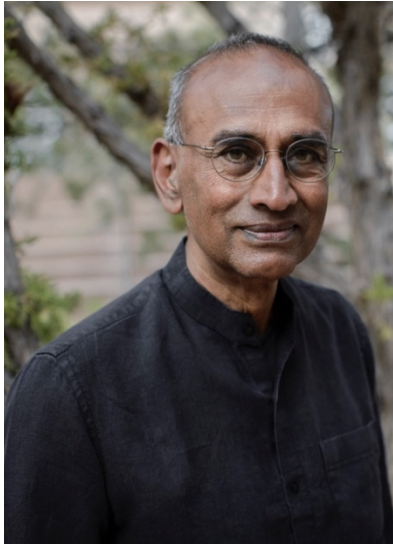


Michael N. Hall
Molecular Biologist, University of Basel

Michael N. Hall received his Ph.D. from Harvard University and was a postdoctoral fellow at the Pasteur Institute (Paris, France) and the University of California, San Francisco. He joined the Biozentrum of the University of Basel (Switzerland) in 1987 where he is currently Professor and former Chair of Biochemistry. Hall is a pioneer in the fields of mTOR signaling and cell growth control. In 1991, Hall and colleagues discovered mTOR (mechanistic Target of Rapamycin) and subsequently elucidated its role as a central controller of cell growth and metabolism.

The discovery of mTOR led to a fundamental change in how one thinks of cell growth. It is not a spontaneous process that just happens when building blocks (nutrients) are available, but rather a highly regulated, plastic process controlled by mTOR-dependent signaling pathways. As a central controller of cell growth and metabolism, mTOR plays a key role in development and aging, and is implicated in disorders such as cancer, cardiovascular disease, diabetes, and obesity. Hall is a member of the US National Academy of Sciences and has received numerous awards, including the Louis-Jeantet Prize for Medicine (2009), the Breakthrough Prize in Life Sciences (2014), the Canada Gairdner Award for Biomedical Research (2015), and the Albert Lasker Award for Basic Medical Research (2017).



Venki Ramakrishnan

Structural Biologist, Cambridge UK

Nobel Prize winner in Chemistry

Venki Ramakrishnan grew up in India and left at the age of 19 for the United States. After a long career there, he moved in 1999 to the MRC Laboratory of Molecular Biology in Cambridge, England. He works on the structure and function of the ribosome, an enormous molecular complex that reads the genetic information on mRNA (itself copied from a stretch of DNA) to synthesize the proteins they specify.

His work also showed how many antibiotics work by blocking bacterial ribosomes, which could help to design better antibiotics. For this work, he shared the 2009 Nobel Prize in Chemistry. From 2015-2020, he was president of the Royal Society.

Ramakrishnan is also the author of a popular memoir, *Gene Machine*, a frank description of the race for the structure of the ribosome and the science and personalities involved, and *Why We Die*, about the biology of aging and our current efforts to combat it.



Jess Bone

Epidemiologist, University College London

Jess Bone is a Senior Research Fellow at University College London. She is a member of the Social Biobehavioural Research Group, a designated World Health Organization Collaborating Centre for Arts & Health. Having completed a PhD in Child and Adolescent Mental Health in the Division of Psychiatry at University College London, Dr Bone is particularly interested in using large population-based longitudinal studies to investigate the social determinants of mental health.

Her postdoctoral work explores the associations between arts and cultural engagement and health and wellbeing in the population. She has used cutting-edge statistical techniques in studies of thousands of older adults to provide evidence that arts and cultural engagement is associated with: lower risk of depression; higher levels of wellbeing; reduced risk of cognitive decline; increased likelihood of aging healthily; and more positive objective and subjective experiences of aging.



Hendrik Scholl
Ophthalmologist, University of Basel

Hendrik Scholl is Professor and Chairman of the Department of Ophthalmology, University of Basel, Switzerland. He is also one of the two founding directors of the Institute of Molecular and Clinical Ophthalmology Basel (IOB). He specializes in the treatment of retinal diseases, specifically inherited retinal and macular dystrophies, and in research on retinal neurodegeneration.

