

# Distinguished Scientist

AWARDS CEREMONY

November 9, 2023 Durham Research Center Auditorium



"The Distinguished Scientist Award ceremony is an annual celebration of UNMC research and researchers, including their collaborators and supporters, and the impact we have regionally and around the world. My congratulations to all those being honored today."



UNMC held its inaugural Research Awards ceremony in 2007, under the leadership of UNMC's first vice chancellor for research, Thomas Rosenquist, PhD. Stephen Rennard, PhD, was the inaugural scientist laureate.

At that time, UNMC's research funding from external sources topped nearly \$80 million annually. With then-chancellor Harold M. Maurer, MD, UNMC strategically built its research enterprise. "If you have a strong research program, you have outstanding education and patient care," Dr. Maurer said at the time.

Jennifer Larsen, MD, succeeded Dr. Rosenquist in 2011. Under Dr. Larsen's leadership, the research enterprise nearly tripled. In fiscal year 2021, sponsored program awards, including research, equaled \$228.5 million, a campus record.

Today, under UNMC Chancellor Jeffrey P. Gold, MD, and Ken Bayles, PhD, UNMC's third vice chancellor for research, UNMC researchers top more than a quarter of a million in grants and contracts and continue to solve critical health questions, while inspiring the next generation of providers and researchers.

# **Award Descriptions**

The Community Service to Research Award recognizes community members who have collaborated with UNMC researchers and have made important contributions to further the research impacting our community.

**The New Investigator Award** goes to UNMC scientists who have secured their first major, independent funding from a national source. New Investigators also have demonstrated their scholarship in published research.

**The Distinguished Scientist Award** recognizes faculty at UNMC who hold the title of Associate Professor or above, have worked for the University for at least two years and have a portfolio of extramurally funded research, collaborators, and impactful publications.

**The Research Leadership Award** is intended to honor scientists previously recognized as Distinguished Scientists who have a longstanding research funding history and also serve as research leaders and mentors on campus.

**The Scientist Laureate** is UNMC's highest award for research. Nominees must be a nationally and internationally recognized research leader in his or her field, previously recognized as a Distinguished Scientist, and contributed to the UNMC research community for at least five years.



### **Award Winners**

#### **Community Service** to Research

Amanda McGill Johnson Carolyn T. Williamson

#### **New Investigators**

**College of Allied Health Professions** Ka-Chun (Joseph) Siu, PhD

**College of Dentistry** Po-Jung Chen, DDS, MDS, MDentSc

**College of Medicine** Christopher Conrady, MD, PhD Imayavaramban Lakshmanan, PhD Nicole A. Shonka, MD

**College of Nursing** Windy Alonso, PhD, RN, FHFSA Libby Mollard, PhD, CNM, WHNP

**College of Public Health** Jungyoon Kim, PhD

#### **Distinguished Scientists**

**College of Public Health** Hongying (Daisy) Dai, PhD

**College of Allied Health** Yvonne Golightly, PT, MS, PhD

**Eppley Institute** Raymond Bergan, MD

Munroe-Meyer Institute Jennifer Urbano Blackford, PhD

**College of Pharmacy** Daren L. Knoell, PharmD, FCCP

**College of Medicine** Karsten Bartles, MD, PhD, MBA Joseph Khoury, MD Saint Patrick Reid, PhD

#### **Research Leadership**

**College of Medicine** Carol Casey, PhD John S. Davis, PhD

#### **Scientist Laureate**

**College of Nursing** Michele Balas, PhD, RN, CCRN-K, FCCM, FAAN

# Agenda

### Welcome

Ken Bayles, PhD VICE CHANCELLOR FOR RESEARCH, UNMC

### Remarks

Jeffrey P. Gold, MD CHANCELLOR, UNMC

### **Presentation of Awards**

Community Service to Research New Investigator Distinguished Scientist Research Leadership

