

Fiscal Year 2019 (April 1, 2018 - March 31, 2019) Accomplishments

Awards

Bernarda Arias Wins Mary B. Talbert Club Unsung Heroes Award

Bernarda Arias, Diversity Program Assistant, was honored by the Mary B. Talbert Civic and Social Club as the winner of the 2018 Unsung Heroes Award.

Canisius College Honors Candace Johnson, PhD, Roswell Park President & CEO, with Distinguished Citizen Award

The Canisius College Board of Regents conferred its Distinguished Citizen Award upon **Candace S. Johnson, PhD**, president and chief executive officer of Roswell Park Comprehensive Cancer Center, during its 52nd annual Regents Scholarship Ball on **Saturday, May 5** at the Hyatt Regency Buffalo. The Board of Regents confers the Distinguished Citizen Award, annually, to recognize an individual for his/her contributions to the economic, civic and/or cultural well-being of Western New York.

Roswell Park Named Best Hospital for Cancer Care by *US News & World Report*

Roswell Park Comprehensive Cancer Center was named a 2018-19 Best Hospital for cancer care by *U.S. News & World Report*, acknowledging our standing as one of the premier providers of cancer care in the country. We were even higher in the rankings than last year—placing 30th among nearly 900 cancer hospitals nationwide. We were the only cancer center in New York State, outside of New York City, to be included. We were also recognized as a high-performing hospital in two categories: colon cancer surgery and lung cancer surgery.

80 Roswell Park Physicians Named Among Top Doctors

Eighty doctors at Roswell Park Comprehensive Cancer Center were recognized by Buffalo Spree Magazine as Top Doctors. The selected physicians spanned across 30 different specialties. This list was compiled through a peer survey of Western New York physicians. The 80 Roswell Park physicians on Buffalo Spree's 2019 Top Doctors list, noting the categories in which they were recognized:

- Ajay Abad, MD, Medical Oncologist — Neurology
- Stacey Akers, MD, FACOG, Gynecologic Oncologist — Gynecologic Oncology; Obstetrics and Gynecology
- Nikolaos Almyroudis, MD, Internal Medicine/Infectious Disease Expert — Infectious Disease
- Steven Ambrusko, MD, MS, Pediatric Oncologist with the Roswell Park Oishei Children's Cancer and Blood Disorders Program and Director, Sickle Cell & Hemoglobinopathy Center of Western New York — Pediatric Hematology and Oncology
- Hassan Arshad, MD, FACS, Head/Neck Oncologic Surgeon— Otolaryngology
- Andrew Bain, MD, Interventional Endoscopist, Chief of Endoscopy — Gastroenterology
- Barbara Bambach, MD, Pediatric Oncologist with the Roswell Park Oishei Children's Cancer and Blood Disorders Program — Pediatric Hematology and Oncology
- Christopher Battaglia, MD, Medical Director of the Intermediate Care Unit — Critical Care Medicine
- Michael Bax, MD, Dermatologic Oncologist — Dermatology
- Ermelinda Bonaccio, MD, Chief of Breast Imaging — Diagnostic Radiology
- Kimberly Brady, MD, Dermatologic Oncologist — Dermatology
- Helen Cappuccino, MD, FACS, Breast Surgeon — Breast Surgery

- Amy Allen Case, MD, FAAHPM, Lee Foundation Endowed Chair of the Department of Palliative and Supportive Care and Chief of the Palliative Care Program — Hospice & Palliative Medicine
- Todd Demmy, MD, FACS, Thoracic Surgeon — Thoracic Surgery
- Elisabeth Dexter, MD, FACS, FCCP, Thoracic Surgeon — Thoracic Surgery
- Ananda Dharshan, MD, FACP, Associate Director, Intensive Care Unit — Critical Care Medicine
- Stephen Edge, MD, FACS, FASCO, Surgical Oncologist and Vice President for Healthcare Outcomes and Policy — Breast Surgery
- Marc Ernstoff, MD, FACP, Medical Oncologist and Katherine Anne Gioia Chair of Medicine — Oncology
- Andrew Fabiano, MD, FAANS, Director, Spinal Oncology Center — Neurosurgery
- Robert Fenstermaker, MD, Chair of Neurosurgery and Director of Neuro-Oncology — Neurosurgery
- Peter Frederick, MD, FACOG, Gynecologic Oncologist and Director of Minimally Invasive Surgery in Gynecologic Oncology — Gynecologic Oncology; Obstetrics and Gynecology
- Simon Fung-Kee-Fung, MD, Radiation Oncologist — Radiation Oncology
- Elizabeth Griffiths, MD, Medical Oncologist and Director, Myelodysplastic Syndrome Program — Hematology
- Vishal Gupta, MD, Head/Neck Oncologic Surgeon — Otolaryngology
- Khurshid Guru, MD, Chair of Urology and Director of Robotic Surgery — Urology
- Mark Hennon, MD, FACS, Thoracic Surgeon and Director, Thoracic Surgery Training Program — Thoracic Surgery
- Francisco Hernandez-Ilizaliturri, MD, Medical Oncologist and Chief of Lymphoma — Hematology
- Wesley Hicks Jr., MD, FACS, Chair of Head & Neck/Plastic & Reconstructive Surgery — Otolaryngology
- Steven Hochwald, MD, FACS, Surgical Oncologist, Chief of Gastrointestinal Surgery — General Surgery
- Frederick Hong, MD, Medical Oncologist/Hematologist with Roswell Park Hematology Oncology Northtowns — Hematology
- Renuka Iyer, MD, Medical Oncologist, Section Chief for Gastrointestinal Medicine and Co-Director of the Liver and Pancreas Tumor Center — Oncology
- John Kane III, MD, FACS, Chair of Surgical Oncology and Chief of the Melanoma/Sarcoma Service — General Surgery
- Eric Kauffman, MD, Urologic Oncologist — Urology
- Kara Kelly, MD, Waldemar J. Kaminski Endowed Chair of Pediatrics at Roswell Park and Chair of the Roswell Park Oishei Children's Cancer and Blood Disorders Program — Pediatric Hematology and Oncology
- Michael Kuettel, MD, PhD, MBA, Barbara C. & George H. Hyde Chair in Radiation Medicine — Radiation Oncology
- Moshim Kukar, MD, Surgical Oncologist (gastrointestinal and endocrine surgery) — General Surgery
- Boris Kuvshinoff, MD, MBA, Surgical Oncologist (gastrointestinal surgery) and Chief Medical Officer — General Surgery
- Dominick Lamonica, MD, Director of Nuclear Medicine — Nuclear Medicine
- Shashikant Lele, MD, FACOG, Clinical Chief of Gynecologic Oncology — Gynecologic Oncology; Obstetrics and Gynecology
- Bethany Lema, MD, Dermatologist — Dermatology
- Mark Lema, MD, PhD, Chair of Anesthesiology, Preoperative Medicine and Pain Medicine — Anesthesiology

- Oscar de Leon-Casasola, MD, Chief of Pain Medicine — Pain Medicine
- Ellis Levine, MD, Medical Oncologist and Chief of Breast Medicine — Oncology
- Robert Lohman, MD, Plastic and Reconstructive Surgeon — Plastic and Reconstructive Surgery
- Philip McCarthy, MD, Medical Oncologist and Director, Transplant & Cellular Therapy Center — Hematology
- Laszlo Mechtler, MD, FAAN, FASN, Medical Oncologist and Chief of Neuro-Oncology — Neurology
- James Mohler, MD, Urologist and Senior Vice President for Translational Research — Urology
- Wong Moon, MD, FACS, Plastic/Reconstructive Surgeon — Plastic and Reconstructive Surgery
- Steven Nurkin, MD, MS, FACS, Surgical Oncologist — Colon and Rectal Surgery; General Surgery
- Chummy Nwogu, MD, PhD, FACS, Thoracic Surgeon — Thoracic Surgery
- Tracey O'Connor, MD, Breast Medical Oncologist — Oncology
- Kathleen O'Leary, MD, Chief of Surgical Anesthesia — Anesthesiology
- Kunle Odunsi, MD, PhD, FRCOG, FACOG, Deputy Director, Chair of Gynecologic Oncology and Executive Director, Center for Immunotherapy — Gynecologic Oncology
- Cemile Nurdan Ozturk, MD, Plastic/Reconstructive Surgeon — Plastic and Reconstructive Surgery
- Gyorgy Paragh, MD, PhD, Dermatologic Oncologist — Dermatology
- Michael Petroziello, MD Interventional Radiologist — Diagnostic Radiology
- Anthony Picone, MD, PhD, MBA, FACP, FACS, Thoracic Surgeon — Thoracic Surgery
- Robert Plunkett, MD, Neurosurgeon — Neurosurgery
- Dheerendra Prasad, MD, MCh, FACRO, Director, Gamma Knife Center and Medical Director, Radiation Medicine — Radiation Oncology
- Marie Quinn, MD, Diagnostic Radiologist, Breast Imaging — Diagnostic Radiology
- Timothy Quinn, MD, Co-Director, Intensive Care Unit — Anesthesiology; Critical Care Medicine
- Kevin Robillard, MD, Gastrointestinal Endoscopist — Gastroenterology
- Charles Roche, MD, Diagnostic Radiologist, Body Imaging — Radiology
- Denise Rokitka, MD, MPH, Pediatric Oncologist with the Roswell Park Oishei Children's Cancer and Blood Disorders Program and Director, Pediatric, Adolescent & Young Adult Cancer Survivorship at Roswell Park — Pediatric Hematology and Oncology
- Ilene Rothman, MD, Dermatologist — Pediatric Dermatology
- Thomas Schwaab, MD, PhD, Urologist and Chief of Strategy, Outreach and Business Development — Urology
- Brahm Segal, MD, Chief of Infectious Diseases and Chair of Internal Medicine — Infectious Disease
- Rajeev Sharma, MD, MBBS, FACE, Endocrinologist — Endocrinology, Diabetes and Metabolism
- Anurag Singh, MD, Radiation Oncologist and Director, Radiation Research — Radiation Oncology
- Edward Spangenthal, MD, Clinical Director of Cardiology — Cardiology
- Raymond Sroka, MD, PharmD, Director, Anesthesia Perioperative Evaluation — Anesthesiology
- Kazuaki Takabe, MD, PhD, FACS, Surgical Oncologist, Chief of Breast Surgery and Alfiero Foundation Endowed Chair in Breast Oncology — Breast Surgery
- Garin Tomaszewski, MD, Interventional Radiologist — Interventional Radiology
- Clare Twist, MD, Pediatric Oncologist with the Roswell Park Oishei Children's Cancer and Blood Disorders Program and Director of Pediatric Experimental Therapeutics, Roswell Park — Pediatric Hematology and Oncology
- Eunice Wang, MD, Medical Oncologist and Chief of Leukemia — Hematology
- Kimberly Wooten, MD, Head/Neck Oncologic Surgeon — Otolaryngology
- Anthony Yarussi, MD, Associate Chief of Surgical Anesthesia — Anesthesiology

- Sai Yendamuri, MD, FACS, Chief of Thoracic Surgery — Thoracic Surgery
- Jessica Young, MD — Breast Surgical Oncologist — Breast Surgery
- Emese Zsiros, MD, PhD, FACOG, Gynecologic Oncologist — Gynecologic Oncology

Roswell Park Named One of America's Best Employers for Diversity

Roswell Park Comprehensive Cancer Center has been recognized as one of America's Best Employers for Diversity 2019. The Buffalo cancer center was ranked 67th among 500 employers and 8th among the 30 employers within the health care sector to be named to the list, which is based on employee surveys.

Forbes selected America's Best Employers for Diversity based on an independent survey conducted in collaboration with the analytics firm Statista among a sample of more than 50,000 U.S. employees working for companies employing at least 1,000 people in their U.S. operations, across 24 different industries. The online surveys asked participants about a number of topics relating to age, gender equality, ethnicity, disability, LGBTQ+ and general diversity concerning their own employer.

Rooftop Terrace Opens and Wins Architectural Awards

A rooftop terrace and garden at Roswell Park Comprehensive Cancer Center has won two prestigious architectural awards. The MMMB Patient Terrace, a year-round outdoor space accessible from Roswell Park's Scott Bieler Clinical Sciences Center, received a regional Design Award from the Buffalo/WNY chapter of the American Institute of Architects (AIA), and also took home a Gold Award for best remodel/renovation in Healthcare Design Magazine's national Healthcare Design awards. The terrace, which opened in Spring 2018, was designed by Jason Sobieraj, Roswell Park Assistant Director of Planning and Institute Architect, and is named in honor of the anonymous donor who provided the funds to create it. The project team also included LaBella P.C., Trowbridge Wolf Michaels Landscape Architects LLP, John P. Stopen Engineering LLP and another Roswell Park employee, Jacob Krone, who served as in-house project manager. The 3,000-square-foot space utilizes the second-story roof over the cancer center's main hospital building. The team selected materials that were both sustainable and able to withstand Buffalo winters.

