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Appendix A Conflict of Interest Policy-Objectivity in Research
I. Introduction

The current Fellowship Employment Manual represents the written agreement between the fellow and the departmental fellowship program at Children’s Hospital & Research Center Oakland. In accordance with the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Pediatrics, the Fellowship Employment Manual delineates the clinical and research responsibilities of the fellows as well as the terms and conditions of employment and benefits. The clinical and research curricula and educational program are also included in the manual.

Children’s Hospital & Research Center Oakland (CHR CO) opened in September 1912 as the Baby Hospital. It began as a 30 bed hospital and has grown today to a 191 bed nationally recognized pediatric tertiary care center and research institute. There is a 47 bed Neonatal unit, a 23 bed Critical Care unit, an 18 bed Medical Rehabilitation unit, 12 bed immunocompromised unit for the Bone Marrow Transplant and Oncology patients with a total of 26 dedicated beds to the Hematology/Oncology unit. CHRCO has the only Level 1 Pediatric Emergency Room and Pediatric Trauma Center in Northern California. Over 32 medical subspecialty services and programs are available at CHRCO, representing all the major pediatric medical and surgical subspecialties.

In January 2014, UCSF Benioff Children’s Hospital and Children’s Hospital & Research Center Oakland entered into an affiliation agreement. Currently, Pediatric Hematology Oncology fellows from both institutions participate in clinical rotations and educational endeavors at both institutions.

Education is an important component of the hospital’s mission and a core value for our faculty members. The Pediatric residency program began in 1926 and now includes 90 residents, including three Chief residents. Additionally, visiting residents from regional surgery, anesthesiology, orthopedic, radiology, and emergency medicine residency programs come to CHRCO for a pediatric experience. The Pediatric Hematology/Oncology fellowship became an ACGME accredited fellowship in 1989 and has grown from 1 to 6 fellows. Additionally, there are fellowship programs in Emergency Medicine, Infectious Diseases, Pulmonology and Critical Care. Our postgraduate training programs provide an organized educational experience, which promote professional and personal growth while ensuring compassionate, expert care for patients.

Children’s Hospital Oakland Research Institute (CHORI) has a major commitment to research. Our 80,000 sq. ft. research institute fosters an environment of collaboration in basic and clinical research in many Pediatric subspecialties. CHORI ranks 10th in the nation for being awarded NIH funding in Pediatric research. The yearly budget now exceeds $40 million. The CHORI facility currently serves more than 200 researchers and support staff. Areas of research include: hemoglobinopathies, stem cell biology, iron overload and iron metabolism, molecular genetics, cancer, nutrition and bone health, cystic fibrosis and pulmonary diseases, lipid biochemistry, infectious diseases, vaccine development, immunology, diabetes, mass spectrometry, and aging. CHORI scientists strive for fundamental advances in both the basic and applied biomedical sciences and improve the lives of children. CHORI sponsors regular educational research symposia at CHORI and at CHRCO, in addition to serving as the host for visiting clinicians and scientists, to provide our postgraduate trainees opportunities in the latest in technologies and scientific discovery.
CHORI also sponsors a summer educational research experience for students in the community.

**Children’s Hospital & Research Center Oakland: Mission and Code of Conduct**

The mission of Children’s Hospital & Research Center Oakland is to ensure the delivery of:

- The highest quality pediatric care for all children through regional primary and subspecialty networks;
- A strong education and teaching program;
- A diverse workforce;
- State of the art research programs and facilities;
- And nationally recognized child advocacy efforts.

The Medical Staff Rules and Regulations of Children’s Hospital & Research Center Oakland expect all members of the Medical Staff to adhere to the following standards of professional conduct. As such, each member of the Medical Staff shall:

- Treat all patients, family members, and staff with professionalism, civility, courtesy, and respect.
- Refrain from engaging in the following interpersonal behaviors:
  - Sexual harassment or the making of sexual innuendoes. This includes, but is not limited to, offensive sexual flirtations, advances, or propositions; engaging in unwarranted or unwanted physical touching; using sexually degrading, abusive, or suggestive words or gestures; and the display of sexually degrading or suggestive objects or pictures in the Hospital or in conjunction with any work-related activity in the hospital.
  - Using rude, demeaning, foul, or abusive language, including slander and repetitive sarcasm.
  - Threatening with gestures, retribution, violence, financial harm, or litigation.
  - Making racial or ethnic slurs.
  - Engaging in actions that are reasonably felt by others to be intimidating, including inappropriate shouting or unnecessarily invading another’s personal space.
  - Criticizing staff in front of others while in the workplace or in front of patients or their families.
  - Shaming others for negative outcomes.
  - Engaging in any behavior that could be reasonably be considered retribution, such as: implied or direct threats, physically intimidating behavior, withholding information, refusing to speak to co-workers, and attempting to find out who might have registered a complaint.
- Refrain from treating patients while impaired by alcohol, drugs, or serious illness, as this would place the patient at risk.
- Support and follow hospital policies and procedures. Address any dissatisfaction with such policies and procedures through appropriate channels.
II. Fellowship Program Goals and Objectives

The field of Pediatric Hematology and Oncology encompasses a broad array of disorders in children and adolescents with cancer and non-malignant disorders of the blood and blood-forming tissues. The intent of Pediatric Hematology and Oncology fellowship program is to train pediatricians in the prevention, diagnosis and management of disease so as to provide comprehensive, compassionate care for children and adolescents. Our training program is unique and diverse though holds to a common goal to provide future academic pediatricians with a foundation to become competent clinicians, researchers, and teachers. To achieve this, our training program holds to the following objectives:

- To provide the clinical experiences and educational opportunities necessary to build a solid foundation of medical knowledge, critical thinking abilities, literature review, diagnostic acumen and technical skills.

- To provide academic pediatricians the research training and experience to develop careers as physician-scientists.

- To train well-rounded, empathetic clinicians to develop skills in communication and counseling with patients and families.

- To impart to our fellows the skills necessary to become lifelong learners and teachers, develop leadership skills and work effectively with team members.

- To impart to our fellows a sense of responsibility to act as advocates for the health of children and families within our society.

- To expose our fellows to the concept of multi-institutional collaborative research as exemplified by the pediatric oncology cooperative groups and encourage them to become active members of the profession’s national societies.

- To prepare future pediatric Hematologists Oncologists for the changes taking place within our health care system including managed care, limitations on resource utilization, and the shift of medical care to ambulatory settings.

- To create pediatric Hematologists Oncologists able to practice the culturally competent medical care necessary in our increasingly diverse population.

- To teach professionalism by mentorship, validating the critical roles of personal ethics, responsibility, respect, compassion, communication, and self-awareness.

- To educate our fellows on current national guidelines and evidence based recommendations.
• To train in aspects of quality care and understand microsystems and continuous processes to evaluate and determine changes/needs in order to enact and monitor outcomes.
• To provide our training in an environment of respect and support, recognizing that fellowship is a difficult and challenging time in one’s life.

III. Employment Policies

A. Policies and Procedures for Fellow Recruitment and Selection

1. The Pediatric Hematology Oncology Fellowship program at Children’s Hospital & Research Center Oakland is committed to maintaining Policies and Procedures for the recruitment and appointment of fellows which are in compliance with the “Institutional Requirements” of the Accreditation Council for Graduate Medical Education (ACGME) and the relevant “Program Requirements” of the Residency Review Committee (RRC).

2. In keeping with the Graduate Medical Education Committee’s (GMEC) responsibility for assuring that each residency and fellowship program establish and implement formal written policies for the selection of residents and fellows in compliance with the above requirements, the Program (Fellowship) Director shall present to the GMEC an annual report delineating the policies and procedures (or any annual changes) to be used for the selection of the following year’s residency group. The chair of the GMEC gives a summative report on the annual program reviews to the Medical Executive Committee of Children’s Hospital & Research Center Oakland. In addition, the Program Director shall report to the GMEC the results of the selection process.

3. The Pediatric Hematology Oncology fellowship at Children’s Hospital & Research Center Oakland strives to train residents to be competent clinicians and researchers and meet the requirements for certification in this pediatric sub-specialty. In order to be accepted for a sub-specialty certifying examination, a candidate must have a current certificate in general pediatrics from the American Board of Pediatrics (ABP).

Fellow Recruitment

Applicants must fulfill the following qualifications to be eligible for appointment to the Children’s Hospital & Research Center Oakland Pediatric Hematology/Oncology Fellowship Program:

1. Applicants must fulfill one of the following qualifications for medical school education eligibility:
   a. Graduates of medical schools in the United States and Canada accredited by the Liaison Committee on Medical Education (LCME).
   b. Graduates of colleges of osteopathic medicine in the United States and Canada accredited by the American Osteopathic Association (AOA).
c. Graduates of medical schools outside the United States and Canada who meet one of the following qualifications:

1) Have received a currently valid certificate from the Educational Commission for Foreign Medical Graduates or,

2) Have a full and unrestricted license to practice medicine in the U.S. licensing jurisdiction in which they are training.

3) Foreign medical graduates with VISAs are eligible, though department costs for application or maintenance of the VISA and eligibility for grant funding will be considered in the selection process.

2. Graduates of medical schools outside the United States who have completed a Fifth Pathway program provided by an LCME-accredited medical school.

3. Applicants must fulfill one of the following qualifications for pediatric residency training eligibility:

a. Graduates of pediatric residency programs in the United States and Canada accredited by the ACGME.

b. Graduates of pediatric residency programs outside of the United and Canada who meet the following qualifications:

1) Letter from the Medical Board of California stating qualification for licensure in the state.

2) Letter from the ABP stating credentials have been deemed for eligibility to take the certifying examination in general pediatrics.

4. Applicants must apply for licensure in the state of California and have a current and valid license prior to the start of the fellowship.

5. An applicant for licensure is allowed to complete a maximum of two years approved postgraduate training in California. Before a third year of training can commence, a full and unrestricted medical license must be obtained.

6. Section 2066 of the B & P Code allows graduates of international medical schools to complete two years of postgraduate training in this state without being issued a license to practice medicine. At the end of the two-year period, a license must be obtained or all clinical service in California facilities must cease. If, at the time of application, one year of training has been completed outside California, one additional year may be completed in this state. If, at the time of application, two or more years of training have been completed outside California, the exemption authorized under Section 2066 is not available, and a medical license must be obtained prior to commencing any clinical service in a hospital in this state.

7. Board Certification in general pediatrics is required either prior to or during the fellowship training period. Therefore, all applicants must demonstrate eligibility for taking the examination with documentation of successful completion of an ACGME residency program, or equivalent as confirmed by the ABP.
8. The Pediatric Hematology/Oncology fellowship program does not discriminate with regard to sex, gender identity, sexual orientation, race, age, religion, color, national origin, disability, or veteran status.

Fellow Selection

1. First Year Appointments

a. Eligible applicants shall be selected on the basis of their preparedness, ability, aptitude, academic credentials, communication skills, and personal qualities such as motivation and integrity.

b. The Pediatric Hematology Oncology fellowship program participates in the National Resident Matching Program (NRMP). Applications are submitted via the Electronic Residency Application Service (ERAS) one and a half years prior to the starting date (December, prior to July of the following year). After the Spring match, late applications will be considered for any unfilled position. Two accredited positions will be available per year with a total of six fellows for the entire program.

c. The Fellowship Director and Associate Program Directors oversee the selection of first year fellows, with the assistance of the faculty and fellows.

1) The Fellowship Director and Associate Directors, with the assistance of selected fellows and faculty, evaluate the initial applications, letters of recommendation, and personal statements. After review of completed applications, all acceptable applicants are offered interviews. Applicants with VISAs will be reviewed, but consideration will be given to the resources (cost and time) necessary to process and maintain VISAs, potential grant funding eligibility, and promise as a future clinician or scientist. Should the initial review committee deem an applicant unacceptable for interview, a denial letter is sent to the applicant.

2) Fellowship candidates invited for an interview spend an entire day at the facility meeting with faculty and fellows. The Fellowship Director and Associate Directors oversee this interview process. There may be one to two applicants being interviewed on the same day. The initial interview is with the Fellowship Director, who also provides an overview of the program.

3) Several faculty members, including the Fellowship Director, Associate Fellowship Directors, Division Chief of Hematology Oncology, Directors of Oncology and the Blood and Marrow Transplant Program, and representatives from different sub-disciplines (Hematology, Oncology, Psychology, research, etc.) interview the applicant. Additionally, the applicant has the opportunity to meet with selected scientists at the Children’s Hospital Oakland Research Institute (CHORI) for a focused interview and discussion of the applicant’s research potential and interests. Fellows are critical in the interview and evaluation process and spend time with the applicants over lunch, with further discussion and a tour of facility.
4) All interviewees submit written evaluations of the interviewed applicant to the Fellowship Director. These evaluations are reviewed and tallied for the final selection process.

5) Following completion of all interviews for the fellowship year, the selection committee of fellows and faculty, in addition to selected research faculty, participate in a final review of each applicant. Evaluations of the applications and interview summaries are reviewed. Acceptable applicants are ranked in order of preference for submission to the NRMP.

6) The fellowship program participates in the National Resident Matching Program (NRMP) and as such adheres strictly to the guidelines for enrollment, dates for rank list submission, confidentiality and integrity.

7) After the NRMP rank has been completed, all matched residents are sent letters of confirmation and contracts, by the dates stipulated by the NRMP.

d. Deferment of appointment is per the discretion of the Fellowship Director.

2. Second and Third Year Appointments

a. Fellows accepted into the Pediatric Hematology/Oncology fellowship program will be provided a length of training sufficient to meet the American Board of Pediatric requirements for certification in Pediatric Hematology and Oncology, unless their performance proves unsatisfactory. Likewise, fellows accepting a position in the training program are expected to stay in the program until completion, though the training program has no obligation to allow continuation from year to year of a fellow judged to be unsatisfactory.

b. All fellows are required to give formal notice of their intention not to continue in the program at least three months prior to the start of the next academic year. It is otherwise assumed that fellows will continue their training, as long as their performance has not been judged unsatisfactory, and each shall receive individual written letters of appointment two months prior to the end of the academic year.

c. Each returning fellow will receive an updated copy of the Fellowship Employment Manual in July. This letter shall include the current salary scale for their level of training and set forth the general terms and conditions of employment at Children’s Hospital & Research Center Oakland. This letter of appointment must be signed and returned to the Fellowship Director at least two months prior to the start of the academic year.

d. In the event that the Pediatric Hematology Oncology Fellowship Program finds it necessary to recruit and appoint one or more fellows at the second or third level from outside the program, eligible applicants shall be selected on the basis of their preparedness, ability, aptitude, academic credentials, communication skills, and personal qualities such as motivation and integrity.
e. A subcommittee will be created by the Fellowship Director to assist and advise in the selection of the second and/or third year fellow(s).
   1) This subcommittee shall be comprised of the Division Chief, Director of Oncology, and other members appointed as deemed appropriate by the Fellowship Director.
   2) The subcommittee shall evaluate all eligible applicants for the available position(s) and advise the Fellowship Director as to their relative qualifications.
   3) The Fellowship Director shall then determine, with the advice of the subcommittee, in which order eligible applicants shall be offered available positions.
   4) To determine the appropriate level of training for a fellow who is transferring from another ACGME-accredited fellowship program, the Fellowship Director must receive written verification of the previous educational experiences in an ACGME accredited Pediatric Hematology/Oncology fellowship and a statement regarding the performance evaluation of the transferring fellow prior to accepting that fellow into the program.
   5) If an applicant is under contract to another fellowship training program, the Fellowship Director shall contact that individual’s current Fellowship Director prior to formally offering the position to request release of the applicant from their contract. If such release is not forthcoming, no position shall be offered to that individual.
   6) The applicant’s former Fellowship Director will be asked to submit a written summary report of number of completed research and clinical months in addition to an attestation of clinical and research competence. This report will be used as a basis for determining the requirements necessary to successfully complete the fellowship and meet board eligibility, and be submitted to the ABP at completion of the fellowship.

B. Letter of Appointment

Fellows accepted into the program will be provided a length of training sufficient to meet the American Board of Pediatric requirements for certification in their subspecialty, unless their performance proves unsatisfactory. Likewise, fellows accepting a position in the training program are expected to stay in the program until completion. The training program has no obligation to allow continuation from year to year of a fellow judged to be unsatisfactory (see Requirements for Promotion, Section III.EE.5 and Disciplinary Guidelines, Section III.FF.).

C. Medical Staff Appointment

Fellows are not required to join the Medical Staff at Children’s Hospital & Research Center Oakland. However, if a fellow chooses to moonlight at CHRCO, the fellow will be required to join the Medical Staff and be responsible for the dues. Fellows on the Medical Staff must comply with all the medical staff rules and regulations as stipulated in the bylaws.

D. PALS/BLS Certification
All fellows are encouraged to acquire **PALS** (Pediatric Advanced Life Support) certification prior to beginning clinical duties and maintain certification throughout their period of fellowship training. **BLS certification is required** for all fellows not PALS certified. PALS or BLS is required for appointment to the Medical Staff.

### E. Employee Health

Children’s Hospital & Research Center at Oakland policy and recommendations from the CDC require that all personnel working in the hospital provide the following documentation before beginning their assignment:

- All fellows must have written documentation of tuberculosis screening within the past 3 months or have one performed by the employee Health Service upon employment and annually thereafter. In higher risk areas (i.e. Infectious Diseases) employees are required to have PPD testing every 6 months. If a fellow is known to be PPD positive, then a chest x-ray is required to exclude tuberculosis (may be performed up to one year prior to employment). PPD skin tests are provided free of charge in Employee Health.

- Evidence of immunity (serologic) or previous immunization to the following diseases: varicella, measles, rubella, and hepatitis B. If a fellow is neither immunized nor immune to these diseases, Children’s Hospital & Research Center Oakland will provide serologic testing and immunization at no charge to the fellow. All job-related injuries or needle-stick accidents must be reported immediately to Employee Health. Details of the general policy on employee health issues are available upon request.

### F. Licensure

All fellows are **required** to have a current and valid California Medical License. The Medical Board of California allows residents and fellows to train in AGGME accredited training programs for a maximum of two years. After two years, the physician must be licensed. As fellows are beginning, in general, their 4th year of training, they are required to have a California license at the start of the fellowship program. Issuance of a California Medical License may take several months from the date of application; therefore, fellows from out of state should apply for a California Medical License and Drug Enforcement Agency (DEA) number as early as possible the year prior to the start of the fellowship program.

All fellows shall furnish a copy of their California Medical License and DEA license to the Program Director as soon as possible following issuance and with subsequent renewals. A DEA license is required for membership on the Medical Staff.

### G. Examinations

1. **American Board of Pediatrics**
All fellows are encouraged to take the American Board of Pediatrics certification examination during the first year of fellowship (if not previously certified) but no later than the second year. **Certification in General Pediatrics is required during fellowship** and prior to taking the sub-board examination.

2) **In-Training Examination**

All fellows are **required** to take the annual Sub-specialty In-Training Examination (SITE), as given by the American Board of Pediatrics. Results of the SITE will be discussed as part of the annual review with the Program Director. Sub-optimal performance will lead to development of an academic learning plan. The fee for SITE will be reimbursed by the Hematology Oncology department.

H. **Library Policies**

Access to the UCSF online library is now available for all CHRCO residents and fellows. Access is granted once an application is submitted to and approved by UCSF. All fellows have 24 hours-per-day access to the Health Sciences Library located on the 4th floor of the Main Hospital. Materials may be checked out only when the librarian is present during the Library’s normal business hours.

On-line and CD-ROM based searches of the medical literature are available at no cost to fellows. These may be self-directed or provided by the library staff. On-line electronic data bases and search engines are available for literature searches. These include: MD Consult, Ovid, PubMed, and EBSCO Psycholit, Psycharticles and CINAHL. Clinical resources include: UpToDate, GIDEON, EBSCO Cochrane, Red Book and Online Library Catalog.

I. **Medical Records**

All fellows are expected to complete their medical records in a timely fashion and avoid delinquent records. Fellows will receive formal training in the EMR system, EPIC, during the orientation in July. Access to EPIC will be available from a home computer for use on call.

Failure to complete delinquent records in a timely manner will result in sanctions which may include suspension from clinical duties. Repeated failures may result in imposition of probationary status.

J. **Clinical Schedules**

1. **Yearly Tracks**

The Program Director and Associate Directors create the clinical year schedules for each first year clinical fellow at the start of the new academic year. Consideration is given to input from fellows with respect to vacations or other personal preference (boards) Components of the yearly track are discussed in the Curriculum for the Clinical Year, Section IV.L.
2. Monthly Call Schedules

The fellowship program administrative assistant will be responsible for creating and maintaining the fellows’ call schedule. Specific scheduling requests made in advance will be considered and accommodated whenever possible. Requirements for coverage with respect to nights, weekends, and holidays are determined by the Program Director, and are generally distributed evenly among all fellows. Any changes or requests after posting are subject to the discretion of the Program Director.

3. Schedule Changes

All schedule changes in the distributed monthly call schedule or clinical tracks, no matter how minor, must be approved in advance by the Program Director. Schedule change approval requires that there be no adverse impact on patient care or other fellows. All steps, including notification of telephone operators, must be followed. Subject to the above, schedule changes will not be unreasonably denied.

4. Clinical schedule

A separate schedule of clinical assignments for each fellow will be available for view on the Shared drive (K:), and be posted in the outpatient clinic in the charting room. This will be created and monitored by the fellowship program administrative assistant and include dates of participation in continuity clinics, inpatient assignments, inpatient consultation, night and weekend call, and participation in the outpatient sub-specialty clinics including LTFU, comprehensive neuro-oncology, general hematology, hemophilia, sickle cell disease and thalassemia, etc. Fellows are responsible to ensure changes made less than one month prior to the beginning of the month are communicated and approved by the Program Director and supervising faculty (e.g. continuity clinic mentor, etc.).

K. Shared Positions

The following guidelines apply to shared positions:

- Granting of shared positions is at the discretion of the Program Director.

- Any fellow desiring a shared position must submit a formal written request as early in the year as possible, preferably by October 1st (for year beginning the next July 1st).

- If there is another fellow already interested in being a partner in a shared position, both fellows should jointly submit a request.
• Fellows entering a shared position must agree to complete a total fellowship year before re-entering the program as a full-time fellow. In other words, once a commitment is made to share a position, it will be with the full understanding that it will take two years to complete one year of fellowship.

• The availability of shared positions is completely dependent upon the ability of the fellowship training program to recruit an acceptable fellow replacement as determined by the Program Director.

• Salary, medical/dental/vision benefits and malpractice insurance coverage, will not be provided during the six months away from the hospital, though may be available for purchase through COBRA.

L. Fellow Duty Hours and the Working Environment

1. General

Providing fellows with a sound academic and clinical education must be carefully balanced with concerns for patient safety and fellow well-being. Didactic and clinical education has priority in the allotment of fellows’ time and energy. Duty hour monitoring assures faculty and fellows collectively have responsibility for the safety and welfare of the patients.

a. Supervision of Fellows

• All patient care must be supervised by qualified faculty. The Program Director must ensure, direct, and document adequate supervision of fellows at all times. In addition to direct supervision, the attending staff serves as a direct back up for clinical duties and medical decision making. Fellows must be provided with rapid, reliable systems for communicating with supervising faculty.

• Faculty schedules must be structured to provide fellows with continuous supervision and consultation. This clinical schedule is available on the Shared drive (K:) and posted in the departmental office. There is always an assigned attending for each fellow clinical assignment (inpatient service, clinic, night and weekend call).

• Faculty and fellows must assume a joint responsibility to recognize signs of fatigue. The Program Director should be immediately notified if the fellow or faculty expresses a concern that the fellow cannot provide competent and safe clinical care or take call due to fatigue. The Program Director will excuse the fellow until he or she is rested, for a minimum of one day, and re-evaluate the situation, in addition to any extenuating circumstances leading to the excessive fatigue (prolonged night call, emotional exhaustion, moonlighting, etc.). The fellow and Program
Director will create a plan to prevent such extreme fatigue and interference with clinical duties.

b. Duty Hours

The Pediatric Hematology Oncology Fellowship Program at Children’s Hospital & Research Center Oakland recognizes the importance of duty hour policies that support the physical and emotional well-being of fellows, promote an appropriate educational environment and facilitate patient care. The program fully complies with the general duty hour requirements adopted by the ACGME and any additional requirements of the RRC for Pediatrics. In general, the expected work day for all fellows is from 8am to 5pm, Monday through Friday, though frequently fellows may work longer hours for patient care or educational activities. Fellows are expected to document Duty Hours in the MyEvaluations.com online system on a daily basis. The Program Director will automatically receive an electronic notice if a fellow is not in compliance with the Duty Hour regulations.

- Duty hours are defined as all clinical and academic activities related to the fellowship program, i.e., patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, research, and scheduled academic activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

- Fellows will be provided a minimum of 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, educational, and administrative activities. However, fellows may stay an additional 6 hours beyond this time for certain specified circumstances (e.g. providing continuity of patient care or taking advantage of educational opportunities). No new patients may be accepted after 24 hours of continuous duty.

- Hematology Oncology fellows work an average of one weekend per 4-6 weeks. This schedule provides each fellow a minimum of 6 days (three weekends) off every 4-5 weeks, or 1-2 days in 7 free from all educational and clinical responsibilities when averaged over a 4-week period. If more than 4 fellows are in the program, call continues to be shared equally and may be less frequent than every 4th night and weekend.

- Adequate time for rest and personal activities will always be provided. This will consist of a minimum 10 hour time period provided between all daily duty periods and after in-house call. Because there are no in-house
(overnight) call responsibilities, Hematology Oncology fellows are not subject to this rule.

2. On-Call Activities

The objective of on-call activities is to provide fellows with continuity of patient care experiences throughout a 24-hour period.

- In-house call is defined as those duty hours beyond the normal work day when fellows are required to be immediately available in the assigned institution. Fellows in the Hematology Oncology program are not assigned in-house overnight call responsibilities.

- At-home call (pager call) is defined as call taken from outside Children's Hospital & Research Center Oakland and any participating institutions.

- An attending is also assigned on-call and serves as a back-up for the fellow. Fellows are encouraged to call the attending for any call or situation in which the fellow is uncertain of the advice. Fellows are asked to call the back-up attending for new patients, transfer of patients to the ICU, death of a patient, or if the fellows deems it necessary to come into the hospital after hours to see a patient.

- Hematology Oncology fellows take at-home call (pager call) approximately every 4th-6th night and weekend (equally shared between fellows). If a fellow is ill or unable to participate in the call schedule, the Program Director will make a determination of how this call will be covered. Call responsibilities include answering evening phone consultations from home and evaluating new and follow-up consultations in the hospital during the daytime (weekend and holiday) or overnight. Fellows are asked to keep track of the time spent on call including the time spent in the hospital if called in to assess patients. Fellows are required to log in their duty hours daily on the MyEvaluations.com program. The Program Director monitors the demands of at-home call and makes schedule adjustments as necessary to mitigate excessive service demands and/or fatigue.

