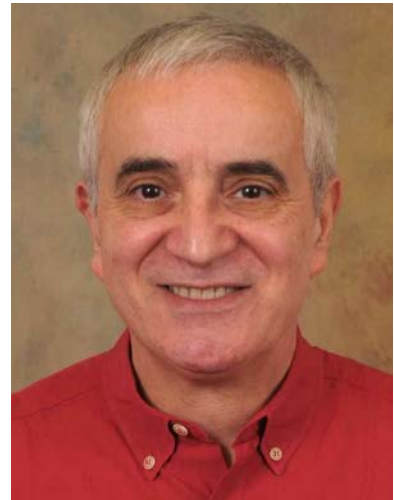


Luigi Ferrucci is the Scientific Director of the National Institute on Aging at the NIH. He is both, an epidemiologist and geriatrician and received his M.D and his Ph.D. on Biology and Pathophysiology of Aging at the University of Florence, Italy. His area of focus is understanding the origin of variation in the human phenotype with aging and how it contributes to physical disability, in order to identify potential targets of prevention and cure. Over the last 30 years, he has participated in designing, consolidating, analyzing, and publishing results from some of the largest epidemiological studies on aging performed in the United States and Europe. His current interest is studying the biological, phenotypic and functional manifestations of aging and how damage accumulation across these metrics is modulated by resilience mechanisms that have been evolutionally selected over millions of years. His goals include the identification of the environmental stressors that affect the speed of aging and understanding how these stressors are sensed and encode response mechanisms that are compensatory in nature but that can result in accelerated damage accumulation later in life. Ultimately, his goal is to contribute to the science aimed at slowing down the aging process, therefore preventing some of its negative consequences on physiology, pathology, physical and cognitive function, and quality of life.



During his career, Luigi Ferrucci was awarded a multitude of prizes, honors, and positions, among them the Longevity Prize of the Fondation IPSEN, the Leadership in Aging Trailblazer Award, and the NIH Directors Award for Excellence in Mentorship. He was Editor-in-Chief of the Journal of Gerontology: Medical Sciences and is Honorary Member by the Board of Directors of the Italian Society of Gerontology and Geriatrics (SIGG).

Dr. **Andreas Schmidt** is the CEO of Proteona, a precision medicine company in Singapore, Germany, and the US that is pioneering the use of single cell multi-omics to improve clinical outcomes in cancer. Using a combination of innovative single cell assays and AI-assisted bioinformatics, Proteona enables pharmaceutical companies, biotech partners, and clinicians to integrate single cell level precision into their clinical projects. Proteona has been selected as a “One to Watch” most innovative company by the Nature Spinoff Award, a Winner of Falling Walls Ventures Breakthrough of the Year 2020 as well as a Global Finalist of The Extreme Tech Challenge 2021.



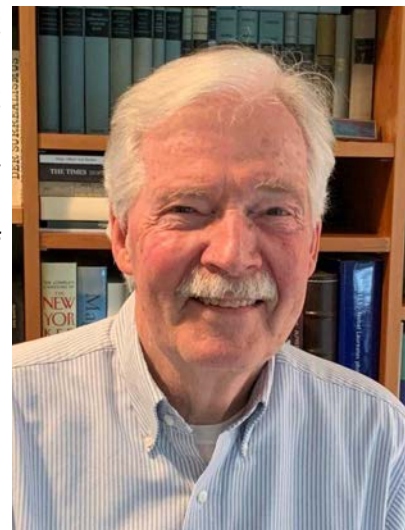
Andreas is a serial entrepreneur and a successful biotech CEO in Asia, Europe and the US. He previously built up the venture capital backed proteomics company AYOXXA leading a team of 40+ employees in Singapore, Cologne and Boston raising more than 40 Million USD in venture capital and grants. Through SchmidtDengVentures Dr. Schmidt serves as board director, advisor and shareholder for several international biotech companies. He is a member of the Duke-NUS industry advisory council, a catalyst of the Singapore MIT Alliance of Research and Technology and a lead mentor of Scaler8 and German Entrepreneurship GmbH. Andreas holds a PhD in immunology jointly from the Universities of California Berkeley and Cologne.

