

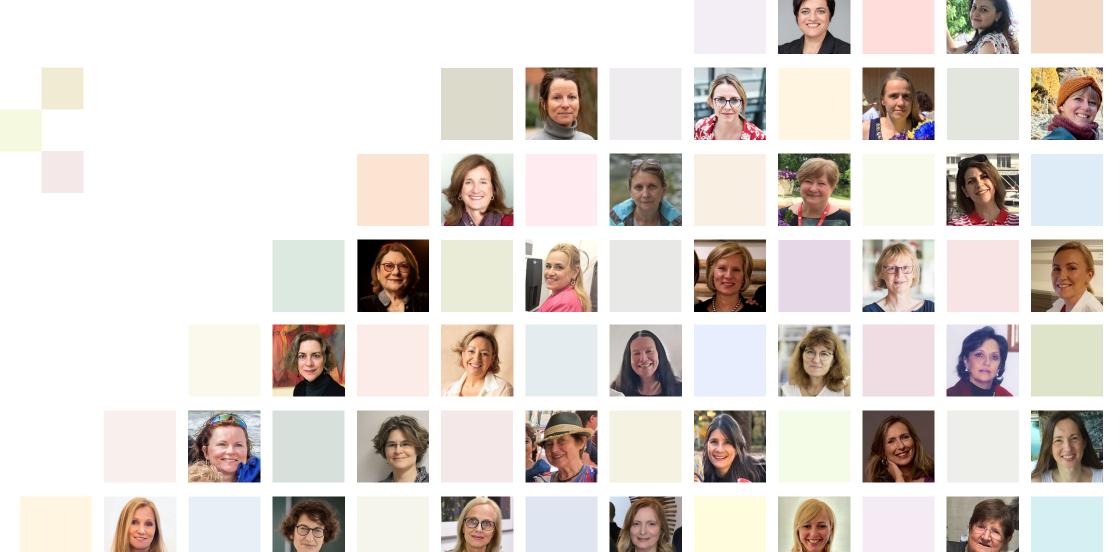


Women's Careers in Science

Celebrating female scientists across FEBS Constituent Societies

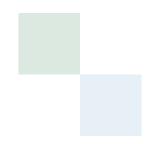


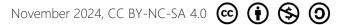






Edited by Marta Reyes-Corral







Preface

We are delighted to present the *Women's Careers in Science* eBook, an initiative by the Careers of Young Scientists Committee in collaboration with the Working Group on Women in Science.

As part of the activities to celebrate FEBS' 60th anniversary (1964–2024), FEBS Constituent Societies were invited to nominate one of their female scientists. The aim of this book is to illustrate the diverse ways in which women navigate their careers in science alongside personal and family commitments. On each page, you will find women nominated by their National Society with a summary of their research and career as well as a timeline with some of their key professional and personal milestones.

This book is a celebration of women scientists across FEBS Constituent Societies, and we sincerely hope it serves as an inspiration for the future generations of female scientists.

Irene Díaz-Moreno Chair of the Careers of Young Scientists Committee

Caroline Dear

Caroline Dean Chair of the Working Group on Women in Science



Agnieszka Dobrzyń Polish Biochemical Society, PTBioch



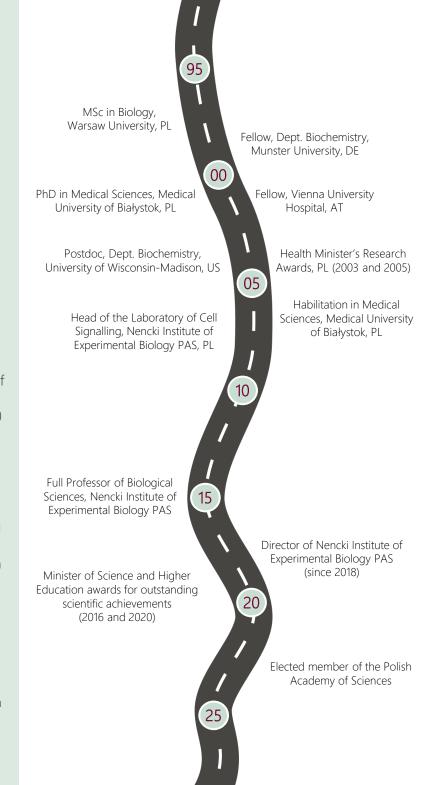
Research

I'm a molecular biologist with a background in medical sciences. My research group is multidisciplinary, focusing on signaling and transcriptional cascades that have significant implications for cell metabolism and human metabolic diseases, particularly type 2 diabetes. Our main goal is to understand how lipid metabolites and epigenetic regulators of gene expression contribute to the development of insulin resistance and pancreatic β-cell dysfunction. My research interests are broad and include the metabolic regulation of the DNA damage response, epigenetic regulation of pancreatic islets' metabolism and function, and the use of induced pluripotent stem cells (iPSCs) as a source of insulin- and glucagon-producing cells for tissue engineering and regenerative medicine applications.

Career

My early scientific career in biology was inspired by my father, a chemist. Following this, I earned

a PhD in Medical Sciences, which opened up the world of metabolic disorders to me. I completed a 4-year postdoctoral training at UW-Madison, US, where I became fascinated with cell metabolism. By the age of 33, I achieved habilitation and established my own research group. Over the years, I have supervised 11 PhD students, with one already being an independent researcher. For the past six years, I have served as the Director of the Nencki Institute of Experimental Biology PAS, being the first woman to hold this position in over 100 years of the institute's history. I am also an active member of several societies including EMBO-YIP and the International Conference on Biology of Lipids (ICBL), where I have been serving as the President since last year. Recently, I have developed a strong interest in translating basic research to clinical applications, initiating the SPARK initiative in Poland, known as "Translational Scientists Without Borders". Two years ago, I had the honor of becoming a member of the Polish Academy of Sciences.





