The Division of Hematology-Oncology includes more than 35 full-time faculty (physician-scientists), 20 full-time faculty who focus on basic science, and 75 faculty with part-time clinical appointments. Our faculty members are internationally recognized for their leadership in the prevention, detection, diagnosis, and treatment of cancer and benign hematologic conditions, and strive to improve their understanding of these diseases.

The Division maintains a strong commitment to research. In FY 2015, direct funding of Division faculty totaled over $12 million. Division faculty members also are dedicated to the education of Hematology-Oncology fellows, interns and residents, medical students, staff, and physician-colleagues. The three-year fellowship program continues to grow in terms of national recognition, and offers comprehensive training in patient care, weekly didactic lectures, journal club, writing group, tumor boards, and grand rounds.

The majority of clinical faculty members have dedicated outpatient practices at Hillman Cancer Center, located on the campus of UPMC Shadyside. In addition, five members of the Division treat patients at Magee-Womens Hospital of UPMC, the cornerstone of the Magee-Womens Breast Cancer Program.

**Mounzer Agha, MD**
*Visiting Research Associate Professor of Medicine*
*Clinical Director, Stem Cell Transplant Program*
*Program(s): Hematologic Malignancies, Leukemia, and Stem Cell Transplant*
*Board Certification: Hematology and Medical Oncology*
*Area of Specialty/Interests: Hematologic malignancies*

**Leonard Appleman, MD, PhD**
*Assistant Professor of Medicine*
*Program(s): Genitourinary Cancer and Phase I Clinical Trials*
*Board Certification: Medical Oncology*
*Area of Specialty/Interests: Genitourinary malignancies including bladder, kidney, prostate, and testis, and the development of novel therapeutics for kidney cancer, prostate cancer, and other malignancies*

**Nathan Bahary, MD, PhD**
*Associate Professor of Medicine*
*Program(s): Gastrointestinal Cancer*
*Board Certification: Medical Oncology*
*Area of Specialty/Interests: Identifying novel genes and pathways underlying normal gastrointestinal development and cancer to design rational molecularly based disease markers for early detection of gastrointestinal cancers and rational-directed therapies for their treatment*

**Julie Bauman, MD, MPH**
*Associate Professor of Medicine*
*Director, Head and Neck Cancer Section*
*Director, Thyroid Cancer Section*
*Co-Director, UPMC Head and Neck Cancer Center of Excellence*
*Program(s): Head and Neck Cancer, Thyroid Cancer*
*Board Certification: Medical Oncology*
*Area of Specialty/Interests: Treatment of head and neck cancer and thyroid cancer; the development of novel therapeutics and clinical trials for patients with head and neck or thyroid cancer*

**Sandra Blakowski, MD**
*Clinical Assistant Professor of Medicine*
*Program(s): VA Pittsburgh Healthcare*
*Board Certification: Hospice and Palliative Care and Internal Medicine*
*Area of Specialty/Interests: Palliative care, hospice, advance directives, and communication between patients and providers*

**Franklin Bontempo, MD**
*Associate Professor of Medicine*
*Program(s): Benign Hematology*
*Board Certification: Internal Medicine*
*Area of Specialty/Interests: Coagulation*
UPMC Division of Hematology-Oncology

Michael Boyiadzis, MD, MHSc
Associate Professor of Medicine
Program(s): Acute Leukemia
Board Certification: Hematology and oncology
Area of Specialty/Interests: Acute leukemia, development of novel therapies for acute leukemia, natural killer cell biology, immunotherapy, and hematopoietic stem cell transplantation

Edward Chu, MD
Professor of Medicine and Pharmacology & Chemical Biology
Chief, Division of Hematology-Oncology
Deputy Director, University of Pittsburgh Cancer Institute
Director, Hematology-Oncology Fellowship Program
Program(s): Gastrointestinal Cancer and Phase I Clinical Trials
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Treatment of colorectal and GI cancers and Phase I clinical trials

Adam Brufsky, MD, PhD, FACP
Professor of Medicine
Associate Division Chief, Division of Hematology-Oncology
Director, Clinical Investigations
Director, Academic Medical Oncology
Program(s): Breast Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Treatment of breast cancer, genomics and experimental therapeutics of metastatic breast cancer, and bone complications of cancer

