SCIENCE IS VITAL: Targeting Age-Related Disease through Biomedical Breakthroughs
AFAR 40th Anniversary Scientific Symposium and Award Ceremony

November 3, 2021
3-5pm Eastern
Free, Online
OPPORTUNITY

In commemoration of our 40th anniversary, the American Federation for Aging Research (AFAR) will be holding a free, online, global scientific symposium and award ceremony:

**SCIENCE IS VITAL: Targeting Age-Related Disease through Biomedical Breakthroughs,**
Tuesday, November 3, 2021
3 to 5pm Eastern.

AFAR's annual scientific symposium has encouraged stimulating discussion between top scientists and leaders across the private, philanthropic, and public sectors on cutting-edge topics in aging research while honoring extraordinary members of the corporate community for their dedication to healthy aging.

At this year’s symposium, AFAR will be honoring Mikael Dolsten, MD, PhD, Chief Scientific Officer and President of Worldwide Research, Development and Medical of Pfizer for his visionary leadership in advancing Pfizer’s scientific breakthrough leadership in small-molecule medicines, bio-therapeutics, gene therapies and vaccines to culminate the day’s festivities. Dr. Dolsten will be joined in conversation with Francis S. Collins, MD, PhD, Director of the National Institutes of Health (NIH) to close the program.

The symposium kicks off with a panel. Moderated by Pol Vandenbroucke, MD, Chief Medical Officer, Hospital Business Unit, Pfizer, and AFAR board member, this panel will bring together AFAR experts across the basic biology of aging, age-related disease, immunology, and innovation to discuss:

- How does the biology of age-related diseases drive the biology of aging, and vice versa?
- How do the biological processes of aging impact older adults’ susceptibility to communicable and non-communicable disease?
- How has COVID-19 reframed addressing early risk factors, prevention, and treatment for older adults and age-related disease?
- How has COVID-19 reignited research on aging biology and immune health and pointed the way toward geroprotectors and vaccines to prevent impact of future viruses in older adults?

The event is free and open to the public, thanks to the generosity of sponsors. We invite your organization to join us as a supporter of this symposium, helping build the body of knowledge and discourse that has developed the field of biomedical research on aging. As a sponsor, you will be part of an exciting conversation with world-renowned researchers and thought leaders. We anticipate a robust mix of 500+ in attendance on November 3rd.

Thank you for considering joining AFAR as a sponsor of this special event.

Sponsorship Packages are available on page 11.
(The sponsorship deadline is October 25.)
ABOUT THE EVENT

PROGRAM

SCIENCE IS VITAL: Targeting Age-Related Disease through Biomedical Breakthroughs,
Tuesday, November 3, 2021
3 to 5pm Eastern
Online

I. Welcome
by Steven Austad, PhD, AFAR Senior Scientific Director

II. Scientific Panel
Moderated by Pol Vandenbroucke, MD, AFAR Board Member and Pfizer Chief Medical Officer of the Hospital Business Unit
Featuring panelists Nir Barzilai, MD, AFAR Scientific Director, Grantee, and Chair of Aging Research at the Albert Einstein College of Medicine; Ana Maria Cuervo, MD, PhD, AFAR Board Member, Grantee, and Co-Director of the Institute for Aging Studies at the Albert Einstein College of Medicine; and James L. Kirkland, MD, PhD, AFAR President, Grantee, and Director of the Robert and Arlene Kogod Center on Aging and Noaber Foundation Professor of Aging Research at the Mayo Clinic. Also featuring respondent Linda P. Freid, MD, MPH, Dean of the Mailman School of Public Health at Columbia University

III. Remarks
by Stuart Firestein, PhD, Chair of Biological Sciences at Columbia University and author of Ignorance: How it Drives Science, and Failure: Why Science Is So Successful

IV. Award Presentation
to Mikael Dolsten, MD, PhD,
Pfizer Chief Scientific Officer and President of Worldwide Research, Development and Medical

V. Conversation
Mikael Dolsten with Francis S. Collins, Director, National Institutes of Health (NIH)

VI. Closing
by Stephanie Lederman, AFAR Executive Director
WHO YOU’LL REACH

Your support of AFAR’s November 3 symposium affords you visibility and access to a concentrated audience of members of the scientific community from leading research institutions and members of a science-curious, sophisticated philanthropic audience.

