Hematology and Medical Oncology Fellowship Program Handbook

2021-2022

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Table of Contents

12. Hematology Leukemia Continuity Clinic
13. Hematology Non-Malignant Hem Consult Service at Harbor-UCLA Medical

III. Fellowship Policies Links

IV. Block Diagram

V. Education

A. Formal Didactic Schedules
B. Fellows Didactics Schedule
C. Education

VI. City of Hope Departmental Directory

VII. Important Links

A. Graduate Medical Program
B. City of Hope Internet
C. CURES Report
D. American Society of Clinical Oncology
E. ASH Academy
F. COVID-19 (Coronavirus)

VIII. Miscellaneous

A. Payroll Calendar
B. Clinical Social Work Service Coverage
C. Duarte Campus Map

Welcome

Dear Fellows,

Welcome to the City of Hope Hematology and Medical Oncology Fellowship program. As a fellow at City of Hope National Medical Center, you should pride yourself in having joined an incredible community with a vibrant learning and training environment, where we know you will thrive.

We are confident that your 3-year training program will prepare you for your future career, whether it be in basic and translational research, clinical investigation, or clinical practice.

We have an outstanding faculty committed to ensuring that you receive an excellent and rewarding educational and training experience. We are confident that when you graduate from fellowship, you will also acquire the skills needed to become a leader in the field.

This book has been put together with the intent of providing you with guidance throughout the year. Please let us know if we can improve it in any way so that it may guide future fellows.

Along with the rest of the faculty, we welcome you as our colleagues and look forward to embarking on this journey with you.

Sincerely,

Niki Patel, M. D.
Program Director

About City of Hope

City of Hope is a world-class biomedical research, treatment, and education institution. For 100 years, our pioneering research has brought the world closer to cures for cancer and other life-threatening diseases.

City of Hope is recognized worldwide for compassionate patient care, innovative science, and translational research. On our park-like campus just northeast of Los Angeles, researchers advance ideas into discoveries, physicians bring promising therapies to patients, and students learn to transform the landscape of modern medicine.

Our patient-centered philosophy guides everything we do. It is why our researchers are relentless in their advance of science, why our physicians bring therapies to patients as quickly as possible and why our students immerse themselves in ways to redefine medicine.

City of Hope is an independent research and treatment center for cancer, diabetes, and other life-threatening diseases. Designated as a comprehensive cancer center, the highest recognition bestowed by the National Cancer Institute, City of Hope is also a founding member of the National Comprehensive Cancer Network, with research and treatment protocols that advance care throughout the nation.

City of Hope's main hospital is in Duarte, California, just northeast of Los Angeles, with clinics in Antelope Valley and South Pasadena. It was ranked as "Best in the West" in cancer by U.S. News & World Report 2019. Founded in 1913, City of Hope is a pioneer in the fields of bone marrow transplantation and genetics.

Institutional Distinctions

- City of Hope is one of only a few National Cancer Institute-designated comprehensive cancer centers in the nation and a founding member of the National Comprehensive Cancer Network
- City of Hope is ranked as one of America's top cancer hospitals by U.S. News & World Report.
- City of Hope speeds the path from laboratory discoveries to treatment. This has led to breakthrough cancer drugs such as Trastuzumab, Rituxan and Bevacizumab, which are saving lives worldwide.
- A pioneer in bone marrow transplantation, City of Hope today maintains one of the largest and most successful bone marrow transplant programs in the world.

City of Hope Mission and Values

Our Mission

City of Hope is transforming the future of health. Every day we turn science into practical benefit. We turn hope into reality. We accomplish this through exquisite care, innovative research and vital education focused on eliminating cancer and diabetes.

City of Hope Values

Compassion

We demonstrate kindness, empathy, and respect in our interactions with patients, their families, and our colleagues.

Service with a Sense of Urgency

We provide exceptional benefit to those we serve, conducting our business with honesty, purpose, and an eye toward improving the future.

Integrity

We follow through on our commitments, we hold ourselves and others accountable for our actions and consistently make the best choice for our organization and its mission.

Intellectual Curiosity

We are life-long learners committed to challenging the status quo. We think about what is possible, not just what has been done before, and are not afraid to ask: “What could be possible?” in our quest to continuously improve and grow.

Excellence

We strive for the highest quality in all we do and are driven to continuously improve both our outcomes and processes.

Collaboration

We actively share thoughts and ideas; we cultivate quality and integrity in our relationships with one another as well as with our community partners

Department of Medical Oncology

Medical Oncology & Therapeutics Research is dedicated to the diagnosis, treatment, and research of tumors in patients to ensure optimal outcomes across a broad spectrum of diagnoses.

Led by **Dr. Ravi Salgia, M.D., Ph.D.,** Medical Oncology & Therapeutics Research Arthur & Rosalie Kaplan Chair in Medical Oncology, our multidisciplinary team is dedicated to the diagnosis, treatment, and research of solid malignancies with the goal of achieving optimal outcomes across a broad spectrum of diagnoses.

The department has dedicated faculty for both its inpatient service and outpatient clinics, which are organized around cancer types. The staff also works closely with City of Hope's surgery, radiation oncology, and supportive care medicine departments to provide coordinated, comprehensive cancer care to patients and caregivers.

Additionally, the department collaborates with City of Hope's comprehensive cancer center's Development Cancer Therapeutics Program and other cancer centers to develop the next generation of cancer therapies starting with a strong foundation of basic science led by researchers at the City of Hope Backman Research Institute and moving on to early and late phase clinical trials across the full spectrum of malignant disease stage and line of therapy.

Department of Hematology and Hematopoietic Cell Transplantation

City of Hope's Hematologic Malignancies Research Institute leads the field as one of the world's largest and most successful research and treatment centers for hematological malignancies.

Led by **Dr. Eileen Smith, M.D**., Hematologist-Oncologist, Francis & Kathleen McNamara Chair in Hematology and Hematopoietic Cell Transplant, our dedicated, multidisciplinary team combines innovative research discoveries with superior clinical treatments to improve outcomes for patients with hematologic malignancy.

The ***mission*** of the institute is to bring pioneering research discoveries in hematological malignancies and stem cell transplantation to early-phase clinical trials of potentially practice-changing therapies.

The ***vision*** of the institute is to become one of the foremost research and clinical treatment centers for hematological malignancies and stem cell transplantation, making the best available therapies accessible to all patients.

Hematology and Medical Oncology Fellowship Program

Mission Statement

The goal of the Hematology and Medical Oncology Fellowship program is to champion compassionate and expert clinician scientists dedicated to serving patients with cancer and blood disorders.

Program Aims

Demonstrate competence in the diagnosis, staging, and management of the majority of hematologic and oncologic conditions.

Demonstrate compassionate patient centered care with urgency.

Demonstrate competence in the creation and execution of clinical trials.

Demonstrate familiarity with the basics of translational and laboratory research.

Author or substantially contribute to at least 1 academic publication, poster, presentation, grant, or trial per year.

Pass medical oncology and/or hematology board exams (some fellows may elect to sit for only the medical oncology board exam)

Hematology and Medical Oncology Fellowship Program Administration

Program Director
Niki Patel, M.D.
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Hematology and Medical Oncology Fellowship Program Core Faculty

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Assistant Professor, Department of Medical Oncology

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Associate Program Director
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Joseph Chao, M.D.
Assistant Clinical Professor, Department of Medical Oncology

Tanya Dorff, M.D.
Associate Clinical Professor, Department of Medical Oncology

Erminia Massarelli, M.D., Ph.D.
Associate Clinical Professor, Department of Medical Oncology

Daphne Stewart, M.D.
Associate Clinical Professor, Department of Medical Oncology

Tanya Siddiqi, M.D.
Associate Clinical Professor, Department of Hematology

Leslie Popplewell, M.D.
Associate Clinical Professor, Department of Hematology

Yuan Yuan, M.D., Ph.D.
Associate Clinical Professor, Department of Medical Oncology

Amandeep Salhotra, M.D.
Associate Clinical Professor, Department of Hematology

Vincent Chung, M.D.
Clinical Professor, Department of Medical Oncology

Karamjeet Sandhu, M.D.
Assistant Clinical Professor, Department of Hematology

Marwan Fakih, M.D.
Professor, Department of Medical Oncology

Vinod Pullarkat, M.D.
Clinical Professor, Department of Medical Oncology

Sayeh Lavasani, M.D.
Assistant Clinical Professor, Department of Medical Oncology

Alexey Danilov, M.D., Ph.D.
Professor, Department of Hematology and Transplantation

Hematology and Medical Oncology Fellowship Research Faculty

Hematology	Medical Oncology
Guido Marcucci, M.D. Professor	**Mina Sedrak, M.D., M.S.** Assistant Professor
Alexey Danilov, M.D., Ph.D. Associate Director	**Vincent Chung, M.D.** Associate Clinical Professor
Tanya Siddiqi, M.D. Associate Clinical Professor	**Tanya Dorff, M.D.** Associate Clinical Professor
Ibrahim Aldoss, M.D. Assistant Clinical Professor	**Marwan Fakih, M.D.** Professor
Stephen Gruber, Dir, Center for Precision Med. Office of the President NMC	**Ravi Salgia, M.D., Ph.D.** Professor
Peter Lee, M.D. Professor	**Sumanta Pal, M.D.** Clinical Professor
	Yung Lyou, M.D., Ph.D. Assistant Clinical Professor
	Erminia Massarelli, M.D. Associate Clinical Professor
	Yuan Yuan, M.D., Ph.D. Associate Clinical Professor
	Afsaneh Barzi, M.D., Ph.D. Associate Clinical Professor
	Daneng Li, M.D. Assistant Clinical Professor
	Yan Xing, M.D., Ph.D. Assistant Clinical Professor

Hematology and Medical Oncology Fellowship Teaching Faculty

Hematology	Medical Oncology
Ahmed Aribi, M.D. Assistant Clinical Professor	**Addie Hill, M.D.** Assistant Clinical Professor
Alex Herrera, M.D. Assistant Clinical Professor	**Afsaneh Barzi, M.D., Ph.D.** Associate Clinical Professor
Amandeep Salhotra, M.D. Assistant Professor	**Daneng Li, M.D.** Assistant Clinical Professor
Amrita Krishnan, M.D. Professor	**Daphne Stewart, M.D.** Associate Clinical Professor
Andrew Artz, M.D. Associate Clinical Professor	**Edward Wang, M.D., Ph.D.** Assistant Professor
Anthony Stein, M.D. Clinical Professor	**Erminia Massarelli, M.D.** Associate Clinical Professor
Benjamin Djulbegovic M.D., Ph.D. Professor	**James Waisman, M.D.** Clinical Professor
Geoffrey Shouse, D.O., Ph.D. Assistant Clinical Professor	**Jana Portnow, M.D.** Associate Clinical Professor
Haris Ali, M.D. Assistant Professor	**Joanne Mortimer, M.D**. Professor
Ibrahim Aldoss, M.D. Assistant Clinical Professor	**Joseph Chao, M.D.** Assistant Clinical Professor
Jasmine Zain, M.D. Associate Clinical Professor	**Marianna Koczywas, M.D.** Clinical Professor
Karamjeet Sandhu, M.D. Assistant Clinical Professor	**Mark Agulnik, M.D.** Clinical Professor
Leslie Popplewell, M.D. Associate Clinical Professor	**Marwan Fakih, M.D.** Professor
Liana Nikolaenko, M.D. Assistant Clinical Professor	**Miguel Villalona-Calero** Pinkus Professor & Director, Early Phase Therapeutics Program
Matthew Mei, M.D. Assistant Clinical Professor	**Mihaela Cristea, M.D.** Associate Clinical Professor
Michael Rosenzweig, M.D. Associate Clinical Professor	**Ravi Salgia, M.D.** Professor, Chair Medical Oncology
Monzr M. Al Maliki, M.D. Assistant Clinical Professor	**Sayeh Lavasani, M.D.** Assistant Clinical Professor
Nitya Nathwani, M.D. Assistant Professor	**Stacy Gray, M.D.** Associate Clinical Professor
Paul Koller, M.D. Assistant Clinical Professor	**Tanya Dorff, M.D.** Associate Clinical Professor
Ryotaro Nakamura, M.D. Associate Professor	**Victoria Villaflor** Clinical Professor & Chief, Head & Neck Oncology
Shukaib Arslan, M.D. Assistant Clinical Professor	**Vincent Chung, M.D**. Associate Clinical Professor
Stephen Forman, M.D. Professor	**Yan Xing, M.D., Ph.D.** Assistant Clinical Professor
Tanya Siddiqi, M.D. Associate Clinical Professor	**Yuan Yuan, M.D**. Associate Clinical Professor
Vinod Pullarkat, M.D. Clinical Professor	**Yung Lyou, M.D., Ph.D.** Assistant Clinical Professor

Formative Evaluation

At the end of the rotation, fellows are evaluated by faculty physicians as well as evaluators across the spectrum of the institution (360 degree evaluations). These evaluators include physician extenders, nurses, patients, peers. Evaluations follow criteria outlined by the ACGME and consist of objective assessments of competence in patient care, medical knowledge, practice based learning and improvement, interpersonal and communication skills, professionalism, and systems based practices. These evaluations will be submitted to the Clinical Competency Committee for review and for summative evaluation.

Every 6 months, in addition to the cumulative assessment by the Clinical Competency Committee, the PD reviews and provides verbal and written notification of the evaluation of the fellows regarding clinical and academic performance. The PD evaluation is based on faculty and 360 evaluations, includes summaries of academic and clinical projects, and lists academic achievements. In addition, the PD also meets with the fellow to review progress towards meeting the goals of the Hematology & Medical Oncology training program. This evaluation is a part of the fellow's permanent confidential record and is kept as a password protected electronic file. The fellow may access his/her record upon request.

A fellow may dispute the content of a written evaluation by submitting a written response to the attention of the PD; this response is added to the fellow's individual file. A fellow whose performance is not satisfactory will be notified of the conclusion, both verbally and in writing, as soon as possible after such determination is made.

Faculty Evaluation

At the end of each rotation and at the end of the academic year, fellows evaluate the clinical and research faculty through a confidential, electronic process. These evaluations include a review of the faculty's clinical teaching abilities, commitment to the educational program, clinical knowledge, technical operative skills, professionalism, and scholarly activities. The aggregated and summarized results are reported to the individual faculty only if there are more than 3 evaluations submitted for that faculty.

The PD, GME Director, and DIO review the faculty evaluations on an annual basis regardless of the number of evaluations submitted. Ongoing teaching faculty appointments are assessed using these evaluations.

Summative Evaluation

The Hematology & Medical Oncology –specific milestones are used as one of the tools to ensure fellows are able to practice core professional activities without supervision upon completion of the program.

The PD provides a verbal and written summative evaluation for each fellow upon completion of the program. Prior to receipt of the summative evaluation, the graduating fellow completes his/her ACGME case log and signs the document at the final meeting. The case log and final evaluation:

1. Become a part of the fellow's permanent record maintained by the institution and is accessible for review by the fellow in accordance with institutional policy
2. Document the fellow's performance during his/her education
3. Verify that the fellow has demonstrated sufficient competence to enter practice without direct supervision

Clinical Competency Committee

The Clinical Competency Committee is appointed by the Program Director. Membership of the committee consists of at least three members of the program faculty. Others eligible for appointment on the committee include faculty from other programs and non-physician members of the health care team. The responsibilities of the Clinical Competency Committee include:

1. Review all fellow evaluations semi-annually
2. Prepare and assure the reporting of milestones evaluations of each fellow semi-annually to ACGME
3. Advise the program director regarding fellow progress, including promotion, remediation, and dismissal.

Program Evaluation

At the end of each academic year, fellows and faculty are required to provide electronic evaluations of the Hematology & Medical Oncology training program. The evaluations are anonymous and managed through the GME department. The summarized results are distributed and reviewed by the Program Evaluation Committee (PEC).

The report and action plan prepared by the PEC is reviewed by the PD, GME Director, DIO and GMEC. The action plan is communicated to the department faculty and chair at the training program's retreat and during orientation meeting with fellows. Resources as needed to address deficiencies are allocated.

The training program submits an annual "Self-Evaluation Report" to the GMEC. This report provides an update for the program and advises the GMEC of the following: recruitment issues, advancement of fellows in the training program, the success in the most recent match, progress in addressing citations or concerns in ACGME letters of notification and/or internal reviews, fellow performance on in-service and certifying examinations, faculty development, program performance and improvement, and assessment of the program's success in meeting requirements for the core curriculum and competencies. This report is presented to eh GMEC in writing and is discussed by the PFD with feedback and discussion from the GMEC members.

Program Evaluation Committee (PEC)

The Program Evaluation Committee is appointed by the Program Director. Membership of the committee consists of at least two faculty members and at least one fellow. The responsibilities of the Program Evaluation Committee include the following:

1. Planning, developing, implementing, and evaluating the educational activities of the program
2. Review and recommendations for revision of competency-based curriculum goals and objective
3. Addressing areas of noncompliance with ACGME standards
4. Reviewing the program annually using evaluations of faculty, fellows and others as specified below

The program, through the PEC, must document formal, systematic evaluation of the curriculum at least annually, and is responsible for rendering a written Annual Program Evaluation (APE).

The program must monitor and track each of the following areas:

1. Fellow Performance
2. Faculty Development
3. Progress of the previous year's action plan (s)

The PEC must prepare a written plan of action to document initiatives to improve performance in one or more of the areas listed above, as well as delineate how they will be measured and monitored. The action plan should be reviewed and approved by the teaching faculty and documented in the minutes.

Rotation Guide

CORE ROTATION – MEDICAL ONCOLOGY INPATIENT WARDS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1-2

Duration: Four 2-week blocks year 1, two 2-week block year 2.

Location: City of Hope

Supervision: rotating medical oncology teaching faculty. (The rotation dates will be staggered to avoid faculty and fellow beginning or ending the rotation in the same week.)

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational Methods: The majority of education during this rotation is by direct, hands-on management of patients admitted for complications of malignancy or its therapy as well as for treatments that require inpatient administration. Fellows will learn through daily rounds, intense discussion of all aspects of patient assessment and management, regular communications with members of the patients' primary team, consultants, and inpatient staff. In addition, fellows will be educated by their required participation in teaching rounds, didactic conferences, self-study, patient care conferences, tumor boards, and preparation of didactic presentations.

Faculty to Fellow Ratio: 1:1

Patient Volume: max 12 patients/fellow (max 5 new admissions/day).

EPAs/milestones that are addressed by this rotation: all (except heme/research specific milestones).

General Description: The inpatient ward rotation provides comprehensive exposure to all aspects of care involving admitted medical oncology patients. The fellow and faculty member form the primary admitting team and assume care no later than the morning after admission per work hour guidelines.

In conjunction with information and, when feasible, direct verbal communication with the admitting physician, the fellow will re-assess the patient thoroughly, including personal review of all pertinent data, and enter all necessary orders. Presentation of the patient and discussion of management will generally occur during the first formal attending rounds following admission but may occur earlier, depending on the patient's needs. Communication with nurses and other staff involved in the patient's care, including assessment of all patients for the need to be

simultaneously managed by the inpatient supportive care team (known at City of Hope as the integrated care service, ICS), will also be the fellow's primary responsibility.

A critical spectrum of diseases and their subsets are seen during this rotation, including the common and uncommon solid tumors listed here as examples: lung cancers, GI cancers, head and neck cancers, sarcomas, breast cancers, and less common tumor types.

The fellow is primarily responsible for recognizing and managing the complications of therapy, making recommendations for curative or palliative treatments, assisting in end of life care and counseling patients regarding prognosis and supportive care issues. A combination of hands-on patient care and management, autonomous decision making, team leadership, and teaching are all critical elements of this rotation.