Nancy Davidson, MD
Distinguished Professor of Medicine and Pharmacology & Chemical Biology
Hillman Professor of Oncology
Director, University of Pittsburgh Cancer Institute and UPMC CancerCenter
Associate Vice Chancellor for Cancer Research, University of Pittsburgh
Program(s): Breast Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Cancer biology, treatment, and policy with special interest in breast cancer

Melissa Burgess, MD
Assistant Professor of Medicine
Associate Program Director, Hematology-Oncology Fellowship
Program(s): Soft Tissue and Bone Sarcoma
Board Certification: Internal Medicine
Board Eligible: Medical Oncology and Hematology
Area of Specialty/Interests: Drug development and early phase clinical trials in soft tissue and bone sarcomas

Laura De Castro, MD
Associate Professor of Medicine
Clinical Chief, Benign Hematology
Program(s): Benign Hematology
Board Certification: Internal Medicine
Area of Specialty/Interests: Sickle cell disease

Kathleen Dorrmitie, MD
Assistant Professor of Medicine
Program(s): Hematologic Malignancies/BMT
Board Certification: Internal Medicine and Medical Oncology
Board Eligible: Hematology
Area of Specialty/Interests: Leukemia, lymphoma, myeloma, stem cell transplantation; the development of novel therapeutics for AML

Timothy Burns, MD, PhD
Assistant Professor of Medicine
Program(s): Lung Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Treatment of lung cancer with a special interest in patients with KRAS mutant non-small cell lung cancer
Jan Drappatz, MD
Associate Professor of Neurology and Medicine
Associate Director, Adult Neuro-Oncology Program
Program(s): Neuro-Oncology
Board Certification: Neurology and Neuro-Oncology
Area of Specialty/Interests: Treatment of primary and metastatic brain tumors and neurologic complications of cancer and early drug development

Rafic Farah, MD
Research Instructor of Medicine
Program(s): Stem Cell Transplant, Hematologic Malignancies
Board Certification: Medical Oncology and Internal Medicine
Area of Specialty/Interests: Allogeneic and autologous stem cell transplant and hematologic malignancies including lymphoma, leukemia, and myeloma

Lanie Francis, MD
Clinical Assistant Professor of Medicine
Associate Medical Director, Medical Oncology, UPMC International
Program(s): Breast Cancer
Board Certification: Hematology, Medical Oncology, and Internal Medicine
Area of Specialty/Interests: Breast cancer, benign hematology, pregnancy-related blood disorders, and integrative oncology

David Friedland, MD
Clinical Associate Professor of Medicine
Program(s): Genitourinary Cancer, Lung Cancer, and Sarcoma
Board Certification: Medical Oncology

Jing-Zhou Hou, MD, PhD
Clinical Assistant Professor of Medicine
Program(s): Hematologic Malignancies, Leukemia, and Stem Cell Transplant
Board Certification: Hematology and Internal Medicine
Area of Specialty/Interests: Hodgkin’s lymphoma, non-Hodgkin’s lymphomas, BMT, and hematologic malignancies

Annie Im, MD
Assistant Professor of Medicine
Associate Program Director, Hematology-Oncology Fellowship Program
Program(s): Hematologic Malignancies/BMT
Board Certification: Internal Medicine, Hematology, and Medical Oncology
Area of Specialty/Interests: Acute myeloid leukemia, stem cell transplantation, and graft-versus-host disease

Rachel Jankowitz, MD
Assistant Professor of Medicine
Program(s): Breast Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Breast cancer endocrine response and primary prevention, invasive lobular carcinoma

Gregory Kato, MD
Professor of Medicine
Director, Adult Sickle Cell Center of Excellence
Director, Vascular Medicine Institute/Institute for Transfusion Medicine Sickle Cell Center of Excellence
Program(s): Benign Hematology
Board Certification: Hematology
Area of Specialty/Interests: Anemia (acquired and hereditary), erythrocytosis, iron overload or deficiency, non-malignant white blood cell or platelet disorders, histiocytosis, hemophagocytic disorders, coagulation disorders or thrombosis

John Kirkwood, MD
Usher Professor of Medicine, Dermatology and Translational Science
Co-Leader, Melanoma Program
Program(s): Melanoma
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Immunology and melanoma advanced disease therapy, adjuvant therapy and prevention
UPMC DIVISION OF HEMATOLOGY-ONCOLOGY