- When fellows are called into the hospital from home, the hours spent in-house are counted toward the 80-hour limit. The faculty and Program Director must ensure that, if one of the Pediatric Hematology Oncology fellows has to spend most of the evening and night in the hospital caring for a sick patient, the 24-hour work rule goes into effect. Fellows must also assume responsibility for monitoring of these hours and alert their respective attending if the duty hour limit is met or surpassed. As soon as the fellow finishes basic patient care duty and/or an essential lecture, they are released to go home for the remainder of the day. This close interaction between the attending physicians and fellows to monitor night and week-end call has worked very well and requires continual scrutiny and participation by all involved. Additionally, the Program Director monitors workload with the fellows by periodically checking in personally, especially those on the inpatient service, and those whose night call sign-out appears particularly complex with documentation of long hours in-house or by phone.
3. Monitoring

Violations of the duty hour rules can only occur if a fellow engages in moonlighting activities, if there is an inadvertent error in the scheduling of on-call weekends, or if fellows trade on-call nights or weekends. Moonlighting is addressed in the next section III. M.. In order to prevent violation of duty hour rules resulting from scheduling mistakes or trading of on-call weekends between fellows, the following protocol has been developed:

- A preliminary on-call schedule will be developed with consideration of scheduling requests by fellows. Fellows will be assigned to take call every 4th-6th weekday (approximately one day a week) and every 4th-6th weekend, dependent on the number of fellows in the program (or if a fellow is unable to participate in the call system). This schedule must be reviewed and approved by the Program Director.

- Fellows may request changes to the call schedule such as trading of on-call weekends, but such changes must be reviewed and approved by the Program Director prior to implementation in order to ensure that duty hour limitations are not violated. Fellows must consider the duty hour limitation when making changes in the call schedule and ensure compliance with these policies.

- Prior to finalization and distribution of the on-call schedule each month, the Program Director will make a final review and approve the schedule to ensure there are no potential violations.

- If scheduling conflicts are such that the fellow is put in a situation that may violate duty hour limitations, then the Program Director or Associate Program Director or faculty must utilize one of the following options:
  - Instruct the fellow to take mandatory time off during the week to ensure that there is at least 1 day off in 7 days (averaged over a 4-week period); or,
  - Relieve the fellow of on-call duties for the night, holiday or weekend in question so that a violation does not occur. The on-call attending will then assume all call responsibilities without the fellow or an alternate fellow may assume the first call.

M. Moonlighting

Because Hematology/Oncology fellowship is a full-time endeavor, moonlighting must not interfere with the fellow’s ability to achieve the goals and objectives of the educational program. Therefore, fellows of training programs sponsored by Children’s Hospital & Research Center Oakland are subject to the following guidelines:
• Moonlighting that occurs within the fellowship program and/or Children’s Hospital & Research Center Oakland, i.e., internal moonlighting, must be counted toward the 80-hour weekly limit on duty hours. Fellows participating in moonlighting are required to keep accurate records of their work hours and inform the Program Director. Additionally, the Program Director monitors internal moonlighting by fellows to ensure that duty hour limits are not violated.

• Moonlighting is defined as any professional and patient care activity that is external to the educational program.

• Fellows have a primary responsibility to the care of patients at Children’s Hospital & Research Center Oakland.

• Fellows must not be required to engage in moonlighting.

• Fellows moonlighting outside CHRCO may not covered by the department’s malpractice insurance.

• Program Directors are responsible for deciding whether individual fellows in their program are allowed to moonlight. Any fellow who desires to engage in moonlighting must prospectively obtain a written statement of permission from their Program Director.

• Program Directors must monitor individual fellow performance for any adverse effects of moonlighting on clinical or research performance. Adverse effects may lead to withdrawal of permission by the Program Director.

• Moonlighting that occurs within the fellowship program and/or CHRCO, i.e. internal moonlighting, must be counted toward the 80-hour weekly limit on duty hours. Program Directors must monitor internal moonlighting by their fellows to ensure that duty hour limits are not violated. See Fellow Duty Hours and the Working Environment, Section III.L.3.

  ▪ Fellows must prospectively inform the Program Director of specific moonlighting shifts whether internal (i.e. at CHRCO) or external (i.e. at another institution).

  ▪ Because internal moonlighting is counted toward the 80-hour per week duty hour limits and may infringe upon the minimum 10-hour rest period required between patient care activities (if in-house coverage is required), the following procedure must be followed:

    o At least 1-week prior to the scheduled moonlighting shift, fellows must report the anticipated number of moonlighting hours to the Program Director.

    o If the internal moonlighting shift would result in violation of duty hour limitations, then the request for permission to moonlight will be rejected.
The hospital payroll department may be contacted following the moonlighting shift to confirm the actual number of hours of internal moonlighting.

- Because external moonlighting is beyond the purview of our department and institution, the hours are not counted toward duty hour limits. However, such activities can nevertheless impact the fellow’s patient care and education at CHRCO and therefore the following procedure must be followed:
  - If it is determined that a negative impact has occurred, a warning will be given to the fellow and a letter describing the concerns will be placed in the fellow’s record. Moonlighting privileges may be revoked at this time by the Program Director.
  - If after a warning has been given, there is another occurrence in which external moonlighting activities negatively impact the fellow’s performance at CHRCO, permission to moonlight will be revoked and a letter describing this action will be placed in the fellow’s record. Furthermore, disciplinary action may be initiated as described in Disciplinary Guidelines: Probation and Dismissal, Section III.FF.
  - The Program Director may request that the fellow provide confirmation of the actual hours of external moonlighting from the outside institution.

- Any purposeful violations of this policy by the fellow may result in disciplinary action as described in Disciplinary Guidelines: Probation and Dismissal, Section III.FF.

N. Dress and Grooming Policy

Fellows are expected to dress in an appropriately professional manner in accordance with the Children’s Hospital & Research Center Oakland Medical Staff dress code policy. Patients, family members and visitors to CHRCO rightfully expect a professional and pleasing environment. Appropriate grooming on the part of all employees communicates respect for our patients, pride in CHRCO, and professionalism in our work.

Specifically, denim jeans, shorts, T-shirts, baseball hats, athletic clothing, suggestive clothing, and similar attire that do not represent a businesslike appearance are not permitted. Fellows are discouraged from wearing scrubs suits.

Security/ID Name Badges are provided to fellows and must be worn and visible while on duty.

O. Paychecks
Hematology Oncology fellows are employees of the department of Pediatric Hematology Oncology. Paychecks are issued on the 15th and 30th of each month. Fellows may elect to have their paychecks deposited directly into their bank account.

P. Salaries/Employee Contract

The following salary scale is in effect as of July 1, 2016:

- 1st year fellows $67,000
- 2nd year fellows $70,000
- 3rd year fellows $73,000

The current salary is reflected on the individual letter of appointment. Additionally, fellows will be asked to sign the Employment Contract for members of the Department of Pediatric Hematology Oncology, which provides more details of the benefits listed below in addition to a pension plan and general employment policies.

Q. Vacation

All fellows are provided a total of 4 weeks of vacation annually, and this may be taken in 1 to 2 week blocks. Requests for shorter or longer periods of time off will be considered individually. The dates of assigned vacation are included in the assigned yearly schedule tracks and changes in vacation dates are subject to the usual change procedures. Up to one week of vacation per year may be carried over to the next year, subject to the approval of the Program Director.

R. Holidays

The following are recognized holidays at Children’s Hospital & Research Center Oakland: New Year’s Day, Martin Luther King, Jr. Day, President’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

Holiday coverage is similar to weekend coverage. Fellows not on call that day are not required to come into the hospital. All conferences and clinics are cancelled on recognized holidays.

Assignment of holidays will be primarily based on patient care needs but reasonable effort will be made to accommodate individual fellow requests. In general, each fellow will be assigned 1-2 holidays per year.

S. Illness

Any fellow with an illness necessitating absence from the hospital, regardless of assigned rotation, must notify the Program Director immediately. The Program Director may request documentation from a treating physician for periods of illness or disability which extend beyond three (3) consecutive days, or which appear chronic or recurring. Refer to the Employment contract for details of sick and disability leave.
Extended absences due to illness which interfere significantly with the fellow’s educational experience or the ABP guidelines for fellowship training may delay the fellow’s graduation from the program. Refer to Section III.T.3.

T. Leave of Absence

Leaves of absence shall be administered within the purview of the Family and Medical Leave Act of 1993 (FMLA), the California Family Rights Act (CFRA), and the State Disability Insurance (SDI Family Leave Act). For specific information on leaves of absence please contact the department practice manager and the Program Director. Any leave of absence, depending on length, may require the fellow to extend their period of training to meet the ABP requirements for Board Certification. An extended absence of more than 3 months requires a letter of explanation from the Program Director to the ABP and is subject to review by the Credentials Committee. The Program Director shall at all times apply the policies and procedures delineated by the RRC in a fair and consistent manner to all fellows.

1. Maternity Leave

Pregnant fellows are encouraged to contact the Program Director as soon as possible to begin arrangements for maternity leave. The employee is entitled by the California family leave act to take up to six months of maternity leave, the majority without pay, and not lose her job. Up to six (6) weeks of paid maternity leave will be granted. Vacation time may be added, at the discretion of the Program Director, to maternity leave as continuous paid time off.

Health insurance coverage is provided for up to three months of approved maternity leave. Extended coverage may be able to be worked out under COBRA, though the fellow may be responsible for these payments. Limited disability payments through the California State Disability Insurance Program are available during maternity leave and/or employee disability insurance as provided by employer The fellow will be responsible for application of benefits with assistance by the practice manager.

In the event that the employee has medical complications before or during maternity leave, it is understood that the above terms may need to be adjusted accordingly.

2. Paternity/Adoptive/Domestic Partner Leave

Prospective fathers, adoptive parents, and domestic partners are entitled to up to six months of unpaid leave for infant bonding. Four (4) weeks of paid infant bonding leave will be granted to fellows. Fellows anticipating such leave should contact the Program Director as soon as possible to begin arrangements. See Section III.W.4 regarding Disability Insurance.

3. Other Leave
Leaves of absence for other reasons, including illness, may be granted at the discretion of the Program Director. Additionally, the Family Leave Act does make provisions for care of a sick family member. See Employment Agreement for more details.

An extended leave of absence of more than 3 months requires a letter of explanation from the Program Director to the ABP and is subject to review by the Credentials Committee. Fellows are advised to contact the ABP prior to the anticipated leave to determine if it will affect successful completion of the fellowship and board eligibility.

U. Other Absences

Fellows are expected to remain in the hospital during the usual working hours of their assigned rotation, typically 8am to 5pm, Monday through Friday. Exceptions to this policy require the notification and approval of both the supervising faculty member and the Program Director.

Absences due to personal or family crisis (including death or illness of family members), necessity for job-related interviews, routine medical/dental/vision appointments, and other circumstances not covered above, are allowed, subject to notification and approval by the Program Director.

V. Educational Leave and Expenses

Paid educational leave is available for fellows (up to 5 days and $1,000 each year) to attend medical or scientific conferences. Leave must be approved in advance by the Program Director. Additional leave and/or paid expenses may be granted to fellows to attend conferences in which they are presenting their work in an oral session, but only if prior approval is obtained.

Original receipts and/or cancelled checks are necessary for reimbursement and should be submitted to the administrative assistant and Program Director for approval. All monies must be spent by the end of each academic year and cannot be carried over to the next year, unless approved by the Program Director.

Approved medical education expenses include conference expenses (registration fee, travel costs, lodging, per diem meal allowance, poster/material costs and fee for the submission of presentations, etc.), medical textbooks, medical journals, and medically related software expenses. If in doubt contact the Program Director prior to incurring the expense.

W. Insurance/Benefits

1. Health/Dental/Vision Coverage
The Pediatric Hematology Oncology (PHO) Department at Children’s Hospital & Research Center Oakland provides comprehensive health, dental and vision insurance to all fellows with a no cost option. However, additional costs may be incurred by the employee (fellow) if a more expensive plan is chosen or to offset the added cost of a spouse, dependents, or a domestic partner. Coverage is effective on the date of hire. Fellows may opt to deny some or all health insurance coverage for any reason. Fellows who are covered under a spouse’s health insurance policy may not be eligible for coverage under the department’s current health plan. Depending on the chosen carrier, a Health Savings Account (HSA) may be an option for payment of deductibles, co-insurance, etc. Please see the Employment Agreement or consult the department practice manager for details.

Department paid health insurance coverage is provided to the end of the calendar month following completion of fellowship training. Thereafter, graduates may elect to purchase health insurance for a maximum period of 18 months at the current COBRA rates.

2. Malpractice Insurance

The Pediatric Hematology Oncology (PHO) Department at Children’s Hospital & Research Center Oakland provides professional liability coverage for all fellows acting within their assigned duties while on scheduled rotations at designated institutions during their period of fellowship training. Fellows will be covered while on required rotations at other hospitals or facilities. Malpractice insurance is not provided for fellows while employed or moonlighting outside Children’s Hospital & Research Center Oakland.

Details of the malpractice insurance policy including terms, limits and duration of coverage are available from the department practice manager.

3. Life Insurance

Currently, there is no life insurance policy available for employees of the Pediatric Hematology Oncology Department. However, financial planning and assistance with choosing and purchasing life insurance is available and encouraged.

4. Disability Insurance

A Disability Insurance policy is provided by the Hematology Oncology Department and includes both short-term and long-term components. Fellows will receive a copy of the plan with full details. Fellows may also obtain an additional individual disability policy (that can continue beyond the employment in the department) and are encouraged to seek financial advice regarding such an individual policy. Additionally, Disability Insurance is provided through the California State Disability Insurance Program with required payroll deductions of premiums biweekly.
5. **Long Term Care**

A Long Term Care policy is provided by the Pediatric Hematology Oncology Department for all fellows. Spouses and family members are eligible to participate at their cost.

6. **Retirement Plan**

The Pediatric Hematology Oncology Department participates in a 401(k) pension and profit sharing plan. Under the terms of the agreement, the Hematology/Oncology Department will contribute a minimum of 3% of the total base compensation each employment year. Fellows may also make contributions and are encouraged to seek financial advice regarding such. Information regarding vesting should be discussed with the department practice manager and is also addressed in the department’s Employee Contract.

X. **Parking**

Parking is available in the Parking Garage located adjacent to the Outpatient Center. Parking expenses for fellows are covered by the Pediatric Hematology Oncology Department.

Y. **Office Space**

Shared office space is provided for fellows and is located in the trailer adjacent to the Hematology Oncology Departmental office building. This office provides ample space for books, files, and personal belongings. Computers, HIS/EPIC terminals, and phones are available for each fellow in the office. Mailboxes are located in the main departmental office.

Z. **Housing/Laundry/Meals**

As fellows are not expected to take in-house call, no provisions have been made to offer housing, laundry facilities, or meals.

AA. **Employment Assistance Program (EAP) and Psychological Support**

All fellows have access to confidential counseling services through the Children’s Hospital & Research Center Oakland Employment Assistance Program (EAP). Fellows are urged to seek assistance as needed to maintain good mental health. Professional assistance is available for stress, depression, marital difficulties, alcoholism, drug abuse, legal, financial, and other problems. Subject to certain restrictions, these services are provided free of charge to the fellow. Participation in this program is strictly voluntary. Interested fellows should contact the EAP directly at 547-8830. All calls and services are completely confidential. Additionally, confidential counseling services are available through the mental health services available on the medical insurance plan.
The fellowship program provides fellows with instruction and opportunities to interact effectively with patients, patient’s families, professional associates and others in carrying out their responsibilities as physicians in the specialty. Additionally, fellows learn to create and sustain therapeutic relationships with patients and work effectively as members or leaders of multi-disciplinary patient care teams or other groups in which they participate as researchers, educators, health advocates, or patient care providers. Skills in the recognition and management of psychosocial stressors and problems are key to a successful career in this profession. Fellows are given the opportunity to develop skills in communication and counseling in addition to provision of comprehensive care. The availability of back-up support systems is reviewed with the fellows, to be utilized when patient care responsibilities are unusually difficult or prolonged. Several methods of communication and teaching of psychosocial skills are available for fellows. The Professionalism Noon Conference series addresses a number of these concepts. Additionally, the clinical psychologists have developed a session with the first year fellows in the Orientation Month on accessing services to assist them in patient care.

**BB. Accommodations for Disabilities**
The fellowship program adheres to the following Children’s Hospital & Research Center Oakland policy of provision of accommodations for disabilities:

Children’s Hospital & Research Center at Oakland (CHRCO) provides job accommodations which are both reasonable and necessary to known limitations of qualified applicants and employees with disabilities and employees who develop disabilities. In accordance with the Americans with Disabilities Act of 1990, CHRCO does not discriminate on the basis of mental or physical disability.

1. **Purpose**
The purpose of this policy is to ensure employment opportunities for qualified individuals with disabilities and to describe the process for providing job accommodations to enable individuals with disabilities to perform the essential functions of a job.

2. **Coverage**
   All qualified applicants and employees who need an accommodation of a disability in order to perform the essential functions of a job.

3. **Provisions**
   a. Individuals are considered qualified for employment if they meet the minimum job requirements and can perform the essential functions of a job, with or without reasonable job accommodation.
   
   b. CHRCO provides job accommodations unless they create an undue hardship. In general, an accommodation may be considered an undue hardship if it is unduly costly, extensive, substantial, disruptive, or would fundamentally change the essential functions of the job. Undue hardship is determined on a case-by-case basis.
c. Individual accommodations may include revised procedures, personal assistance, adapted workplaces and devices, and job restructuring which permits the individual to perform the essential functions of the job.

d. Revised procedures might include, but are not limited to:

- Arranging to have a presentation recorded for a blind employee, providing instructions in writing to a deaf employee, and conference call arrangements for mobility limited workers where travel to a meeting is difficult.
- Personal assistance might include, but is not limited to, part-time readers for blind employees, qualified interpreters for deaf persons, and accommodations for assistive dogs.
- Adapted workplaces and devices might include, but are not limited to, speech synthesizers, telecommunication devices for deaf persons, personal computers with special accessories, Braille printers, raised desks, and lowered file cabinets or desk tops.
- Job restructuring might include, but is not limited to, reallocating nonessential job functions or altering when or how an essential function is performed if this permits the individual to perform the essential functions of the job.

e. Job accommodation for a current employee could also include re-assignment to a similar, vacant position except when accommodation would pose an undue hardship. (Reassignment for bargaining unit employees is in accordance with applicable collective bargaining agreements.)

f. Applicants for employment, who cannot be reasonably accommodated for the original position applied for, may apply for other CHRCO positions.

g. Physical structural accommodations such as ramps, wider door, handrails, accessible restroom facilities and disabled parking spaces are provided and maintained in working order by Facilities Management.

h. Personal aids, such as hearing aids, guide dogs, and wheelchairs are the individual's responsibility to supply and are not provided by CHRCO.

4. Procedure
a. If an applicant or employee needs an accommodation Human Resources will initiate an interactive meeting. In the
interactive meeting they will review the job and ask the applicant or employee if there are any essential functions of the job that the individual might be or is unable to perform. If there are, they ask if the individual can suggest an accommodation. The focus is on the individual's ability to perform the essential functions of the job, not the nature or severity of the disability. It is not permissible to inquire about the applicant's previous attendance records. The interactive meeting will identify how an accommodation can address the limitation and how the specific tasks can be done.

b. The applicant or employee may be asked to submit documentation from their medical provider. Human Resources will provide a job description prior to the interactive meeting. An applicant or employee should have their medical provider review their job description to determine any limitations or restrictions. The medical provider should indicate in writing any limitations or restrictions. The medical provider may be contacted by an Employee Health Clinician. The Employee Health Clinician will receive any additional medical information/documentation related to the accommodation request and clarify it with the medical provider(s) if necessary. All communications will be kept confidential. The employee may also be required to be examined by a medical provider selected by CHRCO or have a functional capacity evaluation at CHRCO’s expense.

c. If an accommodation requires a modification to the building, Human Resources will contact the Facilities Department. If an accommodation requires expenses which exceeds the facility budget a discussion must occur between the appropriate administrative parties.

d. If sufficient accommodation does not seem feasible, Human Resources may include an Employee Health Representative in the interactive process. If the employee has been disabled due to a work-related injury or illness, Human Resources will contact the Employee Health Department to review accommodation possibilities.

e. Before disqualifying a candidate because an accommodation cannot be made, Human Resources may request additional interactive meetings with the applicant.

f. If there is a question as to whether the necessary accommodation creates an undue hardship, the determination is made by the Vice President of Human Resources and Chief Operating Officer within two weeks.
g. Once the needs and possible accommodations are understood, Human Resources will discuss the recommendation with the applicant or employee. Although the applicant or employee's suggestions are fully considered, CHRCO makes the final determination as to what accommodations will be provided.

h. Supplies and equipment needed for an accommodation are acquired in accordance with applicable Purchasing Procedures. If the cost of the accommodation exceeds the departmental budget, the determination as to if and where to charge the expense is made by the COO/Vice President.

i. Accommodations are made available within 30 days of acceptance of the job offer.

j. Human Resources informs the Department Manager when accommodations are made and the Manager periodically checks to ensure that accommodations remain effective.

k. Any person who believes he/she has been subjected to discrimination on the basis of disability, in contradiction of the policy stated above, may file a complaint. It is against the law for CHRCO to retaliate against anyone who files a complaint or cooperates in the investigation of a complaint.

l. Complaints must be submitted to Human Resources within 30 days of the date the person filing the complaint becomes aware of the alleged discriminatory action. If a complaint relates to a matter that is more than 30 days old, the reason for the delay will be taken into consideration.

m. A complaint should be in writing and must state the problem or action alleged to be discriminatory and the remedy or relief sought by the claimant. Complaints must be signed and dated, and must contain the name and address of the person(s) filing the complaint.

n. Human Resources will conduct an investigation of the complaint to determine its validity. This investigation may be informal, but it will be thorough, allowing all interested persons an opportunity to submit evidence relevant to the complaint. Human Resources will maintain the files and records for such complaints.

o. A written decision on the complaint will be issued no later than 30 days after its filing.

p. The complainant may appeal the decision, in writing, to the
Director of Labor and Employee Relations within 15 days of receiving the decision.

q. The Director of Labor Relations and Employee Relations will issue a written decision in response to the appeal no later than 30 days after its filing.

r. Use of this CHRCO procedure does not preclude a person from filing a complaint of discrimination on the basis of disability with the U.S. Department of Health and Human Services, Office for Civil Rights.

s. CHRCO will make appropriate arrangements to assure that disabled persons can participate in or make use of this procedure on the same basis as the non-disabled. Such arrangements may include, but are not limited to, the provision of interpreters for the deaf, providing taped cassettes of material for the blind, or assuring a barrier-free location for the proceedings. Human Resources is responsible for providing such arrangements.

CC. Harassment

It is the policy of Children’s Hospital & Research Center Oakland to provide a work environment free from harassment. CHRCO maintains a strict policy prohibiting sexual harassment and harassment because of race, religious creed, color, national origin, ancestry, disability or physical handicap, medical condition, marital status, age, sexual identification or preference or any other basis made unlawful by federal, state, or local ordinance or regulation.

Fellows that are subject to or are witness to prohibited harassment should immediately report such conduct to either the Program Director, Division Chief, or the Director of Medical Education. If the Program Director is the source of the harassment, the employee should report directly to the Director of Human Resources and/or the Division Chief. Upon receiving the complaint, a full investigation will be conducted. Details on this policy are available from the CHRCO Personnel Department (Human Resources).

DD. Physician Impairment/Substance Abuse

Early identification and intervention for fellows who may be exhibiting signs of impairment due to substance or alcohol abuse, chemical dependency, mental illness, or stress-related conditions is an important responsibility of the Program Director, Department Director, Director of Medical Education, Supervising faculty and the other fellows and staff.

The following policies apply to physician impairment/substance abuse at Children’s Hospital & Research Center Oakland:
• Program Directors and hospital management will treat all communications regarding a potentially impaired fellow, including those involving alcohol or drug use, with the strictest confidentiality.

• Children’s Hospital & Research Center Oakland has a strong commitment to provide a safe workplace for its employees and staff, and to promote employee health. The hospital’s policy regarding alcohol and drug use reinforces this commitment and is in compliance with the Drug-Free Workplace Act of 1988. For this reason, alcohol and/or non-medically authorized drug use which adversely affects or is likely to affect a fellow’s job performance or jeopardizes the safety of the fellow, other employees or patients may result in disciplinary action.

• Disciplinary action for alcohol or drug use in the workplace depends on the nature and seriousness of the problem. If deemed appropriate by the Program Director, the fellow may be required to undergo psychiatric evaluation, counseling and/or successfully participate in a formal drug rehabilitation program in order to continue fellowship training.

• Failure to successfully complete such a program would result in further disciplinary action, including failure to be re-appointed to the next level of training or termination of employment as a fellow prior to the end of the academic year.

• All disciplinary action taken against individual fellows is subject to formal appeal through the written grievance procedures outlined in Grievances, Section III.GG.

EE. Evaluations/Promotional Review/Role of the Clinical Competency Committee

1. General Policies

Evaluations and promotional review procedures in use at Children’s Hospital & Research Center Oakland are in accordance with the most recent guidelines of the ACGME, known as the Next Accreditation System (NAS). Assessment of fellow performance throughout the program must be documented with the results being utilized to improve fellow performance. The purpose of the evaluation process by the Pediatric Hematology Oncology fellowship program is to:

• Identify fellows experiencing significant difficulties as early as possible in their training so as to provide support and effective remediation. Deficiencies, if any, are immediately discussed with the fellow by the Program Director, rather than waiting for the evaluation period, so as to allow immediate guidance and correction. Refer to Academic Probation, Section III.EE.2.
• Provide formative feedback, in as continuous a fashion as possible during fellowship training, to allow the fellow to obtain maximum educational benefit from their fellowship training.

• Provide a consistent method to determine the appropriateness of promotion of an individual fellow from year to year.

• Provide adequate documentation to protect both the fellow and the fellowship program in the event of disciplinary proceedings.

• Provide a record of fellow performance that facilitates application for certification to the Hematology/Oncology sub-board of The American Board of Pediatrics and for the writing of future letters of recommendation that accurately reflect the fellow’s strengths, weaknesses, and overall fellowship performance/competence.

The methods used for evaluation must produce an accurate assessment of the fellows’ competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. The evaluation process utilizes tools that have been created in concert with the Training Committee at ASPHO (American Society of Pediatric Hematology Oncology). These evaluations are designed to assess fellows using a competency-based system in meeting the requirements of the new NAS (Next Accreditation System) for achieving milestones commensurate with level of training. Evaluation of faculty and fellow performance, in addition to program assessment, will be completed in a confidential manner and will be generated following each rotation. Mechanisms for providing regular and timely performance feedback to fellows include:

• A Clinical Competency Committee (CCC) has been created, as per the new ACGME NAS guidelines, to provide broad input to the Program Director about each fellow’s clinical performance. The CCC is comprised of a minimum of three faculty members that may include the Program Director, Associate Program Directors, Division Chief, and any member of the Hematology Oncology faculty. The CCC functions in an advisory role and reviews all completed written evaluations for each fellow and generates a summary and recommendations with respect to the performance and promotion of each fellow. The CCC will meet semi-annually and assure reporting of the Milestones evaluations, prepare a summary report of the committee’s recommendations and rationale, specifically give a recommendation for promotion, remediation or dismissal, and advise the Program Evaluation Committee (PEC) about any specific relevant issue.

• Written fellow evaluations from faculty mentors on progressive improvements in clinical competence are requested following each rotation in the first year and at periodic intervals in the second and third year, dependent on the specific clinical rotation. Fellows and faculty are
asked to review the written goals and objectives contained within this manual at the start of each rotation. Assessments are based on direct observation of clinical patient skills including history taking and physical examination, charting, communication with staff and patients/families, and general observations of personal skills (character and professionalism). A record of evaluation for each fellow is accessible for review with the Program Director at any time and kept in a confidential location. These evaluations will be obtained monthly and reviewed collectively by the Clinical Competency Committee (CCC, see below) on a semi-annual basis (unless remediative action is required). A summary of evaluations by the CCC will be reviewed by the Program Director in person with each fellow semi-annually.