Roswell Park Listed as One of America's Best Employers by Forbes

Roswell Park Comprehensive Cancer Center has been recognized as one of America's Best Employer's by Forbes for the second time in a row. The center was ranked 59th across 25 industries, up 110 spots from last year.

Businesses were carefully chosen based on an independent online survey taken by 30,000 U.S. employees working for firms or institutions with at least 1,000 people. Companies with the best score were designated as America's Best Employers by Forbes. Roswell Park is one of 500 honorees on the 2018 Best Midsize Employer List.

Internationally Recognized Scientist Named New Chief of Myeloma at Roswell Park

An internationally recognized scientist, Jens Hillengass, MD, is the new Chief of Myeloma at Roswell Park Comprehensive Cancer Center. As part of his new role, Dr. Hillengass will continue his research on hematological diseases, including multiple myeloma and its precursor diseases. Since the disease can be very painful, Dr. Hillengass has been investigating the effect of physical activity on pain and ways to improve patients' quality of life.

Two Roswell Park Immunology Leaders Honored by Society for Thermal Medicine

Two Roswell Park Comprehensive Cancer Center researchers who have focused their work around the impact of temperature on the immune system and its implications for cancer treatment were honored by the Society for Thermal Medicine (STM). Elizabeth Repasky, PhD, was awarded the 2018 William C. Dewey Award for contributions to the mentorship and training of new investigators in the field of thermal medicine. Sharon Evans, PhD, received the J. Eugene Robinson Award at the STM's 2018 Annual Meeting in Tucson, Arizona, recognizing outstanding contributions to the field of hyperthermic oncology.

Researcher at Roswell Park Comprehensive Cancer Center Receives American Cancer Society Award

The American Cancer Society, the largest non-government, not-for-profit funding source of cancer research in the United States, awarded a \$792,000 multi-year research grant to John Ebos, PhD, at Roswell Park Comprehensive Cancer Center toward development of a treatment vaccine for metastatic kidney cancer.

Roswell Park's Marketing/Creative Services Team Wins Two International & Six National Awards

Roswell Park's Marketing/Creative Services team received two international and six national awards for excellence in video production and storytelling. They were honored for two videos that were conceptualized, written and created in-house. The team received a Rose Gold award from the Muse Creative Awards and Gold from Hermes Creative Awards. The "Ribbons of Hope" video also received three Telly's, honoring excellence in video and television across all screens. The team received Silver for art direction, Bronze for writing and a People's Telly Bronze for a local TV commercial. The "First Female CEO" won a Silver Telly for the use of music, and two Bronze awards for editing and corporate image.

Roswell Park Recognized as Blue Distinction® Center for Cancer Care

Roswell Park Comprehensive Cancer Center was named as one of the first Blue Distinction® Centers for Cancer Care. The center is one of four hospitals in New York State, and 42 nationwide that received this designation. The Blue Distinction program by the BlueCross BlueShield Association is designed to help patients and their families find quality specialty care. Roswell Park was selected as one of the inaugural Blue Distinction Centers for Cancer Care by BlueCross BlueShield of WNY due to its proven history of delivering exceptional care and results, delivering timely, multidisciplinary care throughout all stages of treatment and survivorship.

Nationally Renowned Scientist Named Castellani Family Chair of Dermatology at Roswell Park

Oscar Colegio, MD, PhD, has been appointed as the Lawrence P. & Joan Castellani Family Endowed Chair in Dermatology at Roswell Park Comprehensive Cancer Center. Prior to this, he served as Associate Professor of Dermatology, Pathology and Surgery (Transplant) at Yale University. A clinician and scientist with more than 20 years of experience, Dr. Colegio is an expert in cutaneous oncology, with practice and research focused on skin diseases in immunosuppressed patients and high-risk skin cancers that develop in organ transplant recipients and the general population.

Roswell Park Among Top 3 Percent of Cancer Hospitals Nationwide

Roswell Park Comprehensive Cancer Center ranks among the top 3% of cancer centers nationwide, as assessed by U.S. News & World Report. The center moved up three spots, to 30, on the media outlet's annual list of 50 Best Hospitals for cancer and was also recognized as high-performing within two subspecialties: colon cancer surgery and lung cancer surgery. One of only five New York State centers to make the top 50, Roswell Park once again stands as the only facility in all of Western and Central New York to be named a Best Hospital for cancer.

Roswell Park Breast Cancer Program Recognized for its High Standard of Care for Patients

The National Accreditation Program for Breast Centers (NAPBC) reaccredited Roswell Park for three years, following a rigorous independent evaluation. Upon completion of the assessment, an NAPBC surveyor highlighted many aspects of the patient-centered care provided at Roswell Park, observing in a written summary: the Breast Imaging Center of Excellence; the excellence of radiation and medical oncologists; the value of nursing staff's specialized knowledge and skill in the understanding and care of the breast patient; the wealth of patient support and information of the Breast Cancer Resource Center throughout the course of diagnosis, treatment and survivorship; and the valuable education, prevention and early detection of its community outreach program.

Director of Pastoral Care at Roswell Park Elected to Board of National Association of Catholic Chaplains

The Director of Pastoral Care at Roswell Park, Beth Lenegan, PhD, has been elected to the Board of Directors of the National Association of Catholic Chaplains (NACC). During her two-year-term, Dr. Lenegan will help advance the future of chaplaincy by shaping the professional standards, training and certification of chaplains. She will also serve as a liaison to the Association of Clinical Pastoral Education.

Grant Awards Bring More Than \$6 Million to Roswell Park Research Projects

Researchers at Roswell Park Comprehensive Cancer Center garnered \$6.6 million in new grant funding to support important investigations. In 2018, grants and contracts brought in \$92 million in newly awarded or continuing funding for research at Roswell Park. The \$6.6 million from the NCI, a prestigious five-year Research Project Grant or "R01" award, will fund a project led by Song Yao, PhD, Associate Professor of Oncology in the Department of Cancer Prevention and Control. His investigation is a multi-institution, multi-investigator project that seeks to understand how DNA mutations relate to the health disparities we see in breast cancer among African-American women.

- Highlights of other recent research grants Roswell Park researchers have successfully competed for:
 - Christine Ambrosone, PhD, Roswell Park Alliance Foundation Endowed Chair in Cancer Prevention and Senior Vice President for Population Sciences, and Michael J. Higgins, PhD, Associate Professor in the Department of Molecular and Cellular Biology, received a five-year, \$3.1 million R01 grant from the NCI for their investigation into the association of having children, not breastfeeding, and the development of aggressive, estrogen-receptor-negative breast cancer, particularly among African-American women.
 - Andrew Ray, PhD, PT, Rehabilitation Specialist, Associate Professor of Oncology in Cancer Prevention and Control and Associate Member in Epidemiology and Prevention, received a five-year R01 grant for more than \$3 million from the NCI. His work involves a program in which lung cancer patients participate in physical and respiratory therapy before undergoing thoracic surgery in an effort to prevent pulmonary complications after surgery.
 - Joseph Lau, PhD, Distinguished Member of the Department of Molecular and Cellular Biology, received two recent grants totaling more than \$3.7 million. The first is a four-year, \$2.6 million R01 grant from the National Institute of Allergy and Infectious Disease to explore the potential therapeutic value of a form of the protein ST6GAL1 in the treatment of inflammation. The other is a five-year, \$1.03 million Physician Scientist Award from the Blood Center of Wisconsin and National Heart Lung and Blood Institute to develop and sustain programs supporting career development in glycosciences.

- Elizabeth Repasky, PhD, Professor of Oncology in the Department of Immunology, received a five-year, \$2.8 million R01 award from the NCI for her work, "Targeting adrenergic stress pathways to increase tumor sensitivity to radiation and promote development of an anti-tumor response." The award is part of a collaboration with the University of Rochester.
- Dean Tang, PhD, Chair of Pharmacology and Therapeutics, received a five-year, \$2.17 million R01 award from the NCI for research on a protein, LRIG1, that appears to play a tumor-suppressive function in prostate cancer.
- Susan McCann, PhD, RD, Professor of Oncology and Member of the Department of Cancer Prevention and Control, received a four-year, \$1.6 million R01 grant from the National Center for Complementary and Integrative Health. Her research aims to identify factors in the blood that respond to flaxseed consumption and may eventually be targets to reduce chronic inflammation and alter immune function related to chronic disease.
- Steven Pruitt, PhD, Professor of Oncology in the Department of Molecular and Cellular Biology, received a five-year, \$1.8 million grant from the NCI to continue an ongoing project looking at genome stability, cancer and aging.
- Richard Koya, MD, PhD, Associate Professor of Oncology and Associate Director of the Center for Immunotherapy, received a three-year, \$1.03 million award from the Department of Defense for a clinical study for patients with ovarian cancer. This trial is the first ever to use a new immunotherapy approach using engineered T-cell injections combined with an epigenetic drug that increases the immunotherapy's effect.
- Meenalakshmi Chinnam, PhD, Research Associate in the Department of Pharmacology and Therapeutics, received a five-year, \$651,060 grant from the NCI to test the hypothesis that mutation of the RB1 gene drives the transformation of prostate cancer to neuroendocrine variants and explore new therapeutic approaches to treat this lethal form of prostate cancer.
- Kelvin Lee, MD, Jacobs Family Chair in Immunology, received a five-year, \$610,955 renewal grant from the NCI to continue this ongoing training program for graduate students focused on multidisciplinary approaches to tumor immunology.
- Subhamoy Dasgupta, PhD, Assistant Professor of Oncology in Cell Stress Biology, received a three-year, \$450,000 grant from the Susan G. Komen Foundation for "Targeting metabolic adaptations to inhibit breast tumor recurrence and metastasis."
- John Ebos, PhD, Assistant Professor of Oncology in the Department of Cancer Genetics and Genomics, received a four-year, \$198,000 grant from the American Cancer Society for "Therapy induced secretomes as drivers of antiangiogenic drug resistance."
- Joseph Barbi, PhD, Assistant Professor of Oncology and Assistant Member in the Department of Immunology, received a one-year, \$100,000 grant from the American Lung Association for "Overcoming Neurotrophin-mediated immune suppression to treat lung cancer."
- Renuka Iyer, MD, received a one-year, \$100,000 grant from the Neuroendocrine Tumor Research Foundation to conduct an early-stage clinical study of SurVaxM, a cancer vaccine developed at Roswell Park, in survivin-positive neuroendocrine tumors.

- Mateusz Opyrchal, MD, PhD, Assistant Professor of Oncology, received a one-year, \$25,000 grant from the American Association for Cancer Research on the role of the PIEZO2 protein in breast cancer.

Roswell Park Awarded More Than \$6 Million in Moonshot Funds to Lead New Data Management Resource

Through a grant award provided by the Cancer Moonshot, Roswell Park Comprehensive Cancer Center will support and advance some of the nation's most ambitious cancer research projects. A cross-disciplinary Roswell Park team submitted the winning application to establish and house a Data Management and Resource-Sharing Center to serve the Immuno-Oncology Translational Network (IOTN), which directly responds to the goals of the Moonshot, and was awarded \$6.28 million to cover the cost of creating and maintaining this resource for five years.

The competitive award marks the second major allocation from the National Cancer Institute (NCI) that Roswell Park teams earned in the space of a week — bringing \$25 million in new federal funds to the Buffalo–Rochester medical research corridor.

Roswell Park's Chief of Breast Medicine Honored by Susan G. Komen® Upstate New York

Ellis Levine, MD, the Chief of Breast Medicine at Roswell Park Comprehensive Cancer Center, received the Susan G. Komen® Upstate New York Hope Award on Saturday, October 6. The award is given annually to a breast health or breast cancer professional who works towards improving the lives of breast cancer survivors or conducts research to find cures. In addition to treating patients and being an expert in breast oncology, Dr. Levine is also pursuing more than 30 clinical trials. Many are focused on new treatments or therapies for patients with breast cancer or metastatic disease.

Roswell Park's Dr. Kunle Odunsi Elected to the National Academy of Medicine

Kunle Odunsi, MD, PhD, Deputy Director of Roswell Park Comprehensive Cancer Center, has been elected to the National Academy of Medicine — a distinguished lifetime designation that is considered one of the highest honors in health and medicine. The election of new members recognized for their outstanding professional achievements and commitment to service was announced today at the Academy's annual meeting, "Cancers: Can We Beat The Odds," held in Washington, D.C.

The Academy, formerly the Institute of Medicine, is an independent body that aims to improve health for all by advancing science, accelerating health equity, and providing independent, authoritative, and trusted advice nationally and globally. "To carry out our work," the organization notes, "we harness the talents and expertise of accomplished, thoughtful volunteers and undertake meticulous processes to avoid and balance bias. Our foundational goal is to be the most reliable source for credible scientific and policy advice on matters concerning human health."