Most recently, AFAR held an online global symposium in February 2021, where geroscience philanthropist and AFAR board member Sami Sagol was honored with the AFAR Award of Distinction for his commitment to the advancement of aging research through innovative new applications of Big Data and Artificial Intelligence.

In person, AFAR’s annual scientific symposium and awards ceremony has historically attracted a mix of approximately 200 influential leaders across the scientific, medical, business, philanthropic, and creative industries.

Attracting a concentrated range of 400-600 attendees online regularly, many of whom are repeat visitors, AFAR webinars bring the best science to info-seeking audiences. In partnership with Prevention magazine, for example, AFAR hosts the webinar series “Live Better Longer” where leading scientists and clinicians discuss the research-backed science driving wellness choices and innovative therapeutics to extend our years of health at any age.

In addition to online events, through our digital communications, AFAR engages:

• nearly 3,000 followers on Facebook (www.facebook.com/AFARorg)
• over 4,000 followers on Twitter (@AFARorg)
• close to 125,000 average monthly visitors to AFAR website (www.afar.org)
• more than 12,000 subscribers to our EncourAGE newsletter, monthly
Dr. Dolsten focuses on advancing Pfizer’s scientific breakthrough leadership in small-molecule medicines, biotherapeutics, gene therapies, and vaccines. Dr. Dolsten leads the Worldwide Research, Development and Medical (WRDM) organization at Pfizer, which is responsible for the development of all compounds through proof of concept, and provides pharmaceutical sciences, safety, and medical support to the entire R&D pipeline and all marketed medicines and vaccines and comprises all Pfizer research units, including Oncology, Internal Medicine, Inflammation & Immunology, Vaccines and Rare Disease, as well as the Centers for Therapeutic Innovation.

In 2020 through 2021, Dr. Dolsten and WRDM were responsible for developing one of the three approved vaccines for COVID-19 approved by the Food and Drug Administration. As shown in The New York Times, using a nineteen-step process over 60 days, 150 million vaccine doses are produced and injected into the arms of the public.

Prior to joining Pfizer in 2009, Dr. Dolsten was President of Wyeth Research, where he led scientists involved in all R&D/Medical activities across the US, Europe and Asia. He served as Executive Vice President and Head of Worldwide Research for Boehringer Ingelheim from 2003-2008.

Dolsten earned his PhD in tumor immunology and MD from the University of Lund, Sweden, where he was Adjunct Professor in Tumor Immunology and was recently appointed Visiting Professor to advise on science and technology strategies. He serves on the PhRMA Research & Development Leadership Forum as well as on the PhRMA Foundation Board of Directors. He is a member of the board of Karyopharm Therapeutics and of Research!America. Additionally, Dr. Dolsten is a member of the Board of Overseers for the Scripps Research Institute and a Foreign Member of The Royal Swedish Academy of Engineering Sciences. Since 2014, Mikael has co-chaired the Accelerating Medicine Partnership with National Institutes of Health (NIH) Director Francis S. Collins. He advised the Obama Administration on regulatory and drug development issues as well as then Vice President Biden’s Cancer Moonshot Initiative to accelerate cancer research. Through 2019, he was a council member of the Government-University-Industry Research Roundtable.

Mike Dolsten is a named inventor on several patents and has published approximately 150 articles in international journals, with contributions in molecular cell biology, immunology, and oncology.
Francis S. Collins, MD, PhD, was appointed the 16th Director of the National Institutes of Health (NIH) by President Barack Obama and confirmed by the Senate. He was sworn in on August 17, 2009. In 2017, President Donald Trump asked Dr. Collins to continue to serve as the NIH Director. President Joe Biden did the same in 2021. Dr. Collins is the only Presidentialy appointed NIH Director to serve more than one administration.

In this role, Dr. Collins oversees the work of the largest supporter of biomedical research in the world, spanning the spectrum from basic to clinical research.

Dr. Collins is a physician-geneticist noted for his landmark discoveries of disease genes and his leadership of the international Human Genome Project, which culminated in April 2003 with the completion of a finished sequence of the human DNA instruction book. He served as director of the National Human Genome Research Institute at NIH from 1993-2008.

