

OCTOBER 15th SPEAKERS:



Assistant Professor Francisco Verdeguer
Principle Investigator, University of Zurich, Switzerland

Dr Francisco Verdeguer completed his masters at the Biomedicine Institute of Valencia-CSIC before moving to the Pasteur Institute, Paris in 2006 to conduct his PhD studies on the role of Hepatocyte Nuclear Factors (HNF1s). In 2011 he started his postdoctoral training with Prof. Pere Puigserver at the Dana Farber Cancer Institute/Harvard Medical School working on epigenomics and transcriptomics of metabolism in obesity and diabetes. Here he discovered a novel role of the Yin Yang 1 transcription factor in thermogenesis. In 2016 Francisco moved to Sweden to join the lab of Myriam Aouadi as a postdoctoral fellow at the Integrated Cardiometabolic Centre, Karolinska Institutet before joining the University of Zurich as an independent group leader in 2016. Currently the Verdeguer lab investigates environmental modulation of energy balance through transcriptional and chromatin changes and in particular the role of Yin Yang 1 in metabolic function.



Dr Matthias Voss
Junior Group Leader, Institute of Biochemistry, Kiel University, Germany

Matthias Voss is currently at the Institute of Biochemistry at Kiel University in Northern Germany and heads an independent junior research group that is associated with the DFG-funded Collaborative Research Cluster (CRC) 877. Following his undergraduate training in biochemistry and molecular biology, Matthias moved to Munich, Germany, to focus on the biology of intramembrane-cleaving proteases with Christian Haass and Regina Fluhrer. Late in 2014 he received a PhD *summa cum laude* from Ludwig-Maximilians University in Munich. The following year, Matthias moved to Karolinska Institutet in Stockholm to join Yenan Bryceson's lab at HERM (MedH) that has a long-standing interest in cytotoxic lymphocyte biology and primary immunodeficiencies. His work there was primarily focussed on the twin tumour suppressors SAMD9 and SAMD9L. During his time in Stockholm, Matthias was awarded fellowships from the Wenner-Gren foundations, EMBO and SSMF and received funding from the Histiocytosis Association and SLS.

In 2018, Matthias moved to Kiel and started his own research group in 2019. Besides work on SAMD9 and SAMD9L, the main focus of the lab is to study the proteolytic processing and secretion of Golgi-resident enzymes and the physiological implications of this process. In addition to his role as group leader, Matthias is also actively involved in pre-clinical biochemistry teaching of medical as well as dental students and teaches theoretical and practical courses in the biochemistry Bachelor/Master programme.



Assistant professor Pedro Costa

Principle Investigator, Department of Life Sciences at the School of Science and Technology, NOVA University of Lisbon, Portugal

I am a biologist with a M.Sc. in marine modelling and a Ph.D. in marine environmental toxicology, accomplished in Portugal and Spain, completed in 2011. Since then I became specialised in toxicology and worked with several subjects and models, from human cell lines to murines and the zebrafish. I did two post-docs. The first, held in Portugal, involved the Portuguese National Institute for Health. The second was done at KI, Institute of Environmental Medicine, where I worked in Bengt Fadeel's lab on nanotoxicology. In 2016 I received a grant that enabled me to return to Portugal as a group leader. I am now an assistant professor at the Department of Life Sciences at the School of Science and Technology, NOVA University of Lisbon. I founded and lead the SeaTox Lab, which currently accommodates eleven researchers, from post-docs to Ph.D. and M.Sc. students and is supported by several funded grants. Our work is multidisciplinary and is focused mainly on environmental toxicology and drug discovery from marine toxins. It also involves genotoxicology, histopathology, molecular biology and bioinformatics and major domains of technical specialisation.



Associate Professor Ioannis Charalampopoulos

Group Leader, Department of Pharmacology, Medical School, University of Crete, Greece

Dr Charalampopoulos received his PhD in neuropharmacology in 2005 from the Medical School, University of Crete, Greece. Ioannis then moved to the Department of Neuroscience at Karolinska Institutet in 2005 where he worked as a Postdoctoral Fellow for two years. During this time, he received postdoctoral funding from both the European Commission and the NIH. In 2007 he returned to the University of Crete as Research Scientist before being promoted to Lecturer in Pharmacology in 2014, eventually establishing his independent research group as Assistant Professor in 2014. In 2017 his position was tenured and since 2019 has been promoted to Associate Professor. Over his career he has trained a number of students and postdocs, published over 60 peer-reviewed articles and received over 2 million euros in funding, including major funding from the European Commission and Novartis. Currently the Regenerative Pharmacology Lab at University of Crete, led by Dr Charalampopoulos, focuses on molecular mechanisms underlying nervous system regeneration.