Roswell Park Alliance Foundation Earns Highest Possible Rating of Four Stars From Charity Navigator

The Roswell Park Alliance Foundation, the 501(c)(3) not-for-profit organization that manages all donations made to Roswell Park Comprehensive Cancer Center, has received the ranking of 4 out of 4 stars from Charity Navigator, America's largest independent charity evaluator. This is the fourth consecutive time that the Alliance Foundation has earned this top distinction. This is Charity Navigator's highest possible rating and indicates that the Alliance Foundation adheres to sector best practices, exceeds industry standards, executes its mission in a financially efficient way and outperforms most charities in its area of work.

Roswell Park Recognized as Center with ‘Great Oncology Program’

Roswell Park Comprehensive Cancer Center has again been named to Becker’s Hospital Review’s 100 Hospitals and Health Systems with Great Oncology Programs, an annual list of centers that are national leaders in patient care, cancer outcomes and research. Roswell Park is one of only six New York State centers to be included, and the only one in Western and Upstate New York. In selecting facilities for the Great Oncology Programs feature, the Becker’s editorial team looks at resources including the U.S. News & World Report cancer care rankings, CareChex rankings and National Cancer Institute “comprehensive cancer center” designations.

Dr. Candace Johnson, Leecia Eve Honored Among Women’s Power 100

Roswell Park Comprehensive Cancer Center’s President and CEO, Candace S. Johnson, PhD, has been named to a new list of the most powerful female leaders in New York. City & State, a media company covering government and politics in New York, included Dr. Johnson on its New York Women Power 100 list, which honors the 100 most influential women in government, public affairs, business, culture and social services. Also named to this new list of distinguished New Yorkers is Leecia Eve, JD, who was recently appointed to the Roswell Park Board of Directors by Gov. Andrew Cuomo. City & State ranked Eve as 40th on its list of powerful women and Dr. Johnson as 41st.

Roswell Park’s Dr. Igor Puzanov Honored for His Many Contributions to Melanoma Research

Roswell Park Comprehensive Center’s Igor Puzanov, MD, MSci, FACP, was honored for his “outstanding and lifelong contributions to melanoma research” during the Melanoma and Immunotherapy Bridge research meeting in Naples, Italy. Dr. Puzanov, who is Chief of Melanoma and Director of the Early Phase Clinical Trials Program at Roswell Park, received the award from Italy’s Fondazione Melanoma, or Melanoma Foundation. Dr. Puzanov gave a keynote address, “Melanoma: The testing ground for immunotherapy,” during the meeting, and his Roswell Park colleagues Kunle Odunsi, MD, PhD, and Marc Ernstoff, MD, spoke, respectively, on reprogramming the tumor microenvironment and T-cells for immunotherapy of ovarian cancer and the role of adrenergic stress in melanoma therapy.

Roswell Park’s Dr. Candace Johnson Named to Inaugural ‘Health Care Power 50’ List

Roswell Park Comprehensive Cancer Center President and CEO Candace S. Johnson, PhD, has been named to City & State’s inaugural Health Care Power 50 list. Dr. Johnson, who in 2015 became the first woman to lead the cancer center, is number 24. She is the only person from a Western New York institution to be included on the statewide list.

Roswell Park Presentations at TCT 2019 Focus on Tools for Predicting Patient Outcomes

Particularly in the realm of cancer care, which can mean years of treatment and follow-up for patients, clinicians look to a number of tools and metrics to guide their decision-making regarding what, if any, treatment options and care approaches may be most effective for a particular patient. Roswell Park Comprehensive Cancer Center experts were invited to highlight ways to optimize these predictive strategies to improve both treatment and rehabilitation of patients undergoing hematopoietic stem cell transplantation, also known as bone marrow transplant, during the TCT/Transplantation and Cellular Therapy Meetings now underway in Houston, Texas.

Theresa Hahn, PhD, earned a Best Abstract Award from the meeting organizers for her work to better predict the long-term risk of disease progression or death in multiple myeloma patients treated with hematopoietic cell transplant followed by long-term, “maintenance” doses of the immunomodulating drug lenalidomide. Dr. Hahn led a multicenter team of collaborators from Roswell Park, the Center for

International Blood and Marrow Transplant Research, the Medical College of Wisconsin and the Blood and the Marrow Transplant Clinical Trials Network in this effort to determine whether a patient's status as either positive or negative for minimal residual disease, or MRD, in the bone marrow at key junctures during the course of treatment could accurately predict how long their disease would remain well-controlled.

Roswell Park Workforce Swells to Record Level With Latest Slate of Hires and Promotions

The team at Roswell Park Comprehensive Cancer Center has reached record levels, growing to a workforce of more than 3,500. Appointments announced by Roswell Park President and CEO Candace S. Johnson, PhD, and her senior leadership team mark a milestone that reflects expansion across all areas of operations, from clinical care and education to new frontiers in cancer research.

Andrei Gudkov, PhD, DSci, Named SVP for Research Technology and Innovation

Shirley Johnson, MBA, MS, RN, Named Chief Clinical Operations Officer and SVP

Kelvin Lee, MD, Named SVP for Basic Science

Carl Morrison, MD, DVM, Promoted to SVP of Scientific Development and Integrative Medicine

Thomas Furlani, PhD, Joins Roswell Park as Chief Information Officer

Pamela Giesie, MSN, RN, PHN, CNOR, FABC, Promoted to Chief Nursing Officer (CNO)

Adam Rosen, MS, Named Chief Information Security Officer

Ermelinda Bonaccio, MD, Promoted to Chair of Diagnostic Radiology

Brahm Segal, MD, Heads New Department of Internal Medicine

Naveen Bangia, PhD, Returns as Associate Dean for Graduate Education

Peter Frederick, MD, FACOG, Promoted to Associate Dean of Graduate Medical Education

Scott Abrams, PhD, Named Co-Leader of Tumor Immunology and Immunotherapy Program

Thinle Chodon, MD, PhD, Named Director of Therapeutic Cell Production Facility (TCPF)

Deborah Cudzilo Joins Roswell Park as Director of Patient Access

Denise Rokitka MD, MPH, Promoted to New Role with Expanded 'AYA' Survivorship Program

Clinical & Scientific Achievements

Roswell Park Becomes Region's Only NPF Center for Pancreatic Cancer

The National Pancreas Foundation (NPF) has designated Roswell Park Comprehensive Cancer Center as an NPF Center for pancreatic cancer. The Buffalo-based cancer center is one of only 42 centers nationwide — and the only one in Western New York — to be named to this network of premier healthcare facilities recognized for their focus on multidisciplinary treatment of pancreas disease and for their commitment to treating “the whole patient,” with a focus on the best possible outcomes and an improved quality of life. The NPF Center designation is awarded following an extensive auditing process to centers that meet established criteria, such as having gastroenterologists, oncologists, pancreas surgeons and interventional radiologists on staff and offering patient-focused programs such as a pain management service and psychosocial support. Designated centers work to advance basic and clinical research and lead the way for heightened awareness and understanding of pancreas disease and related conditions among community physicians, allied health professionals, patients, families and the general public.

Collaboration Expansion With Oishei Children's Hospital and UB Pediatrics Announced

Roswell Park expanded its collaboration with Oishei Children's Hospital and UB Pediatrics for the benefit of the youngest patients in our region. The new Roswell Park Oishei Children's Cancer and Blood Disorders Program enhances the care we provide for children and adolescents with cancer and hematologic disorders. While we have been collaborating with these organizations for decades, this newly aligned joint program reflects new opportunities for improving medical and supportive care by strategically matching clinical needs to resources at each partner institution and delivering care from linked state-of-the-art clinical facilities located down the street from one another on the Buffalo Niagara Medical Campus. Kara Kelly, MD, oversees the collaboration in her roles as Waldemar J. Kaminski Endowed Chair of Pediatrics at Roswell Park, Program Director for Pediatric Hematology/Oncology at Oishei Children's Hospital and Professor of Pediatrics at UB's Jacobs School of Medicine and Biomedical Sciences.

Assessment and Treatment Center Expands to 24/7 Care

The Roswell Park Assessment and Treatment Center (ATC) expanded its operations to 24-hours a day, 365 days a year, as of Thursday, August 30, 2018. Over the past few years, the ATC has provided assessment and treatment of sick patients who require immediate services for non-life-threatening symptoms during the daytime and evening hours. Now, with these expanded hours to 24/7, we can continue to offer this care around the clock.

Governor Cuomo Assists in the Announcement of First-Ever Biotech Venture With Cuba

The Honorable Andrew M. Cuomo, Governor of New York State, came to Roswell Park Comprehensive Cancer Center in September to help announce the formation of the first-ever U.S.-Cuban biotech venture — Innovative Immunotherapy Alliance S.A. The announcement stems from Governor Cuomo's landmark trade mission to Cuba in April 2015, where he facilitated our historic partnership with the Center for Molecular Immunology (CIM). The newly formed joint venture with the CIM means that we can research and develop promising cancer medicines that would otherwise not be available to our patients.

Roswell Park-Baylor Research Identifies Crucial Enzyme Driving Breast Cancer

Looking to identify new strategies to prevent breast cancer recurrence, a research team led by Subhamoy Dasgupta, PhD, Assistant Professor of Oncology in the Department of Cell Stress Biology at Roswell Park Comprehensive Cancer Center, has identified two key proteins involved in glucose metabolism that could be targeted to prevent breast cancer metastasis and recurrence. The team's findings were published in the journal *Nature*. Rapid growth and proliferation are hallmarks of cancer cells, which require a large amount of glucose to meet their energy needs. Because the majority of advanced breast tumors are notably dependent on glucose metabolism, strategies that alter the metabolic pathways of cancer cells can be used to improve outcomes and prevent metastasis or recurrence in patients with breast cancer.

Research Team Identifies Genes Linked to Blood and Marrow Transplant Outcomes

A Roswell Park/Ohio State study opens avenues for genetic screening to improve donor selection, patient prognosis. Blood and marrow transplant, or BMT, is a lifesaving and effective treatment for many patients, but the procedure can cause serious and life-threatening complications. The new research has identified a link between rare variants in a number of novel genes and survival after transplantation of blood and marrow from an unrelated donor, opening avenues for improving individual risk prediction and prognosis for patients undergoing BMT.

A collaborative research team led by **Qianqian Zhu, PhD**, of Roswell Park and Lara Sucheston-Campbell, PhD, of the Colleges of Pharmacy and Veterinary Medicine at Ohio State and The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute has published new findings in *Blood*, the journal of the American Society of Hematology, detailing their study of genetic variants across the entire human genome that cause protein changes. Collaborating researchers include **Li Yan, PhD**, Assistant Professor in the Department of Biostatistics and Bioinformatics at Roswell Park, co-first author of the study, and **Theresa Hahn, PhD**, Professor of Oncology in the Department of Medicine at Roswell Park, co-last author of the study. This study was performed in collaboration with the Center for International Blood and Marrow Transplant Research (CIBMTR) and Be The Match®.

Too Much of a Good Thing: Effect of Prostate Cancer Gene Can Go Either Way, Roswell Park Researchers Find

Roswell Park Comprehensive Cancer Center researchers have found that the effect of a key gene driving an aggressive, recurrent and often incurable form of prostate cancer is dose-dependent, opening new avenues for therapies that overcome resistance to treatment of advanced disease. They presented the results of this research at the American Association for Cancer Research (AACR) Annual Meeting 2018 in Chicago, Ill.

David Goodrich, PhD, Professor of Oncology in the Department of Pharmacology & Therapeutics, is the senior author and **Kristine Wadosky, PhD**, Research Affiliate, is the first author of “Ezh2 is a dose-dependent mediator of prostate cancer aggressiveness and lineage transformation” (abstract 3016). More than 20 teams from Roswell Park Comprehensive Cancer Center were invited to present their research at AACR 2018. In addition, **Marc Ernstoff, MD**, The Katherine Anne Gioia Chair of Medicine, led the roundtable discussion “Practicing immunotherapy in the clinic” on April 14 and **Kunle Odunsi, MD, PhD, FRCOG, FACOG**, Deputy Director, Chair of Gynecologic Oncology and Executive Director of the Center for Immunotherapy was the lead discussant for the session “Multimodality Immuno-oncology Approaches” on April 15. Dr. Odunsi was also the featured presenter at an April 18 Meet the Experts session, “Reprogramming the Tumor Microenvironment to Enhance ‘Next-Generation’ Adoptive Cellular Therapy.”

