

THE OHIO STATE UNIVERSITY COMPREHENSIVE CANCER CENTER –
ARTHUR G. JAMES CANCER HOSPITAL AND RICHARD J. SOLOVE RESEARCH INSTITUTE

TOWARD A CANCER-FREE WORLD

2018

ACCOMPLISHMENTS
REPORT

The James



THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER

Welcome to the annual Accomplishments Report of The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James).

This report highlights activities, events, honors and achievements at the OSUCCC – James during 2018. We believe that our exemplary faculty and staff, along with our devoted volunteers and community supporters, have furthered the momentum of Ohio State’s nationally recognized cancer program as we pursue our shared vision of a cancer-free world.

The report contains synopses of promising studies by our more than 340 cancer researchers, who collectively represent 11 of the 15 colleges at Ohio State and who had hundreds of their studies published in peer-reviewed medical journals, including more than 100 in journals with impact factors of 10 or above. It also highlights our success in landing large grants for cancer research, recruiting top scientists to our cancer program, earning prestigious external awards, and launching or continuing wide-ranging initiatives and projects that contribute to the global fight against cancer.

Our record of success over the last decade has been well documented in our past two five-year NCI surveys, after both of which we earned the highest descriptor of “exceptional” and retained the comprehensive cancer center (CCC) designation that we have maintained by competitive renewal since 1976. Our ability to convert scientific discoveries into innovative cancer care and prevention strategies has given us a reputation as one of the most translational cancer hospitals in the nation and has helped us earn the trust of the thousands of patients and families we serve, who consistently present us with satisfaction scores that rank among the nation’s highest.

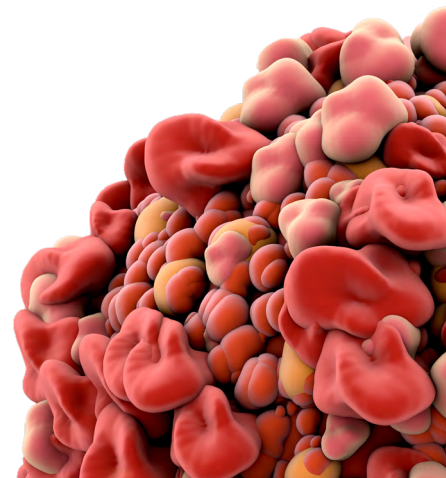
Understanding that no cancer is routine because each patient’s malignancy is biologically unique, we strive to provide research-based and compassionate care that is specially tailored to each individual who comes to us for help. This is reflected in our 2018 Accomplishments Report. We hope you will find it interesting and informative.



William Farrar, MD
Interim CEO, James Cancer Hospital
and Solove Research Institute



Raphael Pollock, MD, PhD
Director, The Ohio State University
Comprehensive Cancer Center



Facilities Expansion – October 2018 saw the completion of a 72-bed expansion within formerly shelled space in the 21-story James Cancer Hospital and Solove Research Institute, a project that gives patients greater access to hospital services by increasing the number of cancer and non-cancer critical care and acute medical-surgical care/progressive ICU care beds. Among the new 72 are 48 cancer beds—including 36 acute care beds and 12 critical care beds—raising the total number of beds at The James from 308 to 356. (The other 24 new beds within the formerly shelled space are for non-cancer critical care patients treated at Ohio State Wexner Medical Center.)

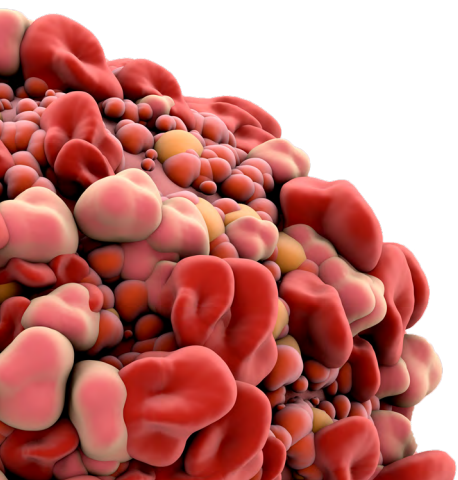
Patient Care – In fiscal year 2018 the OSUCCC – James treated nearly 15,000 inpatients, received more than 430,000 outpatient visits and had a general inpatient occupancy rate of over 91 percent. To accommodate growth in patient volume, the institution hired some 250 new faculty and staff in fiscal year 2018.

Clinical Trials – Patients at the OSUCCC – James have access to hundreds of clinical trials that offer some of the most sophisticated treatments available anywhere, including some that are available nowhere else. In fiscal year 2018 researchers at the OSUCCC – James opened 129 clinical trials to bring the total number of available trials to more than 900, of which approximately 450 are interventional. The five-year average patient accrual to clinical trials here is 23 percent (nearly one in four patients), well above the national average of 3 percent.

Total Cancer Care[®] Protocol – Since 2014 the OSUCCC – James has enrolled nearly 47,000 patients (including 10,000 in the past year, for a 94 percent accrual rate) in a Total Cancer Care[®] (TCC) protocol for voluntarily sharing de-identified clinical data that helps move cancer research forward and personalizes cancer care. The TCC protocol helps clinicians understand differences among cancer patients and find ways to individualize prevention, detection and treatment.

ORIEN Precision Medicine Collaboration – The TCC protocol referenced above has been adopted by all 19 member institutions across the nation that constitute the Oncology Research Information Exchange Network (ORIEN), a research collaboration that was co-founded and is co-anchored by the OSUCCC – James and Moffitt Cancer Center in Tampa, Fla. Through ORIEN, more than 200,000 TCC-consented patients from around the country have agreed to donate their clinical data for research to help scientists understand cancer at the molecular level, making ORIEN the world's largest precision medicine collaboration to address cancer.

Research Grant Funding – The OSUCCC – James has more than 340 cancer researchers who collectively represent 11 of the 15 colleges at Ohio State. Each researcher is a member of one of five multidisciplinary research programs: Cancer Control; Leukemia Research; Molecular Biology and Cancer Genetics; Molecular Carcinogenesis and Chemoprevention; and Translational Therapeutics. In fiscal year 2018, OSUCCC – James researchers received 28 new research grants totaling over \$30 million from the National Cancer Institute (NCI). The OSUCCC – James ranks 25th among cancer institutions in the United States for total NCI funding.



Research Publications – Medical scientists at the OSUCCC – James frequently publish cancer-related articles in prestigious scientific journals. Nearly 90 percent of the publications are collaborative, meaning that researchers are working and sharing expertise with others outside their labs, and often with scientists at other institutions. In 2018, cancer researchers at Ohio State authored or co-authored 750 publications, including 108 in journals with impact factors of 10 or higher. Here are a few examples of 2018 publications in top-rated journals (names in bold are OSUCCC members):

- Hellmann MD, Ciuleanu TE, Pluzanski A, Lee JS, **Otterson GA**, Audigier-Valette C, Minenza E, Linardou H, Burgers S, Salman P, Borghaei H, Ramalingam SS, Brahmer J, Reck M, O’Byrne KJ, Geese WJ, Green G, Chang H, Szustakowski J, Bhagavatheeswaran P, Healey D, Fu Y, Nathan F, Paz-Ares L. Nivolumab plus Ipilimumab in Lung Cancer With a High Tumor Mutational Burden. *New England Journal of Medicine* 2018;378:2093-2104. Impact Factor: 79.258
- Christopher MJ, Petti AA, Rettig MP, Miller CA, Chendamarai E, Duncavage EJ, Klco JM, Helton NM, O’Laughlin M, Fronick CC, Fulton RS, **Wilson RK**, Wartman LD, Welch JS, Heath SE, Baty JD, Payton JE, Graubert TA, Link DC, Walter MJ, Westervelt P, Ley TJ, DiPersio JF. Immune Escape of Relapsed AML Cells after Allogeneic Transplantation. *New England Journal of Medicine* 2018;379:2330-2341. Impact Factor: 79.258
- **Woyach JA**, Ruppert AS, **Heerema NA**, Zhao W, Booth AM, Ding W, Bartlett NL, Brander DM, Barr PM, Rogers KA, Parikh SA, Coutre S, Hurria A, Brown JR, **Lozanski G**, **Blachly JS**, Ozer HG, Major-Elechi B, Fruth B, Nattam S, Larson RA, Erba H, Litzow M, Owen C, Kuzma C, Abramson JS, Little RF, Smith SE, Stone RM, Mandrekar SJ, **Byrd JC**. Ibrutinib Regimens Versus Chemoimmunotherapy in Older Patients with Untreated CLL. *New England Journal of Medicine* 2018;379:2517-2528. Impact Factor: 79.258
- **Presley CJ**, Tang D, Soulos PR, Chiang AC, Longtine JA, Adelson KB, Herbst RS, Zhu W, Nussbaum NC, Sorg RA, Agarwala V, Abernethy AP, Gross CP. Association of Broad-Based Genomic Sequencing With Survival Among Patients With Advanced Non-Small Cell Lung Cancer in the Community Oncology Setting. *Journal of the American Medical Association* 2018;320:469-477. Impact Factor: 47.661
- Tzoneva G, Dieck CL, Oshima K, Ambesi-Impiombato A, Sánchez-Martín M, Madubata CJ, Khiabani H, Yu J, Waanders E, Iacobucci I, Sulis ML, Kato M, Koh K, Paganin M, Basso G, **Gastier-Foster JM**, Loh ML, Kirschner-Schwabe R, Mullighan CG, Rabadan R, Ferrando AA. Clonal Evolution Mechanisms in NT5C2 Mutant-Relapsed Acute Lymphoblastic Leukemia. *Nature* 2018;553:511-514. Impact Factor: 41.577
- Alexander TB, Gu Z, Iacobucci I, Dickerson K, Choi JK, Xu B, Payne-Turner D, Yoshihara H, Loh ML, Horan J, Buldini B, Basso G, Elitzur S, de Haas V, Zwaan CM, Yeoh A, Reinhardt D, Tomizawa D, Kiyokawa N, Lammens T, De Moerloose B, Catchpoole D, Hori H, Moorman A, Moore AS, Hrusak O, Meshinchi S, Orgel E, Devidas M, Borowitz M, Wood B, **Heerema NA**, Carroll A, Yang YL, Smith MA, Davidsen TM, Hermida LC, Gesuwan P, Marra MA, Ma Y, Mungall AJ, Moore RA, Jones SJM, Valentine M, Janke LJ, Rubnitz JE, Pui CH, Ding L, Liu Y, Zhang J, Nichols KE, Downing JR, Cao X, Shi L, Pounds S, Newman S, Pei D, Guidry Auville JM, Gerhard DS, Hunger SP, Inaba H, Mullighan CG. The Genetic Basis and Cell of Origin of Mixed Phenotype Acute Leukemia. *Nature* 2018;562:373-379. Impact Factor: 41.577
- Gorthi A, Romero JC, Loranc E, Cao L, Lawrence LA, Goodale E, Iniguez AB, Bernard X, Masamsetti VP, Roston S, Lawlor ER, Toretsky JA, Stegmaier K, **Lessnick SL**, Chen Y, Bishop AJR. EWS-FLI1 Increases Transcription to Cause R-Loops and Block BRCA1 Repair in Ewing Sarcoma. *Nature* 2018;555:387-391. Impact Factor: 41.577
- Pi F, Binzel DW, Lee TJ, Li Z, Sun M, Rychahou P, Li H, Haque F, Wang S, **Croce CM**, Guo B, Evers BM, **Guo P**. Nanoparticle Orientation to Control RNA Loading and Ligand Display on Extracellular Vesicles for Cancer Regression. *Nature Nanotechnology* 2018; 13:82-89. Impact Factor: 37.49
- Jones JA, Mato AR, Wierda WG, Davids MS, Choi M, Cheson BD, Furman RR, Lamanna N, Barr PM, Zhou L, Chyla B, Salem AH, Verdugo M, Humerickhouse RA, Potluri J, Coutre S, **Woyach J**, **Byrd JC**. Venetoclax for Chronic Lymphocytic Leukemia Progressing After Ibrutinib: An Interim Analysis of a Multicenter, Open-Label, Phase 2 Trial. *Lancet Oncology* 2018;19:65-75.; Impact Factor: 36.418