Associate Professor Mark Denham

Group Leader, Danish Research Institute of Translational Neuroscience (DANDRITE), Aarhus University, Denmark

Assoc. Prof. Mark Denham received his PhD in Stem Cell Biology from Monash University, Melbourne, Australia in 2005 before working as a postdoctoral scientist at Lund University, Sweden. In 2008 Mark returned to Australia for 5 years working as a Research Fellow at the Melbourne Brain Centre, University of Melbourne. Following this period, he returned to Sweden as a Senior Research Fellow at Karolinska Institutet in the lab of Ernest Arenas before being appointed as a principle investigator at the Danish Research Institute of Translational Neuroscience (DANDRITE), Aarhus University, Denmark in 2013. In the past seven years Mark has established and lead the Stem Cell laboratory at DANDRITE investigating neurodevelopmental and neurodegenerative diseases using human embryonic and induced pluripotent stem cell models.



Associate Professor Theresa Vincent

Group Leader, Uppsala University and New York University School of Medicine

Dr. Vincent is currently managing one laboratory at Uppsala University (UU) and one at New York University (NYU) School of Medicine which is focused on understanding the role and contribution of ribosomes to metastatic disease. She started her transatlantic career in 1999 as an exchange student at Weill Cornell Medicine (WCM) from Karolinska Institutet (KI) in Stockholm, Sweden. She returned two years later on a scholarship provided by WCM to perform her PhD studies and graduated at KI in 2007. In 2008, on a scholarship from the Swedish research council (VR), she returned to WCM for postdoctoral studies. In the fall of 2013, she received a returning home grant from VR and was appointed Assistant Professor at KI to start her independent research group in 2014. At WCM, she was awarded a visiting professorship and combined this appointment with her KI faculty appointment and started commuting between the two universities building one research arm at KI and another one at WCM focusing on the role of ribosomes in metastatic disease.

Dr. Vincent moved her group to UU in 2018 and in 2019 she was recruited to NYU School of Medicine. Throughout her time as dual faculty member, she has mentored masters, PhD and medical students as well as postdoctoral fellows, been featured as a key lecturer at international meetings and organized and chaired the Nobel Symposia in 2019. She has continuously supported international collaborations at KI and UU by actively participating in exchange research programs. Dr. Vincent has also been acting as the editor in chief for *Seminars in Cancer Biology* since 2013, has co-founded a small Swedish biotech company and has two patents pending. She is convinced that science and the love and dedication to the discovering of new knowledge will always guide the way forward irrespective of scientific disciplines and nationalities.

OCTOBER 20th SPEAKERS:



Assistant Professor Konstantinos Ampatzis

Group Leader, Department of Neuroscience, Karolinska Institutet

My name is Konstantinos, and currently, I am an assistant professor in the Neuroscience Department at Karolinska Institute. I received my whole education (BSc, MSc, Ph.D.) from the University of Crete in Greece. My Ph.D. studies (Department of Biology, University of Crete) were focused on sexual dimorphisms and sexual differences. I did two postdoc periods, a shorter at the Clinical Science Centre of the Medical Research Council, London, UK, on molecular neuroscience and neurogenesis, and a longer at the Department of Neuroscience at KI studying the functionality of the spinal locomotor networks. In 2016 I received the Starting Grant from the Swedish Research Council (Vetenskapsrådet) to establish my own research group at Karolinska Institutet to study the nervous system's plasticity.



Professor Eleni Aklillu

Group Leader, Department of Laboratory Medicine, Karolinska Institutet

Eleni Aklillu is Professor of Tropical Pharmacology and research group leader at the Department of Laboratory Medicine, KI. She studied pharmacy at Addis Ababa University, graduating in 1987. Through a collaboration between Addis Ababa University and KI, she received a master's degree in Biochemistry in 1996. Aklillu defended her PhD thesis in molecular genetics at the Department of Environmental Medicine, KI in 2003. She subsequently joined the Department of Laboratory Medicine, KI as Postdoctoral researcher and became Associate Professor in pharmacology in 2009. She is supervisor for 18 PhD students registered in KI (11 completed and 7 ongoing). Eleni Aklillu was appointed Professor of Tropical Pharmacology at Karolinska Institutet on 1 July 2020.

