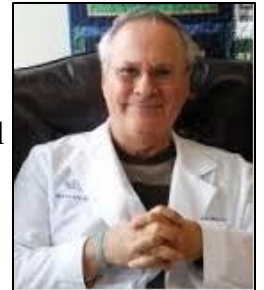




CORE RESEARCH MENTORS

Gary R. Morrow, Ph.D., M.S. Dr. Morrow is currently an Associate Director for the Wilmot Cancer Institute (WCI), Co-Director of the Wilmot Cancer Institute Cancer Control and Survivorship Research Program, and a tenured Full Professor of Surgery, Radiation Oncology, Oncology, and Psychiatry at the University of Rochester Medical Center (URMC). He has been the PI or MPI of the Cancer Control Research Training Program (CCRTP) since its initiation 15 years ago. He has also served as the PI or MPI for the University of Rochester Cancer Center (URCC) National Cancer Institute (NCI) Community Oncology Research Program (NCORP) Research Base for over 35 years under both the NCI Community Clinical Oncology Program (CCOP) and NCORP programs. He is the Dean's Professor of Oncology and the Distinguished Professor of Supportive Care in Cancer in the Medical Center.



Dr. Morrow has been actively involved in research since 1975 with a primary, sustained focus on pharmaceutical and behavioral interventions for the management of symptoms and side effects associated with cancer and its treatments. He is also an internationally recognized expert in the area of clinical trial methodology in cancer control. His research has received continuous peer-reviewed funding since 1976 and has resulted in more than 250 peer-reviewed publications. He has carried out investigator-initiated federal grants from NCI, NCCAM, the US Army, and the American Cancer Society research looking at cancer treatment-induced side effects such as nausea, emesis, and fatigue, and is the MPI of the University of Rochester Medical Center NCI-funded R25T Cancer Control Research Training Curriculum grant. He has also conducted clinical trials with the Nathan Cummings Foundation, and pharmaceutical companies Helsinn Pharmaceuticals, GTx Inc., Alza Pharmaceutical, Pfizer, Glaxo, Janssen, and Upjohn. He has served on numerous (and chaired 13) ad hoc and permanent grant review sections for NIH, ACS, and the Department of Defense Medical Command, and was the founding Chair of the Psychosocial and Behavioral Research Review Committee of the American Cancer Society. Dr. Morrow works closely with investigators within the WCI, the University of Rochester at large, and other research and academic institutions to develop relevant concepts and protocols in the area of cancer control and cancer care delivery.

Michelle C. Janelins, Ph.D., M.P.H.

Dr. Janelins is a tenured Associate Professor of Surgery-Cancer Control, Oncology, Radiation Oncology and Neuroscience and director of the Cancer Control and Psychoneuroimmunology Laboratory (CCPL). She is also the Co-Director and MPI of the Cancer Control Research Training Program. Additionally, she is Chair of Translational Research for the NCI-funded University of Rochester Cancer Center NCI Community Oncology Research Program (URCC NCORP) Research Base. She brings several years of translational research experience focused in immunology, psychoneuroimmunology, neuroscience and cognitive science to her research focused on clinical, psychological, and biological mechanisms of cancer-related cognitive impairment (CRCI), and on behavioral and pharmacological interventions to alleviate cognitive impairments and other side effects in cancer patients and survivors. She is currently the PI of one of the largest NCI-funded (R01-level) observational studies investigating the effects of



chemotherapy on cognitive function in breast cancer and lymphoma patients and age-matched non-cancer controls (N=1432) that is conducted through the nationwide NCORP network to understand the trajectory of CRCI from pre-chemotherapy to post-chemotherapy and at 6 months post-chemotherapy using several cognitive measures. She is also funded as PI by an NIH Director's Innovator Award DP2 major research grant for bench-to-bedside CRCI research incorporating animal models and human research, as well as an R21 and several other grants focused on mechanisms of CRCI and interventions to alleviate CRCI. She also currently serves as a Co-Investigator and Laboratory Chair on several other Phase II-III NCORP studies related to cancer symptom science. As Director of the CCPL, the lab supports several of these studies. Her research to date has culminated in over 75 manuscripts and 22 research awards. She also serves on several NIH grant review panels for research and training grant applications. She has considerable service to several institutional and international research societies. Most recently, Dr. Janelins chaired the Scientific Program Committee for Patient and Survivor Care for the 2018 Annual Scientific Meeting of the American Society of Clinical Oncology (ASCO) as well as co-chairing the education committee during 2018 as part of her 3-year term of service for ASCO.

