News from the University of Arizona Cancer Center

Our mission is to prevent and to cure cancer.

Monthly News & Updates
November 2016
Third Annual UACC Spring Scientific Retreat

Friday, April 21, 2017

CALL FOR ABSTRACTS!!!

This year's Keynote Speaker will be
Dean W. Felscher, MD, PhD
Professor of Medicine (Oncology) and Pathology
Stanford University

Abstracts must be submitted as a WORD document. Click here to view the template.

Please format your abstract to match this template.

Abstracts can be submitted on the Spring Retreat Webpage at http://uacc.arizona.edu/scientific-retreat-abstract-submission
Abstract example can also be found on this page
Arguing (About) the Value of Cancer Care

The debate about the escalating cost of caring for patients with cancer may soon derail into an argument (as in, dispute) that will not help those providing care, those developing treatments, and those paying for care. In the process, the voice of patients—as co-decision-maker, recipient, and copayer of this care—may grow even fainter. Pointing out what others (presumably) do wrong, (presumably) fail to do, or (presumably) should do differently to stem the rising costs of cancer treatment is easy. Building a collective argument (as in, case) that balances the interests and concerns of all stakeholders—and does so in a clinically responsible, economically accountable, and patient-centered manner—is much harder.

Some hard questions must be answered by all stakeholders. Ivo Abraham, PhD, RN; Ali McBride, MS, PharmD; and Karen MacDonald, PhD, RN, take on this topic in the Journal of the National Comprehensive Cancer Network.

Read the Full Article

UA Cancer Center Scientist Recognized for 'Bold Approach to Major Challenges in Biomedical Research' through NIH Transformative Research Award

Keith Maggert, PhD, a research scientist at
the University of Arizona Cancer Center, has received a prestigious Transformative Research Award (TRA) and a five-year, $1.7 million grant from the National Institutes of Health (NIH) to fund his research program, "Induced Transgenerational Inheritance Without Epigenetics."

Investigators previously have attempted to use drugs that target epigenetics to treat diseases. Dr. Maggert's work demonstrates why these treatments, in general, largely have been ineffective and in some cases even toxic. With the knowledge gained by this research, Dr. Maggert will seek to identify new and effective treatments for epigenetic diseases, such as cancer.

Epigenetics is the study of stable changes in gene function that are passed from cell generation to cell generation. For instance, a gene can be silenced through epigenetic changes that are inherited in the absence of genetic mutation. Dr. Maggert's transformative research is a new way to conceive of the field of epigenetics that challenges the current model and seeks to build a new paradigm to characterize epigenetics.

Although a somewhat controversial area, epigenetics has the promise for transformational discovery in the world of medicine and health care. Researchers, government agencies and the news media have devoted much attention to epigenetics because of its role in the development of numerous human diseases, such as cancer, dementia and diabetes. Enormous potential exists to impact treatments for disease if researchers could learn to better manipulate epigenetics.

"My experiments have challenged entrenched concepts in the field of epigenetics," said Dr. Maggert, who is a UA associate professor of cellular and molecular medicine and a member of the Cancer Biology Program at the UA Cancer Center. "So far, it has been exceedingly difficult to get this work funded because I have shown that most of what we know about epigenetic inheritance—a major sub-discipline in genetics and disease research—is misunderstood at a very basic level."

Diseases like cancer and diabetes are caused by many factors, including genetics, the environment and random chance. Researchers and physicians have known for some time that the risk of disease increases as people age (explaining things like the generally late onset of dementia, cancer, etc.). In some cases, the increased risk for disease can even be transmitted to a person's children. Epigenetics has been profoundly difficult to study, and as a result, many of the ways researchers think epigenetics works only recently have been proven incorrect.

The NIH recognizes the extreme potential in Dr. Maggert's unique approach, tapping him among a cadre of researchers throughout the nation as "highly creative and exceptional scientists with bold approaches to major challenges in biomedical research."

The TRA is part of the "High-Risk, High-Reward" set of grants, designed to support "transformative" research that overturns current research paradigms. It is highly prestigious—in 2016, only 3.8 percent of applicants received the award—and Dr. Maggert's work was funded because it is expected to change the way researchers
think about all epigenetics in disease.