- Semi-annual clinical faculty evaluations are sought from the fellows and submitted anonymously so as promote honesty and prevent the possible concern of ill will towards the fellow. Faculty have the opportunity to review the anonymous fellow evaluations and these evaluations may be used in faculty evaluation and promotion.

- Oral discussion and critique in real time is highly encouraged. The Fellowship Program Director and Associate Directors will facilitate this process to assure fellows have the opportunity to learn and apply critical review such as to improve their educational outcomes and performance.

- Research fellows (second and third year) must submit evaluations of the research faculty and the research experience. In turn, research mentors are asked to submit an evaluation of performance of research duties on a semi-annual basis. The SOC serves as an additional evaluation method to monitor progression towards the goal of attainment of scholarly activity as stipulated by the ABP. Fellows are asked to submit to the SOC a progress report and curricula vitae documenting all research activities such as abstracts, posters and oral presentations. Fellows also present their work to date to the SOC in a formalized fashion approximately every 6-9 months (see Research Competence/Scholarship Oversight Committee, Section V.F.).

- 360º evaluations are requested from the clerical staff, nursing and ancillary staff, patients, and peers for each fellow on an annual basis. Clinical mentors will assist the Program Director in the distribution of patient/family evaluations of the fellow. These are currently available in Spanish and English. Alternatively, the mentor may fill it out with the patient representative if literacy is in question.

- Evaluations are requested at all required teaching sessions, including the Fellow’s Hematology Oncology Educational Conference, Journal Club, Hematology Case Conference, and Resident Noon Conference. The results of these evaluations are reviewed by the CCC and shared with
fellows at individual (semi-annual) evaluation sessions to discuss progress towards competence in teaching.

- Fellows will be asked to perform a self-evaluation on a semi-annual basis. Fellows should identify three (3) areas of needed improvement and work with their mentor to develop a **Professional Improvement Plan**. This is submitted to the CCC and also reviewed with the Program Director at the time of the semi-annual reviews.

- Fellows and faculty are asked to perform a Program evaluation on an annual basis. The Program Director will review these evaluations in a formal manner with the Program Evaluation Committee (PEC), the faculty and fellows at departmental meetings, and integrate the findings and recommendations into program development on a yearly basis.

- A semi-annual evaluation is conducted between the Program Director and fellow. In addition, the Associate Program Directors, Division Chief, and/or clinical or research mentors may participate. During this evaluation session all clinical and research evaluations are discussed, feedback is sought, critical review is given, future goals are generated, and all is summarized in a written form. The CCC will convene prior to this evaluation session and provide a formal summative evaluation which will include review of requested documents including: Primary patient log, Procedure log, Educational conferences given, Quality Improvement project summary/progress, CV with publications, abstracts, posters and other writing projects, and an individualized Performance Improvement Plan (PIP). Additionally, fellows should reflect on their prior PIP and personal accomplishments. The SITE exam results are also available for the end of year CCC review. Fellows are asked to be prepared to discuss their Performance Improvement Plan and to give verbal feedback and critique to assist with future program development.

- An annual evaluation session is held at the end of the academic year with each fellow and the Program Director, Associate Program Directors, Division Chief, and mentors (research and/or clinical, if available) are also invited. The evaluation session focuses on clinical performance, procedural competence, research performance, participation in departmental didactics and meetings, and performance on the in-training examination (SITE). Deficiencies in performance, if any, are discussed. Finally, goals for the up-coming year are created, and, a new educational plan is generated to address attainment of future goals and, if necessary, correct deficiencies. An annual written evaluation is generated by the CCC initially and modified as needed by the Fellowship Director and fellow.

- The Program Director conducts a final evaluation for each fellow at the completion of the program. The evaluation includes a review of the fellow’s performance during their training including the final period of
education. As with the semi-annual and annual evaluations, the fellow is asked to provide a progress report or final work product on the research component of training to the SOC, in addition to a curriculum vitae with a listing of their accomplishments. Feedback from the fellow is sought with respect to improving the educational experience for future fellows. The final evaluation verifies that the fellow has demonstrated sufficient professional ability to practice competently and independently, in either clinical or research arenas, or both. The final evaluation becomes part of the fellow’s permanent record maintained by the department. Additionally, the Program Director generates a formal letter to the fellow verifying successful completion of the fellowship program, preparedness for competent, independent practice, and board eligibility.

- Written evaluations are part of the fellow’s permanent record, which is maintained in a confidential manner by the Program Director. These evaluations may be utilized in the future by the director for attestation of clinical and research competence for board application and future job references.

2. Academic Probation

If, during the evaluation process, significant deficiencies are identified, at or between these evaluation sessions, a remediation plan will be developed in conjunction with the individual fellow and the Program Director or faculty preceptor assigned. A timetable of re-evaluation and performance expectations will be formulated. If, in the opinion of the Program Director, the CCC and the clinical and research mentors, these performance deficiencies are sufficiently serious, a written “Letter of Unsatisfactory Academic Performance” may be placed in the fellow’s file. This action may also be accompanied by the imposition of Academic Probation if deemed appropriate by the Program Director and the research and/or clinical mentor.

Failure to achieve required performance expectations upon re-evaluation continued marginal or unsatisfactory evaluations, or failure to comply with the assigned remediation plan will generally result in a “Letter of Unsatisfactory Academic Performance” and the imposition of Academic Probation, if these actions have not already been taken.

Ultimately, failure to correct marginal or unsatisfactory performance may result in either a “marginal” rating being issued to the American Board of Pediatrics (ABP) with or without additional time being required at the current or previous level of training, or an “unsatisfactory” rating to the ABP. If the Program Director cannot sign off on clinical and research competence to the ABP, the fellow will not be eligible to take the sub-specialty board examination.
Academic probation may be imposed for academic or clinical performance deficiencies that are sufficiently serious and/or continue to occur despite attempts at remediation. In exceptional circumstances, where the Program Director has evidence that there is immediate danger to hospital personnel, patients, or the public, by the continued functioning of the fellow, such fellow may be immediately suspended from patient care duties until a definitive course of action is determined.

Academic probation involves the following:

- The fellow must participate in, and complete in a satisfactory manner, an academic remediation program which may consist of assigned readings, periodic sessions with an assigned attending or preceptor, mandatory conference attendance above that required for other fellows, and other educational interventions. Interventions such as psychiatric evaluation and/or counseling may also be required as deemed appropriate by the Program Director.

- Loss of moonlighting privileges.

- Probationary status shall be for a minimum of one month. Actual duration is contingent upon the fellow’s progress and success in correcting identified deficiencies as determined by the Program Director.

3. Non-renewal of Agreement

If, following at least 6 months of clinical or research activities, the fellow has displayed a level of academic performance that appears to the Program Director to likely result in either a marginal or unsatisfactory rating to the ABP, the Director may elect to not renew their contract for the next year of training. In either case, the following guidelines must be followed:

- A written notice of intent to not renew the fellow’s employment agreement must be provided to the fellow as soon as possible but no later than four months prior to the end of their current agreement, unless the primary reason(s) for non-renewal occurs within the four month prior to the end of the agreement. In exceptional circumstances, termination from the program prior to the end of the academic year may result (refer to Disciplinary Guidelines, Section III.FF.).

- Fellows will be informed in writing of their right to implement the formal institutional grievance and appeal procedures at the time that they receive a written notice of intent to not renew their employment agreement.

4. Appeal Procedures
Fellows have the right of formal appeal of evaluations and actions taken by the Program Director for marginal or unsatisfactory academic performance. The following appeal process shall be used in these cases:

- The fellow must submit, in writing, a request for a formal review of the evaluation or action to the Program Director no later than 30 days following notification of the evaluation or action.

- Upon receiving this request, an ad hoc committee of the Graduate Medical Education Committee will be formed to resolve the issue.

- This committee will be comprised of the Program Director, Division Chief, Director of Medical Education, and the Chairperson of the Graduate Medical Education Committee, and one additional Medical Staff faculty member. The involved fellow may designate the additional Medical Staff member.

- The ad hoc committee shall investigate the situation and reach a majority decision as to whether the written evaluation or action be either sustained or amended.

- The decision of the ad hoc committee shall be binding and will be communicated to all parties involved, including the Graduate Medical Education Committee.

5. Requirements for Promotion

Promotion from one year to the next in fellowship assumes the fellow has attained appropriate proficiency in performance of patient care duties and/or research. Following are guidelines for fellows and faculty to assist with the evaluation methods and decision with respect to promotion

a. Expectations for Clinical Skills at the End of the First Year

- Fellows are expected to appropriately handle the clinical service volume with respect to inpatient rounds, consultation requests, performance of procedures, admission of new patients, and triaging phone calls as appropriate.

- Fellows are expected to have performed independently (supervised by faculty) common procedures in Hematology Oncology which include: bone marrow aspirates, bone marrow biopsies, lumbar punctures with intrathecal chemotherapy, and peripheral chemotherapy via PIV. Indications for the procedures, familiarity with complications, obtaining informed consent, and documentation are required to be demonstrated.

- Fellows should be facile at evaluating and creating care plans for newly diagnosed patients, including participation in
clinical trials as appropriate. Fellows should be able to navigate clinical trial protocols and ensure compliance with required studies and therapies, including documentation.

- Fellows should be competent to lead an Informed Consent conference independently (though supervised by faculty).
- Fellows should demonstrate responsibility for teaching of residents and students on the teams and providing appropriate supervision and instruction.
- Fellows are expected to satisfactorily take call and demonstrate in the sign-out, discussion with faculty, and follow-up that appropriate advice has been given.
- Mentors and faculty must attest to these skills in the written evaluations for promotion to the next year.
- Fellows should meet or exceed the minimum goals for NAS milestones in each core competency, as determined by the CCC during semi-annual reviews.

b. Promotion in the Research Years

- Fellows must continue to demonstrate clinical proficiency as per all the requirements in the first year, with noted improvement in knowledge base and independence, as reflected in the clinical faculty evaluations. Fellows should actively assume increased responsibility for patient care during assigned rotations/clinics/call.
- Fellows must develop a hypothesis driven research project, with appropriate guidance by the Program Director, Division Chief, and research mentor(s). This project should be developed into a full proposal early in the second year of fellowship. Fellows are encouraged to apply for extramural funds. Fellows are expected to continue to work progressively on their primary research project in the second and third years. Presentation of the work to date at professional societies is encouraged.
- Fellows may elect to take the UCSF course, “Training in the Clinical Research” if relevant to their research (clinical or translational). The cost of the course will be covered by the Hematology Oncology Department or under the research mentor’s grant.
- Fellows are expected to present their research progress 1-2 times per year before the SOC, an external review board, for critical review. The SOC’s evaluation should reflect progress as appropriate at each stage of training.
- Fellows should meet or exceed the minimum goals for NAS milestones in each core competency, as determined by the CCC during semi-annual reviews.
Disciplinary Guidelines: Probation and Dismissal

Disciplinary action may be necessary for a variety of reasons. These may include failure to perform clinical assignments, inappropriate professional behavior or conduct, failure to comply with policies outlined in the Fellowship Employment Manual, the department’s Employment Contract, or violations of the Personnel Policy and Procedures of Children’s Hospital & Research Center Oakland.

Disciplinary action by the fellowship program taken against an individual fellow shall generally occur according to the procedures outlined below. In exceptional circumstances, where the Program Director has evidence that there is immediate danger to hospital personnel, patients or the public, by the continued functioning of the fellow, such fellow may be immediately suspended from patient care duties until the usual procedures are concluded. Depending on the severity of the infraction, a variety of disciplinary measures may be instituted. In some cases, a verbal warning may suffice. As the seriousness of the infraction increases or subsequent violations occur despite previous warning, disciplinary action may take the form of a written “Letter of Reprimand” placed in the fellow’s file, imposition of Disciplinary Probation, suspension of employment without pay, failure to be reappointed to the next year of training or, ultimately, termination from the program prior to the end of the academic year.

Section 1: A Fellow shall not be suspended or disciplined without just cause.

Section 2: Alleged administrative misconduct, which is misconduct by a Fellow not based on clinical performance or competence and/or which is not related to their satisfactory fulfillment of the clinical and academic standards of their fellowship program shall be subject to the grievance and arbitration set forth in this Agreement. The procedure may be expedited if agreed to by both parties.

Section 3: Disciplinary actions, including assignment of a remediation program, requiring the fellow to repeat clinical rotations which were unsatisfactory, imposition of Academic Probation, reporting of marginal or unsatisfactory performance ratings to the American Board of Pediatrics, and non-renewal of a fellow, when based on issues of clinical performance or competence, shall not be subject to Section 1 and/or the grievance and arbitration procedure set forth in this Agreement, but shall instead be subject to the following procedure.

(a) The Program will maintain an evaluation and promotional review procedure that is in accordance with the guidelines issued by the relevant accreditation bodies. Written evaluations based on clinical performance will become part of each fellow’s permanent file. If a fellow disagrees with a written evaluation and this disagreement cannot be resolved through discussions with the Fellowship Director,
the involved evaluator and the fellow, then the fellow shall have recourse to the formal appeal process outlined in this Section 3 to resolve the disagreement.

(b) If significant deficiencies are identified by the Program Director, a remediation plan will be developed in conjunction with the individual fellow and the Program Director. A timetable of re-evaluation and performance expectations will be formulated. If, in the opinion of the Program Director, these performance deficiencies are sufficiently serious, the fellow may be placed on Academic Probation.

(c) Academic Probation may be imposed for academic or clinical performance deficiencies that are sufficiently serious and/or continue to occur despite attempts at remediation.

Academic Probation involves the following:

- A Letter of Academic Probation is placed in the fellow’s file.
- The fellow must participate in, and complete in a satisfactory manner, an academic remediation program which generally consists of assigned readings, periodic sessions with an assigned attending, mandatory conference attendance above that required for other fellows, and other educational interventions. Other interventions such as psychiatric evaluation and/or counseling and testing for learning disabilities may also be required as deemed appropriate by the Program Director.
- Loss of moonlighting privileges.
- Probationary status shall be for a minimum of one month. Actual duration is contingent upon the fellow’s progress and success in correcting identified deficiencies as determined by the Program Director.

(d) Failure to achieve required performance expectations upon re-evaluation, continued marginal or unsatisfactory evaluations, or failure to comply with the assigned remediation plan may result in either a “marginal” rating being issued to the American Board of Pediatrics (ABP) with or without additional time being required at the current or previous level of training, or an “unsatisfactory” rating to the ABP with a requirement to repeat the year of training in question. If failure to achieve required performance expectations occurs despite remediation, or the fellow fails to comply with the terms of academic probation, the Program Director may also notify the fellow that the Pediatric Hematology Oncology Department does not intend to renew the fellow’s agreement.

(e) In exceptional circumstances, where the Program Director has evidence that there is immediate danger to Hospital personnel, patients or the public by the continued functioning of the fellow, such fellow may be immediately suspended from patient care duties until a definitive course of action is determined.
(f) Fellows have the right of formal appeal of evaluations and actions taken by the Program Director for academic deficiencies. The fellow must formally request such an appeal, in writing, within fourteen (14) days of notification of the contested action or evaluation.

(g) The Hospital, within seven (7) days of the written request of the fellow, shall convene an ad hoc committee of the Medical Staff of the Hospital to review de novo any actions made pursuant to the sections above. The ad hoc committee shall be composed of four (4) members of the Medical Staff, as follows: one appointed by the Chair of the Graduate Medical Education Committee, one appointed by the Program Director, one selected by the affected fellow, and the Chair of the Department of Medicine or his/her designee. One member shall be designated as Chairperson. No staff member who has participated in the disciplinary action shall be appointed as a member of the ad hoc committee.

(h) The ad hoc committee shall meet within one (1) week of its appointment. The affected fellow shall be informed of each and every meeting of the ad hoc committee and shall have the right to bring relevant witnesses. A majority vote of the ad hoc committee shall be necessary to overturn the disciplinary action under review.

(i) The parties agree that the procedure described in this article shall be the sole and exclusive avenue of recourse for the aggrieved fellow under this Agreement.

GG. Grievances

In the event that a fellow believes that the fellowship program has failed to provide a specific condition of employment, or violated any term of agreement as outlined in the Fellowship Employment Manual, or disagree with actions taken by the Program Director under Disciplinary Guidelines, Section III. FF., the following grievance procedures are to be followed:

- The grievance shall first be discussed with the Program Director in an attempt to find a satisfactory solution.
  - The grievance must be presented in writing to the Program Director within twenty (20) days after the event complained of or within twenty (20) days after the time when such event could reasonably have been discovered, whichever is later, not to exceed one (1) year from the event. A grievance addressed to the Program Director shall also be delivered to the Division Chief.
  - Disposition shall be deemed to have occurred on the earliest of the following dates: the date when the grievance is settled or rejected, or the tenth day after it is presented without a response satisfactory to the grieving party.
• If a satisfactory resolution is not reached with the Program Director, the grievance shall then be submitted in writing to the following individuals, in order, until satisfactory resolution is reached:
  ▪ Division Chief
  ▪ Director of Medical Education
  ▪ Chief Medical Officer or institutional official with oversight of GME.

• If a satisfactory resolution is not reached, then a three-member arbitration panel shall be appointed to consist of a fellow representative (chosen by the fellow), the Director of Human Resources, and the Chair of the Graduate Medical Education Committee. This arbitration panel shall investigate the matter and issue a binding, majority decision regarding the grievance.

III. Fellowship Program Closure/Reduction

Should the sub-specialty training program at Children’s Hospital & Research Center at Oakland close or reduce the number of trainees, the following guidelines will be followed:

• All fellows will be informed, verbally and in writing, as soon as possible.

• If possible, fellows currently in training will be allowed to complete their fellowship year, or the entire program.

• Every effort will be made by the Program Director and Division Chief to assist the fellow in re-location to another accredited fellowship program.

II. Policy on Administrative Support in the Event of Disaster

The Children’s Hospital & Research Center Oakland GME committee, the Residency Director, and the Fellowship Directors have developed a policy in the event of a disaster that leads to interruption of patient care and resident/fellow education. The ACGME requires that the sponsoring institution have such a policy that addresses administrative support for the programs, including assistance in continuation of resident/fellow assignments. To the extent reasonably possible, Children’s Hospital & Research Center Oakland and the individual residency and/or fellowship programs will provide assistance in re-location and continuation of education. It is recognized such physicians may be involved in the community in disaster assistance. The Hematology/Oncology Program Director has had discussion with the Program Director at Rady Children’s Hospital in San Diego, CA to develop a reciprocal policy for fellowship training in Pediatric Hematology/Oncology in the event of such a disaster. We are unable to guarantee paid positions, however, both programs will work collaboratively to provide short term or long term educational opportunities.

Policy

Purpose: As the Sponsor of Graduate Medical Education Programs, Children’s Hospital & Research Center Oakland (CHRCO) will provide administrative support
in reconstituting and restructuring residents’ and fellows educational experiences as quickly as possible in the event of a disaster that causes significant disruption of the residents’ or fellows’ experience.

Procedure:

• As soon as possible, but no later than five days after the declaration of such a disaster, the designated institutional official (DIO) or GMEC Chair will arrange a meeting of all program directors to determine whether or not each program can provide adequate educational experience to its trainees.

• If any of the above individuals are unable to participate in the meeting, designees determined by the Chief Executive Officer (CEO), Chief Medical Officer (CMO), or Senior Ranking Physician Official at CHRCO, will be appointed as substitutes.

• For any programs unable to provide adequate training, alternative arrangements will be sought for the trainees, and the ACGME will be consulted in all such arrangements.

• Program Directors will contact the appropriate Review Committee Director with information or requests for information.

• Program Directors will arrange temporary transfers of residents to other programs until the CHRCO program can provide adequate educational experience, or program directors will expedite permanent transfers if necessary.

• If more than one program is available for temporary or permanent transfer of a particular resident, the preference of that resident must be considered.

• All arrangements of temporary or permanent transfers will be done expeditiously so to maximize the likelihood that each resident will complete the year in a timely fashion.

• Within 10 days after the declaration of a disaster, the DIO will contact the ACGME to discuss due dates that the ACGME will establish for the programs:
  ▪ to submit program reconfigurations to ACGME
  ▪ to inform each program’s residents of resident transfer decisions
  ▪ The due dates for submission will be no later than 30 days after the disaster unless other due dates are approved by the ACGME.

JJ. Vendor Interactions Policy/Physician Conflict of Interest Policy

A conflict of interest/vendor interaction policy has been developed by the GME and Medical Staff committees at Children’s Hospital & Research Center Oakland.

Policy
In is the policy of Children's Hospital & Research Center Oakland that its residents and fellows are to refrain from any actual or perceived conflicts of interest with industry. Conflicts of interest arise where there is a divergence between an individual’s private interests and his/her professional obligations to CHRCO, other medical staff, patients or employees such that an independent observer might reasonably question whether the individual’s professional actions or decisions are determined by considerations of personal gain, financial or otherwise. A conflict of interest depends on the situation and not on the character of the individual.

General Principles

At CHRCO, clinical decision making and patient care must not be influenced by any relationships with vendors of pharmaceuticals or equipment. If conflicts arise they must be addressed appropriately and expeditiously. CHRCO recognizes that interactions are the responsibility of both industry and CHRCO personnel.

All faculty, students and staff have a responsibility to ensure, to the best of their abilities that all decisions about clinical care, research and educational content are independent and unbiased. The following guidelines have been adopted to minimize the potential for real or perceived bias in clinical care, education and research. These guidelines cannot identify every potential conflict, but rather serve as a general guideline upon which residents and fellows should act.

Guidelines

This policy incorporates:

- Gifts, Meals, Books, Online Subscriptions, Promotional Items and Compensation
- Drug Samples, Supplies and Equipment
- Support for Educational and Other Professional Activities
- Provision of Scholarships or Other Educational Funds
- Travel funds
- Speakers and Ghostwriting
- Research Contracts
- Disclosure of Relationships with Industry
- Compliance by Industry

1. Gifts, Meals, Books, Online Subscriptions, Promotional Items and Compensation

   a. Personal Gifts, regardless of value, from any industry representative may not be accepted by any resident or fellow as part of any work-related activity or during any clinical or other educational rotation. This includes, but is not limited to loans, economic opportunities, meals, tickets or vouchers for entertainment events, textbooks, software, online subscriptions, pens, notepads or cash. Under no circumstances can promotional items be used in patient care areas.
b. Individuals cannot accept compensation, including but not limited to, reimbursement for expenses associated with attending a CME presentation, sales talk or other activity in which the individual has no other role.

c. Payment of expenses may be provided for speakers at accredited educational meetings, consistent with guidelines developed by the Accreditation Council for Continuing Medical Education (ACCME) and Hospital policy.

d. Residents and fellows are strongly discouraged from accepting gifts of any kind from industry as part of non-professional activities.

e. Meals and other gifts or donations given by industry may not be provided to any CHRCO location. Industry may provide unrestricted funds to departments or divisions for educational programs. The funds will be managed in accordance with the Standards for Commercial Support of the ACCME.

f. Gifts may not be accepted in exchange for modifying patient care, such as prescribing or changing a patient’s prescription.

2. Drug Samples, Supplies and Equipment

a. Proper discretion will be utilized to assure the distribution of drug samples are for the benefit of the patient, not for promotion.

a. Unrestricted donations of drug samples, supplies, equipment can be given to Departments and Divisions, who will then be able to determine the appropriate use.

b. Vendors may donate products for evaluation or educational purposes to a department or division, if there is a formal evaluation process and Hospital invites the donation. Items provided to CHRCO at a discount or free as part of a formal contract are not considered a gift.

3. Support for Educational and Other Professional Activities

a. Commercial support for educational programs must be free of actual or perceived conflict of interest.

b. All of CHRCO’s educational programs must abide by the Standards for Commercial Support established by the ACCME.

c. All funds provided by industry or an industry representative to support educational programs must be given to CHRCO as an unrestricted grant. The funds can be provided to the Department,
Program or Division, but cannot be given to an individual faculty member, student or staff. This requirement applies to all funds for meals or refreshments, speaker honoraria, or any other expense related to an educational program and includes noon conferences, case conferences, grand rounds, and lectures at all Hospital sites. Funds that are provided by educational groups or other entities that act as ‘intermediaries’ for industry, must also be provided as unrestricted grants.

d. If they are requested to do so by the department / division chair or designee, vendors may provide education activities at a Hospital site. Fellows and residents are not required to attend.

e. To ensure accountability and to acknowledge generosity, records of the amount of funds contributed and the purposes for which they were used, will be kept by each Division or Training Program Director. These records should be available for review upon request by the Chair of the GMEC, the DIO (Designated Institutional Official) and training program directors.

f. Industry sponsors of educational programs may not determine the content or selection of speakers for educational programs.

g. Residents and fellows should carefully evaluate whether it is appropriate to participate in off-campus meetings or conferences that are partially or fully sponsored by industry, because of the potential for perceived or real conflict of interest.

h. If trainees elect to participate such above activities, then they should abide by the following requirements:

- Financial support should be fully disclosed by the meeting sponsor;
- The content of the meeting or session must be determined by the speaker, not the industry sponsor;
- The speaker must provide a fair and balanced discussion; and
- The speaker must make clear that the content reflects that of the speaker and not the Sponsor.

4. Provision of Scholarships or Other Educational Funds

a. Industry support for residents’ and fellows’ participation in educational programs must be free from any real or perceived conflicts of interest. All educational grants or programs must comply with the following requirements:

- The Training Program Directors must select the student(s) or trainee(s) for participation.
• The funds must be provided to the Department, Program or Division and not directly to the student or trainee.
• The Department, Program or Division must determine that the conference or program has educational merit.
• There is no expectation that the participant provide something in return for participation in the educational program.

b. This provision does not apply to merit based awards which will be considered on a case-by-case basis.

5. Travel Funds

a. Industry that is interested in having CHRCO residents and fellows attend meetings should provide unrestricted grants to a designated fund for educational conferences and meetings. The DIO will disburse the funds.

6. Speakers and Ghostwriting

a. Residents and fellows are prohibited from publishing articles that are substantially or completely “ghost” written by industry representatives. Residents and fellows who publish articles with industry representatives must participate in a meaningful way to the interpretation of data and/or the writing of the article and their opinion must be data-driven and not for hire. Residents and fellows shall be listed as authors or otherwise be cited for their contribution.

b. All financial interests of the authors shall be listed in accordance with the standards of the journal.

7. Research Contracts

a. To promote scientific progress, Hospital will accept grants for general support of research (no specific deliverable products) from pharmaceutical and device companies in accordance with established CHORI policies. (See CHORI Conflict of Interest Policy-Objectivity in Research attached hereto as Appendix A).

8. Disclosure of Relationships with Industry

a. Residents and fellows must disclose all financial interests with outside entities in accordance with CHRCO policy. Depending on the activity, the disclosure requirements are set forth below.

• For research activities the relationship must be disclosed to the CHORI Conflict of Interest Committee.
• All publications should be in compliance with the guidelines of the International Committee of Medical Journal Editors (www.icmje.org).