Roswell Park Researchers Discover Potential Biomarker for Aggressive Breast Cancer

Roswell Park researchers have identified the histone H2AX as a potential biomarker for breast cancer — a determination that could also help predict how a patient will respond to radiation therapy. The research team presented the findings of their research in April at the American Association for Cancer Research (AACR) Annual Meeting 2018 in Chicago, Illinois. **Eriko Katsuta, MD, PhD**, Postdoctoral Research Fellow in the Roswell Park Department of Breast Surgery, is the first author and **Kazuaki Takabe, MD, PhD, FACS**, Clinical Chief of Breast Surgery, Alfiero Foundation Endowed Chair in Breast Oncology and Professor of Oncology, is the senior author of “H2AX is a novel prognostic marker of breast cancer” (abstract 3216), presented during the poster session “Radiation Studies Using in Vitro and Computational Models.”

Cancer Cells Actively Fuel Growth and Metastasis by Reprogramming Healthy Cells, Roswell Park Team Shows

Roswell Park researchers have identified a potential key player promoting cancer progression through changes in the cell environment that are conducive to metastasis. They presented the results of this research at the American Association for Cancer Research (AACR) Annual Meeting 2018 in Chicago, Ill.

Marc S. Ernstoff, MD, The Katherine Anne Gioia Chair of Medicine, is the senior author and Shin La Shu, PhD, a clinical researcher with the Department of Medicine, is the first author of “Human melanoma exosomes induce metabolic reprogramming in human adult dermal fibroblasts” (abstract 5087).

Sedentary Lifestyle Drastically Increases Risk of Dying from Cancer

Roswell Park researchers have once again identified a link between physical inactivity and an increased risk of mortality among cancer patients, emphasizing the health risks of a sedentary lifestyle and the importance of regular exercise as therapy for cancer patients both during and after treatment. The team presented the findings of their research at the American Association for Cancer Research (AACR) Annual Meeting 2018 in Chicago, Ill. **Rikki Cannioto, PhD, EdD, MS**, Assistant Professor of Oncology in the Department of Cancer Prevention and Control, is lead author of “The associations of habitual physical (in)activity with cancer outcomes: evidence from the Roswell Park Data Bank and BioRepository.” While previous studies from Roswell Park have shown a strong link between lifetime inactivity and increased risk of particular cancers, the new findings to be presented are the first to demonstrate an association of pre- and post-diagnosis inactivity with survival across several different cancer types.

Roswell Park Researchers Identify Epigenetic Changes that May Help Explain Racial Disparities in Breast Cancer

Roswell Park researchers have identified epigenetic differences in the breast cancer tumors of African-American women and women of European descent, shedding light on one mechanism by which race may influence the way breast cancer develops. They presented the results of this research at the American Association for Cancer Research (AACR) Annual Meeting 2018 in Chicago, Ill. **Matthew F. Buas, PhD**, Assistant Professor of Oncology in the Department of Cancer Prevention and Control, is lead author and **Christine B. Ambrosone, PhD**, Professor of Oncology, Senior Vice President of Population Sciences and Chair of Cancer Prevention & Control, is senior author of “Intergenic DNA methylation differences in ER- breast tumors from African American versus European American women” (abstract 5328).

Roswell Park Welcomes New Chair of Molecular and Cellular Biology

A scientist with more than 20 years of experience has been appointed as the new Chair of Molecular and Cellular Biology at Roswell Park Comprehensive Cancer Center. Erik Knudsen, PhD, will also serve as the Co-Leader of the Cancer Center’s Genetics and Genomics Program. Prior to this, he worked at the University of Arizona Cancer Center as the Associate Director of Basic Research, and Professor in the Department of Medicine, Division of Translational Medicine at the University of Arizona.

Nursing and Clinical Executive Changes Made

Shirley Johnson, MBA, MS, RN, was appointed Chief Clinical Operations Officer and Senior Vice President, and oversees all clinical operations at Roswell Park, both inpatient and outpatient, including Pharmacy, Patient Access, Clinical Services and Perioperative Services. She oversees with the Chairs the department administrators for Radiation Medicine, Diagnostic Radiology, Pathology and Laboratory Medicine.

Pamela Giesie, MSN, RN, CNOR, FABC, was appointed Chief Nursing Officer and has assumed management of all nursing functions at Roswell Park. She maintains nursing oversight of Rehabilitation Services, Clinical Nutrition, Social Work, Cafeteria and Case Management.

Naveen Bangia, PhD, was named the new Associate Dean for Graduate Education. Effective October 1, he began to oversee day-to-day operations for the Roswell Park Graduate Division, which encompasses our recently redesigned PhD and MS programs in Cancer Sciences.

Oscar Colegio, MD, PhD, was named the new Chair of the Department of Dermatology at Roswell Park. He has also been named the Lawrence P. & Joan Castellani Family Endowed Chair in Dermatology. A clinician and scientist with more than 20 years of experience, Dr. Colegio is an expert in cutaneous oncology — understanding, diagnosing, treating and preventing a wide variety of skin cancers. Prior to this, he served as Associate Professor of Dermatology, Pathology and Surgery (Transplant) at Yale University. His clinical practice and research are focused on skin diseases in immunosuppressed patients and high-risk skin cancers that develop in organ transplant recipients and the general population. His special clinical interests include cutaneous squamous cell carcinoma, basal cell carcinoma, melanoma, immunology, immunodeficiency-associated skin cancers and solid organ transplantation.

Roswell Park Appoints New Director of the Center for Personalized Medicine

Agnieszka Witkiewicz, MD, has been appointed as the Director of the Center for Personalized Medicine at Roswell Park Comprehensive Cancer Center. She is also the Chief of Research and Biobanking in the Department of Pathology. Before coming to the cancer center, she worked at the University of Arizona as the Vice Chair of the Pathology Department, Director of the Gastrointestinal Pathology Fellowship Program, Director of Tissue Acquisition and Cellular/Molecular Analysis Shared Resource and Professor in the Department of Pathology.

Dr. Witkiewicz is an internationally recognized clinician-scientist who combines ground-breaking laboratory research with precision medicine. Her research interests include identifying mechanisms that drive the invasive progression of cancer, with a special focus on breast and pancreatic cancers. As the Director of the Center for Personalized Medicine, Dr. Witkiewicz and her team are using next-generation sequencing technologies to identify patients' unique genetic profiles. This information allows clinicians and patients to precisely select the best treatment options based on the current scientific and clinical evidence.

Dr. Bhuvana Ramkumar, Formerly of CCS Oncology, Returns to Roswell Park as Community Cancer Practice Physician

Roswell Park Comprehensive Cancer Center's Community Cancer Practice network of outstanding oncology physicians has once again expanded with the appointment of Bhuvana Ramkumar, MD, as staff physician at Roswell Park Hematology Oncology of Niagara in Niagara Falls, N.Y., as well as Roswell Park Hematology Oncology Northtowns in Williamsville, N.Y.

Most recently on staff with CCS Oncology, where she has practiced for the last four years, Dr. Ramkumar is extensively trained, with board certifications in four specialties: medical oncology, hematology, internal medicine and hospice/palliative medicine. Also a former Roswell Park hospitalist, she is pleased to be rejoining the Roswell Park network of practices.

Chief Technology Officer Role Created to Enhance Patient-Centric Tech Solutions at Roswell Park

Paul Visco has been promoted to the role of Chief Technology Officer at Roswell Park Comprehensive Cancer Center. A new position at Roswell Park, Visco's role as CTO involves developing and implementing new technologies that benefit the experiences of both patients and clinical teams. He will be the technical lead on several important campus-wide projects aimed at maximizing the effective use of technology for improved and streamlined internal and patient processes. As CTO, Visco hopes to capitalize on creative energy he's gained throughout his time at Roswell Park. He's been instrumental in the development of the center's Intranet and MyRoswell Patient Portal, and several other critical

technology platforms. Visco and his team have also built hundreds of systems through open source technologies. These platforms and systems greatly enhance care and quality of life for our patients.

Expert in Gastrointestinal Cancers Joins Roswell Park as Co-Director of Liver and Pancreas

Roderich Schwarz, MD, PhD, has been appointed as the new Co-Director of the Liver and Pancreas Tumor Center at Roswell Park Comprehensive Cancer Center. He will also serve as a Professor of Oncology in the Department of Surgical Oncology. Prior to this, he worked as a surgeon and the Medical Director of the Goshen Center for Cancer Care in Goshen, Indiana. He also held a position at Indiana University School of Medicine as a Professor of Surgery.

Dr. Schwarz comes to Roswell Park with more than 30 years of experience in treating gastrointestinal cancers. He specializes in treating cancer of the biliary tract, stomach, pancreas and liver. Throughout his career, he's served as the principal or co-investigator in more than 50 clinical trials. He has also received numerous research grants to study gastrointestinal cancers.

Transforming Cancer Care for 120 Years

Roswell Park celebrated 120 years of innovation, breakthrough discoveries and patient-centered cancer care in 2018. Since 1898, the comprehensive cancer center has grown from the vision set by its founder, Roswell Park, MD, a world-renowned surgeon whose revolutionary model is now the foundation for many cancer centers around the world. Dr. Park created the world's first research center dedicated solely to the study of cancer with the establishment of the New York State Pathological Laboratory of the University of Buffalo 120 years ago. The anniversary celebration included a historical timeline, as well as a time capsule, which included messages and items from patients, staff and community members. It was laid beneath a special marker in Kaminski Park & Gardens for future generations to explore.

Weighing in on proposed policy changes in the legal age for purchasing e-cigarettes in Erie County

Dr. Hyland was quoted by media agencies regarding proposed flavored tobacco and e-cigarette policy changes in Erie County. Erie County lawmakers passed legislation to raise the age for buying tobacco products and electronic cigarettes to 21.

Roswell Park Researchers Identify Protein That Contributes to Racial Disparities in Prostate Cancer

A study published in February 2019 points to cellular factors that appear to be driving racial disparities in prostate cancer — mitochondrial differences that prevent formation of the cancer-killing “death wheel” apoptosome protein complex — and proposes a strategy for overcoming these factors with new therapeutic targets. The new work, led by Dhyana Chandra, PhD, and published in *Cancer Research*, a journal of the American Association for Cancer Research (AACR), provides the first concrete evidence that mitochondrial dysfunction and an inability to generate apoptosome formation are key factors behind higher prostate cancer incidence and poorer outcomes in African-Americans. Many African-American men lack a key mitochondrial protein known as cytochrome c — the main protein that facilitates the formation of the desirable “death wheel” effect against cancer cells. Cytochrome c deficiency can occur in people of any race or background, but is common among people of African ancestry. Dr. Chandra and his team report in their new study that African-American males tend to have high expression of the cancer promoters c-Myc and NF-κB, leading to the inhibition of cytochrome c.

Interim Results from Clinical Trial of Immunotherapy for Glioblastoma Show Significant Clinical Benefit

The research team behind an emerging immunotherapy for cancer will present interim findings from an ongoing clinical study in patients with brain cancer at a major research meeting. Collaborators from organizations including Roswell Park Comprehensive Cancer Center, the Cleveland Clinic and MimiVax

LLC shared data from their phase II study of SurVaxM as part of a combination treatment for patients with glioblastoma at the 2018 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago. These results show that the therapy appears to be safe, effective and worthy of further evaluation. Glioblastoma is the most common and aggressive form of primary brain cancer in adults.

Leukemia and Lymphoma Patients Can Receive First FDA-Approved CAR T-Cell Therapy in WNY

Roswell Park is the only cancer center outside of NYC to offer Kymriah

Roswell Park Comprehensive Cancer Center has been approved to administer Kymriah. It's the first FDA-approved CAR T-cell therapy that's designed to help a patient's immune system fight cancer. The cutting-edge treatment is also breaking ground as the first CAR T-cell therapy approved by the FDA to treat two types of cancer, lymphoma and leukemia. Kymriah, otherwise known as tisagenlecleucel, is manufactured by Novartis. The immunotherapy can be used to treat children and young adults up to the age of 25 with acute lymphoblastic leukemia (ALL) and adults with diffuse large B-cell lymphoma (DLBCL).

Differences in the Immune Cell Environment Help Explain Racial Disparities in Breast Cancer

Roswell Park Comprehensive Cancer Center researchers have identified significant differences in the immune microenvironment of breast cancer tumors between African-American and white women, shedding light on the ways in which race can influence cancer development and outcomes. The findings, which were presented at the 2018 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago, are based on a comprehensive review of data from The Cancer Genome Atlas (TCGA), the world's largest public database containing genetic information about various different types of tumors.

Ahmed Elkhanany, MD, a Roswell Park clinical fellow, is lead author and Kazuaki Takabe, MD, PhD, FACS, Alfiero Foundation Endowed Chair in Breast Oncology, is senior author of the study, "Racial disparity in breast cancer immune microenvironment" (abstract 1081), presented in a poster session on Saturday, June 2, 2018.