As a former F31 awardee, R25 fellow, and NCI K07 Awardee, Dr. Janelins is a passionate and dedicated mentor. To date, she has mentored 25 students, fellows, and junior faculty and have helped many of them establish independent funding at career development (e.g., K Award) or R-level.

Karen M. Mustian, Ph.D., M.A., M.P.H., A.C.S.M., F.S.B.M. Dr. Mustian is a tenured Full Professor in the Department of Surgery, a Dean's Professor of Oncology, MPI and Co-Director of the University of Rochester Cancer Center (URCC) NCI Community Oncology Program (NCORP) Research Base, Co-Director of Cancer Control and Survivorship for the Wilmot Cancer Institute, and Director of the PEAK Human Performance Clinical Research Laboratory. She is internationally renowned in the fields of behavioral oncology, exercise oncology, and cancer control and survivorship with over 15 years of experience conducting large, multi-center, phase II and III clinical trials to treat toxicities and side effects experienced by cancer patients and survivors. Dr. Mustian has served or is serving as the PI on several local and nationwide randomized clinical trials funded by the NCI, NCCAM, OCCAM, NINR, and DOD. She has been continuously funded since 2004, has been awarded over \$61 million in peer-reviewed funding, and has published over 135 peer-reviewed articles.



Dr. Mustian has pioneered methods for testing interventions of yoga, exercise, and cognitive behavioral therapy as well as methods for testing physiology and conducting translational research within the nationwide URCC NCORP Research Base network. Notably, she has designed and tested two behavioral interventions for cancer patients and survivors, respectively: EXCAP® (Exercise for Cancer Patients) and YOCAS® (Yoga for Cancer Survivors). Most recently, Dr. Mustian conducted a landmark meta-analysis comparing the four most common treatments for cancer-related fatigue. This study showed that exercise and psychological interventions are more effective than pharmaceutical interventions. Her work was recognized with two outstanding research awards and the publication in *JAMA Oncology* was the most cited paper for the year 2017. In addition, this work was recognized by the American Society of Clinical Oncology (ASCO) as one of the most significant advances in cancer care for 2018.

Dr. Mustian has mentored more than 80 undergraduate, graduate, and post-graduate students as well as 40 junior faculty, 21 of whom received prestigious Career Development Awards from NIH (K awards), the American Cancer Society (Mentored Research Scholar Awards), and the URMC Clinical and Translational Science Institute (KL2s).

Supriya Gupta Mohile, M.D., M.S. Dr. Mohile is a board-certified geriatrician and oncologist and is actively moving forward the field of geriatric oncology. She completed internship, residency, and fellowships in hematology/oncology and geriatrics at University of Chicago Medical Center, where she also earned a Master's degree in health outcomes research. Dr. Mohile's fellowship was funded by an American Society of Clinical Oncology (ASCO) and John Hartford Foundation initiative to train oncologists in the care of older patients. Her research interests include the evaluation of patterns of care, health outcomes, and quality of life related to treatment for systemic cancer in older patients. In 2013, she was awarded a Patient-Centered Outcomes Research Institute (PCORI) Award and a National Cancer Institute (NCI) R01 to evaluate whether geriatric assessment can improve outcomes of older patients with cancer. She directs the Specialized Oncology Care & Research in the Elderly (SOCARE) geriatric oncology clinic at the University of Rochester/Highland Hospital and is an integral member of the University of Rochester Cancer Center (URCC) NCI Community Oncology Research Program (NCORP) Research Base, which is directed by Drs. Gary Morrow and Karen Mustian. She leads the Cancer Care Delivery Research (CCDR) efforts in the Research Base and sits on the CCDR Steering Committee at the NCI. Dr. Mohile is an expert in geriatric oncology with over 148 publications in this area. She serves on the editorial board of the Journal of Clinical Oncology and is the Editor-in-Chief of the Journal of Geriatric Oncology. She was the Chair for the ASCO Geriatric Oncology Task Force and the ASCO Geriatric Oncology Clinical Guideline panel. She was also recipient of the prestigious B.J. Kennedy Award for Scientific Excellence in Geriatric Oncology in June 2018. Dr. Mohile serves as a Core Mentor for the Cancer Control Research Training Program (CCRTP). Having been a previous trainee in the program, she now fosters new ideas and supports mentees and other investigators in their scientific ambitions, especially in regard to concept development, protocol development, and disseminating data. Over the last several years, she has served as primary mentor for five CCRTP trainees.