Amal Safi Moroccan Society for Biochemistry and Molecular Biology, SMBBM

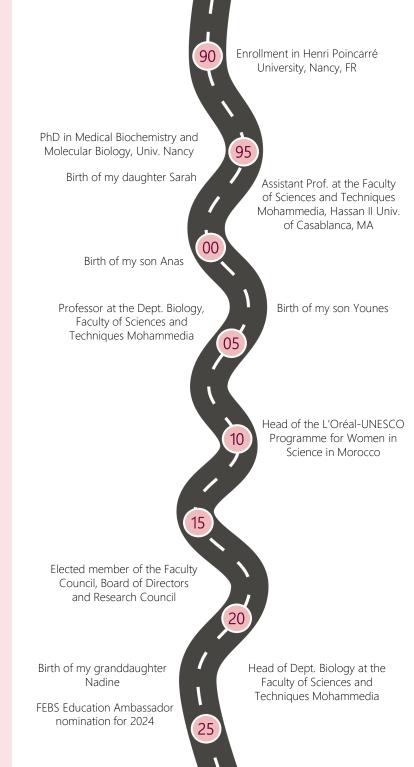


Research

My research team studies the genes involved in gestational diabetes to identify genetic variations that may influence this condition. By analysing genomic data, we identified genes and metabolic pathways linked to increased risk. This helps to understand the mechanisms underlying the disease and to identify new therapeutic targets. Our results can guide the development of personalised treatments, improve prevention strategies and offer avenues for early interventions, thereby reducing complications for mothers and unborn children. For me balancing personal and professional life was a true challenge. Juggling the demands of work and family, I was able to overcome all the difficulties and be a super mom of one daughter and two sons. In 2024 I became the youngest grandmother of our faculty.

Career

I studied medical biochemistry and molecular biology at the Faculty of Medicine of Univ. Henri Poincarré in Nancy, France, where I completed my PhD in 1995. Currently, I am Full Professor and Head of the Biology Department at the Faculty of Sciences and Techniques Mohammedia, in Morocco. My career has been very fruitful, I have had several responsibilities and was elected a member of the Faculty Council, where I participated very actively in all the Faculty's decisions. As head of the L'Oréal-UNESCO Programme for Women in Science in Morocco, I was able to participate in scientific excellence on a national and international scale for women. I have contributed to raising awareness among the general public of advances in biotechnology through conferences and popular science articles. In 2023, I published 8 scientific articles and contributed to various national and international projects.



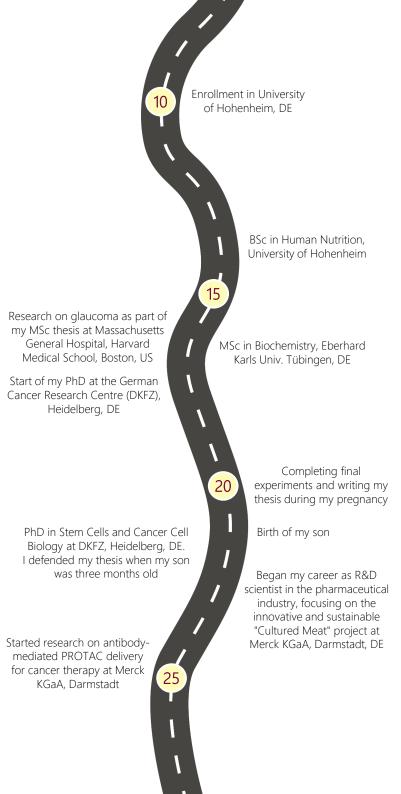


Andrea Geist German Society for Biochemistry and Molecular Biology, GBM



Research

Our team is investigating the PROxAb Shuttle, a technology that utilises bispecific antibodies to transport molecules known as PROTACs. These PROTACs are designed to target and degrade specific disease-related proteins inside cells, with the aim of treating diseases such as cancer. The approach seeks to selectively eliminate cancer cells while minimising damage to healthy cells. Experimental tests, ranging from laboratory *in vitro* experiments to *in vivo* studies, have validated this methodology, showing potential for developing PROTAC Shuttles for cancer treatment therapies.



Career

My career has been shaped by my passion for molecular biology, hard work and the amazing support of the people around me. Balancing being a mother to a 3-year-old boy and pursuing a career in science has taught me the value of perseverance, adaptability and focus. Managing these responsibilities has taught me valuable lessons that I apply in both my professional and personal life. It's taught me to prioritise what's important and to be committed to everything I do. I am motivated by the desire to have a positive impact on the treatment of cancer and to strive for excellence in my scientific work.

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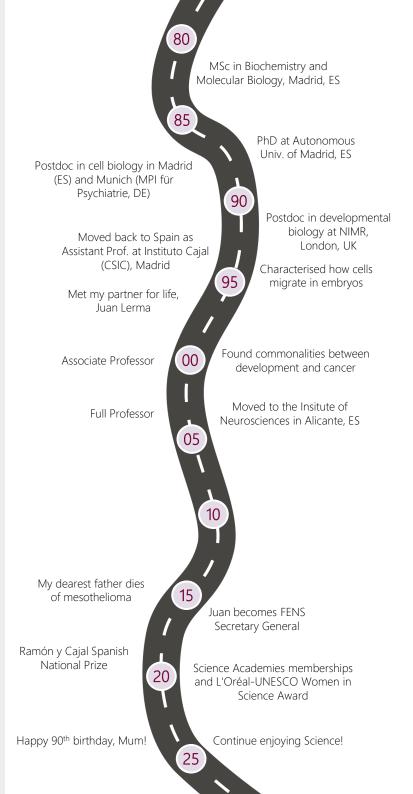
Ángela Nieto Toledano

Spanish Society for Biochemistry and Molecular Biology, SEBBM



Research

Since 1993, I have been leading a research group focused on exploring cellular plasticity in both developmental processes and disease contexts. Our main contribution has been the impact that the reactivation of developmental programmes has on adult diseases, including cancer progression and organ degeneration.



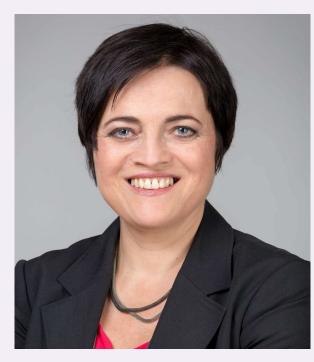
Career

My career is a blend of dedication and joy. Unearthing and solving an artifact during my PhD studies endowed me with the resilience to navigate failure and the capacity to relish success. To me, science embodies rigor, passion, freedom, and generosity. I extend my heartfelt gratitude to everyone in my lab, my partner, my family, my colleagues, and my friends, whose unwavering support has sustained me throughout these 30 years.