New Treatment Combination Improves Outcomes for Some Patients with Colorectal Cancer

Research from Roswell Park Comprehensive Cancer Center suggests that a new treatment combination can extend survival for many patients with advanced colorectal cancer. The findings from this study of the targeted drug nintedanib in combination with capecitabine, an approved standard therapy for colorectal cancer, were shared during the 2018 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago.

Colorectal cancer is one of the most common cancers among men and women in both Europe and the United States. Up to half of patients with this type of cancer will be diagnosed with advanced disease or develop cancer that resists the effects of currently approved treatment strategies.

Threat of Malaria Left its Mark on the Immune system in People with African Ancestry

In a study published in PLOS Genetics, Christine Ambrosone, PhD, of Roswell Park Comprehensive Cancer Center and colleagues identified a genetic difference between people with African and European ancestry that affects how the immune system triggers inflammation. They suspect these differences are rooted in how the immune system evolved and the evolutionary pressure exerted by malaria on ancestors who lived in Africa.

Roswell Park Names New Director of Technology Transfer and Commercial Development

Patrick Emmerling, PhD, MBA, CLP, has been promoted to Director of Technology Transfer and Commercial Development. As leader of the department dedicated to supporting Roswell Park inventors and maximizing the impact of their work, he will collaborate with researchers and other colleagues to assess market opportunities, secure intellectual property protection, negotiate partnering and licensing agreements and assist in commercializing Roswell Park innovations.

Dr. Emmerling joined the cancer center in 2015 as Senior Licensing Manager and served as interim director of the department since January. In his new role, he will continue to work closely with Roswell Park inventors to facilitate the disclosure of new innovations; develop and execute appropriate patenting and marketing strategies; and negotiate license agreements with established and/or startup companies. Before coming to Roswell Park, Dr. Emmerling worked for four years as a Licensing Manager at the University of Rochester, where he managed a large and diverse portfolio of physical and biomedical technologies.

Roswell Park Approach to Assessing Kidney Tumors May Spare Some Patients Surgery

A research team from Roswell Park has discovered a way to use computed tomography (CT) imaging to assess kidney tumors that test positive for the biomarker CD117 and accurately determine — before surgery — whether the tumor is benign or malignant. The findings have been published in *Clinical Cancer Research*, a journal of the American Association for Cancer Research (AACR).

“A persistent problem in kidney cancer diagnosis has been the inability to reliably determine whether a kidney tumor is cancerous without undergoing surgery to remove the tumor, and sometimes the whole kidney too,” says senior author Eric Kauffman, MD, a staff physician and Assistant Professor of Oncology in the Department of Urology at Roswell Park. Surgery for benign kidney tumors is associated with frequent perioperative morbidity and an estimated annual healthcare cost approaching \$100 million in the United States alone.

Roswell Park Team Identifies Possible Cause of Resistance to Prostate Cancer Treatment

A collaborative research team has linked the development of castration-resistant prostate cancer and resistance to treatment to a lack of androgen receptor (AR) expression in prostate cancer cells, identifying a new therapeutic target for one of the deadliest forms of cancer among men. Results of this research, which was led by scientists at Roswell Park Comprehensive Cancer Center, were published in the journal *Nature Communications*.

Prostate cancer is one of the most common and treatable types of cancer in men. Most patients respond well to hormone therapy or chemotherapy, and five-year survival rates have reached nearly 100% thanks to advances in detection and treatment. However, prostate cancer remains the second-leading cause of male cancer deaths, because those with more advanced or aggressive forms of the disease eventually experience progression or recurrence despite treatment.

Director of Spiritual Care at Roswell Park Elected to Board of National Association of Catholic Chaplains

The Director of Spiritual Care at Roswell Park, Beth Lenegan, PhD, has been elected to the Board of Directors of the National Association of Catholic Chaplains (NACC). During her two-year-term, Dr. Lenegan will help advance the future of chaplaincy by shaping the professional standards, training and certification of chaplains. She will also serve as a liaison to the Association of Clinical Pastoral Education. The NACC is a national association that advocates for the profession of spiritual care, and educates, certifies and supports chaplains as well as clinical pastoral educators. Each member must go through

rigorous training to become a board-certified chaplain dedicated to the compassionate care of people experiencing pain, vulnerability, joy and hope. Chaplains serve across the nation in a variety of diverse fields, including health care, education and social work.

Physician Executive Will Lead Value-Based Care Initiatives at Roswell Park

Raghu Ram, MD, has joined Roswell Park Comprehensive Cancer Center as Vice President of Value-Based Care Optimization and Community Clinical Collaboration. Dr. Ram started in his new role on March 4. Bringing significant leadership experience in health systems and health plans, Dr. Ram most recently served as Regional Medical Director of Landmark Health, a medical group that provides care for the frail elderly. His duties at Roswell Park include developing strategy and negotiating contracts with health insurance companies. He will also support the cancer center's business development efforts and engagement with primary-care physicians across Western New York.

Latest Research Grants Bring More than \$10 Million to Roswell Park Scientists

Roswell Park Comprehensive Cancer Center scientists have received a dozen recent competitive grant awards totaling more than \$10 million from federal agencies. The largest individual award is a five-year grant that will support investigations into how certain forms of stress may impact our immune system. Three of the projects seek a better understanding of the behaviors involved with smoking and use of electronic cigarettes.

In 2018, grants and contracts brought in \$92 million in newly awarded or continuing funding for research at Roswell Park.

These awards, including new funding from federal agencies as well as nonprofit foundations and associations, included:

- A \$6.6 million grant from the National Cancer Institute (NCI) was awarded to Roswell Park Comprehensive Cancer Center researchers. The \$6.6 million from the NCI, a prestigious five-year Research Project Grant or "R01" award, will fund a project led by Song Yao, PhD, Associate Professor of Oncology in the Department of Cancer Prevention and Control. His investigation is a multi-institution, multi-investigator project that seeks to understand how DNA mutations relate to the health disparities we see in breast cancer among African-American women.
- Christine Ambrosone, PhD, Roswell Park Alliance Foundation Endowed Chair in Cancer Prevention and Senior Vice President for Population Sciences, and Michael J. Higgins, PhD, Associate Professor in the Department of Molecular and Cellular Biology, received a five-year, \$3.1 million R01 grant from the NCI for their investigation into the association of having children, not breastfeeding, and the development of aggressive, estrogen-receptor-negative breast cancer, particularly among African-American women.
- Andrew Ray, PhD, PT, Rehabilitation Specialist, Associate Professor of Oncology in Cancer Prevention and Control and Associate Member in Epidemiology and Prevention, received a five-year R01 grant for more than \$3 million from the NCI. His work involves a program in which lung cancer patients participate in physical and respiratory therapy before undergoing thoracic surgery in an effort to prevent pulmonary complications after surgery.
- Joseph Lau, PhD, Distinguished Member of the Department of Molecular and Cellular Biology, received two recent grants totaling more than \$3.7 million. The first is a four-year, \$2.6 million

R01 grant from the National Institute of Allergy and Infectious Disease to explore the potential therapeutic value of a form of the protein ST6GAL1 in the treatment of inflammation. The other is a five-year, \$1.03 million Physician Scientist Award from the Blood Center of Wisconsin and National Heart Lung and Blood Institute to develop and sustain programs supporting career development in glycosciences.

- Elizabeth Repasky, PhD, Professor of Oncology in the Department of Immunology, received a five-year, \$2.8 million R01 award from the NCI for her work, “Targeting adrenergic stress pathways to increase tumor sensitivity to radiation and promote development of an anti-tumor response.” The award is part of a collaboration with the University of Rochester.
- Dean Tang, PhD, Chair of Pharmacology and Therapeutics, received a five-year, \$2.17 million R01 award from the NCI for research on a protein, LRIG1, that appears to play a tumor-suppressive function in prostate cancer.
- Susan McCann, PhD, RD, Professor of Oncology and Member of the Department of Cancer Prevention and Control, received a four-year, \$1.6 million R01 grant from the National Center for Complementary and Integrative Health. Her research aims to identify factors in the blood that respond to flaxseed consumption and may eventually be targets to reduce chronic inflammation and alter immune function related to chronic disease.
- Steven Pruitt, PhD, Professor of Oncology in the Department of Molecular and Cellular Biology, received a five-year, \$1.8 million grant from the NCI to continue an ongoing project looking at genome stability, cancer and aging.
- Richard Koya, MD, PhD, Associate Professor of Oncology and Associate Director of the Center for Immunotherapy, received a three-year, \$1.03 million award from the Department of Defense for a clinical study for patients with ovarian cancer. This trial is the first ever to use a new immunotherapy approach using engineered T-cell injections combined with an epigenetic drug that increases the immunotherapy’s effect.
- Meenalakshmi Chinnam, PhD, Research Associate in the Department of Pharmacology and Therapeutics, received a five-year, \$651,060 grant from the NCI to test the hypothesis that mutation of the RB1 gene drives the transformation of prostate cancer to neuroendocrine variants and explore new therapeutic approaches to treat this lethal form of prostate cancer.
- Kelvin Lee, MD, Jacobs Family Chair in Immunology, received a five-year, \$610,955 renewal grant from the NCI to continue this ongoing training program for graduate students focused on multidisciplinary approaches to tumor immunology.
- Subhamoy Dasgupta, PhD, Assistant Professor of Oncology in Cell Stress Biology, received a three-year, \$450,000 grant from the Susan G. Komen Foundation for “Targeting metabolic adaptations to inhibit breast tumor recurrence and metastasis.”

- John Ebos, PhD, Assistant Professor of Oncology in the Department of Cancer Genetics and Genomics, received a four-year, \$198,000 grant from the American Cancer Society for “Therapy induced secretomes as drivers of antiangiogenic drug resistance.”
- Joseph Barbi, PhD, Assistant Professor of Oncology and Assistant Member in the Department of Immunology, received a one-year, \$100,000 grant from the American Lung Association for “Overcoming Neurotrophin-mediated immune suppression to treat lung cancer.”
- Renuka Iyer, MD, received a one-year, \$100,000 grant from the Neuroendocrine Tumor Research Foundation to conduct an early-stage clinical study of SurVaxM, a cancer vaccine developed at Roswell Park, in survivin-positive neuroendocrine tumors.
- Mateusz Opyrchal, MD, PhD, Assistant Professor of Oncology, received a one-year, \$25,000 grant from the American Association for Cancer Research on the role of the PIEZO2 protein in breast cancer.

Adolescent Users of Juul, Other E-Cigarette Pods Exposed to Nearly As Much Nicotine as Smokers, Study Shows

A new study on use of electronic cigarettes among adolescents reports striking findings: that young users of newer “pod” e-cigarette devices are absorbing nicotine at levels approaching nicotine exposure from traditional combustible cigarettes. The research, a collaboration between scientists at Roswell Park Comprehensive Cancer Center and pediatricians from Stony Brook Children’s Hospital, also reveals that Juul and similar products contain high concentrations of a modified, salt form of nicotine, which is more readily absorbed upon inhalation.

The team’s data, published in the journal *Tobacco Control*, represent the first reported independent findings on nicotine exposure among youths who use pod systems, small e-cigarette devices that resemble USB flash drives. “Pods are compact, lightweight, ultraportable and easy to use inconspicuously,” the authors of the new study note. “Use of Juul and similar products (‘juuling’) among youth has parents, teachers and the lay public appropriately concerned.”

New Immunotherapy Approach Found in “Superagonist” Interleukin-15 Complex

Immunotherapy has become a well-established approach to treating cancer, but a recent development shows that the immune response to cancer can be further enhanced using cytokines, small proteins that act as chemical messengers transporting information between different types of immune cells. The findings have been published in *Clinical Cancer Research*, a journal of the American Association for Cancer Research (AACR).

A clinical trial led by Marc Ernstoff, MD, the Katherine Anne Gioia Chair of Medicine at Roswell Park Comprehensive Cancer Center, found that a drug complex containing one of these cytokines, interleukin-15 (IL-15), is both safe and well tolerated in patients with advanced solid tumors. Results of the study show that IL-15 plays a critical role in enhancing certain groups of immune cells involved in cancer therapy.

Roswell Park and UPMC To Create \$19 Million Research Program Focused on Flavored Tobacco

The expertise of two regional research teams has earned a federal grant of nearly \$20 million to create the nation’s first program dedicated to the study of flavored tobacco. One of only nine projects to earn

funding through the federal Tobacco Centers of Regulatory Science (TCORS) program, the WNY Center for Research on Flavored Tobacco Products, or CRoFT, will unite teams from Roswell Park Comprehensive Cancer Center and the University of Rochester Medical Center in an effort to better document and understand one of the fastest-growing trends in tobacco use.