The fellow, as part of the self-study process, should be familiar with his/her limitations and be aware of which aspects of patient assessment and management must be discussed before and during any significant intervention rather than reported after intervention (including major diagnostic tests, consultation requests, transfers to or from another service, therapeutic interventions, code status, family meetings, discharge planning) has been initiated.

Fellows are responsible for continuity clinic during their inpatient rotations.

EXPECTATIONS

FELLOW: The fellow's primary focus will be on all aspects of care for patients on the inpatient medical oncology ward. The fellow will work closely with the attending, midlevel provider(s), pharmacist, social worker/case manager, and others collaborating with the inpatient care team for the continuous assessment and management of medical oncology inpatients. The fellow MUST attend morning rounds and work with the team as supervised and required by the teaching faculty, which will include taking primary responsibility for communicating the team's plans and expectations to the nursing staff and other members of the team. The fellow will function like a junior attending with graduated levels of responsibility, as detailed in the EPAs and levels of independence, so that by the final rotation, the fellow is functioning fully independently and autonomously. The fellow is also expected to learn inpatient-based educational methods to impart didactic knowledge as well as to better communicate with patients, families/caregivers, and staff. During periods in which a rotating resident or other member of the team is in attendance for education purposes, the fellow should take part in these teaching activities, formally or informally.

The fellow will attend appropriate conferences and speak with patients, families and other physicians or health-care team members regarding medical and psychosocial aspects of care. He/she will see any new inpatient consults as promptly as possible and in discussion with the attending. The supervision and staffing of new inpatient consults may also, on a case-by-case basis, involve a specialized faculty member not on the inpatient rotation. The fellow is expected to communicate with the patient's primary oncologist for any questions pertaining to plans of care while the patient is in the hospital as well as to act as the primary responsible individual in assuring that all patients discharged have a clear plan for follow-up and management by the primary team.

The fellow is expected to give one educational lecture weekly to the inpatient team, as seen

appropriate by the supervising attending.

ATTENDING: The supervising attending is expected to provide daily clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation, as set forth below. At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing any online evaluations requested of them.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director, who will be responsible for further referrals and action.

EDUCATIONAL GOALS AND OBJECTIVES:

1. **Deliver <u>Patient Care</u>** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

At the completion of this rotation, which is limited to the first 18 months of clinical training, weighted toward more time in the first than in the second clinical year, fellows should be increasingly able to understand and put into practice the principles of patient care for the following:

- Diagnostic workup of patients with malignancy who are admitted from the clinics or the urgent care area for complications of disease or treatment
- Management of complications occurring in patients with malignancy, including the multidisciplinary elements of care, collaboration with consultants, and implementation of therapeutic plans
- Daily management of patients with complications of cancer or cancer therapies, including the assessment and application of goals of care and realistic expectations
- Development and implementation of treatment strategies for solid tumors requiring urgent therapeutic decisions and initiation of therapy
- Management of short- and long-term complications of chemotherapy, biological therapy, radiation alone or as part of combined-modality therapy, the role of surgical evaluation and interventions, and the
- Judicious use of supportive care modalities, including blood products, bone-protective, anti-emetic, immunosuppressive, hematopoietic, anti-microbial, endocrinologic and other adjunctive therapies for malignancy
- Use of imaging-based diagnostic and therapeutic modalities, including biopsies and placement of access and decompressive devices in patients with malignancy
- To the extent relevant in the inpatient setting, participation in the process of clinical trial enrollment and patient monitoring, particularly with respect to managing and regulatory reporting of the complications of investigational therapies

F1 fellows should increasingly be able to

PC1, Accesses Data Sources to Synthesize Patient and Disease-specific Information Necessary for Clinical Assessment

- Accesses data and gathers a history standard for general internal medicine
- Gathers a disease-specific history, with assistance
- Performs a disease-specific physical examination, with assistance

PC2, Diagnoses and Assigns Stage and Severity of Oncology disorders

- Generates a differential diagnosis expected of a graduating internal medicine resident
- Orders testing without specialty-specific differential diagnosis
- Interprets initial diagnostic studies to generate a specialty-specific differential diagnosis
- Determines stage of disorder

PC3, Formulates the Management Plan

- Formulates a management plan for patients using decision-support tools for patients without comorbidities

PC4, Adjusts Management Plans for Acute and Chronic Issues

- Adjusts management plans according to standard guidelines and toxicities

PC5, Competence recognizing the need for procedures and either performing or collaborating in the planning and discussions with appropriate proceduralist includes Use of Systemic Therapies through all Therapeutic Routes.

- Discusses the indications for and assists with all required procedures
- Discusses potential procedural complications
- Performs all required procedures, with direct supervision
- Recognizes complications of procedures and enlists help

2. **Demonstrate <u>Medical Knowledge</u>** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

At the completion of this rotation, fellows should be able to understand and demonstrate the following:

- Gradual acquisition of the immense pool of knowledge required to effectively diagnose and manage malignancy and all related medical problems. The schedule provided for inpatient rotations will allow fellows to acquire increasing oncologic knowledge and to

use the various opportunities provided in the program to apply this knowledge in an progressively more independent fashion and to incorporate it into teaching at all levels (fellows provide education to staff, other fellows, patients/families, and other trainees such as rotating residents in the informal setting of rounds and bedside teaching as well as the formal settings of conferences and tumor boards).

- Diagnosis, staging, and management of breast, GI, GU, GYN, lung, head and neck, and rarer cancers (sarcomas, melanomas, glioblastomas, etc.).
- Diagnosis and management of common complications of oncologic care/diseases including neutropenic infections, infections/complications due to immune suppression, complications of immunotherapy, GI bleeds, bowel obstructions, intractable pain, failure to thrive, acute and impending organ failure, symptomatic malignant effusions, visceral crises, seizures, leptomeningeal disease, and brain metastases.
- Administration of inpatient chemotherapy and other therapies, and management of complications.
- Coordinate care with colleagues from surgery, radiology, pathology, and internal medicine specialties (endocrinology, renal, pulmonology, cardiology, GI, and supportive care).
- Goals of care discussions and end of life planning, in conjunction with primary oncologist and supportive care team
- Incorporation and application of rapidly-growing knowledge based on recent and ongoing clinical trials and related sources of new information. Part of this skill will also involve the increasingly sophisticated ability to critically evaluate the medical literature and to extract the relevant information from published and unpublished datasets. By the end of the series of inpatient rotations, fellows should be applying medical knowledge at the aspirational level.

F1 fellows should increasingly be able to

MK 1, Oncology - (Pathophysiology, Diagnostics, Prognostic Information, Treatment)

- Demonstrates basic knowledge of specialty disorders
- Demonstrates expanding knowledge of specialty disorders and development of clinical reasoning

MK2 Scholarly activity

- Identifies areas worthy of scholarly investigation
- Formulates a scholarly plan under supervision of a mentor

3. Demonstrate <u>Practice-Based Learning and Improvement</u> that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

Fellows are expected to develop skills and habits to be able to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.

F1 fellows should increasingly be able to

PBLI1, Evidence-based and Informed Practice

- With assistance, accesses available evidence and practice guidelines for patient care
- Independently identifies available evidence and practice guidelines for patient care

PBLI2, Reflective Practice and Commitment to Personal Growth

- Identifies gaps in knowledge and performance
- Reflects on the factors which contribute to gaps between expectations and actual performance
- Actively seeks opportunities to improve
- Designs and implements a learning plan, with assistance

4. **Develop <u>Interpersonal and Communication Skills</u>** that result in effective information exchange and teaming with patients, their families, and other health professionals.

    - Further development of skills learned in clerkships and medical residency that are essential interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
    - Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and midlevel providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
    - Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
    - Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
    - Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
    - Participation as part of a multidisciplinary team in caring for such patients and discuss issues related to risks and benefits of treatment as well as prognosis.
    - Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
    - Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
    - Interpersonal and communication skills should include competence in both

verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

F1 fellows should increasingly be able to

IPCS1 Patient and Family Centered Communication

- Identifies common barriers to effective communication and recognizes the need to adjust communication strategies based on context
- Identifies complex barriers to effective communication
- Verifies patient/family understanding of the clinical situation to optimize effective communication

IPCS2 Interprofessional and team communication

- Uses respectful communication (verbal, non-verbal) with all members of the health care team
- Communicates effectively within and across all health care teams
- Demonstrates openness to feedback
- Responsive to feedback

5. Demonstrate a commitment to carrying out **professionalism** and an adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate a positive attitude towards learning, including timely attendance in clinic and on rounds with evidence of reading and other methods of gaining knowledge and self-assessment
- Demonstrate interaction with other health care workers in a respectful and kind manner
- Maintain respect for patient privacy and autonomy, complying with regulatory rules such as HIPAA as well as those pertaining to participation in research
- Demonstrate accountability to patients, society, and the profession, including sensitivity and responsiveness to the needs and expectations of a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Demonstrate skills needed to interact with patients and their families in a manner that demonstrates compassion, competence, and professionalism.
- When functioning as a consultant for other services, work in a mutually-acceptable and respectful relationship with the primary treating physician or other medical provider
- Acknowledge and demonstrate in actions the importance of attention not only to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions

F1 fellows should increasingly be able to:

P1, Professional Behavior and Ethical Principles

- Be able to identify common ethical principles and potential triggers for professionalism lapses and describe when and how to appropriately report professionalism lapses.
- Should be able analyzes straightforward situations using ethical principles
- Recognizes and takes responsibility for own professionalism lapses

P2, Accountability/Conscientiousness

- Takes responsibility for failure to complete tasks
- Performs tasks in a timely manner or provides notification when unable to complete tasks

P3, Fellow well being

- Recognizes status of personal and professional well-being, with assistance
- Independently recognizes status of personal and professional well-being

6. Demonstrate **systems-based practice** and an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Fellows are expected to:

- Develop effective coordination of care of patients moving from the inpatient to the outpatient setting and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care for patients with terminal cancer.
- Become familiar with the benefits and limitations available through Hospice programs.
- Learn of the appropriate timing and use of palliative care and hospice services in both the inpatient and outpatient settings.
- Apply principles of clinically appropriate cost-benefit analysis to current aspects of diagnosis and treatment of all supportive modalities, including blood products and other adjunctive therapies
- Understand basic information about cost-effectiveness and know where to seek further information
- Demonstrate awareness and incorporate, in a progressively more independent fashion, the national guidelines for disease evaluation and management.

F1 fellows should increasingly be able to:

SBP1, Patient Safety

- Demonstrates knowledge of common patient safety events and how to report them
- Identifies system factors that lead to patient safety events
- Reports patient safety events through institutional reporting systems (simulated or actual)

SBP2, Quality Improvement

- Demonstrates knowledge of basic quality improvement methodologies and metrics
- Describes local quality improvement initiatives

SBP3, System Navigation for Patient-Centered Care: Coordination and Transitions of Care

- Demonstrates knowledge of care coordination
- Identifies key elements for safe and effective transitions of care and hand-offs
- Coordinates care of patients in routine clinical situations effectively using the roles of their interprofessional teams
- Performs safe and effective transitions of care/hand-offs in routine clinical situations

SBP4, System Navigation for Patient-Centered Care: Population Health

- Demonstrates knowledge of population and community health care needs and disparities
- Identifies specific population and community health care needs and disparities

SBP5, Physician Role in Healthcare Systems

- Identifies basic financial barriers for individual patients and basic financial components of the health care system
- Identifies key components of the complex health care system
- Considers financial barriers and quality of care when ordering diagnostic or therapeutic interventions
- Describes how components of a complex health care system are inter-related, and how this impact ordering therapeutic interventions

CORE ROTATIONS – MEDICAL ONCOLOGY CLINIC BLOCKS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1-F2

Location: City of Hope

Duration: 4-week blocks, two in year 1 and three in year 2

Supervision: Medical oncology faculty, all aligned within a specified disease team.

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences, and tumor boards.

Patient Volume: 10 patients/day (including 1-2 new patients or consults per half-day clinic)

Faculty to Fellow Ratio: 1:1 within each clinic; occasionally there will be more than one faculty member in a clinic who will supervise the same fellow seeing different patients.

General Description: This rotation is an outpatient clinical experience that gives the fellow an opportunity to work closely with multiple different disease-aligned faculty members and their disease teams, usually consisting of RN coordinator, advanced practice provider, pharmacist, and members of the disease program's clinical research staff. In the clinic setting, fellows will see new patients, consults, and follow-ups under close supervision of the faculty member. This rotating outpatient clinic experience will offer the fellow the opportunity to appreciate and learn the principles and practice of oncologic patient care delivered within a tertiary care referral system that provides standard, evidence-based first-line evaluation and management, clinical trial enrollment and conduct, and later-line patient management, including palliative and end-of-life care. Principles of simultaneous care as well as survivorship are also addressed in this rotation. The medical oncology outpatient clinic block complements the 6-month continuity clinics by providing exposure to additional diseases and multiple different faculty members with different styles of practice and teaching as well as potential opportunities to initiate and continue clinical research projects.

The structure of this rotation will allow each fellow to participate in the maximum number of half- or full-day clinics in order to become competent and fulfill the requirements of all 6 milestone competencies, across the range of malignant diseases. This document concerns the solid tumor rotations, which will be customized for each fellow depending on the available clinical faculty and the fellow's continuity clinic schedule. The descriptions below apply across all of the solid tumor clinics.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient medical oncology clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients coming for follow-up visits. The fellow is expected to be prepared, prompt, and available to stay until the clinic patients have been seen and developed their management plan and to complete the documentation for the assigned patients quickly and accurately. Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit.

While the shorter duration of this rotation—in contrast with the structure and expectations of the 6-month continuity clinics— will not permit long-term co-management of patients by the fellow, it may be possible for fellows to be considered a point of communication for individual patients during the rotation, provided the faculty member and pertinent members of the team are in agreement and that the fellow adheres to the expected forms of communication and documentation. This may also include following up on consults and incorporating them into the patient's evaluation and management as well as following patients who are admitted for complications or therapies requiring inpatient administration.

During this rotation, it is expected that the fellow also attend the relevant tumor boards and conferences prepared to present and discuss the patient, if suggested by the attending. Each fellow will be provided a schedule of conferences and tumor boards pertinent to the clinic block, which will constitute the minimum required attendance and participation—additional conferences are encouraged, as permitted by the available time during the rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING: The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan. Whenever possible, the faculty member should also assist the fellow to identify the pertinent literature and, as permitted by time, provide as much didactic instruction, translational and clinical trial education as possible.

At the end of the clinic block, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.
For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or associate program director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient medical oncology clinic blocks will provide fellows with elements of the 6 essential

competencies across the 5 levels of expertise, as detailed here:

1. <u>Patient Care</u>

Incoming fellows have completed an internal medicine residency that provides ample experience in the principles and practice of patient care at the level of general internal medicine, and they should have mastered the ability to deliver such care at an independent, potentially aspirational, level. During the hematology-oncology fellowship, trainees will continue to grow in their ability to evaluate and manage patients with malignancy and will grow in their ability and confidence to deliver expert cancer care as outlined in numerous guidelines for standard care and also includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program. Curriculum to be covered during this clinic block are determined by the disease and faculty, and more details by disease program are provided in the descriptions of the continuity clinic rotations. It is expected that these shorter clinic blocks will provide additional exposures to diseases and therapies not necessary covered by the available continuity clinics, which are directed to the major disease program categories and more limited members of the faculty.

At the completion of this rotation, F1-F2 fellows should also increasingly be able to understand and eventually demonstrate their ability to:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

2. <u>Medical Knowledge</u>

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly-growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, F1-F2 fellows should be increasingly able to understand, as well as gradually acquire the ability to demonstrate, the following components of medical knowledge:

- The evaluation and treatment—including principles of the important research

questions—of common (lung, colon, prostate, breast), less-common (head & neck, bladder, renal, melanoma) and rare (sarcomas, primary brain tumors, germ cell cancers, neuroendocrine and endocrine, other cutaneous, adult patients with childhood cancers), including the recognition of unmet therapeutic needs and important clinical trial questions.

- The common complications of treating patients with cancer, including, but not limited to, neutropenic fever, mucositis, emesis, extravasation, brain metastasis, spinal cord compression, bone metastases and cancer pain.
- The different uses of chemotherapy and biologic therapy for palliative treatment, curative intent, and adjuvant or neo-adjuvant treatment.
- The indications for hospitalization and the indications for consultative input-including radiation oncology, surgical specialties, and other medical and mental health-related specialties—for patients with malignancy.
- The skills of ordering, administering, and monitoring chemotherapeutic and biologic agents along with supportive modalities, including blood products and other biological agents.

3. Demonstrate **systems-based practice** and an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities
- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.
- Apply principles of cost-benefit analysis to current aspects of diagnosis and treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

4. <u>Practice-Based Learning and Improvement</u>

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

5. <u>Professionalism</u>, including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

6. <u>Interpersonal and Communication Skills</u>

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that

demonstrates compassion, competence, and professionalism.

- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and midlevel providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

CORE ROTATION – MEDICAL ONCOLOGY CONTINUITY CLINICS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program.

Fellow level: F1-F3

Location: City of Hope

Duration: ½ day of solid oncology continuity clinic and ½ day of hematology continuity clinic, every week, throughout all 3 years.

Supervision: Medical oncology faculty, all aligned within specific disease teams.

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences, and tumor boards.

Patient Volume: variable, on average 10 patients/day (including 1-2 new patients or consults per half-day clinic)

Faculty to Fellow Ratio: The continuity clinics are designed to provide an intensive 1:1 experience between faculty member and fellow. Exceptions will be made when a faculty member is absent from clinic or when more than one faculty member is available and has a patient of interest/educational value for the fellow.

General Description:

City of Hope does not have multi-disease or general continuity clinics; therefore, fellows will participate for 6 months at a time in one medical oncology and one hematology clinic, with supervision by a faculty member who has agreed to provide 1:1 supervision of the rotating fellow.

Planned order of rotations, subject to change if necessary, based on faculty schedule and availability: F1s will rotate through Breast and GU clinics. F2s will rotate through GI and Lung/Head and Neck clinics. F3s will rotate through Gyn/Brain and Melanoma/Sarcoma clinics. Fellows are expected to participate in their assigned continuity clinics during all other rotations, unless the clinical responsibilities of the other rotation preclude this, in which case the faculty member responsible for the continuity clinic must be notified with maximum possible advanced notice of the fellow's absence. Regarding subject matter and curriculum, it is understood that not all continuity clinics or clinic blocks will cover all critical topics, but the two types of clinic experience should complement each other in providing maximum coverage of the required curriculum and fund of knowledge as well as opportunities for multidisciplinary care and other elements of the reporting milestones.

This continuity-directed outpatient clinic rotation gives the fellow an opportunity to work closely with a faculty member and disease program-based team, usually consisting of an RN, NP, pharmacist, and clinical research staff. In the clinic setting, fellows will see new patients/consults, and follow-ups under close supervision of the faculty member and will be responsible for the continuous care of those patients after the initial visit until the rotation is completed. During this time, the fellow should act as the point person for medical management and communications, under the supervision of the faculty at a level commensurate with the faculty member's assessment of the fellow's level of competence, ranging through "critical deficiencies" to "ready for independent practice" or "aspirational".

The continuity clinic experience at City of Hope will offer the fellow the opportunity to appreciate and learn the principles and practice of oncologic patient care delivered within a tertiary care referral system that provides standard, evidence-based first-line evaluation and management, clinical trial enrollment and conduct, and later-line patient management including end-of-life care. Principles of simultaneous care as well as survivorship are also addressed in this rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient medical oncology clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients coming for follow-up visits. The fellow is expected to be prepared, prompt, and available to stay until the clinic patients have been seen and developed their management plan and to complete the documentation for the assigned patients quickly and accurately. Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit. Fellows should be the point of communication for individual patients during the rotation, including taking responsibility for following up on consults and incorporating them into the patient's evaluation and management as well as participating in the decisions and management regarding patients they are following in that clinic who are admitted for complications or therapies requiring inpatient administration.