Drug Development Institute (DDI) – The DDI is a biotech-like institute embedded within the OSUCCC – James that employs a combination of targeted investments, strategic management and cutting-edge resources to drive projects from discovery to early-stage development of drugs for cancer therapy. Led by DDI Director and Clinical Pharmacist **Jeffrey Patrick, PharmD**, the DDI team works with world-renowned investigators who conduct research in multidisciplinary teams. Among current projects in the DDI pipeline are:

- “Activated B Cells as a Therapeutic Cancer Vaccine Platform”;
- “Selective Activation of Immune Cells via the Notch Pathway”;
- “Selective RAL A GTPase Inhibitors as a Cancer Treatment”;
- “Selective Estrogen Receptor Modulator (ER-β Agonist) as a New Approach to Targeting Cancer”;
- “Split Delivery and Functional Reconstruction of Immunotoxins via Dual Tumor-Targeted Pathways”;
- “Mps1 Kinase Inhibitor as a Treatment for Solid Tumors”;
- “PP2A Activator for Treatment of AML and Other Hematologic Malignancies”;
- “Aryl Hydrocarbon Receptor as a Target for Multiple Myeloma”

PELTONIA-FUNDED STATEWIDE INITIATIVES

Funds from Pelotonia, an annual grassroots cycling event that raises millions of dollars for cancer research at Ohio State, are helping the OSUCCC – James change the landscape of cancer care by supporting three statewide initiatives that promote early detection and better outcomes for patients with colorectal, lung and endometrial (uterine) cancers in Ohio. Updates on the three initiatives appear on this and the next two pages.

Ohio Colorectal Cancer Prevention Initiative Draws to Successful Close

A five-year statewide initiative to screen newly diagnosed colorectal cancer patients and their biological relatives for Lynch syndrome has closed but will have far-reaching benefits by setting the stage for future LS screening in Ohio and around the nation.

Funded over five years (2013-18) by \$4.3 million from Pelotonia, the Ohio Colorectal Cancer Prevention Initiative (OCCPI) established a 50-hospital network to accommodate screenings for Lynch syndrome (LS), an inherited genetic condition that predisposes to colorectal, endometrial, ovarian, stomach and other cancers. The LS screenings identify patients and family members who may be at risk of developing these cancers so they can take precautionary measures, including heightened surveillance (e.g., colonoscopies) for early detection.

OCCPI Director **Heather Hampel, MS, LGC**, associate director of the Division of Human Genetics at Ohio State, says the OCCPI enrolled 3,346 newly diagnosed colorectal cancer (CRC) patients, of whom 143 tested positive for LS. She also reports that 204 of their relatives tested positive, and another 101 CRC patients were found to have a hereditary cancer syndrome other than LS.

The initiative has also resulted in six publications in prestigious medical journals, including *Journal of the American Medical Association (JAMA) Oncology*, *Gynecologic Oncology*, *Gastroenterology* (two articles), *Family Cancer* and *Journal of Medical Genetics*. The overall results of the study are being analyzed in preparation for publication.

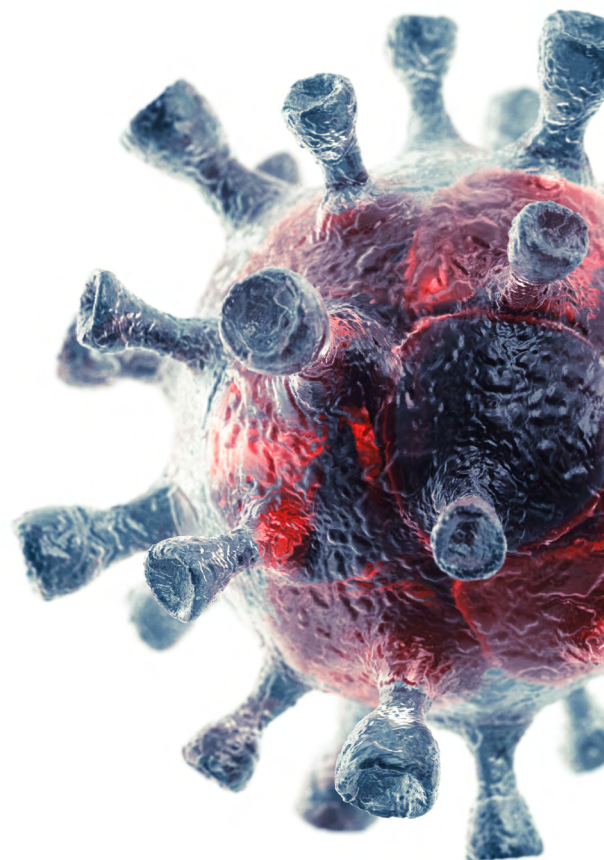
Hampel and colleagues estimate the OCCPI will save about 1,000 years of life and provide about \$32 million in community benefit because of the lives saved in Ohio through early diagnosis of LS and, consequently, through a reduced need for cancer treatment.

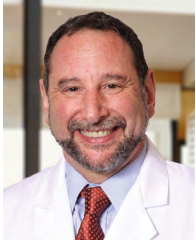
“Our study findings demonstrate the need and value of screening early-onset CRC patients for LS,” Hampel says, noting that her team is working to help launch this screening approach nationally. “We believe the OCCPI can serve as a roadmap for other states to implement LS screening as well.”

PELTONIA



Heather Hampel, MS, LGC





Peter Shields, MD

David Carbone,
MD, PhDMary Ellen Wewers,
RN, PhD, MPHBarbara Andersen,
PhD

OSUCCC – James Leads Statewide Initiative Against Lung Cancer

Recruitment continues for a statewide clinical research initiative taking aim at lung cancer, the No. 1 cancer killer among men and women in the United States. Led by [Peter Shields, MD](#), [David Carbone, MD, PhD](#), [Mary Ellen Wewers, RN, PhD, MPH](#), and [Barbara Andersen, PhD](#), the initiative is called [Beating Lung Cancer – In Ohio](#) (BLC-IO) and is supported by \$3 million from Pelotonia.

The initiative will draw upon a network of 50 hospitals around Ohio that was established by an earlier Pelotonia-funded statewide project (*the OCCPI, page 5*). BLC-IO has two aims: to assess the impact of advanced gene testing and expert advice on lung cancer treatment and patient survival; and to improve smoking-cessation rates among smokers with lung cancer and their family members (assess the impact of centralized telephone counseling and provider support on smoker cessation). A three-year patient recruitment period began in March 2017.

Project leaders anticipate that more than 2,000 newly diagnosed patients with stage IV non-small cell lung cancer will enroll in BLC-IO via the community hospital network. Each enrollee will receive free testing for more than 300 genes in their cancer specimens, and the physicians who treat them will receive expert support for interpreting test results and determining treatments. BLC-IO also will provide smoking-cessation support for up to three years to all participating patients and family members.



David Cohn, MD

Paul Goodfellow,
PhD

Genomics-Driven Statewide Endometrial Cancer Research Initiative Launched

A statewide clinical cancer research project called [Ohio Prevention and Treatment of Endometrial Cancer](#) (OPTEC), which is supported by \$1.25 million in Pelotonia funds, aims to recruit up to 700 women with endometrial cancer from partner hospitals across the state and screen them for Lynch syndrome (LS) and other inherited genetic conditions linked to greater risk of endometrial, colorectal, stomach and ovarian cancers.

Their tumor samples will undergo molecular profiling to identify targeted treatments personalized to each patient's tumor characteristics. Patients identified with LS and their at-risk family members will be educated about the importance of genetic testing and cancer-prevention strategies based on their increased risk for LS-associated cancers. Those whose tumors have defective DNA mismatch repair will be considered for immunotherapy clinical trials for endometrial cancer.



Elaine Mardis, PhD

Heather Hampel,
MS, LGC

OPTEC is led by [David Cohn, MD](#), and [Paul Goodfellow, PhD](#), with multiple collaborators from the OSUCCC – James and Nationwide Children's Hospital Research Institute. OPTEC will conduct its LS screening with a novel one-step genetic sequencing technique developed by Goodfellow and [Elaine Mardis, PhD](#), a geneticist at Nationwide Children's Hospital Research Institute. Genomic profiling also will help identify patients who are most likely to benefit from new medical therapies, including immunotherapy drugs that target certain proteins.



OPTEC also is supported by a five-year, multimillion grant that the National Cancer Institute (NCI) awarded in July 2018 to principal investigators Goodfellow, Mardis and **Heather Hampel, MS, LGC**, for a study titled “Combined NGS Tumor-Based Detection of Germline Lynch Syndrome Mutations and Prognostic Classification of Endometrial Cancers.” The NCI grant extends research supported by Pelotonia and supports the study of nearly 1,000 additional tumors from women with endometrial cancer.

The grant will help researchers develop low-cost and highly sensitive tumor-based DNA methods to identify women with inherited forms of endometrial cancer and, at the same time, test for genetic changes useful for treatment planning. Studying DNA specimens prepared in clinically approved laboratories will make it possible to rapidly translate research findings to tumor-based testing that can be applied to all endometrial cancer patients and thus improve cancer prevention and treatment.