The five-year, \$19.05 million competitive grant, awarded by the National Cancer Institute, will be shared by Roswell Park and URMC. Based at Roswell Park, the program will be led by Richard O'Connor, PhD, and Maciej Goniewicz, PhD, PharmD, both internationally recognized experts on tobacco use and its health consequences. The Roswell Park team will analyze various combustible and electronic tobacco products, their consequences for health and how users interact with these products. Collaborators from URMC, led by Irfan Rahman, PhD, and Deborah Ossip, PhD, will contribute critical resources in biomarker screening, genetic analysis and toxicology assessment.

Roswell Park Lung Cancer Expert Shares Initial Findings From First North American Study of CIMAvax

Initial results from the first North American clinical trial of CIMAvax-EGF show that this Cuban-developed immunotherapy is safe, well tolerated and worthy of further study. Principal Investigator Grace Dy, MD, of Roswell Park Comprehensive Cancer Center shared the findings at the International Association for the Study of Lung Cancer's (IASLC's) 19th World Conference on Lung Cancer (WCLC) in Toronto, Canada. The poster presentation reports results from the first portion of an ongoing phase I/II study of CIMAvax, an epidermal growth factor (EGF)-depleting immunotherapy, in combination with the checkpoint inhibitor nivolumab (brand name Opdivo) in 13 patients with advanced non-small cell lung cancer (NSCLC). Nivolumab is an anti-PD1 antibody and is a standard therapeutic option in many countries, including the U.S., for patients with treatment-resistant or recurrent NSCLC.

Compound Derived From Chinese Tree Bark Shows Promise as Treatment for Pancreatic Cancer

A new derivative of a compound found in the bark of a rare Chinese tree has powerful anticancer properties and a low toxicity profile, according to researchers at Roswell Park Comprehensive Cancer Center. Results of their study of the effects of the compound F118 in pancreatic cancer were published in the *Journal of Experimental & Clinical Cancer Research*.

Pancreatic cancer is one of the most difficult cancers to treat. Even with aggressive treatment, only 6% to 8% of patients will survive 5 years beyond the time of diagnosis. The biggest challenges stem from the fact that pancreatic tumors are very dense, making the delivery of cancer-fighting drugs challenging, and most tumors quickly develop resistance to treatment.

Research Review Underscores Progress in Treating Kidney Cancer, Importance of Close Patient Monitoring

The treatment of renal cell carcinoma (RCC), or kidney cancer, has been one of the fields most dramatically affected by what the authors of a new research review article call a period of "remarkable progress," with April 2018 FDA approval of the first immunotherapy combination regimen for the treatment of patients newly diagnosed with kidney cancer. In an effort to compile and summarize the latest knowledge about these immunotherapy combinations and their implications, a group of kidney cancer immunotherapy experts led by Saby George, MD, of Roswell Park Comprehensive Cancer Center have written a new research review article assessing current approaches to treating patients newly diagnosed with kidney cancer and also looking ahead to some of the most pressing questions still to be answered related to these emerging therapies. Published online Nov. 21 by the journal *JAMA Oncology*, the review article highlights the path to approval for the new standard of care for these patients — ipilimumab, also known as Yervoy, together with nivolumab, also known as Opdivo.

“Remarkable progress has been made recently in the clinical application of newer immunotherapies, of which the most notable are immune checkpoint inhibitors (ICIs) that increase antitumor immunity by blocking native immune regulators such as cytotoxic T lymphocyte antigen 4 (CTLA-4) and programmed cell death 1 (PD-1),” the authors write. “However, current evidence indicates that not all patients may find single-agent immunotherapy advantageous, underscoring the unmet need for combination treatment strategies that can improve efficacy in a broader patient population without exacerbating toxic effects.”

Brain Cancer Immunotherapy SurVaxM Extends Survival, Even in Hard-to-Treat Patients

Injectable immunotherapy developed by Roswell Park team shows promise as treatment for glioblastoma

Results from an ongoing clinical study incorporating the immunotherapy SurVaxM as part of combination treatment for glioblastoma show that this investigational drug is safe, well-tolerated and extended survival even among the hardest-to-treat subgroups of patients. These new findings — including a molecular analysis detailing study participants’ levels of a key biomarker, MGMT — were presented at the Society for Neuro-Oncology (SNO) Annual Meeting in New Orleans. Glioblastoma is the most common and aggressive form of primary brain cancer in adults, with approximately 14,000 cases diagnosed each year in the United States. With standard therapy — surgery followed by chemotherapy (temozolomide, also known as Temodar), radiation therapy and adjuvant temozolomide — the median overall survival is 15 months. SurVaxM is a synthetic compound that stimulates the immune system to target a cancer molecule called survivin, a molecule that is highly expressed in glioblastoma and many other cancers.

20 Years, 6,300 Patients: Roswell Park Marks Milestone for Gamma Knife Radiosurgery Program

In November 1998, Roswell Park Comprehensive Cancer Center took a leap when it began to offer an emerging technology called Gamma Knife radiosurgery for many people with cancer and other disorders. Twenty years later, some 6,300 patients have been treated through this advanced and targeted approach — many of them from across the country and across the globe — and Roswell Park is an international leader and mentor in the most effective use of this advanced system. Dan Leksell, MD, the son of the neurosurgeon who invented radiosurgery and developed the first Gamma Knife device, traveled to Buffalo from his home in Sweden to mark the 20th anniversary of the Roswell Park Gamma Knife Program.

Roswell Park Hematologists Bring Expertise in Cellular Therapies, Genomic Testing and Rare Lymphoma to ASH 2018

Roswell Park Comprehensive Cancer Center hematology experts from many disciplines and subspecialties were invited to present new research at the American Society of Hematology (ASH) 60th Annual Meeting, which was held in December 2018 in San Diego, California. The dozens of research projects they highlighted included new research on management of aggressive and rare lymphomas, approaches for optimizing cellular therapies such as blood and marrow transplant, and decision-making around genomic testing for patients with acute myeloid leukemia.

Opioid Prescriptions Can Be Drastically Reduced After Surgery with No Increase in Pain, Study Shows *Striking Roswell Park research leads to new care guidelines to combat opioid crisis*

Pain after surgery can be effectively managed with minimal or no opioids, according to research conducted at Roswell Park Comprehensive Cancer Center and published in JAMA Network Open. A two-year study by a multidisciplinary team of surgeons and other cancer specialists found that the amount of opioid medications prescribed after surgery can be drastically reduced without negatively affecting pain

scores, postoperative complications or patient requests for additional opioids, demonstrating that alternative approaches to pain management can be both safe and highly effective. The publication presented the findings of a two-year pilot study at Roswell Park in which patients undergoing gynecologic or abdominal surgery were prescribed fewer opioids at discharge.

Exercise Significantly Cuts the Risk of Death from Cancer

Research out of Roswell Park Comprehensive Cancer Center shows that cancer patients who exercise regularly both before and after their diagnosis are significantly more likely to survive than those who are sedentary, adding to the growing body of evidence that physical activity is an important part of a cancer prevention and treatment strategy. The results were published in an issue of the journal *Cancer Causes & Control*.

A physically active lifestyle can help reduce the risk of many diseases, including breast and colon cancer, but surprisingly few studies have investigated the link between regular physical activity and cancer outcomes across multiple disease sites. This large study demonstrates the potential value of regular exercise among cancer patients and survivors, regardless of age, weight, smoking status, or cancer type and stage, and is one of the first to examine the beneficial effect of regular physical activity before and after a cancer diagnosis across many different cancer types.

E-Cigarette Users Have Lower Exposure to Toxicants — As Long As They Don't Smoke Combustible Cigarettes Too

The largest study to date to compare exposure to toxicants among users of electronic cigarettes, smokers and nonsmokers has been completed, suggesting possible benefits for smokers who switch completely to electronic cigarettes. The research team, led by Maciej Goniewicz, PhD, PharmD, and Andrew Hyland, PhD, of Roswell Park Comprehensive Cancer Center in collaboration with scientists from Westat, the National Institute on Drug Abuse (NIDA), the U.S. Food and Drug Administration (FDA) and other academic centers, saw clear evidence that e-cigarette users, while exposed to more toxicants than people who do not use any form of tobacco, evidence significantly lower levels of toxicants than those who smoke cigarettes.

The findings, which were based on the largest prospective U.S. study of tobacco use, were published by the journal *JAMA Network Open*. Using data from 5,000 of the U.S. adults participating in the federally funded Population Assessment of Tobacco and Health (PATH) Study, between 2013 and 2014, the research team analyzed their use of tobacco, testing urine samples from these participants for key biomarkers of exposure to harmful chemicals.

Donations Are Fueling New Research at Roswell Park

Five promising preliminary cancer research projects at Roswell Park Comprehensive Cancer Center received a total of \$500,000 in grants from the Roswell Park Alliance Foundation, the 501(c)(3) not-for-profit organization that raises funds and manages all donations made to Roswell Park.

The grants went to researchers who received the funds following a competitive peer-review process that is led by the Foundation. The researchers submitted their project proposals to the Alliance Foundation's Scientific Advisory Committee (SAC), made up of objective Roswell Park scientists, who scored the applications and selected the projects that would receive funding based on their potential to find cancer cures and save lives.

Roswell Park Researchers Propose Two New Strategies for Treating Pancreatic Cancer

In a pair of studies, researchers from Roswell Park Comprehensive Cancer Center outlined strategies for overcoming pancreatic cancer's resistance to treatment through approaches that exploit this cancer's reliance on uncontrolled, or deregulated, cell proliferation. The companion articles in *Oncogene*, which is published by the Nature Publishing Group, and *Clinical Cancer Research*, a journal of the American Association for Cancer Research (AACR), report promising findings from preclinical studies employing existing treatments that have been effective against other solid-tumor cancers.

The study published in *Oncogene* reports both new findings about how pancreatic cancer evades the effects of treatment with cyclin-dependent kinase 4 and 6 (CDK4/6) inhibitors such as palbociclib, ribociclib and abemaciclib and a strategy for overcoming that resistance — by combining CDK4/6 inhibitors with drugs inhibiting another growth promoting kinase MTOR.

Genetic and Metabolic Differences May Help Explain Inconsistencies in Studies on Diet and Cancer

While research suggests that increasing dietary intake of lignans — nutrients found in whole grains, vegetables, fruits and seeds — may reduce risk of breast cancer, the findings from studies testing this hypothesis have been inconsistent. A study from Roswell Park Comprehensive Cancer Center, published in *Cancer Epidemiology, Biomarkers & Prevention*, a journal of the American Association of Cancer Research (AACR), examines how women of different backgrounds metabolize lignans. What these scientists learned may help explain why associations between diet and breast cancer risk have been difficult to demonstrate consistently.

Lignans are phytoestrogens that are structurally similar to naturally occurring steroid hormones. A team of Roswell Park researchers led by Susan McCann, PhD, RD, Professor of Oncology in the Department of Cancer Prevention and Control, conducted a dietary intervention study in 137 healthy, postmenopausal Caucasian women and 115 healthy, postmenopausal African-American women in Western New York. Participants were randomly assigned to either maintain their usual diet or to consume 10 grams per day of ground flaxseed, the richest known source of lignans, for 6 weeks. Then, after a 2-month period with no dietary interventions, all participants crossed over to the other diet for an additional 6 weeks.

Roswell Park Reports New Path to Overcoming Drug Resistance in HER2-Positive Breast Cancer

The HER2 protein, which encourages the growth of cancer cells, is present in about 20% of all breast cancers. While HER2-positive breast cancers tend to be very aggressive, the prognosis is generally very good, thanks to the introduction of HER2 inhibitors such as trastuzumab (brand name Herceptin). However, not all HER2-positive breast cancers respond to existing HER2 inhibitors.

In a study published in *Science Translational Medicine*, Roswell Park researchers report that a new anticancer agent, PEPD-G278D, has the potential to overcome that drug resistance. It is a novel HER2 inhibitor that operates on several different fronts.

Roswell Park Researchers Identify Protein That Contributes to Racial Disparities in Prostate Cancer

A published Roswell Park Comprehensive Cancer Center study points to cellular factors that appear to be driving these disparities — mitochondrial differences that prevent formation of the cancer-killing “death wheel” apoptosome protein complex — and proposes a strategy for overcoming these factors with new therapeutic targets.

The recent work, led by Dhyan Chandra, PhD, and published in *Cancer Research*, a journal of the American Association for Cancer Research (AACR), provides the first concrete evidence that

mitochondrial dysfunction and an inability to generate apoptosome formation are key factors behind higher prostate cancer incidence and poorer outcomes in African-Americans.