Since 2016, Aklillu is a member of the Swedish Research Council's Committee for the Development Research, and during 2014–2018 served as Vice Chair of the Scientific Advisory Committee for EDCTP – European and Developing Countries Clinical Trials Partnership.



Assistant Professor Anna Pasetto

Group Leader, Department of Laboratory Medicine, Karolinska Institutet

I joined the Karolinska Institutet in 2018 as assistant professor (biträdande universitetslektor) and managing director of the pre-GMP facility in the department of Laboratory Medicine. I received my master's degree in molecular biotechnology in 2007 from Alma Mater Studiorum Bologna University, Italy. I then moved to the Karolinska Institutet where I received my PhD in 2012. I joined the laboratory of Dr. Steven Rosenberg at the National Cancer Institute, NIH in 2013 and my research was focused on the isolation of TCR genes from mutation-reactive tumor infiltrating lymphocytes in metastatic solid cancers.

My research goal is to develop new immunotherapies against cancer. The main focus is to identify immunological receptors able to recognize mutated antigens expressed by cancer, these receptors can then be engineered to generate CAR-T cells, TCR-T cells and other types of cell therapies.



Associate Professor Per Nilsson

Group Leader, Department of Neurobiology, Care Sciences and Society

Dr Nilsson received both his MSc in Molecular Biotechnology (Civ ing, 2001) and PhD in Molecular Biotechnology (2008) from Uppsala University working on the biochemical characterization of a human enzyme involved in mRNA metabolism. In 2009 Per received a VR grant to conduct postdoctoral research at RIKEN Brain Science Institute, Tokyo, Japan. In 2016 he started his own research group in the field of Alzheimer's preclinical research at Karolinska Institutet with funding from VR, Alzheimer's foundation and Hållsten research foundation. His group now consists of 2 PhD students, 2 postdocs, 2 researchers, 1 Ass Prof and masters students/PhD interns. The group receives financial support from EU-H2020, Swedish brain foundation, Torsten Söderberg foundation, StratNeuro, Hållsten research foundation and Erling Person foundation.

The Nilsson lab focuses on Alzheimer's disease mechanisms, including autophagy, by using and developing new Alzheimer's disease animal models. Key findings include identifying a pivotal role of autophagy in A β metabolism, notably that autophagy mediates the secretion of A β and its impairment leads to intracellular A β accumulation and neurodegeneration, a key Alzheimer pathology.



Dr Karin Sundström

Group Leader, Department of Laboratory Medicine, Karolinska Institutet & MD Karolinska University Hospital

Karin Sundström is an MD at Karolinska Hospital Center for Cervical Cancer Prevention and a group leader at the Department of Laboratory Medicine, KI. She received her PhD from KI in 2013 on the topic HPV, cervical cancer epidemiology and related issues of public health under the supervision of Prof. Pär Sparén in the Dept. of Medical Epidemiology and Biostatistics. From 2014 till 2019 Karin continued her work in this field as a research associate in the lab of Prof. Joakim Dillner. During this time, she was project manager for the Swedish Resource Center for Laboratory Diagnostics (SRCLD) and research coordinator for the Nordic Information for Action eScience Center (NIASC). Since 2018 Karin has established her own independent research group focusing on molecular epidemiological studies and she also acts a consultant to the World Health Organization (WHO)'s working group on cervical cancer screening strategies in women living with HIV.

OCTOBER 22nd SPEAKERS:



Dr Swetha Vijayaraghavan

Business Developer/Analyst, FoU Ledningen, Karolinska Universitetssjukhuset

I am a biotechnologist and have a PhD in the field of dementia research from Karolinska Institutet (KI). After PhD, I continued as a post-doc at KI, during which I had an opportunity to pursue an internship at Pfizer. I worked with big patient data both at KI and Pfizer; this is when I started seeing the fun part behind analyzing data to get meaningful insights. Especially, I was interested in using business intelligence (BI) tools for data driven decision-making. Then, I decided to shift my career path and wanted to work at a place where I can implement BI tools for business development in the healthcare sector. In addition to the research experience, I equipped myself with hands-on training on different BI tools and learning how to use them for data analysis, visualization & decision-making. When I came across the perfect job advert matching my interests, I decided to go for it and now I am working as a Business developer/ R&D Analyst at Karolinska Universitetssjukhuset.