Angela Sessitsch

Austrian Association of Molecular Life Sciences and Biotechnology, ÖGMBT

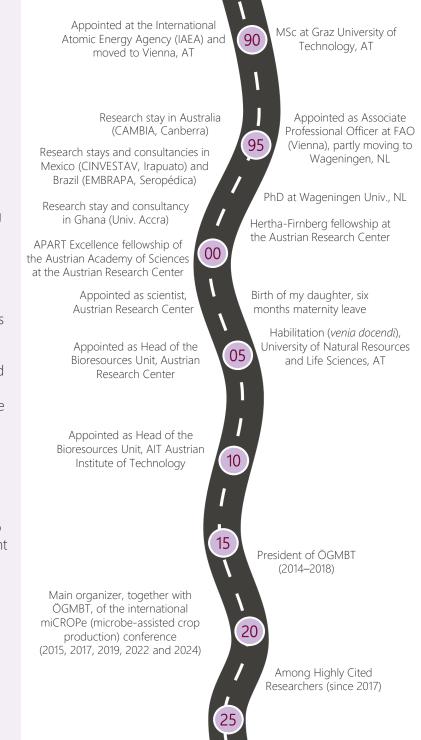


Research

My group has pioneered plant-associated microbiomes and is interested in understanding the interactions between plants, microbiomes and the environment as well as in developing applications for sustainability. We study the ecology of bacterial endophytes (i.e., bacteria colonising the plant endosphere) and we also explore microbiota in other plant compartments such as the rhizosphere. We are particularly interested in understanding the functioning of plant microbiota in regard to plant nutrition and stress mitigation. We have developed various applications and application technologies to use microorganisms for plant protection and crop enhancement.

Career

My early-stage career was rather unusual as after my MSc I had a position at the United Nations to facilitate technology transfer to less developed countries and, at the same time, I was a PhD student at Wageningen University, NL. My independence and motivation helped me to successfully finish my PhD in a more or less remote way. Fellowships like the APART Excellence fellowship of the Austrian Academy of Sciences greatly helped me to build an independent group and to secure a fixed position in a non-university, academic research institution. This was the time when my daughter was born and my husband, a veterinarian, has been always very supportive. During my maternity leave I finished my habilitation. Support from my husband also helped me to take more responsibilities on board and I became Unit Head in my institution, being responsible for budget, personnel development, and strategic development of the Unit involving several research groups.





Beáta G. Vértessy Hungarian Biochemical Society, MBKE

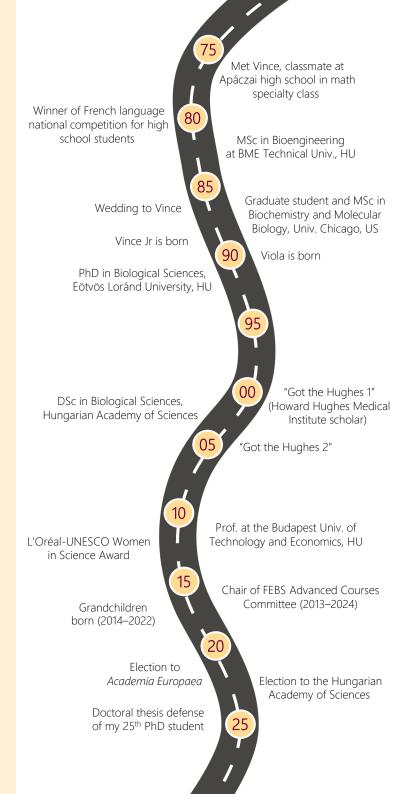


Research

My group defined key concepts in uracil-DNA metabolism revealing fundamental structural and functional aspects of the dUTPase enzyme family and discovering novel roles of uracil bases in genomic DNA. My role in mentoring students from early undergraduate to postgraduate levels led to numerous successful careers in science and innovative biomedical businesses.

Career

I graduated from BME Technical University in Budapest and also received a MSc from the University of Chicago. My lab and our research relies on a beautiful quote from János Apáczai Csere, a leading scholar and writer of 17th century Hungary: "The root of science is bitter, while its fruit is exquisite." ("A tudomány gyökere keserű, gyümölcse pedig gyönyörűséges.")





Carine Michiels Belgian Society of Biochemistry and Molecular Biology, BMB

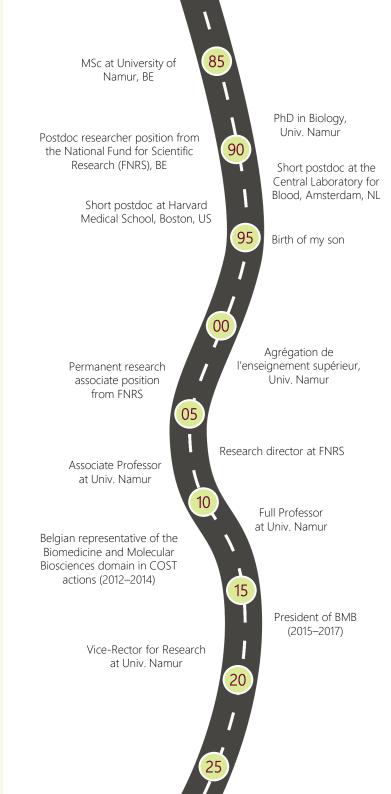


Research

My group investigates the mechanisms of tumor progression and resistance to chemo-, radio- and immunotherapies, with the aim to develop novel strategies to overcome treatment resistance or relapse. In this context, the effect of several physical features of the tumor environment as well as cellular mechanisms of resistance and invasiveness are investigated, such as tumor hypoxia, cell death, inflammation and the interaction of cancer cells with the tumor microenvironment. Of particular interest is the use of charged particle radiotherapy, alone or in combination with gold nanoparticles, of immunotherapy to potentiate cancer cell killing and of drug combination to induce synthetic lethality.

Career

Research has always been fascinating for me. My mother used to tell me what she was doing as a lab technician, helping researchers to perform the first skin grafts in mice, but she had to stop when I was born. I studied biology with the aim to study plant biotechnology, but I finally ended up in a human cell biology lab. I never regretted this choice. More than 40 years later, I'm still passionate by the complexity of cell behaviour, and more particularly by the plasticity of cancer cells. Teaching the scientific methodology to students and supervising young researchers is something I like very much.