Lorenzo De Michieli is Director of the Rehab Technology Lab at the Italian Institute of Technology (IIT), an Innovation Lab jointly created by IIT and INAIL to develop new prostheses, exoskeletons and rehabilitation devices of high market potential in the healthcare sector. He received a M.S. in Physics (Material Science) in 1999, and a Ph.D. in Mechanical Engineering (Humanoid Robotics) from the University of Genoa, Italy. He also accomplished an extensive training on innovation management both in Italy at Jacobacci & Partners (Turin, IT) and abroad at the European Patent Office (The Hague, NL) and the Bergen Teknologioverføring (Bergen, N). He is currently Board member of Movendo Technology, one of the most promising biomedical companies in Italy.



From 2014 to 2019 he was contract Professor at the University of Genoa - Faculty of Economics - in Collaborative Innovation and Technology Transfer. From 2005 to 2011 he was member of the Governing Board for Technology Transfer at the Italian Institute of Astrophysics (INAF, Rome, IT). Before joining IIT in 2008, he was research technologist at the National Institute for the Physics of Matter (INFN, Italy).

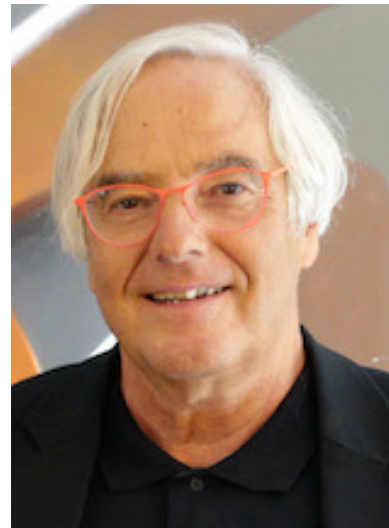
Helmut Sies, MD, PhD (hon), MD (hon), studied medicine at Tübingen, Paris and Munich. He was professor of Biochemistry and Molecular Biology at Heinrich-Heine-University at Düsseldorf, where he currently is an emeritus professor. He also is a Senior Scientist at the Leibniz Research Institute for Environmental Medicine, Düsseldorf. He demonstrated the existence of hydrogen peroxide (H₂O₂) as a normal attribute of aerobic life in eukaryotes in intact tissue. He founded the concept of „Oxidative Stress“. In nutritional biochemistry, his group found that lycopene, a carotenoid, exhibits the highest rate constant for the reaction with singlet oxygen, leading to investigating systemic nutritional photoprotection in humans. As to antioxidant enzymes and low-molecular-mass antioxidants, he contributed studies on glutathione and related enzymology, and on the essential trace element selenium, as well as the organo-selenium compound ebselen. Vascular responses to cocoa flavanols at the endothelium were examined from the molecular basis to health effects in the human.



Johannes Siegrist is currently a Senior Professor of Medical Sociology at the Heinrich-Heine-University Düsseldorf in Germany. Until 2012, he was there Professor and Director of the Department of Medical Sociology. He received his Ph.D. in Sociology from the University of Freiburg i. Br. in 1969, and during his first professorship at the University of Marburg, he was visiting professor at Johns Hopkins University (USA) and at the Institute for Advanced Studies in Vienna (Austria). His long-standing research focused on health-adverse psychosocial work environments and social inequalities in health. In addition to his collaboration in distinct European research networks, he served as a consultant to the World Health Organization, and he chaired several national and international academic societies. Among other distinctions, he is a member of Academia Europaea (London) and a corresponding member of the Heidelberg Academy of Sciences.



Claudio Franceschi is Professor Emeritus at Alma Mater Studiorum University of Bologna (UNIBO) Italy, and Head of the Laboratory of Systems Medicine and Healthy Aging, Lobachevsky University of Nizhni Novgorod, Russia. He is Editor-in-Chief of “Ageing Research Review” and co-editor of the “Handbook of Immunosenescence: Basic Understanding and Clinical Implications”, 2nd edition. He published about 850 papers in peer reviewed journals (75.986 citations, h-index: 133) and was keynote lecturer at multiple national and international meetings (Gordon Conferences, Keystone Symposia on Molecular Biology, Cold Spring Harbor Symposia, EMBO Courses, European and World Congresses and Conferences on Aging). He got his MD cum laude (1967) at UNIBO, Italy, was full Professor of Immunology at the Universities of Padua (1980-86), Modena (1986-1998) and UNIBO (1998-2013), founder and director of the Interdepartmental Center for Studies on Bioinformatics and Biocomplexity “L. Galvani”, UNIBO (2001-2006; 2012), director of the Department of Experimental Pathology, UNIBO (2010-2012), and scientific director of the public Italian National Research Center for Aging (INRCA, 1,500 total employees) (1996-2005).



