Cancer Control Research Training

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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. Janelsins, Ph.D., M.P.H.

Dr. Janelsins 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. Janelsins 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. Janelsins 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 CCRTP, 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) g roup'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 (CCRTP) since 2012. Following his transition to tenure track, he has mentored two CCRTP fellows, both of whom were from minority/underrepresented (M/U) backgrounds, and both of whom have developed health equity focused protcols. 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.