• All continuing medical education activities must be disclosed and resolved as defined by the Office of Continuing Medical Education and the ACCME (http://www.accme.org).

b. Residents and fellows who serve as consultants, members of a speakers’ bureau or have an equity interest in or similar relationship with industry for which they receive personal compensation or other support must recuse themselves from decision making regarding the selection of products or services to be provided to CHRCO (i.e. selection of drugs to be added to the formulary). Similarly, residents and fellows with such ties to industry shall not participate in decisions regarding the purchase of related items, drugs, procedures in their department unless requested to do so by the purchasing unit and after full disclosure of the industry relationship. In all circumstances, the financial relationship must be disclosed and any conflict resolved prior to participation any decision making.

c. Residents and fellows with financial relationships with industry must ensure that their responsibilities do not affect the ability to properly supervise and educate students and trainees or influence employment decisions for CHRCO. All relationships must be disclosed and resolved as defined by ACCME.

9. Compliance by Representatives

a. Industry representatives are permitted in non-patient care areas by appointment only. Industry representatives are not permitted in any patient care areas except to provide scheduled and approved in-service training on devices and other equipment for which there is an executed Hospital contract for these services.

KK. Institutional Agreements

Fellows may participate in elective or required rotations outside of the sponsoring hospital, and, as such, the Program Director is required to create an Institutional Agreement with each of the participating programs with a rotation of one month or longer. Currently, the Hematology Oncology fellows do not participate in off-site educational endeavors of 1 month or longer. The current off site rotations are: Radiation Oncology (Alta Bates Medical Center 2 weeks), Palliative Care (UCSF 2 weeks), Blood Banking (Blood Center of the Pacific 1 week), and Hematopathology (UCSF 1 week). Agreements for rotations of 1 month or longer contain written objectives (as outlined in this manual), supervising physician(s), evaluation process, and confirmation that malpractice, salary and benefits will continue to be covered by the Pediatric Hematology Oncology Department.

LL. Committee Representation
Fellows are encouraged to join a Medical Staff committee. These include both standing and ad hoc committees. Appointment of fellows to a medical staff committee is at the discretion of the Program Director, the Medical Staff President, and the relevant committee chairpersons. A second year fellow representative, selected by his/her peers, is appointed yearly to the Graduate Medical Education Committee. This position rotates yearly amongst the three fellowship programs. All first year fellows are members of the Hematology Oncology department’s Medical Quality Improvement Committee (5 South MQIC) which meets monthly, on the second Thursday of the month. Additionally, a fellow representative will be asked to participate on the Program Evaluation Committee (PEC) for Hematology Oncology. All fellows are requested to participate in the fellow selection committee annually.

**MM. Departmental Meetings**

The Department of Hematology Oncology meets twice monthly on the first and third Fridays from 8:00 to 9:00 a.m. Fellows are expected to participate unless specifically excused. The Division Chief oversees this meeting at which the group reviews: business planning and practice management, billing and coding, personnel management, Quality Improvement (QI), education, fellowship education and program development, and other agenda items. Fellows are asked to participate in presentation of patients for QA review at a formal QA meeting held quarterly and to present their work on QI projects (part of their portfolio). Fellows are also exposed to division or program development including outreach development, program organization and maintenance, and development of necessary collaborations within the institution (such as with other sub-specialty groups or administration) and beyond the institution (e.g. participation in national cooperative care groups, multi-center research collaborative). Exposure to administrative aspects of delivery of care appropriate for the discipline afford new opportunities for fellows to actively participate in creation of new learning endeavors, quality assessments, and acquisition of administrative and leadership skills.

**IV. Clinical Responsibilities**

**A. Activities and Charting Requirements**

Accurate and timely medical record documentation is an important part of each fellow’s patient care responsibilities. The chart is a major route of communication for the team members and it is often the primary source of information used for retrospective reviews for quality assurance and legal considerations.

1. **History and Physical**

Patients admitted to CHRCO must have an H&P in EPIC completed by the primary House officer assigned to the patient, co-signed by a senior resident, fellow, or attending. The fellow must write an additional note which includes a summary of the patient’s presenting features, pertinent physical examination findings, laboratory and radiographic results, and an assessment and plan for the current hospitalization. Patients admitted to Children’s
Hospital & Research Center Oakland who are over 21 years of age may not have an assigned resident. These patients are cared for by the fellow/attending on service. Therefore all admission, progress, and discharge notes must be completed by the responsible fellow and attending in a timely manner.

2. Progress Notes

Progress notes serve to document the patient’s course in the hospital and the chronology in which treatment was delivered, and should reflect any changes in the condition and results of treatment. They should also reflect periodic review for longer hospitalizations, or as a patient’s condition warrants.

Progress notes should be written in a standard Subjective, Objective, Assessment, Plan (SOAP) format.

Progress notes should emphasize the fellow’s assessment and proposed plan, they should not merely record the previous 24-hour activities. The notes should include a physical exam, laboratories, therapies administered (transfusions, chemotherapy, etc.) procedures performed, discussions with the family, and overall impression and management plan. Progress notes must be written by the resident at least once daily on all patients. When on service, fellows are expected to edit these notes for accuracy and completeness in EPIC and share with the attending, including, when appropriate, a signed addendum with a brief summary or any additional details required.

3. Orders

The use of verbal orders is discouraged. Physicians are required to place orders in EPIC. Verbal orders are to be given only when failure to do so would be detrimental to patient care. They must be transmitted only to a Registered Nurse (RN) or Respiratory Care Practitioner (RCP). When a verbal order is given, it is required that it be written down first, then repeated by the person who gave the order to ensure its accuracy. All verbal orders must be dated and signed as soon as possible and always within 48 hours by the ordering physician.

4. Admission

The on-call fellow coordinates admissions form the Emergency department or the clinic in consultation with the attending on-call. The fellow communicates the plan for admission to the Nursing Supervisor or unit Charge nurse and the on-call resident. Fellows are expected to come into the hospital after hours as necessary to assess very ill or newly diagnosed oncology patients and assist the residents in a course of action. See section IV. H. for details regarding on-call duties. An attending physician must see patients who are stable within 24 hours of admission.

5. Discharge
The primary house officer or nurse practitioner assigned to the patient is responsible for completing the discharge summary and after visit summary (AVS) prior to discharge in EPIC. In the event the patient is older than 21 years of age, the fellow and attending are responsible for completing the discharge.

B. Informed Consent

Informed consent is an integral component of practicing clinical Hematology and Oncology. Consent is required prior to enrollment on clinical trials, transfusion support, procedures, and major changes in therapeutic plans, including End of Life care and transition. The process of Informed Consent is taught in both a didactic fashion and by direct observation. A curriculum for enrollment of patients on clinical trials has been developed (see Section IV. J.5, The Educational Program). Didactics will be given in the context of the first month Orientation Lecture, Professionalism Noon Conferences, inpatient resident didactics, or weekly Fellow’s Hematology Oncology Educational Conferences. Fellows have the opportunity to observe informed consent conferences with faculty while on the inpatient service and in the outpatient setting. During the first year fellows should begin the process of leading such conferences in the presence of the attending, after a period of observation. During the course of the training program, fellows will assume a graduated responsibility for conducting the Informed Consent process in a mentored environment. Fellows should expect to receive valuable constructive feedback from members of the team, including the attending physicians, social workers, nurses, and interpretive staff. The clinical psychologists are available to the fellows for structured observation and critique for fellows leading consent conferences. The topic of such discussions is also part of the clinical psychology didactics.

All physicians (residents, fellows and attendings) are required to document Informed Consent Conferences in the patient’s medical record, EPIC. HIPAA consents are also required for every patient registered on a research protocol (clinical or biological).

Documentation consists of:

- Original consent in the Medical Record; signed and dated by:
  - Parent/guardian;
  - Witness;
  - Physician (providing consent/performing procedures/etc.);
  - Interpreter, if applicable.

- Notation in the progress notes (date and time) of consent conference with family, and other individuals present. A short separate EPIC consent note with details of protocol identification, adverse events, options, elements of Informed Consent is also required. Summary of the discussion should be included.

- Appropriate literature given to family (i.e. Transfusion consent requires written information on risks/benefits per Paul-Gann Act to be given to the family; chemotherapy protocol consents which include descriptions of medications, side-effects; therapy roadmaps, etc.).
• Copy of consent to the family.
• Copy of consent in the clinic (brown) chart (department specific) and scan into EPIC.

Transfusion consents are required prior to all transfusions. Consents may be obtained on a yearly basis for hematology/oncology patients and other patients with chronic transfusion needs (ensure documentation in EPIC). Patients going to the OR must have a signed consent in the chart prior to leaving the acute care unit. Ideally, the physician responsible for the procedure, or an associate, should provide consent. A parent should not be asked to sign a consent form unless they have been given ample opportunity to hear the risks and benefits of the procedure, available options, and have their questions answered. IRB (Institutional Review Board) approved consent forms for the Children’s Oncology Group protocols are located in the Hematology Oncology office and on the Hematology Oncology group’s Shared drive (K.). The CRAs (Clinical Research Associates) will provide assistance with locating appropriate consents for clinical trials.

C. Confidentiality of Information

The confidentiality of patient/family and staff information must be respected. Confidential information includes, but is not limited to, information acquired by discussion, consultation, examination, treatment and/or access to records. Be sensitive to your surroundings when discussing cases with your colleagues.

Passwords used to access the Hospital Information System (HIS) must not be disclosed or shared with anyone. The HIS systems, including Meditech, EPIC and Groupwise, are not to be used to access patient or Hospital information except to conduct legitimate business. Log off of the system when work is completed to prevent access to information by unauthorized persons.

CHRCO values confidentiality rights with regards to patients, families, and restricted hospital information. Any person who violates these rights, is subject to disciplinary action, up to and including termination.

D. Do Not Resuscitate (DNR)/Allow Natural Death (AND) Policies

Based on evaluation of an individual patient’s condition and prognosis and on discussions with the patient, parents or legal guardian and other members of the healthcare team, the attending or Medical Staff physician may decide to write an “Allow Natural Death” order in the medical record. The current policies regarding such orders are summarized as follows:

• “AND” orders must be documented on the “AND Order Sheet” with any specific orders qualifying the conditions or degree of resuscitation clearly delineated.

• All patients are considered a full code at the time of admission unless a “AND” order is written by the patient’s attending physician.
• Only the patient’s attending physician may write a “AND” order and such orders must be written in the medical record. Verbal orders or telephone orders are never acceptable for “AND” orders.

• “AND” orders must be rewritten with each admission.

• Full documentation of the clinical reasons for the “AND” order, discussions that lead to an informed consent being obtained and any consultations obtained must be made in the medical record. Daily progress notes thereafter should specifically mention the “AND” status.

E. Deaths/Autopsies

The general policy of the hospital and its medical staff is to provide for the comprehensive care of deceased patients and ensure the security of their belongings. A procedure has been created that delineates the process for completion of the deceased patient’s medical record, autopsy consent, death certificate, and referral to an organ procurement organization, if appropriate. The procedure for all involved staff is detailed in the Medical Staff Bylaws. The role of the attending physician and/or fellow in the case of patient death is as follows:

• Respond immediately when called.
• Carry out pronouncement of death.
• Document death in the patient’s chart. The death note should be written as soon as possible after the time of death and should include:
  1. Time of death.
  2. Disposition of body, including autopsy request and whether or not the coroner was notified.
  3. Persons contacted including attending and referring physicians.
• When appropriate a brief summary of the events leading to the physician being called to the bedside.
• Notify fellow and attending physician on-call and discuss:
  1. How, when, and by whom, the family will be notified.
  2. Cause of death.
  3. Indications for autopsy.
  5. Responsibility for completion of death certificate.
  6. Need for assistance from Social Services Department.
• Notify pathologist of autopsy.
• Notify coroner if required.
• The fellow or attending physician or designee must report a death to the California Donor Network (CTDN) at (800)-55-DONOR (36667).
• If autopsy is performed, follow-up on completion of death certificate.
• A narrative discharge summary must be dictated on all expired patients, even on those with stays less than 48 hours.
F. Procedural Competencies

Attaining proficiency in technical procedures specific to the sub-specialty is an important goal of fellowship training. Documentation of procedural competencies during fellowship is required by the ABP and may also be used to support the fellow’s application for clinical hospital privileges in the future. A core group of procedures, emphasizing those procedural skills appropriate for the pediatric sub-specialty, have been identified as a requirement for graduation for each fellowship program. An EPA (Entrustable Professional Activity) for the Hematology Oncology fellowships is to attain clinical competency in all the procedures specific to this specialty. Fellows are directly taught to perform procedures by the attending physician staff. This is done in an apprentice based system with direct observation of an experienced practitioner, and subsequent performance of multiple procedures under direct supervision with critical review.

The procedure competency system in use at Children’s Hospital & Research Center Oakland includes both an initial supervision and certification of a successful procedure attempt, as well as documentation of all subsequent successful procedures performed. Supervision and documentation of skills must be by the faculty. Fellows place procedure notes in the EMR documenting the indication, consent process, details of the procedure and outcome, and identification of supervising faculty.

Fellows are asked to maintain a complete list of all procedures performed during their fellowship training. The procedure log will be maintained in the Shared drive (L.) and be placed in the fellow’s portfolio, to be reviewed with the Program Director at the time of semi-annual reviews.

Fellows will receive training in the performance of procedures necessary to practice independently as a Pediatric Hematologist Oncologist. They will become proficient in the indications for the procedures, associated risks, and diagnostic interpretation. The technical skills deemed required are:

- Lumbar puncture with instillation of intrathecal chemotherapy
- Bone marrow aspiration and bone marrow biopsy
- Peripheral IV for instillation of chemotherapy

Additionally, fellows may have the opportunity to: perform conscious sedation for procedures, access central venous catheters, access and instill chemotherapy via an Ommaya reservoir, perform a skin biopsy, and give intramuscular chemotherapy. Fellows are encouraged to participate in bone marrow harvests, stem cell collections, and apheresis. Competence in working through a difficult procedure (i.e. dry tap on bone marrow aspirate, bloody lumbar puncture, extravasation of chemotherapy) is related to frequency of procedure performance. Fellows should expect to perform numerous procedures and be mentored prior to being assessed as procedurally competent.

First year fellows will be assigned to procedure clinics with a designated faculty member during the first month Orientation. During this time, fellows will be
supervised and signed off on competency after successfully performing 10 lumbar punctures (LP) with instillation of chemotherapy and 4 bone marrow aspirates/biopsies (BMA/Bx), including at least 2 bone marrow harvests. Additionally, the faculty should go through potential pitfalls and how to work through unexpected problems in the course of procedures. Attainment of procedural competence is a requirement and is documented in the semi-annual and annual evaluations, with final approval from the Clinical Competency Committee. First year fellows are asked to perform a minimum of 30 LPs and 10 bone marrow aspirates and biopsies. Senior fellows are asked to perform a minimum of 10 LPs and 5 BMA/Bx in each of the subsequent two years of training. Fellows will have ample opportunity to fine tune their skills throughout the fellowship training.

G. Primary Patient and Procedure Logs

All fellows are required to maintain accurate patient and procedure logs for the duration of the fellowship. The patient logs should include patient identifiers (Medical Record number, initials) in addition to diagnosis, date the fellow assumed care, and the name of the supervising faculty member. Fellows will have the opportunity to acquire new patients at the time of diagnosis and initial evaluation/management, during consultation, or during routine care in the clinic or hospital stay. Fellows should gain experience in the primary care of patients with both hematologic and oncologic disease at all stages of diagnosis and therapy (including off therapy). A minimum of 15 primary patients is required by the end of the first year of fellowship.

Procedure logs should document patients by common identifiers (Medical Record number, initials) in addition to the type of procedure performed, attainment of Informed Consent, date of service, and name of the supervising attending.

H. Night/Weekend/Holiday Call and Sign-out

Call responsibilities remain the same for all fellows, all three years. Fellows take call from home, however, they may on occasion need to come to the hospital to evaluate patients experiencing complications of their disease or treatment or new patients with a suspected malignancy. Each fellow assumes a maximum of every fourth weekday night and every fourth weekend call averaged over the year, and takes the first call. An attending is always available for back-up and should be called for difficult questions, newly diagnosed patients, critically ill patients warranting admission or transfer to the ICU, and deaths. Fellows are expected to call the attending and come into the hospital to evaluate ICU patients (including transfers) and newly diagnosed oncology patients or to admit BMT patients. Also, any patient, in the judgment of the fellow or attending, that may require a timely assessment should be seen right away and not wait to the next morning. Fellows take sign out from both inpatient teams at the end of the workday for any patients who are unstable or likely to need attention overnight, and then sign the patients out in the morning.

Fellows are asked to keep a log of their calls, patient names, diagnoses, reason for call, and recommendations. During the weekday, patients are signed out in the morning in written form via EPIC, the hospital’s electronic medical record (EMR)
system, to the entire clinical department so as to allow quick follow-up by the nurses, staff, or attending staff. Fellows must also document time spent actually taking the calls and time spent in the hospital. Any unusual circumstances that may warrant immediate attention, such as admissions, new patients, and critically ill patients, should also be communicated verbally to the responsible fellow, nurse(s), and/or attending(s).

Weekend sign-out rounds occur in person on Monday mornings (Tuesday morning following Monday holidays) from 8:00 to 9:00am. The on-call fellow (and attending) give a verbal presentation of all new admissions in addition to the current diagnostic and management issues on all hospitalized patients, including consultations. The calls and discharges are signed out in a written form utilizing the hospital’s EMR system (EPIC) as per the weekday protocol. All fellows and attending physicians are expected to attend. This also provides an opportunity for discussion of patient management and updates on the status of primary patients. Following is a template designed to provide guidance for Monday morning sign-out rounds:

**Sign-out template for fellows:**

Red/Aqua patients
1. Brief line stating age, gender, diagnosis, current treatment plan, and clinical status.
2. Brief overview of why the patient was admitted and planned disposition
3. Significant weekend events and brief overview of major issues (i.e., fungal disease, typhlitis, poor nutrition, prolonged fever/neutropenia)
4. Review of the patients by systems:
   a. FEN/GI: TPN/fluids, electrolyte issues, sludging/VOD issues
   b. CV/Pulm: Cardiopulmonary status, antihypertensive
   c. ID: Current antibiotics, antifungals, antivirals, why they are on them and planned length of therapies, recent significant culture or biopsy results
   d. Hem/Onc: Counts, transfusion thresholds and need for transfusions, coagulation issues, immunosuppressant therapies and current levels, current chemotherapy and plan
   e. Neuro: Pain issues, PCA/pain medication status, anti-emetics
   f. Psych: Other relevant family/social issues
   g. Disposition

New or ongoing active consults
1. Brief description about patient and reason for admission (should know pertinent lab and exam findings that lead to admission)
2. Describe initial management, diagnosis, presumed plan and disposition (with an appropriate justification, i.e., added vancomycin because, gave transfusion because…)
3. For more complicated admissions review patient by systems
The goal of sign-out should be able to cover each service in 30 minutes. That means you must know the patients and your sign-out well enough to average 1-2 minutes per patient.

I. Teaching Conferences

Formal teaching conferences play an important role in the sub-specialty training programs. A core didactic series has been structured for the fellows (Fellows Hematology Oncology Educational Conference), in addition to other educational experiences including Journal Club, Tumor Board, Hematology Case Conference, morphology review sessions, periodic Morbidity & Mortality conferences (often in association with the PICU), and Quality Assurance (QA) reviews conducted quarterly in Departmental meetings. Fellows are expected to prepare and give educational didactics a minimum of once per month throughout the fellowship (includes the Fellow’s Hematology Oncology Educational Conference, Journal Club, and Case Conference). Fellow attendance is required for departmental educational programs and those that pertain to the fellowship training program. Fellows are asked to make a concerted effort to attend the majority (80%) of the required conferences. CME credit is available for the Fellows Hematology Oncology Educational Conference and the Journal Club. It is imperative that the fellows ensure compliance with the regulations including disclosure of conflicts of interest, stated objectives, advance submission of the topics and speakers, and submission of evaluations. In general, the topics and goals/objectives must be submitted 72 hour in advance (minimum) and guest speakers require 2 months notice with submission of a curriculum vitae, conflict of interest statement, title of the didactic, and goals and objectives.

The following are the major teaching conferences at Children’s Hospital & Research Center Oakland:

- **Grand Rounds** are held every Tuesday from 8:00 to 9:00 a.m. in the auditorium. Attendance by all fellows is encouraged.

- **Case Conference** is held each Thursday from 8:00 to 9:00 a.m. (except every third Thursday when PL-2/3’s switch rotations). Attendance by all fellows is encouraged. Case Conference is an interactive session led by senior residents, Chief Residents or CHRCO fellows and attendings on clinical cases with emphasis on differential diagnosis, appropriate management, and clinical problem solving.

- **Noon Conference** is a formal teaching session held every weekday from 12:00 to 1:00 p.m. in the Main Hospital Auditorium. Noon Conference teaching sessions are presented by CHRCO subspecialty attendings, fellows, or visiting lecturers. Each fellow will be assigned to give at least one noon conference each year.

- In addition to the core noon conference schedule, approximately 10 conferences a year will focus on issues relevant to all post-graduate pediatric trainees such as professionalism, ethics, legal issues, wellness, and sleep hygiene. Fellows will be expected to attend this series of **Professionalism** lectures. The Program Director
will post a list of these special conferences and send e-mail reminders to the fellows and staff. The schedule is also available on the CHONet.

Following are the Hematology Oncology department specific teaching and clinical care conferences: Attendance sheets are kept for all required conferences.

- **Children’s Hospital Oakland Research Institute (CHORI)** hosts several conferences a month, typically on Tuesday afternoons at 4 p.m., given by the CHORI staff or visiting scientists. Attendance by the research fellows is **required**.

- **Monday morning sign-in** rounds provide a review and discussion of the prior weekend (and week) patients on the inpatient service in addition to consultations and advice calls. The fellow and attending on-call the prior weekend are responsible for the presentation of patients. The conference is held every Monday from 8:00 to 9:00 a.m. All fellows (attendings and nurse practitioners) are **required** to attend.

- **Tumor Board** is held weekly, on Tuesday from 12:15 to 1:30 p.m. All new solid tumor oncology patients in addition to those with new problems or recurrences are presented and discussed in this venue. Fellows are asked assume responsibility for their primary patients and present them to the Tumor Board as needed. The conference provides a forum amongst many disciplines involved in the complex care of these patients and includes: surgery, pathology, hematology/oncology, bone marrow transplant, neurosurgery, radiation oncology, data management, and nursing. Attendance by clinical fellows is **required**. Attendance by research fellows is encouraged.

- **Journal Club** is held monthly on the 2nd Friday morning from 8:00 to 9:00 a.m. The Journal Club is organized by the senior fellows. Topics for discussion and articles are chosen by the fellow and approved by the attending responsible for the Journal Club (Dr. Robert Raphael, or other faculty with particular expertise in the topic to be presented) and distributed ahead of time. A formal method for Journal Club presentation has been created and will be taught at the beginning of each year in a didactic session. This Didactic is available on the Shared drive (K.). Fellows are expected to demonstrate the ability to use technology to access scientific evidence, interpret what is uncovered, and apply to the care of patients. Evaluation of these skills is documented via the written evaluation process. Attendance at the Journal Club is **required** for all fellows.

- **Hematology Case Conference** is held monthly on the 4th Friday morning from 8:00 to 9:00. This conference consists of hematology case presentations and literature review, in a similar format to the Journal Club. Fellows and faculty present recent cases and discuss the evidence in the medical literature to guide in medical decision making. This conference is coordinated by the senior fellows. This is a **required** conference for fellow attendance.
• **Clinical Team Meetings** are held for each sub-specialty (Oncology, Sickle Cell, Thalassemia, Bone Marrow Transplant, Hemophilia, General Hematology) and fellows are expected to attend while on the designated outpatient service or the inpatient clinical service to present their patients.

• **Scholarship Oversight Committee (SOC)** sessions are held quarterly at CHORI. These sessions occur on the third Monday evening from 5:00 to 7:00 p.m. The SOC in June is reserved for graduating fellows and will typically be held on the first Monday of the month. All sub-specialty fellows from Children’s Hospital & Research Center Oakland attend these sessions. Each fellow is given the opportunity to present their research to the group every 6 to 9 months. Clinician scientists and laboratory based scientists critically review the concepts and quality of scholarly activity and provide feedback to the fellows, mentors, and Program Directors. Presentation and review at this committee is a requirement by the ABP to document participation and completion of a scholarly work product. See Research Competence/Scholarship Oversight Committee Section V. for full details and requirements. Hematology Oncology fellows are required to attend the sessions, even if not presenting their research.

• **Fellows Hematology Oncology Educational Conference** is held every Wednesday morning from 8:00 to 9:00 a.m. The senior fellows assume responsibility for creating the didactic schedule. This is a structured educational program in the basic sciences and pathophysiology of disease and serves as a comprehensive board preparation course. Topics for the conferences are listed in the Clinical Core Curriculum, Section IV.K. and the course should extend over a 3 year period of time to cover all these topics. Fellows should prepare and read in advance of each didactic so as to maximize the educational experience. These didactics are given primarily by fellows, but also by faculty and visiting/invited professors. Additionally, some of the sessions will address topics relevant to research (clinical and laboratory research methodology and study design, grant preparation, statistics, conduct of ethical research, critical review of literature, manuscript preparation), and senior fellows will be asked to present their research yearly at this conference. Fellow attendance is required.

• **Psychosocial Development Rounds** are periodically conducted by the clinical psychologists, Dr. Pamela Orren and Dr. Dina Hankin. These sessions focus on topics related to patient communication and assessment skills. Fellows are required to attend a minimum of 75% of these sessions.

J. **The Educational Program**

1. **ACGME Clinical Core Competencies**
Subspecialty programs must require that its fellows obtain competence in the six areas listed below to the level expected of a new practitioner:

a. **Patient care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

b. **Medical knowledge** about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

c. **Practice-based learning and improvement** that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

d. **Interpersonal and communication skills** that result in effective information exchange and collaboration with patients, their families, and other health professionals.

e. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse population.

f. **Systems-based practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

2. **Scholarly activities**

Both faculty and fellows must participate actively in scholarly activity. Adequate resources for such activity must be available, e.g., sufficient laboratory space, equipment, computer services for statistical analysis, and statistical consultation services. Scholarship is defined as one of the following:

- The scholarship of discovery, as evidenced by peer-reviewed funding or publication of original research in peer-reviewed journals.

- The scholarship of dissemination, as evidenced by review articles or chapters in textbooks.

- The scholarship of application, as evidenced by the publication or presentation at local, regional, or national professional and scientific society meetings, for example, case reports or clinical series.

- Active participation of the teaching staff in clinical discussions, rounds, Journal Club, Hematology Case Conference, Hematology/Oncology Educational(Fellows) Conference, and research conferences in a manner that promotes a spirit of inquiry and scholarship. Offering of guidance and technical support (e.g., research design, statistical analysis), for fellows involved in research; and, provision of support for fellow participation as appropriate in scholarly activities.

3. **Professionalism**

The ABP and the ACGME require that programs teach and evaluate professionalism of all pediatric residents and fellows. Professional behavior comprises those attributes and actions that serve to maintain patient interests above physician self-
interest. It involves the relationships between physicians and their patients, families, colleagues, and professional organizations. It has implications in the conduct of clinical or translational research and in interactions with pharmaceutical industries. Components of professionalism integral in the lives of all physicians include:

- Honesty/integrity
- Reliability/responsibility
- Respect for others
- Compassion/empathy
- Self-improvement
- Self-awareness/knowledge of limits
- Communication/collaboration
- Altruism/advocacy

In addition to these general guidelines for the teaching and evaluation of professionalism, there are unique components in the field of Pediatric Hematology and Oncology. As physicians continually faced with life threatening and grievous medical illnesses, we are in unique clinical situations. We must be able to speak with patients and their families in times of grief and loss, always maintaining professional composure, compassion, honesty, and always bearing in mind the emotional, educational, social, and cultural status and well-being of our patients. Learning to discuss difficult information with patients and families is a critical component in the education of oncologists. Structured didactics and mentorship are instrumental in this teaching process. Additionally, caregiver health is critical to recognize during the initial training period and appropriate recognition and assistance provided on a regular basis. There is a high burn-out rate in oncology and learning to face issues early on in training, establish support networks, and improve communication are recognized effective means of prevention for burn-out.