### Presentation of Scientist Laureate Award

### **Remarks**

Michele Balas, PhD, RN, CCRN-K, FCCM, FAAN 2023 UNMC SCIENTIST LAUREATE

### **Poster Presentations**

# Please join us after the ceremony for a small reception and poster presentation in the DRC II, Commons. Posters to include:

Study protocol: HEART Camp Connect - Promoting adherence to exercise in adults with heart failure with preserved ejection fraction – W. Alonso, S. Bills, S. Lundgren, J. Norman, S. Keteyian, A. Fisher, K. Kupzyk, C. Zheng, F. Wilson, E. Salahshurian, T. Scheer, and B. Pozehl

Investigating PRG4 Re-expression as a Treatment for TMJ Degenerative Diseases – P. Chen, A.Tanguay, K Wang, P. Woods, A. Liu, M. O'Brien, T. Schmidt, and S. Yadav

A mouse model of acute retinal necrosis to study innate immunity of the retina – C. Conrady and S. Fan

BEAT Cancer: A Cross-Sectoral Partnership to Reduce Health Disparities in Colon Cancer Screening of African Americans – J. Kim, T. Michaud, K. M. King, P. Estabrooks, J. W. Ewing Jr., G. Mabiala-Maye, C. Le and H. Dai

MUC5AC promotes brain metastases and colonization in non small cell lung cancer – S. Chaudhary, C. V. Ramakanth, M. W. Nasser, S. K. Batra, I. Lakshmanan, and A. K. Ganti

PARITY: An integrated community care and strengthsbased technology intervention to improve maternal wellness and reduce health disparities in Black women – L. Mollard, A. Elya, C. Gaines, D. C. Owens, M. Balas, S. Maloney, T. Moore, and N. Shah

A novel combination therapy for glioblastoma identified using connectivity mapping – R. Vengoji, P. Atri, M. A. Macha, N. K. Perumal, S. Mahapatra, M. Jain, M. P. Ponnusamy, S. K. Batra, and N. Shonka

Portable Simulation Trainer to Enhance Surgical Skill Acquisitions for Avoiding Bile Duct Injury in Laparoscopic Cholecystectomy – I. Suh, H. Li, S. De, D. Oleynikov, C. Nelson, K. Siu

Removing Work Applications from Mobile Devices during Leisure Time to Reduce Stress among Health Care Workers; A Prospective Randomized Trial – E. S. Rodriguez, C. Akwani, K. Delancey, J. Hoffman, B. Williams, J. M. Valdovinos, and K. Bartels Dual acting bone defender agents inhibit prostate cancer-mediated bone destruction – F. Qiao, R. Gordon, A. Pattanayak, K. O'Neill, N. Chaika, W. Chen, R. Rhatigan, and R. Bergan

Anxiety predicts activation of a BNST-anxiety network during early abstinence from an alcohol use disorder – N. L. Zabik, E. Flook, B. Feola, M. Benningfield, M. Silveri, D. Winder, J. U. Blackford

School-based e-cigarette education curriculum, "T.E.A.M No Vaping": Impact on knowledge of e-cigarettes, harm perception, and media literacy among middle/high school students – N. Tamrakar, K. L. Ratnapradipa, T. Michaud, H. Dai

A Novel Computed Tomography Application to Monitor Bone in Those at Risk of Knee Osteoarthritis – R. Blay, L. Bilek, and Y. Golightly

The Impact of ZIP8 on Macrophage-Mediated Phagolysosomal Removal of Bacteria – S. Haq, D. Smith, C. M. Ellis, D. R. Samuelson, and D. L. Knoell

Chikungunya virus impairs Osteogenic Differentiation of Bone Marrow-derived Mesenchymal Stem Cells – E. Roy, B. Duan, and St. P. Reid

Alcohol-induced liver injury: Downregulation and redistribution of Rab3D results in atypical protein trafficking – C. A. Casey, A. J. Macke, T. Divita, A. N. Pachikov, P. G. Thomes, K. Rasineni, J. L. Kubik, and A. Petrosyan