Joseph Kiss, MD
Associate Professor of Medicine
Program(s): Benign Hematology
Board Certification: Blood Banking and Transfusion Medicine, Internal Medicine, Hematology, and Medical Oncology
Area of Specialty/Interests: Thrombotic thrombocytopenic purpura (TTP) and other thrombotic microangiopathies, apheresis, iron deficiency, and research in transfusion medicine

Frank Lieberman, MD
Professor of Neurology, Neurosurgery, and Medicine
Director, Adult Neuro-Oncology Program
Program(s): Neuro-oncology
Board Certification: Neurology
Area of Specialty/Interests: Treatment of brain tumors, brain, spinal, and leptomeningeal metastasis, and the neurologic complications of cancer and its therapy, quantitative imaging of tumor response, immunotherapy and molecularly targeted therapeutics for gliomas

John Lech, DO
Clinical Assistant Professor of Medicine
Program(s): Gastrointestinal Cancer
Board Certification: Hematology, Medical Oncology, and Internal Medicine
Area of Specialty/Interests: Gastrointestinal malignancies and peritoneal carcinomas

Seah H. Lim, MD, PhD, FRCPath
Clinical Professor of Medicine
Program(s): Hematologic Malignancies, BMT
Board Certification: Internal Medicine and Hematology
Area of Specialty/Interests: Stem cell transplantation, hematological malignancies, hemato-pathology, general hematology

Andrew Liman, MD
Clinical Assistant Professor of Medicine
Program(s): VA Pittsburgh Healthcare System
Board Certification: Internal Medicine, Medical Oncology, Hematology
Area of Specialty/Interests: Head and neck cancer, GU cancer, oncology clinical trials

James Lee, MD, PhD
Assistant Professor of Medicine
Program(s): Gastrointestinal Cancer and Phase I Clinical Trials
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Phase I clinical trials of new cancer drugs and the treatment of gastrointestinal cancers, especially colon cancer, rectal cancer, and liver cancer and the development of new cancer drugs

Barry Lembersky, MD
Clinical Professor of Medicine
Associate Director, Medical Affairs of NSABP
Program(s): Breast Cancer and Gastrointestinal Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: Clinical trials in breast, colorectal, and pancreatic cancers and palliative/hospice management

Carissa A. Low, PhD
Assistant Professor of Medicine and Psychology
Program(s): Biobehavioral Medicine in Oncology
Area of Specialty/Interests: Inflammatory biomarkers, stress and coping, symptom management
UPMC DIVISION OF HEMATOLOGY-ONCOLOGY

Stanley Marks, MD
Chairman, UPMC CancerCenter
Director of Clinical Services and
Chief Medical Officer, UPMC CancerCenter
Chief, Division of Hematology-Oncology,
UPMC Shadyside
Clinical Professor of Medicine
Program(s): Benign Hematology,
Hematologic Malignancies,
and Breast Cancer
Board Certification: Hematology
Area of Specialty/Interests: Lymphoma and
breast cancer

Enrico Novelli, MD
Assistant Professor of Medicine
Medical Director, Sickle Cell Disease Program
Program(s): Benign Hematology
Board Certification: Hematology
Area of Specialty/Interests: Hemoglobinopathies, including sickle cell
disease, and tropical hematology

James Ohr, DO
Clinical Assistant Professor of Medicine
Program(s): Esophageal Cancer,
Gastrointestinal Cancer, and Head and
Neck Cancer
Board Certification: Hematology, Internal
Medicine, and Medical Oncology
Area of Specialty/Interests: Gastrointestinal
malignancies, peritoneal carcinomas, and
head and neck malignancies

Rahul Parikh, MD, PhD
Assistant Professor of Medicine
Program(s): Genitourinary Malignancies
Board Certification: Internal Medicine and
Medical Oncology
Area of Specialty/Interests: Treatment of
genitourinary malignancies with a focus on
prostate and bladder cancer; the role of DNA
damage pathways and repair in malignancies

Vida Passero, MD
Associate Program Director,
Hematology-Oncology Fellowship
Clinical Assistant Professor of Medicine
Board Certification: Hematology, Internal
Medicine, and Medical Oncology
Area of Specialty/Interests: Gastrointestinal
cancer, colorectal cancer, and education
and systems wide quality improvements
in oncology

Kevin Patterson, MD
Assistant Professor of Psychiatry and Medicine
Director, Psycho-Oncology Section
Program(s): Biobehavioral Medicine in Oncology
Area of Specialty/Interests: Psycho-oncology
interventions and interactions