His major research achievements are: i) discovery of the most important characteristics of immunosenescence in humans; ii) proposal of the “remodelling” and “inflammaging” theories of aging, conceptualization of the “liquid immune self” and “immunobiography”; iii) pioneering studies on immune response and stress throughout evolution; iv) pioneering studies on genetics, epigenetics, proteomics, metabolomics, metagenomics, glycomics of human aging and longevity (centenarians); v) discovery of nuclear genes and mtDNA polymorphisms associated to human longevity; vi) discovery of new biomarkers of aging (gut microbiome; N-glycans; DNA methylation; inflamma-miRs; metabolomic and lipidomic markers); vii) identification of immunological, epigenetic and glycomic biomarkers of the Down Syndrome as a model of accelerating aging; viii) mathematical modelling of the immune system and the proteasome. During his ongoing career he won numerous grants and awards, among them NU-AGE (Mediterranean Diet for the elderly, 2011-2016), GEHA (GEnetics of Healthy Aging, 2004-2010, Annual Hayflick Lecturer 2012 (University of Alabama at Birmingham's Center for

Aging), Schober Price, Martin Luther University, Halle, Germany (2017), Laurea honoris causa, University of Bordeaux, France (2018).

P. Eline Slagboom, biologist by training, obtained her PhD at the Leiden University (NL) on genome instability and ageing. Between 1993 and 2000 she was group leader at the TNO Institute for applied sciences (Gaubius Institute) and was appointed in 2000 as professor of Molecular Epidemiology at the Leiden University Medical Center (LUMC). She initiated and is head of the section of Molecular Epidemiology within the Department of Biomedical Sciences, she is chair of the LUMC Medical Research Profile on Ageing and of the DUSRA – Dutch Society for Research on Ageing. She is PI of the Leiden Longevity Study and Fellow at the Max Planck Institute for Biology of Ageing in Cologne.



The studies of her group focus on biomarkers and pathways of metabolic health, ageing and longevity. Particular interest of her group is the genomic basis and development of biomarker profiles for osteoarthritis and healthy ageing/longevity. Her research into healthy ageing is based on cohort studies such as the Leiden Longevity Study and stimulation of healthy ageing in lifestyle intervention studies in humans (Growing Old Together study, GOTO). Slagboom has/had a leading roles in large consortia. She was coordinator of IDEAL, a large scale FP7-EU project (Integrated research on DEvelopmental determinants of Aging and Longevity). She is PI of VOILA (Vitality Oriented Innovations for the Lifecourse of the Ageing Society) a public-private collaborative consortium. She is board member of EU collaborative research projects, BBMRI-NL (Bio banking and Biomolecular Resources Research Infrastructure) and the national studies in metabolomics (25 cohorts), www.molepi.nl, www.nvvvo.nl.

Joris Deelen, PhD, is a Research Group Leader at the Max Planck Institute for Biology of Ageing in Cologne, Germany. He obtained his PhD at the Leiden University Medical Center in The Netherlands in 2014. The work in his group focuses on the establishment of novel human aging studies in Cologne to determine the efficacy of previously identified biomarkers of aging in clinical studies. The main focus is on biomarkers that have been identified in large-scale international collaborations of human studies using omics-based approaches, such as metabolomics. In addition, they include biomarkers originating from studies in model organisms to determine their translatability. Moreover, his group studies the functional effect of common genetic variants (identified using large-scale genetic association studies of healthy aging) and rare protein-altering genetic variants (identified using sequencing data of long-lived individuals). To this end, they make use of the CRISPR/Cas9 system to generate transgenic cell lines and animals harbouring the identified variants. They subsequently measure the in vitro (mouse embryonic stem cells) and in vivo (mice and fruit flies) effects of



the genetic variants on the functioning of the genes. In addition to doing research, Dr. Deelen enjoys talking about his work to a general audience and sharing his passion for research on (human) aging.

Matteo Cesari, MD, PhD is Associate Professor of Geriatrics at the Università di Milano and Director of the Geriatric Unit at the IRCCS Istituti Clinici Scientifici Maugeri (Milan, Italy). His research activities are focused on the frailty condition and strategies aimed at preventing the disabling cascade.