Delineating YAP and TAZ driven networks in ovarian biology – K. L. Clark, E. Przygrodzka, J. W. George, and J. S. Davis

Behavioral Economic and Staffing Strategies To Increase Adoption of the ABCDEF Bundle in the Intensive Care Unit (BEST ICU): A Stepped Wedge Cluster Randomized Controlled Trial – M. C. Balas, E. Vasilevskis, J. Campbell, B. Hetland, K. Wichman, R. Horner, J. Kim, A. Krupp, J. Blum, M. Exline, T. Gerlach, and K. Hepburn



### **Community Service to Research**



#### **Amanda McGill Johnson**

As the executive director of Nebraska Coalition for Lifesaving Cures, Amanda McGill Johnson's leadership, dedication and impact have been transformative. Through her efforts to raise public awareness about the significance of health care research, she has bridged the gap between science and the public, fostering deeper understanding of diseases, mechanisms, and innovative treatments.

Her advocacy for evidence-based guidelines has empowered health care professionals to deliver optimal care, resulting in improved patient outcomes, and her initiatives ensure that patients receive the latest

treatments, grounded in the latest scientific advancements. By championing collaborations between researchers and clinicians, supporting clinical trials and driving innovation, she has been critical in advancing medical solutions that benefit those affected by various diseases. Her commitment extends to disease prevention and public health, highlighting the broader societal and economic impact of medical research, and her advocacy contributes significantly to healthier communities, underscoring the importance of research investment.



#### **Carolyn T. Williamson**

As a community volunteer, highly engaged employee of Girls Inc., Omaha, and a dedicated Internal Advisory Board Member of the Child Health Research Institute, Carolyn T. (C.T.) Williamson's impact on UNMC, Child Health Research Institute (CHRI), the wider community and the youth of North Omaha is immeasurable.

She consistently has been engaged in helping integrate STEM programing from UNMC faculty into the summer programming at Girls Inc., growing in time to a trusted sounding board and entry point for community engagement as investigators developed community-engaged research projects. During

the COVID pandemic, C.T. was integral to UNMC faculty as they partnered with Girls Inc. to help families in North Omaha get up-to-date and accurate recommendations regarding screening and school attendance.

She also has served on the CHRI Internal Advisory Board in 2020, raising important questions about how research is conducted by our academic medical center and how that research served the North Omaha community.



### New Investigator



### Ka-Chun (Joseph) Siu, PhD

Title: Associate Professor and Director of Global Health Opportunities Program, Physical Therapy Program, Health & Rehabilitation Sciences, College of Allied Health Professions Joined UNMC: 2009 Hometown: Hong Kong, China

**Research focus:** Human movement science, motor control and learning, advancing innovative technology.

Why is research important in the world today? Research creates a

space of unlimited imagination, innovation, and creativity. It inspires people to breakthrough novel ideas and explore new possibilities. It improves the existence and builds the future.

**My research will make a difference because:** My research team is developing a portable, affordable, and smart digital learning system for trainees to gain critical surgical skills and enhance clinical decision-making capacity. We use both performance and cognitive based assessments to study the human learning process. Trainees can learn new skills or maintain existing skills whenever and wherever they prefer.



### Po-Jung Chen, DDS, MDS, MDentSc

**Title:** Assistant Professor, Growth & Development, College of Dentistry **Joined UNMC:** 2022 **Hometown:** Changhua, Taiwan

Research focus: Temporomandibular joint (TMJ) biology, geroscience

**Why is research important in the world today?** Research improves human health, longevity, and quality of life.

**My research will make a difference because:** Aging affects all organs and tissues of the body and leads to many diseases, including TMJ degeneration. TMJ degeneration significantly impairs quality of life by causing acute and chronic pain. Our research has been focusing on an effective approach to treat TMJ degeneration associated with old age. In the future, our study will likely establish proof of principle that senolytics slow down or even alleviate the degeneration of the osteochondral tissues of the TMJ with aging.