A professionalism didactic series has been created by the fellowship sub-committee of the Graduate Medical Education committee to address the above topics. The lectures will be given during the resident noon conferences on a monthly basis (10 lectures per year). All fellows are required to attend.

4. Fellows College at UCSF

CHRCO pediatric sub-specialty fellows have been invited to participate in the Fellows College at UCSF. This program offers quarterly activities to assist fellows in the continuing development of teaching, education and leadership. Fellows are divided by year of training and attend specific seminars providing instruction in clinical teaching methods, assessment of educational tools, and new strategies for effective teaching. Professionalism topics common to all sub-specialties are also presented in this forum, in addition to development of skills in assessment, portfolio building, and career development. The college will also offer opportunities to attain and enhance skills in the conduct of clinical or basis science research, in addition to networking with other fellows conducting research. All fellows are required to attend and will be relieved of their clinical or research duties for one day on a quarterly basis. The program directors will inform fellows of the Fellows College
dates and place them on the e-mail list for direct contact to register for these programs.

5. **Clinical Trial Consent Curriculum**

**Purpose:** Pediatric hematology/oncology fellows must learn and demonstrate competency in the Entrustable Professional Activity (EPA) of enrolling and treating patients on clinical/translational research trials

**Participants:** First, second and third year pediatric hematology/oncology fellows

**Objectives:** By the end of the first year of training, fellows will:
- Choose an appropriate front-line trial for patients with newly diagnosed ALL
- Independently obtain proper informed consent for participation in ALL clinical trials
- Work with clinical research associates (CRAs) to review and verify eligibility requirements for enrollment on ALL clinical trials

**Curriculum:**
- During orientation first year fellows will attend lectures introducing the Children’s Oncology Group (COG) and its clinical trials, the elements of informed consent and breaking bad news
- Additional instruction pertinent to the conduct of clinical research will be included in a rotating series of Professionalism lectures during Noon Conference, and during “Fellows’ College” sessions and the TICR (if taken) at UCSF. The TICR or Training Introduction to Clinical Research, a course for the conduct of research involving human subjects. This course is optional and fellows may enroll dependent on the nature of the research to be conducted.
- During orientation first year fellows will complete the online Collaborative Institutional Training Initiative (CITI) module for human subjects research
- During orientation second/third year fellows will conduct a mock consent conference for an ALL clinical trial using role play, observed and evaluated by peers, first year fellows and participating faculty
- During clinical rotations first year fellows will observe faculty conducting at least one consent conference for participation in an oncology clinical trial
- During clinical rotations first year fellows will independently obtain proper informed consent from a newly diagnosed patient for participation in a clinical trial for ALL
- During clinical rotations first year fellows will review and verify eligibility requirements for patient enrollment on clinical trials for ALL, in conjunction with faculty and CRA staff
- Performance in the conduct of consent conferences will be reviewed by faculty using a standard evaluation form, mapped to core competency milestones
- Fellows will participate in self-reflection and constructive criticism with supervising faculty following consent conferences
K. Clinical Core Curriculum

In designing the clinical objectives for training, the program adheres to the criteria of the American Board of Pediatrics (ABP) for board certification and the American Council of Graduate Medical Education (ACGME) for training in pediatric subspecialties. Additionally, core curriculum components of training that as clinicians we believe are essential to the clinical practice of Pediatric Hematology Oncology have been added. Components of the training include: clinical care (direct and consultative), a didactic core curriculum in related basic sciences, and continuing responsibility for the care of patients with malignant disease and chronic hematologic diseases. These topics provide a basis for learning and didactics in the Fellow’s Hematology Oncology Educational Conference. Trainees are expected to become facile at the recognition, diagnostic evaluation, and management of the following disorders:

Hematology

Newborn: developmental erythropoiesis and hemostasis; unique disorders such as neonatal alloimmune thrombocytopenia, autoimmune thrombocytopenia, fetomaternal hemorrhage, alloimmune hemolytic anemia, vitamin K deficiency, anemia of prematurity

Structural and quantitative disorders of hemoglobin synthesis: hemoglobinopathies, thalassemias

Red cell diseases: membrane defects, enzymopathies, acquired

Anemias: nutritional (iron deficiency, megaloblastic), autoimmune hemolytic, blood loss, chronic disease and secondary anemia

White cells: normal myelopoiesis; alterations in primary disease states or systemic disease; neutropenia, inherited and acquired; defects of neutrophil function

Coagulation: physiology of coagulation, fibrinolysis and the vessel wall; factor deficiencies and inhibitors; hemophilia; von Willebrand disease; inherited and acquired coagulopathies

Hemostasis: platelets, thrombocytopenia – inherited and acquired, ITP, DIC, sepsis; platelet dysfunction, inherited and acquired

Hypercoagulable thrombotic states: pulmonary embolus, deep venous thrombosis, catheter associated thrombosis, stroke; congenital and acquired thrombotic disorders

Immunodeficiency states: acquired and congenital

Bone marrow failure syndromes: aplastic anemia, Fanconi’s anemia, Diamond-Blackfan anemia, transient erythrocytopenia of childhood

Transfusion medicine: collection and storage and use of products, typing and cross matching for transfusion, indications and complications of transfusion; iron overload and chelation therapy

Oncology

Knowledge of the epidemiology and etiology of childhood cancer, predisposing factors, genetics, clinical presentation, diagnosis, and staging/classification of
common childhood malignancies, and application of multimodal therapy for the following conditions:

**Leukemias:** acute and chronic; lymphoid and myeloid
**Lymphomas:** Non-Hodgkin lymphoma, Hodgkin lymphoma
**Brain tumors:** medulloblastoma, astrocytoma, ependymoma, glioma, PNET
**Solid tumors:** neuroblastoma; renal tumors; rhabdomyosarcoma and soft tissue sarcomas; gonadal and germ cell tumors; liver tumors; rare tumors
**Bone tumors:** osteosarcoma and Ewing’s sarcoma
**Histiocytic disorders:** Langerhans cell histiocytosis, hemophagocytic syndromes

**Treatment of relapsed or refractory malignancies**
**Chemotherapy:** knowledge of the principles of chemotherapy including combination chemotherapy, pharmacology and pharmacokinetics, drug resistance, organ damage
**Adjuvant therapy:** applying principles of therapy to specific disease states to include biologic response modifiers, immunotherapy, chemotherapy, radiation therapy, and surgery
**Supportive care:** nutrition, anti-emetics, transfusion support, oral hygiene, central venous access, pain control; schooling, stress
**Management of infections in immune compromised hosts:** prophylaxis and treatment of viral, bacterial and fungal infections
**Late effects in cancer survivors:** radiation and chemotherapy related, cognitive and physical
**Understanding principles and complications of radiation and surgical therapy**
**Applying appropriate diagnostic studies** in the diagnosis, staging and monitoring of diseases, including appropriate imaging studies, procedures, biochemical markers, and immunologic studies
**Palliative care:** including support of the patient, family, and staff (coordination of care in the hospital, home, or end-of-life facility)

**Hematopoietic stem cell transplantation**

**Knowledge of allogeneic, autologous, and syngeneic hematopoietic cell (marrow, peripheral blood stem cell, umbilical cord blood) transplants** including biologic principles, indications, donor selection and evaluation, tissue typing, preparative therapy, and procurement and processing.
**Common problems:** graft rejection, graft versus host disease (acute and chronic), veno-occlusive disease, infectious complications (diagnosis and management), interstitial pneumonitis; early and late sequelae including effects of conditioning and radiation; post-transplant lymphoproliferative disease.

L. **Curriculum for the Clinical (First) Year of Fellowship**

The first year of the Hematology Oncology Fellowship is designed to provide a broad clinical experience. Integrated into this year will be orientation to the hospital and programs, and development of a research hypothesis with identification of a research mentor. The first year fellows will be required to attend a daily noon lecture during the Outpatient Orientation month given by the clinical staff on basic topics in Hematology, Oncology, and BMT (Orientation Lecture Series). See Clinical Objectives for the Outpatient Orientation Rotation Section IV.W.
Following are the clinical and laboratory rotations for the first year clinical fellow:

- **Outpatient Orientation Rotation; Daily lecture series** 4 weeks
- **Inpatient Rotations:**
  - Aqua team (BMT, high acuity oncology) 12 weeks
  - Red team (hematology, oncology, inpatient hematology consultation) 12 weeks
- **Radiation Oncology Rotation, Alta Bates/Summit Medical Center** 2 weeks
- **Pathology/Hematology Laboratory** 2 weeks
- **Blood Banking Rotation (Blood Center of the Pacific)** 1 week
- **Hematology/BMT clinics Rotation** 5 weeks
- **Hematopathology (UCSF)** 1 week
- **Palliative Care/End of Life Rotation (CHRCO/UCSF)** 4 weeks
- **Neuro-Oncology Rotation** 2 weeks
- **Formulation of Research hypothesis** 3 weeks
- **Continuity clinic (minimum 36 per year)** one half day per week
- **Call:** maximum every 4th night and 4th weekend; 1-2 holidays per year
- **Vacation** 4 weeks

First year fellows will attend continuity clinic one half day per week. They will each attend a Tuesday General Hematology clinic each month and the remainder of the weekly clinics will be in their general Oncology continuity clinic.

**M. Clinical Curriculum for the Research Years of Fellowship**

Following are the clinical and laboratory responsibilities for the second and third year fellows:

- **Continuity clinic:**
  - Second year: one half day per week (minimum 36 per year)
  - Third year: one half day per week (minimum 36 per week)
- **General Hematology continuity clinic:**
  - All fellows will attend a monthly General Hematology Continuity clinic in lieu of the weekly Oncology Continuity Clinic that week.
- **General Oncology clinic:**
  - All fellows will attend Oncology clinic (assigned day of week) 3-4 days per month. They are not expected to attend this clinic on the week of their General Hematology continuity clinic.
- **Call:** Night and weekend call remains every 4th (maximum) to 6th for the duration of the fellowship. There are 1-2 call holidays per year.
- **Inpatient Hematology consultation:** Senior fellows participate in the inpatient consultation service (when the first year fellow is not on the Red team or on consult). Fellows work directly with the Red team attending in providing new consultation during these weeks and following patients while hospitalized. The fellows will then sign out the consultations to the fellow covering the following
week. Second year fellows will cover 6 weeks on the inpatient consult service and third year fellows will cover 4 weeks.

- **Transitional clinics:** Fellows will periodically participate in the sub-specialty clinics that provide comprehensive transitional care to patients. These include: Long term Follow Up (LTFU) for survivors of childhood cancer, comprehensive Neuro-Oncology clinic, Sickle Cell, Pediatric and Adult, and Thalassemia clinics and hematopoietic stem cell transplantation.

- **Oncology Survivorship/Long Term Follow-up (LTFU) clinic:** Third year fellows will alternately participate in this monthly cancer survivorship clinic for 6 months (a total of 6 clinics each per year), generally on the third Tuesday afternoon of each month. Fellows are expected to participate in chart review and preparation for each clinic in advance.

- **Specialty outpatient rotations:** Six week blocks have been designed to provide opportunity for fellows to gain a deeper exposure to a multi-disciplinary approach to management in Sickle Cell disease, Thalassemia, Hemophilia, Neuro-Oncology, and Bone Marrow Transplantation. Senior fellows will be assigned two of these blocks in each of the second and third year in lieu of continuity clinic for that time period. Fellows may create a clinical rotation in an area not previously created, with permission from the Program Director and a designated mentor.

- **Inpatient service:** Third year fellows are asked to spend one month on the inpatient services at the end of the academic year. Senior fellows assume the role of a “junior attending” with full responsibility for the care of the Hematology, Oncology, and Bone Marrow Transplant patients, in addition to inpatient consultation. Third year fellows are assigned two 2-week blocks on the Red and Aqua teams. Attending back-up and supervision is provided. This month reinforces the clinical experience and development of skills necessary to transition to independence in clinical management of complex Hematology, Oncology, and BMT patients.

**N. Continuity Clinic**

The continuity clinic experience provides an excellent opportunity for fellows to be completely involved in all aspects of clinical care for their patients, including diagnostic evaluation, assessment, development of care plans, and management of acute and chronic complications related to their disease or effects of treatment. Additionally, fellows have the opportunity to observe the natural course of an illness over a long time period. First year fellows acquire new oncology and hematology patients, primarily during their rotations on the inpatient services, and assume the role as the primary doctor, with the supervision of the primary attending physician. Senior fellows may “pick up” new patients while on call or in the clinics as well. New primary patients do not have to be newly diagnosed patients and fellows are encouraged to pick up patients at later stages of treatment or off therapy so as to benefit from the knowledge of monitoring during this period of time. All fellows attend their respective continuity clinic for one half day per week during all three years. The fellow will maintain a continuity experience with their patients and the clinic attending, who serves as a clinical mentor. Fellows are asked to maintain a log
of primary patients, with a goal of a minimum of fifteen patients with malignant or chronic hematologic disease, and to document details of their participation or involvement with each patient (consent conferences, referrals, Tumor Board presentations, coordination of care, etc.). This primary patient log is requested for review semi-annually.

Refer to Level Specific Competency Based Aspects of Training and Evaluation, Section IV.P., for details of the expectations of fellows in the care of their patients on an outpatient basis. Many of these patients will also transition between the inpatient and outpatient services and afford many opportunities for fellows for direct patient interaction, presentation at Tumor Board, patient care conferences, etc.

Fellows are encouraged to either schedule their primary patients into their continuity clinics or arrange to see them in an alternate clinic (for example, when the patient would be due to receive therapy or as per the sub-specialty care team). Fellows may also arrange to see their primary patients when admitted to the inpatient service, even if not assigned to that service at the time (analogous to the role of the primary attending). Fellows are expected to be involved in all aspects of primary management for their patients such as: periodic assessments, meetings with the patient and family, consent conferences, evaluation and management of new problems, management of relapse or complications, referrals letters and communication with other specialists and presentation at the Tumor Board.

Fellows are assigned a specific day of the week for their Oncology continuity clinic for all three years, though there is an option to change day of the week at the beginning of each academic year to accommodate research and lab meetings. The clinic hours are generally 9am to 1pm. Fellows are expected to be present to see all assigned patients and be available to assist with emergencies and drop-in and sick patients. In the case of absence, including vacation or illness, fellows should notify both the Program Director and the clinic attending. The clinic schedule will be updated on the Shared K drive and posted in the clinic. Any changes are to be reported immediately to the Program Director and administrative assistant.

Each fellow will rotate through the General Hematology continuity clinic on an every 4 week basis during all three years, and establish continuity with patients in this setting as well. This General Hematology clinic will be in lieu of the weekly Oncology clinic.

In addition to the weekly half-day continuity clinic experience throughout the 3 year fellowship, fellows have the opportunity to participate in sub-specialty multi-disciplinary clinics, such as Thalassemia, Sickle Cell Disease, Neuro-Oncology, Hemophilia, and Bone Marrow Transplant. As per many academic institutions, patients are seen in multidisciplinary clinics, affording comprehensive care for these diseases and their resultant complications. This differs from the type of experience in the traditional primary care continuity clinic. The first year fellows have 5 weekly rotations in Hematology/BMT clinics and will be able to participate in these specialty clinics (as well as during the Orientation month). Fellows also have the opportunity to participate in the Hematology laboratories (e.g. Ektacytometry, Hemoglobin
Reference Lab, HLA, coagulation) during the Pathology, Hemato-pathology and Blood Banking rotations in addition to the Hematology/BMT clinics rotation.

Fellows may schedule their own continuity clinic patients and continue to acquire new patients (primarily while on-call), in addition to attending these sub-specialty clinics, as long as they attend a minimum of 36 clinics in the year.

During the first year, while on the Aqua inpatient service, fellows attend the Bone Marrow Transplant clinic one to two days a week, time permitting.

O. Competency Based Learning Goals and Objectives

The overall goals and objectives for Pediatric Hematology Oncology fellows are to gain extensive experience in the diagnosis and on-going care of children with cancer and hematologic disorders, and to become researchers and teachers in the field. First year fellows spend the majority of their time providing clinical care on inpatient and selected outpatient rotations. Second and third year fellows continue to provide care on the inpatient services on call nights, weekends, and holidays, and participate in their weekly Continuity Clinics, and devote the majority of their time devoted to research activities.

The goals listed below, established for the first year Pediatric Hematology Oncology fellows, are primarily aimed at gaining experience in the daily management and continuity of care of children with known as well as presumed hematologic or oncologist disorders. In general, the expectations of the first year fellow involve demonstration of medical knowledge, comprehension of pathophysiology of disease, development of differential diagnoses, formulation of management plans, dissemination of plans by presentation at Tumor Board and other clinical conferences, and management of hematology and oncology patients in inpatient, outpatient, and consultative settings.

Senior fellows are expected to develop increased knowledge and independence with respect to the clinical care goals for the first year fellows. Additionally, the second and third year fellows are expected to develop a research project, attain appropriate IRB approval and animal research approval as necessary, apply for grant funding, carry out necessary experiments and/or clinical studies, and prepare the results for periodic presentation (to the SOC and local/regional/national meetings) and publication.

All fellows are also expected to engage in regular teaching activities for Pediatric residents and medical students.

a) **Goal: Provide patient care** that is compassionate, appropriate, and effective for the treatment of health programs and the promotion of health.
   i. Demonstrate thorough presentations of patients seen as new patient consults, inpatient rounds, outpatient clinics, and at clinical conferences, and documentation in the medical record the ability to
report a detailed and appropriate history and physical examination, pertinent diagnostic studies, and develop rationale for the diagnostic and therapeutic decision making to optimize the care of children with hematologic or oncologic disease. Fellows must demonstrate the ability to develop management plans and provide appropriate counsel to the patients and families.

ii. Discriminate severity or changes in clinical status of patients which need to be reported to the attending immediately from those that can be presented on rounds. Discriminate between patients who may be appropriately treated on the inpatient unit and those who require escalation of care to the intensive care unit.

iii. Develop and provide rational for the management plans of children with acute life threatening or major organ threatening disease or complications unique to hematology/oncology such as:
   1. Sickle cell disease and acute chest syndrome
   2. Tumor lysis syndrome
   3. Acute hemorrhage
   4. Sepsis in the hematology/oncology/BMT patient
   5. Acute neurological compromise

iv. Recognize indications for and the risks associated with the following therapies and develop appropriate management plans:
   1. Central venous lines
   2. Chemotherapy
   3. Transfusion therapy
   4. Apheresis
   5. Radiation therapy
   6. Surgical therapy/intervention
   7. Anti-coagulation therapy
   8. Chelation therapy
   9. Nutritional support
   10. Pain Management

v. When requesting consultation, demonstrate the ability to formulate the appropriate questions and rationale justified by pertinent points of the history, physical examination, and laboratory data.

vi. When requested to perform a consultation, demonstrate the ability to obtain the appropriate information to ascertain the urgency, perform a complete chart review and patient history, physical examination, review of pertinent laboratory data, and synthesize a cohesive summary, differential, and management plan. Demonstrate professionalism in the timeliness of the consult and personal demeanor in communicating with other health care staff and patients/families. Also include teaching residents and staff with verbal and written communication and review of the literature with appropriate materials referenced or provided.

vii. Recognize the indications for, the common complications of, and achieve competence in performance of the following procedures:
   1. Bone marrow aspirate and biopsy;
   2. Lumbar puncture with instillation of chemotherapy;
3. Administration of intravenous chemotherapy by peripheral venous access.

b) **Goal: Acquire medical Knowledge** of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences as well as the application of this knowledge to patient care.
   i. Develop a prioritized differential diagnosis for children with cancer or hematologic diseases hospitalized for acute illnesses, seen in the outpatient or continuity clinics, or during consultation.
   ii. Fellows must demonstrate use of information technology to optimize patient care and education. Fellows should also become proficient at determining which laboratory tests are indicated and the appropriate interpretation. Supervision will be provided and it is expected that fellows will assume progressive responsibility with time and experience.
   iii. Demonstrate knowledge of the pathophysiology of disease, review of recent advances in clinical medicine and biomedical research, dealing with complications and death, and the scientific, ethical, and legal implications of Informed Consent and confidentiality. Fellows are expected to become familiar with the hematologic, oncologic, and transplant diseases listed in the Clinical Core Curriculum, Section IV.K. These diseases will frequently be encountered in the clinical setting and form the basis of topics for the didactic program led by the fellows at the Fellows Educational Conference.
   iv. Take the sub-specialty In-Training Examination (SITE) yearly and review the results by sub-section for feedback on general academic knowledge base and areas needed for self-improvement.
   v. Be an active participant in teaching and learning at the Fellows Conference, Hematology Case Conference, Journal Club, Tumor Board, Monday morning sign-out rounds, and individual team discipline clinical rounds. Demonstrate a commitment to primary care responsibility with acquisition of a group of primary patients of varied hematologic/oncologic diagnoses, and continued involvement in the clinical management of these patients, to assess complications of disease or therapies, and provide appropriate interventional strategies. Remain the primary physician contact for the family and the remainder of the health care team, including the referring physician. Ensure appropriate and frequent communication, verbal and written, with consultants and primary care/referring health care providers.

c) **Goal: Participate in Practice Based Learning and Improvement** that involves the investigation and evaluation of the knowledge, skills, and attitudes needed for continuous self-assessment, using scientific principles, methods, and evidence to investigate, evaluate, and improve one’s patient care practice.
i. Present new cases and new problems with primary patients at Tumor Board and clinical conferences with detailed literature review to support the chosen management plan.

ii. Critique one’s practice experience to recognize strengths, deficiencies, and limits in knowledge and expertise; then identify and utilize the appropriate resources for remediying those identified deficiencies. Fellows will be asked to complete an assessment of their own clinical and research skills in addition to evaluation of their peers.

iii. Meet individually with the responsible attending physicians periodically during the clinical rotations to obtain feedback on performance. Meet with the continuity clinic attending/mentor at least monthly for this critique as well. Incorporate this feedback and personal career goals into development of a professional career development plan.

iv. Actively seek out and listen to constructive feedback from other members of the health care team as well as patients and families, and incorporate this feedback as appropriate into an individualized professional development plan.

v. Actively participate in the education of patients, families, Pediatric residents, medical students, and other health professionals by leading clinical rounds, providing daily direct updates on patient status and plan of care, and providing teaching points and giving scheduled didactics.

vi. Fellows will have the opportunity to teach and participate in continuing education activities as well as assume departmental administrative responsibilities, such as QA and QI. Fellows will learn methods of adult learning for self-education and teaching purposes, primarily by didactic at the UCSF Fellow’s College and by active participation in Fellow’s Hematology Oncology Educational Conference, Hematology Case Conference, Journal Club, Resident Noon Conference and inpatient Resident teaching rounds.

d) **Goal: Develop Interpersonal and Communication Skills** that result in effective information exchange and collaboration with patients, families, staff, and professional associates.

   i. Communicate effectively in a developmentally appropriate manner with patients, and their families, to create and sustain a professional and therapeutic relationship across a broad range of socioeconomic and cultural backgrounds.

   ii. Lead discussions with the family of a child (and/or patient as age permits) with a newly diagnosed malignancy or hematologic disease regarding the diagnosis, investigative and treatment plans and implications on health management.

   iii. Obtain Informed Consent for fellow performed procedures, and both research-based protocol therapy and non-research based therapies for malignant and non-malignant disorders.
iv. Effectively communicate changes in patient status with all members of the health care team.

v. Maintain comprehensive, timely and legible medical records on inpatient and primary continuity patients. Maintain the clinic shadow (brown) charts with appropriate roadmaps and protocols for Oncology patients.

vi. Communicate with attending physician (on-service attending) on a daily basis and with referral physicians on a periodic basis (new patients, discharge, change in status or plans, off therapy).

vii. Provide timely written letters to referring physicians and consultations. Mentor should provide a structured review of such documentation and give feedback. Such feedback should be documented on the faculty evaluations of fellows.

viii. Assume the unique roles of team leader, team member, and consultant, as appropriate. Responsibility in these roles should increase with experience during the fellowship.

c) **Goal: Demonstrate and Practice Professionalism** as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.
   
   i. Consistently maintain respect, compassion, integrity, honesty, and responsiveness to the needs of patients and the health care team in a way that supersedes self-interest.
   
   ii. Attend educational programs geared towards Professionalism with respect to bioethics, professional relationships (with patients, family, health professionals), conflict of interest, medical error, etc.
   
   iii. Continually demonstrate accountability to all patients and the health care team, including all physicians involved in the care.
   
   iv. Demonstrate a commitment to excellence and ongoing professional development by being prepared, on-time, in appropriate attire, polite, contributing to rounds without dominating, and participating/leading teaching conferences.
   
   v. Exercise sensitivity to the needs of the patients and the family/guardians by applying cultural awareness, negotiation, compromise, and mutual respect in the care of the patients.
   
   vi. Recognize and demonstrate an understanding of the ethical, cultural, religious or spiritual values of import of patients and families during communications and care decisions. Ensure all information is communicated in the patient/family’s primary language.
   
   vii. Demonstrate a commitment to confidentiality, privacy, and respect for patients and families.
   
   viii. Demonstrate empathy towards the child and family in negotiating and designing goals of treatment, including relevant medical, legal, and psychological issues.
   
   ix. Demonstrate advocacy for patients and families.
   
   x. Honestly assess one’s contribution to error that are made, accept responsibility for personal mistakes, and implement plans to prevent one’s self and others from making the same mistake.
f) **Goal: Practice Systems Based Practice** as manifested by actions that demonstrate an awareness of and responsiveness to the health care system and the ability to call upon resources to provide high quality health care and advocate for patients within the context of the health care system.

i. Prioritize the various modes of diagnostic testing and select the most appropriate testing modality, with a goal toward preventing unnecessary laboratory or imaging studies.

ii. Demonstrate the ability to work effectively with other members of the health care team, including, but not limited to, other physicians, nurses, pharmacists, dieticians, interpreters, social workers, child life specialists, and chaplains. This includes effective working relationships during very stressful times for the patient and family such as at initial diagnosis and implementation of new therapy plans or surgical procedures, arranging home care or discharge, and making a pain management plan.

iii. Acknowledge medical errors in a forthright manner, and report observed medical errors (real or potential) to the appropriate member of the care team, then work with the team to develop a plan for preventing future errors. Participate in the 5 South MQIC (Medical Quality Improvement Committee) to draft policies and procedures and present the findings/outcomes in interdisciplinary meetings and conferences as well as provide in-service teaching to implement new methods.

iv. Comply with institutional systems that have been developed to prevent errors in the administration of “high-risk” medications such as chemotherapy or other immunosuppressive medications or transfusions.

v. Avoid use of ambiguous or unacceptable abbreviations in the medical record, prescriptions, and medical orders.

vi. Participate in the departmental business meetings to gain knowledge and experience with regards to resource allocation, quality improvement, practice management, and current economics of health care.

vii. Gain skill in working with the EMR (EPIC) for accurate patient documentation, coding and billing.
### P. Level Specific Competency Based Aspects of Training and Evaluation