ADDITIONAL RESEARCH HIGHLIGHTS

Ibrutinib Outperforms Chemoimmunotherapy in Older Patients with CLL

Results from a multi-institutional phase III clinical trial show that older patients with chronic lymphocytic leukemia (CLL) have a significantly lower rate of disease progression if treated with the newer targeted drug ibrutinib, rather than with bendamustine plus rituximab—the regimen previously considered as one of the most effective therapies for this group of patients. This study—the first head-to-head comparison between these treatments—also suggests that adding the immune-based therapy rituximab to ibrutinib does not bring additional benefits beyond those seen with ibrutinib alone. **Jennifer Woyach, MD**, of the OSUCCC – James, was lead author of the study, which was reported simultaneously at the American Society of Hematology (ASH) annual meeting and in the [New England Journal of Medicine](#). Woyach says study results show that ibrutinib should be a standard of care for patients with CLL. [Read more.](#)



Jennifer Woyach, MD

Researchers Invent RNA Nanotech to Decorate Exosomes for Cancer Therapy

A study led by researchers at The Ohio State University College of Pharmacy and the OSUCCC – James shows that attaching antibody-like RNA nanoparticles to microvesicles can deliver effective RNA therapeutics, such as small interfering RNA (siRNA), specifically to cancer cells. Researchers used RNA nanotechnology to apply the RNA nanoparticles and control their orientation to produce microscopic, therapy-loaded extracellular vesicles that targeted three types of cancer in animal models. The findings, reported in the journal [Nature Nanotechnology](#), could lead to a new generation of anticancer drugs that use siRNA, microRNA and other RNA-interference technologies. Principal investigator was **Peixuan Guo, PhD**, who is a professor in the College of Pharmacy and a researcher in the Translational Therapeutics Program at the OSUCCC – James. [Read more.](#)



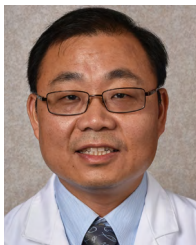
Peixuan Guo, PhD



Heather Hampel,
MS, LGC

Single Upfront Genomic Test Improves Lynch Syndrome Detection Rates

A single upfront genomic test is more effective for detecting Lynch syndrome in colorectal cancer (CRC) patients than the traditional multiple sequential testing approach, according to clinical data reported by researchers at the OSUCCC – James. The researchers say offering this type of advanced genetic testing diagnosis could help guide and expedite treatment decisions for many patients with CRC while simultaneously identifying those who also are likely to have Lynch syndrome, a genetic condition that predisposes to colorectal and other cancers. Researchers analyzed tumor samples from 419 CRC patients using both the traditional multiple test approach and the single upfront genomic tumor-sequencing test to check for multiple mutations simultaneously. Study findings were reported in the journal [JAMA Oncology](#). Heather Hampel, MS, LGC, was corresponding author. [Read more.](#)



Zhiwei Hu, MD, PhD

New Drug Harnesses Immune System to Stop Triple-Negative Breast Cancer

Scientists have identified a drug therapy target for treating BRCA-mutated, triple-negative breast cancer (TNBC), according to data published by OSUCCC – James researchers. Zhiwei Hu, MD, PhD, and colleagues reported the first evidence that a molecule called tissue factor, or TF, is highly expressed in TNBC—both on the surface of TNBC cancer cells and in most of the tumor mass. The molecule is also expressed within the inner layer of tumor blood vessels, which supply oxygen and nutrients to cancer cells and help them spread to distant organs. Additionally, the team showed that an injectable, second-generation TF-targeting therapeutic molecule is effective at targeting TNBC cells in laboratory and preclinical animal models. They reported their findings in the journal [Cancer Immunology Research](#). [Read more.](#)



Clara D. Bloomfield,
MD



Ann-Kathrin Eisfeld,
MD

Study Identifies Gene Mutation Combinations That Predict AML Outcomes in Older Patients

A study led by researchers at the OSUCCC – James identified combinations of gene mutations that predict whether an older person with acute myeloid leukemia (AML) might achieve complete remission when treated with standard chemotherapy. The researchers analyzed the AML cells of 423 patients age 60 and older for mutations in 80 cancer- or leukemia-associated genes, then used that information to classify the patients into groups that had a good, poor or intermediate outcome after treatment with standard chemotherapy. Published in the journal [Leukemia](#), the study highlighted the extremely poor outcome of AML patients age 60 and older with current treatment approaches, but it also revealed mutation combinations that associated with patient survival. Clara D. Bloomfield, MD, was the study leader. Ann-Kathrin Eisfeld, MD, was first author. [Read more.](#)

Genetic Biomarker Linked to Improved Survival in Some Brain Tumor Patients

A DNA-level biomarker called *MGMT* promoter methylation can help predict survival outcomes in patients with high-risk, low-grade gliomas, according to a study conducted through the NRG Oncology/ RTOG collaborative clinical trials group and led by scientists at the OSUCCC – James. Data reported in the journal [JAMA Oncology](#) shows that patients with *MGMT*-methylated tumors are more than twice as likely to survive after combination temozolomide and radiation treatment than patients who have unmethylated tumors. Gliomas are a class of brain tumors that develop in the supportive cells that surround nerve cells in the brain. This study represented the first published data showing that *MGMT* promoter methylation status can be used to predict patient outcomes. **Arnab Chakravarti, MD**, was senior author for the study. [Read more.](#)



Arnab Chakravarti,
MD

Broad Genetic Testing for Advanced Lung Cancer May Not Improve Survival

Testing for dozens of genetic mutations in tumors of patients with a common form of advanced lung cancer does not appear to improve survival compared to routine genetic testing. A study co-authored by researchers at the OSUCCC – James used broad-based genomic sequencing (BGS) to evaluate numerous genes to identify mutations in tumors of patients with advanced non-small cell lung cancer. If a mutation is found and a drug exists to target it, BGS can help clinicians personalize and treat the disease. But questions remain about how broad-based testing, which can be costly, compares to more routine testing that focuses on one or two established, treatable genetic mutations. **Carolyn Presley, MD, MHS**, was first author of the study, published in [Journal of the American Medical Association](#). She conducted the research while at Yale University in collaboration with colleagues there and at Flatiron Health. [Read more.](#)



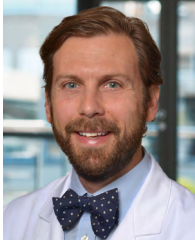
Carolyn Presley,
MD, MHS

Study Identifies How *EGFR*-Mutated Lung Cancer Becomes Resistant to Targeted Agent

A study led by the OSUCCC – James showed how tumors fail to be eradicated by therapy in lung cancer patients treated with targeted drugs called *EGFR*-tyrosine kinase inhibitors (*EGFR*-TKIs). It also suggested a way to improve therapy to slow or prevent drug resistance. *EGFR*-TKIs are often used to treat lung cancers that have tumor cells with *EGFR* gene mutations. Patients receiving these agents often improve, but tumors inevitably recur. Published in the journal [Nature Communications](#), this study found that in *EGFR*-mutated non-small cell lung cancer, *EGFR* inhibitors activate a gene (*NOTCH3*) whose protein energizes a molecule called beta-catenin, which leads to cell survival despite treatment with *EGFR*-TKIs. It also showed in an animal model that combining an *EGFR*-TKI with a clinical beta-catenin inhibitor blocked the development of treatment-resistant cells, decreased tumor burden and improved recurrence-free and overall survival. **David Carbone, MD, PhD**, was principal investigator.



David Carbone,
MD, PhD



Daniel Stover, MD

Liquid Biopsy Can Help Predict Outcomes in Metastatic Triple-Negative Breast Cancer

A clinically relevant “liquid biopsy” test can profile cancer genomes from blood and predict survival outcomes for patients with metastatic triple-negative breast cancer (TNBC), according to research by a multi-institutional team at the OSUCCC – James, Dana-Farber Cancer Institute and the Broad Institute of MIT and Harvard. TNBC represents just 10-15 percent of all breast cancer diagnoses, but it is responsible for 35 percent of breast cancer-related deaths. Scientists have made advances in understanding genomic drivers of primary TNBC, but relatively little is known about metastatic disease because surgical tumor biopsies are rarely obtained from these patients. For this study, researchers completed what they believed to be the largest genomic characterization of metastatic TNBC derived exclusively from liquid biopsies. [Daniel Stover, MD](#), of the OSUCCC – James, was co-first and co-corresponding author of the study, published in the [Journal of Clinical Oncology](#). [Read more.](#)



Amanda Ewart Toland, PhD

Report: Labs Differ Widely in BRCA-Testing Protocols

An international survey of genetic testing labs showed that, despite the availability of *BRCA1* and *BRCA2* gene testing for more than two decades, global protocols and standards are surprisingly inconsistent when it comes to analyzing cancer susceptibility genes and their many variations. A multi-institutional team led by [Amanda Ewart Toland, PhD](#), of the OSUCCC – James, surveyed 86 genetic testing laboratories around the world to better understand their testing practices for *BRCA1/2*—known cancer susceptibility genes that are linked to the types of breast and ovarian cancer passed down through families. The researchers say differences in testing mean that patients could be getting different levels of accuracy in their genetic results, based on the level of testing beyond baseline *BRCA1/2* testing. Survey results were [reported](#) in the Feb. 15, 2018, edition of the journal *NPJ Genomic Medicine*. [Read more.](#)



Vinay Puduvalli, MD

First-in-Human ‘Nanomedicine’ Drug Shows Promise in Solid Cancers

The OSUCCC – James is one of four cancer centers involved in testing a new “nanomedicine” agent – known as BXQ-350 while in testing – for treating advanced solid tumors, including difficult-to-treat malignant brain tumors. BXQ-350 combines a protein called Saposin C, which is naturally expressed in humans, with nanobubbles of a fat molecule called DOPS. This creates an agent that can selectively target cancerous tumor cells and kill them, largely sparing surrounding healthy tissue. These fat nanoparticles can also penetrate the blood brain barrier, which makes them particularly useful against malignant brain tumors. OSUCCC – James investigator [Vinay Puduvalli, MD](#), notes that BXQ-350 is the first agent in this class of drugs and has properties not seen in conventional cancer treatments. He believes this research can open new doors to the treatment of malignant brain tumors and other advanced cancers. [Read more.](#)

Vaccination and Testing Turning Tide in Effort to End Cervical Cancer

While cervical cancer diagnoses and related deaths are down dramatically compared to 50 years ago, **Ritu Salani, MD**, of the OSUCCC – James, wants to help lower them even more through education, vaccination against the human papillomavirus (HPV) that causes cervical cancer and research. Salani and the OSUCCC – James were part of a national phase I clinical trial organized by the Gynecologic Oncology Group Foundation. The study utilized a more targeted treatment for patients who experience a cervical cancer recurrence, for which the recommended treatment is chemotherapy. To make chemotherapy more effective, the study also treated patients with a PARP inhibitor. PARP is a cellular enzyme that has many functions, including the repair of DNA damage. By blocking the PARP in the cervical cancer cells from doing its job, the cancer cells can't repair themselves, and they die. [Read more.](#)



Ritu Salani, MD

Genomic Analysis Important Even for Ultra-Hypermuted Tumors Prior to Immune Therapy

Research at the OSUCCC – James underscores the importance of genomic analysis of rare malignant tumors that are genetically unstable and have many gene mutations. The researchers analyzed the cancer genomes of nine metastatic tumors and the pretreatment primary tumor from a deceased patient with a rare form of cancer called interdigitating dendritic cell sarcoma, a disease with no standardized treatment. The samples were obtained through a body donation and autopsy study. The genomic analysis revealed that all the tumors were ultra-hypermuted (the cancer cells had more than 100 gene mutations per million DNA bases). Ultra-hypermuted cancers often respond to immune therapy, but this patient's cancer progressed despite two courses of immune therapy and targeted agents. Principal investigator **Sameek Roychowdhury, MD, PhD**, says this study, published in the journal [Oncotarget](#), shows how a partnership with patients can enable the analysis of rare aggressive cancers and possibly lead to new therapies. [Read more.](#)