"Dr. Maggert's work is transforming the way we understand trans-generational epigenetic inheritance," said Nathan Ellis, PhD, director of the Cancer Biology Program at the UA Cancer Center and associate professor in the UA Department of Cellular and Molecular Medicine. "The research has the potential to impact disease treatments that are based on manipulation of epigenetics."

The research program, "Induced Transgenerational Inheritance Without Epigenetics," is supported by the NIH under award number R01-GM-123640.

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**Cancer Moonshot Blue Ribbon Panel Report**

The Blue Ribbon Panel presented its report to the National Cancer Advisory Board on September 7, 2016. The NCI then transmitted the final revised version to the Vice President on October 17, 2016. The final report describes 10 transformative research recommendations for achieving the Cancer Moonshot's ambitious goal of making a decade's worth of progress in cancer prevention, diagnosis, and treatment in just 5 years.

A) Establish a network for direct patient involvement  
B) Create a translational science network devoted exclusively to immunotherapy  
C) Develop ways to overcome cancer's resistance to therapy  
D) Build a national cancer data ecosystem  
E) Intensify research on the major drivers of childhood cancers  
F) Minimize cancer treatment's debilitating side effects  
G) Expand use of proven cancer prevention and early detection strategies  
H) Mine past patient data to predict future patient outcomes  
I) Develop a 3-D cancer atlas  
J) Develop new cancer technologies

[Download the Complete Report] [Download At-A-Glance Report]
UACC Featured on PBS Arizona Week

PBS / Arizona Public Media aired a breast cancer story on Friday, October 28, on Arizona Week that follows a breast cancer patient from Douglas, AZ who is being treated at the UACC. The show followed up with the 32-year-old mother of four. She's a cancer survivor in the process of reconstructive surgery, and hopes she'll put this chapter behind her one day soon.

Show host, Lorraine Rivera, interviewed Dr. Karen Weihs, Dr. Joyce Schroeder, and Dr. Tracy Crane to discuss the psychological impact that cancer has on a patient, research in breast cancer, and diet and lifestyle.

Special thanks to Dr. Weihs, Dr. Schroeder, and Dr. Crane for participating and doing a great job!

WATCH HERE - The segment begins at the 12:05 mark.

Exciting News & Need to Know
NCI Awards T32 Grant for Cancer Prevention and Control Health Disparities Program

Dr. David Alberts, Dr. Robin Harris, and Dr. Rick Kittles have been awarded a 5-year, $1,394,252 T32 grant from the NCI that will replace the R25 Cancer Prevention and Control postdoctoral training program that concluded on August 31, 2016.

The proposal is a resubmission of the University of Arizona Cancer Center’s (UACC) Cancer Prevention and Control R25T postdoctoral training program re-competition. This program was first funded by the National Cancer Institute (NCI) in 1998 as a R25T and currently continues under that mechanism (2R25CA078447).

The R25T program is currently in a no cost extension year and has supported 9 successful postdoctoral fellows over the current grant cycle (2010 - 2015), 44% of whom are from underserved populations.

This T32 proposal requests 4 postdoctoral positions per year for two-year training periods with the goal to train a maximum of 10 postdoctoral trainees over five years. Upon program completion, T32 fellows will be prepared to proceed to successful and productive independent cancer health disparity research careers that contribute to decreases in cancer morbidity and mortality among underserved populations. This will be achieved through two designated foci: 1) recruit qualified trainees committed to cancer prevention work in underserved populations, including researchers from underserved communities and those with an interest in cancer health disparities science; and 2) train individuals in cancer prevention and control and health disparities science to reduce health disparities.

During this training program, fellows will be required to 1) engage in a primary research project along with required coursework, including a health disparities training curriculum; 2) attend and lecture in the weekly UACC Cancer Prevention and Control seminar series; 3) submit their work for presentation and publication in peer-reviewed journals; 4) attend scientific and career development meetings; and 5) develop a grant proposal for research funding. This proposed Cancer Prevention and Control Health Disparities Training Program aligns with the University of Arizona’s strategic plan and addresses the needs of our State’s unique population (25.5% Hispanic, 4.1% African-American, and 5.8% Native American residents, as compared to national averages of 15.8% Hispanic/Latino, 12.6% African-American, and 0.7% Native American (US Census Bureau)).