### **Christopher Conrady, MD, PhD**

Title: Assistant Professor, Ophthalmology and Visual Sciences, College of Medicine Joined UNMC: 2021 Hometown: Edmond, Oklahoma

Research focus: Infections of retina

Why is research important in the world today? It may identify treatments and improvement in patient care.

**My research will make a difference because:** I will hopefully improve the visual outcomes of blinding condition by identifying future or different therapeutic targets.



### Imayavaramban Lakshmanan, PhD

Title: Assistant Professor, Biochemistry and Molecular Biology, College of Medicine Joined UNMC: 2008 Hometown: Thirunallar, Pondicherry, India

Research focus: Cancer, tumor angiogenesis and metastasis

Why is research important in the world today? Numerous cancer patients die due to a lack of early diagnosis, molecular understanding of the disease, and effective therapeutics. Extensive research is needed to

provide clinical benefits to patients who do not have treatment options!

**My research will make a difference because**: Understanding the biology of lung adenocarcinoma is critical to unveiling a molecular profile that can be utilized to develop novel therapeutic strategies for patients. We identified mucin 5AC (MUC5AC) as a vital molecule in lung adenocarcinoma development and metastasis. Using genetically engineered lung cancer mouse models, we observed that mutant TP53 mutation mediates sialyltransferase ST6GalNAc-I expression in lung adenocarcinoma. ST6GalNAc-I induces MUC5AC sialylation necessary for MUC5AC and integrin β4 interaction during tumor angiogenesis and metastasis. Additionally, my research focuses on the transmembrane mucin 16 (MUC16) role in triple-negative breast cancer (TNBC) cell proliferation and metastasis. Our findings indicate that MUC16 is significantly overexpressed in African-American TNBC patients and induces therapy resistance. I believe my research will help to design a new strategy to target mucin MUC5AC and MUC16 to improve the survival outcome of cancer patients.





### New Investigator



### Nicole A. Shonka, MD

Title: Associate Professor, Oncology & Hematology, Internal Medicine, College of Medicine Joined UNMC: 2010 Hometown: Bellevue, Nebraska

Research focus: High grade glioma

Why is research important in the world today? Research is essential to improve patient care and outcomes.

**My research will make a difference because:** Although rare, high grade glioma is universally lethal and disproportionately impacts patients, families and communities. More effective therapy is integral to prolonging independence and improving the quality of life for all affected by this cancer.



### Windy Alonso, PhD, RN, FHFSA

Title: Assistant Professor, College of Nursing-Omaha Division Joined UNMC: 2017 Hometown: Curwensville, Pennsylvania

Research focus: Exercise, adherence, heart failure

Why is research important in the world today? Scientific research has led to significant advancements in health care by increasing our understanding of the underlying mechanisms of disease, developing and testing new interventions and fostering innovation. With the aggressive

pace of today's world, science and research are critical to develop dynamic solutions to our everevolving society.

**My research will make a difference because:** Exercise makes most of us feel better. In fact, a study participant once told us, "The more I exercise, the better I feel about EVERYTHING." Many adults with heart failure do not exercise because they are afraid or are not sure where to start. The HEART Camp Connect research team will make a difference by working closely with adults with heart failure to show them they can exercise and ultimately, – see the benefits of their long-term commitment to healthy behavior change.



#### Libby Mollard, PhD, CNM, WHNP

Title: Assistant Professor, College of Nursing-Lincoln Division Joined UNMC: 2016 Hometown: Lincoln, Nebraska

**Research focus:** Maternal health disparities

Why is research important in the world today? Research is important to advancing our knowledge about the world and to improving our human experience! It is important that we keep using our curiosity and innovative ideas through research to make the world a better place.

**My research will make a difference because**: My research will make a difference because it is designed to improve health and empower individuals in their communities. Since my focus is on maternal health, I know that empowering mothers has a ripple effect that empowers their children and their communities.