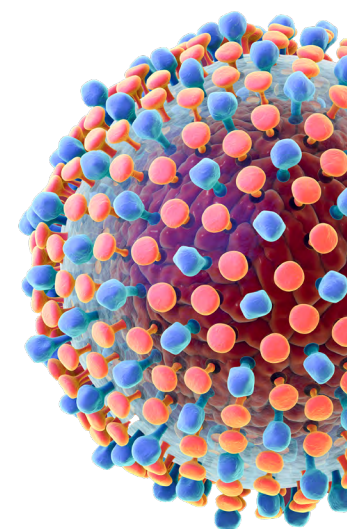
Sameek Roychowdhury, MD, PhD

Old Drug May Improve Radiation Therapy for Cancer

A drug first identified 150 years ago and used as a smooth-muscle relaxant might make tumors more sensitive to radiation therapy, according to a recent study by researchers at the OSUCCC – James. Led by principal investigator **Nicholas Denko, PhD, MD**, the researchers found that the drug papaverine inhibits the respiration of mitochondria, the oxygen-consuming and energy-making components of cells, and also sensitizes model tumors to radiation. The scientists reported their findings in the journal [Proceedings of the National Academy of Sciences of the USA](#). The journal [includes a commentary](#) noting that the study “represents a potential landmark in the six-decade-old quest to eliminate hypoxia as a cause for radiotherapy treatment failure.” [Read more.](#)



Nicholas Denko, PhD, MD





Bhuvana
Ramaswamy, MD

Few Women Told by Doctor That Breastfeeding Can Reduce Cancer Risk

A survey shows that, although nearly 60 percent of breastfeeding mothers knew about the link between breastfeeding and breast cancer risk reduction, just 16 percent learned this from a medical professional. This is concerning, says study principal investigator **Bhuvana Ramaswamy, MD**, because women should be informed that breastfeeding can reduce breast cancer risk and improve a mother's health. Epidemiological studies show a strong correlation between prolonged breastfeeding and reduced risk of developing triple-negative breast cancer (TNBC), an aggressive form of the disease. This knowledge is especially relevant for African-American women considering whether to breastfeed, as they are two times more likely to develop TNBC when compared with women of other ethnicities. [Read more.](#)



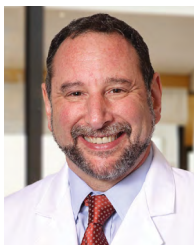
Lisa Blackburn

Aromatherapy and Reflexology Ease Side Effects for Cancer Patients

A noninvasive approach using aromatherapy and reflexology can dramatically reduce pain and anxiety for women undergoing cervical radiation therapy, according to preliminary data from a clinical study underway at the OSUCCC – James. Previously reported data suggests that 40 percent of women undergoing cervical radiation therapy experience such significant pain and anxiety that they develop post-traumatic stress disorder (PTSD). For this study, researchers wanted to know if integrative medicine approaches such as aromatherapy and reflexology could reduce pain and anxiety among women undergoing brachytherapy. **Lisa Blackburn**, a clinical oncology nurse specialist, was principal investigator of the study, which was supported by the OSUCCC – James. [Initial study results](#) were presented at the Oncology Nursing Society's 43rd Annual Congress. [Read more.](#)



Mary Ellen Wewers,
PhD, MPH, RN



Peter Shields, MD

Vaping Yields No Boost to Quit Rates Among Smokers, Study Suggests

People who vape *and* smoke cigarettes are no more likely to drop the nicotine habit than those who just smoke, a study suggests. Researchers at Ohio State studied 617 tobacco users and found no differences in quit rates for “dual users” of both traditional and electronic cigarettes. This research provides important information for public health and medical professionals who are grappling with the role vaping might play in reducing cigarette smoking, says study senior author **Mary Ellen Wewers, PhD, MPH, RN**. Wewers is a professor emeritus of health behavior and health promotion and a member of Ohio State's federally funded Center of Excellence in Tobacco Regulatory Science, for which she serves as a principal investigator along with **Peter Shields, MD**, deputy director of Ohio State's Comprehensive Cancer Center. The study was published in the journal [Nicotine & Tobacco Research](#). [Read more.](#)

At-Home HPV Tests Could Be Powerful Tool for Hard-to-Reach U.S. Women

Screening women for human papillomavirus (HPV) is a promising way to detect cervical cancer early, but many at-risk women go without screening for the virus and without Pap tests that look for abnormal cells on the cervix. However, researchers at Ohio State found that mailing at-home HPV tests to hard-to-reach women may be a viable approach that could be especially helpful in such regions as Appalachia, where access to health care can be limited. [The study](#), which appeared in the journal *Sexually Transmitted Diseases*, found that almost 80 percent of women who received the kits used them and sent them back to researchers for testing. About a quarter of them tested positive for a cancer-causing type of HPV. “The return rate was much higher than we expected,” says [Paul Reiter, PhD, MPH](#), an epidemiologist with the Cancer Control Program at the OSUCCC – James. [Read more.](#)



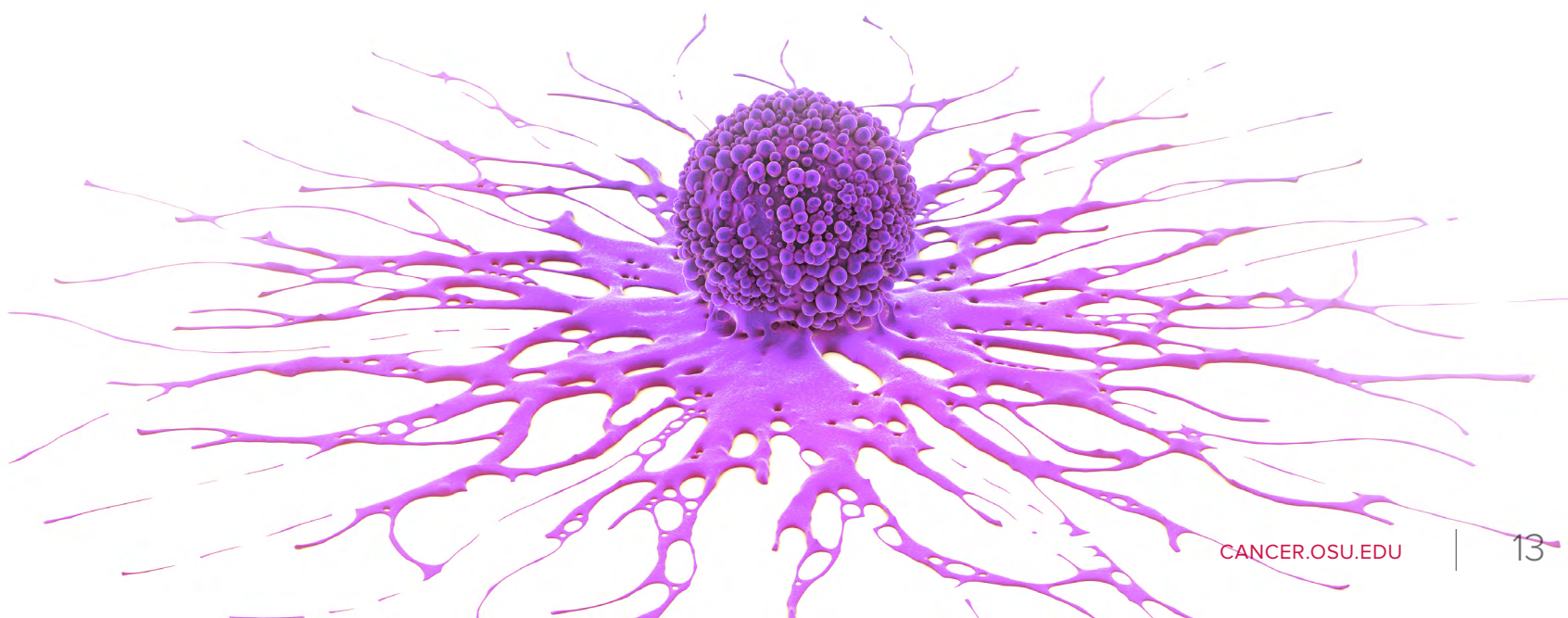
Paul Reiter, PhD,
MPH

Many Women Who Choose Breast Reconstruction Are Less Satisfied Than Expected After Surgery

Many breast cancer patients undergoing mastectomy with or without immediate reconstruction mispredict future satisfaction with aspects of physical and sexual health post-surgery, according to a study published by researchers at the OSUCCC – James. [Clara Lee, MD, MPP](#), and colleagues evaluated 96 women undergoing mastectomy for either early-stage breast cancer (stage I, II, III ductal or lobular breast cancer) or as a preventive measure. Women were 21 or older and were treated between July 2012 and February 2014 at a single-institution, multidisciplinary cancer clinic. They were asked to rate six domains of future happiness 12 months after surgery: happiness, quality of life, satisfaction with breast appearance, sexual attractiveness, breast numbness and pain. Researchers found that women who chose immediate reconstruction after a mastectomy overestimated how satisfied they would be with their appearance, whereas those who chose not to reconstruct generally underestimated future satisfaction. Full study results were published in the journal *JAMA Surgery*. [Read more.](#)



Clara Lee, MD, MPP



PROMINENT RESEARCHERS JOIN OSUCCC – JAMES TEAM

In 2018, nearly 40 researchers were recruited to Ohio State’s cancer program. The newcomers, who represent four colleges at the university, include six professors, six associate professors, 25 assistant professors and two hospitalists. Here are some of the recent recruits:



Allan Tsung, MD

Allan Tsung, MD, was recruited from the University of Pittsburgh Medical Center (UPMC) to become director of the Division of Surgical Oncology in the Department of Surgery at Ohio State’s College of Medicine. Tsung was the Raizman-Haney Endowed Chair and a professor in the Department of Surgery at UPMC. He also directed the Liver Cancer Program at the UPMC Hillman Cancer Center, led the UPMC Regional Therapy Program for primary and metastatic liver cancers, and directed the Biospecimen Repository and Processing Core of the Pittsburgh Liver Research Center. He recently was elected as a member of the Society of Clinical Surgery, a prestigious organization dedicated to the advancement of surgery.



Philip Tschlis, MD

Philip Tschlis, MD, was recruited to Ohio State as a professor in the College of Medicine, Department of Cancer Biology and Genetics, and as co-leader of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James. Tschlis came to Ohio State from Tufts University School of Medicine in Boston, where he also served as executive director of the Molecular Oncology Research Institute. His lab focuses on using insertional mutagenesis and other genetic strategies to identify genes involved in causing cancer or regulating phenotypic changes in tumor cells. Tschlis and colleagues have identified and exploited a number of genes implicated in oncogenesis.



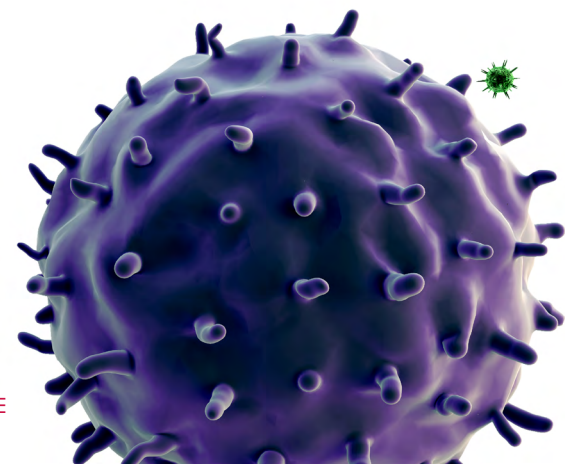
Jing ‘Jenny’ Wang, PhD

Jing ‘Jenny’ Wang, PhD, who studies molecular mechanisms and therapeutic targets of colon cancer metastasis and drug resistance, joined the faculty at Ohio State as a professor in the College of Medicine, Department of Cancer Biology and Genetics. She is a member of the Molecular Biology and Cancer Genetics Program in the OSUCCC – James. Wang was recruited from the University of Nebraska Medical Center, where she was a professor in the Eppley Institute for Research in Cancer and Allied Diseases. The long-term goal of her research is to develop effective therapies for patients with advanced colon cancer.