Ideally, the fellow should also plan to attend tumor boards and other educational conferences pertinent to the current continuity clinic, as permitted by time and as dictated by the responsibilities of the fellow's principal rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING:

The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan. Whenever possible, the faculty member should also assist the fellow to identify the pertinent literature and, as

permitted by time, provide as much didactic instruction, translational and clinical trial education as possible.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient medical oncology clinic blocks will provide fellows with elements of the 6 essential competencies across the 5 levels of expertise, as detailed here:

1. **Patient Care**

Fellows will expand their ability to evaluate and manage patients with solid malignancies, ultimately allowing them to deliver expert cancer care that includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program.

At the completion of this rotation, F1-F2 fellows should increasingly be able to understand, and F3 fellows should be able to understand as well as demonstrate, the following general elements of oncologic patient care:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

2. **Medical Knowledge**

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly-growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, F1 fellows should be increasingly able to understand, and F3 fellows should be able to understand as well as demonstrate, the following components of medical knowledge:

- The evaluation and treatment—including principles of the important research questions—of common (lung, colon, prostate, breast), less-common (head & neck, bladder, renal, melanoma) and rare (sarcomas, primary brain tumors, germ cell cancers, neuroendocrine and endocrine, other cutaneous, adult patients with childhood cancers), including the recognition of unmet therapeutic needs and important clinical trial questions.
- The common complications of treating patients with cancer, including, but not limited to, neutropenic fever, mucositis, emesis, extravasation, brain metastasis, spinal cord compression, bone metastases and cancer pain.
- The different uses of chemotherapy and biologic therapy for palliative treatment, curative intent, and adjuvant or neo-adjuvant treatment.
- The indications for hospitalization and the indications for consultative input-including radiation oncology, surgical specialties, and other medical and mental health-related specialties—for patients with malignancy.
- The skills of ordering, administering, and monitoring chemotherapeutic and biologic agents along with supportive modalities, including blood products and other biological agents.

3. **<u>Systems-based practice</u>**

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system, including a rapidly-expanding array of virtual educational tools, to provide optimal health care.

All levels of fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities

- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.
- Apply principles of cost-benefit analysis to current aspects of diagnosis and

treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

4. **<u>Practice-Based Learning and Improvement</u>**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

5. **<u>Professionalism</u>,** including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict

with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social and spiritual dimensions.

6. **Communication Skills**

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

CORE ROTATION – MEDICAL ONCOLOGY BREAST CONTINUITY CLINIC

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program.

Fellow level: F3

Duration: ½ day of breast continuity clinic, every week, for 6 months.

Location: City of Hope

Supervision: Drs. Mortimer, Waisman, Stewart, Patel, Yuan, Lavasani, Sedrak, and Hill.

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences, and tumor boards.

Patient Volume: variable, 5-10 patients/half-day (including 1-2 new patients or consults)

Faculty to Fellow Ratio: 1:1

EPAs/Milestones that are addressed by this rotation: essentially all 22, covering the 6 competencies that are detailed below.

General Description: This continuity-directed outpatient clinic rotation gives the fellow an opportunity to work closely with a faculty member specializing in breast cancer and their team, usually consisting of an NP, pharmacist, RN, ACA, SW, and clinical research staff. In the clinic setting, fellows will see new patients/consults and follow-ups under close supervision of the faculty member and will be responsible for the continuous care of those patients after the initial visit until the rotation is completed. During this time, the fellow should act as the point person for medical management and communications, under the supervision of the faculty at a level commensurate with the faculty member's assessment of the fellow's level of competence, ranging through "critical deficiencies" to "ready for independent practice" or "aspirational".

The continuity clinic experience at City of Hope will offer the fellow the opportunity to appreciate and learn the principles and practice of oncologic patient care delivered within a tertiary care referral system that provides standard, evidence-based first-line evaluation and management as well as novel therapeutic approaches based on clinical and translational research within well designed clinical trials. Fellows will learn the principles of clinical trial enrollment and conduct, and later-line patient management, including end -of-life care. Principles of simultaneous care as well as survivorship are also addressed in this rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient medical oncology clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients coming for follow-up visits. The fellow is expected to be prepared, available to stay until the clinic patients have been seen and advised of the management plan and complete the documentation for the assigned patients quickly and accurately. Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit. Fellows should be the point of communication for individual patients during the rotation, including taking responsibility for following up on interval events (ETC visits or admissions, including any medical encounters or interventions outside of City of Hope), labs/imaging, consultant visits, and incorporating these into the patient's evaluation and management. Fellows should also actively participate in the decisions and management regarding patients they are following in clinic who are admitted for complications or therapies requiring inpatient administration.

During this rotation, it is expected that the fellow also attends the Wednesday tumor board, where the fellow should be the primary presenter of the patient's case and participate, with the input of the attending, in leading the discussion and the wrap-up from the tumor board discussion. Attendance at other conferences, particularly the Thursday research team meeting and Friday precision medicine tumor board is also strongly encouraged, if the fellow's primary rotation permits.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING:

The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. They are expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan. Particular attention should be drawn to encouraging fellows to place chemotherapy orders and manipulating orders (dose reductions, changes to pre-medications, etc.).

At the end of the rotation, the attending is expected to provide feedback to the fellow on their performance during the rotation as well as completing the required online evaluations in the New Innovations system.

The attending is expected to notify and discuss any performance concerns (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), with the Program Director or Associate Program Director as soon as able

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient medical oncology breast continuity clinic block will provide fellows with elements

of the 6 essential competencies across the 5 levels of expertise, as detailed here:

1. **Patient Care**

Fellows will expand their ability to evaluate and manage patients with breast cancer, ultimately allowing them to deliver expert cancer care that includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program.

At the completion of this rotation, fellows should increasingly be able to understand and demonstrate, the following general elements of oncologic patient care:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

Milestones:

PC1, Accesses Data Sources to Synthesize Patient and Disease-specific Information Necessary for Clinical Assessment

All fellows should increasingly be able to

- Accesses data from multiple sources and collects disease-specific history, including psychosocial issues, from the patient and family members and other sources and gathers a history standard for general internal medicine
- Performs a physical examination standard for general internal medicine
- Completes a disease-specific physical examination

F3 Fellow Increasingly

- Role models gathering and synthesis of clinical information

PC2, Diagnoses and Assigns Stage and Severity of Oncology Disorders

All Fellows should increasingly be able to

- Generate a differential diagnosis expected of a graduating internal medicine resident
- Orders testing without specialty-specific differential diagnosis
- Interprets initial diagnostic studies to generate a specialty-specific differential diagnosis
- Determines stage of disorder
- Orders advanced diagnostic studies for common disorders when appropriate
- Determines clinical comorbidities
- Diagnoses uncommon disorders and determines disease severity using evidence-based studies

F3 Fellow Increasingly

- Role models the assignments of stage and disease severity, informed by evidence-based studies and guidelines for specialty disorders

PC3, Formulates the Management Plan
All fellows should increasingly be able to

- Formulates a management plan for patients using decision-support tools for patients without comorbidities
- Formulates a management plan with consideration of disease and patient factors and enrollment in clinical trials and conforms to patient preferences and goals of care

F3 Fellow Increasingly

- Serves as an expert in formulating management plans

PC4, Adjusts Management Plans for Acute and Chronic Issues
All fellows should increasingly be able to

- Adjusts management plans according to standard guidelines and toxicities
- Adjusts management plans based on response to treatment, side effects of the treatment, and comorbidities
- Adjusts management plans based on anticipation and recognition of subtle toxicities and long-term sequelae and/or changes in patient preferences and goals

F3 Fellow Increasingly

- Serves as an expert in developing and implementing pathways that influence management plans

PC5 (partial), Competence in Procedures [adjusted: recognizing the need for procedures and either performing or collaborating in the planning and discussions with appropriate proceduralist]—includes Use of Systemic Therapies through all Therapeutic Routes
All fellows should increasingly be able to

- Discusses the indications for and assists with all required procedures (particularly intrathecal chemotherapy administration through both LP and Ommaya reservoir, paracentesis/thoracentesis, and rarely bone marrow biopsies)
- Discusses potential procedural complications
- Performs all required procedures, with direct supervision
- Recognizes complications of procedures and enlists help

- Competently performs all required procedures, with indirect supervision and then independently
- Manages complications of procedures, with supervision
- Anticipates and independently manages complications of procedures

F3 Fellow Increasingly

- Serves as an expert for all required procedures and their complications

2. **<u>Medical Knowledge</u>**

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical

component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, F1 fellows should be increasingly able to understand and demonstrate, the following components of medical knowledge:

- Staging, diagnosis, and management of breast cancer including:
    - AJCC staging components: TNM and GEP tests (Oncotype, Mammaprint)
    - Diagnostic modalities and when to use them: mammography, US, MRI, CT, bone scan, and PET
    - Pathologic staging: invasive vs in situ disease, ductal vs lobular histology, how to evaluate ER/PR/Her2 receptor status, GEP definitions, definition of negative margins, microscopic disease vs isolated tumor cells. Prognostic factors: LVI/ENE.
    - Surgical principles: breast conservation therapy vs mastectomy, side effects of both (lymphedema, infections, neuropathy, etc.), benefit of neoadj/adj chemotherapy.
    - Radiation principles: adjuvant XRT vs palliative XRT, side effects of XRT and how to manage them, radiation options for brain/CNS metastases
    - Management Principles of ER/PR+ and Her2+ breast cancers, early stage (neoadjuvant/adjuvant) vs recurrent vs metastatic disease, inflammatory breast cancer, use of endocrine therapy vs targeted therapy vs chemotherapy.
    - Surveillance guidelines and principles
    - Hallmark clinical trials and how to extrapolate data from studies into clinical practice
    - How to evaluate patients for clinical trials and follow them on study.
    - Other topics: incidence and management of AI/endocrine therapy toxicity, cardiac toxicity of Her2 directed agents, management principles of CNS mets/leptomeningeal disease, indications for use of immunotherapy/ checkpoint inhibition in breast cancer, use of bone directed therapy, indications for genetic testing and management strategies for BRCA carriers, premalignant conditions and high risk factors, male breast cancer, pregnancy associated breast cancer.
- The common complications of treating patients with cancer, including, but not limited to neutropenic fever, mucositis, emesis, extravasation, brain metastasis, spinal cord compression, bone metastases and cancer pain.
- The different uses of chemotherapy and biologic therapy for palliative treatment, curative intent, and adjuvant or neo-adjuvant treatment.
- The indications for hospitalization and the indications for consultative input-including radiation oncology, surgical specialties, and other medical and mental health-related specialties—for patients with malignancy.
- The skills of ordering, administering, and monitoring chemotherapeutic and biologic agents along with supportive modalities, including blood products and other biological agents.

Milestones:

MK1, Solid Tumor Oncology (Pathophysiology, Diagnostics, Prognostic Information, Treatment)
MK1Malignant Hematology- (Pathophysiology, Diagnostics, Prognostic Information, Treatment).
All fellows should increasingly be able to

- Demonstrates basic knowledge of specialty disorders
- Demonstrates expanding knowledge of specialty disorders and development of clinical reasoning
- Demonstrates sufficient knowledge of specialty disorders and clinical reasoning skills to determine evidence-based interventions
- Synthesizes advanced knowledge of specialty disorders and uses clinical reasoning skills to develop personalized interventions

F3 Fellow Increasingly

- Serves as a subject matter expert

MK5- Scholarly activities
F1 fellow should increasingly be able to

- Identifies areas worthy of scholarly investigation
- Formulates a scholarly plan under supervision of a mentor
- Presents products of scholarly activity at local meetings
- Disseminates products of scholarly activity at regional or national meetings, and/or submits an abstract to regional, state, or national meetings

F3 Fellow Increasingly

- Publication of independent research that has generated new medical knowledge, educational programs, or process improvement

PBLI1, Evidence-based and Informed Practice
PBLI2, Reflective Practice and Commitment to Personal Growth

7. <u>Systems-based practice</u>

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system, including a rapidly expanding array of virtual educational tools, to provide optimal health care.

All levels of fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities
- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective

interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.
- Apply principles of cost-benefit analysis to current aspects of diagnosis and treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

Milestones:

SBP1, Patient Safety
All fellows increasingly

- Demonstrates knowledge of common patient safety events and how to report them
- Identifies system factors that lead to patient safety events
- Reports patient safety events through institutional reporting systems (simulated or actual)
- Participates in the analysis of patient safety events
- Participates in disclosure of patient safety events to patients and families (simulated or actual)
- Conducts analysis of patient safety events and offers error prevention strategies
- Leads disclosure of patient safety events to patients and families with documentation (simulated or actual)

F3 Fellows Increasingly

- Actively engages teams and processes to modify systems to prevent patient safety events
- Role models or mentors' others in the disclosure of patient safety events

SBP2, Quality Improvement
All fellows increasingly

- Demonstrates knowledge of basic quality improvement methodologies and metrics
- Describes local quality improvement initiatives
- Participates in local quality improvement initiatives
- Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project
- Role models or mentors' others in the disclosure of patient safety events

F3 Fellows Increasingly

- Creates, implements, and assesses quality improvement initiatives at the institutional or community level
- Role models or mentors' others in the disclosure of patient safety events

SBP3, System Navigation for Patient-Centered Care: Coordination and Transitions of Care

All Fellows Increasingly

- Demonstrates knowledge of care coordination
- Identifies key elements for safe and effective transitions of care and hand-offs (especially between clinic and ETC/inpatient teams)
- Coordinates care of patients in routine clinical situations effectively using the roles of their interprofessional teams
- Performs safe and effective transitions of care/hand-offs in routine clinical situations
- Coordinates care of patients in complex clinical situations effectively using the roles of their interprofessional teams
- Performs safe and effective transitions of care/hand-offs in complex clinical situations
- Role models effective coordination of patient-centered care among different disciplines and specialties especially junior fellows, residents, and other members of the team
- Role models and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems, including outpatient settings for junior trainees

F3 Fellows Increasingly

- Analyzes the process of care coordination and leads in the design and implementation of improvements
- Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes

SBP4, System Navigation for Patient-Centered Care: Population Health
All fellows increasingly

- Demonstrates knowledge of population and community health care needs and disparities
- Identifies specific population and community health care needs and disparities
- Identifies local resources to meet community health care needs and disparities
- Adapts practice to provide for the needs of specific populations

F3 Fellows Increasingly

- Leads innovations and advocates for populations and communities with health care disparities

SBP5, Physician Role in Healthcare Systems
All fellows increasingly

- Identifies basic financial barriers for individual patients and basic financial components of the health care system
- Identifies key components of the complex health care system
- Considers financial barriers and quality of care when ordering diagnostic or therapeutic interventions
- Describes how components of a complex health care system are inter-related, and how this impact's ordering therapeutic interventions
- Incorporates value (quality/costs) into shared decision making, with interprofessional team input
- Discusses how individual practice and the broader system affect each other
- Manages financial factors that affect a patient's access to care and decision making
- Manages various components of the complex health care system to provide efficient and

effective patient care

F3 Fellows Increasingly

- Role models and teaches patients and interprofessional team members to consider value when making diagnostic and therapeutic recommendations
- Advocates for or leads systems change that enhances high-value, efficient, and effective patient care

3. **<u>Practice-Based Learning and Improvement</u>**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

Milestones:
PBLI1, Evidence-based and Informed Practice
All fellows should increasingly be able to

- With assistance, accesses available evidence and practice guidelines for patient care
- Independently identifies available evidence and practice guidelines for patient care
- Critically appraises evidence and applies to patient care

Applies best available evidence, even in the face of insufficient and/or conflicting information

F3 Fellows Increasingly

- Serves as a role model to critically appraise and apply evidence to patient care

PBLI2, Reflective Practice and Commitment to Personal Growth
All fellows increasingly

- Identifies gaps in knowledge and performance
- Reflects on the factors which contribute to gaps between expectations and actual performance

- Actively seeks opportunities to improve
- Designs and implements a learning plan, with assistance
- Institutes changes to narrow the gaps between expectations and actual performance
- Intentionally seeks performance data to narrow the gaps between expectations and actual performance
- Measures the effectiveness of the learning plan and makes appropriate changes

F3 Fellow Increasingly

- Role models reflective practice
- Facilitates the design and implementation of learning plans for others

4. **<u>Professionalism</u>,** including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

Milestones:

P1, Professional Behavior and Ethical Principles
All fellows increasingly

- Be able to identify common ethical principles and potential triggers for professionalism lapses and describe when and how to appropriately report professionalism lapses.
- Should be able analyzes straightforward situations using ethical principles
- Recognizes and takes responsibility for own professionalism lapses
- Manages and resolves complex ethical situations, including personal lapses, with assistance
- Intervenes and uses appropriate resources to prevent and manage professionalism lapses and dilemmas in self and others

F3 Fellows increasingly

- Coaches others when their behavior fails to meet professional expectations

P2, Accountability/Conscientiousness
All fellows increasingly

- Takes responsibility for failure to complete tasks
- Performs tasks in a timely manner or provides notification when unable to complete tasks
- Performs tasks in a timely manner with appropriate attention to detail in complex or stressful situations
- Takes responsibility in situations that impact the ability of team members to complete tasks and responsibilities in a timely manner

F3 Fellow increasingly

- Exceeds expectations for supporting team responsibilities

P3, Fellow well-being
All fellows increasingly

- Recognizes status of personal and professional well-being, with assistance
- Independently recognizes status of personal and professional well-being
- With assistance, proposes a plan to optimize personal and professional well-being
- Independently develops a plan to optimize personal and professional well-being

F3 Fellow Increasingly

- Role models the continual ability to monitor and address personal and professional well-being
- Advocates for institutional changes to support well-being

5. **<u>Interpersonal and Communication Skills</u>**

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers

with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

Milestones:

IPCS1, Patient- and Family-Centered Communication
All fellows increasingly

- Identifies common barriers to effective communication and recognizes the need to adjust communication strategies based on context
- Identifies complex barriers to effective communication
- Verifies patient/family understanding of the clinical situation to optimize effective communication
- Reflects on personal biases while attempting to minimize communication barriers
- Proactively improves communication by addressing barriers including patient and personal biases
- With guidance, uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan
- Independently, uses shared decision making to make a personalized care plan

F3 Fellow Increasingly

- Role models communication that addresses barriers
- Role models shared decision making in patient/family communication, including those with a high degree of uncertainty/conflict

IPCS2, Interprofessional and Team Communication
All Fellows:

- Uses respectful communication (verbal, non-verbal) with all members of the health care team
- Communicates effectively within and across all health care teams
- Demonstrates openness to feedback
- Responsive to feedback
- Adapts communication style within and across all health care teams to ensure mutual understanding
- Coordinates recommendations from different members of the health care team to optimize patient care
- Seeks and provides performance feedback
- Uses feedback to improve own performance and provides actionable feedback to team members

F3 Fellow Increasingly

- Role models flexible communication strategies that solicits and values input from all health care team members, resolving conflict when needed

- Role models giving and receiving of feedback

IPCS3, Communication within Healthcare Systems
All fellows increasingly

- Accurately records information in the patient record
- Safeguards patient personal health information in communications
- Demonstrates organized diagnostic and medical reasoning through notes in the patient record
- Appropriately selects forms of communication based on context
- Documentation reflects level of complexity and severity of disease
- Communication includes key stakeholders
- Documentation reflects medical reasoning, patient preferences, and management recommendations and plans
- Achieves written or verbal communication that is exemplary

F3 Fellow Increasingly

- Role models optimal documentation
- Guides departmental or institutional communication policies

CORE ROTATION – CLINICAL CANCER GENOMICS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1

Location: City of Hope, Duarte, Division of Clinical Cancer Genomics

Duration: 2-week block if stand-alone; 4-week block is recommended to pair with two other 2-week rotations, e.g. radiation oncology and supportive care, to allow for completion of counseling/testing/results cycle.

