

## APPROVED NIH MENTORS

### PAUL CALABRESI K12 CLINICAL ONCOLOGY PROGRAM MENTORS

---

**Ramsey Badawi, PhD** is Professor of Radiology and Biomedical Engineering, Chief of the Division of Nuclear Medicine and Vice Chair for Research, Department of Radiology. He has been involved in the field of medical imaging for more than 25 years. Dr. Badawi's research has involved the development of new imaging devices and data processing techniques, primarily for Positron Emission Tomography (PET). With extensive experience in the use of imaging in clinical trials he has been involved in image processing for PET, MRI and CT since the early 1990s. His main focus at this time is in combined PET/CT instrumentation, with additional emphasis in image processing and quantitative methods.

**Richard Bold, MD** is Professor of Surgery and Chief of the Division of Surgical Oncology. He is a clinician and a translational researcher, and holds the Isabelle McDonald Endowed Chair in Cancer Research. He has research interests in pancreatic cancer and the implementation of novel techniques for pre- and intra-operative management of pancreatic and breast cancer. He is PI for ACOSOG. Dr. Bold is a mentor in the BIRCWH K12.

**John Boone, PhD** is Professor and Vice Chair of Radiology as well as Professor in the Department of Biomedical Engineering. He is a medical physicist specializing in CT and breast imaging research. He has developed several generations of dedicated breast CT scanners that can collect fully 3D data from the breast and has been conducting extensive trials of these systems. Dr. Boone is also active in reconstruction algorithms for CT and PET, development of image-quality assessment, and radiation-dose computation techniques. Dr. Boone is a mentor in the T32 in Engineering Approaches to Molecular Imaging.

**Xinbin Chen, PhD** is Professor and Director of Veterinary Oncology in the School of Veterinary Medicine, Co-Leader of the Comparative Oncology Program at the UC DCCC, and Director of the Center for Comparative Oncology. He investigates the role of p53 and other genes in tumor growth to develop more effective cancer treatments for people and their pets. Dr. Chen is a faculty trainer in the Comparative Lung Biology T32, Oncogenic Signals T32, Comparative Medical Science Training Program, Advanced Training in Environmental Health Sciences T32, Pharmacology Training T32, and Students Training in Advanced Research T35 programs.

**Simon Cherry, PhD** is Professor of Biomedical Engineering and Director of the Center for Molecular and Genomic Imaging. His research focuses on developing molecular imaging technology, including microPET, hyperspectral fluorescence tomography, microPET/CT, microPET/MRI, SPECT, novel photon detectors; quantitative molecular imaging methods; and applications of imaging technology in small animal and non-human primate models of disease. Dr. Cherry is on the Executive Committee of the CIRM Stem Cell Training Program and a trainer in the Basic and Translational Cardiovascular Science T32, Engineering Approaches to Molecular Imaging T32, CIRM Stem Cell, and Neuroscience of Cognitive Aging T32 Training Program.

**Ralph de Vere White, MD** is Professor of Urology, Director of the UC DCCC, and Associate Dean of Cancer Programs. He founded the Genitourinary Tumor Biology Committee of SWOG and led the specimen repository for the Prostate Cancer Prevention Trial. His research covers the research spectrum from basic to translation to clinical science. In prostate cancer, he focuses on p53 and castration resistance; in urothelial cancer, he focuses on predicting response to therapies, with an emphasis on using the PDX platform. He is on the Executive Committees of the CIRM Stem Cell Training Program and the Oncogenic Signals and Chromosome Biology T32 Training Program. He is a mentor for the Oncogenic Signals & Chromosome Biology T32. (NOTE: Dr. de Vere White retired in July 2016)

**Christopher Evans, MD** is Professor and Chair of Urology and co-leader of the UC DCCC Prostate Cancer Program. He is a urologic oncologist with research interests focused on prostate cancer; specifically, mechanisms signaling the androgen receptor to activate prostate cancer growth and progression following castration. His laboratory work has tested new agents and brought them from bench studies to animal models to Phase I-II clinical trials.