Luke Joseph Peppone, Ph.D., M.P.H. Dr. Peppone is an Assistant Professor of Oncology, Surgery, and Orthopaedics at the University of Rochester Medical Center (URMC). Dr. Peppone originally came to URMC to participate in the Cancer Control Research Training Program (CCRTP – R25T). Since completing this position, he has transitioned to a tenure-track Assistant Professor. His research is in the area of cancer control and survivorship with primary foci on investigating the influence of nutritional supplementation and exercise on toxicities and side effects (acute, chronic and late) stemming from cancer and its treatments including translational foci investigating psychoneuroimmunological and genetic mechanistic pathways. He is currently investigating the effects of high-dose vitamin D, marine ω -3 polyunsaturated fatty acids, guaraná (a Brazilian botanical product) supplementation, and medical cannabis. The effect of high-dose vitamin D supplementation is being tested on arthralgias, bone mineral density, and fatigue among breast and prostate cancer patients on hormonal therapy. Both marine ω -3 polyunsaturated fatty acids and guaraná supplementation are being tested for their effects on fatigue and cognitive issues. Over the past 11 years in the University of Rochester Cancer Center (URCC) group, Dr. Peppone has focused on clinical research for symptom management in cancer patients with a focus on nutraceutical interventions such as high-dose vitamin D, high-dose omega-3 supplementation, and guaraná. He has been awarded \$3.3 million in independent funding as principle investigator (PI) from NIH and ACS, has published 58 peer-reviewed manuscripts, and has received more than 10 scientific awards from national and international associations.



Since completing the CCRTTP, Dr. Peppone has been active in mentoring both pre- and post-doctoral students in cancer control. Dr. Peppone has had a mentoring role for two former R25T trainees and now serves as the primary mentor for a current R25T fellow. In addition, Dr. Peppone has sat on four thesis committees for Master's of Public Health and served as an external dissertation reviewer for the University of Canberra, Australia. In his research role, Dr. Peppone serves as the Chair of Pilot Studies for the URCC National Cancer Institute (NCI) Community Oncology Program (NCORP) Research Base. In this role, Dr. Peppone supervises and coordinates the piloting of cancer control protocols and leads the effort to develop novel and early stage therapy concepts, protocols, and pilot studies. He is also responsible for Novel and Early Stage Therapy Development, including the facilitation and oversight of concepts for which there is little research in the literature, for early-stage interventions, and for protocols in which the intervention is established but not in the population the protocol seeks to study and/or for the symptom being targeted. This position goes hand-in-hand with mentorship roles, as the vast majority of trainees conduct their own pilot studies. Dr. Peppone works personally with all trainees when designing and implementing their pilot work.