Nicole Grieselhuber, MD, PhD

Nicole Grieselhuber, MD, PhD, is an assistant professor in the College of Medicine, Department of Internal Medicine, Division of Hematology and Division of Medical Oncology, where she studies acute myeloid leukemia (AML). Her research interests include molecular mechanisms of leukemogenesis, pharmacology of targeted inhibitors and applying genomic technologies to patient care.





Brad Blaser, MD, PhD

Brad Blaser, MD, PhD, is an assistant professor in the College of Medicine, Department of Internal Medicine, Division of Hematology, and a member of the Leukemia Research Program at the OSUCCC – James. Blaser’s research involves identifying factors in the hematopoietic niche that promote the development of myeloid neoplasia.



Amanda Hummon, PhD

Amanda Hummon, PhD, is an associate professor in the College of Arts and Sciences, Department of Chemistry and Biochemistry. Her research interests involve analytical chemistry and chemical biology, with a focus on cancer biology. Her team develops analytical methods to evaluate the transcriptome and the proteome in cancer cells while exploring deregulation in cancer-associated signal transduction pathways.



Zachary Schultz, PhD

Zachary Schultz, PhD, is an associate professor in the College of Arts and Sciences, Department of Chemistry and Biochemistry. His team focuses on developing tools for identifying molecules relevant to biomedical diagnostics and other applications. To do this, the team builds and develops instrumentation that takes advantage of chemical properties to characterize complex biologic samples.



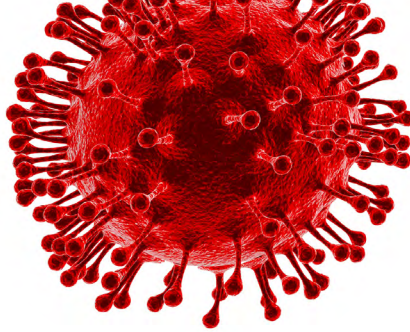
Gina Sizemore, PhD

Gina Sizemore, PhD, is an assistant professor in the Department of Radiation Oncology and member of the OSUCCC – James Molecular Biology and Cancer Genetics Program. Her research integrates *in vitro* and *in vivo* modeling of the brain metastatic tumor microenvironment (TME) to provide mechanistic insight into how the brain metastatic TME contributes to breast cancer metastatic progression. Current studies aim to elucidate whether platelet-derived growth factor beta (PDGFR β) signaling is a promising pathway for diagnostic and/or therapeutic purposes for metastatic breast cancer patients.



Steven Sizemore, PhD

Steven Sizemore, PhD, is an assistant professor in the Department of Radiation Oncology and member of the OSUCCC – James Molecular Biology and Cancer Genetics Program. His research focuses on elucidating the mechanisms of cancer metastasis and developing therapies to improve outcomes for patients with metastatic disease. Metastatic breast cancer and metastatic soft tissue sarcoma are his areas of concentration.



Collaboration Will Lead to Region’s First Proton Therapy Facility to Treat Cancer Patients

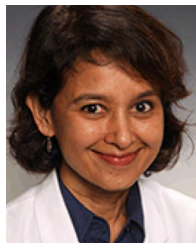
The Ohio State University Wexner Medical Center and the OSUCCC – James are collaborating with Nationwide Children’s Hospital to bring the first proton therapy treatment facility to central Ohio. It will occupy some 55,000 square feet in a 340,000-square-foot outpatient facility being planned for Ohio State’s west campus. The \$100 million proton therapy facility, to be completed in 2021, will offer state-of-the-art radiation oncology treatment for adult and pediatric cancer patients in one location that is closer to their homes. Proton therapy is an advanced form of radiation treatment that uses protons (positively charged particles) instead of X-rays to kill cancer cells. It can be used alone or in combination with other therapies to treat several localized cancers. [Read more.](#)



Rebecca Jackson,
MD

NIH Awards \$25 Million to Center for Clinical and Translational Science

The National Institutes of Health (NIH) awarded a \$25 million Clinical and Translational Science Award to **Rebecca Jackson, MD**, a member of the Cancer Control Program at the OSUCCC – James and director of Ohio State’s Center for Clinical and Translational Science (CCTS). The grant will further the CCTS mission of translating discoveries into therapies to improve human health. This is the third five-year cycle of funding for the CCTS since 2008 from the NIH’s National Center for Advancing Translational Sciences. The CCTS—a collaboration of the College of Medicine, other colleges at Ohio State and Nationwide Children’s Hospital—provides financial, organizational and educational support to biomedical researchers, as well as opportunities for community members to participate in research. [Read more.](#)



Purnima Kumar,
DDS, PhD

Grant Will Support Study of Bodily Responses to E-Cigs

OSUCCC – James researchers led by **Purnima Kumar, DDS, PhD**, have landed a five-year, \$3.12 million grant from the National Institute of Dental and Craniofacial Research to conduct the first comprehensive examination of the body’s biological responses to electronic nicotine delivery systems (ENDS), popularly known as e-cigs. The researchers will use the oral cavity as a model system for their study, since it is the first area of the body to be affected by ENDS and the most accessible for examination. Kumar, a professor in the College of Dentistry, Division of Periodontology, says the study is important because, even though ENDS were introduced about a decade ago, little is known about their impact on health. Moreover, statistics show that ENDS are being used more frequently by adolescents and young adults, partly because these products are thought to be safer than cigarettes and other nicotine-replacement therapies. [Read more.](#)

Researchers Gain NCI Grant for Thyroid Cancer Study

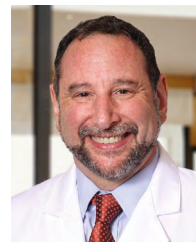
The National Cancer Institute awarded **Matthew Ringel, MD**, professor and director of the Division of Endocrinology, Diabetes and Metabolism at Ohio State, \$1.89 million to study the role of p21-activated kinases in thyroid cancer development and progression. This work by Ringel and colleagues will define the function of these proteins in thyroid cancer and determine if they might be used as therapeutic targets. Ringel also co-leads the Molecular Biology and Cancer Genetics Program at the OSUCCC – James.



Matthew Ringel, MD

Grant to Help Establish Postdoctoral Training Program for Cancer Control

The OSUCCC – James will address a high priority of both the National Cancer Institute (NCI) and Ohio State by using a new five-year, \$1.03 million NCI grant to establish a postdoctoral training program for cancer prevention and control. The T-32 grant, awarded to principal investigator (PI) and project leader **Peter Shields, MD**, deputy director of the OSUCCC, and co-PI **Christopher Weghorst, PhD**, professor and associate dean for research in the College of Public Health, will support transdisciplinary research training that will prepare postdoctoral fellows to be independent scientists in academia, government or industry whose studies will be aimed at reducing cancer risk and improving the lives of cancer patients. [Read more.](#)



Peter Shields, MD



Christopher Weghorst, PhD

Venere Lands ACS Research Scholar Grant

The American Cancer Society (ACS) awarded a four-year, \$800,000 Research Scholar Grant to help **Monica Venere, PhD**, pursue a new therapeutic strategy for patients with glioblastoma, the most common and lethal form of brain cancer. Venere, assistant professor in the Department of Radiation Oncology at Ohio State and member of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James, received the grant for a project titled “Targeting Kinesins to Radiosensitize Glioblastoma.” Preliminary data in her project proposal was generated through support from an Idea Grant funded by [Pelotonia](#), an annual grassroots cycling event that raises money for cancer research at the OSUCCC – James. [Read more.](#)



Monica Venere, PhD

Miles and Burd Receive 2018 Damon Runyon-Rachleff Innovation Awards

OSUCCC – James researchers **Wayne Miles, PhD**, and **Christin Burd, PhD**, were among 11 early-career scientists to be named 2018 recipients of the Damon Runyon-Rachleff Innovation Award, which funds cancer research by creative thinkers with “high-risk, high-reward” ideas who lack sufficient preliminary data to obtain traditional funding. Miles, assistant professor in the College of Arts and Sciences, Department of Molecular Genetics, received an initial grant for projects with the potential to impact the prevention, diagnosis and treatment of cancer. His project will examine how inactivation of the retinoblastoma1 (*RB1*) tumor-suppressor gene, a hallmark of many



Wayne Miles, PhD



Christin Burd, PhD

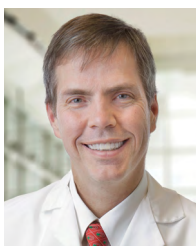
cancers, changes cells. Burd, assistant professor in the College of Arts and Sciences, Department of Molecular Genetics, and in the College of Medicine, Department of Cancer Biology and Genetics, first received a \$300,000 Damon Runyon-Rachleff Innovation Award in 2016 and then was granted additional funding of \$300,000 in 2018 for demonstrating progress on her research during the first two years. Her second-phase grant funding will help her continue her mutation-specific studies of the *RAS* oncogene—which is mutated in 20 percent of all human cancers—in a variety of tumor types, starting with melanoma, thyroid cancer and acute myeloid leukemia.



David Gosky, MA, MBA

OSUCCC Names Executive Director for Research Administration

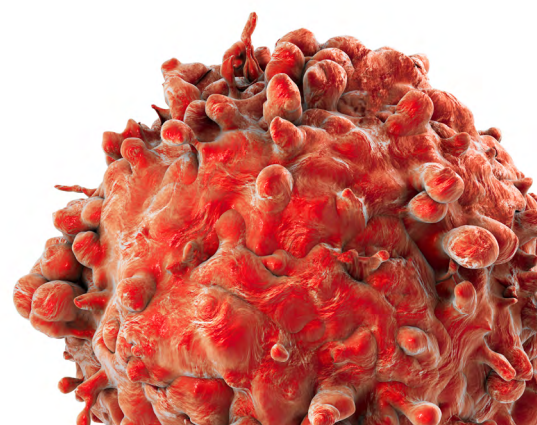
David Gosky, MA, MBA, a research and healthcare executive with experience in managing the research, clinical and education missions of cancer centers at academic medical institutions, was named executive director for research administration at the OSUCCC. Gosky, who came to Ohio State from the University of Kentucky, oversees all administrative, operational and fiscal responsibilities for the research arms of Ohio State’s cancer program. He has administrative oversight of all senior cancer program staff members who manage administrative, clinical research and research operations of the OSUCCC. Gosky reports to OSUCCC Director Raphael Pollock, MD, PhD. He works closely with OSUCCC Deputy Director Peter Shields, MD, Interim James CEO William Farrar, MD, and James Chief Medical Officer David Cohn, MD, to further program goals. He also works with Kris Kipp, MSN, RN, executive director of patient services and chief nursing officer at The James, on overarching OSUCCC – James issues.