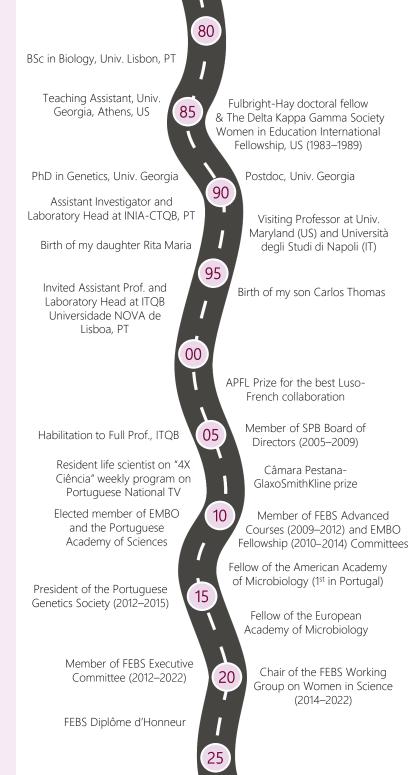


Cecília Arraiano Portuguese Biochemical Society, SPB



Research

My lab focuses on the control of gene expression, namely RNA processing and degradation. We have studied RNase II family of ribonucleases in maturation, decay, and quality control of mRNAs and functional non-coding RNAs. Another area of interest is synthetic biology. We also study stress, biofilm, and bacteria pathogenesis and survival. Our work has been applied in areas of health and biotechnology.



Career

I am the Coordinating Investigator and Head of the Control of Gene Expression Laboratory at ITQB Universidade NOVA de Lisboa, Portugal. I was a Fulbright-Hays Scholar in the US, where I finished my PhD in Genetics at the University of Georgia, Athens, in 1989. I did a postdoc also in the US before coming back to Portugal, where I set up my laboratory at CTQB (later ITQB NOVA). I had two children while setting up my lab. I was a Visiting Professor at the University of Maryland (Baltimore, US) and at the Università di Napoli (Italy).



Daniela Corda Italian Society of Biochemistry and Molecular Biology, SIB

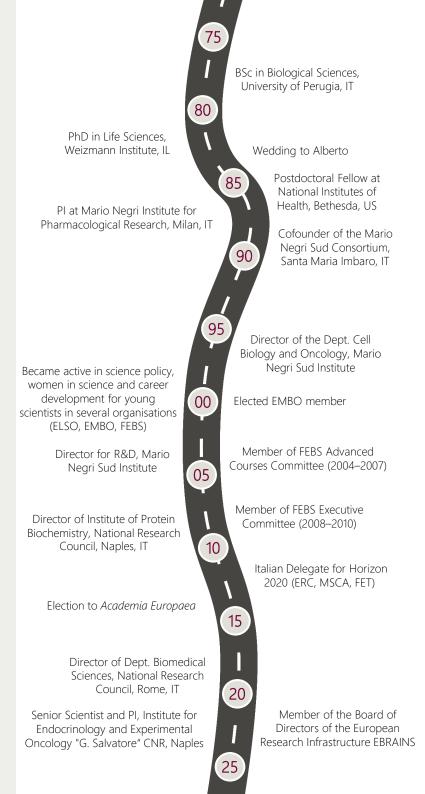


Research

My group has pioneered the field of protein mono-ADP-ribosylation, having highlighted the physiology and functional significance of this reaction. We contributed to the discovery of a membrane-fission protein machinery crucial in membrane trafficking and mitotic partitioning of the Golgi. On the lipid signaling side, we identified a phosphoinositide metabolite, glycerophosphoinositol, involved in inflammation and immune response, now on the market as an anti-inflammatory compound.

Career

My career began as a biology student in Perugia, the first time I saw a living cell under a microscope, and decided I wanted to understand everything about its life. However, the doctoral period at the Weizmann Institute remains the fundamental element of my career. There I understood the importance of being part of a scientific community and what I needed to overcome the difficulties I might encounter. It was fundamental to meet Alberto there, a scientist with whom I have until now shared my passion for science and, in fact, my life. This definitely helped me when I was a young woman in science: we always supported each other during the different stages of our careers, and this made our lives challenging and fun at the same time. This endless enthusiasm was rewarded with independent and successful careers for both of us.





Evdokia Pasheva

Bulgarian Biochemical, Biophysical and Molecular Biology Society, BBMBS

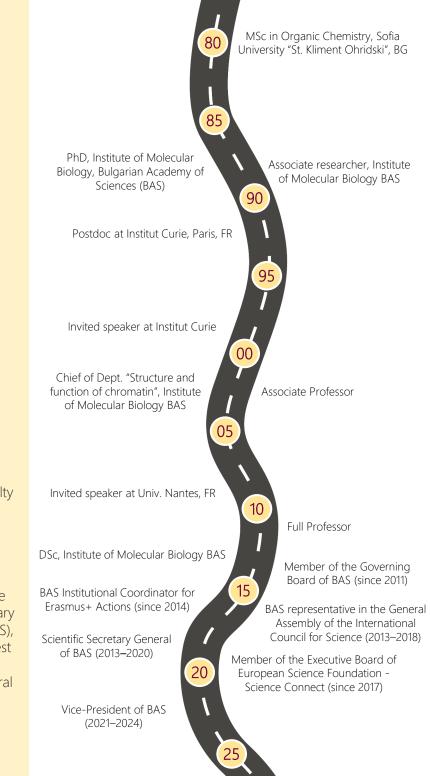


Research

I am a researcher specialized in the fields of biochemistry, molecular and cellular biology, DNA replication and repair, epigenetic control, chromatin structure and remodeling, and tumorigenesis. More specifically, I work on the effect of postsynthetic modifications of proteins on their structure and functions. My research focuses on protein-receptor interactions and how these interactions affect the invasion potential of different tumor cells.

Career

I graduated from Sofia University "St. Kliment Ohridski", Faculty of Chemistry. I devoted myself to research in the field of molecular biology, and my scientific career led me to the Institute of Molecular Biology at the Bulgarian Academy of Sciences (BAS), where I earned the degree of Doctor of Science and hold the position of professor. I completed my postdoctoral specialization at the Institut Curie in Paris. I have been honored with several awards, including the BAS honorary badge "Prof. Marin Drinov" (a distinctive mark of merit to BAS), a prize from the Ministry of Education and Culture for the best implemented project in medical and biological sciences, an honorary status from the Council of the European and Cultural Community as a leader with high prestige and public recognition in the field of science, and the Gold coin for contributions to the development of Bulgarian science.