Supervision: Members of the population science/clinical cancer genomics faculty at City of Hope, Duarte (Drs. Gray, Idos, McDonnell for AY 2020-2021)

Educational methods: Fellows will learn through direct patient assessment, testing, and post-testing discussions; faculty teaching, didactic conferences, self-study including elements of the intensive course modules; patient care conferences, tumor boards, and through preparation of didactic presentations.

Evaluation methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record. Participation in journal club and other educational conferences may also be used in evaluation of hematology-oncology fellows.

General Description: During this rotation, fellows will be exposed to all aspects of clinical cancer genetic evaluation, testing and patient and family counseling involved in the practice of genetic/genomic cancer risk assessment

To the extent possible, fellows will be integrated into all elements of the assessment, testing and post-testing counseling of subjects (affected patients and selected family members) under the supervision of the faculty in the Division of Clinical Cancer Genomics. They will also perform educational assignments as deemed appropriate by the faculty, including online coursework and presentation at meetings such as journal club.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

FELLOW: The fellow is expected to be available and participate daily in the activities of the clinical cancer genetics rotation that are outlined above and detailed below. Fellows will maintain their continuity clinic and required conference schedules, but priority will be given to educational conferences within clinical cancer genetics and population sciences in the event of time conflicts.

ATTENDING: The faculty members supervising this rotation are expected to provide instruction to cover the curriculum and the elements of proficiency in clinical cancer genetics that are

detailed below.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

Educational Goals and Objectives

1. <u>Patient Care</u>

- Fellows entering the rotation are fully-trained in internal medicine both in the inpatient and outpatient settings. However, it is expected that they will have had minimal prior exposure to the details of clinical cancer genetics. This rotation will educate incoming fellows in the basic principles of the specialty but will provide only limited exposure without an opportunity to become proficient in the field, which will require further exposure if the fellow is interested in clinical cancer genetics as part of a career specialization.

- Rotation-specific activities include the participation in assessing and selecting patients and family members for risk assessment and consideration of germline genetic analysis; interpreting the results of testing; and delivery of the results along with a thoughtful recommendation that takes into account all of the factors considered in risk mitigation.

2. <u>Medical Knowledge</u>

- Familiarity with the major germline genetic syndromes underlying enhanced risk of malignancy and the expected findings on germline genetic testing

- Understanding of the available options for lowering the risk of malignancy in subjects found to harbor germline genetic risk factors.

- Insight into the implications of negative testing, including uncertainties regarding the cause of malignancy and possibility of inherited risk from unidentified germline genetic alterations.

- Learning the basic concepts of tumor biology that integrate germline alterations with acquired/somatic changes and how these factors impact oncogenesis and therapy.

3. <u>Systems-based practice</u>

- Understand basic information about cost-effectiveness and risk-benefit relationships of genetic testing and counseling and know where to seek further information—as applied both to patients with malignancy and to family members who may or may not be at risk or test positive for increased inherited risk of malignancy.

- Utilize the medical literature to support decision-making in a highly evidence-based manner, educating patients and their families, both before and after testing, on the implications of anticipated test results.

- Demonstrate awareness of clinical guidelines and the role of clinical trials for the management of patients and family members involved in genetic testing.

4. **Practice-Based Learning and Improvement**

In this brief rotation, fellows will gain knowledge about the basic principles and practice of clinical cancer genetics but will not have the opportunity to function as practitioners in the field. Therefore, fellows are expected to supplement their exposure during this rotation with further reading and attendance at conferences, journal clubs, other didactic sessions, and as much patient care (including planning, on-treatment assessment, and post-treatment support) as possible.

5. **Professionalism,** including strict adherence to ethical principles

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

6. **Interpersonal and Communication Skills**

- Provision of education and supervision to all members of the patient's network, including

families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.

- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Communication is a particularly critical skill in clinical cancer genetics, where the results of testing positive (or negative) for gene alterations associated with increased risk of malignancy have extensive implications for personal and family interactions as well as decisions about risk-reducing measures (which may involve medication and/or surgery).

CORE ROTATION – RADIATION ONCOLOGY

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1

Location: COH radiation oncology clinics, Duarte; inpatient consults, COH inpatient wards

Duration: 2-week block

Supervision: Radiation oncology full-time core teaching faculty

Evaluation methods: Direct observation of patient and staff interactions; case presentation to faculty; documentation in electronic medical record

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences that include interaction with radiation oncology residents, self-study, patient care conferences, and tumor boards. Fellows will perform one presentation for Current Concepts in Radiation Oncology.

Evaluation methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

General Description: During this rotation, fellows will be exposed to methods used by radiation oncologists to treat malignant diseases for curative and palliative intent as well as learning the basic principles and practice of radiation methods used alone and in combined-modality therapies, including systemic therapy and hematopoietic cell transplant. They will gain familiarity with indications for treatment, planning methods, dosing strategies, delivery methods and radiation sources, and associated toxicities, risks, and benefits. To the extent possible, fellows will be integrated with trainees in radiation oncology (residents) to perform all aspects of the patient's assessment, planning and care under the supervision of the faculty and in collaboration with the members of the radiation oncology team, including physicists, nursing staff, advanced practice providers, skin care and nutritional specialists, and social workers/case managers. They will also participate in the coordination of communications, decisions, and transitions of care among radiation oncology, surgical oncology, and the primary team, generally medical oncology or hematology/HCT.

EXPECTATIONS

FELLOW: The fellow is expected to be available and participate daily in the activities of the radiation oncology rotation that are outlined above and detailed below. Fellows are responsible for continuity clinic during the radiation oncology rotation, except where waived by mutual agreement from both supervising faculty members under extenuating circumstances.

During this rotation, and to the extent allowable by the supervising faculty, the fellow may act as a radiation oncology resident, with all of the corresponding responsibilities feasible for a rotating trainee. Fellows will not be expected to perform excessive clerical duties, such as entering orders, scheduling, or obtaining outside records except when critical for the assessment and management of the patients under their care.

ATTENDING: The supervising faculty member is expected to provide instruction to cover the curriculum and the elements of proficiency in radiation oncology that are detailed below.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director, who will be responsible for further referrals and action.

Educational Goals and Objectives

1. **Patient Care**

- Fellows entering the rotation are fully-trained in internal medicine both in the inpatient and outpatient settings. However, it is expected that they will have had little to no prior exposure to radiation oncology. This rotation will educate incoming fellows in the basic principles of radiation oncology with the goal of understanding indications, principles of techniques, source and fractionation, and rationale, risks and benefits of combined-modality therapies that incorporate radiotherapy.
- Additional elements of radiation oncology exposure include the diagnostic component, particularly the acquisition of enhanced radiology skills that will contribute not only to an understanding of radiotherapy applications but also to general patient care and the need to order and interpret imaging as well as indications for interventional radiology, which may also feature specialized delivery of therapeutic radio-isotopes.

2. **Medical Knowledge**

At the completion of this rotation, all fellows will have:

- Been exposed to the basic principles of radiation for curative and palliative intent in the management of malignancy
- Observed the use of different radiation sources and energy and become familiar with the concepts of dose and fractionation
- Learned the concepts of radiation as preparative therapy for allogeneic hematopoietic cell transplantation
- Become familiar with the role of radiotherapy in combined-modality therapy, including systemic cytotoxic, molecularly-targeted and immunotherapeutic agents

- Learned about normal tissue tolerance and the principal dose-limiting toxicities of various radiation approaches including locoregional delivery and brachytherapy
- Observed the use of intensity modulated RT, image-guided RT and stereotactic radiosurgery techniques, including delivery to the brain and extracranial sites
- Been exposed to radioimmunotherapy agents and learned their indications, risks and benefits
- Enhanced their skills of image interpretation and understanding of optimal imaging techniques for the clinical problem

3. **Systems-based practice**

- Understand basic information about cost-effectiveness and know where to seek further information—this applies in particular to the selection of types of radiotherapy and their cost: benefit ratios
- Utilize the medical literature to support decision-making in a highly evidence-based manner, educating patients and their families/caregivers in the rationale, risks and benefits of radiation and combined-modality treatments.
- Demonstrate awareness of clinical guidelines and the role of clinical trials for the management of patients with malignant diseases appropriate for radiation therapy
- Advocate for quality patient care and optimal patient care systems

4. **Practice-Based Learning and Improvement**

In this brief rotation, fellows will gain knowledge about the basic principles and practice of adult radiation oncology but will not have the opportunity to function as practitioners in the field. Therefore, fellows are expected to supplement their exposure during this rotation with further reading and attendance at conferences, tumor boards, other didactic sessions, and as much patient care (including planning, on-treatment assessment, and post-treatment support) as possible.

5. **Professionalism**

- Demonstrate respect for patients, families/caregivers, other staff and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining

the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.

- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social and spiritual dimensions.

6. **Interpersonal and Communication Skills**

- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- In particular, radiation oncology is a highly multidisciplinary field in which patients are managed by an integrated team of physicians and staff who provide the network of care components required to assess their needs, plan their treatment, support them during and after treatment, and care for the short- and long-term outcomes of therapy.

CORE ROTATION – SUPPORTIVE MEDICINE

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1

Duration: 4-week block (inpatient and outpatient experience)

Supervision: Faculty in the department of supportive medicine

Evaluation methods: Direct observation

Educational methods: Inpatient and outpatient consultations and primary/collaborative patient management; didactic lectures as audience and as presenter; cross-education with supportive medicine fellows in ACGME-accredited program; self-study.

General description: The Supportive Medicine rotation is based at the City of Hope Medical Center and is a required rotation for all first-year fellows that includes inpatient experience as a member of the integrated care service as well as outpatient management as a participant in the supportive care team for patients receiving simultaneous care and end-of-life care. The fellow on supportive care rotation will maintain continuity clinic and all other educational conferences, although any conflict during this rotation should prioritize the supportive care experience. This rotation will provide fellows with substantial experience in elements of end-of-life care, supportive/palliative (simultaneous) medicine, and communicating effectively with the patient and their family about goals of care. The contribution of emotional and psychosocial support, including pastoral care and end of life options, is also included in this rotation.

EXPECTATIONS

FELLOW: The fellow's primary focus will be on gaining experience with the role of supportive medicine as it pertains to hematology and oncology patients, although the inpatient setting for this rotation will initially be in medical oncology. The fellow will work closely with the supportive care consult attending and other members of the integrated care service in the daily care of hospital inpatients in need of this team's management in collaboration with the primary medical oncology team.

With the supervising attending, the fellow will attend appropriate conferences and speak with patients, families and other physicians or health-care team members regarding medical and psychosocial aspects of care. He/she will see any new inpatient consults with the attending. These opportunities will provide the fellow with experience in consultation, communication, end of life decision making, discussions of prognosis and goals of care, and optimal multi-disciplinary symptom management. Elements of all 6 competencies, as detailed below, will be provided during this rotation in both the inpatient and outpatient settings.

The fellow may be assigned to similar types and frequencies of didactic and patient-based presentations as are assigned to the supportive care fellow, at the discretion of the supportive

medicine attending physician.

ATTENDING: The supervising attending is expected to provide daily clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation, as set forth below. At the end of the rotation, the attending is expected to provide verbal feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or the associate program director, who will be responsible for further referrals and action.

EDUCATIONAL GOALS AND OBJECTIVES:

1. <u>Patient Care</u>

The fellow is expected to:

- Assist in the development of a pain management plan of care based on patient symptoms, co- morbidities, opioid equianalgesic dosing chart, opioid side effects, use of adjunctive medical therapies, and legal aspects of narcotic use and abuse.
- Develop first- and second-line strategies for non-pain symptom management, making use of appropriate consultants when indicated
- Become familiar with the application of non-medical forms of pain management, including locoregional anesthetic injections, various forms of palliative radiotherapy, and surgical palliation.
- Understand the laws and practices as well as institutional operations regarding access to physician aid-in-dying drugs.

2. <u>Medical Knowledge</u>

Fellows are expected to:

- Demonstrate the ability to assess goals of care, incorporating knowledge of the natural history of each malignancy into the assessment of curability, therapeutic options (including clinical trials), and realistic expectations.
- Become familiar with the spectrum of palliative options for managing pain and other symptoms of cancer, including non-medical modalities such as radiotherapy and surgical approaches.
- Gain experience with agents used for supportive medicine and their therapeutic mechanisms and expected results.
- Understand the evidence basis for interventions in psychosocial, cultural-based, spiritual, and patient/family/caregiver aspects of supportive care.
- Become familiar with legal and financial aspects of medications used in supportive

medicine, including limitations on opioid availability, third-party coverage, physician aid in dying drugs (outpatient only), and the changing/challenging landscape of interventions such as cannabinoid products.

3. **Systems-based practice**

Fellows are expected to:

- Develop effective coordination of care for patients moving between the inpatient and outpatient settings, thus learning the complexities of our health-care delivery system and limitations on the provision of satisfactory supportive medicine in all settings.
- Continue to develop skills necessary for leadership within a healthcare team.
- Determine the indications for inpatient care of patients with complications of cancer, including how to promptly identify and place them in the best setting to meet their short- and long-term supportive-care needs.
- Become familiar with the benefits and limitations available through inpatient and outpatient Hospice programs, which may have different criteria and provide different levels of intervention.
- Understand and identify procedures that may be appropriate versus futile in the management of patients with late-stage cancer, including the risk: benefit and cost-benefit of such interventions.
- Demonstrates awareness of clinical guidelines for supportive medicine.

4. **Practice-Based Learning and Improvement**

Fellows are expected to develop skills and habits to be able to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction
- The role of staff feedback in PBLI for supportive medicine is particularly important, since interpersonal and communication skills are particularly critical in this competency. See further details in the next section.

5. **Professionalism**

Fellows are expected to:

- Demonstrate a positive attitude towards learning, including timely attendance in clinic and on rounds with evidence of reading or other methods of gaining knowledge
- Demonstrate interaction with other health care workers in a courteous and respectful manner
- Maintain respect for patient privacy and autonomy, which can be particularly challenging and require repeated interactions with family/caregivers and many different members of the medical staff.
- Demonstrate accountability to patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, sexual orientation, and beliefs about physician aid in dying (outpatient only).
- Demonstrate skills needed to interact with patients and their families in a manner that demonstrates compassion, competence, and respect.
- Embrace the role of consultant for other services, prioritizing the patient's physical comfort and emotional well-being as the primary goals, and performing these duties in a respectful and courteous manner.

6. <u>Interpersonal and Communication Skills</u>

Fellows are expected to:

- Develop skills to effectively communicate with patients and their families as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Continue their expansion of previously-developed skills to communicate effectively with physicians and other healthcare professionals.
- Develop effective initiation of end-of-life discussions with patients and their families/caregivers when appropriate, including responsiveness to patient-initiated queries about physician aid in dying drugs (outpatient only).
- Develop peer-peer relationships with consultants as well as methods of handing off patient care responsibilities for safety and continuity of care, where pertinent to the supportive care rotation.

CORE ROTATION– HEMATOLOGY INPATIENT WARDS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Duration: three 4-week blocks

Fellow year: F1

Location: City of Hope

Supervising faculty: City of Hope full-time Hematology faculty who are assigned to the in-patient service of the specific team.

Evaluation methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: The majority of education during this rotation is by direct, hands-on management of patients admitted for treatment of hematological malignancies, including induction and consolidation therapy, inpatient treatment of relapsed disease, as well as management of patients who are receiving therapy on protocol that need to be admitted . Fellows also will be involved in the management of treatment and disease related complications. They will work with the inpatient team that includes the attending physician, APPs, pharmacist's nutritionist, physical and occupational therapists, social workers and discharge planners. Fellows will learn through daily rounds, discussion of all aspects of patient assessment and management, regular communications with members of the patients' primary team, inpatient staff and consulting services including palliative care where appropriate. In addition, fellows will be educated by their required participation in teaching rounds, didactic conferences, self-study, patient care conferences, tumor boards, and preparation of didactic presentations.

General Description: The inpatient ward rotation provides a comprehensive exposure to assuming and maintaining primary responsibility for all aspects of patient care in the inpatient setting. Ideally, patient care should be assumed as soon as possible after the determination of planned admission, in compliance with the duty hour restrictions and hours of defined call, which may delay this transfer of care from the primary or emergency physician to the inpatient team until the morning after admission.

In conjunction with information and, when feasible, direct verbal communication with the admitting physician, the fellow will re-assess the patient thoroughly, including personal review of all pertinent data, and enter all necessary orders. Presentation of the patient and discussion of management will generally occur during the first formal attending rounds following admission but may occur earlier, depending on the patient's needs and fellow's other responsibilities. Communication with nurses and other staff involved in the patient's care, will also be the fellow's primary responsibility.

A critical spectrum of diseases and their subsets are seen during this rotation, including the

common and uncommon hematological malignancies listed here as examples: acute myelogenous leukemia, acute lymphoblastic leukemia, myelodysplastic syndromes, B-cell lymphoma, Hodgkin disease, T-cell lymphoma, multiple myeloma, myeloproliferative neoplasms, bone marrow failure syndromes.

The fellow is primarily responsible for recognizing and managing the complications of therapy, making recommendations for curative or palliative treatments, assisting in end of life care and counseling patients regarding prognosis and supportive care issues after discussion with the supervising attending. A combination of hands-on patient care and management, autonomous decision making, team leadership, and teaching are all critical elements of this rotation.

The fellow, as part of the self-study process, should be familiar with his/her limitations and be aware of which aspects of patient assessment and management must be discussed before and during any significant intervention rather than reported after intervention (including major diagnostic tests, consultation requests, transfers to or from another service, therapeutic interventions, code status, family meetings, discharge planning) has been initiated.

Fellows are not responsible for continuity clinic during their inpatient hematology rotations.

EXPECTATIONS

FELLOW: The fellow's primary focus will be on all aspects of care for hematology inpatients. The fellow will work closely with the attending, midlevel provider(s), pharmacist, social worker/case manager, and others collaborating with the inpatient care team for the continuous assessment and management of medical oncology inpatients. The fellow MUST attend morning rounds and work with the team as supervised and required by the teaching faculty, which will include taking primary responsibility for communicating the team's plans and expectations to the nursing staff and other members of the team. The fellow will function like a junior attending with graduated levels of responsibility, so that by the final rotation, the fellow is functioning fully independently and autonomously. The fellow is also expected to learn inpatient-based educational methods to impart didactic knowledge as well as to better communicate with patients, families/caregivers, and staff. During periods in which a rotating resident or other member of the team is in attendance for education purposes, the fellow should take part in these teaching activities, formally or informally.

The fellow will attend appropriate conferences and speak with patients, families and other physicians or health-care team members regarding medical and psychosocial aspects of care. He/she will see any new inpatient consults as promptly as possible and in discussion with the attending. The supervision and staffing of new inpatient consults may also, on a case-by-case basis, involve a specialized faculty member not on the inpatient rotation. The fellow is expected to communicate with the patient's primary hematologist for any questions pertaining to plans of care while the patient is in the hospital as well as to act as the primary responsible individual in assuring that all patients discharged have a clear plan for follow up and management by the primary team.

The fellow is expected to give one educational lecture weekly to the inpatient team, as seen appropriate by the supervising attending.

ATTENDING: The supervising attending is expected to provide daily clinical supervision,

teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation, as set forth below.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director, who will be responsible for further referrals and action.