John C. Byrd, MD

Byrd Becomes Senior Adviser for Cancer Experimental Therapeutics

John C. Byrd, MD, distinguished university professor in the Division of Hematology at Ohio State, accepted a new executive position as senior adviser for cancer experimental therapeutics at the OSUCCC – James. In this role, Byrd is a consultant to the director of the OSUCCC and to the CEO of The James, particularly on matters of drug development and experimental therapeutics. An internationally known expert in hematologic malignancies, Byrd also remains as national chief medical officer for the Leukemia & Lymphoma Society/ Beat AML Master Trial, a precision medicine-focused effort against acute myeloid leukemia (AML) in which Ohio State is a lead institution. He also is co-leader of the Leukemia Research Program at the OSUCCC – James.



Peters Elected as AAAS Fellow

Ellen Peters, PhD, a distinguished university professor in the Department of Psychology at Ohio State and member of the Cancer Control Program at the OSUCCC – James, was among five Ohio State researchers elected in 2018 as Fellows of the American Association for the Advancement of Science (AAAS). AAAS Fellows are elected by their academic peers; it is considered one of the most prestigious honors given to U.S. scientists. Peters, who also directs the Decision Sciences Collaborative in the College of Arts and Sciences at Ohio State, was elected for contributions to basic research on affect, numeracy and risky decision making, and for translational research on communicating health risks and improving medical decisions and policies.



Ellen Peters, PhD

Woyach Presents Groundbreaking CLL Drug Research at ASH Annual Meeting

Ongoing research in hematologic malignancies by OSUCCC – James investigators was in the spotlight at the 60th American Society of Hematology (ASH) Annual Meeting & Exposition in San Diego. Jennifer Woyach, MD, associate professor in the Division of Hematology at Ohio State and a member of the Leukemia Research Program at the OSUCCC – James, was a speaker during the meeting’s [press program](#) and at the [Plenary Scientific Session](#). She presented “Ibrutinib Alone or in Combination With Rituximab Produces Superior Progression-Free Survival (PFS) Compared With Bendamustine Plus Rituximab in Untreated Older Patients With Chronic Lymphocytic Leukemia (CLL).” Study results were reported simultaneously in the [New England Journal of Medicine](#).



Jennifer Woyach, MD

Gupta Elected as Fellow in AAPM

Nilendu Gupta, PhD, associate professor in the Department of Radiation Oncology at Ohio State, was elected as a Fellow of the American Association of Physicists in Medicine (AAPM). The category of Fellow honors AAPM members who have distinguished themselves by their contributions in research, education or leadership in medical physics. For the past decade Gupta has been the chief medical physicist in the Department of Radiation Oncology, where he has spearheaded large technical advances and expansion projects in the cancer program and the department.



Nilendu Gupta, PhD

NASA Selects Jacob Study to Support Astronaut Health on Space Missions

A study by Naduparambil Jacob, PhD, assistant professor in the Department of Radiation Oncology at Ohio State and a member of the Translational Therapeutics Program at the OSUCCC – James, was one of 10 proposals selected by NASA to support astronaut health and performance on longer missions to the moon and Mars. Jacob aims to study predictive biomarkers for space radiation-induced cancer and cardiovascular injury risk assessment.



Naduparambil Jacob, PhD



Kris Kipp, MSN, RN

Kipp and Account Team Earn Regional ACS Volunteer Staff Partnership Award

Kris Kipp, MSN, RN, executive director of patient services and chief nursing officer at The James, and The Ohio State University Account Team received the first American Cancer Society Volunteer Staff Partnership Award – North Central Region. The award recognizes a volunteer and staff team that models a successful partnership to positively impact the American Cancer Society (ACS) mission. For the past five years, Kipp has worked closely with The Ohio State University Account Team to create a collaborative environment to share ideas.



Floor Backes, MD

Backes Co-Chairs NRG Oncology Developmental Therapeutics Committee

Floor Backes, MD, associate professor in the Division of Gynecologic Oncology at Ohio State and member of the Cancer Control Program at the OSUCCC – James, assumed the national role of co-chair for the NRG Oncology Developmental Therapeutics Committee. NRG Oncology is a nonprofit research organization formed to conduct national and international oncologic clinical research and to disseminate study results for informing clinical decision making and healthcare policy. Backes also was named local lead investigator for the Gynecologic Oncology Group (GOG) Foundation Inc., an independent, international, nonprofit organization that promotes excellence in the quality and integrity of clinical and basic scientific research of gynecologic malignancies.



Ritu Salani, MD, MBA

Salani Chairs IGCS Education Committee

Ritu Salani, MD, MBA, associate professor in the Division of Gynecologic Oncology at Ohio State and member of the Cancer Control Program at the OSUCCC – James, became chair of the International Gynecologic Society’s (IGCS) Education Committee. The Education Committee organizes, implements and evaluates educational content to meet the diverse membership needs of IGCS members in high-, middle- and low-resource settings. Salani also became chair of the Compliance Committee for the Society of Gynecologic Oncology (SGO), a nonprofit medical specialty society for healthcare professionals trained in the comprehensive management of gynecologic cancers.



Larry Copeland, MD

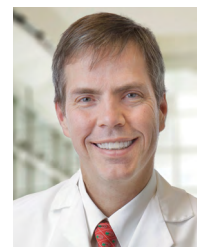
Copeland Takes Reins as President of GOG Foundation Inc.

Larry Copeland, MD, professor in the Department of Obstetrics and Gynecology at Ohio State and member of the Translational Therapeutics Program at the OSUCCC – James, became president of the Gynecologic Oncology Group (GOG) Foundation Inc. after previously serving as vice president. The GOG Foundation is an independent, international, nonprofit organization that promotes the quality and integrity of clinical and basic scientific research in gynecologic malignancies. The foundation maintains the highest standards in clinical trials development, execution, analysis and distribution of results.



Byrd Addresses LLS Influencer Roundtable on Innovations in Cancer Research

John C. Byrd, MD, senior adviser for cancer experimental therapeutics at the OSUCCC – James and co-principal investigator for the Beat AML master clinical trial spearheaded by the Leukemia & Lymphoma Society (LLS), was among the speakers at an LLS Influencer Roundtable titled “Innovations in Cancer Research – Blood Cancers and Beyond.” Launched in 2016, Beat AML is a collaboration among top leukemia researchers, biopharmaceutical companies and a genomics information company aimed at advancing treatment for acute myeloid leukemia (AML). Beat AML also was the subject of a media briefing at the American Society of Hematology (ASH) 2018 annual meeting. Five Beat AML research abstracts co-authored by scientists at the OSUCCC – James and elsewhere were presented during the meeting, and **Matthew Cannon**, a graduate student in Ohio State’s Experimental Hematology Laboratory, received a 2018 Minority Graduate Student Abstract Achievement Award for “High-Throughput miRNA Analysis Suggests Pro-Inflammatory Profile in Sickle Cell Disease.”



John C. Byrd, MD

Cohn Begins 4-Year Commitment to SGO Top Leadership Roles

David Cohn, MD, director of the Division of Gynecologic Oncology at Ohio State and chief medical officer at the OSUCCC – James, was elected as president of the Society of Gynecologic Oncology (SGO) for the 2020-2021 term year. This is a four-year commitment that started with Cohn serving as president-elect II for one year—a term that began after the SGO Annual Meeting held in March 2018. After serving as president-elect II, Cohn will serve for successive years as president-elect I, president and past president. He also is a cancer researcher in the Translational Therapeutics Program at the OSUCCC – James.



David Cohn, MD

Shah Elected to 3-Year Term as ITOG Chair

The board of directors for the International Thyroid Oncology Group (ITOG) elected **Manisha Shah, MD**, professor in the Division of Medical Oncology at Ohio State, to a three-year term as chair of ITOG. Her term began following the ITOG Annual Meeting held in April 2018. Shah, a member of the Translational Therapeutics Program at the OSUCCC – James, also has served as ITOG secretary, co-chair of the Protocol Committee and member of the Executive Committee. Her research at Ohio State focuses on the discovery of targeted therapies for patients with thyroid cancers, neuroendocrine cancers and adrenal cancers.



Manisha Shah, MD

Karuppaiyah Receives Research Prize for Early-Career Investigators

The Ovarian Cancer Research Fund Alliance (OCRFA) presented the Liz Tilberis Research Prize for Outstanding Early-Career Investigators to **Selvendiran Karuppaiyah, PhD**, associate professor in the Department of Obstetrics and Gynecology at Ohio State and member of the Translational Therapeutics Program at the OSUCCC – James. OCRFA, the largest global organization dedicated to fighting ovarian cancer, bestows this distinction annually on one person who has significantly impacted ovarian cancer research.



Selvendiran Karuppaiyah, PhD



Electra Paskett, PhD,
MSPH

Paskett Lands Laurels Award for Increasing Health Equity

Electra Paskett, PhD, MSPH, associate director for population sciences and leader of the Cancer Control Program at the OSUCCC – James, accepted the Prevent Cancer Foundation® Laurels Award for Increasing Health Equity in recognition of her outstanding contributions toward reducing cancer health disparities. Co-sponsored by the National Colorectal Cancer Roundtable and the American College of Obstetricians and Gynecologists, this award honors individuals who have passion for cancer prevention and early detection, and who have brought about positive change in the public, professional or political arena.



Darrell Gray II, MD,
MPH

Gray Wins National Service Award for Colorectal Cancer Outreach and Prevention

The American College of Gastroenterology presented Darrell Gray II, MD, MPH, assistant professor in the Division of Gastroenterology, Hepatology and Nutrition at Ohio State, a Service Award for Colorectal Cancer Outreach, Prevention and Year-Round Excellence for Best Community Service Delivery and Comprehensive Community Education Initiative. Gray is in the Cancer Control Program at the OSUCCC – James, where he also is deputy director of the Center for Cancer Health Equity.

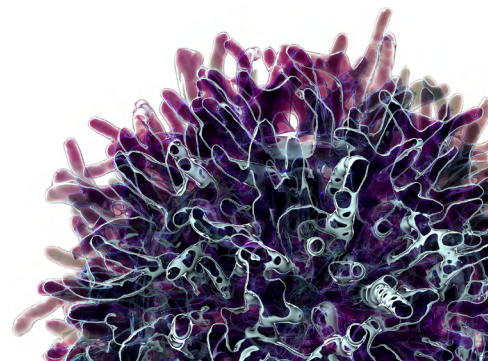
In addition, he leads Ohio State’s Provider and Community Engagement (PACE) Program for Health Equity in Colorectal Cancer Prevention, which promotes colorectal cancer screening and has provided low- to no-cost colonoscopies to uninsured and underinsured Ohioans. **Ohio State was among seven recipients** of an “80 percent by 2018 National Achievement Award” from the National Colorectal Cancer Roundtable, an organization founded by the American Cancer Society and the Centers for Disease Control and Prevention. The award recognizes individuals and organizations that advance initiatives to reach the national goal of regularly screening 80 percent of adults age 50 or over for colorectal cancer.