Charles S. Kamen, Ph.D., M.P.H. Dr. Kamen is a clinical psychologist with a strong background and training in behavioral medicine, health disparities, and dyadic interventions. His program of research specifically focuses on 1) cancer-related health disparities affecting sexual and gender minority (SGM; e.g., lesbian, gay, bisexual, transgender; LGBT) cancer survivors, and 2) behavioral interventions to address these disparities. He is director of the University of Rochester Cancer Control (URCC) group's Community Engagement Training Laboratory (CENTRAL) and his signature curriculum, the Minority and Underserved Research, Action, and Learning (MURAL) Program, provides tools to investigators and coordinators to educate and recruit "invisible" and hard-to-reach minority participants (e.g., SGM, African American) to clinical research. He has been awarded a K07 career development award from NCI focused explicitly on SGM cancer-related health disparities, and has also contributed to a range of behavioral interventions to improve the health and well-being of cancer patients and survivors. Dr. Kamen is a former R25 fellow and has been involved with the Clinical and Translational Cancer Control Research Training Program (CCRTTP) since 2012. Following his transition to tenure track, he has mentored two CCRTTP fellows, both of whom were from minority/underrepresented (M/U) backgrounds, and both of whom have developed health equity focused protocols. Moving forward, Dr. Kamen will continue to develop studies to identify and address determinants of cancer disparities in clinical research, including efforts to increase participation in underserved populations. Dr. Kamen is committed to training and mentoring the next generation of cancer control researchers to consider minority and underserved populations when designing clinical trials, as well as developing studies with a specific diversity and health equity focus.



Sarah L. Kerns, Ph.D., M.P.H. Dr. Kerns is an Assistant Professor with appointments in Radiation Oncology (primary) and Surgery (secondary). She has over 10 years of experience conducting clinical translational research in cancer biology and cancer control and survivorship. During this time, she has published 38 peer-reviewed manuscripts and two book chapters, has been PI or co-I of seven extramural grants, and has mentored several undergraduate and graduate students. Dr. Kerns is also the primary mentor to a Holman Pathway Scholar who is a resident in Radiation Oncology. She is involved in teaching in the graduate school and the Radiation Oncology residency program. Her current research interests focus on identifying genetic risk factors for development of radiotherapy toxicities and using this genetic information to better personalize care in the clinic. She is PI of a K07 Career Development Award from NCI and an SBIR Phase II award



from NIH that support this work. She is passionate about research as well as training the next generation of clinical translational researchers.

Joseph A. Roscoe, Ph.D. Dr. Roscoe received his Ph.D. in Social Psychology in May, 2000, and is currently a Research Associate Professor in the Department of Surgery at the University of Rochester, School of Medicine and Dentistry, Rochester, New York. He is Assistant Director of the Cancer Control Training Program and Director of Cancer Control Research for the URCC NCORP Research Base. He has been either the Principal or Co-Investigator on five multicenter URCC NCORP/CCOP CINV protocols. He received seven nationally competitive research awards, including an American Cancer Society career development award to examine disturbances of sleep architecture in breast cancer patients undergoing chemotherapy and an NCI-supported R01 testing the efficacy of a behavioral intervention in reducing insomnia and fatigue in cancer survivors. He currently has an R01 examining a non-pharmacological adjunct to standard antiemetics for controlling chemotherapy-induced nausea in breast cancer patients, as well as an R01 examining optimal treatment of refractory nausea. Dr. Roscoe has 71 peer-reviewed publications on issues of symptom management.



Charles Edward Heckler, Ph.D., M.S. Dr. Heckler has been a practicing statistician for over 30 years, and has expertise in many fields including multivariate analysis, variance components, mixed models, longitudinal analysis, statistical learning, statistical graphics, exploratory analysis, and statistical computing. Building on his chemistry background, he became proficient in the field of Chemometrics, and in particular did methodological research and applied work in quantitative structure-activity relationships (QSAR) used in drug discovery. He is also a co-inventor of 7 patents owned by Eastman Kodak Company. Dr. Heckler currently serves as a biostatistical reviewer for the Journal of Clinical Oncology and Psycho-Oncology and served as a member of the NCI CCDR Steering Committee from 2015 to 2017. He is the Chair of Biostatistics for the University of Rochester Cancer Center (URCC) group (currently in the Department of Surgery) since 2006 and has served as the biostatistics chair on 14 Community Clinical Oncology Practice (CCOP)/National Cancer Institute (NCI) Community Oncology Research Program (NCORP) protocols and 6 local protocols to date. He has been a statistical mentor and advisor to 8 trainees, 7 of whom are now independent researchers at the University of Rochester and nationwide. He is also an instructor (since 2006) for a course in statistical computing, and has given this course to over 250 undergraduate and graduate students.