EDUCATIONAL GOALS AND OBJECTIVES:

1. **Deliver <u>Patient Care</u>** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

At the completion of this rotation, which is limited to the first 18 months of clinical training, weighted toward more time in the first than in the second clinical year, fellows should be increasingly able to understand and put into practice the principles of patient care for the following:

- Development and implementation of treatment strategies for hematological malignancies requiring urgent therapeutic decisions and initiation of therapy.
- Participation in the process of clinical trial enrollment and patient monitoring, particularly with respect to managing and regulatory reporting of the complications of investigational therapies
- Diagnostic workup of patients with malignancy who are admitted from the clinics or the urgent care area for complications of disease or treatment
- Management of complications occurring in patients with malignancy, including the multidisciplinary elements of care, collaboration with consultants, and implementation of therapeutic plans
- Daily management of patients with complications of cancer or cancer therapies, including the assessment and application of goals of care and realistic expectations
- Management of short- and long-term complications of chemotherapy, biological therapy, radiation alone or as part of combined-modality therapy, the role of surgical evaluation and interventions, and the Judicious use of supportive care modalities, including blood products, bone-protective, anti-emetic, immunosuppressive, hematopoietic, anti-microbial, endocrinology and other adjunctive therapies for malignancy.
- Use of imaging-based diagnostic and therapeutic modalities, including biopsies and placement of access and decompressive devices in patients with malignancy.

2. **Demonstrate <u>Medical Knowledge</u>** about established and evolving biomedical,

clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

- Of particular importance will be evidence of the gradual acquisition by fellows of the immense pool of knowledge required to effectively diagnose and manage malignancy and all related medical problems. The schedule provided for inpatient rotations will allow fellows to acquire increasing knowledge and to use the various opportunities provided in the program to apply this knowledge in an progressively more independent fashion and to incorporate it into teaching at all levels (fellows provide education to staff, other fellows, patients/families, and other trainees such as rotating residents in the informal setting of rounds and bedside teaching as well as the formal settings of conferences and tumor boards).
- Incorporation and application of rapidly-growing knowledge based on recent and ongoing clinical trials and related sources of new information. Part of this skill will also involve the increasingly sophisticated ability to critically evaluate the medical literature and to extract the relevant information from published and unpublished datasets. By the end of the series of inpatient rotations, fellows should be applying medical knowledge at the aspirational level.

3. **Systems-based practice**

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system, including a rapidly-expanding array of virtual educational tools, to provide optimal health care.

Fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities.
- Develop effective coordination of care of patients moving from the inpatient to the outpatient setting and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care for patients with terminal cancer.
- Become familiar with the benefits and limitations available through Hospice programs.
- Learn of the appropriate timing and use of palliative care and hospice services in both the inpatient and outpatient settings.
- Apply principles of clinically appropriate cost-benefit analysis to current aspects of diagnosis and treatment of all supportive modalities, including blood products and other adjunctive therapies
- Understand basic information about cost-effectiveness and know where to seek

further information
- Demonstrate awareness and incorporate, in a progressively more independent fashion, the national guidelines for disease evaluation and management.

4. **Practice-Based Learning and Improvement**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

5. **Professionalism,** including strict adherence to ethical principles

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological,

social, and spiritual dimensions.

6. Develop **Interpersonal and Communication Skills** that result in effective information exchange and teaming with patients, their families, and other health professionals.

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice professionals, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

CORE ROTATION - HEMATOPOIETIC CELL TRANSPLANT

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F2

Duration: 4week block (In-patient)

Location: City of Hope

Supervising faculty: City of Hope full-time hematology/hematopoietic cell transplant faculty who are assigned to the in-patient team rotation as well as the HCT fellow who is assigned to the same in-patient team.

Evaluation methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Education during this rotation is by direct, hands-on management of patients admitted for Hematopoietic Cell Transplantation (HCT) or for HCT-related complications. Fellows will learn through daily rounds, intense discussion of all aspects of patient assessment and management, regular communications with members of the patients' primary team and with inpatient staff. In addition, fellows will be educated by their required participation in teaching rounds, didactic conferences, self-study, patient care conferences, tumor boards, and preparation of didactic presentations.

General Description: The HCT rotation consists of experiences in patient care for adult patients with hematologic malignancies (on the ward and at the ambulatory day hospital) and other disorders requiring high-dose chemotherapy with stem cell rescue or allogeneic stem cell transplant from one of the following sources; matched sibling or unrelated donors, cord blood or haploidentical donor. A critical spectrum of diseases is seen during this rotation, including acute leukemias, chronic leukemias, non-Hodgkin's lymphomas, Hodgkin's disease, myelodysplastic syndrome, myeloproliferative disorders, multiple myeloma, and bone marrow failure syndromes like aplastic anemia. Fellows will be exposed to all the stages of the HCT process as well as a wide range of HCT related acute and chronic complications. This rotation is a core requirement of at least one month during the 36-month fellowship period.

EXPECTATIONS

FELLOW: The fellow's primary focus will be on the supervisory care of transplant patients. The fellow will work closely with the attending in the daily care of patients undergoing HCT. The fellow will participate in daily work rounds. The fellow will attend appropriate transplant and hematologic malignancy conferences and speak with patients, families and other physicians or health-care team members regarding medical and psychosocial aspects of care. Fellows will participate in and learn about the complicated discharge planning of HCT patients, including post discharge care, psychosocial considerations, out-patient medications, and detailed discharge instructions.

The fellow is expected to present a literature review on one of the HCT related management and complications during rounds at least weekly.

Fellows will participate when appropriate in bone marrow and stem cell harvesting, storage and administration as well as patient care procedures including bone marrow biopsies and aspirates, intrathecal chemotherapy administration, and skin biopsies. Fellows are also expected to review peripheral blood smears, bone marrow aspiration, biopsy, and interpretation.

ATTENDING: The supervising attending is expected to provide daily clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation, as set forth below.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director, who will be responsible for further referrals and action.

EDUCATIONAL GOALS AND OBJECTIVES:
To train fellows with respect to the 6 competencies (underlined, in bold):

1. Deliver <u>Patient Care</u> that is compassionate, appropriate, timely and effective for the treatment of health problems and the promotion of health.

Fellows are expected to:

- Learn about the appropriate use of stem cell transplantation as part of the overall management of patients with hematologic malignancies, blood disorders and other diseases where a stem cell transplant is indicated as a therapeutic option.
- Recognize the different sources of stem cell transplantations, their indications and the different complications associated with each source.
- Identify the symptoms and signs of acute GVHD and engraftment syndrome, sinusoidal obstructive syndrome, and infectious complications of the peri transplant period.
- Participate in daily management of patients on the BMT service (leukemia 1 and 2 for COH). This will include patients that are undergoing allogeneic stem cell transplantation and autologous bone marrow/stem cell rescue as well as patients admitted with complications of stem cell transplantation requiring.
- Become familiar with comprehensive treatments for leukemias, lymphomas, multiple myeloma, myelodysplastic syndrome, myeloproliferative disorders, and bone marrow failure conditions like aplastic anemia.
- Become familiar with the pharmacology and use of antiemetics, antimicrobials, growth factors and other supportive care measures in such patients.
- Become familiar with the process of clinical trial enrollment and patient monitoring.
- Learn of post-therapy opportunistic infections utilizing pre-emptive tests, prophylaxis when appropriate, disease diagnosis, and appropriate anti-microbial therapy.
- Learn methodology of treatment planning of patients in need of bone marrow transplant

- Gain knowledge in diagnosis, evaluation and treatment of hematologic tumors and malignancies and their complications in hospitalized patients
- Learn the principles of chemotherapy, radiotherapy, and biologic therapy as it pertains to conditioning regimens for patients undergoing bone marrow transplant
- Have hands-on experience with evaluation and management of patients undergoing high dose chemotherapy and progenitor cell transplantation
- For first through third year fellows: consolidate confidence in caring for patient's post-transplant specifically as it pertains to issues surrounding transplant medicine; become familiar with early and late post-transplant complications and management, and integration of care with the transplant team

2. **Demonstrate <u>Medical Knowledge</u>** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

Fellows are expected to:

- Identify different indications of stem cell transplantation as part of the overall management of patients with cancer and blood disorders.
- Daily management of patients undergoing HCT.
- Treatment strategies for leukemias, lymphomas, multiple myeloma, myelodysplastic syndrome, myeloproliferative neoplasms, and bone marrow failure syndromes like aplastic anemia.
- Short- and long-term complications of high dose chemotherapy and radiation therapy.
- Pathophysiology and treatment options of acute and chronic graft versus host disease.
- Transfusion medicine policies and practices in transplant patients.
- Rationale use of antiemetics, antimicrobial therapy, growth factors and other supportive care measures in such patients.
- Principles of selecting stem cell sources, collection storage and reinfusion and associated complications.
- Immunologic mechanism which underlie the therapeutic benefits conferred by allogeneic hematopoietic cell transplant.
- Learn about principles of allogeneic bone marrow transplantation
    - Difference between autologous and allogenic stem cell transplant
    - Principles of selecting conditioning regimens
    - HLA typing, methodology
    - principles of donor selection including siblings, unrelated matched donor, cord blood, haploidentical donors
    - Principles of searching through Bone Marrow registries
    - Role of ABO in transplant, and transfusion support
- Indication for stem cell transplantation:
    - Acute leukemias, first or subsequent remission
    - Chronic Myelogenous leukemia
    - Lymphoma and Hodgkin Disease
    - Testicular Cancer

- Multiple myeloma
- Aplastic anemia and myelodysplastic syndrome

- Understand the principles and indications for the following procedures related to HSCT
  - Donor selection and evaluation
  - Bone marrow Harvest
  - Stem Cell Collection by apheresis
  - The role of growth factors for donor
  - Stem cell infusion
    - Fresh versus frozen cells
    - Pre medications
    - Proper documentation of the infused unit.
    - Possible infusion reactions and their management.
  - Documentation and reporting on patients on investigational protocols
  - Administration of high-dose chemotherapy
  - Immediate complications of chemotherapy and radiation and their management.
- Learn about the role of viral infections in transplantation
  - CMV infections:
  - Pneumonitis
  - The role of CMV seropositivity
  - Adenoviral and RSV infection Fungal infection in transplant
- Learn about supportive care in transplantation
  - Transfusion support during bone marrow aplasia
  - Antimicrobial prophylaxis and management of neutropenic fever and other infectious complications
  - The role of growth factors
  - Management of complications of conditioning regimen
  - Management of dermatological complications related to chemotherapy and radiations.
  - Psychological issues of transplantation
- Learn about graft versus host disease
  - Acute GVHD
  - chronic GVHD
  - Prophylaxis, treatment of GVHD
  - Vaccinations in post-transplant period
- Become familiar with late complications of transplantation
- For 1st year fellows: gain introduction to concepts in transplant medicine.
- For 2nd year fellows: consolidating concepts in transplant medicine.
- For 3rd year fellows: mastery of concepts in transplant medicine, specifically for purpose of passing ABIM Board Exam in Hematology and Oncology.

3. Demonstrate **systems-based practice** and an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Fellows are expected to:

- Become familiar with the evaluation of patients in the outpatient setting seeking consultation regarding the risks, benefits, and costs of allogeneic or autologous stem cell/bone marrow transplant.
- Develop skills necessary for leadership within a healthcare team, with particular emphasis on the role of extenders, HCT nurses, and HCT pharmacists.
- Identify the need for appropriate and timely consultation with other medical specialists and demonstrate effective communication and implementation of specialty services in the management of these patients
- Learn of the appropriate timing and use of palliative care and hospice services.
- Apply principles of clinically appropriate cost-benefit analysis to current aspects of diagnosis and treatment of HSCT medicine.
- Demonstrates awareness of clinical guidelines for HSCT patients.
- For 1st year fellows: gain introduction to practice in HCT center.
- For 2nd year fellows: appreciate discrepancies and practice limitations as they pertain to patient resource allocation depending on various financial factors.
- For 3rd year fellows: appreciate tertiary referral process and limitations to resource allocation.

4. Demonstrate **<u>Practice-Based Learning and Improvement</u>** that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.

- Identify deficiencies in knowledge or experience and actively seek opportunities for correction.
- Use educational and evidence-based resources to seek answers to scientific and clinical questions.
- learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning
- Observe how evidence-based medicine is used in practice of transplant medicine.
- Use evidence in clinical practice, i.e., when presenting case on rounds or in clinic.
- Gain ability to counsel patients/family members using evidence with regards to treatment options.

5. Demonstrate a commitment to carrying out **<u>professionalism</u>** and an adherence to ethical principles.

- Demonstrate a positive attitude towards learning, including timely attendance in clinic and on rounds with evidence of having prepared appropriate medical knowledge.
- Demonstrate interaction with other members of the health care team in a professional manner
- Maintain respect for patient privacy and autonomy

- Demonstrate accountability to patients, society, and the profession; and, sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Demonstrate skills needed to interact with patients and their families in a manner that demonstrates compassion, competence, and professionalism.
- Embrace the role of consultant for other services - always keeping the patient's best interest as the primary goal and performing these duties in a professional and courteous manner.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social and spiritual dimensions as well.

6. Develop <u>Interpersonal and Communication Skills</u> that result in effective information exchange and teaming with patients, their families, and other health professionals.

- Develop skills to effectively communicate with patients and their families as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Develop skills to communicate effectively with physicians and other healthcare professionals
- Acquire skills to work effectively and in coordination with other health care providers in the Bone Marrow Transplant clinic and Bone Marrow Transplant Wards
- Learn the importance to maintain comprehensive, timely, and legible medical records
- Practice skills needed to interact with patients and their families in a manner that demonstrates compassion, competence, and professionalism.
- Develop appropriate end of life discussions with patients with incurable malignancies.
- Develop Peer-peer relationships and methods of handing off patient care responsibilities for safety and continuity of care.
- Appreciate the role of subspecialist physician as part of a multidisciplinary team in caring for such patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Appreciate role of a consultant in assisting another physician with the care of a patient.

Fellows are responsible for continuity clinic during their inpatient rotations.

CORE ROTATION – Hematology/HCT CLINIC BLOCKS

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow level: F1-F2

Location: City of Hope

Duration: 4-week blocks, 1 each in year 1 and 2

Staffing/supervising faculty: Hematology faculty, all aligned with disease group programs upon which clinic structure is based.

Evaluation methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences and disease-focused program meetings.

Patient volume: up to 5 patients/half day for F1 and up to 10 patients/half day for F2

Faculty to Fellow Ratio: 1:1 within each clinic; occasionally there will be more than one faculty member in a clinic who will supervise the same fellow seeing different patients.

General Description: This rotation is an outpatient clinical experience that gives the fellow an opportunity to work closely with a faculty member and disease program-based team, usually consisting of RN, NP, and clinical research staff in various subspecialty fields of hematology. In the clinic setting, fellows will see new patients and follow-ups under close supervision of the faculty member. The experience in clinics at City of Hope will offer the fellow the opportunity to appreciate and learn the principles and practice of hematology patient care delivered within a tertiary care referral system that provides standard, evidence-based first-line evaluation and management, clinical trial enrollment and conduct, and later-line patient management including end-of-life care. Principles of simultaneous care as well as survivorship are also addressed in this rotation. While this rotation does not provide the longitudinal experience of hematology patient management that the continuity clinic structure provides, the subspecialty experience and exposure to the different styles of practice and communication among faculty members and program and clinic team staff provide a valuable aspect of fellow education and training that is complemented by the structure of the continuity clinics.

or full-day clinics in order to become competent and fulfill the requirements of all 6 competencies, as they are provided by the clinic rotations, across the range of hematologic malignancies. This document concerns the hematological diseases rotations, which will be customized for each fellow depending on the available clinical faculty and the fellow's continuity clinic schedule. The descriptions below apply across all of the Hematologic disease clinics.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient hematology clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients coming for follow-up visits. The fellow is expected to be prepared, prompt, and available to stay until the clinic patients have been seen and developed their management plan and to complete the documentation for the assigned patients quickly and accurately. Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit. Fellows who wish to be considered a point of communication for individual patients during the rotation may do so, provided the faculty member and pertinent members of the team are in agreement and that the fellow adhere to the expected forms of communication and documentation. This may also include following up on consults and incorporating them into the patient's evaluation and management as well as following patients who are admitted for complications or therapies requiring inpatient administration.

During this rotation, it is expected that the fellow also attends the relevant hematologic malignancy-based conferences and prepared to present and discuss the patient, if suggested by the attending. Each fellow will be provided a schedule of meetings pertinent to his/her clinic block.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING: The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan. Whenever possible, the faculty member should also assist the fellow to identify the pertinent literature and, as permitted by time, provide as much didactic instruction, translational and clinical trial education as possible.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or associate program director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient medical oncology clinic blocks will provide fellows with elements of the 6 essential competencies across the 5 levels of expertise, as detailed here:

1. **Patient Care**

Incoming fellows have completed an internal medicine residency that provides ample experience in the principles and practice of patient care at the level of general internal medicine, and they should have mastered the ability to deliver such care at an independent, potentially aspirational, level. During the hematology-oncology fellowship, trainees will continue to grow in their ability to evaluate and manage patients with malignancy and will grow in their ability and confidence to deliver expert cancer care that includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program.

At the completion of this rotation, F1-F2 fellows should also increasingly be able to understand and eventually demonstrate their ability to:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

Milestones:

PC1, Accesses Data Sources to Synthesize Patient and Disease-specific Information Necessary for Clinical Assessment

All fellows increasingly

- Access data and gather a history standard for general internal medicine
- Perform a physical examination standard for general internal medicine
- Gather a disease-specific history, with assistance
- Perform a disease-specific physical examination, with assistance

F2 fellows increasingly

- Accesses data from multiple sources and collects disease-specific history, including psychosocial issues, from the patient and family members and other sources
- Complete a disease-specific physical examination

PC2, Diagnoses and Assigns Stage and Severity of Hematologic Disorders

All fellows increasingly

- Generate a differential diagnosis expected of a graduating internal medicine resident
- Order testing without specialty-specific differential diagnosis
- Interpret initial diagnostic studies to generate a specialty-specific differential diagnosis
- Determine stage of disorder

F2 fellows increasingly

- Order advanced diagnostic studies for common disorders when appropriate
- Determine clinical comorbidities
- Diagnose uncommon disorders and determines disease severity using evidence-based studies

PC3, Formulates the Management Plan

All fellows increasingly

- Formulate a management plan for patients using decision-support tools for patients without comorbidities

F2 fellows increasingly

- Formulate a management plan with consideration of disease and patient factors and enrollment in clinical trials and conforms to patient preferences and goals of care

PC4, Adjusts Management Plans for Acute and Chronic Issues

All fellows increasingly

- Adjust management plans according to standard guidelines and toxicities

F2 fellows increasingly

- Adjust management plans based on response to treatment, side effects of the treatment, and comorbidities
- Adjust management plans based on anticipation and recognition of subtle toxicities and long-term sequelae and/or changes in patient preferences and goals

PC5, Competence recognizing the need for procedures and either performing or collaborating in the planning and discussions with appropriate proceduralist includes Use of Systemic Therapies through all Therapeutic Routes.

All fellow increasingly

- Discusses the indications for and assists with all required procedures
- Discusses potential procedural complications
- Perform all required procedures, with direct supervision
- Recognize complications of procedures and enlists help

F2 fellows increasingly

- Competently perform all required procedures, with indirect supervision and then independently
- Manage complications of procedures, with supervision
- Anticipate and independently manages complications of procedures

2. **Medical Knowledge**

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, F1-F2 fellows should be increasingly able to understand, as well as gradually acquire the ability to demonstrate, the following components of medical knowledge:

- The evaluation and treatment—including principles of the important research questions of hematologic malignancies.
- AML, ALL, MDS, MPN, DLBCL, Hodgkin's, MM and T cell lymphoma) as well as bone marrow failure syndromes and including the recognition of unmet therapeutic needs and important clinical trial questions.
- Timing and type of stem cell transplant evaluation in a particular disease type
- Follow up and maintaining treatment for patients who underwent HCT.
- Evaluation and treatment of acute and chronic GVHD.
- The common complications of treating patients with hematological malignancies, including, but not limited to, neutropenic fever, mucositis, emesis, extravasation, brain metastasis, spinal cord compression, tumor lysis syndrome, differentiation syndrome,

organs dysfunction and pain management.