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<td><strong>First Year fellows should:</strong>&lt;br&gt;1. Be able to systematically and efficiently evaluate and manage patients. Be mindful of cost issues relating to ordering laboratory and imaging studies.&lt;br&gt;2. Identify problems and develop appropriate differential diagnoses.&lt;br&gt;3. Formulate a treatment plan when a diagnosis is reached.&lt;br&gt;4. Be able to obtain consultations and coordinate multidisciplinary comprehensive care with appropriate integration of other subspecialties (i.e. surgery, pathology, diagnostic imaging; social services, PT/OT, etc.)&lt;br&gt;5. Be able to provide inpatient and outpatient consultation including appropriate chart review, patient history taking and examination, review of the medical literature, detailed and timely charting, discussion with attending, referring healthcare providers, and families/patients.&lt;br&gt;6. Create and maintain appropriate and timely medical record documentation.&lt;br&gt;7. Appreciate the dynamics of the patient and family interaction.&lt;br&gt;8. Recognize the roles and values of nurses, nurse practitioners and social workers in patient care and education.&lt;br&gt;<strong>The first year fellows should:</strong>&lt;br&gt;1. Perform initial evaluations and consultations of new patients and review recommendations with staff.&lt;br&gt;2. Write organized consultations with appropriate differential diagnoses and discussions and communicate recommendations to primary service/referring physicians.&lt;br&gt;3. Participate in patient conferences and protocol explanations – initially observing then taking a larger part in giving diagnostic talks to new patients. Obtain informed consent.&lt;br&gt;4. Learn to present a patient’s change in status and revised treatment plans to family and the medical team.&lt;br&gt;5. Keep accurate medical records including daily progress reports, treatment flow sheets and discharge summaries.&lt;br&gt;6. Communicate with referring physicians verbally and in written form to provide initial consultative opinions and recommendations and keep updated on patient status.&lt;br&gt;7. Participate in the education of the family and patient regarding disease and treatment including complications.&lt;br&gt;8. Establish a cohort of patients to provide continuity of care in cooperation with the attending physicians and PNPs.</td>
<td><strong>Staff should:</strong>&lt;br&gt;1. Critically evaluate fellow patient evaluations regarding appropriate differential diagnoses and indicated evaluations and management plans including considerations of issues of cost containment. Faculty will access the overall quality of task and provide feedback to fellow.&lt;br&gt;2. Review fellow’s written work for organization, clarity and content and give real time feedback to implement change.&lt;br&gt;3. Observe and document (via oral and written evaluation) fellow proficiency and progression of skills in presenting diagnostic conferences including change of status and treatment plans in a thorough and understandable manner appreciating the family’s ability to comprehend.&lt;br&gt;4. Observe the fellows’ ability to coordinate multidisciplinary care.&lt;br&gt;5. Observe and give feedback on fellow’s consultative skills including written documentation, and education of referring healthcare providers and families/patients.&lt;br&gt;6. Obtain feedback from nurses, advanced practitioners and social workers regarding trainee’s professionalism.</td>
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1) **Primary patient care skills**
   - Interpersonal and communications skills
   - Systems-based practice
   - Professionalism

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<td><strong>Second year fellows should:</strong></td>
<td>The second year fellows should: 1. Be able to implement all above stated tasks competently and with demonstrated increased independence. 2. Be able to develop and implement complex management plans for complicated and relapsed patients. 3. Assume greater responsibility for primary patients in evaluation, management, presentation at Tumor Board and multidisciplinary conferences.</td>
<td>Staff will: 1. Continue to encourage independence in evaluation and decision making in the care of primary patients, sick patients, and consultations. 2. Provide supervision as appropriate for level of training and fellows’ demonstrated increased knowledge.</td>
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<td>1. Be able to competently perform all above goals and objectives, with demonstration of increased independence in assessment and decision making. 2. Lead patient consent conferences and discussions on patient status, and development of management plans.</td>
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<td>3. Provide mentorship to senior fellows to establish independence in clinical skills, team leadership, and communication skills.</td>
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<td><strong>The third year fellows should:</strong></td>
<td>The third year fellows should: 1. Be able to demonstrate further increased competence and independence in decision making and management of patients, in addition to team leadership. 2. Be the inpatient ward attending for 4 weeks and lead all patient care evaluations, management, and decision making. 3. Assume a leadership role in on the inpatient team to coordinate multidisciplinary care and education of staff, residents, and first year fellows. 4. Determine necessity of, consent families, and perform all procedures. Write chemotherapy orders.</td>
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<td>1. Demonstrate further competence and independence with above stated goals.</td>
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 Staff will: 1. Continue to encourage independence in evaluation and decision making in the care of primary patients, sick patients, and consultations. 2. Provide supervision as appropriate for level of training and fellows’ demonstrated increased knowledge. 3. Provide mentorship to senior fellows to establish independence in clinical skills, team leadership, and communication skills.
### Level Specific Competency Based of Training and Evaluation

#### 2) Protocols, Clinical Research
Medical Knowledge
Practice-based Learning and Teaching

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<td><strong>First year fellows should:</strong></td>
<td><strong>The first year fellow should:</strong></td>
<td><strong>Staff should:</strong></td>
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<td>1. Know the elements of diagnosis, management options and outcome of the more common oncologic and hematologic disorders.</td>
<td>1. Perform self-directed review of appropriate literature and protocols.</td>
<td>1. Access the fellow’s understanding of clinical trials by observing and reviewing fellow presentations to families for education and informed consent. Document progression of these skills in the written evaluation and give real time oral feedback.</td>
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<td>2. Understand the rationale of current clinical trials and the questions being asked by the studies.</td>
<td>2. On their own initiative, identify and review appropriate sources regarding hematologic and oncologic problems.</td>
<td>2. Critique fellow presentations at conferences and lectures including use of literature source materials and visual aids in the written evaluation.</td>
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<td>3. Be able to follow diagnostic and treatment outlines of oncology and hematology protocols and clinical practice guidelines.</td>
<td>3. Participate in a didactic lecture series on the inpatient service. Give a resident noon conference.</td>
<td>3. Review fellows’ written documentation in the outpatient EMR/EPIC system.</td>
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<td>4. Be able to collect and record appropriate clinical data.</td>
<td>4. Attend local and/or national meetings and educational conferences or society meetings.</td>
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<td>5. Know the common oncology and hematology drugs, their actions and side effects.</td>
<td>5. Learn to critically review reports of clinical research in preparation for presentations at Tumor Board, Journal Club, Hematology Case Conference, and Fellows Educational Conference.</td>
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<td>6. Present cases and discuss relevant literature at Tumor Board, Hematology Case Conference, Neuro-Oncology Conference, and General Hematology and Oncology Team meetings.</td>
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<td>7. Attend the daily Orientation lecture series in the first month of fellowship.</td>
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<td>8. Fellows will use the NIH web-based training module regarding human research and obtain certification from the CITI course.</td>
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#### 3) Protocols, Clinical Research
Medical Knowledge
Practice-based Learning and Teaching

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<th>OBJECTIVES</th>
<th>IMPLEMENTATION/</th>
<th>COMPETENCY</th>
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<tr>
<th><strong>The second year fellow should:</strong></th>
<th><strong>The second year fellow should:</strong></th>
<th><strong>Staff should:</strong></th>
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<tbody>
<tr>
<td>1. Demonstrate increasing competence in the self-learning objectives as stated above, in addition to continued active participation in teaching.</td>
<td>1. Continue to actively participate in all fellowship educational programs as listed above.</td>
<td>1. Encourage active learning and independence in senior fellows commensurate to level of training.</td>
</tr>
<tr>
<td><strong>The third year fellow should:</strong></td>
<td>2. Submit clinical or basic/translational research for presentation/poster/abstract at national or regional meetings.</td>
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<tr>
<td>1. Meet all above stated objectives with a continued expectation of teaching first and second year fellows as well.</td>
<td>3. Provide guidance for first year fellows in presentations at Fellows Conference, Hematology Case Conference, and Journal Club. Provide leadership in organizing these conferences.</td>
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<tr>
<td><strong>The third year fellow should:</strong></td>
<td>4. Give resident Noon Conference and an Orientation lecture for the first year fellows.</td>
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</tr>
<tr>
<td>1. Meet above stated objectives with continued emphasis on self-learning and motivation.</td>
<td>5. Attend the Introduction to Clinical Research course at UCSF, if involved in clinical research or as mentor requests.</td>
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### Level Specific Competency Based Aspects of Training and Evaluation

#### 3) Psychosocial aspects of care

**Communication and Interpersonal Skills; Professionalism**

**Systems-based Practice**

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<td><strong>Staff should:</strong></td>
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<tr>
<td>1. Meet stated objectives as above and continue to expand upon and apply clinical and communication skill sets.</td>
<td>1. Demonstrate competence in above skills and continue to develop further expertise.</td>
<td>1. Continue to have increased expectations of the knowledge base and skill of fellows to provide expert care in difficult clinical situations.</td>
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<td>2. Provide mentorship and give real time verbal feedback and complete a written evaluation.</td>
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<td><strong>Staff should:</strong></td>
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<tr>
<td>1. Attain competency in above stated objectives.</td>
<td>1. Continue to demonstrate increased maturity and development of skills in above stated objectives.</td>
<td>1. Continue to have increased expectations of the knowledge base and skill of fellows to provide expert care in difficult clinical situations.</td>
</tr>
<tr>
<td>2. While on the inpatient ward service apply knowledge attained in the care and management of patients with pain, psychological suffering, and at end-of-life.</td>
<td>2. Provide leadership in the development of care plans for patients with pain or requiring specialized care in the inpatient or outpatient setting, such as end-of-life, palliative care, home nursing, etc.</td>
<td>2. Provide mentorship.</td>
</tr>
<tr>
<td>3. Demonstrate leadership skills and professionalism in applying such skills.</td>
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<td>3. Give structured critiques on performance and encourage independence in clinical decision making and leadership.</td>
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#### 4) Education and teaching skills

**Practice-based learning**

**Communication skills**

**Medical knowledge**

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All Fellows Should Partake In:

1. **Self-instruction:** Fellows should be able to prepare Tumor Board and subspecialty Conference presentations to include recommendations for workup, treatment, or choice of therapeutic protocols.

2. **Teaching house staff and medical students:** Demonstrate skill in the education of learners at all levels.

3. **Critical analysis of patient problems and therapy alternatives with incorporation of literature review an assessment.**

4. **Publications:** Fellows should be invited to participate with faculty in submitting articles, reviews, chapters, case reports, etc. for publication.

5. **Develop facility in the use of EMR/EPIC systems.**

All fellows are expected to participate in the education and teaching programs for fellows, residents, and medical students. Senior fellows should expect to take a leadership role in the education of staff, residents, and first year fellows in addition to improving their skills in self-education.

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<tr>
<th>All Fellows Should Partake In:</th>
<th>Faculty should:</th>
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<td>1. <strong>Self-instruction:</strong> Initially these presentations will be the appropriate case history followed by review of the literature and participation of another discussant (mentor). With time, fellows should be able to present a critical review of relevant data and make recommendations for solutions and/or interventions.</td>
<td>1. Assist with preparation of presentations and assess through written evaluations the quality of such presentations and make suggestions for improvement.</td>
</tr>
<tr>
<td>2. <strong>Teaching house staff and medical students:</strong> While on the inpatient service, prepare topics of interest from the curriculum or current patient scenarios and present to nursing staff, house staff and/or medical students on rounds and at team meetings.</td>
<td>2. Faculty should provide the opportunity to mentor fellows in writing articles, reports, or reviews, in addition to providing guidance to the fellows of the editor’s comments regarding submitted articles.</td>
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<tr>
<td>3. Fellows will give a resident Noon Conference on a selected topic in hematology, oncology, or bone marrow transplantation on a yearly basis.</td>
<td>3. Faculty should review and complete all charting done by the fellow using the EMR EPIC/HIS systems.</td>
</tr>
<tr>
<td>4. Faculty are available to provide mentorship for Fellow’s Hematology Oncology Educational Conference and Journal Club with lecture development, review of materials to be presented, discussion, and evaluation/feedback.</td>
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<tr>
<td>5. Involved faculty will work with fellows to prepare and submit scholarly publications.</td>
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| 5) Procedural and technical skills |  |  |
| Practice-based learning | IMPLEMENTATION/COMMENTS | COMPETENCY ASSESSMENT |
| Medical knowledge | The first year fellow should: | Faculty should: |
1. **Gain expertise in the Performance of:**
   - Lumbar puncture, with and without administration of IT chemotherapy.
   - BMA/Biopsy and marrow harvest.
   - Peripheral intravenous chemotherapy.
   - Appreciate the use of sedation in procedures.
   - Marrow infusion (transplantation).
   - Preparation and staining of marrow smears and peripheral blood smears, in addition to CSF for cytology review.

2. **Gain an understanding of laboratory procedures and results:**
   - Immunophenotyping/flow cytometry of tumor tissue/marrow.
   - Immunohistochemistry of liquid and solid tumors.
   - Principles of Blood Banking.
   - Lab process of marrow purging, cryopreservation and subsequent thawing.
   - Coagulation laboratory procedures.

1. **Receive instruction in performing routine bone marrow aspirations and biopsies in addition to LPs with administration of IT medications.**

2. **Fellows will maintain documentation of procedural proficiency.**

3. **Participate in bone marrow harvests and infusions during the BMT/Aqua inpatient rotations.**

4. **Learn the preparation of blood and marrow smears, in addition to CSF slide preparation during the Pathology rotation.**

5. **Fellows will review and interpret CSF cytology, PBS and bone marrow smears and perform differentials during the Pathology rotation.**

### Understanding of procedures/results:

1. **Fellows will review and interpret results of immunophenotyping, leukemia and solid tumor identification on cases and faculty (Pathology rotation) will review this assessment. When appropriate, present interpretations at the Tumor Board.**

2. **Written assessments in the form of pre/post tests will be given following the rotation in.**

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<th>5) <strong>Procedural and technical skills</strong></th>
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<td><strong>Medical knowledge</strong></td>
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| 1. Perform procedures when on call and in the outpatient setting to continue to improve skills.  
2. Apply knowledge of laboratory procedures and interpretation in on-going patient management. | 1. Continue perform procedures to maintain and hone skills.  
2. Document procedure notes to include informed consent, purpose, actual procedure, complications, and medications administered.  
3. Apply knowledge of laboratory procedures and interpretation in on-going patient management | 1. Mentor fellows and provide supervision in procedural competence.  
2. Mentor and provide critique for presentations and reviews at team meetings and educational endeavors. |
| The third year fellow should: | 1. Continue perform procedures to maintain and hone skills.  
2. Document procedure notes to include informed consent, purpose, actual procedure, complications, and medications administered.  
3. Apply knowledge of laboratory testing, evaluation, and procedures for independent management of patients in the inpatient and outpatient settings. |  |
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| Use of the Medical and Research literature | 1. Knowledgeable about significant journals in the field of Hematology Oncology.  
2. Competent to use computer-based literature searches to thoroughly research the literature on relevant problems.  
3. Able to read, understand and critically analyze pertinent medical and scientific articles.  
4. Able to write a concise abstract describing current work.  
5. Able to write and complete manuscripts describing the results of their research. | 1. Develop a plan with mentor on relevant current literature to develop the background and purpose of the proposed research project.  
2. Receive training from mentor, CHRCO and/or CHORI staff on use of appropriate databases.  
3. Present a critique at least twice yearly of relevant articles at regular research lab group meetings.  
4. By beginning of third year, write an abstract for a scientific meeting on research project.  
5. Write and submit a grant.  
6. Present research to the SOC twice in each of the second and third years of fellowship.  
7. Under supervision of mentor, write a final manuscript describing research project (third year).  
8. Fellow will also obtain copies of any peer review of the manuscript and aid in making required revisions. | 1. Assist fellow in development of hypotheses, review relevant background, and review progress of writing project description.  
2. Fellow will write a review of research topic including literature search for background support. This plan is reviewed by the mentor and approved by the Scholarship Oversight Committee (SOC).  
3. Mentor will meet with fellow after group meeting presentations and committee meetings to evaluate presentation and discuss critique.  
4. Mentor will review and edit abstracts, written proposals, and progress reports, and encourage submission to regional and national meetings.  
5. Mentor will review and edit manuscripts. |

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<tr>
<td>Research Skills - First Year</td>
<td>1. Be able to identify an area of scientific interest.</td>
<td>1. Continue background reading to identify an area of interest in mutual agreement with</td>
<td>1. Meet with the Program Director, Department Director and, and fellow during</td>
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2. Be able to identify a specific research question and develop an broad understanding of the topic.

3. Be able to develop specific hypotheses.

4. Be able to design specific aims/experiments to test the hypothesis.

5. Select a research mentor.

| mentor by the end of the first year. |
| 2. Attend the UCSF Fellows College for research development to gain skills in methodology, general analysis and applied statistics, writing, and ethical conduct of research. |
| 3. Write specific hypothesis/es to be tested in the second year. Write background in preparation for presentation to the mentor and SOC in September of the second year. |
| 4. Participate in Introduction to Clinical Research Course in early second year (if involved in Human subjects). |

2. Fellow will write an introduction/rationale section of proposal that is evaluated by the mentor in the first year and presented to the SOC in the beginning of the second year.

3. Will review hypothesis/es and specific aim section of proposal prior to review by the SOC.

4. Meet formally with the fellow and Division Director/Program Director at least twice a year to review progress on research with the fellow and expectations for successful completion of the project.

5. The SOC will provide a critical review of the research plan, give immediate feedback and make suggestions to the fellow and mentor.

6) Progression of Research Skills
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<tr>
<td><strong>Research Skills - Second and Third years</strong></td>
<td>1. Continue to develop research plan with respect to hypothesis/es, background reading, methodology, data analysis, and periodic SOC and lab presentations.</td>
<td>1. Present on a regular basis (every 6-9 months) development of research and progress to the SOC. &lt;br&gt;2. Review data with regard to testing of hypotheses. &lt;br&gt;3. Meet frequently with mentor, statistician, primary reviewer and division faculty to discuss research progress and potential pitfalls.</td>
<td>1. The mentor and SOC will review the fellow’s progress during the second and third years, with a final presentation given at the end of the third year.</td>
</tr>
<tr>
<td><strong>Experimental Skills</strong></td>
<td>1. Become knowledgeable with regard to techniques related to the research project. &lt;br&gt;2. Become competent to perform research techniques related to the project. &lt;br&gt;3. Design experiments required to carry out the research project and design of necessary controls. &lt;br&gt;4. Become competent in the oral and written presentation of experimental results. &lt;br&gt;5. Develop innovative, creative, novel techniques or novel uses of standard techniques with guidance from lab supervisor(s) and mentor. &lt;br&gt;6. Learn to write scientific abstracts, manuscripts, and prepare oral and poster presentations at meetings, local, regional, and/or national.</td>
<td>1. Observe experimental methods in current use in mentor’s studies as necessary to develop appropriate skill set. &lt;br&gt;2. Perform independent experiments with appropriate positive and negative controls. &lt;br&gt;3. Present experimental data regularly at formal laboratory meetings, including analysis of data and suggestions for subsequent experiments. &lt;br&gt;4. Design novel techniques or uses of technology to solve research questions. &lt;br&gt;5. Maintain up to date progress reports, data review and analyses. Work with research mentor to write abstracts and manuscripts for presentation at appropriate scientific conferences and journals.</td>
<td>1. Mentor will meet with the fellow to identify appropriate methods to observe. &lt;br&gt;2. Fellow will present progress of experimental plan at laboratory meetings in addition to the SOC approximately every 6-9 months and meet with the mentor for evaluation. Mentors will be asked to complete a written and oral evaluation of the fellow at least twice per year. &lt;br&gt;3. Fellow will present planned design of experiments to mentor on a regular basis and obtain immediate feedback on appropriateness of design. &lt;br&gt;4. Fellow will meet at least twice yearly with the Program Director, Department Director, and research mentor.</td>
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### 6) Progression of Research Skills – Second and Third Years

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| Experimental Skills         |                                                                                                                                               | 6. Write fellowship grant applications (e.g. Foundations, K08) including proposals for novel techniques for peer review and written comments.                                                                                                             | 5. Program Director to review and critique status of progress of research, attaining research competence goals, and publications.  
6. Work with fellows to ensure publication requirements as per the SOC and ABP goals of attainment of competency in scholarly activity.          |

### Q. Entrustable Professional Activities and Milestones

Entrustable Professional Activities (EPAs) have been developed by the American Board of Pediatrics as a framework to help supervisors decide when trainees are ready for unsupervised practice. With EPAs, increased entrustment of the trainee to independently perform clinical care occurs as they are determined to have achieved progressively higher levels of the Milestones associated with the Pediatric Competencies. Following are EPAs that have been developed for all Pediatric sub-specialty trainees in addition to those specific to Pediatric Hematology Oncology. EPAs are linked to specific Pediatric Competencies and their Milestones in the evaluation process. Milestones refer to the developmental progression of knowledge, skills and attitudes for each sub-competency.

**EPAs for Pediatrics, all sub-specialties:**

- Provide for and obtain consultation with other health care providers caring for children.
- Manage information from a variety of sources for both learning and application to patient care.
- Contribute to the fiscally sound and ethical management of a practice.
- Lead and work within interprofessional health care teams.
- Facilitate handovers to another healthcare provider either within or across settings.
- Engage in mindful practice.
- Lead within the subspecialty profession.
- Apply public health principles and improvement methodology to improve the health of populations, communities and systems.
- Engage in scholarly activities through discovery, application, and dissemination of new knowledge (broadly defined).
**EPAs for Hematology Oncology:**

- Manage patients with hematology oncology conditions, whether acute or chronic, simple or complex, in an ambulatory, emergency, or inpatient setting.
- Provide a medical home for patients with complex, chronic, or special health care needs.
- Facilitate the transition from pediatric to adult health care.
- Demonstrate competence in performing the common procedures of Pediatric hematology oncology.
- Introduce and transition patients to palliative care and manage patients with terminal disease.
- Enroll and treat patients on clinical and translational research trials.

**R. Program Evaluation Committee**

The goal of this Program Evaluation Committee (PEC) is to oversee curriculum development and program evaluation for the Children’s Hospital & Research Center Oakland Pediatric Hematology/Oncology Fellowship Program.

The PEC of Children’s Hospital & Research Center Oakland Pediatric Hematology/Oncology Fellowship Program will meet at least annually. The PEC will have at least three members, two program faculty and one trainee from the program. Faculty members may include physicians and non-physicians from Children’s Hospital & Research Center Oakland Pediatric Hematology/Oncology Fellowship Program.

The committee’s responsibilities are to:

- Plan, develop, implement and evaluate educational activities of the program;
- Review and make recommendations for revision of competency-based curriculum goals and objectives;
- Address areas of non-compliance with ACGME standards;
- Review the program annually using evaluations of faculty, residents or clinical fellow and others;
- Document on behalf of the program formal, systematic evaluation of the curriculum at least annually and render a written Annual Program Evaluation (APE), which must be submitted to the GMEC annually in the Annual Program Director Update;
- Monitor and track each of the following:
  - Resident/fellow performance;
  - Faculty development;
  - Graduate performance including performance on certifying examination;
  - Program quality; and
  - Progress in achieving goals set forth in previous year’s action plan.
- Review recommendations from the Clinical Competency Committee

The PEC will be provided with confidential resident/fellow and faculty evaluations data by the program’s administrative staff in order to conduct their business.

The Program Director is ultimately responsible for the work of the PEC. The program director must assure that the annual action plan is reviewed and approved by the
program’s teaching faculty. The approval must be documented in meeting minutes. The program’s annual action plan and report on the program’s progress on initiatives from the previous year’s action plan must be sent to the GME office annually.

S. Quality Improvement Project

Fellows will become members of the Department’s Quality Improvement committee, the 5South MQIC, which meets on the second Thursday afternoon of the month. The Chair of this committee is Dr. Anu Agrawal. First year (clinical) fellows will be expected to attend the meetings and actively participate in the planning, implementation, and analysis of an intervention on a practice outcome. Dr. Agrawal will provide oversight for this task and assist with the identification of a suitable project. Fellows will be asked to write a summary of the QI project and present it at the Departmental physician meetings. The respective fellows will also be responsible for the educational component of the project, such as new teaching or dissemination of information to other departments or staff at the hospital. This summary will become part of the fellow’s portfolio.

T. Mentorship

A mentor is one of the most influential figures in the life of an aspiring doctor. Mentoring is a reciprocal relationship between an advanced career incumbent (the mentor) and a junior faculty member or physician in training (the mentee) aimed at fostering the professional and personal development of the mentee. Many successful clinicians and scientists identify early positive role models as mentors critical to their success. At various times, the mentor serves as a teacher, sponsor, advisor, and role model. The most critical function of the mentor is to support and assist the junior person to succeed. Mentoring in academics is traditionally divided into several categories: clinical, research, and career. Additionally, there may be personal mentors for navigating through difficult times and situations, relationship building, and offering guidance in “balancing” personal and career objectives. It is important to distinguish between these types of mentors as they differ in goals, skills, and the fundamental relationship between the mentor and mentee.

The goal of the clinical mentor is to assist the fellow in acquisition of clinical skills, knowledge base, and development of relationships with colleagues, staff, and patients and their families. The mentor provides guidance in reaching academic goals and improving basic skills in communication. The mentor and fellow mentee should work together to formulate specific goals for success in the field, such as improving presentations at Tumor Board, giving Informed Consent, and formulation of clinical care plans.

The goal of the research mentor is to assist the mentee in the development of a research career. This involves the acquisition of research skills, selecting and conducting research projects, presenting research findings at national meetings, ensuring completion and submission of manuscripts, assisting in networking, and teaching the mentee how to obtain extramural funding. See Section V.I. SOC: Guidelines for Committee Members for more details.

The goal of the career mentor is to focus on more global aspects of an academic career, including balancing family demands and work, career promotion, juggling different aspects of academic life (teaching administration, clinical care, and research), and major
career decisions, such as changing institutions or research direction. Career mentors typically have accumulated years of experience and wisdom in academia.

The responsibilities of the mentor include:

- Being available;
- Acting as an advocate for the mentee;
- Insisting on completion of project(s);
- Assisting with networking; and
- Being proactive in seeking extramural funding.

Undoubtedly, the single most important ingredient in the mentor-mentee relationship is a sufficient on-going time commitment from the mentor. Effective mentoring requires regular formal, scheduled meetings and informal discussions.

The mentee also has certain responsibilities. The mentee must hold the mentor accountable for various details of the relationship such as time commitment, reading manuscripts and grants in a timely fashion, etc. Mentees must seek out and be willing to hear criticism and be prepared to discuss how to improve themselves. Mentees must also commit appropriate time and effort to analyze data, complete and submit written reports, abstracts or manuscripts per a mutually agreed upon timetable. Mentees are encouraged to foster relationships with more than one mentor in order to gain various perspectives, including colleagues outside the department or institution. The mentor-mentee relationship needs to mature over time, as the mentee transitions to more independence.

Identifying appropriate mentors can be a frustrating task. Mentees need a certain level of self-awareness to be able to articulate the type of colleague they would be able to work with and assure success. Mentees should meet with a number of prospective mentors to discuss goals and expectations, and in addition, should meet with other junior faculty or fellows who have worked with this individual in a mentor-mentee relationship. Also, all need to recognize that sometimes, despite the best of intentions, the relationship is not working and they need to change mentors.