Eva Culakova, Ph.D. Dr. Culakova has over 15 years of experience working as a biostatistician in cancer research and she coauthored over 40 publications. She worked for a national observational registry of cancer patients treated with chemotherapy, which studied patterns of cancer care delivery and toxic side effects of treatments. She has statistical experience in the design and analysis of both randomized, as well as, observational studies. She has a solid working knowledge of longitudinal data analysis, risk modeling, survival analysis, propensity score analysis, analysis of clustered data, systematic reviews, and meta-analysis. Her statistical methodology research interests are related to risk stratification models, analysis of biomarker data (e.g., missing values due to detection threshold, multiple testing), and analysis of patient reported outcomes (PROs) such as symptoms data. She is highly interested in research of treatment tolerability with a goal to develop reliable risk classification tools that are able to identify vulnerable patients who are likely to develop side effects, thus allowing application of early



preventive measures. She collaborated on the development of prediction models identifying patients with cancer at an increased risk of developing treatment related toxicities such as thromboembolism or neutropenia. Dr. Culakova joined the University of Rochester Cancer Center (URCC) National Cancer Institute (NCI) Community Oncology Research Program (NCORP) Research Base in January 2017. Since then, she has been actively collaborating with NCORP scientists and fellows on various projects, impacting quality of life of cancer patients and survivors. She has contributed to the design of future studies, grant applications writing, and concepts development, as well as statistical analysis of the existing studies, and also presentations of the results at the national and international meetings, and journals' publications. Dr. Culakova also has considerable college teaching experience. In addition to working with senior clinical professionals, as a biostatistician she has productively collaborated with junior faculty and trainees, several of whom are now successfully established clinical researchers.

Additional Mentors

Nancy M. Bennett, M.D., M.S. Dr. Bennett is the co-Director and co-Principal Investigator of the University of Rochester's Clinical and Translational Science Institute (CTSI). Her research focuses on T3, T4 research related to population health, community-based participatory research, practice based research, and education and training related to population health and community engagement. She is also the Director of the Center for Community Health & Prevention (CCHP), a multidisciplinary academic center focused on community health improvement through research, policy, and prevention services, including cancer prevention. The CCHP leads the community/population health mission and community engagement for the Medical Center, working with all schools and many departments on research and program implementation to improve health and engage the community.

Joe Chakkalakal, Ph.D. Dr. Chakkalakal's research utilizes murine models to study the regulation, and contributions of stem cells to the maintenance of skeletal muscle regenerative potential during aging, in the context of androgen deprivation, and in models of pediatric cancer treatment. Sarcopenia is the abnormal loss of skeletal muscle mass, and function commonly observed in the elderly population the onset of which is accelerated upon androgen deprivation and in pediatric cancer survivors. A significant contributor to falls, frailty and loss in functional mobility, disabilities related to sarcopenia are a burgeoning cost to the US healthcare system. Hence, the identification of factors that promote skeletal muscle maintenance is of critical importance.

Yeates Conwell, M.D. The primary focus of Dr. Conwell's research for the past 25 years has been the study of suicide and its prevention, with an emphasis on later life and on the role of primary care and community-based aging services in the detection and management of mental disorders and suicide risk in older adults. He is Professor and Vice Chair, Co-Director of the Center for the Study and Prevention of Suicide and Director of the Geriatric Psychiatry Program of the Department of Psychiatry, and Director of the University of Rochester Medical Center's Office for Aging Research and Health Services. Training and mentorship have always been central to his work. Dr. Conwell was Co-PI of an NIMH-funded U24 to develop a web-based mentorship structure for young investigators from diverse backgrounds nation-wide, recipient of a K24 award from NIMH, a faculty member on several other T32s, and primary research mentor and sponsor for nine K awardees and many other pre-and postdoctoral scholars in suicide research in the U.S. and abroad.