Dr. Collins is an elected member of both the National Academy of Medicine and the National Academy of Sciences, was awarded the Presidential Medal of Freedom in November 2007, and received the National Medal of Science in 2009. In 2020, he was elected as a Foreign Member of the Royal Society (UK) and was also named the 50th winner of the Templeton Prize, which celebrates scientific and spiritual curiosity.
WHO’S WHO

MODERATOR
Pol Vandenbroucke, MD
Pfizer Chief Medical Officer of the Hospital Business Unit and AFAR Board Member

Dr. Vandenbroucke’s career has been dedicated to Clinical Development, Medical Affairs, and Marketing in the U.S., Europe, Asia, and Latin America. Before his current position, he was responsible for Medical Strategy for Pfizer Inc. and for Medical Affairs of Pfizer’s Essential Health portfolio in North America. He previously also led the Clinical Development of all Pfizer compounds in Asia, Central/Eastern Europe, Latin America, and Africa-Middle East and of Pfizer’s Established Products globally. He was also responsible for developing compounds specifically for diseases of the developing world, such as malaria and river blindness. Dr. Vandenbroucke serves on the Board of AFAR and BIO Ventures for Global Health. He is a member of the Advisory Boards of the Steve Biko Centre for Bioethics, University of the Witwatersrand-Johannesburg, the Canadian Institutes of Health Research, and the Keck Graduate Institute, Claremont, CA. He also is a Fellow of the Faculty of Pharmaceutical Medicine of the Royal Colleges of Medicine of the United Kingdom. A frequent speaker on health, aging, diversity, and policy issues, he is also a Visiting Senior Lecturer at King’s College and the Module Coordinator for Medical Affairs in the Medicines Development Certificate Program at IFAPP Academy and King’s College London.

RESPONDENT
Linda P. Fried, MD, MPH
Dean, Mailman School of Public Health, Columbia University

Linda P. Fried, MD, MPH, Dean of Columbia University’s Mailman School of Public Health since 2008, is a leader in the fields of epidemiology and geriatric medicine. She additionally serves as the Director of the Robert N. Butler Columbia Aging Center. Trained in cardiovascular and chronic disease epidemiology and geriatrics, she has dedicated her career to the science of healthy aging and creating a health span that matches our increased life expectancy, prevention of frailty, disability and cardiovascular disease, and defining how to transition to a world where greater longevity benefits people of all ages. Dr. Fried is an elected member of the US National Academy of Medicine (since 2000), and currently serves as a re-elected member of its Executive Council. She is also Co-Chair of the NAM Global Commission to create a Global Roadmap for Healthy Longevity. Elected to the Association of American Physicians in 2000, she served as its President from 2016-17. She was a member of the Council of the National Institute on Aging, served from 2006-2016 as a member of the World Economic Forum’s Global Agenda Council on Aging and currently serves on its Council on Longevity.
REMARKS
Stuart Firestein, PhD
Chair of Department of Biological Sciences, Columbia University

Dr. Firestein is the former Chair of Columbia University's Department of Biological Sciences. Dedicated to promoting the accessibility of science to a public audience, Firestein serves as an advisor for the Alfred P. Sloan Foundation’s program for the Public Understanding of Science. Recently he was awarded the 2011 Lenfest Distinguished Columbia Faculty Award for excellence in scholarship and teaching. He is a Fellow of the AAAS, an Alfred Sloan Fellow and a Guggenheim Fellow. At Columbia, he is on the Advisory boards of the Center for Science and Society (CSS) and the Presidential Scholars in Society and Neuroscience — both centers for interdisciplinary work between the sciences and the humanities. His book on the workings of science for a general audience called Ignorance, How it Drives Science was released by Oxford University Press in 2012. His new book, Failure: Why Science is So Successful, appeared in October 2015. They have been translated into 10 languages.
WHO’S WHO

PANELIST
Nir Barzilai, MD
AFAR Scientific Director

Nir Barzilai, MD, is a Professor in the Department of Endocrinology Medicine and the Department of Genetics at the Albert Einstein College of Medicine. He is also the Ingeborg and Ira Leon Rennert Chair of Aging Research at the Albert Einstein College of Medicine. Dr. Barzilai is the founding director of the Institute for Aging Research at Albert Einstein College of Medicine and the Director of the Nathan Shock Center for Excellence in the Basic Biology of Aging, funded by the National Institutes of Health (NIH); the center is coordinating 80 investigators and six program projects on the biology of aging. He is also the director of the Glenn Center of Excellence in the Biology of Human Aging. He is a chaired professor of medicine and of genetics and a member of the Diabetes Research Center and the divisions of endocrinology and geriatrics.