In the Hematology Oncology fellowship program, the Continuity Clinic attending often serves as a clinical and/or career mentor for the fellow. However, any of the clinical faculty can serve as this mentor. Ideally, a 3-year relationship is established with this faculty member, and opportunity for frequent interaction, discussion, and development of a personal relationship often fosters this natural mentor-mentee relationship. Additionally, first year fellows will often conduct short literature reviews, write and submit abstracts on retrospective data, and/or write review articles or case reports with a number of the faculty. These ventures, in addition to specific academic interests, often also lead to a natural alliance between a particular member of the faculty and the fellow.

Fellows are asked to seek mentorship and establish formal relationships during the first year. If the fellow has not chosen a mentor by mid-year, a mentor may be assigned by the Program Director. Fellows will meet periodically with the Program Director, to discuss goals (program and personal), check in on progress in clinical and research topics, review evaluations, and be offered support. Mentors are also invited to participate per request of the fellow. In the middle of the first year, the fellow will begin to pursue an area of investigation for the second and third years. A major part of this research development is to identify a research mentor, who shares a common interest in the
research question and is willing to commit the time and attention needed to assure completion of the project and research success. The research mentor assists the fellow in development of the research question, review of background materials, research methodology, periodic reviews at the Scholarship Oversight Committee, and preparation of work for written or oral presentation at national meetings. Mentors will be asked to be involved with evaluation sessions of fellow performance with the Program Director and Department Director.

U. Teaching Responsibilities and Curriculum

The Pediatric Hematology Oncology fellow serves a role as a primary teacher for Pediatric residents and medical students on the inpatient and outpatient services, and additionally provides education and guidance to ancillary staff and families/patients. The fellows oversee the clinical care aspects of teaching (leading rounds, performing joint physical examinations, reviewing and interpreting diagnostic studies) in addition to giving formal didactic presentations. During the inpatient experience, the fellow provides direct supervision related to patient care to the residents and medical students on the team and provides guidance for self-education in the form of providing relevant medical literature and citing appropriate references for review. The fellow serves as the primary orchestrator of patient care as well as the primary educator. In the clinic setting, the fellow also provides direct supervision and teaching to Pediatric residents and medical students. In addition, the fellow actively participates in a formal educational program for the Pediatric residents. Each fellow is asked to prepare at least one Noon Conference on a topic in Hematology or Oncology, participate in Resident Case Conference and present cases or lead discussions for the inpatient unit didactic series. Each fellow is expected to review specific disease topics for presentation at the Fellow’s Hematology Oncology Educational Conference, Hematology Case Conference, and Journal Club, and give a minimum of 12 prepared didactics per year. Pediatric residents currently on the Hematology Oncology services are encouraged to attend these teaching conferences.

Fellows are required to attend the quarterly UCSF Fellows College, which provides instruction in basic teaching principles. These principles include preparation of materials, development of teaching tools, knowledge of adult learning techniques, use of information technology, skills to participate effectively in curriculum development, and the assessment of efficacy in teaching.

A formal teaching curriculum on topics in Professionalism has been developed under the auspices of the Graduate Medical Education Program at CHRCO. Topics may include: sleep hygiene, the art of consultation, communication, ethical challenges, medical error, quality improvement, and practice management. These sessions will primarily be in the form of monthly noon conferences and all fellows are required to attend.

V. Supervision and Supervisory Lines of Responsibility

All patients seen at or admitted to Children’s Hospital & Research Center Oakland will have a designated Attending Physician who is a member of the medical staff.
As required by the Medical staff Rules and Regulations, the Attending Physician is ultimately responsible for all decisions related to the patient’s diagnostic and treatment plan and outcomes. The diagnostic and treatment plan must be discussed with the Attending Physician at the time of admission and subsequently on a daily basis. Ideally “discussion” will be by verbal communication, but may as circumstances dictate, occur by entries into the Progress Note section of the EMR/EPIC. Any significant changes in the diagnostic or treatment plan must be communicated to and be approved by the Attending Physician, unless a delay in intervention might compromise the patient’s course.

Pediatric Hematology Oncology fellows are supervised for all clinical care and decision making. Fellows are given progressive responsibility under the close supervision of the Attending Physicians. All diagnostic and therapeutic procedures performed by fellows are also directly supervised by the Attending Physician.

While on-call, the fellow is expected to consult the on-call Attending Physician for any situation in which the patient is critically ill, the fellow needs to come in to the hospital such as for a newly diagnosed oncology patient, or if the fellow is inexperienced or uncertain of how to proceed with a certain patient or illness. See Night/Weekend/Holiday Call and Sign-Out, Section IV.H. As the first year progresses, fellows are expected to assume more responsibility in patient care and decision making. Fellows are given feedback and encouragement by the faculty supervisors with respect to independent decision making.

While on the inpatient services, fellows assume a supervisory role for medical students and Pediatric residents. They are expected to assume the role of a junior attending physician and provide general teaching and instruction in patient care, examination, procedural performance, interpretation of laboratory and diagnostic studies, and creation and monitoring of clinical care plans. See Level Specific Competency Based Aspects of Training and Evaluation, Section IV.P. Second and third year fellows provide supervision while on call, in the clinics, and during the third year inpatient rotation, for first year fellows, in addition to residents and medical students.

W. Clinical Objectives for the Outpatient Orientation Rotation

The first year fellows spend the first four to five weeks of the fellowship in an Outpatient Orientation Rotation. During this rotation, the fellows attend and participate in all aspects of the outpatient clinics and procedures. These clinics include the general hematology and oncology clinics, sub-specialty clinics such as Thalassemia, Sickle Cell, Neuro-Oncology, Hemophilia and Thrombophilia, in addition to comprehensive sub-specialty clinics. During this month, the fellows become oriented to the staff, hospital setting, computer systems, EMR systems, and routine clinical protocols. They will take the necessary didactic and online courses to allow participation in patient care and clinical trial involvement including EPIC training, the CITI course, and any other requirements for clinical trial participation as determined by the NIH and/or COG. Daily lectures are given by the faculty, ancillary staff and senior fellows on common topics that may be encountered while on-call, with a specific emphasis on common strategies for evaluation and management. The senior fellows provide an overview of call responsibilities and sign-out procedures. The clinical psychologists meet with the first
year fellows during this time to discuss common clinical situations and strategies for enhanced communication and psychosocial assessment of patients and their families. The fellowship director and associate directors allocate several sessions to provide global orientation to the program.

Specific objectives of this rotation are:

- Fellows should recognize common hematologic problems encountered in an outpatient setting and on-call, including immune thrombocytopenia purpura, anemia and neutropenia and initiate diagnostic and evaluation strategies in common disease states.
- Fellows should become knowledgeable regarding navigation of oncology protocols, including the Children’s Oncology Group (COG) and Head Start therapeutic protocols. Complete the CITI course as required by the IRB for conduct of clinical trials.
- Fellows will gain an understanding of common problems encountered by patients with Sickle Cell disease, such as pain events, infections, strokes, and iron overload.
- Fellows will participate in multi-disciplinary rounds, conferences, and clinics, and understand the contribution of such specialized care in complex medical disease.
- Fellows will develop a good understanding and comfort with respect to navigation of the hospital communication systems, general program requirements, and educational goals.
- Fellows will initiate training in the performance of common procedures (lumbar puncture with instillation of chemotherapy, bone marrow aspirates and biopsies) and maintain a log of procedures.
- Fellows will participate in EPIC training with the goal of being able to efficiently and competently utilize the EMR in patient care and communication.

X. Clinical Objectives and Responsibilities for the Inpatient and Consultation Rotations

While on the clinical inpatient services (Red or Aqua teams) fellows assume primary care responsibility for all the patients on their service. Direct supervision is provided by the attending on the inpatient service. During the course of the three years, it is anticipated that many of the topics listed in the Clinical Core Curriculum (Section IV.K.) will be covered by direct clinical experience. Fellows participate in the evaluation (medical history and physical examination), assessment (clinical, laboratory, radiographic), and management of patients with creation and implementation of care plans. Fellows assess newly diagnosed patients primarily in the first year while on the clinical inpatient services. Fellows then have the opportunity to co-manage these patients (primary patients) with an attending throughout the course of their training. In this way, experience in management throughout and off therapy may be attained. Additionally, fellows are involved in the care of on-going patients in both the inpatient and outpatient areas and attain experience in managing acute illnesses, relapses, chronic illnesses, and late effects of disease and treatment. First year fellows will spend approximately 6 months on the inpatient services. Following are the general goals of the first year training program:
• The fellow should become competent in the delivery of quality patient care involving the evaluation and management of children and adolescents with common pediatric hematologic and oncologic disorders.
• The fellow should develop a strong fund of knowledge in these areas (also see Section IV.K. Clinical Core Curriculum).
• The fellow should develop and demonstrate effective interpersonal and communication skills.
• The fellow should understand and become competent in participation in the clinical trial process.
• The fellow should recognize and manage the psychosocial aspects of severe, chronic and life-threatening diseases using, when appropriate, institutional and community resources.
• The fellows should develop technical proficiency of the procedures associated with the subspecialty and an appreciation of the key laboratory methodologies and result interpretation.

Fellows in their second year of fellowship do not have a specific inpatient assignment. However, fellows take night and weekend call to provide continuous fellow coverage. It is expected second year fellows will have mastered the goals as stipulated for first year fellows and be able to function more independently in medical decision making. Supervision by attending staff is, however, always expected. At this stage of training fellows are also expected to be able to perform procedures and consultations independently with assistance by the attending as needed for complicated or unusual cases. Fellows will also be expected to independently lead resident rounds and provide resident supervision.

Third year fellows are assigned four weeks on the inpatient services. During this time they are to assume “attending” responsibilities, though an attending will round with them and see the patients. Fellows are expected again to have mastered the goals expected of first and second year fellows and be able to demonstrate an increase in knowledge base and independence in the diagnosis and management of complex patients. Third year fellows will lead rounds, evaluate all the patients, institute care plans, provide team leadership, and directly supervise medical students, residents, and first year fellows on the team. The third year fellow will also perform all procedures and be expected to assume a teaching role for junior fellows and residents who desire to attain procedural competence.

Following are specific responsibilities for fellows on the inpatient services:

**Patient Care**

• Assume primary care responsibility for all patients on the service.
• Evaluate each patient daily with a careful medical history and physical examination.
• Determine necessary diagnostic studies and interpret results.
• Develop and implement a care plan for each patient. Review prior care plans for established patients and update as needed.
• Write chemotherapy orders.
• Perform all procedures.
• Provide Informed Consent to all patients, including new diagnoses.
• While on the Red service, see inpatient consultations with appropriate documentation and communication.
• While on the Aqua service, assume primary responsibility (if no assigned resident) for BMT patients (see Section IV.CC. Clinical Objectives for the 1st Year Hematopoietic Cell Transplant/BMT service).
• Chart all interactions; assessments in the form of admission notes, progress reports, and discharge summaries; management plans; procedure notes, and consents every day.
• Sign out all patients to the on-call fellow, including consultations and ICU patients. Sign out BMT patients to the on-call residents.
• Attend the BMT clinic with the team while on the Aqua Inpatient rotation

Teaching and Leadership
• Communicate with the patient and family all aspects of assessment and management, including leading formal Informed Consent conferences for therapy and participation in clinical trials.
• Interact with the multidisciplinary team.
• Lead rounds and provide direct supervision and teaching for the residents (see also Supervision and Supervisory Lines of Responsibility, Section IV.V.).
• Prepare didactic/case presentations for the residents on the service.

All fellows participate in a rotating schedule of inpatient Hematology/Oncology Consultation. The time commitment for this service is as follows: 1st year fellows—18 weeks each; 2nd year fellows—6 weeks each; 3rd year fellows—4 weeks each. First year fellows see inpatient Hematology Consultations while on Red team and during additional clinical rotations. New probable Oncology Consults may be seen by fellow/attending on the Aqua team. The appropriate team attending serves as the supervisor for this consultative service. Senior fellows are able to continue to develop consultative skills and have more time and experience to do these effectively, which include assessment of the chart, history, examination, and review of the relevant medical literature. A detailed written consultation note is generated by the fellow and discussed with the referring team, and appropriate educational materials provided.

Fellows will be expected, at a minimum, to write a brief note on every patient on both Mondays and Fridays. The Monday/Friday notes don’t necessarily have to be full-length notes with exams. They can be brief communications, intended more to communicate with the primary teams as well as the oncoming heme-onc consult providers. More complete follow-up notes, with exams, should be written when clinically appropriate. Fellows should maintain daily communication with the clinical teams providing care to active consult patients.

Fellows will be responsible for sending a text page to the attending once they become aware of a new consult. It should indicate whether the consult is “urgent” or “non-urgent” and give an indication of when the fellow will see the patient (e.g. new non-urgent consult for anemia from NICU, insert patient name, will see this afternoon). At the time of discharge (or even before), the consult fellow will send an in basket message to the Hem-Onco on call distribution list in EPIC with all the pertinent patient information. The fellows will maintain a consult sign-out list that will located on the I-drive for all to
access. The list will contain the following information: (1) Patient name/MRN/age, (2) reason for consult, (3) brief summary, (4) recommendations, and (5) to-do list. The file can be found on the Group (I:) drive → Hemonc → 5-South Inpt. Billing & notes→CONSULTS→2016→Current month. After updating, please SAVE AS, and rename the file with the current date. Any urgent, critically ill, or particularly active consults MUST be signed out to the oncoming attending & fellow directly (i.e. in person or by phone). In addition, a consult list exists in EPIC that must be manually maintained (i.e. new consults must be added, old/inactive consults must be removed). Maintenance of the list is the responsibility of the fellows.

Y. Clinical Objectives for the 1st year Pathology Rotation

The Pathology Rotation provides laboratory training in conjunction with the institution’s pathology department and special hematology laboratory facilities. The on service pathologist and Lynn Sorenson, CLS provide direct mentorship and supervision during this 2 week rotation.

Upon completion of the training program at CHRCO, fellows are expected to independently review and interpret a peripheral blood smear and bone marrow aspirate/biopsy in a setting of hematologic or oncologic disease. Fellows are taught the proper use of laboratory techniques, including the performance and interpretation, for diagnostic purposes. Educational opportunities are provided in the following areas:

- Tissue pathology (solid tumor)
- Bone marrow aspirate/biopsy (morphology, flow cytometry, special stains)
- CSF cytology
- HLA laboratory
- Hemoglobin Reference laboratory (electrophoresis, genotyping)
- Ektacytometry

Specific objectives of the pathology and laboratory rotation include:

- Prepare and stain high quality bone marrow aspirate smears and CSF slides.
- Perform accurate cell counts and morphologic assessment of bone marrow aspirates and peripheral blood smears.
- Interpret special stains on bone marrow aspirates and apply these data to the classification of leukemia.
- Determine the appropriate use of ancillary techniques such as flow cytometry, cytogenetics, immunohistochemistry and molecular genetic analysis.
- Describe the separate but complimentary roles of bone marrow aspirates, core biopsies and flow cytometry in the evaluation of hematopoietic disorders.
- Recognize the major limitations of each of these techniques in evaluating hematopoietic disorders.
- Identify the specimen requirements and turnaround times for each of these techniques.
- Outline the current classification nomenclature for neuroblastoma, rhabdomyosarcoma, peripheral primitive neuroectodermal tumors, nephroblastoma, and lymphoma.
Describe the main techniques used in the evaluation of solid tumors of childhood and the specimen requirements and turnaround times for each method.

Understand the role of frozen section evaluation of suspected pediatric neoplasms, including indications, limitations of the technique, and diagnostic accuracy.

Outline the clinician’s responsibilities in obtaining an autopsy.

Describe the routine autopsy procedure and turnaround times.

The attainment of these objectives will be evaluated by practical and written examinations. Additionally, each fellow will select a topic each in oncologic pathology and present a seminar to colleagues in Hematology Oncology at the end of the rotation. This may occur during the Tumor Board or as a didactic presentation at the Fellow’s Hematology Oncology Educational Conference or Journal Club. Laboratory mentors will be asked to submit a written evaluation of the fellow’s performance at the conclusion of the rotation.

**Z. Clinical Objectives for the 1st year Blood Banking Rotation**

A one week rotation in Blood Banking has been created in partnership with Shannon Kelly, MD, Director of Apheresis at CHRCO and staff physician at the Blood Center of the Pacific (BCP). Fellows will have the opportunity to work with Dr. Kelly and colleagues at BCP (in San Francisco) in addition to staff in the blood bank at CHRCO.

Specific objectives of the Blood Banking rotation are:

- Understand methods of donor recruitment, collection and storage, safety and testing.
- Understanding of blood component modification including volume reduction, washing, irradiation
- Perform basic blood typing and extended phenotyping, crossmatching and DAT, antibody screens, and understanding of RBC antigen genotyping.
- Become knowledgeable about appropriate indications for blood product transfusion.
- Be able to recognize and manage platelet transfusion refractoriness, transfusion reactions, and transfusion acquired infections.

**AA. Clinical Objectives for the 1st year Radiation Oncology Rotation**

The Radiation Oncology rotation will be at Alta Bates Medical Center under the direction and supervision of Christine Chung, MD, Director of Pediatric Radiation Oncology and her colleagues.

The goals and objectives will be to introduce fellows to:

- The basics of radiation biology and physics, through readings in the textbooks recommended by Dr. Chung and mentors. Clinical applications of radiation oncology through initial examinations of new patients (adult
and pediatric) seen in the Department of Radiation Oncology. Fellows will see these patients with the attending radiation oncologist, discuss the evaluation and management of each case, and follow these patients during their daily treatment visits and follow-up.

- Specific understanding of the role of radiation oncology in the current open Children’s Cancer Group studies.
- Knowledge of short-term and long-term toxicity of radiation alone or in combination with chemotherapy.

**BB. Clinical Objectives for the 1st year Palliative Care/End of Life Rotation**

A two week clinical rotation has been developed, in conjunction with The Palliative Care program at CHRCO, to impart to fellows understanding and appreciation for concepts in hospice and end of life care. Barbara Beach, M.D., associate Oncologist in the Hematology Oncology department, Vivien Newman, MD, Director and PICU attending, and the Palliative Care Program Coordinator, have assumed responsibility for supervision and teaching. Additionally, there is an opportunity to spend an additional two weeks on the Pain and Palliative Care service at UCSF (*see below) under the aegis of Cynthia Kim, MD. The following objectives have been created for this rotation:

- Understand the importance of and learn strategies for effective communication between team members, families and patients to provide optimal comfort care in a respite or end of life setting.
- Understand the symptoms commonly encountered in providing palliative care and learn appropriate pharmacologic and other interventions.
- Understand the unique resources available to families through palliative care services and the physician’s role in these services.
- Understand the death/dying process, including common signs and physiologic changes near the time of death and physician roles and responsibilities when a patient expires.
- Become familiar with ethical and cultural issues that may arise at the end of life for children and adolescents, and understand the normal process of grief for families after a loss.
- Work as part of a multidisciplinary team for the management of pain
- Learn complimentary therapies that are important for pain management and palliative care

*This rotation will include opportunities to participate in new consultations, follow-up visits and interdisciplinary meetings by the Children’s Hospital Palliative care Team. In addition, one day per week will be spent at George Mark Children’s House, the first freestanding pediatric hospice/palliative care facility of its kind, under the supervision of Dr. Joan Fisher. There may also be opportunities to participate in home visits through regional hospice agencies. There will be lectures on core pediatric palliative care topics as well as focused reading materials and videos.

Each fellow will be asked to create a didactic presentation at the weekly Fellow’s Hematology Oncology Educational Conference on some aspect of their experience on this rotation. Dr. Beach and the Palliative Care Program Coordinator will provide an evaluation of the fellow’s performance at the conclusion of the rotation.
Clinical Objectives for the 1st year Bone Marrow Transplant Rotations

First year fellows will spend 3 months (12 weeks) of clinical time on the inpatient Aqua service, and participate directly in the care of patients undergoing bone marrow transplantation. Fellows spend an additional month (5 weeks) in the outpatient setting attending Hematology and BMT clinics and have the opportunity to see pre- and post-transplant patients, and address the unique medical issues patients experience. Mark Walters, M.D., the Director of the Blood & Marrow Transplant Program, will provide supervision for parts of these rotations, as will faculty on service.

During inpatient rotations on the Aqua service, first-year fellows will have the following responsibilities:

- Assume responsibility as the primary caregiver of BMT patients (usually 1-2) on 5-South (the immunocompromised unit).
- Act in a supervisory capacity of 2nd year residents caring for oncology and/or BMT patients on the Aqua service.
- Attend the BMT clinic on a Monday/Thursday schedule, and act as primary caregiver of 1-2 patients in the clinic. These encounters will focus on the management of chronic graft-versus-host disease, pre-transplant assessments, and long-term follow-up evaluations.
- Prepare one interactive teaching session per week with the residents on the ward service. This responsibility is shared with all the fellows for the duration of the fellowship. In general, 2-3 lectures per week will be given to all Hematology Oncology residents.
- Attend and participate in all BMT consultations, long-term follow-up, and departure conferences during the rotation.
- Attend and participate in all BMT patient-care conferences and meetings during the rotation.

First year fellows attending the BMT clinics, either during the inpatient or outpatient rotations, will have the opportunity for more extensive reading and integration of newly acquired knowledge in the care of their patients. The BMT program has prepared materials to be available for fellows, under the guidance of Dr. Mark Walters, Director of the program. Fellows will review the BMT clinical practice guidelines, seminal journal articles, and textbook chapters to familiarize themselves with common transplant principles.

Following are teaching objectives for the clinical fellows on the transplant service:

- Understand about hematopoietic stem cell sources – procurement, processing, indications, and donor registries
- Understand about the scientific basis for transplantation – histocompatibility, methodology of HLA typing, high-dose chemotherapy, mechanisms of tolerance, immunosuppressive therapy, and assessment of chimerism.
- Understand and perform pre-transplant patient evaluations, including assessments of appropriate patient eligibility and studies related to the underlying disease and general organ function.
• Understand how to administer growth factors for hematopoietic stem cell mobilization and for post-transplant hematopoietic cell reconstitution.
• Learn basic principles of infusion of the hematopoietic stem cell infusion and patient management.
• Learn to document and report on patients enrolled on investigational protocols.
• Participate in the harvest of bone marrow stem cells and/or apheresis procedures.
• Perform routine procedures on the BMT patients for assessment and treatment (lumbar puncture and intrathecal chemotherapy, bone marrow aspirates and biopsies, skin biopsies).
• Understand and diagnose common transplant-related complications and learn about their management:
  - Neutropenic fever;
  - Nausea and vomiting;
  - Hemorrhagic cystitis;
  - Thrombocytopenia and bleeding;
  - Pain;
  - Graft-versus-host disease, acute and chronic, – prevention and treatment;
  - Infection prevention and treatment, including fungal and viral infections;
  - Nutritional support;
  - Hepatic (VOD), renal, and gastrointestinal complications;
  - Blood group incompatibilities; and
  - Pulmonary complications (infectious and non-infectious);
  - Engraftment failure;
  - End of life management.
• Understand, recognize, and manage late effects of transplantation:
  - Immunological reconstitution: evaluation and intervention;
  - Development of long term follow-up plans.
• Understand concepts regarding transplantation for acquired diseases, indications for transplantation, preparative regimens and donor selection, and published outcomes for the following diseases:
  - Acute leukemias;
  - CML;
  - Myelodysplastic syndromes and JMML;
  - Solid tumors of childhood; and
  - Hemophagocytic lymphohistiocytosis.
• Understand concepts for transplantation in hereditary diseases, the indication for transplantation, preparative regimens and donor selection, and published outcomes for the following diseases:
  - Sickle cell anemia and thalassemia major;
  - Marrow failure syndromes – severe aplastic anemia, Fanconi’s anemia;
  - Lysosomal storage diseases; and
  - Immunodeficiency syndromes.
DD. **Clinical Objectives for the 1st year Neuro-Oncology Rotation**

First year fellows have an opportunity to spend two weeks on the Neuro-Oncology service. Fellows will be supervised by Joseph Torkildson, M.D. and participate in outpatient consultation and care of patients with tumors of the spine and brain, in addition to seeing new consultations and on-going care for hospitalized patients. Reading materials will be provided during the rotation. Fellows are encouraged to observe neurosurgery should the opportunity arise during this rotation.

Specific objectives of this rotation are:

- Fellows will participate in neuro-imaging rounds and learn basic neuro-anatomy, classic appearance of common brain tumors (brain stem gliomas, post fossa masses, ependymal tumors, spinal tumors, etc.), and common tumor related issues such as edema, pressure changes, gliosis, etc.
- Fellows will learn about common brain tumors such as primitive neuroectodermal tumors, medulloblastomas, ependymomas, high grade gliomas, low grade gliomas (juvenile pilocytic gliomas, optic pathway gliomas), with respect to clinical presentations, diagnostic studies, staging, and treatment concepts.
- Fellows will integrate into the neuro-oncology team and learn to work collaboratively in the management of patients with complex medical issues and late effects of therapy. Fellows will have the opportunity to participate in the monthly comprehensive multi-disciplinary neuro-oncology clinic.

EE. **Clinical Objectives for the 1st year Hematology/BMT Clinics Rotation**

Fellows in the first year have five weeks focused on the outpatient care and management of patients in the general hematology, sub-specialty hematology, and bone marrow transplant clinics in addition to the monthly hematology clinic. They will attend the clinics in Sickle cell, Thalassemia, Hemophilia, Thrombophilia, and General Hematology, in addition to twice weekly BMT clinics as well as neuro-oncology during this time period. Fellows will have the opportunity to integrate into the clinical teams and participate in clinical care and consent conferences, team meetings, and comprehensive multi-disciplinary clinics. Fellows will also have the opportunity to learn about laboratory integration in the diagnostic evaluation of their patients. This includes review of peripheral blood smears, coagulation testing, hemoglobin reference laboratory testing, and Ektacytometry. They will also learn about unique imaging studies developed to evaluate patients with iron overload (SQUID, MRI), pulmonary hypertension (ECHO), and stroke risk in Sickle Cell disease (transcranial Doppler).

Specific responsibilities and objectives of this rotation are (in addition to Clinical Objectives for the 1st Year the Bone Marrow Transplant Rotation, Section IV.CC.):

- Fellows will participate in multi-disciplinary care of patients with complex hematologic disease and appreciate individual roles in the management of such patients.
• Fellows will learn aspects of continuity of care of patients with chronic hematologic disease, such as Sickle Cell disease (chronic pain, iron overload, school performance issues, growth retardation, recurrent infection, chronic lung disease, pulmonary hypertension, neuropsychological issues) and Thalassemia (transfusion dependence, nutritional issues, endocrinopathies).
• Fellows will learn to evaluate, diagnose and manage children and adolescents with bleeding or clotting disorders. They will develop an understanding of common acute problems and therapies in addition to chronic problems and potential interventions.
• Fellows will learn to utilize specialized diagnostic testing (laboratory, imaging) for initial diagnosis of hematologic disease in addition to monitoring of chronic complications.

FF. Clinical Objectives for the 2nd/3rd year Sub-Specialty Clinic Block Rotations

Fellows in the 2nd and 3rd year will have the opportunity to participate in the following sub-specialty clinics: Bone Marrow Transplantation, Hemophilia, Neuro-Oncology, Sickle Cell Disease, and Thalassemia. These rotations will provide deeper and more concentrated exposure to these disciplines, with an emphasis on outpatient management and a multidisciplinary approach to care. Fellows will be assigned 2 sub-specialty rotations per year in their 2nd and 3rd years, scheduled as six-week contiguous blocks. They will attend a minimum of 1 half-day clinic per week throughout each block, in lieu of their regular continuity clinic in Oncology or General Hematology. Participation is also expected in any associated multidisciplinary team meetings during the rotation. A syllabus of reading materials relevant to each rotation will be provided. A final project will be completed during or after completion of each rotation, consisting of a presentation at either Fellow’s Conference or Journal Club on a topic of interest pertinent to the learning objectives of the rotation. Fellows may also choose to complete an alternative project or presentation with the approval and oversight of the physician supervising the rotation.