Dr. Cesari has currently published more than 500 articles in peer-reviewed scientific journals, 25 book chapters, and numerous other publications. He is listed by Clarivate Analytics among the worldwide Highly Cited Researchers.

Dr. Cesari is Editor-in-Chief of The Journal of Frailty & Aging, and Senior Associate Editor of the Journal of the American Medical Directors Association [JAMDA]. He is one of the coordinators of the European Geriatric Medicine Society (EuGMS) Special Interest Group on “Frailty and resilience in older persons”, and member of the Clinical Consortium on Healthy Ageing coordinated by the World Health Organization.



Patrizia Mecocci MD, PhD, is a full Professor in Gerontology and Geriatrics at the University of Perugia, and Head of the Department of Geriatrics at the University Hospital S.M. Misericordia, Perugia (Italy). She received her M.D. from the University of Perugia (Italy), School of Medicine, where she completed a residency program in Geriatrics. She also earned a Ph.D. in Biology and Physiopathology of Aging at the University of Modena (Italy). After receiving a grant from the Italian National Research Council (CNR), she spent three years as a research fellow, first at the Department of Psychiatry and Neurochemistry at the University of Lund (Sweden) and then at the Department of Neurology, MGH-Harvard Medical School in Boston (USA). She then started her academic career at the University of Perugia, where she is now full Professor of Gerontology and Geriatrics and Director of the Geriatric Clinic.

Her research activity is focused on several aspects of clinical and neuropsychological aspects of aging and biological studies on aging with a specific interest in oxidative stress. She sits on the editorial board of the Journal of Alzheimer's Disease, Alzheimer's and Dementia TRCI, American Journal of Alzheimer's Disease and Other Dementias, International Journal of Alzheimer's Disease, Nutrients, Frontiers in Aging Neuroscience. She worked as a partner in various European Union-funded projects of FP6, FP7, and Horizon 2020 programs and JPND programs concerned with improving the diagnosis/treatment of dementia, problems related to aging, and healthcare opportunities for an aging Europe. She is P.I. of National projects funded by the Italian Ministry of Health (MinSal) and by the Italian Ministry of University and Research (MUR) on biomarkers in



aging and age-related diseases and on the role of oxidative stress and antioxidants in aging. She is the leader of the ReGAI project (Geriatric Network on Alzheimer's disease) that first developed in Italy an EHR for collecting clinical data on a large number of old subjects with cognitive and somatic problems. She has authored/co-authored more than 340 peer-reviewed publications, has contributed 30 books/chapters and monographs, and is a regular contributor speaker at international congresses.

M. Cristina Polidori leads the Ageing Clinical Research (<https://nephrologie.uk-koeln.de/forschung/klinische-altersforschung/>) group at the Dpt. II of Internal Medicine of the University Hospital of Cologne in Germany and belongs, as a Consultant, to the Management Team of the newly established Ward for Ageing Medicine (Universitäre Altersmedizin, <https://nephrologie.uk-koeln.de/erkrankungen-therapien/universitaere-altersmedizin/>) of the same Department. She is specialized in Gerontology and Geriatrics since 2000 and in Internal Medicine and Geriatrics. Dr. Polidori has a Master in Philosophy, is Professor of Physiological Chemistry and of Geriatrics and is responsible for the Teaching of Ageing Medicine and Medicine of the Aged (<https://nephrologie.uk-koeln.de/lehre/medizin-des-alters-und-des-alten-menschen/>) at the University Hospital of Cologne. She is former fellow of the Harvard University, of the EU Marie-Curie Program Quality of Life and Management of Living Resources, of the Robert-Bosch Foundation and, since 2014, is an honorary fellow of the Royal College of Physicians of London for her studies on healthy centenarians. She is actively involved in several national and international initiatives, research networks and Commissions of Trust. Dr. Polidori is a Delegate of the International Federation on Aging, member of the Scientific Committee of ProMoAgeas well as an Associate PI of the Cologne Excellence Cluster on Cellular Stress-Responses in Aging-Associated Diseases (CECAD, <https://www.cecad.uni-koeln.de/research/associated-members/prof-dr-m-cristina-polidori/>) and a local coordinator of the EIT Health Ageing PhD School. M. Cristina Polidori is listed among the 2% top world-ranked scientists in her field (PloS Biology 2020), has been awarded with several national and international prizes, is editor and author of over 140 most relevant books and publications in the field and has a h-index of 44.