- Ordering appropriate chemotherapy and biologic therapy and monitoring for complications for all indications including curative intent, and disease control as well as palliative care of cancer patients.
- The skills of ordering, administering, and monitoring chemotherapeutic and biologic agents along with supportive modalities, including blood products and other biological agents.
- Supportive care of patients undergoing treatment of hematologic malignancies including transfusion support, growth factor support, use of bisphosphonates, pain management and psychosocial needs
- Appropriate referrals to Radiation therapy
- Appropriate referrals to other specialties including but not limited to psychiatry, infectious disease experts, cardiology endocrinology

Milestones:

MK1- 4 Malignant Hematology- (Pathophysiology, Diagnostics, Prognostic Information, Treatment)

All fellows increasingly

- Demonstrate basic knowledge of specialty disorders
- Demonstrate expanding knowledge of specialty disorders and development of clinical reasoning

F2 fellows increasingly

- Demonstrate sufficient knowledge of specialty disorders and clinical reasoning skills to determine evidence-based interventions
- Synthesize advanced knowledge of specialty disorders and uses clinical reasoning skills to develop personalized interventions

MK5- Scholarly activities

All fellows increasingly

- Identify areas worthy of scholarly investigation
- Formulate a scholarly plan under supervision of a mentor

F2 fellows increasingly

- Present products of scholarly activity at local meetings
- Disseminate products of scholarly activity at regional or national meetings, and/or submits an abstract to regional, state, or national meetings

3. Demonstrate **systems-based practice** and an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities
- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.
- Apply principles of cost-benefit analysis to current aspects of diagnosis and treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

Milestones:

SBP1, Patient Safety

All fellows increasingly

- Demonstrate knowledge of common patient safety events and how to report them
- Identify system factors that lead to patient safety events
- Report patient safety events through institutional reporting systems (simulated or actual)

F2 fellows increasingly

- Participate in the analysis of patient safety events
- Participate in disclosure of patient safety events to patients and families (simulated or actual)
- Conduct analysis of patient safety events and offers error prevention strategies
- Lead disclosure of patient safety events to patients and families with documentation (simulated or actual)

SBP2, Quality Improvement

All fellows increasingly

- Demonstrate knowledge of basic quality improvement methodologies and metrics
- Describe local quality improvement initiatives

F2 fellows increasingly

- Participate in local quality improvement initiatives
- Demonstrate the skills required to identify, develop, implement, and analyze a quality improvement project

SBP3, System Navigation for Patient-Centered Care: Coordination and Transitions of Care

All fellows increasingly

- Demonstrate knowledge of care coordination
- Identify key elements for safe and effective transitions of care and hand-offs
- Coordinate care of patients in routine clinical situations effectively using the roles of their interprofessional teams
- Perform safe and effective transitions of care/hand-offs in routine clinical situations

F2 fellows increasingly

- Coordinate care of patients in complex clinical situations effectively using the roles of their interprofessional teams
- Perform safe and effective transitions of care/hand-offs in complex clinical situations
- Role model effective coordination of patient-centered care among different disciplines and specialties especially junior fellows, residents and other members of the team
- Role model and advocate for safe and effective transitions of care/hand-offs within and across health care delivery systems, including outpatient settings for junior trainees

SBP4, System Navigation for Patient-Centered Care: Population Health

All fellow increasingly

- Demonstrate knowledge of population and community health care needs and disparities
- Identify specific population and community health care needs and disparities

F2 fellows increasingly

- Identify local resources to meet community health care needs and disparities
- Adapt practice to provide for the needs of specific populations

SBP5, Physician Role in Healthcare Systems

All fellows increasingly

- Identify basic financial barriers for individual patients and basic financial components of the health care system
- Identify key components of the complex health care system
- Consider financial barriers and quality of care when ordering diagnostic or therapeutic interventions
- Describe how components of a complex health care system are inter-related, and how this impact ordering therapeutic interventions

F2 fellows increasingly

- Incorporate value (quality/costs) into shared decision making, with interprofessional team input
- Discuss how individual practice and the broader system affect each other
- Manage financial factors that affect a patient's access to care and decision making
- Manage various components of the complex health care system to provide efficient and effective patient care

4. **<u>Practice-Based Learning and Improvement</u>**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- **Use information technology to optimize learning**

Milestones

PBLI1, Evidence-based and Informed Practice

All fellows increasingly

- With assistance, accesses available evidence and practice guidelines for patient care
- Independently identify available evidence and practice guidelines for patient care

F2 fellows increasingly

- Critically appraise evidence and apply to patient care
- Apply best available evidence, even in the face of insufficient and/or conflicting information

PBLI2, Reflective Practice and Commitment to Personal Growth

All fellows increasingly

- Identify gaps in knowledge and performance
- Reflect on the factors which contribute to gaps between expectations and actual performance
- Actively seeks opportunities to improve
- Design and implement a learning plan, with assistance

F2 fellows increasingly

- Institute changes to narrow the gaps between expectations and actual performance
- Intentionally seeks performance data to narrow the gaps between expectations and actual performance
- Measure the effectiveness of the learning plan and makes appropriate changes
- Demonstrate **systems-based practice** and an awareness

5. **Professionalism,** including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

Milestones:

P1, Professional Behavior and Ethical Principles

All fellows increasingly

- Be able to identify common ethical principles and potential triggers for professionalism lapses and describe when and how to appropriately report professionalism lapses.
- Should be able analyzes straightforward situations using ethical principles
- Recognize and take responsibility for own professionalism lapses

F2 fellows increasingly

- Manage and resolve complex ethical situations, including personal lapses, with assistance
- Intervene and use appropriate resources to prevent and manage professionalism lapses and dilemmas in self and others

P2, Accountability/Conscientiousness

P3, Fellow well being

All fellows increasingly

- Recognize status of personal and professional well-being, with assistance
- Independently recognize status of personal and professional well-being

F2 fellows increasingly

- With assistance, propose a plan to optimize personal and professional well-being
- Independently develop a plan to optimize personal and professional well-being

6. Interpersonal and Communication Skills

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and midlevel providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

Milestones:

IPCS1 Patient and Family Centered Communication

All fellows increasingly

- Identify common barriers to effective communication and recognizes the need to adjust communication strategies based on context
- Identify complex barriers to effective communication
- Verify patient/family understanding of the clinical situation to optimize effective communication

F2 Fellows increasingly

- Reflect on personal biases while attempting to minimize communication barriers
- Proactively improve communication by addressing barriers including patient and personal biases
- With guidance, use shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan
- Independently, use shared decision making to make a personalized care plan

IPCS2 Interprofessional and team communication

All Fellows increasingly

- Use respectful communication (verbal, non-verbal) with all members of the health care team
- Communicate effectively within and across all health care teams
- Demonstrate openness to feedback
- Responsive to feedback

F2 fellows increasingly

- Adapt communication style within and across all health care teams to ensure mutual understanding
- Coordinate recommendations from different members of the health care team to optimize patient care
- Seek and provides performance feedback
- Use feedback to improve own performance and provides actionable feedback to team members

IPCS3 **Communication within Health Care Systems**

All fellows increasingly

- Accurately record information in the patient record
- Safeguard patient personal health information in communications

- Demonstrate organized diagnostic and medical reasoning through notes in the patient record
- Appropriately select forms of communication based on context

F2 fellows increasingly

- Documentation reflect level of complexity and severity of disease
- Communication includes key stakeholders
- Documentation reflects medical reasoning, patient preferences, and management recommendations and plans
- Achieves written or verbal communication that is exemplary

CORE ROTATION – HEMATOLOGY Lymphoma (B-Cell) CONTINUITY CLINIC

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program.

Fellow level: F1

Duration: ½ day of Lymphoma (B-Cell) continuity clinic, every week, for 6 months.

Location: City of Hope

Supervision: Drs. Popplewell, Herrera, Mei, Siddiqi, Danilov, Nikolaenko and Shouse for 2020-2021 academic year

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences, and tumor boards.

Patient Volume: variable, on average 6 patients/half-day (including 1-2 new patients or consults)

Faculty to Fellow Ratio: 1:1 for each continuity clinic

General Description: This continuity-directed outpatient clinic rotation gives the fellow an opportunity to work closely with a Lymphoma faculty member and their team, usually consisting of an RN, NP, and clinical research staff. In the clinic setting, fellows will see new patients/consults and follow-ups under close supervision of the faculty member and will be responsible for the continuous care of those patients after the initial visit until the rotation is completed. During this time, the fellow should act as the point person for medical management and communications, under the supervision of the faculty at a level commensurate with the faculty member's assessment of the fellow's level of competence, ranging through "critical deficiencies" to "ready for independent practice" or "aspirational".

The continuity clinic experience at City of Hope will offer the fellow the opportunity to appreciate and learn the principles and practice of oncologic patient care delivered within a tertiary care referral system that provides standard, evidence-based first-line evaluation and management, clinical trial enrollment and conduct, and later-line patient management, including end-of-life care. Principles of simultaneous care as well as survivorship are also addressed in this rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient Lymphoma clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients who are coming for follow-up visits. The fellow is expected to be prepared, available to stay until the clinic patients have been seen and advised of the management plan and complete the documentation for the assigned patients quickly and accurately.

Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit. Fellows should be the point of communication for individual patients during the rotation, including taking responsibility for following up on interval events (urgent visits or hospital admissions, including any medical encounters or interventions outside of City of Hope), labs/imaging, consultant visits, and incorporating these into the patient's evaluation and management. Fellows should also actively participate in the decisions and management regarding patients they are following in clinic who are admitted for complications or therapies requiring inpatient administration.

During this rotation, it is expected that the fellow also attend the Lymphoma tumor board, where the fellow should be the primary presenter of the patient's case and participate, with the input of the attending, in leading the discussion and the wrap-up from the tumor board discussion. Attendance at other conferences, particularly the disease program meeting for clinical trials discussion, is also strongly encouraged, if the fellow's primary rotation permits.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING: The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient medical oncology breast continuity clinic block will provide fellows with elements of the 6 essential competencies across the 5 levels of expertise, as detailed here:

1. **Patient Care**

Fellows will expand their ability to evaluate and manage patients with a variety of gastrointestinal cancers, ultimately allowing them to deliver expert cancer care that includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program.

At the completion of this rotation, fellows should increasingly be able to understand and demonstrate, the following general elements of oncologic patient care:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

2. **Medical Knowledge**

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly-growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, F1 fellows should be increasingly able to understand and demonstrate, the following components of medical knowledge:

At the completion of this rotation, fellows should be able to demonstrate understanding of the following:

- Diagnosis, pathology, staging, risk factors, and management of different types of Lymphoma, Hodgkin disease, non-Hodgkin lymphoma, chronic lymphocytic leukemia and transformed lymphoma
- Indications and application of imaging techniques in patients with Lymphoma
- Indications and knowledge of different Chemotherapeutic drugs, Immunotherapeutic products, Cellular therapy, Multiagent chemotherapeutic

protocols and combined modality as well as growth factors in the treatment of different Lymphoma subtypes
- Indications, complications and expected outcome of autologous and allogeneic stem cell transplantation in the treatment of Lymphoma.
- Principles of, indications for, and limitations of surgery and radiation in the treatment of Lymphoma
- Management and care of indwelling access catheters
- Management of pain, anxiety, and depression
- Concepts of supportive care, including hematologic, infectious disease, and nutrition
- Management of the neutropenic and immunocompromised patient
- Rehabilitation and psychosocial aspects of clinical management of patients with cancer and hematologic disorders
- Palliative care, including hospice and home care
- Recognition and management of paraneoplastic disorders
- Cancer prevention and screening, including genetic testing
- Care and management of the geriatric patient
- The appropriate use of tumor markers
- Correlation of clinical information with cytology, histology, and immunodiagnostic imaging techniques

3. **Systems-based practice**

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system, including a rapidly-expanding array of virtual educational tools, to provide optimal health care.

All levels of fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities
- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.

- Apply principles of cost-benefit analysis to current aspects of diagnosis and treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

4. **Practice-Based Learning and Improvement**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

5. **Professionalism,** including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation

- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social and spiritual dimensions.

6. **Interpersonal and Communication Skills**

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

CORE ROTATION – HEMATOLOGY LEUKEMIA CONTINUITY CLINIC

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program.

Fellow level: F1

Duration: ½ day of Leukemia continuity clinic, every week, for 6 months.

Location: City of Hope

Supervision: Drs. Marcucci, Stein, Pullarkat, Salhotra, Koller and Curtin.

Evaluation Methods: Direct observation of patient and staff interactions as well as case presentation to faculty; documentation in electronic medical record.

Educational methods: Fellows will learn through direct patient care, faculty teaching, didactic conferences, self-study, patient care conferences, and tumor boards.

Patient Volume: variable, on average 4-6 patients/half-day (including 1-2 new patients or consults)

Faculty to Fellow Ratio: 1:1 for each continuity clinic

General Description: This continuity-directed outpatient clinic rotation gives the fellow an opportunity to work closely with a Leukemia faculty member and their team, usually consisting of an RN, NP, and clinical research staff. In the clinic setting, fellows will see new patients/consults and follow-ups under close supervision of the faculty member and will be responsible for the continuous care of those patients after the initial visit until the rotation is completed. During this time, the fellow should act as the point person for medical management and communications, under the supervision of the faculty at a level commensurate with the faculty member's assessment of the fellow's level of competence, ranging through "critical deficiencies" to "ready for independent practice" or "aspirational".

The continuity clinic experience at City of Hope will offer the fellow the opportunity to appreciate and learn the principles and practice of oncologic patient care delivered within a tertiary care referral system that provides standard, evidence-based evaluation and management as per NCCN guidelines as well as novel therapeutic options as clinical trials. They will be an integral part of the team involved in clinical trial enrollment and conduct, and later-line patient management, including end-of-life care. Principles of supportive care as well as survivorship are also addressed in this rotation.

EXPECTATIONS AND RESPONSIBILITIES OF THE FELLOW

The fellow's primary focus will be on learning patient care through attending mentorship in the outpatient Hematology Leukemia clinic setting. The fellow will work closely with the attending in seeing new outpatient consults as well as patients coming for follow-up visits. The fellow is expected to be prepared, available to stay until the clinic patients have been seen and advised of the management plan and complete the documentation for the assigned patients quickly and accurately. Fellows should review the faculty member's co-signature on their notes as soon as possible, since this is an important element of the feedback provided on their synthesis and documentation of each patient visit. Fellows should be the point of communication for individual patients during the rotation, including taking responsibility for following up on interval events (urgent visits or hospital admissions, including any medical encounters or interventions outside of City of Hope), labs/imaging, consultant visits, and incorporating these into the patient's evaluation and management. Fellows should also actively participate in the decisions and management regarding patients they are following in clinic who are admitted for complications or therapies requiring inpatient administration.

During this rotation, it is expected that the fellow also attends the Leukemia tumor board, where the fellow should be the primary presenter of the patient's case and participate, with the input of the attending, in leading the discussion and the wrap-up from the tumor board discussion. Attendance at other conferences, particularly the disease program meeting for clinical trials discussion, is also strongly encouraged, if the fellow's primary rotation permits.

EXPECTATIONS AND RESPONSIBILITIES OF THE ATTENDING: The supervising attending is expected to provide clinical supervision, teaching, and mentorship to the fellow while on rotation. He/she is expected to provide educational value when trying to meet goals and objectives of the rotation (see below) while avoiding the assignment of non-educational tasks to the fellow (e.g. excessive order entry, filling out forms, phone calls to insurance and pharmacies). The attending should be willing to spend a reasonable amount of additional time with the fellow if the fellow is following a patient who has been admitted or for whom the result of a consult needs to be incorporated into the plan.

At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required online evaluations in the New Innovations system.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or Associate Program Director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

The outpatient Hematology Leukemia continuity clinic block will provide fellows with elements of the 6 essential competencies across the 5 levels of expertise, as detailed here:

1. **Patient Care**

Fellows will expand their ability to evaluate and manage patients with a variety of leukemias, ultimately allowing them to deliver expert care that includes the selection of candidates for clinical trials, the ability to communicate the complexities of evaluation, therapy and prognosis to patients from a wide variety of cultural and educational backgrounds, and the skills required to educate patients, their families, and other trainees such as the internal residents who rotate through the program.

At the completion of this rotation, fellows should increasingly be able to understand and demonstrate, the following general elements of oncologic patient care:

- Appreciate the relevance of research as it relates to direct patient care
- Apply evidence-based medicine to daily patient care activities
- Identify appropriate patients for enrollment into clinical trials

2. **Medical Knowledge**

This competency encompasses every element of the evidence basis for all aspects of malignant disease and includes, in particular, amassing and applying the existing and rapidly-growing knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences. While the primary purpose of medical knowledge is to provide outstanding patient care, it is also the critical component of the scientific methods that underlie successful research both in the laboratory and in the clinic, including population-based research.

At the completion of this rotation, fellows should be able to demonstrate understanding of the following:

1- Myeloid Leukemia
   a. Classification and clinical manifestations of Acute myelogenous leukemia.
      i. Phenotypic variants of AML including APL
   b. Epidemiology
   c. Pathogenesis
   d. Clinical presentation
      i. Interpretation of bone marrow biopsy
      ii. Value of cytogenetics and molecular studies
   e. Complications
   f. Prognostic factors

i. Cytogenetic
ii. Molecular

g. Management
i. Chemotherapy
ii. Remission induction
iii. Response assessment
iv. Value of MRD
v. Post-remission therapy
vi. Maintenance therapy
vii. Targeted agents and their role in the management
viii. Clinical trials
ix. Indications of HCT
x. Management of relapsed or refractory disease.
xi. Supportive care including transfusion support
xii. Infectious complications and their management

2- Lymphoid Leukemia

a. Classification and clinical manifestations of acute lymphoid leukemia: B-cell vs T-cell
b. Epidemiology
c. Pathogenesis
d. Clinical presentation
i. Interpretation of bone marrow biopsy
ii. Value of cytogenetics and molecular studies

e. Complications
f. Prognostic factors
i. Cytogenetic
ii. Molecular

g. Management
i. Chemotherapy
ii. Remission induction
iii. Response assessment
iv. Methods and value of MRD assessment
v. Post-remission therapy
vi. Maintenance
vii. Targeted agents
viii. The role of immunotherapy and cellular therapy
ix. Clinical trials
x. Indications of HCT
xi. Management of relapsed or refractory disease.
xii. CNS prophylaxis

3. **Systems-based practice**

Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system, including a rapidly-expanding array of virtual educational tools, to provide optimal health care.

All levels of fellows are expected to:

- Demonstrate knowledge of and reporting methods for common patient safety events, participate in activities such as root-cause analysis, work with the institutional safety and quality improvement officers to perform scholarly activities directed at enhancing safety and quality improvement, and assume a leadership role in these activities
- Develop effective coordination of care for patients moving between the inpatient and outpatient settings and thus learn the complexities of our health-care delivery system.
- Acquire the skills necessary for leadership within a healthcare team.
- Determine the indications for hospitalization or inpatient care and other alternatives for patients with insurmountable end-of-life care needs, including effective interactions with the palliative care services and community resources.
- Understand basic information about cost-effectiveness and know where to seek further information, including the broad array of types of third-party coverage and their particular requirements, as well as methods for appeal of denials of treatment and procedures.
- Apply principles of cost-benefit analysis to current aspects of diagnosis and treatment of cancer in the clinical trials setting, including the need to distinguish standard of care coverage from that which is provided by trial sponsors.
- Demonstrate awareness of clinical guidelines and the role of clinical trial results, including the FDA approval process and pre-approval expanded-access therapies for cancer.
- Advocate for quality patient care and optimal patient care systems within the context of the current health-care environment.