**Katherine W. Ferrara, PhD**, Professor of Biomedical Engineering, Professional focus is image-guided drug and gene delivery. She is engaged in the design of imaging devices, molecularly-targeted imaging probes and engineered delivery vehicles, drawing upon her education in biology and imaging physics and more than 20 years of experience with the synthesis of lipid particles. Her laboratory has unique resources for and substantial experience in synthetic chemistry and ultrasound, CT, MR and PET imaging. Having served as the founding chair of the Department of Biomedical Engineering at UC Davis, now a department of 32 faculty members. Over a period of six years, she developed the departmental educational programs, hired 13 faculty members and funded and developed the facilities before stepping down to focus on my research program. She is a Distinguished Professor of Biomedical Engineering at UC Davis, a member of the National Academy of Engineering and a fellow of five societies spanning physics, biomedical and electrical engineering. Her publications are indexed by ferrara k\* and include more than 230 technical manuscripts. In addition, she has a visiting professor appointment at Stanford University. Our major contributions include papers in fundamental aspects of ultrasound imaging (radiation force, phase inversion and bioeffects), image-guided drug and gene delivery, techniques for radiolabeling nanoparticles, combining focal and immunotherapies, nanoparticle design (including novel temperature sensitive particles and miRNA carriers), and imaging system and transducer design (spanning ultrasound and MRI).

**David Gandara, MD**, Professor in the Division of Hematology Oncology, leads a multidisciplinary team of molecular biologists, pharmacologists, and clinical investigators in the conduct of early therapeutic trials of new anticancer agents. He is the PI for Early Drug Development awards in phase I (UM1) and the SWOG grant (U10). He is recognized for his expertise in clinical research in lung cancer and developmental therapeutics. He is Chair of the SWOG Lung Committee, where he directs a comprehensive clinical cancer research program. Dr. Gandara is a mentor on the T32 in Comparative Lung Biology and Medicine.

**Allen Gao, PhD**, Professor and Director of Urology Research and co-Leader of the UC DCCC Prostate Cancer Program, has a research focus on androgen receptor activation and the mechanisms of castration-resistant prostate cancer, including a variety of in vitro and in vivo models of prostate cancer growth and experimental treatment.

**Paul Henderson, PhD**, Associate Adjunct Professor, Hematology Oncology, develops advanced diagnostics with the goal of predicting patient response to cancer drugs prior to chemotherapy. He has developed a microdosing platform which is currently being tested in the clinical trial setting. Dr. Henderson is a mentor on the Comparative Lung Biology and Medicine and Oncogenic Signals and Chromosome Biology T32 Training Programs.

**Karen Kelly, MD** is Professor, Division of Hematology/Oncology, and at the UC DCCC serves as Associate Director for Clinical Research, Medical Director of the Clinical Trials Office, and Director of the Phase I Clinical Program. Dr. Kelly is a lung cancer expert dedicated to providing enhanced cancer care through cutting-edge clinical trials. She is PI/Co-PI on numerous phase III clinical trials including investigator initiated, cooperative group, local U01 studies and industry trials. She is also developing biomarkers for screening and early detection of lung cancer. Dr. Kelly is a mentor on the Training Program in Comparative Lung Biology and Medicine T32.

**Jian Jian Li, PhD**, Professor, Radiation Oncology, has a research focus on understanding radioresistance in breast cancer. He was the first to show that radioresistant cells have the hallmarks of cancer stem cells and that they express HER2.

**Kit S. Lam, MD, PhD** is Professor and Chair of Biochemistry and Molecular Medicine, and coleader of the UC DCCC Cancer Therapeutics Program. He is a pioneer in combinatorial chemistry and is the inventor of the OBOC method. He has successfully applied these techniques for drug and imaging agent discovery and basic science studies. Dr. Lam is a mentor for the Oncogenic Signals and Chromosome Biology, Biomolecular Technology, Molecular Imaging, Comparative Lung Biology and Medicine, Pharmacology, Chemical Biology T32 programs.

**Primo N. Lara, Jr., MD** is Professor, Hematology Oncology and UC DCCC Associate Director of Translational Research and co-leader Cancer Therapeutics Program, and PI of the Paul Calabresi Clinical grant.

**Philip C. Mack, PhD**, Associate Adjunct Professor, Hematology Oncology and Director of the UC DCCC Molecular Pharmacology shared resource, conducts molecular biology and molecular pharmacology studies for the UC DCCC, the California Cancer Consortium, and the Southwest Oncology Group. Dr. Mack conducts basic and translational research, with an emphasis on anticancer agents and PDX models in lung cancer.

**William Murphy, PhD** is Professor of Medicine and leading researcher in the fields of cancer immunology and immunotherapy. His translational research programs include the development of novel immunotherapies for treatment of cancer, nanotherapeutics, and the investigation of the cellular mechanism of graft versus host disease. He is on the faculty of the CTSC K12 Mentored Career Development Program.

**Frederick J. Meyers, MD** is Associate Dean for Precision Medicine, Professor of Internal Medicine, and Director of the Research Education and Training Program of the CTSC. He is a nationally recognized oncologist with expertise in cancer molecular biology, end-of-life care, and pain management. He serves on national committees that deal with educational policy. He is Director of the CTSC's MCRTTP and PI of the CIRM Stem Cell Training Program and UC Davis BEST award ("FUTURE"). He serves as a member of the Executive Committee and is a faculty trainer for the Quality Safety comparative Effectiveness Research Training T32 and Stem Cell Training Program.