Prof. Scholl is a graduate of the Medical Faculty of the University of Tübingen/Germany and holds a Master of Arts from Tübingen's Faculty of Philosophy. He completed a residency at Tübingen's University Eye Hospital prior to a fellowship at Moorfields Eye Hospital & Institute of Ophthalmology in London/UK and a DFG Heisenberg fellowship on macular disorders. After having held several academic positions at the Medical Faculty of the University of Bonn/Germany, he was appointed as Professor of Ophthalmology in 2010 and subsequently as Endowed Chair at the Wilmer Eye Institute of Johns Hopkins University Medical School in Baltimore, USA.

In 2016, Prof. Scholl joined the University Basel as Professor and Chairman of the Department of Ophthalmology. Prof. Scholl has authored over 250 articles and reviews in peer-reviewed journals and received numerous prestigious awards. In 2023, he received an honorary doctorate from Semmelweis University Budapest.



Fiona Marshall
President, Biomedical Research Novartis

Fiona Marshall is President of Biomedical Research, the innovation engine of Novartis, where she leads roughly 5,400 scientists and other associates across six research sites dedicated to the discovery of high-value medicines for patients.

Fiona collaborates with experts across the pipeline—from R&D to manufacturing and commercial development—to ensure Biomedical Research’s technological and scientific breakthroughs translate into therapies that address the world’s greatest disease burdens.

"As scientists, there’s nothing more fulfilling than seeing our discoveries translate into meaningful medicines for patients. Our research teams are committed to this mission. By building on our strengths, including our long history of scientific innovation and technological leadership, we aim to deliver the next generation of medicines that will make a real difference to people’s lives."

Prior to taking up her current role in November 2022, Fiona served as senior vice president and global head of discovery sciences, preclinical development and translational medicine at MSD (Merck & Co in the US). Prior to that, she was a founder and chief scientific officer of Heptares Therapeutics, a UK-based biotechnology company focused on structure-based drug design. Earlier in her career, Fiona was director of molecular pharmacology at Millennium Pharmaceuticals and spent 10 years at GSK, holding senior positions in molecular pharmacology and neuroscience. Fiona holds a bachelor’s degree in biochemistry from the University of Bath and a doctorate in neuroscience from the University of Cambridge, both in the UK. She was the recipient of the 2012 WISE Women of Outstanding Achievement for Innovation and Entrepreneurship Award, the 2015 RSC Malcolm Campbell Award for Chemistry, and the Vane Medal from the British Pharmacological Society. She is also a fellow of the Royal Society and the Academy of Medical Sciences, and an honorary fellow of both the British Pharmacological Society and the Royal Society of Chemistry.

A frequent traveler, Fiona’s preferred destinations include national parks and wildlife conservation sites. She also enjoys spending time with her family in her native England.



Markus Rüegg
Neurobiologist, University of Basel

Markus Rüegg studied biochemistry at the University of Zurich and graduated with a PhD in the field of Neurobiology. In 1989 he went as a postdoctoral fellow to conduct research at the Department of Neurobiology at Stanford University School of Medicine.

In 1992 he was appointed as Assistant Professor to the Biozentrum, University of Basel. Since 1998 he has been a Professor of Neurobiology and teaches and conducts research at the Biozentrum of the University of Basel. Based on his research findings he co-founded the first spin-off company (MyoContract Ltd) of the Biozentrum in 2000, which merged in 2004 to become Santhera Pharmaceuticals Ltd. As of August 2021, he co-founded SEAL Therapeutics Ltd. and acts as its CEO. SEAL Therapeutics Ltd. aims to develop a gene therapy for the severe LAMA2-related muscular dystrophy (LAMA2 MD). He is also scientific advisor to several biotech companies for rare diseases, board member on several patient organizations for neuromuscular diseases and scientific editor for several renowned magazines. Furthermore, he is the recipient of several awards.



Alex Schier
Cell Biologist, University of Basel

Alex Schier received a B.A. in cell biology from the Biozentrum of the University of Basel, Switzerland, followed by a PhD in cell biology under Walter J. Gehring, also at the Biozentrum. He conducted his postdoctoral research at the Massachusetts General Hospital and Harvard University in Boston, US. In 1996, Schier was recruited as assistant professor in the Developmental Genetics Program to the Skirball Institute and Department of Cell Biology, NYU School of Medicine. From 2005 to 2019, he was a professor at the Department of Molecular and Cellular Biology, Harvard University, Faculty of Arts and Sciences. He chaired the Department of Molecular and Cellular Biology from 2014 to 2017. In 2018, Schier became the Director of the Biozentrum of the University of Basel as well as Professor for Cell Biology. His research was featured in Science “Breakthrough of the Year 2018”. He is an elected member of EMBO and NAS.