### Jungyoon Kim, PhD

Title: Assistant Professor, Health Services Research and Administration, College of Public Health Joined UNMC: 2011 Hometown: Daegu, South Korea

**Research focus:** Cancer prevention for underserved

Why is research important in the world today? Research can make people live a better life. Whether it is biological research at laboratories or translational research in the field, ultimate purpose of the research is

to help human being and the world they live in a better place.

**My research will make a difference because:** About this time last year, my research assistant and I were busy following up with our research participants who were screened positive for colon cancer using home tests. We called patients to make sure they talk to their primary doctor about the results and encourage them to schedule a follow up colonoscopy. One day, I got an email from my research assistant, saying "Dr. Kim, I was finally able to talk to Mr. Johns [fictional name]!! He said he went through colonoscopy last week and found two polyps, and removed both. He was forever grateful!" This was a moment I felt that I made a difference through my research.



## Distinguished Scientist



### Hongying (Daisy) Dai, PhD

Title: Professor, Biostatistics, College of Public Health Joined UNMC: 2018 Hometown: Fuzhou, China

**Research focus:** Statistical epidemiology, health disparities and substance use and prevention

Why is research important in the world today? Health disparities remain a significant and pressing issue in the United States. Substance use is particularly high among racial minorities, individuals with low

socioeconomic status, and residents of rural areas due to a range of contributing factors. Understanding substance use patterns and mechanisms underlying these disparities can inform public health officials on how to mitigate the addiction crisis and protect vulnerable populations.

**My research will make a difference because:** My research has been focusing on integrating multiple interdisciplinary areas from public policies, statistical modeling, and community engagement to prevent and reduce substance use among vulnerable subpopulations (e.g., youth, racial minorities, and rural residents).



### Yvonne Golightly, PT, MS, PhD

**Title:** Assistant Dean for Research, College of Allied Health Professions; Professor, Physical Therapy, Courtesy Professor of Epidemiology **Joined UNMC:** 2022 **Hometown:** Morrisville, North Carolina

**Research focus:** Maximizing musculoskeletal health

Why is research important in the world today? As a public health researcher with years of clinical experience as a physical therapist, I see how research improves clinical care and informs policies that

impact human health. Findings from research can advance wellness at a societal level.

**My research will make a difference because:** it will inform new ways to prevent and manage musculoskeletal problems and will optimize care pathways for patients with osteoarthritis.



### **Raymond Bergan, MD**

Title: Deputy Director, Fred & Pamela Buffett Cancer Center Joined UNMC: 2020 Hometown: Eden, New York

Research focus: Discovering cancer drugs

Why is research important in the world today? Research is important for several reasons. It provides us better treatment for people with cancer, and other diseases, it allows us to detect cancer earlier, it allows us to better understand the world we live in, it provides cutting-edge jobs for

the future and drives the economy, the relationships it builds serves to link people across the world, it is the means by which we identify new ideas to solve problems that are impacting our world.

**My research will make a difference because:** cancer takes the lives of people because it moves throughout the body. Our group seeks to understand what drives cancer cells to move and to discover new drugs that can stop them from moving. If we are successful, we can stop cancer from taking the lives of the people we love.



### Jennifer Urbano Blackford, PhD

Title: Hattie B. Munroe Professor and Director of Research, Munroe-Meyer Institute Joined UNMC: 2021 Hometown: Miami, Florida

Research focus: Anxiety brain circuitry

Why is research important in the world today? Anxiety is the most prevalent mental health disorder in the US and rates are rapidly rising. Anxiety most often emerges in childhood and causes significant

impairment across almost every area of life. Anxiety is usually chronic, persisting into adulthood, and significantly increases risk for later depression and substance use disorders.

**My research will make a difference because:** We still know remarkably little about the neurobiological mechanisms that contribute to anxiety. Increasing our understanding of these mechanisms can lead to identifying the children at greatest risk for developing anxiety and can provide novel targets for preventions and interventions.