Daniel Petro, MD
Clinical Assistant Professor of Medicine
Program(s): Esophageal Cancer, Lung Cancer,
and Phase I Clinical Trials
Board Certification: Hematology, Medical
Oncology, and Internal Medicine
Area of Specialty/Interests: Multidisciplinary
approach to thoracic malignancies,
Phase 1 trials

Donna Posluszny, PhD
Assistant Professor of Medicine
Program(s): Biobehavioral Medicine in Oncology
Board Certification: Clinical Health Psychology
Area of Specialty/Interests: Adherence
to medical regimens, patient and family
caregiver coping, and psychosocial
adjustment to stem cell transplantation
and to a new cancer diagnosis

Shannon Puhalla, MD
Assistant Professor of Medicine
Program(s): Breast Cancer and Phase I
Clinical Trials
Board Certification: Internal Medicine and
Medical Oncology
Area of Specialty/Interests: Early phase
clinical trials in breast cancer and drug
development
Margaret Ragni, MD, MPH
Professor of Medicine and Clinical Translational Research
Director, Hemophilia Center of Western Pennsylvania
Program(s): Benign Hematology
Area of Specialty/Interests: Hemostasis and Thrombosis

Craig Seaman, MD
Assistant Professor of Medicine
Program(s): Benign Hematology
Board Certification: Internal Medicine
Board Eligible: Hematology and Medical Oncology
Area of Specialty/Interests: Hemostasis and thrombosis

Anastasios Raptis, MD, PhD
Clinical Associate Professor of Medicine
Program(s): Hematologic Malignancies
Board Certification: Hematology
Area of Specialty/Interests: Hematological malignancies, leukemia, myelodysplastic syndrome, Hodgkin’s and non-Hodgkin’s lymphoma, and multiple myeloma

Alison Sehgal, MD
Assistant Professor of Medicine
Program(s): Hematologic Malignancies/BMT
Board Certification: Internal Medicine, Medical Oncology, and Hematology
Area of Specialty/Interests: allogeneic and autologous stem cell transplant, lymphoma, leukemia, multiple myeloma, and drug development in hematologic malignancies

Priya Rastogi, MD
Associate Professor of Medicine
Senior Associate Medical Director, Medical Affairs of NSABP
Program(s): Breast Cancer
Board Certification: Medical Oncology
Area of Specialty/Interests: Clinical trials in breast cancer

Roy Smith, MD
Professor of Medicine
Program(s): Benign Hematology
Board Certification: Hematology, Internal Medicine, and Medical Oncology
Area of Specialty/Interests: Hematological disorders, bleeding and thrombotic disorders

Robert Redner, MD
Professor of Medicine
Program(s): Leukemia, Hematologic Malignancies, and Benign Hematology
Board Certification: Hematology, Internal Medicine, and Medical Oncology
Area of Specialty/Interests: Molecular biology of acute promyelocytic leukemia, malignant and non-malignant hematology

Mark Socinski, MD
Professor of Medicine and Cardiothoracic Surgery
Co-Director, UPMC Lung Cancer Center of Excellence
Director, Lung Cancer Disease Section
Program(s): Lung Cancer
Board Certification: Internal Medicine and Medical Oncology
Area of Specialty/Interests: All thoracic malignancies, including small cell and non-small cell lung cancers and mesothelioma

John Rhee, MD
Clinical Assistant Professor of Medicine
Program(s): Gastrointestinal Cancer and Phase I Clinical Trials
Board Certification: Medical Oncology, Hematology, and Internal Medicine
Area of Specialty/Interests: Colorectal, esophageal, gastric, peritoneal, pancreaticobiliary, liver, neuroendocrine, and lung tumors
Hussein Tawbi, MD, PhD
Associate Professor of Medicine,
Clinical and Translational Science
Leader, Sarcoma Program
Director, UPCI Clinical Translational Research Center
Program(s): Melanoma, Sarcoma, and Phase I

Area of Specialty/Interests: Chemotherapy and targeted therapy resistance in metastatic melanoma, epigenetics, drug development, and early phase clinical trials in melanoma and sarcoma

Gijsberta van Londen, MD, MS
Assistant Professor of Medicine
Program(s): Cancer Survivorship