Dr. Barzilai’s interests focus on several basic mechanisms in the biology of aging, including the biological effects of nutrients on extending life and the genetic determinants of life span. His team discovered many longevity genes in humans, and they further characterized the phenotype and genotype of humans with exceptional longevity through NIH awards. He also has an NIH Merit award investigating the metabolic decline that accompanies aging and its impact on longevity.

Dr. Barzilai has published more than 270 peer-reviewed papers, reviews and chapters in textbooks. Dr. Barzilai serves on several editorial boards and advisory boards of pharmaceutical and start-up companies, and is a reviewer for numerous journals. A Beeson Fellow for Aging Research, Dr. Barzilai has received many other awards, including the Senior Ellison Foundation Award, the 2010 Irving S. Wright Award of Distinction in Aging Research, the NIA–Nathan Shock Award and a merit award from the NIA for his contributions in elucidating metabolic and genetic mechanisms of aging and was the 2018 recipient of the IPSEN Longevity award. He is leading the TAME (Targeting/Taming Aging with Metformin) Trial, a multi-center study to prove the concept that multi morbidities of aging can be delayed in humans and change the FDA indications to allow for next generation interventions.

He is a founder of CohBar Inc. (now public company), a Medical Advisor for Life Biosciences, and a founding member of the Academy for Lifespan and Healthspan. He has presented on the promise of targeting aging to extend healthspan before esteemed audiences at several international banks, the Milkin Institute, the Singapore Prime Minister Office, the Vatican, Pepsico, TEDx, and TEDMED. He has been featured in major papers, TV programs, and documentaries including The Economist, The Guardian, National Geographic, The New York Times, PBS, Wired, and more.

Ana Maria Cuervo, MD, PhD is co-director of the Einstein Institute for Aging Research, and a member of the Einstein Liver Research Center and Cancer Center. In 2001 she started her laboratory at Einstein, where she studies the role of protein-degradation in aging and age-related disorders, with an emphasis in neurodegeneration and metabolic disorders.

Dr. Cuervo’s group is interested in understanding how altered proteins can be eliminated from the cells and their components recycled. Her group has linked alterations in lysosomal protein degradation (autophagy) with different neurodegenerative diseases including Parkinson’s, Alzheimer’s and Huntington’s disease. They have also proven that restoration of normal lysosomal function prevents accumulation of damaged proteins with age, demonstrating this way that removal of these toxic products is possible. Her lab has also led studies demonstrating a tight link between autophagy and cellular metabolism. They described how autophagy coordinates glucose and lipid metabolism and how failure of different autophagic pathways with age contribute to important metabolic disorders such as diabetes or obesity.

Dr. Cuervo is considered a leader in the field of protein degradation in relation to biology of aging and has been invited to present her work in numerous national and international institutions, including name lectures as the Robert R. Kohl Memorial Lecture, the NIH Director’s, the Roy Walford, the Feodor Lynen, the Margaret Pittman, the IUBMB Award, the David H. Murdock, the Gerry Aurbach, the SEBBM L'Oreal-UNESCO for Women in Science, the C. Ronald Kahn Distinguished Lecture and the Harvey Society Lecture. She has organized and chaired international conferences on protein degradation and on aging, belongs to the editorial board of scientific journals in this topic, and is currently co-editor-in-chief of Aging Cell.