### Distinguished Scientist



### Daren L. Knoell, PharmD, FCCP

Title: The Lewis E. and Antonia E. Harris Professor and Chair, Pharmacy Practice and Science, College of Pharmacy; Professor, Pulmonary, Critical Care and Sleep Medicine, College of Medicine Joined UNMC: 2016 Hometown: Fremont, Nebraska

Research focus: Zinc

**Why is research important in the world today?** A moldly orange – Dr. Alexander Fleming – Penicillium chrysogenum – Penicillin – Countless lives saved. Need we say more?!

**My research will make a difference because:** It is revealing how a vital nutrient (Zinc) has profound influence on the host response to infection. Through our discoveries, also inspired by the work of others, new translational knowledge is emerging that will lead to advancements in the prevention and treatment of populations that are vulnerable to zinc deficiency and infectious disease.



### Joseph Khoury, MD

**Title:** Chair, Pathology and Microbiology, College of Medicine **Joined UNMC:** 2022 **Hometown:** Moved from Houston, Texas. Born in Lebanon.

Research focus: Cancer research

Why is research important in the world today? Research through sound scientific methodology is fundamental for knowledge growth and improving lives.

**My research will make a difference because:** It is focused on a challenging disease that remains difficult to prevent and treat. My research brings innovative approaches to enhance the accuracy of diagnosing cancer and identifying biomarkers that inform therapy selection and disease monitoring. Those approaches are harnessing the power of machine learning and artificial intelligence techniques to augment the sensitivity and specificity of diagnostic techniques for cancer.



### Karsten Bartles, MD, PhD, MBA

Title: Professor of Anesthesiology, Robert Lieberman Endowed Chair, Vice Chair of Research, College of Medicine Joined UNMC: 2021 Hometown: Vechta, Germany

Research focus: Health services and outcomes

Why is research important in the world today? Science forms the basis to improve health and reduce suffering.

**My research will make a difference because:** Our team applies rigorous methods to assess clinical effectiveness and determine the value of novel perioperative care models in large patient samples. Sometimes proving that a widely adopted intervention does not work, only adds cost, or even causes harm is more important than developing a new therapy.



### Saint Patrick Reid, PhD

Title: Associate Professor, Pathology and Microbiology, College of Medicine Joined UNMC: 2016 Hometown: Brooklyn, New York

**Research focus:** Host-based therapeutics

Why is research important in the world today? In its purity, the importance is grounded in the simplicity of trying to help. But it is not just today. It is accepting the failures and lack of inclusivity of the past

and understanding the greater purpose as we move forward. Always making corrections in seek of learning from the past and trying to help.

**My research will make a difference because:** Elucidating host-pathogen interactions will provide novel therapeutic tools.



### **Research Leadership**



### **Carol Casey, PhD**

Title: Professor, Gastroenterology & Hepatology, Internal Medicine, College of Medicine Research Career Scientist, Nebraska-Western Iowa Veterans Affairs Healthcare System Joined UNMC: 1984

Hometown: Mitchell, South Dakota

Research focus: Alcohol-associated organ injury

Why is research important in the world today? Research is the basis for much of what we enjoy in life today – longer lives, healthier lives, cures for diseases, development of vaccines, and so much more. And there are still so many more advances to be made, not only with healthcare, but in areas such as space exploration. It's exciting to play even a small part in what the future holds.

**My work will make a difference because:** Alcohol and its byproducts are known to affect function in several organs in the body, especially in the liver, which leads to liver failure. One of the earliest signs of alcohol-induced liver injury is fatty liver, which is known to be part of the progression of liver injury in non-alcohol-induced liver injury as well. My work in examining how alcohol (and excess fat) disrupts cellular function may define some potential therapies that can be used in the setting of liver injury not only from alcohol, but other toxins.