Use of Oral Contraceptives Protects Against Most-Fatal Types of Ovarian Cancer

A team from Roswell Park Comprehensive Cancer Center and the University at Buffalo analyzed the connections between ovarian cancer and a history of oral contraceptive use, reporting for the first time that the protective benefit of oral contraceptives is most pronounced with the most aggressive and fatal subtypes of ovarian cancer. The research team, led by Kirsten Moysich, PhD, MS, Distinguished Professor of Oncology in the Departments of Cancer Prevention and Control and Immunology at Roswell Park, evaluated data from the Ovarian Cancer Association Consortium (OCAC) to determine whether any associations existed between pre-diagnostic use of oral contraceptives and incidence of highly fatal ovarian cancer. They looked at pooled data from 20 case-control studies involving 579 patients who died within 12 months of being diagnosed with ovarian cancer, matched to a control group of 2,279 patients who did not have ovarian cancer. After adjusting for potential confounding factors including age and parity, or whether the patients had given birth, the results show that any history of using oral contraceptives was associated with a 46% reduction in the odds of death within 12 months of diagnosis. Their work is believed to be the first large, multicenter study to investigate the association between oral contraceptive use and risk of highly fatal ovarian cancer.

Hour of Radiation Treatments Can Affect Mucositis for Patients With Head/Neck Cancers

Painful sores in the mouth and throat are one of the most common adverse side effects caused by radiation therapy, which is a mainstay of treatment for most cancers of the head and neck. This condition, known as oral mucositis, frequently causes quality-of-life issues such as difficulty swallowing or eating and interrupted sleep, and often necessitates prescription of opioids or other analgesics for pain control. New research from Roswell Park Comprehensive Cancer Center, presented at the American Association for Cancer Research (AACR) Annual Meeting 2019 in Atlanta, reported that administering radiation treatments in the morning as opposed to later in the day can significantly reduce severity of mucositis and its related impacts.

With Safety Analysis Now Complete, Roswell Park Moves Forward With Expanded Study of CIMAvax

Final results from the first U.S. clinical study of a Cuban immunotherapy show that CIMAvax-EGF, a treatment targeting a particular cancer survival protein, epidermal growth factor (EGF), is safe and showed promising efficacy as part of a treatment combination with nivolumab (Opdivo) in patients with advanced non-small cell lung cancer (NSCLC). Principal Investigator Grace Dy, MD, shared these findings in a presentation at the American Association for Cancer Research (AACR) Annual Meeting 2019 in Atlanta.

“Watch and Wait” Strategy Puts Surgery On Hold for Some With Rectal Cancer

Researchers at Roswell Park Comprehensive Cancer Center are seeing encouraging results with a group of rectal cancer patients who were able to safely defer surgery rather than going under the knife. The research, led by surgical oncologist Steven Nurkin, MD, MS, FACS, was published in *Surgical Oncology* and is one of the largest U.S. single-institution analyses evaluating neoadjuvant therapy and non-operative management, or NOM, in patients with rectal cancer. Through a retrospective review of rectal cancer patients seen between 2012 and 2016, Dr. Nurkin and team identified 29 individuals who elected to “watch and wait” as part of their treatment plan. They did receive some treatment for their cancers — all 29 achieved complete clinical response (cCR) from chemotherapy and radiation therapy administered as a neoadjuvant, or preliminary step — but did not initially undergo surgery as part of their treatment. All 29 were followed with physical exams, endoscopy, and imaging.

Roswell Park Becomes First Site in New York Accredited to Provide Tobacco Treatment Specialist Training

Roswell Park was awarded full accreditation by the Council for Tobacco Treatment Training Programs, Inc., making it the first accredited provider in New York State that prepares health professionals for the National Certificate for Tobacco Treatment Practice. The 4.5-day in-person workshops prepare health care professionals from all backgrounds and disciplines to provide effective, evidenced-based treatment to a range of individuals in many settings and modalities. Attendees will learn from nationally and internationally renowned experts through lectures and a variety of hands-on learning activities. Highlights include updates on new and emerging tobacco products, tobacco product marketing, basic and advanced pharmacotherapy, and evidence-based behavioral treatment approaches. Completion of the program satisfies the training requirement for the National Certificate in Tobacco Treatment Practice (NCTTP).

Roswell Park Researchers Take Center Stage at Meeting of Experts on Gynecologic Cancers

Members of Roswell Park Comprehensive Cancer Center's senior leadership team, physician staff and fellows were invited to present research findings and insights at the Society of Gynecologic Oncology (SGO) 50th Annual Meeting on Women's Cancer. SGO is considered the premier specialty society for healthcare professionals focused on comprehensive treatment of gynecological cancers. The meeting ran March 16-19 in Honolulu, Hawaii. Among them were five Roswell Park researchers invited to give podium presentations:

- Kunle Odunsi, MD, PhD, FRCOG, FACOG, was asked to discuss the future of immunology for gynecologic malignancies as part of a plenary session beginning at 7:45 a.m. HST Sunday, March 17. As the Deputy Director, Chair of Gynecologic Oncology and Executive Director of the Center for Immunotherapy at Roswell Park, Dr. Odunsi continues to lead the way in this field, pioneering new approaches and developing strategies for improving the care and quality of life for patients with ovarian cancer and other gynecologic cancers.
- As part of a plenary session later that morning highlighting results from new clinical trials, Emese Zsiros, MD, PhD, FACOG, presented results from a phase II clinical trial that seeks to enhance the efficacy of immune checkpoint inhibition with pembrolizumab and two other immunomodulatory drugs for epithelial ovarian cancer. Dr. Zsiros, a staff physician and Assistant Professor of Oncology with Roswell Park's gynecologic oncology team, shared initial findings about the safety and efficacy of this novel treatment combination.
- As part of an education forum, clinical fellow Jaron Mark, MD, gave an update Monday, March 18, beginning at 6:07 p.m. HST on a project he presented last year at SGO related to opioid prescribing following major gynecologic oncology procedures. In a study, researchers discovered they were able to dramatically reduce use of opioids without any impact on patient pain scores. Roswell Park adopted new pain management guidelines across all its surgical programs in January.
- Fellow Paul Mayor, MD, discussed evidence that surgery suppresses the immune system during a featured poster presentation the evening of Monday, March 18.
- Physician wellness took center stage at SGO. A Saturday, March 16, presentation by clinical fellow Sarah Lynam, MD, highlighted a national survey she and Dr. Zsiros conducted together on the burnout rate among gynecologic oncologist trainees.

Community Support & Advocacy

Herd of Hope Campaign Launched

The Herd of Hope is a twist on the Herd About Buffalo campaign and offers Western New York's corporate community the opportunity to come together as one in the fight against cancer.

The 2018 campaign generated \$500,000 to fund Roswell Park's first ever team-science research award. **More than 100 blue buffalos are now roaming throughout Western New York and more will join them in 2019.** Funds raised in the second year of the campaign will fuel new innovative team research project that has potential to change how we prevent, diagnose and treat cancer.

Roswell Park Kicks off New Facebook Live Series

Roswell Park launched a new Facebook Live Series, Cancer Talk Live. The monthly show features a plethora of topics and have experts available to answer questions from the community. Throughout the year, episodes feature various experts, guests and patients answering viewers' questions about young adult cancers, advances in pediatric cancer, lung cancer, blood cancers and more.

Sun Safety at the Ballpark

Roswell Park Comprehensive Cancer Center and the Buffalo Bisons teamed up to help Bisons fans protect themselves from the sun's ultraviolet (UV) rays, which can burn and damage the skin. Damaged skin cells can lead to skin cancer, the most common cancer in the U.S.

Throughout the Bisons' 2018 season, free sunscreen was provided to game attendees to make it as easy as possible to protect their skin. Six sunscreen dispenser stations were available throughout Coca-Cola Field in downtown Buffalo.

2018 Skin Cancer Screenings

279 community members attended a free skin cancer screening event on Thursday, May 17 at KeyBank Center in Buffalo. Roswell Park and the Buffalo Sabres teamed up to increase public awareness and early detection of the most common type of cancer among men and women. During the event, participants had the opportunity to learn about skin self-examination, early skin cancer detection and treatment. They were also able to meet Sabres alumni, tour KeyBank Center, enjoy music and refreshments and visit with local wellness vendors.

The event was followed by another skin cancer screening later that summer in August, at which Roswell Park clinicians provided an additional 309 free skin cancer checks.

More Cancer Patients at Roswell Park Have Access to Dental and Oral Care

Building on a long and distinguished history of providing dental and oral health services to cancer patients, Roswell Park Comprehensive Cancer Center expanded its clinical and research services in dentistry and maxillofacial prosthetics. The expanded services are part of a newly established Department of Oral Oncology.

UB, Roswell Park and URMC to Lead \$47M Partnership to Advance Drug Discovery in Upstate New York

The University at Buffalo, Roswell Park Comprehensive Cancer Center and the University of Rochester have joined together to form a powerful new drug discovery partnership that aims to convert the institutions' scientific breakthroughs into viable pharmaceuticals for commercialization and strengthen the region as a hub for life sciences research and development. The partners established the Empire Discovery Institute (EDI), an independent, nonprofit entity that will identify promising drug candidates and move them toward clinical trials. The institute will help UB, Roswell Park and University of Rochester researchers conduct preclinical testing of promising compounds discovered in their labs.

Researchers will also receive assistance in designing new drugs for drug targets they have identified through their work.

Roswell Park Holds Nursing Open Houses

Roswell Park held several Nursing Open Houses in 2018-19, inviting experienced nurses to attend. The open houses are opportunities for them to learn about oncology nursing and hear from those who work at the cancer center.

Dorothy G. Griffin Charitable Foundation Announces \$1 Million Donation to Roswell Park and Oneida Healthcare Affiliation

The Dorothy G. Griffin Charitable Foundation announced a generous \$1 million gift to support a joint capital campaign between Roswell Park Comprehensive Cancer Center and Oneida Healthcare (OHC). Along with future donations, this leading philanthropic gift will provide the funds needed for OHC to provide access to National Cancer Institute-level cancer care to residents of Central New York.

Oneida Healthcare opened a new infusion center at the Madison County campus in mid-December 2018 and is in the process of opening a new radiation oncology facility and expanding its existing Alice M. Gorman Imaging Center, which includes the installation of a new state-of-the-art MRI, PET/CT and a second 3D Mammography unit.

Roswell Park's 28th Annual All Star Night Gala Featured Creative Direction From Former Disney Exec

Former Disney executive, Bryan Wittman, and his wife Kathy served as Chairmen of the 2018 Roswell Park Comprehensive Cancer Center's 28th annual All Star Night – the institute's signature black-tie event took place on Saturday, November 10, 2018, at the Buffalo Niagara Convention Center. The event raises more than a half-million dollars for cancer research and patient care at Roswell Park each year.

A native of Hamburg, N.Y., Bryan has more than 30 years of global business experience focused on marketing, entertainment, special events, talent relations and operations. He most recently served as Corporate Vice President of Global Special Events at Disney, where he was responsible for the creative development, production and marketing of major grand openings, special events, entertainment and festivals for Disney Theme Parks and Resorts Worldwide. In addition to focusing on the marketing of numerous large-scale development projects around the world, he also served as the creative force behind a number of Disney productions including the Macy's Thanksgiving Day Parade and Pasadena's Tournament of Roses.

The Ride For Roswell Pedals Past \$5 Million at 23rd Annual Event

Thousands of riders rolled up to The Ride For Roswell start lines at the University at Buffalo (UB) and Roswell Park. Sponsored by the West Herr Automotive Group, the 23rd annual event welcomed 7,740 riders and an additional 2,000 volunteers who celebrated a significant fundraising milestone that will impact the lives of patients fighting cancer.

From the mainstage in front of an excited crowd of riders, volunteers, sponsors and supporters, Ride Founder Mitch Flynn announced that this year's event not only surpassed its fundraising record but "shattered it," with a grand fundraising total of \$5.2 million. This is the first time in its 23-year history that the event has surpassed the \$5 million mark. To date, The Ride has raised more than \$48 million for cancer research and patient care at Roswell Park.

FruitBelt Coalition Honors Roswell Park's David Scott

David Scott of Roswell Park Comprehensive Cancer Center was recognized with a special award at the FruitBelt Coalition's 8th Annual Recognition Banquet. Scott, who serves as Director of Diversity and Inclusion at the Buffalo-based cancer center, was surprised with the Lighthouse of Partners Award at the event.

The FruitBelt Coalition, whose focus is "Planting seeds to grow communities," is a nonprofit organization dedicated to improving quality of life for those who live in and around the Fruit Belt, a residential neighborhood with a rich history and located near Roswell Park's main campus.

Roswell Park, Oneida Healthcare Break Ground on Radiation Center in Madison County

Roswell Park Comprehensive Cancer Center and Oneida Healthcare marked two milestones: the full implementation of a new medical oncology facility and ground-breaking at the site of a state-of-the-art radiation oncology center on the same campus. Both developments are part of a collaborative initiative to provide increased local access to the services of a National Cancer Institute (NCI)-designated comprehensive cancer center to residents of Central New York.