Dr. Cuervo has served in NIH advisory panels, special emphasis panels, and study sections, the NIA Scientific Council and the NIH Council of Councils and has been recently elected member of the NIA Board of Scientific Counselors and member of the Advisory Committee to the NIH Deputy Director. She has received numerous awards for the pioneering work of her team such as the 2005 P. Benson Award in Cell Biology, the 2005/8 Keith Porter Fellow in Cell Biology, the 2006 Nathan Shock Memorial Lecture Award, AFAR’s 2008 Vincent Cristofalo Rising Star in Aging Award, the 2010 Bennett J. Cohen Award in Aging Biology, the 2012 Marshall S. Horwitz, MD Faculty Prize for Research Excellence and the 2015 Saul Korey Prize in Translational Medicine Science. She has also received twice the LaDonne Schulman Teaching Award. In 2015 she was elected International Academic of the Royal Academy of Medicine of the Valencia Community and in 2017, she was elected member of the Real Academia de Ciencias Exactas, Físicas y Naturales. She was elected member of the American Academy of Arts and Sciences in 2018 and member of the National Academy of Science in 2019.
James L. Kirkland, MD, PhD
AFAR President

James L. Kirkland, MD, PhD is the Director of the Robert and Arlene Kogod Center on Aging at Mayo Clinic and Noaber Foundation Professor of Aging Research. Dr. Kirkland’s research focuses on cellular senescence, age-related adipose tissue and metabolic dysfunction, and development of agents and strategies for targeting fundamental aging mechanisms to treat age-related chronic diseases and disabilities and to extend healthspan. He published the first article about drugs that clear senescent cells / senolytic agents.

A novel, mechanism-based, hypothesis-driven drug development paradigm was used to discover senolytic drugs. Based on the observation that senescent cells release factors that cause apoptosis of the cells around them, yet are themselves resistant to apoptosis, Dr. Kirkland hypothesized that senescent cells utilize senescent cell anti-apoptotic pathways (SCAPs) for protection from their own senescence-associated secretory phenotype (SASP). Using bioinformatics analyses of senescent vs. non-senescent cells and RNA interference, Dr. Kirkland identified these SCAPs and verified their importance for senescent cell survival. Dr. Kirkland used bioinformatics approaches to identify agents that target key nodes across the SCAP network and demonstrated these drugs are senolytic in rodent and human cultured cells and mice in vivo. These senolytic drugs include Dasatinib (D), Quercetin (Q), Fisetin, Navitoclax, and related compounds.

Dr. Kirkland showed these agents delay, prevent, or alleviate multiple disorders in mouse models of human chronic diseases and aging phenotypes. Conditions alleviated in mouse models include frailty, diabetes, hepatic steatosis, cirrhosis, renal dysfunction, neuropsychiatric disorders, dementias, pulmonary fibrosis, osteoporosis, osteoarthritis, retinal degeneration, diastolic dysfunction, cardiac ischemia, vascular hyporeactivity, infertility, and skin disorders, among others. He demonstrated that intermittent, orally administered senolytics reduce senescent cell abundance in adipose tissue and blood markers of senescent cell burden in blood of patients with diabetic kidney disease. He and collaborators found that a brief course of senolytics enhances physical function and reduces frailty in patients with idiopathic pulmonary fibrosis, a fatal, cellular-senescence-driven disease for which available treatments have been unsatisfactory. Multiple clinical trials are currently underway of the senolytics that Dr. Kirkland discovered.

He is a scientific advisory board member for several companies and academic organizations. In addition to being President of AFAR, he has been a member of the National Advisory Council on Aging of the National Institutes of Health, and past chair of the Biological Sciences Section of the Gerontological Society of America. He holds honorary appointments at Boston University and the University of Groningen in the Netherlands. He is a board-certified specialist in internal medicine, geriatrics, and endocrinology and metabolism.
SPONSORSHIP OPPORTUNITIES

The support of sponsors will allow AFAR to make this event free and accessible on November 3 and in continued promotions. We offer the following opportunities for sponsor engagement:

**Visionary $15,000**
- Invitation to exclusive, private in-person event in NYC with symposium speakers and key dignitaries at future date, pending public health safety standards
- Extended, private Q&A with AFAR experts in conjunction with a “Live Better Longer” webinar
- Invitation to AFAR GeroFutures Think Tank series, a range of invite-only online events bringing to-gether cross-sector, global leaders in biology, biotech, investment, and philanthropy to guide the future of aging research
- Complimentary registration to invite-only, AFAR event at UK Longevity Week, London, November 17
- Logo Recognition as a Visionary Sponsor in all digital materials including evites
- Premium-placed, full page ad in event digital program book
- Logo display on event break slides
- Post with logo recognition on the AFAR Facebook page, Twitter feed, and AFAR website
- Recognition in AFAR’s annual report and monthly newsletter