Faiza Fakhfakh Tunisian Association of Biological Sciences, ATSB



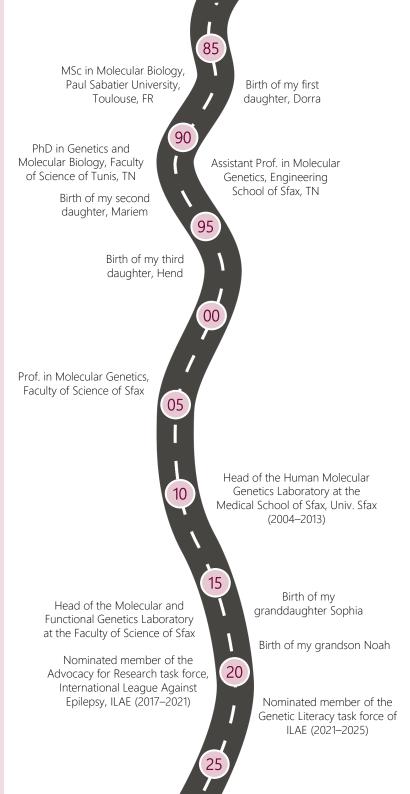
Research

My research team focuses on the genetic and molecular aspects of monogenic or complex neurological inherited diseases, including dystrophies, mental retardation, epilepsy, and metabolic inherited pathologies. We were the first to identify mutations in mitochondrial diseases in Tunisian patients, establishing ourselves as a reference in the field in Tunisia. We initiated genetic analyses in hereditary neurological diseases such as congenital muscular dystrophies, epileptic syndromes, and Rett syndrome. Currently, we explore functional and epigenetic aspects of these pathologies. Despite challenges, I introduced new technologies in my lab, participated in national and international projects, published

over 150 scientific articles, and presented at various national and international congresses. For my work in epilepsy genetics, I was nominated by the International League Against Epilepsy (ILAE) to join its Task Force on Advocacy for Research and later its Genetic Literacy Task Force.

Career

I studied Molecular Biology at Paul Sabatier University in Toulouse, France, where I obtained my Master's degree, and later I earned my PhD in Genetics and Molecular Biology from the Faculty of Science of Tunis, Tunisia. Currently, I am a Full Professor of Genetics and Molecular Biology in the Department of Life Sciences at the Faculty of Science of Sfax, Tunisia, where I have held several responsibilities related to teaching and research. I was the principal investigator on the committee for creating and designing the academic program for the Master's in Genomics and Proteomics in my department. I have supervised many Master's and PhD students in the field of genetics and molecular Biology. I was also nominated as the Head of the Laboratory of Human Molecular Genetics at the Faculty of Sfax for ten years, and I continue to serve as the Head of the Laboratory of Molecular and Functional Genetics at the Faculty of Science of Sfax. Additionally, I was elected as a member of the faculty council and nominated as the president of the professor recruitment committee, as well as an expert for research project evaluations.





Flora Sarukhanyan Armenian Association of Biochemists, AAB



Research

My group investigates the role of hemorphins —hemoglobin-derived peptides— and the involvement of calcineurin in the pathophysiology of different diseases (diabetes, cancer, endotoxin-induced stress, or Parkinson's disease). We discovered antidiabetic, antitumor and neuromodulatory effects of hemorphins mediated through the Ca²⁺/calmodulin/calcineurin signalling pathway. Starting point in my career: Volkswagen-Stiftung research project with the Dept. Molecular Pathology, Univ. Würzburg, DE

First organizational experience: FEBS WGI regional visit to Armenia & FEBS Education Workshop on Biochemistry and Molecular Biology

> Secretary of the Armenian Association of Biochemists (2011–2013)

Supervision of PhD students

Head of the Neuropeptides

Biochemistry Group, H. Buniatian Institute of Biochemistry NAS RA

> Secretary of the Armenian Association of Biochemists (since 2023)

MSc in Biophysics, Yerevan State University, AM

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Participation in FEBS Congresses and Council meeting delegate

Junior researcher, H. Buniatian Institute of Biochemistry NAS RA, Yerevan, AM

PhD in Biochemistry, H. Buniatian Institute of Biochemistry NAS RA

Senior Scientific Staff, H. Buniatian Institute of Biochemistry NAS RA

Lecturer in Microbiology, Yerevan Haybusak University, AM

> Training at American Univ. of Armenia (AUA) Extension: Entrepreneurship, Leadership and Communication Program for Women

Career

My career in Biosciences is based on love, dedication and responsibility, so I preferred to be a scientist rather than a medical doctor. At the beginning of my professional pathway, I was lucky to combine research work and social activity which allowed me to expand my scientific vision. Numerous activities in the lab including tutoring, supervision of students, mastering of leadership skills and socialising with lab fellows, brought me to the current position as a Scientific Group Leader. Although I don't have my own children yet, the love and warmth received from my six nieces and nephew helped me on my personal and professional path.



Helike Lõhelaid Estonian Biochemical Society, EBS

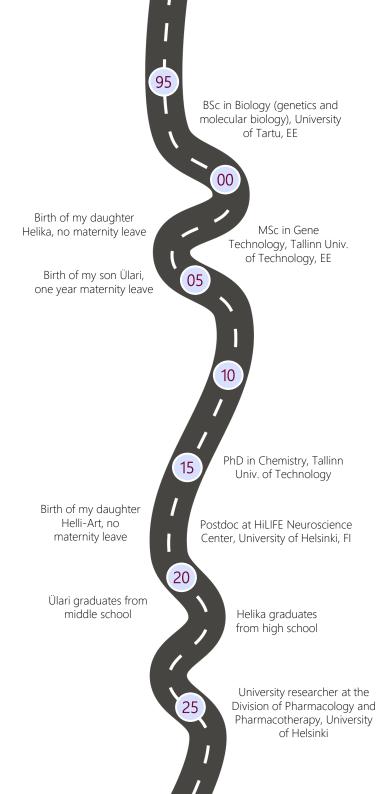


Research

My research has evolved around wound healing, inflammation, and bioactive lipid mediators. Currently, I study ischemic stroke and my goal is to discover new lipidbased biomarkers for the detection of stroke.

Career

My path in science has been a curvy road: I started my career in biology, then studied gene regulation and dioxygenase enzymology, and coral oxylipin biosynthesis in response to stress. Now, I investigate ischemic stroke in rodent models. In parallel, I have raised up three kids as a single mother (aged 21, 18 and 6). Joining both worlds has been difficult and time consuming but has brought me a lot of joy and fulfillment.