Associate Professor S. Noushin Emami

Group Leader, The Wenner-Gren Institute, Department of Molecular Biosciences, Stockholm University

Dr Emami is a molecular infection biologist expert in the field of host-pathogen interactions. She received her Master's in 2008 from the University of Tehran, Iran before moving to the University of Glasgow, Scotland in 2009 where she did her PhD studies in malaria vector ecology, behaviour, and host-parasite interaction. After completing her PhD in 2012, Noushin worked as a post-doctoral fellow at Imperial college London and in 2014 started a second post-doctoral fellowship at Stockholm University. In 2018 Dr Emami established her own independent research group at Stockholm university funded by VR where her main research ambition is to understand the chemical language that exists between pathogens and their hosts. Her research includes both patent applications and peer-reviewed publications in prestigious journals including Science, and Nature Ecology and Evolution.



Dr Stefania Giacomello

Principle Investigator, SciLifeLab, KTH Royal Institute of Technology Stockholm

Stefania Giacomello's research interests focus on developing, establishing, and applying innovative molecular and computational approaches to answer interesting biological questions in different organisms. She studied Biotechnology at the University of Udine in Italy. Before starting her PhD, she spent one year in Cambridge (UK) to study key genes involved in wheat development. This experience inspired her to conduct her PhD studies in plant genomics at the University of Udine where she started to develop her skills in next-generation sequencing and bioinformatics. Stefania moved to Stockholm in 2013 for her postdoctoral training at SciLifeLab. During that time, she contributed to the development of an innovative technique named Spatial Transcriptomics that allows to generate 2D gene expression maps in mammalian tissue sections. Moreover, she extended it to plant tissues. Before starting her research group in the end of 2018, she worked for two and a half years at the National Bioinformatics Infrastructure of Sweden as computer scientist where she mostly analyzed single-cell RNA-sequencing data. Currently, her research group focuses on the fundamental question of how cell localization influences biological processes across different kingdoms by developing and applying single-cell and spatial transcriptomics approaches, which are core technologies of her lab.



Assistant Professor Myriam Aouadi

Group Leader, Integrated Cardio-Metabolic Center, Karolinska Institutet

I received my PhD in June 2006 from the University of Nice Sophia-Antipolis, France, in the laboratory of Yannick Le Marchand-Brustel. My work focussed on the role of MAPK pathways in the commitment of embryonic stem cells in different lineages. I found that p38MAPK is an important player in the early steps of neurogenesis and myogenesis, while it is required for the late stages of adipogenesis. In 2006, I joined the laboratory of Michael Czech at the University of Massachusetts to work on the emerging field of immunometabolism, that investigates the interactions between immune and metabolic cells. During my postdoctoral studies, I developed a method to deliver siRNA specifically to macrophages in vivo. This unique technology allows the study of particular factors expressed by macrophages specifically. In 2009, I became assistant professor at the University of Massachusetts and used this novel technology to show that while macrophages in the adipose tissue could be detrimental to insulin sensitivity, they could be beneficial as well.

I started my laboratory at the Integrated Cardio-Metabolic Center at the Karolinska institute in 2015. My lab investigates the multiple roles and heterogeneity of liver and adipose tissue macrophages in metabolic diseases. Teamwork, curiosity, passion and enthusiasm are the important qualities that I am looking for and found in my lab members.



Assistant Professor Ismael Valladolid Acebes

Group Leader, The Rolf Luft Center for Diabetes and Endocrinology, Karolinska Institutet

My thesis defence took place at San Pablo-CEU University, Madrid, Spain, in 2012 obtaining the maximal qualification (*Cum Laude*) unanimously. After my thesis defence, I spent five years of post-doctoral training in the Departments of Neuroscience and Molecular Medicine and Surgery (MMK) at Karolinska Institutet. Since June 2018, I upgraded my position and obtained my assistant professorship in the The Rolf Luft Research Center for Diabetes and Endocrinology at Karolinska Institutet. For a decade, I have been conducting research studies in the area of obesity and diabetes in different animal models. These studies aimed to understand the underlying mechanisms by which metabolic diseases induce changes in synaptic plasticity and in the neurochemistry of neurotransmitters in different brain areas involved in learning processes, memory, reward and regulation of energy balance. In the last five years, my lines of research have been focused on the treatment of diabetes through the transplantation of pancreatic islets of Langerhans of histocompatible donors in the anterior chamber of the eye of mice with diabetes. These precedents are supported by 16 scientific publications in prestigious international journals, the co-authorship of five book chapters, numerous communications to national and international congresses and symposiums and the co-supervision of two doctoral theses defended at Karolinska Institutet in January 2017 and in September 2017, respectively.