This distinctive geographic location along with our strong community ties, university partnerships, CPC postdoctoral training history, and university infrastructure and resources uniquely position us to train the next generation of CPC researchers focused on reducing health disparities and working with underserved communities.

Over the past 10 years, the Cancer Prevention and Control Postdoctoral Fellowship has published over 120 peer-reviewed journal articles.
DCTD Announces Precision Medicine Initiative Administrative Supplement Grantees

Agnes Witkiewicz, MD, is the project PI on a $744,675 NCI administrative supplement to fund the project "Collaborative Research Efforts to Enhance Preclinical Drug Development and Preclinical Clinical Trials Utilizing Patient Derived Xenograft (PDX) Models." It is one of six scientific areas supplemented in September 2016 as part of President Obama's Precision Medicine Initiative. The pancreatic research team at the UACC, including Dr. Emad Elquza, Dr. Taylor Riall, and Dr. Erik Knudsen, was instrumental in the application process.

In 2016, President Obama announced a Precision Medicine Initiative (PMI) to advance health and treatments for disease through research that considers an individual's genes, lifestyle, and environment. The PMI provided FY2016 resources to FDA and NIH, including funding for NCI to focus research in precision medicine in oncology. Discussions and collaborations among staff across NCI's divisions led to the development of NCI's PMI oncology strategic areas. As part of NCI's contribution to this initiative, DCTD directed new funding towards expanding its portfolio of genomic-based clinical trials, improving our understanding of resistance to targeted agents and drug combinations, and developing a mechanistic understanding of immunotherapy. The PMI was also focused on improving pre-clinical models for evaluating targeted therapeutics. Finally, a major component of this overall effort was the 2016 launch of NCI's Genomic Data Commons (GDC), which is a data sharing platform for precision medicine in oncology. Molecular data from DCTD-supported clinical trials will be
deposited into the GDC in order to foster and encourage data mining and secondary analyses by a broad range of investigators.

To begin this initiative, and to accelerate progress in multiple areas, DCTD announced a series of administrative 1-year supplement awards for 2016. Eligible parent grants for these supplements included P30 (Cancer Centers), P50 (SPORES), and UM1 / U10 Cooperative Agreements (Experimental Therapeutics Clinical Trials Network - ETCTN and National Clinical Trials Network - NCTN, respectively). In total, 53 awards were made for this supplement initiative from a total of 144 applications. In the coming years, DCTD hopes to spark increased activity in the areas that were supplemented in 2016 by issuing Requests for Applications (RFAs) on these topics.

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**Dermatology Department completes FDA with flying colors for Scibase company**

**Dr.Clara Curiel** and **Lynne Morrison, RN**, represented the Dermatology Department in July by completing an FDA audit for the Scibase company. The Scibase Nevisense machine is in line to be marketed in the US now that they have passed the FDA audit. The Scibase study was held at the Arizona Cancer Center in 2006-2007 and a total of 216 subjects were enrolled in the study making this site the largest enrolling site in the US.

With **Nevisense**, SciBase has developed an innovative method for improving accuracy in the detection of malignant melanoma. Utilizing Electrical Impedance Spectroscopy (EIS), applied as a harmless electrical signal to the skin, Nevisense is able to provide a reliable, objective analysis of suspicious lesions which complements the physician's regular clinical evaluations.
Two College of Medicine Doctors Honored With Educator Award

Dr. Mihra Taljanovic, professor in the Department of Medical Imaging, and Dr. Lana Gimber, assistant professor in the Department of Medical Imaging, were awarded the Radiological Society of North America Educator Award for their dedication to furthering the profession of radiology and commitment to radiology education by delivering high-quality educational content for Radiological Society of North America endeavors.

The award, established in 2011, serves as a benchmark of academic productivity in support of a meaningful and successful radiology career and commitment to radiology education.