Henriette Aksnes Norwegian Bioscience Society, NBS



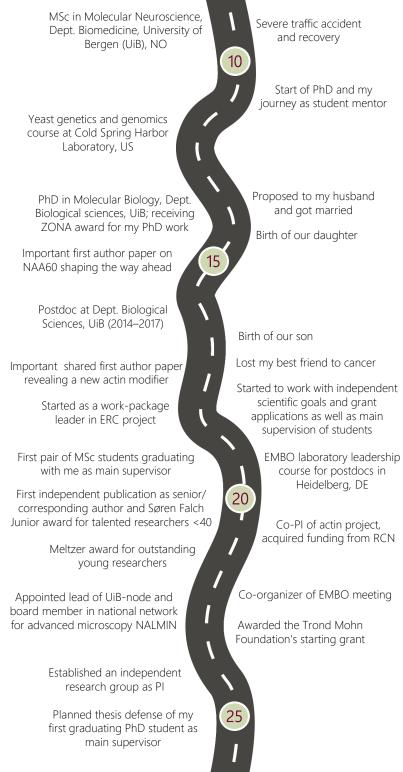
Research

My newly established research group focuses on membrane proteins with crucial functions in the brain. The group's direction stemmed from my previous work on the enzyme Nalpha-acetyltransferase 60 (NAA60), which catalyzes N-terminal acetylation, a highly abundant and essential protein modification. NAA60 plays a role in preserving the structural integrity of the Golgi apparatus, and therefore has a crucial function in the secretory pathway. Amongst other things we would like to understand how

pathogenic variants of NAA60 contribute to a hereditary form of brain calcification. The overall goal of the group is to employ cell biological tools, such as microscopy, to investigate membrane proteins and how their modifications (or lack thereof) impact neurodegenerative diseases.

Career

My fascination with the molecular biology of the brain was sparked during my first year at the University of Bergen (UiB) while studying psychology. I then pursued an MSc in molecular neuroscience, focusing on the synaptic plasticity protein Arc. During my PhD in molecular biology, I specialized in the lesser-known protein modification N-terminal acetylation and the protein NAA60, in the lab of Prof. Thomas Arnesen, who was highly supportive for my continued career. Already at the start of my PhD, I was entrusted with the supervision of two MSc students. I thrived very well in the mentor role and continued to work with students ever since. During my postdoc, science took me on a tour to actin cell biology as we discovered a new actin modifier, and I continued to work on this as a researcher in an ERC-funded project. During this time, I also revisited NAA60 and pursued an independent research direction, combining my knowledge of N-terminal acetylation with my interest in neuroscience. After several years of repeatedly coming very close to securing major grants, I was finally awarded a starting grant by the Trond Mohn Foundation, allowing me to establish my own research group.



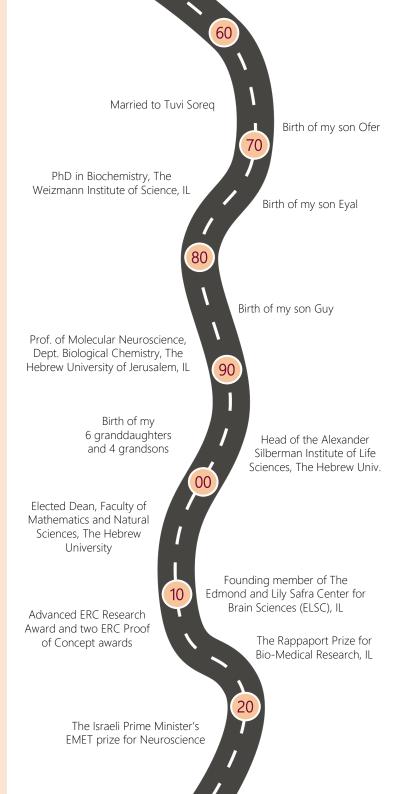


Hermona Soreq Israeli Society for Biochemistry and Molecular Biology, ISBMB



Research

My group explores long and short noncoding RNA regulators of acetylcholine in health and disease, especially microRNAs and transfer RNA fragments. The complex impact of non-coding RNA controllers on brain-tobody functioning is largely unresolved, although microRNAs and transfer RNA fragments rapidly acquired wide recognition as global controllers of such regulatory processes. We focus on acetylcholine-related pathways to combine advanced computational neuroscience with RNAsequencing technologies, transgenic engineering and microscopy analysis tools to investigate controller RNA functions in the healthy and diseased brain and body and their interactions.



Career

My group discovered primate-specific "CholinomiR" silencers of multiple genes that compete with each other on suppressing their targets and identified cholinergic brain-to-body regulation of anxiety and inflammation. In Israeli human volunteers, we found cholinergic-associated pulse increases under fear of terror and identified massive CholinomiRs decline in Alzheimer's brains, which accompanies changes in long non-coding RNAs and points at Statins and circular RNA interventions with Parkinson's disease progression. In engineered mice, we studied CholinomiR and CholinotRF responders to inflammation, ischemic stroke, epilepsy and liver fattening, as well as trait anxiety, blood pressure and inflammation. By identifying CholinomiR differences between men and women living with schizophrenia and bipolar disorder, and modified structure of cholinergic interneurons under mild social stress, our work leads to molecular neuroscience-driven prevention and/or intervention with diseases involving impaired acetylcholine signalling.





Kristina Djinović Carugo Slovenian Biochemical Society, SBD

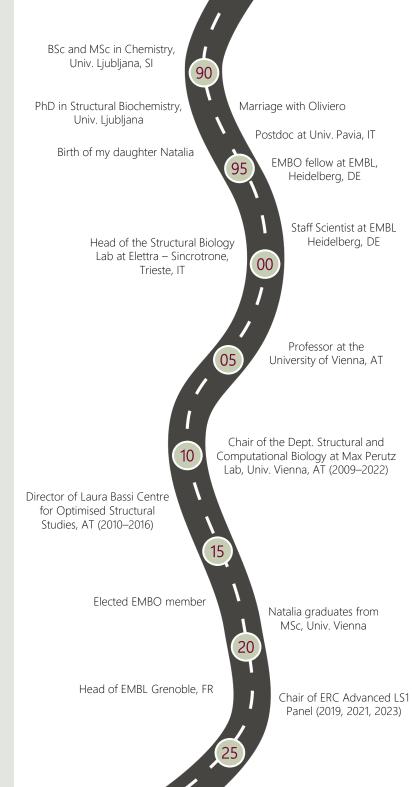


Research

My lab studies the molecular architecture of muscle sarcomere Z-discs, which connect actin filaments, transmit force and signal. We employ integrative structural biology methods, combining biochemical, biophysical, structural, and functional approaches to address key questions about Z-disc assembly, force transmission dynamics, hierarchical organization during biogenesis, and the impacts of posttranslational modifications and pathological mutations on Z-disc structure and function.

Career

As a scientist I would like to be recognised in the field for my contributions to understanding the muscle cytoskeleton. As a Head, for cultivating an enriching environment and ensuring staff has access to cutting-edge resources in a motivating and collaborative atmosphere. Personally, my goal and challenge is to harmonise the demands of a fulfilling professional life with a rich and nurturing personal life, leveraging the strength of a supportive family and the diverse cultural experiences, coming from being from and wiring in different countries. As a consequence, my daughter speaks five languages.