**Jan Nolta, PhD** is Professor of Medicine and Stem Cell Program Director. Her current research is focused on developing therapies that will use stem cells to deliver factors for treating disease and tissue injury. Her group focuses on translational research that has been evidenced by Dr. Nolta's involvement in numerous clinical trials of gene and cell therapy. She is a mentor on the BIRCIWH K12, Comparative Lung Biology and Medicine T32, CTSC K12, and CTSC T32.

**Chong-Xian Pan MD PhD – 12/2019 No longer with UCDH.** Associate Professor, Division of Hematology Oncology, and coleader of the Prostate Urothelial Cancer Research Program. He is a medical oncologist and physician-scientist specializing in genitourinary malignancies. His research focuses on translational research, including in the development of the microdosing platform for bladder cancer and the PLZ-4 9-in-one nanotheranostic platform, which have each been taken through the translational pipeline to clinical trials. (Also see section 2.2.3)

**Brad Pollock, PhD, MPH** is Chair of the Department of Public Health Sciences and co-leader of the UC DCCC Population Sciences and Health Disparities Program. He is a clinical epidemiologist with extensive experience conducting population-based, clinical and translational cancer research. He has led or provided support for numerous observational research studies including cohort and case-control studies as well as randomized clinical trials and intervention studies. Dr. Pollock has held a number of national leadership positions, including serving as past Chair of the Pediatric Oncology Group (POG) Epidemiology, past Chair of the POG and Children's Oncology Group (COG) Cancer Control Committee, and PI of the NCI-sponsored COG NCI Community Clinical Oncology Program (CCOP) Research Base and the new NCI Community Oncology Research Program (NCORP) Research Base. D

**Julie L. Sutcliffe, PhD, MSc.** is a Professor of medicine (Hematology/Oncology) and Urology, and a Board-certified practicing medical oncologist specializing in genitourinary malignancies, UC Davis Health. Her academic training is in chemistry. With over 25 years' experience in molecular imaging for both preclinical and clinical applications. The focus of her research efforts has been the design, synthesis, *in vitro* identification and *in vivo* screening of targeted molecular imaging agents with a focus on cancer and PET.

**Joseph Tuscano, MD** is Professor in the Division of Hematology/Oncology. His areas of specialty include bone marrow transplantation with high-dose chemotherapy for lymphoma, leukemia, and multiple myeloma. He has both basic/translation and clinical research interests that include the development of novel antibody and other immune-based therapeutics for hematologic malignancies. He has also developed a novel CD-22 targeted monoclonal antibody in his lab that is now entering clinical trials. Dr. Tuscano is a mentor on the CTSC K12 program.

**Richard Valicenti, MD, MA**, Professor and Chair of Radiation Oncology, is an expert in radiation treatments for prostate cancer and other tumors. He has advanced the use of brachytherapy, image-guided radiation therapy, and combined modality treatments to improve the care of patients with cancer. He has developed clinical trials that offer new prostate cancer treatments, including an ongoing phase II trial to assess the effectiveness of multimodality therapies. He also carries out outcome-based studies addressing quality-of-life and exploratory analyses of large databases.

**Ted Wun, MD**, Professor of Medicine and Chief of the Division of Hematology Oncology, has research interests in cancer-related thromboembolism. He has clinical expertise in hematologic malignancies, including non-Hodgkins lymphomas as well as chronic and acute leukemias. Dr. Wun is a mentor in the CTSC K12 and Emergency Medicine K12. (Also see section 2.2.3.)

**Aiming Yu, PhD**, Associate Professor, Department of Biochemistry and Molecular Medicine and Director of the UC Davis PK/PD Analytical Core, has research interests in the molecular mechanisms of drug metabolism/disposition and multidrug resistance in cancer pharmacology and therapy. He has focused on noncoding microRNA epigenetics with a goal of developing new and rational therapeutics.

**Laurel Beckett, PhD, RETIRED** - Professor of Biostatistics, Director of the CTSC Biostatistics program, and Director of the UC Davis Biostatistics Shared Resource, has committed herself as the lead biostatistics resource mentor for K12 scholars. She has been awarded the UC Davis School of Medicine Dean's Award for Excellence in Mentoring and the Graduate Program in Epidemiology teaching award. Dr. Beckett is a mentor on the Pharmacology T32, Neuroscience of Cognitive Aging T32, and Emergency Medicine K12.