Dr. Mihra Taljanovic and Dr. Lana Gimber are faculty members in the Department of Medical Imaging and the UA Cancer Center in Phoenix.
SR HIGHLIGHT

Flow Cytometry Welcomes New Assistant Staff Scientist

The Flow Cytometry Shared Resource is pleased to announce the addition of an assistant staff scientist who will be managing this resource.

Mark Curry is a Flow Cytometry Professional with more than 20 years of experience in cell sorting and analysis and instrument troubleshooting and repair.

Mr. Curry received his education at the University of New Mexico where he also served as core manager for nearly 20 years. He joins the University of Arizona from Texas A&M, where he was a senior research associate. Prior to that, he served as director of Flow Cytometry at Dana-Farber Cancer Institute at Harvard.

In this new role, Mr. Curry will oversee the daily operations of the Flow Cytometry Shared Resource. This includes oversight of equipment and computer maintenance and operations, application of flow cytometry/cell sorting technologies to research problems, and design and develop specialized methods and/or techniques to provide new protocols in cytometric procedures and assays. He will also train and assist faculty, PIs, and new users on the use of the application software and interpreting and evaluating raw data, as well as developing research proposals.

Mark has co-authored more than 24 publications.

Shared Resources To Enhance Research Efforts

The University of Arizona Cancer Center supports eight Shared Resources funded by the Cancer Center Support Grant, intended to provide access to technology that enhances the research productivity of the Cancer Center and provides a basis for scientific interaction and consultation, as well as access to services that facilitate the research and strengthen the administrative and organizational cohesion of the center.

- Biostatistics
- Analytical Chemistry
- Behavioral Measurement and Interventions
NCI Funding Opportunities

(R01) Program to Assess the Rigor and Reproducibility of Exosome-Derived Analytes for Cancer Detection
(PAR-16-276)
Application due dates: June 13, 2017; October 13, 2017; June 13, 2018; October 15, 2018; June 13, 2019

(R21) Program to Assess the Rigor and Reproducibility of Exosome-Derived Analytes for Cancer Detection
(PAR-16-277)
Application due dates: June 13, 2017; October 13, 2017; June 13, 2018; October 15, 2018; June 13, 2019

(U24) Sustained Support for Informatics Resources for Cancer Research and Management
(NOT-CA-16-045) (PAR-15-333)
Application due date: November 10, 2016

P30 Admin Supplement
Science of Behavior Change: Use-inspired Basic Research to Optimize Behavior Change Interventions and Outcomes (PA-16-334)
Application due date: November 10, 2016

(R43 / R44) Methods Development in Natural Products Chemistry
(PA-16-342)
Application due date: (standard): January 5, 2017

(U01) Biological Comparison in Patient-Derived Models of Cancer
(PAR-16-344)
Application due dates: March 1, 2017; September 6, 2017; March 7, 2018; September 6, 2018; March 6, 2019

(R01) Social Epigenomics Research Focused on Minority Health and Health Disparities
(PAR-16-355)
Application due date: November 16, 2016

(R21) Social Epigenomics Research Focused on Minority Health and Health Disparities
(PAR-16-356)
Application due date: November 16, 2016

(R01) Fundamental Mechanisms of Affective and Decisional Processes in Cancer Control
(PAR-16-380)
Application due date(s): April 11, 2017; October 10, 2017; April 11, 2018; October 10, 2018; April 11, 2019, October 11, 2019

(U24) Oncology Co-Clinical Imaging Research Resources to Encourage Consensus on Quantitative Imaging Methods and Precision Medicine
(PAR-16-385)
Application due date(s): November 17, 2016; June 14, 2017; November 17, 2017; June 14, 2018

(K23) NCI Mentored Patient-Oriented Research Career Development Award to Promote Diversity
(PAR-16-399)
No LOI required
Application due date(s): Standard

(K08) NCI Mentored Clinical Scientist Research Career Development Award to Promote Diversity
(PAR-16-400)
No LOI required
Application due date(s): Standard

(K01) NCI Mentored Research Scientist Development Award to Promote Diversity
(PAR-16-401)
No LOI required
Application due date(s): Standard
UAHS Bridge Funding Program

The Office of the Senior Vice President for Health Sciences (SVPHS) and Deans of the UAHS Colleges (Medicine in Tucson and Phoenix, Pharmacy, Nursing and Public Health) have developed a program to provide bridge funding to support faculty at UAHS to span the gap in innovative and significant research projects. The UAHS Bridge Funding Program, which is established and administered by the SVPHS office, is intended to bridge funds to minimize disruption of existing research projects that have temporarily lost external funding but show high promise of success in the next round of competitive review.