**The best advice I could give a beginning researcher is:** Work hard, don't give up, be smart in your approaches to your work. Not everything works the first time, and it is a lifelong learning process. Be a collaborative and supportive colleague and share your knowledge and resources with others – it will always pay off.



### John S. Davis, PhD

Title: Professor and Director of Research and Development, Obstetrics and Gynecology and Biochemistry and Molecular Biology, Olson Center for Women's Health Senior Research Career Scientist, Omaha VA Medical Center Director, Nebraska Center for Women's Health Research Joined UNMC: 2021 Hometown: Minot, North Dakota

Research focus: Women's reproductive endocrinology

Why is research important in the world today? Insights provided by medical research today promise to lessen the impact of our greatest health problems, including infertility, metabolic disorders, aging, and cancer.

**My work will make a difference because:** Female infertility affects an estimated 7.5 million women of reproductive age and affects 10% of married couples. Fueled by medical advances and social changes, more women are delaying childbirth resulting in increased diagnosis of infertility. Older women are more likely to have trouble conceiving when compared to younger women. Although ovarian aging is a natural physiological process, cessation of ovarian function at midlife increases susceptibility to the development of co-morbidities, such as osteoporosis and cardiovascular disease, which decrease quality of life and increases healthcare burden. Our research aims to transform our understanding the mechanisms used by hormones and other factors to control ovarian function to improve diagnosis and treatment of age-related cases of infertility. This research has a dual impact that can benefit fertility rates in humans and domestic farm animals.

**The best advice I could give a beginning researcher is:** Develop a passion for reading, writing, and communicating science. Don't be afraid to ask for help or advice. Develop a positive approach to maximize the benefit of critical reviews of your work.



### Scientist Laureate



# Michele Balas, PhD, RN, CCRN-K, FCCM, FAAN

Associate Dean for Research & Dorothy Hodges Olson Chair in Nursing

Michele Balas, PhD, RN, CCRN-K, FCCM, FAAN, is the associate dean of research and Dorothy Hodges Olson Distinguished Professor of Nursing at the UNMC College of Nursing. Born and raised in Northeastern Pennsylvania, Dr. Balas received her Bachelor of Science Degree in Nursing and Bachelor of Arts Degree in Psychology from Wilkes University. She later received her Masters of Science in Nursing, PhD, and post-doctoral training from the University of Pennsylvania School of Nursing. Dr. Balas is an implementation scientist and registered nurse with extensive training and experience in the conduct of clinical trials and mixedmethods research in the intensive care unit and hospital setting.

The goal of Dr. Balas' research focuses on improving the physical, functional, cognitive, and quality of life outcomes of seriously ill older adults. Her research endeavors specifically target developing, testing and translating safe and effective interprofessional interventions aimed at reducing common geriatric syndromes including hospital-acquired pain, delirium, weakness, falls, and infections. Dr. Balas' work has been supported by numerous federal and private/philanthropic organizations including the National Institute of Health, John A. Hartford Foundation Building Academic Geriatric Nursing Capacity Pre- and Post-Doctoral Program, Robert Wood Johnson Foundation Interdisciplinary Nursing Quality Research Initiative, Alzheimer's Association, Select Medical, and American Association of Critical Care Nurses.

Her influence in transforming team-based, hospital care of older adults and commitment to developing and testing evidence-based interprofessional interventions is also evident in her prolific publication record and leadership roles in numerous professional health care societies. She was a former committee member and now Co-Chair of the Society of Critical Care Medicine's (SCCM's) **Clinical Practice Guidelines for the Prevention** and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption in Adult ICU Patients, an invited participant of the NIH's Implementation Science in Critical Care Workshop, and chair/study section member of various NIH review panels. She is also an active member of the American Academy of Nursing's Expert Panels on Aging and Acute/Critical Care, American **Psychiatric Association Guideline Writing** Group, Gerontological Society of America, and editorial board member/reviewer for various medical journals.

BREAKTHROUGHS FOR LIFE."