4. **Practice-Based Learning and Improvement**

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

5. **Professionalism,** including strict adherence to ethical principles.

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

6. **Interpersonal and Communication Skills**

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that demonstrates compassion, competence, and professionalism.
- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and advanced practice providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.

- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively-increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

CORE ROTATION – NON-MALIGNANT HEM CONSULT SERVICE at Harbor-UCLA Medical Center

This rotation-specific curriculum is to be used in conjunction with the general hematology/oncology core curriculum that contains the overall goals and objectives of the training program

Fellow levels: F1-F3

Location: Harbor-UCLA Medical Center

Duration: 2 4-week blocks over the 3 year fellowship period

Supervision: Attending assigned at HUCLA

Evaluation Methods: Direct observation, presentation to faculty, documentation in electronic medical record, interdisciplinary discussions.

Educational methods: Fellows learn through performing initial consultation, presentation to supervising faculty, teaching rounds with the participation of Harbor-UCLA fellows and house staff, self-study, and interaction with other members of the patient's care team, who may be from internal medicine or other specialties.

General Description: The Hematology consult service at Harbor-UCLA provides a unique experience not available at City of Hope, consisting of the opportunity to do hematology consultations across a broad variety of diagnoses in the inpatient and outpatient settings of a large county hospital system. Patients seen on the inpatient consult service may be primarily managed by surgery/surgical specialties, internal medicine/medical specialties, or other disciplines with primary care responsibilities for inpatients and outpatients in the Harbor-UCLA system.

EXPECTATIONS

FELLOWS are first assigned to perform consultations by the faculty member on the consult service upon request by the primary teams. The goal is to provide expertise in diagnostic and therapeutic aspects of the hematologic problem, along with thorough documentation of the consultation in the electronic medical record.

ATTENDING: The supervising attending is expected to provide daily clinical supervision, teaching, and mentorship to the fellow while on rotation for both in-patient and outpatient activities. He/she is expected to provide educational value to meet goals and objectives of the rotation, as set forth below. At the end of the rotation, the attending is expected to provide feedback to the fellow on his/her performance during the rotation as well as completing the required evaluations in the New Innovations system or on forms that will allow entry of the evaluative data into this system by the City of Hope program

coordinator.

For any concerning matters related to fellow performance (fatigue, impairment, stress, severe deficiencies in professionalism/patient care/medical knowledge, etc.), the attending is expected to notify and discuss these with the Program Director or associate program director as soon as able.

EDUCATIONAL GOALS AND OBJECTIVES:

1. <u>Patient Care</u>

Fellows learn to perform accurate and comprehensive medical interviews, physical examinations, review of laboratory and radiologic data, and procedural skills related to predominantly non- malignant hematology by serving on the inpatient consultation services at Harbor-UCLA Medical Center.

This rotation provides the City of Hope fellow predominantly non- malignant hematology problems including hemoglobinopathies such as sickle cell disease, cytopenias and proliferations, disorders of hemostasis leading to either bleeding or thrombosis, immune-hematologic problems, and inborn errors with hematologic consequences such as storage diseases and congenital marrow disorders.

For consults with some urgency, verbal communication between either the fellow or the faculty member and the requesting provider should also occur. Formal attending rounds will occur daily for presentation, education, feedback, and planning regarding each patient seen in consultation. Other trainees participating in this rotation will provide additional opportunities for information exchange and for fellows to teach residents and students.

Fellows will also attend Harbor-UCLA Medical Center hematology clinic, which is a weekly half-day clinic staffed by several faculty members. In this clinic, fellows will learn to evaluate and manage and variety of malignant and non-malignant hematologic disorders, including thrombosis, coagulopathies, hemoglobinopathies/thalassemias, immune cytopenias, myeloproliferative disorders, and complement disorders.

Milestones:

PC1, Accesses Data Sources to Synthesize Patient and Disease-specific Information Necessary for Clinical Assessment

PC3, Formulates the Management Plan

PC4, Adjusts Management Plans for Acute and Chronic Issues

PC5 (partial), Competence in Procedures—includes Use of Systemic Therapies through all Therapeutic Routes

2. Medical Knowledge

- The basic mechanisms that underly the normal functioning of the bone marrow, blood and related components and the principle of hematopathology assays and their interpretation.
- The evaluation and treatment of patients with anemia, thrombocytopenia, leukopenia, or any combination, including diagnostic laboratory and imaging evaluations
- The evaluation and treatment of patients with thrombocytosis, erythrocytosis and leukocytosis, including diagnostic laboratory and imaging evaluations.
- The evaluation and treatment of patients with disorders of hemostasis leading to either thrombosis or bleeding.
- Diagnosis and management of red blood cell disorders, including the management of pain and psychosocial aspects of hemoglobinopathies, particularly sickle cell anemia including principles of laboratory evaluation of these disorders.
- The use of various anticoagulants, length of treatment, surgical/procedural considerations, and management of their complications, including failure of anticoagulation.
- Principles and techniques of basic and advanced tests of thrombosis and hemostasis in normal and pathologic conditions.
- Integration of multidisciplinary and multifactorial elements of hematology with other medical conditions and their management.
- The impact of pregnancy and benign blood disorders on one another.
- The use of biological agents such as growth factors, as well as cytotoxic agents in the management of non-malignant hematologic disorders.
- Knowledge of the process of clinical trial enrollment and patient monitoring.

Milestones:

MK1 Non-Malignant Hematology (includes Pathophysiology, Diagnostics, Prognostic Information, and Treatment

3. Systems-Based Practice and Learning

Fellows are expected to use outside resources, and to effectively use systemic approaches to reduce errors and to improve patient care. This area is assessed by means of the following: (a) Fellows are expected to seek and read the pertinent medical literature regarding the patients for whom they provide consultation and to share the important literature with other

trainees, and this activity will be assessed by the attending physician and discussed at the weekly Division meetings; (b) The weekly Patient Care conference is prepared by the Fellow, who is responsible for providing all pertinent literature from outside sources, and for presenting this material so that the entire Division might learn any new aspects of the field under discussion.

Milestones:

SBP1, Patient Safety

SBP2, Quality Improvement

SBP3, System Navigation for Patient-Centered Care: Coordination and Transitions of Care

SBP4, System Navigation for Patient-Centered Care: Population Health

SBP5, Physician Role in Healthcare Systems

4. <u>Practice-Based Learning and Improvement</u>

This competency is directed at assuring that fellows are able to accurately assess their own abilities and identify ways to improve and expand them, with the expectation that upon graduation to full independence in practice, research and education, each individual will need to know his/her abilities and limitations, so that errors and misperceptions about skills, knowledge and competence are avoided.

All fellows, regardless of their year in training, need to develop and maintain good self-assessment and self-learning habits to meet the following goals:

- Demonstrate effective utilization of educational and evidence-based resources to seek answers to scientific and clinical questions.
- Gain knowledge of their deficiencies in knowledge or experience and opportunities for correction.
- Use evidence from the medical literature to answer clinical questions
- Learn how to critically review the medical literature and use the scientific data for enhancing personal knowledge and stay current on practice concepts
- Incorporate formative evaluation feedback into daily practice
- Use information technology to optimize learning

Milestones:

PBLI1, Evidence-based and Informed Practice

PBLI2, Reflective Practice and Commitment to Personal Growth

5. Professionalism

All levels of fellows are expected to:

- Demonstrate respect for patients, families/caregivers, other staff, and professionals, using compassionate methods of communication, avoiding discussion of other patients or disciplinary words except in private spaces and imposition of politics, religious beliefs or other personal opinions on patients or their families/caregivers.
- Adhere strictly to HIPAA and related requirements concerning privacy and ethical principles for standard of care and clinical trial therapies.
- Demonstrate empathy with the specific needs of patients, society, and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation
- Embrace the role of consultant for other specialties, including the courteous and professional communication of recommendations to the primary physician whether inside or outside of the City of Hope and making sincere efforts—while maintaining the patient's best interest for health and safety—to avoid the appearance of conflict with the patient's other physicians in the delivery of second opinions and consultations.
- Demonstrate effective communication skills with patients and their families with attention not just to the medical aspects of cancer care, but also to the psychological, social, and spiritual dimensions.

Milestones:

P1, Professional Behavior and Ethical Principles

P2, Accountability/Conscientiousness

P3, Fellow well-being

6. Interpersonal and Communication Skills

- Further development of skills learned in clerkships and medical residency that are essential to interact with patients and their families/caregivers in a manner that

demonstrates compassion, competence, and professionalism.

- Provision of education and supervision to all members of the patient's network, including families/caregivers, nursing staff and midlevel providers, residents rotating through the service, and other fellow-level trainees, including those in other departments.
- Participation in decision-making groups, including multidisciplinary conferences for patients with a variety of malignancies, and progressively increasing independence in carrying out the decisions made in these settings.
- Recognition of the need for, and leadership of, sensitive and honest end-of-life discussions with patients/caregivers when facing incurable malignancies.
- Refinement in peer-peer relationships and methods of handing off patient care responsibilities to assure maximum safety and continuity of care.
- Participation as part of a multidisciplinary team in caring for cancer patients and discuss issues related to risks and benefits of treatment as well as prognosis.
- Identification and appropriate utilization of consultants from other departments and specialties for optimal diagnostic and therapeutic procedures.
- Development of skills to effectively communicate with patients and their families with sensitivity to diversity, addressing patients/families/caregivers with a broad range of socioeconomic and cultural backgrounds.
- Interpersonal and communication skills should include competence in both verbal and written (including timely and comprehensive, yet concise, electronic documentation and communication) forms
- Application of all of these principles, when relevant, to the role of consultant for other providers' patients.

Milestones:

IPCS1, Patient- and Family-Centered Communication

IPCS2, Interprofessional and Team Communication

IPCS3, Communication within Healthcare System

Fellowship Policies

Please review the full description of our policies and procedures on the New Innovation site, GME website, or in the Policies and Procedures Handbook in the Fellows Lounge.

New Innovations - Home

Department – Graduate Medical Education

City of Hope Hematology and Oncology Fellowship Block Diagram

Hematology and Medical Oncology Fellowship Block Diagran

PGY-4	Block	1	2	3	4	5	6	7	8	9	10	11	12
	Institution	1	1	1	1	1	1	1	1	1	1	1	1
	Rotation Name	MedOnc Clinic	Trans Med	Heme Wards	Heme Wards	MedOnc Wards	Elective	Vaca	Heme Clinic	MedOnc Wards	MedOnc Clinic	Research	Elective
	% Outpatient	100	20	10	10	10	20	0	100	10	100	20	100
	% Research	0	0	0	0	0	0	0	0	0	0	80	0
PGY-5	Block	1	2	3	4	5	6	7	8	9	10	11	12
	Institution	1	1	1	1	1	1	1	1	1	1	1	1
	Rotation Name	Heme Wards	MedOnc Clinic	MedOnc Clinic	BMT Wards	MedOnc Clinic	Heme Clinic	Vaca	MedOnc Wards	Research	Research	Research	Research
	% Outpatient	10	100	100	10	100	100	0	10	20	20	20	20
	% Research	0	0	0	0	0	0	0	0	80	80	80	80
PGY-6	Block	1	2	3	4	5	6	7	8	9	10	11	12
	Institution	1	1	1	1	1	1	1	1	1	1	1	1
	Rotation Name	Research	Research	Research	Research	Research	Research	Vaca	Research	Research	Research	Research	Research
	% Outpatient	20	20	20	20	20	20	0	20	20	20	20	20
	% Research	80	80	80	80	80	80	0	80	80	80	80	80

Block Rotation Schedule KEY:

Institution 1: City of Hope Medical Center Duarte

MedOnc Clinic	Medical Oncology outpatient clinic
MedOnc Ward	Medical Oncology inpatient ward
Heme Clinic	Hematology outpatient clinic
Heme Ward	Hematology inpatient ward
BMT Ward	Bone Marrow Transplant inpatient ward
Trans Med	Transfusion medicine and hematopathology
Elective	Elective (supportive medicine, genomics, radiation oncology, surgical pathology)
Vacation	Vacation

City of Hope Hematology and Oncology Fellowship Core Didactic Series

Mondays @ 12:00 pm, virtual via MS Teams

DATE	TITLE	SPEAKER
Mondays @ 12-1 pm, location Via MS Teams		
July 12	What I Wish I Knew Before Starting Fellowship	Mina Sedrak
July 19	GWU Board Review on BMT	Forrest Stewart
July 26	Post-Solid Transplant Malignant Complications	Liana Nikolaenko
Aug 2	Post-Soled Transplant Hematologic Complications	Idoroenyi Amanam
Aug 9	Supportive Care Pain	Sorin Buga
Aug 16 R/S to 8/17	Supportive Care: Peripheral Neuropathy	Manisha Trivedi
Aug 23	Palliative Care Pain Mx	Christine Jun
Aug 30	Psychiatric Challenges of the Cancer Patient	Xiomara Rocha-Cadman
Sept 6	HOLIDAY	
Sept 13	Non-Metastatic Rectal Cancer	Afsaneh Barzi
Sept 20	Pancreaticobiliary Cancer	Vincent Chung
Sept 27	Colorectal Cancer	Marwan Fakih
Oct 4	Triple-Negative Breast Cancer	Yuan Yuan
Oct 11	Upper GI Tumors	Joseph Chao
Oct 18	Localized ER + Breast Cancer	Sayeh Lavasani
Oct 25	Metastatic ER + Breast Cancer	Daphne Stewart
Nov 1	Localized Triple Negative Breast Cancer	Niki Patel
Nov 8	Localized NSCLC	Jack West
Nov 15	Metastatic NSCLC	Erminia Massarelli
Nov 22	SCLC	Ravi Salgia
Nov 29	Adjuvant/Neoadjuvant Colon Cancer	Afsaneh Barzi
Dec 6	Value of Care	Afsaneh Barzi
Dec 13	Bladder Cancer	Yung Lyou
Dec 20	Metastatic Prostate Cancer	Tanya Dorff

Dec 27	Holiday	
Jan 3	Holiday	
Jan 10	Renal Cancer	Sumanta Pal
Jan 17	Localized Prostate Cancer	Tanya Dorff
Jan 24	CNS Malignancy	Jana Portnow
Jan 31	CLL	Tanya Siddiqi
Feb 7	Amyloidosis	Michael Rosenzweig
Feb 14	Lynch Syndrome	Gregory Idos
Feb 21	B-Cell Lymphoma High-Grade	Leslie Popplewell
Feb 28	T-Cell Lymphomas	Jasmine Zain
Mar 7	Myeloma	Nathwani
Mar 14	Aplastic Anemia Marrow Failure	Ryotaro Nakamura
Mar 21	Hodgkin Lymphoma	Mathew Mei
Mar 28	ASCO GU Update	Tanya Dorff
Apr 4	ALL	Ibrahim Aldoss
Apr 11	Management of Cancer Related Anemia	Benjamin Djulbegovic
Apr 18	HCT-Auto	Liana Nikolaenko
Apr 25	GVHD and Infectious Complications	Amandeep Salhotra
May 2	HCT-ALLO	Monzr M. Al Malki
May 9	GI	Dr. Lin
May 16	IR	Dr. Kessler
May 23	Telemedicine/Business of Med or Coast	Dr. West
May 30	HOLIDAY	
June 6		
June 13		
June 20	AYA@COH: From “Shook” to “Glowed Up”	Jeanelle Folbrecht

Hematology and Medical Oncology Fellows Didactics

Date	Topic
7/12	No Discussion (1st year fellows on wards)
7/19	No Discussion (1st year fellows on wards)
7/26	Dr. Zain Introduction to Bone Merrow Procedure
8/2	Dr. Ge Research Update
8/9	MedOnc Morning Report
8/16	Journal Club
8/23	MedOnc Morning Report
8/30	Board Review
9/6	**Holiday**
9/13	MedOnc Morning Report & Dr. Rainone Research Update
9/20	Journal Club
9/27	Board Review
10/4	Dr. Kasparian Research Update
10/11	MedOnc Morning Report
10/18	Journal Club
10/25	Board Review

Date	Topic
11/01	Dr. Muddasani Research Update
11/08	MedOnc Morning Report
11/15	Journal Club
11/22	MedOnc Morning Report
11/29	Board Review
12/06	Dr. Ramos-Perez Research Update
12/13	MedOnc Morning Report
12/20	Journal Club
12/27	Board Review
1/03/2022	Dr. Naghi Research Update
1/10	MedOnc Morning Report
1/17	Journal Club
1/24	MedOnc Morning Report
1/31	Board Review
2/7	Dr. Chawla Research Update
2/14	MedOnc Morning Report
2/21	Journal Club

Date	Topic
2/28	Board Review
3/7	Dr. Ji Research Update
3/14	MedOnc Morning Report
3/21	Journal Club
3/28	Board Review
4/4	Dr. Rainone Research Update
4/11	MedOnc Morning Report
4/18	Journal Club
4/25	Board Review
5/2	Dr. Ge Research Update
5/9	MedOnc Morning Report
5/16	Journal Club
5/23	MedOnc Morning Report
5/30	Board Review
6/6	Dr. Kasparian Research Update
6/13	MedOnc Morning Report
6/20	Journal Club

Date	Topic
6/27	Board Review

Board Review

- ASCO Comprehensive Assessment, MDA Board Review Video, and Hemonc Q-bank.

Case Conference

- Case based discussion and a deep dive into a topic of your choice. If no case than that is fine too but the topic should be detailed Expecting a 45-50 minute talk.

Research Update

- Formal research presentation on topic of your choice, should ideally be update on current project. Invite research mentors and any relevant faculty. Prepare to answer questions about project as well as methodology.

