



Leaders' Update

A message from Director Gordon Ginder

Dear colleagues,

As we approach the end of the calendar year, I am proud to share some of the outstanding accomplishments made at Massey Cancer Center in 2018.

In fiscal year 2018, Massey peer-reviewed cancer research funding was robust, with \$33.4 million in total cost (\$24.7 direct cost).

Cancer Prevention and Control members and psychology professors Thomas Eissenberg, Ph.D., and Alison Breland, Ph.D., were awarded through the VCU Center for the Study of Tobacco Products a nearly \$20 million grant from the NIH and the FDA Center for Tobacco Products to launch a five-year project focused on predicting the outcomes of government regulations of tobacco products. Tobacco use is a leading cause of cancer and of death from cancer, and this research supports a major scientific goal of Massey's CPC research program to reduce cancer risk.

Further indication of Massey's growing focus on tobacco research, Massey successfully competed for and received a supplement to its Cancer Center Support Grant totaling nearly \$500,000 over two years to support a project in tobacco cessation. The goal of the Moonshot Initiative Supplement is to build a sustainable Tobacco Cessation Treatment Service (TCTS) that is integrated within the cancer center. Cancer Prevention and Control co-leader Darlene Brunzell, Ph.D., will lead the effort with collaborations from investigators in the Departments of Health Behavior and Policy, Psychiatry and Biostatistics.

Massey also successfully competed for and received another supplement to the Cancer Center Support Grant of more than \$225,000 to support a one-year study led by Bernard Fuemmeler, Ph.D., M.P.H., associate director for cancer prevention and control, in collaboration with Cancer Prevention and Control members David Wheeler, M.P.H., Ph.D., and Sunny Kim, Ph.D., M.S., M.A. The goal of the Population Health Assessment Supplement is to assess the social, psychological, behavioral and environmental factors that contribute to the community's cancer risk practices.

Also, through a competitive renewal, Massey Cancer Center was recently awarded an Institutional Research Grant (IRG) from the American Cancer Society (ACS) of \$360,000 over three years. For more than four decades, the ACS has continuously awarded Massey an IRG, which is a block grant given to prestigious institutions to provide funding for junior investigators with an interest in cancer research. David Gewirtz, Ph.D., has served as the grant's principal investigator for more than a decade and annually awards seed funding to young researchers at Massey.

Additionally, Massey Cancer Center was awarded a T32 training grant from the NCI to support a fellowship program in cancer prevention and control. The two-year postdoctoral training program offers a core curriculum in the science and practice of conducting CPC research, individualized training opportunities and mentorship through research experience. The fellowship program is directed by the grant's principal investigators Bernard Fuemmeler and Vanessa Sheppard, Ph.D., associate director for disparities research and co-leader of the Cancer Prevention and Control program.

Philanthropic support remained strong this year, totaling \$10.5 million in fiscal year funds raised. Massey welcomed in July a new executive director for development, Martha Quinn, from Johns Hopkins

Children's Center. Partnering with advancement colleagues across the university and the cancer center's Advisory Board, she is directing the effort to fulfill Massey's \$120 million campaign goal in support of VCU's largest comprehensive fundraising endeavor to date, the \$750-million *Make It Real* campaign.

A mark of national peer recognition of our scientific research, the number of high-impact publications that resulted from Massey members' research grew nearly 40 percent in FY18 over FY17. Of the total cancer publications, 25 percent were inter- or intra-programmatic, 66 percent were inter-institutional and 26 percent were with international collaborators.

Massey's research was represented on the global stage by Developmental Therapeutics member Charles Geyer, M.D., who is also associate director for clinical research at Massey and served as co-author of two landmark, international phase 3 clinical trials for breast cancer. Earlier this month at the San Antonio Breast Cancer Symposium he presented findings from a trial known as KATHERINE that he led as global co-chair. The study found that trastuzumab emtansine reduced the risk of cancer recurring by 50 percent in patients with HER2-positive early-stage breast cancer who had residual disease after receiving neoadjuvant therapy. He was also a co-author on a study presented at the American Society of Clinical Oncology annual meeting in June. That 12-year clinical study called TAILORx found that 70 percent of women with the most common type of newly diagnosed breast cancer – HER2-negative, axillary lymph node-negative – can now be identified and safely skip chemotherapy.

This fall, Cancer Prevention and Control member Alex Krist, M.P.H., M.D., was elected as a member of the National Academy of Medicine, considered one of the highest honors in the fields of medicine and health. He joins the ranks of five other VCU School of Medicine colleagues, including fellow Massey CPC researcher Steven Woolf, M.D. A practicing family physician, Krist developed [MyPreventiveCare](#), an interactive online personal health record that empowers patients to better understand the factors that contribute to their health and take actions to improve them.

We welcomed 12 new research members to the cancer center in FY18. These new members are senior and junior investigators with diverse research interests and scientific backgrounds from a variety of departments at VCU.

Key recruitments include Cancer Prevention and Control member Greg Hundley, M.D., Cancer Cell Signaling and Cancer Molecular Genetics member Azeddine Atfi, Ph.D., and Suyun Huang, M.D., Ph.D. Hundley joined VCU from Wake Forest School of Medicine and is now serving as the director of the Pauley Heart Center at VCU Health. He studies the effect of cancer treatment on cardiovascular health and was the first to demonstrate that MRI stress testing can identify patients at risk of a heart attack. Atfi joined VCU as the chair of the Division of Cellular and Molecular Pathogenesis in the Department of Pathology at the School of Medicine and was previously at University of Mississippi Medical Center. His research explores the role of transforming growth factor (TGF-beta) signaling in cancer pathogenesis and progression, and he has made key discoveries in this field. Huang was very recently recruited from MD Anderson Cancer Center to the Department of Human and Molecular Genetics at the VCU School of Medicine. The focus of her research is on the molecular and cellular mechanisms of tumor progression, invasion and metastasis. She is a leader in the fields of brain metastasis, cancer stem cell and glioma research, and she and her team are conducting in-depth research to understand epigenetics mechanisms of gene expression including histone methylation and RNA m⁶A methylation and their impacts on cancer cell resistance to therapeutics.

Additional faculty members are actively under recruitment, including some to fill key leadership roles at Massey.

In June, Massey became the first in Virginia to offer the revolutionary, FDA-approved CAR-T cell therapy. Massey is an official treatment center for YesCarta™ by Kite Pharma for adult patients with recurrent or refractory B-cell lymphoma. Our first patient is in complete remission 100 days after receiving the therapy, and more patients are beginning treatment or under consultation for treatment. In January, Massey will begin offering in partnership with Children's Hospital of Richmond at VCU another FDA-

approved CAR T-cell therapy, KYMRIAH™ by Novartis, for children and young adults with recurrent or refractory B-cell acute lymphoblastic leukemia.

That same month, Massey leaders joined VCU and VCU Health leaders in breaking ground on a new outpatient facility that will feature an oncology pavilion for Massey Cancer Center. The pavilion will become the new hub of the majority of our cancer services downtown. With great anticipation we look forward to its completion, which is projected to be in fall of 2020.

Finally, in August, Massey was the first in the region to use a new, FDA-approved device that guides surgeons in locating and removing breast tumors. The device, named Magseed, is a magnetic seed smaller than a grain of rice and a simpler, more effective alternative to traditional wire localization methods.

Thank you for your contributions to Massey's success. I look forward to working with you in 2019 to make further progress against cancer.

Wishing you and your families a joyous holiday season,

Gordon D. Ginder, M.D.
Director