Area of Specialty/Interests: Geriatric oncology and cancer survivorship

Liza Villaruz, MD
Assistant Professor of Medicine
Program(s): Lung Cancer

Area of Specialty/Interests: Lung cancer and thoracic malignances

Donald Woytowitz, MD
Clinical Assistant Professor of Medicine
Program(s): Hematology

Area of Specialty/Interests: Myelodysplasia, myeloproliferative disorders, unusual hematopoietic conditions, and lymphoproliferative disorders

Hassane Zarour, MD
Professor of Medicine,
Immunology and Dermatology
Program(s): Melanoma

Area of Specialty/Interests: Pigmented lesions, skin cancers, and melanoma vaccines
RESEARCH FACULTY

Jan Beumer, PharmD, PhD  
Associate Professor of Pharmaceutical Sciences and Medicine  
**Area of Specialty/Interests:** Preclinical and clinical pharmacology, pharmacokinetics, metabolism, drug development, and early phase clinical trials

Lisa Butterfield, PhD  
Professor of Medicine, Surgery, and Immunology  
Director, UPCI Immunologic Monitoring and Cellular Products Laboratory  
**Area of Specialty/Interests:** Tumor immunology, melanoma, hepatocellular cancer, dendritic cells, tumor antigens, immunotherapy

Albert Donnenberg, PhD  
Professor of Medicine  
Professor of Infectious Disease and Microbiology  
Director, UPMC Hematopoietic Stem Cell Laboratories  
Director, UPCI Flow Cytometry Facility  
**Area of Specialty/Interests:** Hematopoietic stem cell transplantation, stem cell biology and therapy, immune reconstitution, cancer cell biology, flow cytometry

Julien Fourcade, PharmD, PhD  
Research Instructor in Medicine  
**Area of Specialty/Interests:** Cancer immunology immunotherapy

Deborah Galson, PhD  
Research Assistant Professor of Medicine  
**Area of Specialty/Interests:** Signal transduction and transcription factors regulating osteoclast and osteoblast differentiation, with a focus on Paget’s disease and multiple myeloma bone disease

Samit Ghosh, PhD  
Research Assistant Professor of Medicine  
**Area of Specialty/Interests:** Sickle cell disease, acute chest syndrome, endothelial cell biology, inflammation, cytoprotection

James Herman, MD  
Professor of Medicine  
Co-Leader, UPCI Lung Cancer Program  
**Area of Specialty/Interests:** Epigenetic changes in cancer, lung cancer progression and early detection, esophageal cancer, early detection of lung cancer, predictive and prognostic biomarkers

Daniel Johnson, PhD  
Professor of Medicine and Pharmacology  
**Area of Specialty/Interests:** Molecular oncology, mechanisms of apoptosis, signal transduction, myeloid differentiation, drug development

Byeong-Chel Lee, PhD  
Assistant Professor of Medicine  
**Area of Specialty/Interests:** Hematopoietic stem cell senescence, breast cancer metastasis, cancer stem cells

Vera Levina, PhD  
Research Assistant Professor of Medicine  
**Area of Specialty/Interests:** Cancer cell cytokine network, cancer stem cells, lung and ovarian cancers
RESEARCH FACULTY

Anna E. Lokshin, PhD
Professor of Medicine, Pathology, and Ob/Gyn Reproductive Sciences
Director, Luminex Core Facility
Area of Specialty/Interests: Biomarkers for cancer diagnostics and early detection, biomarkers for cancer therapy monitoring, chemotherapy and stem cells response, apoptosis, signal transduction, and angiogenesis

Malabika Sen, PhD
Research Assistant Professor
Area of Specialty/Interests: Cancer biology, epigenetics, signal transduction, cancer therapeutics/chemoprevention

Warren D. Shlomchik, MD
Professor of Medicine
Area of Specialty/Interests: Understanding the complex immunology of allogeneic hematopoietic stem cell transplantation

Richard Steinman, MD, PhD
Associate Professor of Medicine and Pharmacology
Area of Specialty/Interests: Tumor microenvironment and carcinogenesis

Quanhong Sun, PhD
Research Instructor of Medicine
Area of Specialty/Interests: Paget’s Disease of bone and regulation of osteoclast differentiation

Darcy Thull, MS
Instructor of Medicine
Certified Genetic Counselor
Area of Specialty/Interests: Hereditary cancer predisposition

Lazar Vujanovic, PhD
Research Instructor of Medicine
Area of Specialty/Interests: Cancer vaccines, immunotherapy, dendritic cell biology, natural killer cell biology