**Innovator $10,000**
- Invitation to AFAR GeroFutures Think Tank series, a range of invite-only online events bringing together cross-sector, global leaders in biology, biotech, investment, and philanthropy to guide the future of aging research
- Complimentary registration to invite-only, AFAR event at UK Longevity Week, London, November 17
- Recognition as an Innovator Sponsor in all digital materials including evites
- Full page ad in event digital program book
- Logo display on event break slides
- Tagged post on the AFAR Facebook page, Twitter feed, and AFAR website
- Recognition in AFAR’s annual report and monthly newsletter

**Pioneer $5,000**
- Recognition as a Pioneer Sponsor in all digital materials including evites
- Half page ad in event digital program
- Name display on event break slides
- Name recognition on AFAR Facebook page and Twitter feed, and AFAR website
- Recognition in AFAR’s annual report and monthly newsletter

**Friend $1,000**
- Recognition as a Friend Sponsor in all digital materials including evites
- Quarter page ad in event digital program
- Recognition in AFAR’s annual report and monthly newsletter

100% of your sponsorship is tax-deductible.

PROCESS YOUR SPONSORSHIP ONLINE AT WWW.AFAR.ORG/NOV3SPONSORSHIP
HOW YOUR SPONSORSHIP SUPPORTS HEALTHY AGING

Your gift helps AFAR invest early in high-impact, long-term research that is working to help us all live healthier, longer by targeting the biology of aging, delaying age-related diseases, and developing innovative therapeutics.

Your sponsorship helps support AFAR’s signature grant programs. Consistently, promising young investigators leverage their AFAR grants to receive larger federal grants later in their careers, advancing innovations and interventions. As AFAR grants are not limited to a singular institution, your gift helps build the pipeline of research and network of scientific exchange.

Your gift has optimum impact as the majority will directly fund our mission. AFAR’s responsible resource management results in low indirect costs, helping AFAR earn consistently the highest rankings from Charity Navigator and GuideStar.

As Jim Mellon (CEO of Juvenesence) stated upon being honored at AFAR’s 2018 symposium: “AFAR is a pioneer in aging research. The field could not have advanced to where we are today without AFAR’s vision and willingness—for four, often lonely decades—to take chances on funding the scientists who are conducting innovative studies that serve as the basis for so many of the therapies that are being developed today.”
By sponsoring AFAR’s November 3 symposium and award ceremony, you join a dedicated roster of corporations and organizations dedicated to advancing and supporting healthy aging through biomedical research, including:
The American Federation for Aging Research (AFAR) is a national non-profit organization that supports and advances pioneering biomedical research that is revolutionizing how we live healthier and longer.

Celebrating its 40th anniversary in 2021, AFAR has served as the field’s talent incubator, providing more than $184 million to more than 4,200 investigators at premier research institutions nationwide.

A trusted leader and strategist, AFAR also works with public and private funders to steer high quality grant programs and interdisciplinary research networks. AFAR-funded researchers are finding that modifying basic cellular processes can delay or even prevent many chronic diseases, often at the same time. They are discovering that it is never too late—or too early—to improve health. This groundbreaking science is paving the way for innovative new therapies that promise to improve and extend our quality of life—at any age.

AFAR’s scientific leadership, board members, grantees and experts are leading the public and academic discussion on living healthier for longer thanks to the biomedical research that AFAR has advanced and supported for 40 years.

In addition to publishing in the most respected scientific and medical journals, AFAR experts have been featured in major media worldwide, including BBC News, CNN, The Guardian UK, National Geographic, The New York Times, PBS, The Washington Post, and more.
Thanks to the science AFAR supports, we are making constant progress toward a compelling vision: the ability for all of us to live healthier each and every day of our lives.

Please join us in this important work by sponsoring this special event to celebrate the extraordinary dedication of Mikael Dolsten of Pfizer while exploring advances in biomedical research and therapeutics to extend our years of health as we grow older.

To discuss these sponsorship opportunities, please contact Amy Sullivan at amy@afar.org or 212.703.9977.

You may also donate directly online at www.afar.org/nov3sponsorship.

The deadline for sponsorship is October 25th, 2021, in order to best recognize your support in our event communications. Thank you for your consideration!