Lejla Pojskić

Association of Biochemists and Molecular Biologists in Bosnia and Herzegovina, ABMBBIH



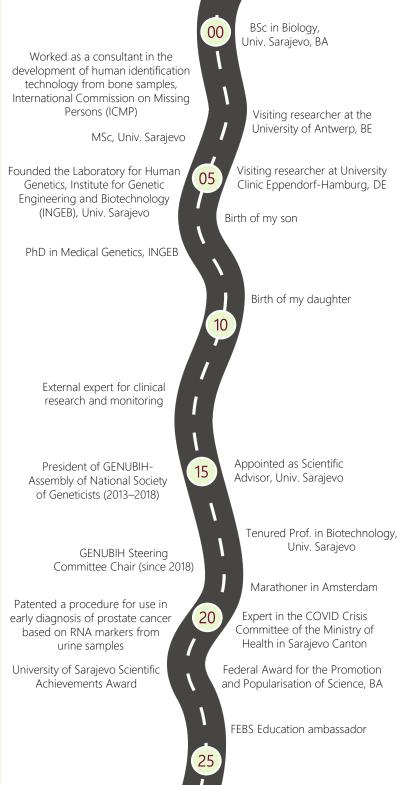
Research

My research activities can be divided into two segments: first, genomics of complex traits and diseases, which focuses on genetic association studies of bipolar disorder, neurogastric disorders, and infection-associated traits. Second, differential gene expression as a marker of therapeutic and epigenetic effects of xenobiotics, which involves the use of targeted transcriptome analysis to explore potential mechanisms of action. I have also participated in the development of two patents.

Career

I work as a scientific advisor at the Institute for Genetic Engineering and Biotechnology, University of Sarajevo, where I have been working since 2000. I got my PhD in medical genetics in 2007 and my professional path was determined during my visiting researcher training at the University of Antwerp and University Clinic Eppendorf-Hamburg. In 2005, I founded the Laboratory for Human Genetics, which investigates tumour

markers and molecular diagnostics applications. I serve as a lecturer and mentor in Genetics and Biotechnology in several faculties in Sarajevo, Tuzla and Banja Luka, and I have been a visiting professor and researcher in Croatia, France, Turkey, Portugal and Germany. I am the leader of the innovative research section at the University of Sarajevo and work on empowering young researchers for innovative and translational research to support interaction between academia and industry. As such, I have mentored/co-mentored dozens of postgraduate researches, including several doctoral theses. I am an active member of several Bosnian (GENuBiH, ABMBBIH, GENOFOND) and European (EFB, ESHG) associations. I am also a proud wife, mother of two teenagers, and a marathon runner.





Luciane Vieira de Mello UK Biochemical Society



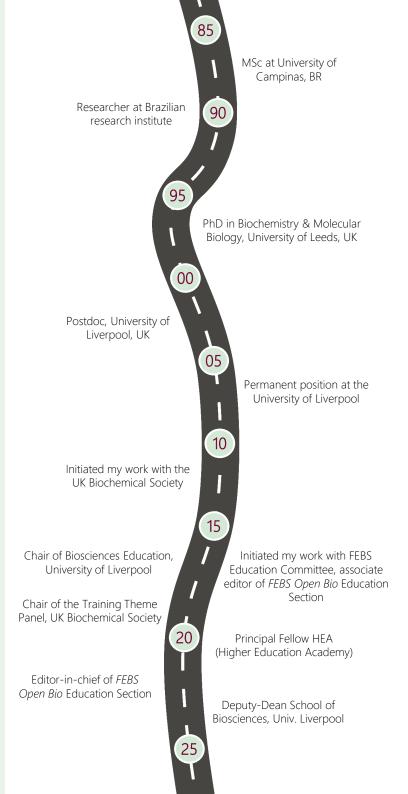
Research

I am a biologist from the University of Campinas, Brazil. I started my research in plant genetics, slowly moving into bioinformatics while working in a research institute in Brazil. I fully embraced bioinformatics in my PhD training, combining it with molecular biology and biochemical analysis in the UK. This was followed by a postdoc on bioinformatics sequence analysis. I published over 40 peerreviewed articles in biological sciences, and learned how different areas of science complement each other. But, while working in a university since 2006, I also became aware of the importance of educating our future scientists. After training myself in Education (MA) in 2014, I now research and publish in this area. Although primarily focusing on the topics of skills development and internationalisation, I engage in diverse aspects of educational

research which benefit students. I consider myself fortunate to have had the opportunity to take my research knowledge and experience to the classroom and influence institutional policies. My research in science education has been recognised by national and international prizes.

Career

As with research interests, my career has also integrated different areas of science. After many years working in a research institute in Brazil, and a few years as researcher in the UK, I transitioned from a career in science to education, dedicating myself to training and inspiring future scientists. Today, I have different leadership positions in a UK university; I am deputy Dean of the School of Biosciences at the University of Liverpool, and also lead the provision of our postgraduate courses. Externally, I am a Principal Fellow of the HEA, and a member of the Biochemical Society and FEBS. For the former, I am the Chair of the Training Panel and a co-chair of the Education Committee. For the latter, I am the editor-in-chief for the *FEBS Open Bio* Education Section. Overall, I aim to bring science and education together in a meaningful way. I am a proud mum of two who, together with my husband, always encourage me to keep growing in my professional and personal life.





María Luz Cárdenas

French Society for Biochemistry and Molecular Biology, SFBBM



Research

I am an enzyme kineticist. I began working on isolated enzymes, focusing on glucokinase, the first monomeric enzyme shown to follow sigmoidal kinetics. Among the four hexokinases in rat hepatocytes, only glucokinase is diet- and hormone-dependent. My interest in metabolic regulation and enzymes as components of metabolic pathways led me to explore Erwin Schrödinger's question, "What is Life?". More recently, I have studied cell interactions in bacterial consortia, which enable direct metabolite transfer between different species.