December 1, 2016

The maximal award for Bridge Funding is not to exceed $6,000/month for 12 months ($72,000/year). The funds will be provided to the awardee by the Office of the SVPHS, the Office of the Dean, and the Office of the Chair (of the awardee's home college and department). The support will be provided monthly, for a maximum of one year, and end at the start of any renewed or new funding. The SVPHS/Dean offices anticipate supporting up to five (5) investigators for Bridge Funding each year in 2016 and 2017.

Click Here for Further Details

Notice of Intent to Publish a Funding Opportunity Announcement for NCI Youth Enjoy Science (YES) Program (R25)

The National Cancer Institute (NCI) intends to publish a Funding Opportunity Announcement (FOA) for the NCI Youth Enjoy Science (YES) Program as part of the Continuing Umbrella of Research Experiences (CURE) Program.

The goal of this R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs.

The primary focus of this initiative is on providing research experiences. Based on the success of the previous NCI Cancer Center Supplements for High School and Undergraduate Student Research Experiences (P30S), this FOA will support efforts to create and maintain an institutional program to engage grade 6-12 and undergraduate students from underrepresented populations in cutting edge cancer research. The proposed institutional programs may also provide research
experiences for K-12 teachers and undergraduate faculty members who serve underrepresented student populations.

The overall goals are to inspire interest in biomedical sciences, help envision research as a career path, and strengthen practical research and career skills. In alignment with these goals, institutions may develop unique programs that capitalize on their research strengths and are responsive to their target populations.

This Notice is being provided to allow potential applicants sufficient time to develop meaningful collaborations, identify program faculty, and create responsive research education programs.

Notice Number: NOT-CA-16-028  Click Here for Full Details

New to the UACC Family

Renowned Oncology Surgeon and Physician-Scientist Dr. William Cance Joins UA Cancer Center as Deputy Director to Lead Phoenix Efforts

William Cance, MD, has joined the University of Arizona Cancer Center as deputy director and will lead the efforts in Phoenix at the UA Cancer Center at Dignity Health St. Joseph's Hospital and Medical Center.

Dr. Cance is a fellowship-trained surgical oncologist who treats patients with complex gastrointestinal and endocrine cancers. He has a particular focus on the diagnosis and treatment of thyroid and parathyroid diseases, including thyroid cancer.
"I believe that the partnership between a National Cancer Institute-designated Comprehensive Cancer Center such as the UA Cancer Center and a world-class health-care organization such as Dignity Health St. Joseph's will serve to integrate delivery of cancer care and bring new levels of excellence in cancer treatment and prevention to the Phoenix area and across Arizona," said Dr. Cance.

Read Full Article

New Clinicians

Aaron Scott, MD - GI
ajscott@email.arizona.edu

Srikanth Sundararajan, MD - Melanoma/Renal Cell
Srinanth.sundararajan@bannerhealth.com

Simian Sindhu, DO - Breast/Head & Neck/ Benign Heme
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Murali Kodali, MD - Malignant and Benign Heme/ BMT
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Hani Babiker, MD - Phase I/ Bladder
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Sima Ehsani Chimeh, MD - Breast
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Julie Bauman, MD, MPD - Head & Neck
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Call for Collaborations
This section is intended to provide a platform for UACC Members to propose collaborative efforts with each other. Any and all ideas are welcome. Contact **Cody Cassidy** with your proposal to be posted here.

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**Share Your Stories and Ideas**

This newsletter is still in its infancy, and it will continue to evolve based on your feedback.

Please send news items, announcements, calls for collaborations, upcoming events, comments, and anything else that you can think of to Cody Cassidy, [ccassidy@uacc.arizona.edu](mailto:ccassidy@uacc.arizona.edu).

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Visit the UACC Website