Schier studies the mechanisms underlying embryonic development and the regulation of sleep-in vertebrates. During development, cells acquire specialized fates and migrate to specific positions to form the embryo and generate functional organs. His goal is to understand the molecular and cellular mechanisms underlying this process. How do signals move through fields of cells and elicit concentration dependent effects? How do cells differentiate into specialized cell types? How do cells arrive at the right place at the right time? And how can embryogenesis be both robust and flexible? To address these questions, Schier uses genetic, genomic, biophysical and in vivo imaging approaches in zebrafish.

In a second line of research Schier studies sleep and wakefulness. We spend a third of our life asleep but the mechanisms that control sleep and waking states remain largely elusive. His lab seeks to identify molecules and neurons that regulate sleep and the neuropeptides that promote sleep and wakefulness. What are the neurons that detect sleep deprivation and regulate recovery sleep? What is the role of genes that have been implicated in human sleep disorders? To address these questions, Schier uses genetic, genomic, and imaging approaches in the fish and mouse.



Linda Partridge
Geneticist, University College London

Linda Partridge works on the biology of aging. Her research is directed to understanding the mechanisms by which health in later life can be increased in laboratory model organisms and humans. Her work has focussed on the role of nutrient-sensing pathways, such as the insulin/insulin-like growth factor and mTOR signalling network and on the role of diet, and her primary interest is in geroprotective drugs.

She is the recipient of numerous awards, including the ZSL Frink Medal and Stamford Raffles lecture, and was honoured with a DBE for Services to Science in 2009. She is a Fellow of the Royal Society, the Academy of Medical Sciences, a member of the German Academy of Sciences Leopoldina and a foreign member of the American Academy of Arts and Sciences. She is the founding director of the Max Planck Institute for Biology of Ageing in Cologne, Germany and Biological Secretary and Vice-President at the Royal Society.



Christoph Handschin
Cell Biologist, University of Basel

Christoph Handschin is a Professor of Pharmacology and research group leader at the Biozentrum of the University of Basel, Switzerland. He studied Biochemistry at the University of Basel before completing his PhD thesis in the group of Professor Urs A. Meyer at the Biozentrum. Subsequently, Professor Handschin worked in the laboratory of Professor Bruce M. Spiegelman, Dana-Farber Cancer Institute and Harvard Medical School, first as a postdoctoral fellow, and then as an instructor. In 2006, he started his own research group at the University of Zurich as an Assistant Professor before moving to the Biozentrum in Basel in 2009, first as an Associate Professor (tenured), then, in 2015, as Full Professor.

Handschin's research is focused on the molecular mechanisms that control skeletal muscle plasticity in health and disease. Research highlights include the investigation of the mechanistic underpinnings of short-term acute exercise and long-term training adaptations in skeletal muscle, as well as the pathological processes leading to aging-associated sarcopenia, cancer cachexia and muscular dystrophies.

The results of Professor Handschin's research are described in more than 140 peer-reviewed publications, cited over 25,000 times.



Matt Kaeberlein

Biogerontologist, University of Washington, Seattle

Matt Kaeberlein is the Chief Executive Officer at Optispan, Affiliate Professor of Oral Health Sciences at the University of Washington, and Co-Director of the Dog Aging Project.

Dr. Kaeberlein's research seeks to define biological mechanisms of aging to facilitate translational approaches that promote healthspan and improve quality of life for people and companion animals. He is a Fellow of the American Association for the Advancement of Science, the American Aging Association, and the Gerontological Society of America.

Dr. Kaeberlein has published more than 250 scientific papers on longevity and received numerous prestigious awards from organizations such as the Ellison Medical Foundation, Alzheimer's Association, American Federation for Aging Research, Glenn Foundation, Murdock Trust, and National Institutes of Health. Dr. Kaeberlein is the founding Director of the University of Washington Healthy Aging and Longevity Research Institute. He previously served as Director of the NIH Nathan Shock Center of Excellence in the Basic Biology of Aging, the Biological Mechanisms of Healthy Aging Training Program and President and Chair of the American Aging Association.