Ronald Epstein, M.D. Dr. Epstein is residency-trained as a family physician, with board certification in family medicine and palliative care, clinically trained as a family therapist, and a professor of family medicine, psychiatry, oncology, and medicine (palliative care). He has over 250 publications, 23,000 citations, h-index of 63 and i-10 index of 152. He has published many firsts—studies of communication in the contexts of AIDS, mental health and advanced cancer; qualitative health services research; a highly-cited 2007 NCI monograph on communication in cancer; 4 of the 50 most widely-cited articles in medical education in the past 100 years—and introduced the concepts of mindful practice and shared mind into the medical literature. Dr. Epstein is currently a senior communication and health services researcher with a focus on pragmatic strategies for improving communication with patients with serious and stigmatized illnesses and addressing health professionals' self-awareness and burnout.

Jonathan Friedberg, M.D. As Director of the Wilmot Cancer Institute, Dr. Friedberg has had a longstanding interest in development of novel rational therapeutic combinations for lymphoma. His work on Syk inhibition represented the first clinical experience of B-cell receptor signaling cascade blockade in the treatment of lymphoma, and resulted in the Scholar in Clinical Research Award from the Leukemia and Lymphoma Society. He ran the clinical trials core of our Lymphoma SPORE, and has served as PI of several national clinical trials in lymphoma. Dr. Friedberg led the SWOG lymphoma committee through the NCI NCTN, ran two national studies in non-Hodgkin lymphoma through SWOG, and was the co-leader of the most recent US Intergroup trial in advanced Hodgkin lymphoma. As a member of the National LymphoCare Study Steering Committee, and former PI of the NCCN NHL Database, he has experiences to assist trainees with clinical trial execution and database interpretation.

John Foxe, Ph.D. Dr. Foxe is the Director of The Ernest J. Del Monte Institute for Neuroscience. He has a history of basic research studies of the neurophysiology of multisensory integration and attention. In parallel, he has worked to translate new understanding generated in this basic research program to advance understanding of the neuropathology that underlies various neurological, neurodevelopmental and psychiatric disorders. His work places special emphasis on the identification of endophenotypic markers in childhood neurological and neuropsychiatric diseases and in the linking of these biomarkers to the underlying genotype. Dr. Foxe has a consistent history of NIH, NSF, industry and foundation funding, as well as a solid record of productivity (>250 publications; H-Index = 79). His lab employs an integrated multi-methodological approach, using high-density electrophysiology, structural and functional neuroimaging, imaging genomics, eye-tracking, psychophysics, and virtual reality to understand the neural basis of fundamental sensory-perceptual and cognitive functions.

Kathi Heffner, Ph.D. Dr. Heffner's research interests and expertise pertain to the examination of psychosocial modulation of physiological responses to stress, immunological/inflammatory dysregulation, and longer-term health outcomes. Her current work aims to identify how physiological adaptation to stress alters immune and inflammatory activity, and the psychosocial factors that moderate these pathways. She has two NIH-funded studies that have recently come to completion to assess the role of sleep disturbance in psychoneuroimmunological mechanisms contributing to depressive and anxiety symptoms in trauma-exposed individuals (R01), as well as older adults' pain (R21). Currently, Dr. Heffner has two R01s aimed at testing two approaches to regulating stress in caregivers of a spouse with Alzheimer's disease (AD) to, in turn, mitigate the effects of chronic stressors on immune aging.

Feng Lin, Ph.D. Dr. Lin's career has been devoted to the development of neuroplasticity-based cognitive modification interventions to mitigate or prevent cognitive decline in older adults at

risk for Alzheimer's disease. Specifically, her research focuses on understanding the underlying neurophysiological mechanisms of cognitive impairment and designing and implementing cognitive training paradigms targeting those mechanisms in order to promote neuroplasticity and ultimately prevent dementia. She has experience as the principal investigator on multiple competitive external grants from NIH and Alzheimer's Association. Currently, Dr. Lin runs the CogT laboratory, focusing on promoting successful cognitive aging applying neuropsychological and neurophysiological approaches.