Educational Conferences

Activity	Day	Time
Hematology and Medical Oncology Formal Didactics	Monday Weekly	12:00 to 1:00 pm
Hematology and Medical Oncology Board Review	Monday Weekly	4:00 to 5:00 pm
Schwartz Rounds	Tuesday (6 per year)	12:00 to 1:00 pm
Melanoma T.B.	Monday 2nd & 4th	8:00 to 9:00 am
Genomic T.B.	Monday, Wednesday & Thursday	11:00 to 12:00 pm
Colorectal Cancer T.B.	Monday Weekly	12:00 to 1:00 pm
H&N T.B.	Monday Weekly	5:00 to 6:00 pm
Medicine Grand Rounds	Tuesday 4th	12:00 to 1:00 pm
Hospice & Palliative Med. Didactic Series	Tuesday & Thursday	12:00 to 1:00 pm
Multidisciplinary/GU Prostate T.B.	Tuesday 2nd 4th	5:00 to 6:00 pm
Medical Oncology Chair Fellow Meeting	Tuesday 1st	5:00-6:00 pm
GYN ONC. T.B.	Wednesday Weekly	8:00 to 9:00 am
Transplantation Disease Team	Wednesday Weekly	8:00 to 9:00 am
Cutaneous Lymphoma T.B.	Wednesday Weekly	8:00 to 9:00 am
Neuro Endocrine T.B.	Wednesday Weekly	12:00 to 1:00 pm
Breast Cancer T. B.	Wednesday Weekly	12:00 to 1:00 pm
MM Patient Review	Wednesday Weekly	1:00 to 2:00 pm
Hematology New Patient Conference	Wednesday Weekly	3:00 to 4:00 pm
Med Onc Faculty Research Meeting	Thursday Weekly	12:00 to 1:00 pm
Upper GI (UGI or Liver) T.B.	Thursday Weekly	12:00 to 1:00 pm
Chest/Lung T.B.	Thursday Weekly	5:00 to 6:30 pm
Neuro-Oncology T.B.	Friday Weekly	8:15 to 9:15 am
Topics in Cancer Genomics Research	Friday Weekly	11:30 am to 12:30 pm
Hem/HCT Grand Rounds	Friday Weekly	12:00 to 1:00 pm
Lymphoma T.B.	Friday every other	1:30 to 2:30 pm
Leukemia T.B.	Friday every other	2:00 to 3:00 pm
GME Grand Rounds	4 Sessions	1 hour each

Hospital Directory

Department	Name	Extension
Clinical Locations	Clinic IA (ETC)	65200
	Clinic IB Hem	62799
	Clinic IC Hem	6322I
	Clinic ID (Hem/BMT Infusion)	62763
	Clinic 2A	62856
	Clinic 2B	627I0
	Clinic 2C	62857
	Clinic 2D	62805
	Clinic 3A Peds	64800
	Clinic 3B	63234
	Clinic 3C Infusion	64540
	Clinic 3D	63I97
	Donor Room	62286
	Amini Day Hospital	698I8
	EHA	6288I
	EHB	6889I
In House Paging:	Helford 3 East (ICU)	6264I
69000, then pgr #	Helford 3 West (Peds)	62627
Med Call Pgr: 5415	Helford 4 East	6279I
Nsg Spvr Pgr: 5400	Helford 4 West (Surg)	62359
Peds Call Pgr: 5407	Helford 5 East (Heme)	62396
Pharmacy Pgr: 5414	Helford 5 West (Heme)	62395
Surg Call Pgr: 5430	Helford 6 East (BMT)	62338
	Helford 6 West (BMT)	62337
DRs On Call Rooms	Operating Room	68I00
Med 3rd Floor-62301	Pre-Op	6I005
Peds 3rd Floor-62618	Recovery Room	68I55
Surg 4th Floor-62794	Pharmacy Outpatient	68303
	Pharmacy Inpatient	65560
	4E Pharmacy	62746
	3E Pharmacy	62749
	3W Pharmacy	658I2
	EHC Pharmacy	89923
	EHB Pharmacy	63660
	EHA Pharmacy	6294I
Department	Case Management	63726
	Child Life Services	63335
Patient Coordination	Clinical Social Services	62282
	Diabetic Teaching	62689
	Dietitian's Office	62I08
	Guest Services (Helford)	6II43
	Guest Services (Main Medical)	62234
	Hope Village Office	62380
	Information Tech Serv	63244
	New Patient Services	62292
	Patient Advocate	62285
	Patient Education	62682
	Positive Image Center	63842
	Rehabilitation	624I2
	Respiratory Therapy (62378)	62274
	Sheri & Les Biller Resource Center	32273
	Spiritual Care Services	63898
	Volunteer Services	62424
Information/Help	Benefits	62228
Security -82006	Catering	62255
6-HELP-64357	CIS/Informatics	64357
	Compliance	64025
	Continuing Med Ed	65626
	Corporate Accounting	68I02
	Creative Services	62447
	Employee Health	627I3
	Engineering/Maintenance	6226I
	Environmental Services/Housekeeping	62255
	General Counsel	64278
	HIMS/Medical Records (option 3)	62444
Department	**Name**	**Extension**
Information/Help	Human Resources	622I6
	Library	62203
	Mail Room	62233
	Maintenance	6226I
	Medical Staff	62706
	Payroll	62707
	Print Shop (Victor)	62I58
	Quality, Risk, & Rec Mgmt	6220I
	Security/Tram	62006
	Transcription	62440
Medical Divisions	Anesthesiology	6265I
	BMT Office	6269I
	Cancer Center Office	62238
	Cancer Registry	62663
	Cardiology	6249I
	Clinical Pathology	62775
	Diabetes	6225I
	Gastroenterology	62570
	Gynecology	62656
	Hematology	62405
	Hospital Medicine	62774
	Immunology	6260I
	Infectious Diseases	62202
	Medical Oncology	62307
	Molecular Medicine	64245
	Neurology	62859
	Neurosurgery	6451I6
	Pediatrics	6261I3
	Psychiatry/Psychology	6874I
	Pulmonary/Critical Care Medicine	6277I
	Radiation Oncology	62967
	Supportive Medicine (Palliative Pain)	6399I
	Surgery	67II0
	Transfusion Medicine	62744
	Urology	62655
Laboratory	Blood Bank	62770
	Chemistry Lab	62308
	Histopathology	63576
	Cytogenetics	6283I
	Cytology	6281I3
	Hematology	62679
	Microbiology	62777
	Specimen Processing	62308
	Sterile Processing	63525
Radiology/Diagnostics	Blood Bank	62770
	Chemistry Lab	62308
	CT Scan	6I487
	Cytogenetics	6283I
	Cytology	6281I3
	EEG/EMG/Audiogram	62240
	EKG	62236
	Histopathology	63576
	HLA	62694
	Microbiology Lab	62777
	MRI	6I470
	Nuclear Medicine	62377
	PICC Line	61992
	Specimen Processing	62308
	Sterile Processing	63525
	Ultrasound	6I476

Important Links

Graduate Medical Program

Department – Graduate Medical Education

- GME Hotline
- Residency and Fellowship Programs
- New Innovations-Trainee Verification
- Program Directors& Coordinators Resources
- GME Policies and Procedures
- Helpful Links & Resources
    1. ACGME, Accreditation Council for Graduate Medical Education
    2. DEA, Drug Enforcement Agency
    3. ECFMG, Educational Commission for Foreign Medical Graduates
    4. MEDICAL Board of California
    5. NRMP, National Resident Matching Program
    6. PUBMED
    7. VPN, Virtual Private Network
    8. ERAS, Electronic Residency Application Service
    9. AHME, Association for Hospital Medical Education
    10. IHI, Institute for Healthcare Improvement
    11. NPI, TAGME, National Provider Identifier
    12. AMA, American Medical Association
    13. AMA/AAMC/LCME, Directory of Medical Schools
    14. ABMS, American Board of Medical Specialties
    15. ECFMG, Educational Commission for Foreign Medical Graduates
    16. NRMP, National Resident Matching Program
    17. ACGME, Program Directors "Virtual Handbook"
    18. ACGME, Program Directors and Coordinator
    19. ADS, Accreditation Data System
- Graduate Medical Education Committee (GMEC)
- Required Training
- Well-Being Resources
- Resident & Fellow Scholarly Activity

City of Hope Internet

iHope - City Of Hope Intranet

Controlled Substance Utilization, Review and Evaluation System (CURES) and controlled substance Prescriptions

https://www.pharmacy.ca.gov/licensees/cures.shtml

American Society of Clinical Oncology

https://www.asco.org/

ASH Academy

ASH Self-Assessment Program (ASH-SAP)

COVID-19 (CORONAVIRUS)

https://cityofhope--c.na118.visual.force.com/apex/DepartmentPortal?id=a6G3o000001UJQ2EAO

Payroll Calendar

City of Hope 2021 PAYROLL CALENDAR

	Pay Period Begin Date		Pay Period End Date	ok	Approve Time Cards	$	Pay Date

JANUARY

Su	Mo	Tu	We	Th	Fr	Sa
					$	2
3	ok	5	6	7	$	9
10	11	12	13	14	15	16
17	ok	19	20	21	$	23
24	25	26	27	28	29	30
31						

New Years 01/01/21

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
	ok	2	3	4	$	6
7	8	9	10	11	12	13
14	ok	16	17	18	$	20
21	22	23	24	25	26	27
28						

MARCH

Su	Mo	Tu	We	Th	Fr	Sa
	ok	2	3	4	$	6
7	8	9	10	11	12	13
*14	ok	16	17	18	$	20
21	22	23	24	25	26	27
28	ok	30	31			

* Daylight Saving Time Begins

APRIL

Su	Mo	Tu	We	Th	Fr	Sa
				1	$	3
4	5	6	7	8	9	10
11	ok	13	14	15	$	17
18	19	20	21	22	23	24
25	ok	27	28	29	$	

MAY

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	ok	11	12	13	$	15
16	17	18	19	20	21	22
23	ok	25	26	27	$	29
30						

Memorial Day 05/31/21

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	ok	8	9	10	$	12
13	14	15	16	17	18	19
20	ok	22	23	24	$	26
27	28	29	30			

JULY

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4		ok	7	8	$	10
11	12	13	14	15	16	17
18	ok	20	21	22	$	24
25	26	27	28	29	30	31

Independence Day Observed 07/05/21
Independence Day 07/04/21

AUGUST

Su	Mo	Tu	We	Th	Fr	Sa
1	ok	3	4	5	$	7
8	9	10	11	12	13	14
15	ok	17	18	19	$	21
22	23	24	25	26	27	28
29	ok	31				

SEPTEMBER

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	$	4
5		7	8	9	10	11
12	ok	14	15	16	$	18
19	20	21	22	23	24	25
26	ok	28	29	30		

Labor Day 09/06/21

OCTOBER

Su	Mo	Tu	We	Th	Fr	Sa
					$	2
3	4	5	6	7	8	9
10	ok	12	13	14	$	16
17	18	19	20	21	22	23
24	ok	26	27	28	$	30
31						

NOVEMBER

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
*7	ok	9	10	11	$	13
14	15	16	17	18	19	20
21	ok	23	24		$	27
28	29	30				

Thanksgiving Day 11/25/21
* Daylight Saving Time Ends

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	ok	7	8	9	$	11
12	13	14	15	16	17	18
19	ok	21	22	$		25
26	27	28	29	30		

'Christmas Day' Observed 12/24/21
Christmas Day 12/25/21
'New Years Day' Observed 12/31/21
New Years Day 01/01/22

Clinical Social Work Service Coverage

DIVISION OF CLINICAL SOCIAL WORK | DEPARTMENT OF SUPPORTIVE CARE MEDICINE | SERVICE COVERAGE by PRIMARY PHYSICIAN
(Updated 11/17/20)

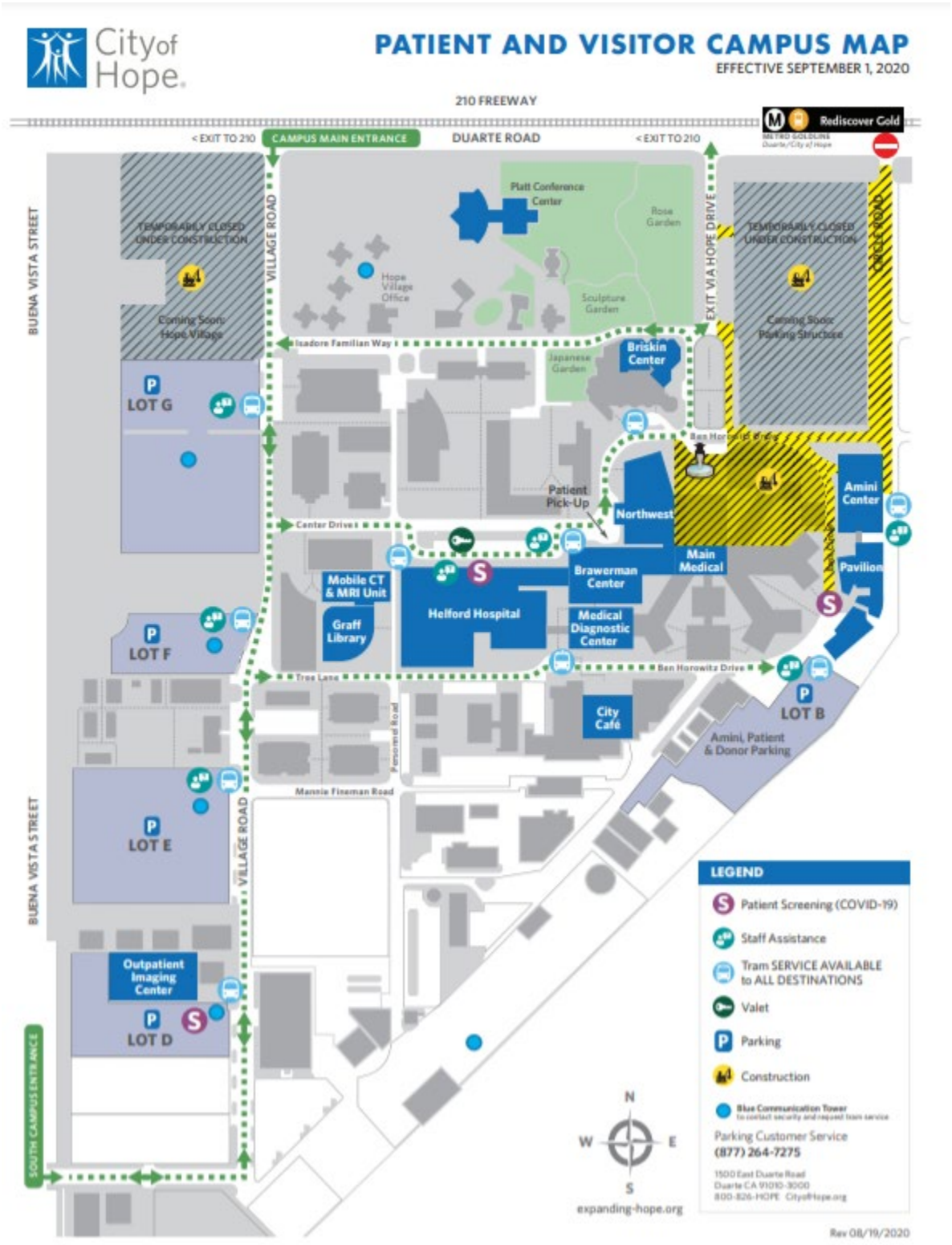
PRIMARY PHYSICIAN	CLINICAL SOCIAL WORKER	EXT	PAGER
HEMATOLOGY			
Aldoss, Khaled, Rosenzweig, Nade, Arslan, Koller	Michelle Rouse, LCSW	88402	5223
Al Malki, Sandhu, Smith, Marcucci, Otokesh, Stein	Christine Rodriguez, MSW	89938	5593
Karanes, Htut, Siddiqi, Krishnan, Nathwani, Shouse	Ying Moua, LCSW	82504	0111
Herrera, Querfeld, Rosen, Zain, Nikolaenko, Popplewell, Danalov, Budde	Estella Barrios, LCSW	89096	0330
Alvarnas, Forman, Kwak, P. Lee, Levine, Snyder, Mei, Pullarkat, Ali, Curtin	Nicole D'Souza, MSW	88400	5182
(Team 6) KAISER: Cai, Cao, Farol, Kogut, Sahebi, Spielberger, Mansour	Rachael Hanaya, MSW	88414	5677
Salhotra, Nakamura, Artz, Aribi, Ball, Amanam	Madeline Santoyo, MSW	82523	0122
Pre HCT-Assessments	Rupinder Sidhu, LCSW	88404	5939
Family Meeting Program	Marinel Olivares, LCSW	82124	0132
GVHD Clinic	Nicole Peeke, LCSW	80775	0075
Lymphoma/Myeloma Psychosocial Coordinator	Ying Moua, LCSW	82504	0111
Leukemia 1 Psychosocial Coordinator	Madeline Santoyo, MSW	82523	0122
Leukemia 2 Psychosocial Coordinator	Terence Hung, LCSW	85278	0296
Leukemia 3 + 4 Psychosocial Coordinator	Rachael Hanaya, MSW	88414	5677

SURGERY	MEDICAL ONCOLOGY	CLINICAL SOCIAL WORKER	EXT	PAGER
Badie, M. Chen, Jandial, Feldman	Portnow, Margolin, V. Chung	Victoria Ramirez, LCSW	83787	5975
Fong, Singh, Sentovich, Lai, Woo, Paz, Schoellhammer, Raoof, S. Warner, Kaiser	Fakih, Daneng Li, Lim, McDonell, Barzi	Jorene Kalaw, MSW	89113	5663
Maghami, Kang, Gernon,	J. Chao, Massarelli (H&N), Agulnik	Bernie White, MSW	87354	5934
Jae Kim, Erhunmwunee, Raz	Salgia, Massarelli (Lung), West, Pathak	***Call CSW Office***	82282	5018
Femino, Zuckerman, Trisal, K.+ L. Melstrom	W. Chow, Koczywas, Agulnik (Sarcoma)	Lauren Grabowski, MSW	80656	2470
K. Chan, Hannoun (INPT), Lau, J. Warner (INPT), Yamzon, Yuh, Zhumkhawala (INPT), Bertram Yuh	Pal, Cy Stein, Dorff, Lyou	Katie Cunningham, MSW	85076	5018
	Yan Xing	Alejandra Muro, LCSW	82015	6072
		Blanca Rivas (M, T, Th, F 11-4)	88403	0322

WOMEN'S CANCER PROGRAM							
Breast (Oncology)	Breast (Surgery)	Breast (Plastics)	Gyn (Oncology	Gyn (Surgery)	CLINICAL SOCIAL WORKER	EXT	Pager
Mortimer Tank-Patel	Kruper	Anderson		Rodriguez	Ruby Banuelos, LCSW	83479	0170
Sedrak Waisman	Yee Yim	Tan		Delinger S.Lee	Jenny Lu, LCSW	88407	5403
Lavasani Hill	Jones Polverini	W. Li	Cristea Wang	Han Wakabayashi	Andrea Bubbert, LCSW	81202	0249
Stewart Yuan	Rand Taylor Schulz-Costello	Chang	Stewart	Chung	Leah Hamel, LCSW	85915	6063
Oncology Counselor					Lisa Donley, LMFT	88049	0394
SOCARE Clinic			William Dale		Call CSW Office	82282	5018
Integrated Care Service			William Dale		Lucia Kinsey, LCSW	81795	0407
Clinical Caregiver Preparedness Program – Hematology Service					Rupinder Sidhu, LCSW	88404	5939
Couples Coping Together with Cancer Program					Kim Romig, LCSW Claudia Cuevas, MSW Lynne Thomas, MSW	84550 86180 88406	5221 5282 5188
Clinical Network Sites					John Brown, LCSW	81478	-
End of Life Option Act – EOLOA					Victoria Ramirez, LCSW Blanca Rivas, LCSW	83787 81278	5975 0322
Academic Advocacy Program					Joey Fredlund, LCSW	88125	6077
PEDIATRICS							
Armenian, Anderson **(PEDS)**, DiMundo, Femino **(PEDS)**, Karras, Pawlowska, Rosenthal, Shahani, Sato, Wang					Renee Joshi, LCSW Lucia Lemus, LCSW Amy Donner, LCSW Joey Fredlund, LCSW	81211 88401 82939 88125	5992 5882 6072 6077
MEDICAL SPECIALTIES							
ENDO: Chiu, Feng, Forouhar, Jain, Kandeel, Khosravi, Salehian, Samoa					Call CSW Office	82282	5018
PULMONARY: Dunst, Horak, A. Kim, Sandoval					Call CSW Office	82282	5018
RADONC: Y. Chen, Dandapani, D. Kim, Radany, Sampath, Vora, J. Wong, Amini, S. Glaser **CARDIO:** M. Tran, Ven, Yamada **NEUROLOGY:** Benjamin, Chilian, Prakash **GASTRO:** Lal, J. Lin, Idos **DERM:** Modi **INFECTIOUS DISEASE:** Dadwal, Dickter					Call CSW Office	82282	5018

DIRECTOR: Courtney Bitz, LCSW **Ext: 82125, Pager: 0133**	**MANAGER: Christina Cabanillas, LCSW** **Ext:82723, Pager 6290**	**DIVISION EXT: 82282** **FAX: 626.930.5331 (x85331)**

Duarte Campus Map



INDEX—BUILDING NUMBER

INDEX—BUILDING NAME