Heather Hampel,
MS, LGC

Hampel Attains Award and Visiting Professorship in Clinical Cancer Genetics

Memorial Sloan Kettering Cancer Center in New York City selected Heather Hampel, MS, LGC, associate director for biospecimen research and member of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James, to receive the 2018 Niehaus, Southworth, Weissenbach Award and Visiting Professorship in Clinical Cancer Genetics. The award recognizes leaders in translating germline genetics to preventive care of cancer patients and families. Hampel, professor and associate director of the Division of Human Genetics at Ohio State, visited Memorial Sloan Kettering to accept her award and deliver two lectures.



Andersen Writes Expert Commentary and Podcast for ASCO

Barbara Andersen, PhD, a distinguished university professor in the Department of Psychology at Ohio State and member of the Cancer Control Program at the OSUCCC – James, co-wrote an expert commentary and accompanying podcast for the American Society of Clinical Oncology (ASCO) on recognizing, assessing, referring and monitoring cancer patients with symptoms of moderate to severe anxiety or depression. Andersen and co-author Marlena Ryba, PhD, assistant professor of psychology at Coastal Carolina University, state in their commentary—which appeared in [ASCO Daily News](#)—that cancer has modifiable psychological and behavioral patient elements capable of reducing risk, morbidity and mortality.



Barbara Andersen, PhD

Johanson Wins MODNA Expert Nursing Care Award

The Mid-Ohio District Nurses Association (MODNA) selected **Marna Johanson, BSN, RN**, a nurse on 21 James, as recipient of the association’s 2018 Expert Nursing Care Award. This award is presented annually to a member nurse who demonstrates extraordinary nursing care in ordinary settings, brings heart into her/his practice and exemplifies the five values of an expert of nursing: compassion, competence, conscience, confidence and commitment.



Marna Johanson, BSN, RN

Talawoly Participates on National Council Licensure Examination Panel

Massa Talawoly, MSN, RN-BC, CNL, nurse educator for The James, was approved by the Ohio Board of Nursing and selected by the National Council of State Boards of Nursing (NCSBN) Licensure to participate on the National Council Licensure Examination (NCLEX®) item development panel of subject matter experts held in 2018 in Chicago. Talawoly was selected for her clinical specialty and nursing expertise. Passing the NCLEX® exam is a requirement for attaining a nursing license/registration in the United States and in participating Canadian provinces and territories.



Massa Talawoly, MSN, RN-BC, CNL

Kennerly-Shah Chosen for Inaugural Class of ‘40 Under 40 in Cancer’

Julie Kennerly-Shah, PharmD, MS, MHA, assistant director of pharmacy at the OSUCCC – James, was selected as part of the inaugural class of “40 Under 40 in Cancer,” an awards initiative founded by McGivney Global Advisors and The Lynx Group “to identify and recognize contributions being made across the field of cancer by rising stars and emerging leaders” under age 40. Finalists and awardees were selected by a panel of reviewers from diverse roles in oncology. The awardees were honored at a reception at the American Society of Clinical Oncology (ASCO) in Chicago.



Julie Kennerly-Shah, PharmD, MS, MHA



Ann-Kathrin Eisfeld, MD



Meixiao Long, MD, PhD

Eisfeld and Long Receive ASH Scholar Awards

Ann-Kathrin Eisfeld, MD, a hematology/oncology fellow in the Physician Scientist Training Program at Ohio State, and **Meixiao Long, MD, PhD**, a clinical instructor in the Division of Hematology at Ohio State, both received a 2019 American Society of Hematology (ASH) Scholar Award, one of the most prestigious awards given by ASH. Their \$150,000 awards, presented at the ASH annual meeting in December 2018, were in the Basic/Translational Junior Faculty category. Eisfeld's award will help her continue her research as a "young Investigator," receiving senior support from **Elaine Mardis, PhD**, **Clara D. Bloomfield, MD**, and **Albert de la Chapelle, MD, PhD**. Under the direction of **John C. Byrd, MD**, Long and colleagues are studying the immune modulatory effects of small molecule kinase inhibitors and their potential for immunotherapy. Long's ASH Award will help him further his research.



John Grecula, MD

Grecula Becomes President-Elect of ISIORT

John Grecula, MD, professor in the Department of Radiation Oncology at Ohio State and member of the Translational Therapeutics Program at the OSUCCC – James, was elected as president-elect of the International Society of Intraoperative Radiation Therapy (ISIORT). This organization provides a platform for scientists and clinicians from around the world to present new research, developments and clinical data. Grecula also is an elected board member of ISIORT.



Jonathan Song, PhD

Song Acquires Grant from Mark Foundation® for Cancer Research

Jonathan Song, PhD, assistant professor in the College of Engineering at Ohio State and member of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James, received a \$187,772 grant from The Mark Foundation® for Cancer Research to support his development of a preclinical disease model to precisely interrogate how brain metastases obtain vasculature through the co-option of pre-existing blood vessels. Song leads an interdisciplinary lab at Ohio State that applies microtechnology, principles from tissue engineering and quantitative engineering analysis for studying physical dynamics of tumor and vascular biology. The Mark Foundation for Cancer Research is dedicated to accelerating cures for cancer by integrating discoveries in biology with innovative technology.



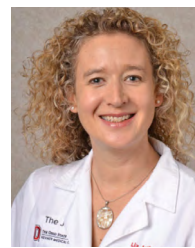
Richard Fishel, PhD

Fishel Elected as Fellow in American Academy of Microbiology

Richard Fishel, PhD, professor in the Department of Cancer Biology and Genetics at Ohio State, and a member of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James, was elected as a fellow in the American Academy of Microbiology, an honorific leadership group within the American Society for Microbiology. Fellows, who hail from around the world, are elected annually through a highly selective peer-review process based on their records of scientific achievement and original contributions that have advanced microbiology.

Arthur Produces Distinguished Abstract for MNRS Annual Conference

An abstract by **Elizabeth Arthur, PhD, APRN-CNP, AOCNP**, was one of six selected as Distinguished Abstracts for the Midwest Nursing Research Society (MNRS) 2018 Annual Conference. Arthur, an advanced oncology certified nurse practitioner at The James, submitted an abstract titled “Cognitive Interviews With Women Cancer Survivors to Assess Content Validity of the Self-Efficacy to Communicate About Sex and Intimacy (SECSI) Scale.” The abstracts were selected via a rigorous peer-review process involving two blinded review panels.



Elizabeth Arthur, PhD, APRN-CNP, AOCNP

ATA Research Grants Extended to Miles and Eisfeld

The American Thyroid Association (ATA) awarded 2018 Research Grants to **Wayne Miles, PhD**, assistant professor in the College of Arts and Sciences, Division of Molecular Genetics, and **Ann-Kathrin Eisfeld, MD**, a hematology/oncology fellow in the Physician Scientist Training Program, to help them pursue innovative studies and generate preliminary data needed to apply for larger grants from such organizations as the NIH. Eisfeld received an ATA grant for junior faculty for a project titled “Novel NRAS Isoform Mediates BRAF-Inhibitor Resistance in Papillary Thyroid Cancer—Thinking Outside the Box to Overcome ‘Inevitable’ Treatment Failure.” Miles, a member of the Molecular Biology and Cancer Genetics Program at the OSUCCC – James, received a grant consisting of funds donated to the ATA from the Thyroid Cancer Survivors’ Association Inc. (ThyCa) and Bite Me Cancer for a project titled “Proteomic-Led Discovery of Essential Genes in Medullary Thyroid Cancer.”



Wayne Miles, PhD



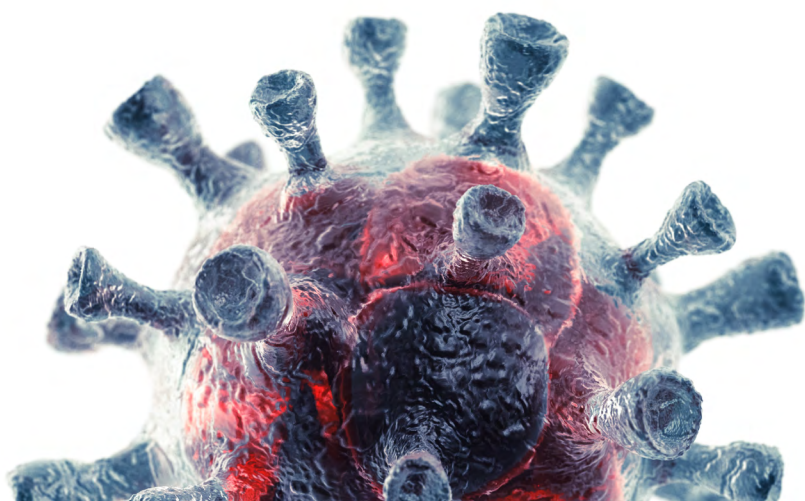
Ann-Kathrin Eisfeld, MD

Memorial Sloan Kettering CEO Accepts Block Lectureship Award

The OSUCCC – James presented the 23rd Herbert and Maxine Block Memorial Lectureship Award for Distinguished Achievement in Cancer to **Craig B. Thompson, MD**, president and CEO of Memorial Sloan Kettering Cancer Center in New York City. The \$50,000 award goes to internationally prominent scientists who then visit Ohio State to accept the honor and lecture about their research. Thompson, who has extensive research experience in cancer, immunology and translational medicine, presented “The Metabolic Origins of Cancer” for the Block Lecture. One of the largest prizes presented in the field of cancer, the award is supported by proceeds from the annual Herbert J. Block Memorial Tournament, a golf outing sponsored by the Block family of Columbus.



Craig B. Thompson, MD



Mercy Health – St. Rita’s Medical Center Joins James Cancer Network

Mercy Health – St. Rita’s Medical Center has joined The James Cancer Network as an affiliated hospital. By joining the network, Mercy Health – St. Rita’s Cancer Center will continue to provide comprehensive, state-of-the-art and compassionate cancer care to the community, but the affiliation provides physicians and patients at that institution with access to the expertise and subspecialization at the OSUCCC – James while allowing patients to stay close to their homes, loved ones and support systems. The affiliation also provides access to OSUCCC – James tele-genetics, tele-survivorship care plans and clinical trials. [Read more.](#)

Wexner Medical Center and Mercy Health Launch Alliance to Address Critical Health Needs

The Ohio State University Wexner Medical Center and Mercy Health—the largest community health system in Ohio and a Catholic health ministry serving Ohio and Kentucky—have launched [Healthy State Alliance](#), an initiative to tackle Ohio’s most critical health needs and improve the health of communities. Increasing access to cancer care is one of the initial three areas of focus, out of 10 total that the alliance has identified. Expanding access to transplant care and addressing the opioid epidemic round out the top three. The resources of both organizations will fuel the Alliance’s ambition, providing increased access to more than 50,000 team members and more than 600 points of care throughout the state. Patients also will benefit from enhanced access to one of the nation’s premier transplant centers, one of only 49 National Cancer Institute-designated Comprehensive Cancer Centers, and the assets of one of America’s leading research universities. [Read more.](#)

James Team Breaks New Ground With Digital Pathology Cancer Diagnosis

The OSUCCC – James made further progress toward implementing [digital pathology technologies](#) into research and patient care at Ohio State. In March 2018, [Anil Parwani, MD, PhD, MBA](#), completed the first primary cancer diagnosis of a patient using the digital pathology platform. The sample had been sent for suspected prostate cancer based on an elevated serum PSA (prostate-specific antigen). Also known as “whole-slide imaging,” digital pathology is the process of scanning conventional glass slides and then digitally knitting consecutive images into a single whole image that replicates the information on the glass slide. This virtual image is paired with associated clinical information to give pathologists an integrated picture of each patient’s unique cancer. Pathologists can then perform additional diagnostics, including image analysis tests that are not possible on traditional glass slides. In 2018, the digital pathology program scanned more than 570,000 tumor sections from some 50,000 past cancer cases, contributing to an invaluable digital archive for researchers. [Read more.](#)

The James: Nationally Ranked in Cancer for 20 Years

U.S. News & World Report listed the James Cancer Hospital and Solove Research Institute among America’s Best Hospitals for cancer care for the 20th consecutive year, ranking it 20th the nation for 2018-19. The James first appeared on the list in 1999, less than a decade after the hospital opened in 1990, and it has remained there ever since. The *U.S. News* rankings are based on such criteria as patient volume, safety and mortality, nursing excellence, staffing levels, reputation and technology. For reference the magazine relies on data collected each year from thousands of hospitals and physicians.