David Linehan, M.D. Dr. Linehan is the Seymour I. Schwartz Professor and Chairman of Surgery at the University of Rochester Medical Center. His academic focus and clinical expertise has centered on translational research to improve outcomes in patients with pancreas cancer. He strives to create a patient-centered, team-oriented and empowering environment that fosters both clinical/scientific excellence and innovation. Dr. Linehan's clinical expertise is in the multi-modality treatment of hepatobiliary and pancreatic malignancies. He is the author of many basic science and clinical manuscripts and he directs an NIH-funded laboratory whose focus is on the tumor microenvironment and the cell-mediated immune response to pancreas cancer. In addition, Dr. Linehan is an active translational researcher, serving as Principal Investigator on several, on-going multi-modality clinical trials.

Edith Lord, Ph.D. Dr. Edith Lord is a Professor of Microbiology and Immunology and Oncology. Dr. Lord received her BA degree in microbiology from the University of Kansas in 1970 and a Ph.D. degree in immunology from the University of California at San Diego in 1975. She was a postdoctoral fellow at the University of California at San Francisco. As a faculty member since 1976, Dr. Lord has demonstrated excellence as a scientist and dedication to the training of graduate students and postdoctoral fellows. Her research is focused on the generation of anti-tumor immunity, how immune cells function within the tumor microenvironment, and how treatment modalities such as radiation therapy affect the immune response. Using mouse model systems, she has helped establish a new paradigm that the generation of immunity is an important component of the effectiveness of radiation in controlling tumors.

Mark Noble, Ph.D. Dr. Mark Noble is a pioneering researcher in the fields of stem cell biology and stem cell medicine. He currently holds professorships in Genetics, Neurology, Neurobiology and Anatomy at the University of Rochester School of Medicine and is the Director of the University of Rochester Stem Cell and Regenerative Medicine Institute. His laboratory has made major contributions in multiple areas of research, beginning in 1983 when he co-discovered the first precursor cell isolated from the central nervous system (CNS). Dr. Noble and his colleagues then were the first to identify means of growing these cells in tissue culture, means of enabling expansion sufficient for carrying out repair, and the first to repair damaged tissue (in this case, the demyelinated spinal cord) by purifying progenitor cells, expanding them outside the body and transplanting them to obtain tissue repair. He has also studied the impact of cancer treatment on neural stem cell populations.

M. Kerry O'Banion, M.D., Ph.D. Dr. O'Banion's research focuses on understanding the role of neuroinflammation in Alzheimer's and other neurodegenerative diseases, as well as its contribution to changes seen following brain irradiation and environmental exposure. He is the Vice Chair in the Department of Neuroscience and has served for 18 years as Principal Investigator of the University of Rochester Medical Scientist Training Program. Much of his current work explores the influence of glial expressed cytokines and infiltrating peripheral cells on brain pathology, and utilizes genetic and pharmacological approaches in a variety of mouse models. In relation to cancer, his lab investigates mechanisms underlying cognitive dysfunction

following brain irradiation. With support from NASA, he has also explored the effects of low-dose proton irradiation on the CNS and demonstrated that HZE particle irradiation can exacerbate Alzheimer's disease pathology in a mouse model of that disease.

Deborah Ossip, Ph.D. Dr. Ossip is a Behavioral Scientist (Psychology) with a long track record of NIH-funded research as PI in leading multi-site, multidisciplinary research and training projects, with particular focus on tobacco use. Her tobacco control research has spanned basic, clinical, and policy domains, with concurrent foci on translating science to practice and policy. Her basic research includes early studies demonstrating no reduced exposure for "low tar low nicotine" cigarettes, through current collaboration with investigators in biology examining toxicology of emerging products and effects of flavorings. Currently, Dr. Ossip is the Director of the Smoking Research Program in the Department of Public Health Sciences at the University of Rochester and Co-Director of the NYS-funded tobacco policy change initiative in health systems serving low income and psychiatric populations. She is also a Site Director and Career Enhancement Core Co-Director for the Center for Research on Flavored Tobacco (CRoFT), an NIH-funded Tobacco Center of Regulatory Science (TCORS) as a partnership between Roswell Park Cancer Center and the University of Rochester Medical Center. More broadly, Dr. Ossip is MPI of the NIH NCATS-funded Center for Leading Innovation and Collaboration to coordinate over 50 Clinical and Translational Science Award centers nationally.