Construction of the radiation oncology center, to be named in honor of the late Dorothy G. Griffin, began in the late summer. The center will occupy a 6,079-square-foot building, slated to open in 2019, and will contain four exam rooms, a consultation room, a CT scanner for treatment planning, a linear accelerator for radiation therapy and required support facilities on a single level in an outpatient setting. The center will accommodate oncology patient treatment planning, radiation therapy sessions and patient treatment monitoring.

The Herd is Back: Roswell Park and Buffalo Business Leaders Launch Grassroots Campaign to Fund Tomorrow's Cures

Bright blue buffalo statues began mysteriously popping up at area landmarks and events last summer and raising questions on social media. Roswell Park Comprehensive Cancer Center revealed that these "herd sightings" led up to the unveiling of a new grassroots fundraising campaign called Herd of Hope.

Herd of Hope is a new take on the Herd About Buffalo public art project in 2000 that raised \$1 million for Roswell Park. But rather than each Buffalo being individually decorated and auctioned off, Herd of Hope is giving the corporate community the opportunity to sponsor their own Herd of Hope blue buffalo statue to display at their places of business.

'Community Conversation About Cancer' Continues with July 31 Event at Delavan-Grider Community Center

Community members were invited to be a part of "A Community Conversation About Cancer" on Tuesday, July 31, 2018. The free event, held at the Delavan-Grider Community Center, 877 E. Delavan Ave., Buffalo, was an additional opportunity for area residents to ask questions about cancer risk and incidence, learn about cancer screening services and resources, and share input related to a New York State Department of Health initiative to study cancer incidence in a particular Western New York community. The regional cancer study, launched as part of Gov. Andrew Cuomo's Cancer Research Initiative, will explore higher-than-expected incidence of six different cancer types — colorectal cancer, esophageal cancer, kidney cancer, lung cancer, oral cavity (mouth and throat) cancer and prostate cancer — in an area that includes most of Buffalo's East Side and the western portion of the Town of Cheektowaga.

Empire State Ride Raises \$660,000 for Cancer Research at Roswell Park

Cyclists from 20 states and U.S. Virgin Islands finished the seven-day, 500+ mile adventure in Niagara Falls, USA

A group of passionate cyclists marked the end of their 500+ mile journey across New York State by crossing the Empire State Ride (ESR) finish line in Niagara Falls, USA. A total of 137 cyclists participated in the event – most riding all seven days and others taking part in one-day riders or custom routes – and collectively raised \$660,000 for cancer research at Roswell Park Comprehensive Cancer Center in Buffalo, New York.

The ESR began with a trip on the Staten Island Ferry on Sunday, July 29, before riders embarked on the first leg of their journey from Manhattan to Stoney Point, New York. Over the following days, cyclists of all experience levels pedaled 60 to 85 miles per day through some of the most scenic parts of New York State, making overnight stops in the Hudson Valley, Albany, Utica, Syracuse and Rochester.

Local High School Students Explore Diverse Healthcare Field at Roswell Park

Sixty-two local high school students participated in a unique career development program at Roswell Park Comprehensive Cancer Center last summer. The Buffalo Healthcare Exploration (BHE) program demonstrated to students that it takes a team of people to run a cancer center, and that each professional plays an important role in the patient experience. During the three-week program, they learned from nurses, oncologists and researchers, as well as other experts in different fields such as dietetics, development and planning.

Chapter 2 Workshop Brings Patients, Survivors and Caregivers Together

A cancer survivor's workshop entitled Chapter 2 was held on September 15 and was open to all patients, survivors and caregivers. The program included approximately 20 breakout sessions ranging from mindfulness to music, financial toxicity, healthy cooking and spirituality.

Governor Cuomo Announces First-Ever Biotech Venture Between U.S. and Cuba to Research and Develop New Cancer Treatments

Governor Andrew M. Cuomo announced Buffalo-based Roswell Park Comprehensive Cancer Center has formed Innovative Immunotherapy Alliance S.A., the first-ever biotech venture between the U.S. and Cuba. The announcement marked a significant milestone of progress following Governor Cuomo's landmark trade mission to Cuba in April 2015, where he facilitated this historic partnership between Roswell Park and the Center for Molecular Immunology. This historic step will advance the research and development of new cancer medicines that may prolong and enhance survival for thousands of U.S. patients. This new joint venture gives Roswell Park access to CIMAvax-EGF and three additional cancer drugs — unique approaches to treating some of the most deadly and burdensome cancer types both in the U.S. and globally — for U.S. patients and researchers. The milestone marks another step toward researching, developing and eventually commercializing promising cancer drugs for the benefit of patients in the U.S.

Roswell Park Establishes Partnership with Jagiellonian University in Krakow, Poland

Roswell Park Comprehensive Cancer Center has formed an academic cooperation agreement with the Jagiellonian University (JU) in Kraków, Poland. JU is the oldest higher education institution in Poland, and one of the oldest in Europe. The collaboration will see the two centers exchanging staff, students and scientific resources to jointly undertake basic, translational and clinical research in order to advance the

development of cancer therapies to benefit patients worldwide. The agreement grew out of a July 2018 visit by Polish Secretary of State Anna Maria Anders to Roswell Park, a Buffalo, N.Y.-based cancer center that was the first institution in the world to focus exclusively on cancer research. The two organizations will work collaboratively to develop innovative clinical trials aimed at advancing the science around the treatment, detection and prevention of cancer.

Hockey Fights Cancer Night in Buffalo Slated for November 27

The Buffalo Sabres today announced the team, in partnership with Roswell Park Comprehensive Cancer Center, again took part in the NHL's Hockey Fights Cancer™ program during the team's home game against the San Jose Sharks on Tuesday, November 27. As part of an NHL-wide initiative to raise money and awareness for cancer research, the Sabres hosted events throughout the night in support of local cancer patients and their charitable organizations. All fans attending the game received a Sabres Hockey Fights Cancer scarf.

Join Roswell Park for a Hopeful Tribute to All Affected by Cancer at Tree of Hope 2018

Roswell Park Comprehensive Cancer Center's 24th annual Tree of Hope lighting ceremony drew cancer patients, survivors, caregivers and loved ones together for a holiday celebration Friday, Dec. 14, from 4:30 to 6:30 p.m. in Kaminski Park and Gardens on the Roswell Park campus. This free, family-friendly holiday celebration was held in honor of all who are touched by cancer. It included live music, carriage rides, visits with Santa and Mrs. Claus, face painting and a gingerbread house raffle. The event was co-sponsored by WGRZ 2 On Your Side and the West Herr Automotive Group. The festivities were hosted by Channel 2's Maryalice Demler and Michael Wooten, and culminated with the lighting of the Tree of Hope by 9-year-old Mason, a cancer survivor and member of the Courage of Carly Fund at Roswell Park.

Buffalo Business Community Raises Half-Million Dollars for Team Science Project at Roswell Park

Roswell Park Comprehensive Cancer Center marked the completion of its inaugural Herd of Hope campaign with the announcement of the winner of a \$500,000 research grant. This first-of-its-kind "team science" research award was made possible through sponsorships from Western New York businesses and is providing seed funding to begin a new team science research study at Roswell Park. Each sponsor made a \$5,000 sponsorship commitment and received one of the more than 100 blue buffalos that are now grazing at places of business across the region.

Buffalo Police Department and Erie County Sheriff's Office Complete 2018 Beards for Bucks Program

The Buffalo Police Department (BPD) and Erie County Sheriff's Office (ECSO) raised nearly \$60,000 for Roswell Park Comprehensive Cancer Center through Beards for Bucks – an extension to the Goin' Bald for Bucks fundraising program. The money raised will support cancer research and patient-care programs at Roswell Park. In order to be excluded from agency policies that prohibit beards, each participant made a donation toward their fundraising efforts and have been growing their facial hair since November 1, 2018. Female participants had the option to color their hair. To culminate their 2018 efforts, both agencies recently held beard-shaving events.

The BPD held their shaving event on December 28 and presented \$35,600 to Roswell Park, including a \$10,000 gift from the Police Benevolent Association. Since 2015, the BPD has raised a total \$112,000 for Roswell Park through Beards for Bucks.

Roswell Park Releases Super Bowl Ad Early

For the fourth time, Roswell Park Comprehensive Cancer Center launched a 30-second regional television commercial, set to air in the Buffalo region during the Super Bowl on Sunday, February 3. The spot is called “Dear Cancer...”

Completely produced in-house, it showcased the inspiration and courage of Roswell Park’s cancer community during one of the biggest sporting events of the year. It included survivors like Ashley, who lovingly lifted her third child, after doctors told her she could not have children – and John, who moved strongly into recovery, just 24 hours after surgery.

Roswell Park, NFMCC Launch Cancer Care Collaboration

Roswell Park Comprehensive Cancer Center and Niagara Falls Memorial Medical Center announced a collaborative effort to greatly improve the availability of cancer care in Niagara County. The first step of the new collaborative partnership is a comprehensive thoracic clinical program. With the establishment of a jointly operated Thoracic Center at Memorial, Niagara County residents now have convenient access to a wide range of specialized services, from lung cancer screening and early detection through to state-of-the-art cancer treatment and survivorship support — the first time such specialized and comprehensive cancer services have been available in the Niagara region.

The BOGO Bunch Foundation Donates \$75,000 to Roswell Park

Buffalo Sabre Zach Bogosian and his wife, Bianca, presented Candace Johnson, PhD, Roswell Park President and CEO and a patient with a \$75,000 donation to support research and care. The funds were raised at Casino for a Cause II, The BOGO Bunch Foundation’s roaring 20s-themed event held on February 2 at Town Ballroom. More than 600 guests attended the event, which featured live and silent auctions, as well as special appearances by Zach’s Buffalo Sabres teammates who served as the gaming table dealers for the night. To date, the \$75,000 gift is the largest donation the Foundation has made to any organization. Combined with donations from their first Casino for a Cause event in 2017 and the Bogosian Kancer Jam Kan Jam tournament in 2018, the Foundation’s contributions to Roswell Park total \$155,000.

Minority-Owned, Women-Owned, Small Business, Disadvantaged and Veteran-Owned Enterprises

Roswell Park encourages opportunities for Minority Business Enterprises (MBE), Woman-Owned Business Enterprises (WBE), Small Business Enterprises (SBE), Disadvantaged Business Enterprises (DBE) and Service-Disabled Veteran-Owned Business Enterprises (SDVOB). 43% of qualifying expenditures in 2018 were awarded to certified Minority-and-Women-Owned Business Enterprises.

Through the bi-weekly ceremonies held by Roswell Park, nearly 75 patients, survivors and families have visited the **Bridge of Hope at Canalside** to hang bells in honor of their survivorship or in memory of a loved one.

Roswell Park had another large presence at the **JP Morgan Corporate Challenge** race in Buffalo with a team of 146 employees. In addition, Roswell Park once again created inspiring t-shirts for Team Roswell members to wear with pride.

Led by Dr. Ermelinda Bonaccio, Director, Mammography, and other members of the Roswell Park Breast Cancer Team, Roswell Park employees joined Team Roswell at breast cancer awareness events throughout the summer and fall of 2018, including the **Susan G. Komen Race for the Cure** (31 Team Roswell members), **American Cancer Society Making Strides Against Breast Cancer Walk** (50 Team

Roswell/Bosom Buddies members). Each event raised awareness and funds for breast cancer detection, treatment and research.

Roswell Park provided sponsorship of the **American Lung Association's Fight for Air Climb** of Buffalo. A group of 13 employees participated in the event, raising \$4,749 before climbing 24 flights of stairs at the annual event.

Twenty-six Roswell Park employees participated in the **Undy Run/Walk**. In addition, a table of educational information was available to all participants of this event. Organized by the Colon Cancer Alliance, the Undy Run/Walk raises awareness within the Western New York community about colon cancer screening and prevention.

Team Roswell Participates in Light Up The Night for the Leukemia and Lymphoma Society

Dr. Francisco Hernandez-Ilizaliturri, Chief, Lymphoma & Myeloma, led more than 65 Roswell Park employees as part of Team Roswell in the **Leukemia & Lymphoma Society's Light the Night Walk** in September 2018 to show support for his patients and the community.

The Yroswell Street Team brought the message of cancer awareness to the community, especially Western New York's young people, at 45 events. Each Street Team member has been working on hosting their own fundraising event either at their school or in their community to raise critical funds for cancer research and patient-care programs. Their fundraisers have raised a combined \$3,929.76 so far. The Institute also encouraged young people throughout the area to find out about the resources they need to become the next generation of cancer professionals and advocates. Events that the Street Team participated in and brought awareness information to, included: various events for The Ride For Roswell (including the Celebration of Hope and fundraising initiatives), many WNY high school and middle school wellness fairs, Roswell Park's Employee Appreciation Day, Making Strides Against Breast Cancer Walk, Komen Run/Walk, Tree of Hope, the Junior Robotic Surgeon Challenge Program, Hockey Fights Cancer Night at KeyBank Center, Kissmas Bash, BNMC Student Open House and more.