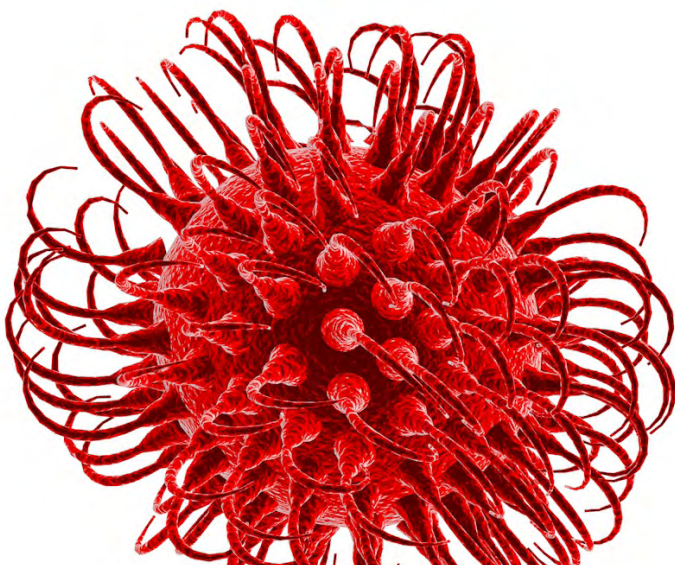
OSUCCC – James Again Achieves Magnet® Recognition

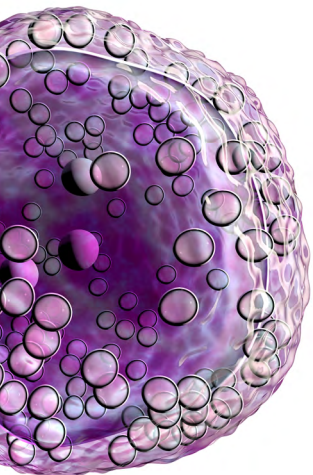
Hours of work and dedication over many months paid off for OSUCCC – James faculty and staff on March 15, 2018, when they learned that the hospital had for the second time achieved Magnet® recognition from the American Nurses Credentialing Center (ANCC). The ANCC announced the award after examining an extensive re-designation document submitted by the OSUCCC – James in 2017 and following a January 2018 site visit. The Magnet Recognition Program® recognizes healthcare organizations for quality patient care, nursing excellence and innovations in professional nursing practice. The OSUCCC – James initially achieved Magnet® status in 2013. The renewed Magnet® status will extend for four years.



James Sickle Cell Program Receives Nation’s First Joint Commission Disease-Specific Certification

The Sickle Cell Program at The James received the nation’s first disease-specific certification for sickle cell from The Joint Commission following a two-day on-site survey that yielded no findings. The certification is typically valid for up to two years. The disease-specific care certification program evaluates clinical programs across the continuum for compliance with Joint Commission requirements. Organizations seeking certification are examined during an on-site survey by reviewers who assess how clinical outcomes and other performance measures are used to identify opportunities for improving care, whether organization leaders commit to improving quality of care, how patients and caregivers are educated and prepared for discharge, and whether evidence-based guidelines for clinical care are incorporated into daily practice.





OSUCCC – James BMT Earns Highest-Level Beacon Award for Excellence

The 36-bed Blood and Marrow Transplant (BMT) Unit at the OSUCCC – James has again received national recognition for exceptional patient care and professional nursing practice with a three-year Gold-level Beacon Award for Excellence from the American Association of Critical-Care Nurses (AACN). Gold is the highest-level Beacon Award. This was the second Beacon Award for Excellence for the BMT unit. The team first received the honor in 2015 with a bronze-level award. Units that earn the Beacon Award meet nationally recognized benchmarks for excellence in patient care consistent with Magnet® Recognition, the Malcolm Baldrige National Quality Award and the National Quality Healthcare Award—all considered gold standards for quality patient care and professional nursing practice.



James Earns Third Consecutive Press Ganey Award

The James earned a Press Ganey Guardian of Excellence Award® for achieving and sustaining excellence in patient experience for the third consecutive year. A nationally recognized symbol of achievement in health care, the award recognizes top-performing healthcare organizations that have achieved the 95th percentile or above for performance in patient experience. Presented annually, it also honors clients who consistently sustained performance in the top 5 percent of all Press Ganey clients for each reporting period over one year as measured by the Centers for Medicare/Medicaid’s Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).

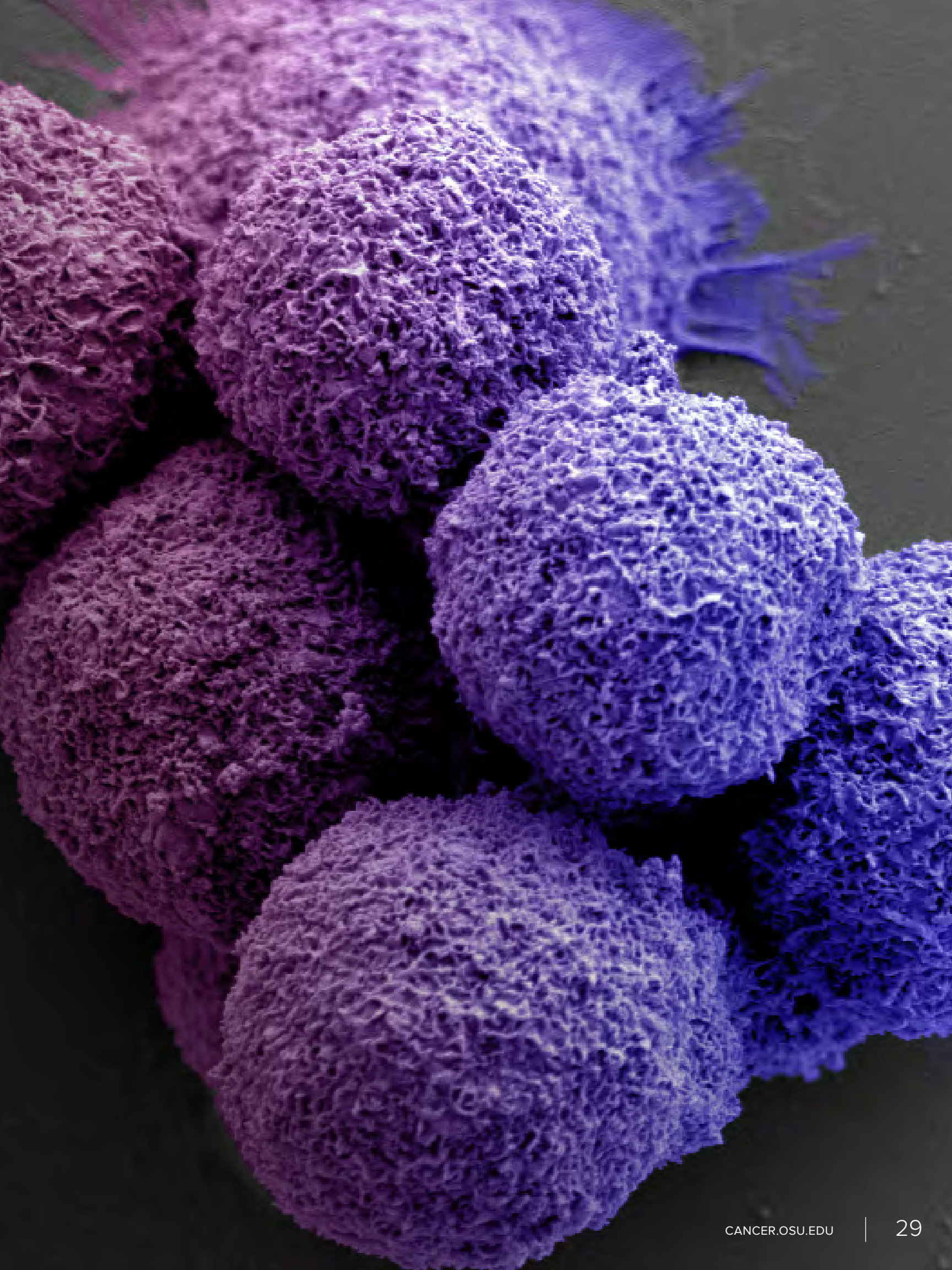


James Nurse Residency Program Gains Accreditation With Distinction

The James Cancer Hospital/Vizient Nurse Residency Program received a three-year Accreditation with Distinction from the American Nurses Credentialing Center’s (ANCC) Practice Transition Accreditation Program (PTAP)™. The highest recognition awarded by the ANCC’s Accreditation Program, the ANCC PTAP sets the global standard for residency or fellowship programs that transition registered nurses (RNs) and advanced practice registered nurses (APRNs) into new settings that meet evidence-based standards for quality and excellence. The James’ nurse residency program is one of only four in Ohio—and one of only two in central Ohio—with PTAP accreditation. The accreditation extends through January 2022.

ONS Presents Employer Recognition Award to OSUCCC – James

The Oncology Nursing Society (ONS) selected the James Cancer Hospital and Solove Research Institute to receive the 2018 ONS Employer Recognition Award (Large Size Category), which acknowledges employers who honor and show exemplary support for RNs in oncology. The hospital was recognized on the ONS website and at the 43rd Annual Congress in Washington, D.C.





PELOTONIA

Save the Date!

We hope you can join us for the 11th annual Pelotonia, which is scheduled to take place Aug. 2-4, 2019. Learn more and register to ride at pelotonia.org.

Pelotonia 2018 Raises Record \$27.4 Million for Cancer Research at Ohio State

Riders, virtual riders and donors in Pelotonia 2018, the 10th anniversary installment of the annual cycling event that generates money for cancer research at Ohio State, raised a record \$27,400,779, bringing the event's 10-year fundraising total to more than \$184 million. Donors from all 50 American states and more than 60 countries contributed to funds raised by the event's 326 pelotons (riding groups). The 2018 event included a record 8,470 riders, more than 3,000 virtual riders and over 3,000 volunteers. Thanks to Pelotonia's major sponsors, every dollar raised by riders, virtual riders and donors funds cancer research at Ohio State's Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute (OSUCCC – James).