Wilfred Pigeon, Ph.D. Dr. Pigeon is currently a full, tenured professor of Psychiatry and Public Health Sciences at the University of Rochester Medical Center (URMC). He also directs the URMC Sleep & Neurophysiology Research Lab, which conducts clinical sleep research, and serves as the Director of the Department of Veterans Affairs' Center of Excellence for Suicide Prevention. In these capacities, he has designed and conducted many clinical trials involving the development and testing of sleep interventions and on mechanisms underlying sleep disturbance. The clinical sleep research focuses on adapting interventions to specific treatment settings and/or specific patient populations including those with chronic pain, depression, suicidality, posttraumatic stress disorder, and/or cancer.

O.J. Sahler, M.D. Dr. Sahler is currently the Director of Pediatric Psychosocial Oncology Services and Research as well as the Director of the Long-Term Childhood Cancer Survivors Program at Golisano Children's Hospital. She is also an attending physician in the Pediatric Palliative Care Service and in Adolescent Medicine. Dr. Sahler has been PI for an international multi-institutional research consortium funded by the National Cancer Institute since 1995 studying the use of Problem-Solving Skills Training (PSST) of mothers of newly diagnosed childhood cancer patients as well as other cancer-related projects focusing on PSST dissemination through the R01, R25, and R21 mechanisms. For the past 20 years, Dr. Sahler has also been PI or co-PI on research projects investigating the clinical application of complementary therapies such as biofeedback, aromatherapy, and music therapy as well as an investigator on a CCOP study of acupressure in the management of pain, anxiety, and nausea associated with cancer therapies.

Edwin van Wijngaarden, Ph.D. Dr. van Wijngaarden's primary research efforts have focused on the influence of environmental exposures on cognitive outcomes in children and adults. He leads the Seychelles Child Development Study (SCDS), which for over 30 years has investigated the impact of pre- and postnatal methylmercury exposure on child development. As Chief of the Division of Epidemiology and a Fellow of the American College of Epidemiology, Dr. van Wijngaarden has published over 110 peer-reviewed manuscripts primarily in the areas of environmental and occupational health, and has extensive experience in managing and

conducting epidemiologic studies, academic leadership, and mentoring junior investigators in cancer-related research.

Jacqueline Williams, Ph.D. As an internationally-recognized radiation biologist, Dr. Williams has over 30 years of experience in radiation research and related fields and has participated in a broad spectrum of research areas, including clinically-related oncologic studies and clinical trials, tumor blood flow studies, long-term carcinogenic studies, and pharmacologic and toxicological projects. Her current research interests involve identifying mechanisms that underlie radiation-induced late normal tissue effects that arise as a consequence of high-dose clinical treatment or accidental exposures, with a focus on the effects seen in lung, brain, bone marrow and musculoskeletal tissues. Importantly, she and her group are investigating the interactions between tumor and normal tissues and how radiation-induced alterations in the microenvironments of each affect patient outcomes.

Martin Zand, M.D., Ph.D. Dr. Zand is Professor of Medicine and Medical Humanities in the Division of Nephrology. He is also Co-Director of the Clinical and Translational Science Institute and Co-Director of The Center for Leading Innovation and Collaboration and Director of the Rochester Center for Health Informatics. His clinical practice is focused on the care of kidney transplant patients. His approach emphasizes holistic care of the whole person, mind and body. He brings to his practice of medicine an extensive experience in cutting edge clinical immunology, and a practical approach to wellness emphasizing exercise, diet, stress-reduction, and mindfulness. He has an active research program in the biology of antibody producing cells and their role in vaccine responses, transplant rejection, and health informatics.