Following are the learning objectives for each rotation:

1. Bone Marrow Transplantation Clinic
   • Understand the indications for stem cell transplantation in malignant and non-malignant disorders
   • Understand the basic principles of donor selection, including:
     o HLA testing and interpretation
     o Differences between stem cell sources:
       ▪ Bone marrow
       ▪ Umbilical cord blood
       ▪ Peripheral blood
     o Process of unrelated donor identification through registries
   • Understand factors affecting the choice of preparative regimen for transplantation
   • Understand the timeframe and assessment of immune reconstitution
   • Understand the risks of infectious complications during different time periods after transplantation
   • Understand the assessment and management of acute graft-versus-host disease
2. Hemophilia Clinic
- Understand the assessment and management of chronic graft-versus-host disease
- Recognize the potential late toxicities of stem cell transplantation

- Understand the elements of a multidisciplinary approach to management of hemophilia
- Understand the components of routine health maintenance and surveillance for children with hemophilia and other bleeding disorders
- Develop a rational approach to diagnosis of patients with suspected bleeding tendency
- Understand the approach to managing joint disease in hemophilia
- Recognize the differences between recombinant and plasma-derived factor products for hemophilia and gain a working knowledge of new products in development
- Understand the indications and options for prophylaxis in hemophilia
- Understand the management of hemophilia patients with inhibitors:
  - Diagnosis, interpretation of laboratory studies
  - Low-titer vs. high-titer management
  - Strategies for immune tolerance induction
  - Use of bypassing agents
- Understand the approach to diagnosis of von Willebrand disease
- Understand the options for management of gynecologic bleeding in hemophilia and von Willebrand disease
- Understand the options for management of minor bleeding complications in hemophilia and von Willebrand disease
- Understand the options for prophylaxis of minor surgical/dental procedures in hemophilia and von Willebrand disease
- Understand the options for management of major surgical procedures in hemophilia and von Willebrand disease
- Understand the options for prophylaxis of minor surgical/dental procedures in hemophilia and von Willebrand disease

3. Neuro-Oncology Clinic
Learning Objectives
- Identify the elements of a multidisciplinary approach to management of CNS tumors
- Describe the epidemiology of CNS tumors in children and adolescents
- Understand the relative prognosis of different CNS tumors
- Describe the characteristics of and general approach to treatment for:
  - Low grade astrocytoma
  - High-grade astrocytoma
  - Medulloblastoma/PNET
  - Ependymoma
  - Optic pathway glioma
  - Brain stem glioma
  - Craniopharyngioma
  - Intracranial germ cell tumors
  - Spinal cord tumors

- Understand the management of patients receiving chronic anticoagulation
- Outline the late toxicities of CNS tumor treatment
  - Conventional chemotherapy
  - Bone marrow transplantation
  - Radiation therapy
- Describe how the management of CNS tumors differs in children with neurofibromatosis

Expectations
- Fellow will attend Friday Neuro-Oncology clinics weekly.
- Fellow will be responsible for seeing at least 30% of the patients scheduled in all Neuro-Oncology clinics other than the monthly comprehensive clinic, reviewing the patients with the appropriate attending, and completing the required documentation for the visit, including dictated reports to referring physicians. Fellow will select two patients for each comprehensive clinic attended and will be responsible for presenting these patients during the preclinical conference, evaluating these patients during the clinic, presenting the patients to the appropriate attending, discussing the patients in the post clinic conference, and completing the required documentation for each patient, including dictated reports to the referring physician.
- Fellow will be available to participate in new patient consultations as allowed by his/her research commitments.
- Fellow will meet with Dr. Torkildson weekly to discuss progress on recommended reading, questions resulting from the reading, progress on their final project (outlined below) and any other topics relevant to their rotation.
- Fellow will complete successfully a final project as outlined below.

Final Project/Presentation
- Fellow will present at either Fellow’s Hematology Oncology Educational Conference or Journal Club on a topic of interest pertinent to the Learning Objectives of this rotation.
- Fellow may complete an alternative project or presentation with the approval and oversight of the physician supervising this rotation.

4. Sickle Cell Disease Clinic
- Understand the components of a multidisciplinary approach to care of sickle cell disease patients
- Understand the components of routine health maintenance and surveillance for children, adolescents, and adults with sickle cell disease
- Gain knowledge of transition of care from pediatric to adult services
- Understand the monitoring and management of chronic complications of sickle cell disease
  - Cerebrovascular disease
  - Avascular necrosis
  - Pulmonary hypertension
  - Leg ulcers
  - Chronic pain
- Understand the outpatient management of vaso-occlusive pain crises
- Understand the use of hydroxyurea in sickle cell disease: indications, toxicity, monitoring, dose adjustment
- Understand the use of transcranial Doppler ultrasound in sickle cell disease
• Gain knowledge of emerging therapies in SCD including gene therapy and bone marrow transplantation
• Understand the use of chronic transfusion therapy in sickle cell disease
  o Indications for chronic transfusion
  o Management of complications
  o Differences between exchange and straight transfusion regimens

5. Thalassemia Clinic
• Understand the components of a multidisciplinary approach to care of thalassemia patients
• Recognize the consequences and management of chronic transfusional iron overload
  o Cardiac complications
  o Endocrine complications
  o Orthopedic complications
  o Infectious complications
  o Hematologic complications
• Understand the use of iron chelation therapy, including:
  o Indications for initiating therapy
  o Monitoring the effect of therapy
  o Toxicities
  o Differences between currently available agents
  o Strategies for managing noncompliance
• Understand the approach to utilizing blood products in chronically transfused patients
• Understand the epidemiology and genetics of the thalassemia syndromes
• Become familiar with current translational and clinical research in thalassemia at our institution including novel approaches such as gene therapy
• Gain knowledge of transition of care from pediatric to adult care

GG. Clinical Objectives for the 3rd year Long-term Follow Up (LTFU) for Survivors of Childhood Cancer

Third year fellows will participate in the LTFU clinic for survivors of childhood cancer for 6 continuous months. This clinic meets monthly for a half day, preceded by a multidisciplinary review and discussion of the patients. The primary mentors are Dr. James Feusner and Dr. Robert Raphael. The following objectives have been developed for this clinical experience:

• Identify the potential late effects of common treatment modalities in pediatric oncology, including:
  o Specific chemotherapeutic agents
  o Radiation
  o Surgery
  o Bone marrow transplantation
• Participate actively in a multidisciplinary team approach to pediatric cancer survivorship
• Become familiar with LTFU recommendations and guidelines from the Children’s Oncology Group and other organizations
• Use existing guidelines to create individualized plans and recommendations for off-therapy surveillance of late effects and general health maintenance
• Efficiently review, summarize and present the relevant history of complex pediatric oncology patients
• Understand the process of transitioning care of young adult survivors of childhood cancer from pediatric to adult health care providers
• Recognize the importance of a comprehensive LTFU approach for all survivors of childhood cancer

V. Research Competence/Scholarship Oversight Committee

The ABP (American Board of Pediatrics) requires all sub-specialty Pediatric residents (fellows) to participate in scholarly activities during fellowship training. These activities include: participation in a core curriculum, scholarly activities resulting in a work product, and periodic review by the scholarship oversight committee (SOC). The ABP requests that ensuring such activity be the responsibility of the program directors and be reviewed by the RRC (Residency Review Committee) of the ACGME (Accreditation Council for Graduate Medical Education). Fellowship trainees will be required to submit documentation of this training and review at the time of application for the sub-specialty certifying examination.

Fellowship trainees are required to demonstrate a meaningful accomplishment in research. The duration of fellowship training is currently 3 years, with 2 years typically being devoted to this endeavor.

A. Research Funding

Funding during the 2nd and 3rd years of the fellowship comes from a combination of grants and department supplementation. Each fellow is encouraged to identify a mentor, a project and be involved in writing and submitting a grant proposal during the first or second year.

B. Research Core Curriculum

All programs must include a core curriculum in scholarly activities. This curriculum provides skills that lead to an in-depth understanding of biostatistics, clinical and laboratory research methodology, study design, preparation of applications for funding and/or approval of clinical or research protocols, critical literature review, principles of evidence-based medicine, ethical principles involving clinical research, and the achievement of proficiency in teaching. The curriculum should lead to an understanding of the principles of adult learning and provide skills to participate effectively in curriculum development, delivery of information, provision of feedback to learners, and assessment of educational outcomes. Graduates should be effective in teaching both individuals and groups of learners in clinical settings, classrooms, lectures, and seminars, and also by electronic and print modalities.

The fellowship program directors at CHRCO have addressed many of these topics in the Professionalism series. Additionally, fellows have access to the Introduction to
the Clinical Research (TICR) course if their research involves human subjects. Fellows are required to attend the quarterly Fellows College at UCSF which provides a core curriculum in research development and conduct. Presentation of research activities in written and lecture format on a periodic basis, with critical review, such as at the SOC, also assists the fellows with accomplishment of many of these goals.

C. Scholarly Activities

In addition to the core curriculum, each program is expected to engage fellows in specific areas of scholarly activity to allow acquisition of skills in the critical analysis of work of others; to assimilate new knowledge, concepts, and techniques related to the field of one’s practice; to formulate clear and testable questions from a body of information/data so as to be prepared to become effective sub-specialists and to advance research in pediatrics; to translate ideas into written and oral forms as teachers; to serve as consultants for colleagues in other medical and scientific specialties; and to develop as leaders in their fields.

All fellows will be expected to engage in projects in which they develop hypotheses or in projects of substantive scholarly exploration and analysis that require critical thinking. Areas in which scholarly activity may be pursued include, but are not limited to: basic, clinical, or translational biomedicine; health services, quality improvement; bioethics; education; and public policy. Fellows must gather and analyze data, derive and defend conclusions, place conclusions in the context of what is known or not known about a specific area of inquiry, and present their work in oral and written form to the Scholarship Oversight Committee in addition to laboratory meetings and regional/national meetings.

The Scholarship Oversight Committee (SOC) in conjunction with the trainee, mentor(s), primary reviewer(s), and the Program Director will determine whether a specific activity is appropriate to meet the ABP guidelines for scholarly activities. In addition to biomedical research, examples of acceptable activities might include: a critical meta-analysis of the literature, a systematic review of clinical practice with the scope and rigor of a Cochrane review, a critical analysis of public policy relevant to the subspecialty, or a curriculum development project with an assessment component. These activities require active participation by the fellow and must be mentored. The mentor(s) and primary reviewer(s) will be responsible for providing the ongoing feedback essential to the trainee’s development.

D. Work Product of Scholarly Activity

Involvement in scholarly activities must result in the generation of a specific written “work product,” which may include:

- A peer reviewed publication in which a fellow played a substantial role
- An in-depth manuscript describing a completed project
- A thesis or dissertation written in connection with the pursuit of an advanced degree
- An extramural grant application that has either been accepted or favorably reviewed
- A progress report for projects of exceptional complexity, such as a multi-year clinical trial
E. Duties of the Scholarship Oversight Committee (SOC): Guidelines for committee members

Review of scholarly activity will occur at the local institution. Each fellow must have a Scholarship Oversight Committee. The SOC should consist of three or more individuals, at least one of whom is based outside the sub-specialty discipline; the fellowship program director may serve as a trainee’s mentor and participate in the activities of the SOC, but should not be a standing member. The SOC will:

- Determine whether a specific activity is appropriate to meet the ABP guidelines for scholarly activity.
- Determine a course of preparation beyond the core fellowship curriculum to ensure successful completion of the project.
- Evaluate the fellow’s progress as related to scholarly activity during the training period.
- Meet with the fellow early in the training period and regularly thereafter to evaluate progress related to the scholarly activity.
- Requires the fellow to present/defend the project related to his/her scholarly activity.
- Advises the Program Director and mentor(s) on the fellow’s progress and determines whether the fellow has satisfactorily met the guidelines associated with the requirement for active participation in scholarly activities.

The ABP requires that members of the SOC complete documentation of critical review of the fellow’s completed work product at the time of application for the sub-specialty certifying. The Program Director is responsible for ensuring completion of this documentation in addition to review and acceptance of the individual fellows’ Personal Statement summarizing education and career goals in the context of the research project.

F. Guidelines for Fellow Presentations to the Scholarship Oversight Committee

The American Board of Pediatrics requires subspecialty fellows to complete a work product in scholarly activity that has been approved by an advisory and review committee, the Scholarship Oversight Committee (SOC). Fellows work with the faculty in their division and the Program Director to develop an area of interest and develop a hypothesis driven project. The Division Director and Program Director provide guidance on project selection in addition to appropriate mentorship for the research period (typically 2 years). The SOC has assumed an integral role in providing critical review and guidance to fellows, mentors, and Program Directors. The Program Director has developed guidelines for fellows on how to present and utilize the SOC for attainment of the goal of completion of a scholarly activity.

Fellows are required to present their research periodically over the course of their training. Hematology Oncology fellows present to the SOC on at least 4 occasions during the course of their training.
The **Initial Presentation** to the SOC is the fellow’s proposal for research, including background review, hypothesis, and methodology. It should also contain a brief description of how this scholarly project will allow the fellow to achieve his or her stated short and long term goals. The presentation should include:

1. A Title of the project that reflects its content.
2. Listing of all investigators and lab, include the primary mentor(s), Program Director, and Primary Reviewer(s).
3. Background and relevance: Provide a clear explanation of the relevance and complete discussion of the background with references.
4. Research question/study hypothesis: Provide a clear statement of the problem and questions with a clear statement of the hypothesis.
5. Methodology: Provide a clear explanation of the methodology and methods of analysis.
6. Provide a realistic timeline for the project completion during the course of the fellowship.

During the research fellowship, fellows will present 1-2 times per year and update the committee on the progress of their work. The committee will review the project to date and provide critical evaluation to the fellow, fellowship Program Director, and project mentor(s).

**Subsequent Presentations** (2) should include the following elements:

1. A Title of the project that reflects its content.
2. Listing of all investigators and lab, include the primary mentor(s), Program Director, and Primary Reviewer(s).
3. Background and relevance: This should be briefly reviewed in oral presentation with 1-2 slides, though should be more detailed in the written progress report and build on the prior submission.
4. Methodology: Give a clear description of the research methods and scientifically appropriate data/analytic plan. Outline any changes since the most recent presentation.
5. Results: Present results to date and analysis with relevant graphs, tables, figures that are clear.
6. Limitations: Discuss any project limitations and the plan to address these.
7. Funding: Identify if any grant funding has been sought or received.
8. Provide a realistic timeline for the project completion and publication of abstracts and manuscripts during the course of the fellowship.

The **Final Presentation** (June of the third year) should include the following elements:

1. A Title of the project that reflects its content.
2. Listing of all investigators and lab, include the primary mentor(s), Program Director, and Primary Reviewer(s).
3. Background and relevance: This should be briefly reviewed in oral presentation with 1-2 slides, though should be more detailed in the written progress report and build on the prior submission.
4. Methodology: Give a clear description of the research methods and scientifically appropriate data/analytic plan. Outline any changes since the most recent presentation.

5. Results: Present results to date and analysis with relevant graphs, tables, figures that are clear.

6. Limitations: Discuss any project limitations and the plan to address these.

7. Identify if any grant funding has been sought or received, and how it will be funded if you plan to continue your work post fellowship.

8. Publications: List any publications and national/regional abstracts/posters/presentations. If the project publication is not yet complete give a timeline.

9. The ABP requires fellows completing their training and applying for subspecialty boards to write a personal statement on how this Scholarly Activity has meaningfully contributed to their career development. The written statement is 1-2 pages in length and will be formally reviewed by the SOC. The statement should describe the work and the fellow’s role in each aspect of the activity, as well as any preparation beyond the core fellowship curriculum needed to ensure successful completion of the project. Finally, the personal statement should describe how the Scholarly Activity furthers the fellows’ career development plan, and should reflect on the educational value of the pursuit of the project. The oral presentation should include a slide with summary points addressing this topic.

Fellows are asked to submit a formal research Progress Report and up to date Curriculum Vitae at the time of each SOC presentation. The guidelines above should assist fellows in development of the research report and oral presentation. The progress report should be a document in development throughout the fellowship, with more in depth discussion of each section as the project matures.

Specific expectations for the SOC presentation are as follows:

1. Submit a written progress report (summary of the background, hypothesis, research methodology and/or study design, methods for statistical analysis, and results to date) at least 1 week prior to the date of presentation to your fellowship director and the SOC chairperson, Caroline Hastings MD.
   a. Include all elements as listed above in your written report.
   b. State if work has resulted in abstract, poster, oral presentation, or manuscript and submit copies (also state if this is in progress).
   c. Updated curriculum vitae.

2. Prepare a 10 minute power point presentation highlighting the key elements of the research as detailed in the written summary and per the guidelines above according to year of fellowship. Please adhere to this 10 minute rule for the initial and subsequent presentations. Due to time limitations please do not repeat your background or supporting data (other than a brief summary slide). The committee will have had the opportunity to read your report ahead of the meeting and be familiar with this aspect of the work.
3. You will be allowed **15 minutes for the final presentation** at the end of the fellowship. Please note that each presenter should include an initial slide with a financial disclosure statement for the CME program.

4. Following the presentation, a 10-15 minute question and answer session will proceed, led by the moderator, your primary reviewer(s), and members of the SOC. Fellows are not present during this discussion, though advocates (primary reviewer, mentors) will be present to lead the discussion.

5. The moderator will then give an oral synopsis of critical feedback to each fellow and complete a written evaluation summarizing the findings and recommendations of the SOC. Should there be a need for a short interval assessment, the SOC chairperson will work with the Program Director and mentor(s) to arrange this to ensure the fellow’s success with the project and subsequent SOC presentations.

6. General recommendations for slide preparation should include clear and readable information without too much information; figures/tables/graphs as a means of displaying data; and practice to ensure adherence to the time guidelines. The SOC does assess presentation style and skills (oral and slides) in addition to the ability to defend and discuss the presentation in an articulate and scientific manner in the evaluation process.

7. It is expected that your research mentor(s) and primary reviewer(s) be present at the presentation and evaluation session. Please communicate in advance with these investigators regarding the dates of presentation. Also, please review your progress report and practice your presentation with your research mentor(s) and/or division and lab prior to committee review. Your primary reviewer(s) will be assigned in advance by the Program Director, SOC Chair, and mentor(s). These individuals serve as your critical review committee and your advocates and assist the SOC with understanding the relevance and content of your scholarly work.

G. **SOC Evaluation Process**

The SOC has developed a formal written process for evaluation. An Initial Evaluation will be utilized for fellows presenting their initial hypothesis and supportive background. Following presentation and a Question & Answer period, the SOC will meet without the fellow for private discussion and critique, then invite the fellow to receive verbal feedback. In addition, a written document with guidelines will be developed for the fellow, and respective Program Director and mentor. Subsequent committee evaluations will have expectations of progress through the research, further refinement of the hypothesis, review and analysis of data, and application of appropriate statistical methods, and conclusions. The committee will also review publications related of the research. If the committee has concerns about appropriateness of research and/or progress toward the goals as stipulated by the ABP, the fellow may be invited back for a short interval interim presentation and special committee review. A final evaluation is also created at the culmination of the third year, with specific guidelines for a final review and personal statement listed below. The intent of the evaluation process is to provide on-going, non-biased, critical review and constructive guidance, to assist the fellow in attainment of competence in scholarly activity.
H. Final Presentation and Evaluation of Competence

The ABP requires Pediatric Sub-Specialty fellows to prepare a summary of the final work product or submit a manuscript in addition to the Personal Statement as described above. The committee will be asked to sign off on both these activities.

The SOC coordinator and Program Directors will bring the required documents from the ABP for final certification of attainment of research competence. These forms will be required for each fellow desiring to become board eligible in their sub-specialty and require meticulous attention and completion at the SOC meeting. The forms will then be forwarded to the appropriate Program Director for submission to the board.

I. SOC: Guidelines for Committee Members

The ABP requires review of scholarly activity occur at the local institution. As members of this committee, you are asked to follow the guidelines as set forth by the ABP for the purpose of fellows to attain competence in the conduct of research. SOC members are comprised of faculty and visiting scientists and clinician scientists directly involved in the research being conducted by fellows at Children’s Hospital & Research Center Oakland. Roles of the committee are varied and include: Moderators, Mentors, Primary reviewers, and general committee participants and reviewers. Additionally, all subspecialty Program Directors and fellows attend each meeting, in addition to interested CHORI and CHRCO faculty (including residents and post-doctoral students) for educational interest.

There are four subspecialty programs at CHRCO who utilize the SOC committee for formal review of fellowship research activity: Pulmonology, Emergency Medicine, Infectious Diseases, and Hematology Oncology. Each Pediatric subspecialty fellow is asked to present to this committee four times during the research years of the fellowship training period. It is additionally recommended that fellows present their work internally and have the opportunity for periodic critical review by clinician-scientists in their field.

The SOC serves the following functions:

- Determination of whether a specific activity is appropriate to satisfy the ABP requirements for scholarly activity.
- Evaluation of the fellow’s progress as related to scholarly activity during the research fellowship (2-3 year period).
- Make recommendations to the Program Director, mentor(s), and fellow on the fellow’s progress and assess whether the fellow has satisfactorily met the ABP requirement for active participation in scholarly activities.
- Make a final determination of accomplishment of research competence.

It is required that a minimum of three members of the committee be present for review and discussion for each presentation, at least one based outside the subspecialty discipline. The research mentor(s) and Program Directors may not sign off on the evaluations so as not to introduce bias. The Primary
Review(s) should focus on an individual fellow’s scholarly work and meet on a regular basis with the fellow and mentor(s).

Format for the SOC:

The SOC meets quarterly in the evenings at CHORI (third Monday of the month March, September, and December and the first Monday in June) and hears 2-4 fellow presentations. Each fellow is allotted 30 minutes for an oral presentation with slides, Q&A led by the moderator and primary reviewer(s), and an oral evaluation. Program Directors, mentors, and primary reviewers are asked to be present for the entire period.

The research and clinical components of the fellowship are integrated in a cohesive, synergistic manner. Each participant in the fellow’s educational experience plays a critical role in this process of ensuring communication and an optimal experience for the fellow. The Program Director assumes a leadership role and works directly with each of the mentors to ensure the scientific program is accomplished and the requirements of the accreditation have been met.

All fellows are required to attend each SOC meeting, even if not presenting. Presenting fellows are requested to review their work and written materials with their mentor(s) and primary reviewer(s) in advance and practice the oral presentation prior to the SOC. Presenters are required to submit their written initial or progress reports one week prior to the SOC meeting, for distribution by the SOC chairperson to the committee to allow ample time for review. Fellows should adhere to the Guidelines for Fellow Presentations to the SOC to ensure appropriate presentation materials and adherence to the committee requirements. Practice is encouraged as this format is intended to teach fellows the art of didactic and research presentation in an academic setting, such as at a national meeting, and the presentation is also evaluated for style and content.

Program Directors are requested to attend each committee session, though cannot formally be on a committee for their respective fellows (per ABP guidelines). Program Directors serve the following roles in the SOC:

1. Determine dates for respective fellow presentations.
2. Assist with project development and selection of mentor(s) and primary reviewer(s).
3. Assure each fellow is timely with document submission and well prepared for each oral presentation.
4. Work with the fellows to review submitted written materials and practice of oral presentations prior to each meeting.
5. Assure for the final presentation, appropriate written mentor and primary reviewer evaluations are submitted to the SOC.
6. Assure all ABP documentation is completed at the time of the final presentation to include the SOC review of the scholarly work product and the personal statement.
7. Encourage faculty in the division to attend the fellow’s SOC meeting to support their work and participate in the discussion and review.
The specific role of the **Research Mentor** is as follows:

1. Assist the fellow in development of a scholarly activity that meets the requirements as above and can be realistically completed by the end of the third year of fellowship.
2. Provide direct oversight and guidance.
3. Be available and meet regularly to review progress.
4. Assist the fellow with presentations to the SOC, act as an advocate, and attend all SOC presentations by that fellow.
5. Develop timelines and insist on completion of projects.
6. Seek extramural funding and provide assistance in submission of such grants.
7. Provide semi-annual written evaluations on the fellow’s progress in the scholarly activity to the Program Director.
8. Meet periodically in a formalized manner with the fellow, Program Director, Division Chief, and/or relevant faculty to discuss the progress and timelines.
9. Provide a formal written evaluation of the final research work product to the SOC at the time of the final presentation, to be utilized by this committee in its review and decision regarding accomplishment of the research requirement for the ABP.

The specific role of the **Primary Reviewer** is as follows:

1. Serve as an expert reviewer of the research being conducted by the fellow;
2. Ensure the project is appropriate for the fellowship given the requirements of the ABP.
3. Ensure the hypothesis and methods are sound, and provide advice on data interpretation and analysis.
4. Ensure timelines are adhered to.
5. Provide advice/editorial support on progress reports, grant submissions, abstracts, and publications.
6. Meet with the fellow and research mentor(s) from the time of inception of the project and periodically throughout the conduct of the research project. It is suggested that the primary reviewers meet at least quarterly and just prior to the SOC presentation.
7. Serve as an advocate for the fellow with the goal of ensuring their successful completion of the project and attainment of the goal of learning how to conduct meaningful research.
8. Provide expert advice to the SOC regarding the relevance and content of the work product and the fellow’s progress.
9. Complete a written evaluation at the time of the final presentation to the SOC.

Primary reviewer(s) are selected in advance by the Program Director, mentor(s), and/or SOC chairperson. There may be 1-3 primary reviewers for each fellow.

A **Moderator** will be assigned to each meeting of the SOC. The specific role of the moderator is as follows:
1. Lead each SOC meeting, introduce each fellow presenter, and assure adherence to timeliness of presentations.
2. Lead the question & answer and evaluation sessions.
3. Ensure professional conduct and determine appropriateness of questions directed to the fellow during the Q&A session.
4. Provide an oral synopsis of the SOC critical review and recommendations to the fellow.
5. Complete the written evaluation forms and ensure they represent the discussion and recommendations of the committee.

The **SOC chairperson** serves the following duties:

- Creates the fellows presentation schedule with input from individual program directors.
- Assists mentors and program directors with the selection of primary reviewers for each fellow.
- Selects moderators for each session.
- Creates and distributes guidelines for fellows and committee members.
- Oversees CME requirements with creation of Goals/Objectives, developing and collating evaluation forms, and submitting annual reports.
- Maintains records of attendance, submitted documents, and evaluations (and ensure respective program directors receive these documents/forms as well).
- Creates and distributes appropriate evaluation forms for initial, on-going, and final fellow evaluations, in addition to mentor and primary reviewer evaluations, and special reviews.
- Communicates with fellow presenters and Program Directors to coordinate the schedule, collect the require documents and submit to the SOC in advance of each meeting.
- Assists to coordinate special reviews or SOC sub-groups for fellows needing additional support or who are at risk for not meeting research requirements.

**General committee members** are asked to attend a minimum of 50% of the SOC meetings and be prepared in advance with reading the submitted materials. Additionally, general committee members may serve as moderators, mentors, or primary reviewers. Comments and discussion with critical review are highly valued and appreciated by all the members. It is expected that critical review will be given in a professional and constructive manner.