Career

I studied at the University of Chile, where I had excellent teachers such as J.E. Allende, C. Connelly, O. Cori, G. Hoecker, H. Niemeyer, and O. Pizarro. I became a teaching assistant, later associate professor. For my doctoral research with Niemeyer, I studied glucokinase kinetics. I combined research with full-time teaching due to a lack of grants for doctoral students, eventually obtaining my doctorate in 1982, shortly before marrying Athel Cornish-Bowden. He had been our competitor and we had met a few years earlier at a meeting in Santiago. I moved to Birmingham for a postdoctoral position with lan Trayer and was invited by Tsou Chen-Lu to spend a month in China. Later, we moved to the CNRS in Marseilles, invited by Jacques Ricard. Our daughter Isadora was born in England but grew up in France, becoming fluently trilingual by age five. This greatly facilitated my career development, as it made it easy to take her with us when I was invited to meetings. At the CNRS, Athel and I have collaborated on projects like interconvertible enzymes and the Nature of Life, and also worked separately on bacterial consortia. I have promoted women scientists in France (creating SFBBM-AFSI) and more generally in FEBS. I am a member of the Biochemical Society, the Spanish Society of Biochemistry and Molecular Biology (Tito Ureta Prize 2015).



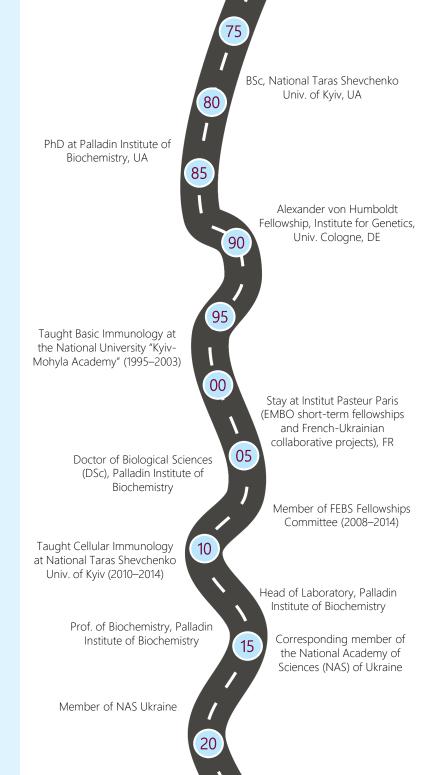


Maryna Skok[†] Ukrainian Biochemical Society, UBS



Research

Me and my team were the first to show that nicotinic acetylcholine receptors (nAChRs) regulate B lymphocyte development and activation, and that functional nAChRs are expressed in intracellular organelles: mitochondria, nuclei and synaptic vesicles. Our studies revealed the prominent role of α 7 nAChRs in neuroinflammation-induced cognitive impairment and in pathogenesis of COVID-19 and post-COVID complications.



Career

I have developed most of my career at the Palladin Institute of Biochemistry (NAS Ukraine), embarking as a PhD student in 1979 and progressing to my current roles as Principal Researcher since 2008 and Head of the Cell Receptors Immunology Laboratory since 2012. Additionally, I have had the privilege of teaching Immunology across various Ukrainian institutions since the mid-90s.

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In loving memory of Maryna Skok (1956–2024)

Miriam Stoeber Life Sciences Switzerland, LS²



Research

My team studies the large family of Gprotein coupled receptors (GPCRs), which transduce information about incoming stimuli into precise signalling cascades that alter human physiology. We investigate how GPCRs fine-tune the cellular response according to the exact ligands bound, including endogenous molecules and therapeutic drugs. In this context, we aim to unravel how the receptor localisation in the cell defines the ability to receive and interpret stimuli. We also develop tools to precisely sense and modulate distinct elements of the GPCR signalling cascade, often employing single-domain antibody fragments called 'nanobodies', that currently have a large impact on basic research and drug development.

Career

My career has enabled me to immerse myself in leading research environments across Europe and the US. It allowed me not only to acquire various research skills, but also to develop an interdisciplinary mindset, a wide scientific network, and the confidence that any scientific problem can be tackled with a creative and dedicated team. New research projects and technologies continue to shape my scientific interests, which first ignited when I saw receptors move inside cells in real time under a fluorescent microscope as a Master's student. While linked to many challenges, I enjoyed all career steps from student to associate professor, largely due to the fantastic colleagues and memorable experiences inside and outside the lab. Together with my husband, who also leads a research team, we were able to share most of the steps and now we have two kids who sometimes get to peek through the microscope and ask a lot of difficult questions.





Nina Kulikova Association of Georgian Biochemists, AGB

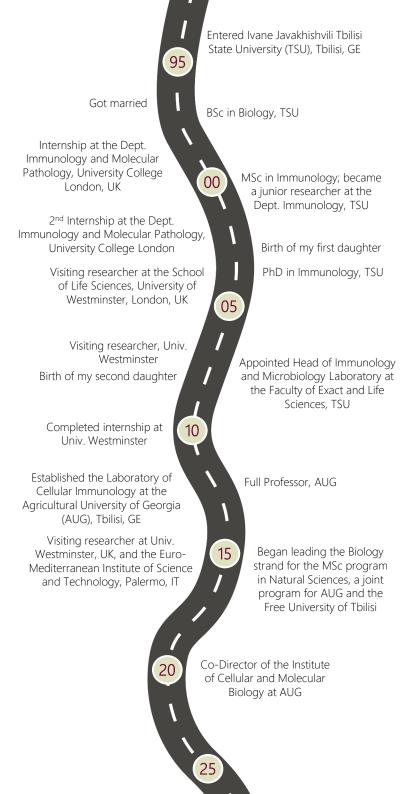


Research

At the start of my scientific career, my research focused on the immunopathology of B-chronic lymphocytic leukemia (B-CLL) and the role of the TLR family member CD180 on B-CLL cells. Later, using an in vitro 3D model of Non-Alcoholic Fatty Liver Disease, my lab studied how resveratrol affects lipid metabolism in hepatocytes and its impact on the functional polarization of macrophages. My recent work emphasizes the biomedical applications of biodegradable polymeric films for wound healing and how these biopolymers can enhance wound closure by promoting cooperative interactions between fibroblasts and macrophages.

Career

My career began with a BSc in Biology from Ivane Javakhishvili Tbilisi State University (TSU), Georgia, followed by an MSc and PhD in Immunology. My academic journey includes internships at University College London and the University of Westminster, UK. With a strong background in immunology, I became the Head of the Immunology and Microbiology Laboratory at my alma mater. After several international collaborations and projects, I joined the Agricultural University of Georgia (AUG) as a Full Professor in 2013, establishing the Laboratory of Cellular Immunology. Currently, I am the Co-Director of the Institute of Cellular and Molecular Biology at AUG, teaching several BSc courses and leading the biology strand for the MSc program in Natural Sciences. I am also actively mentoring the next generation of scientists.



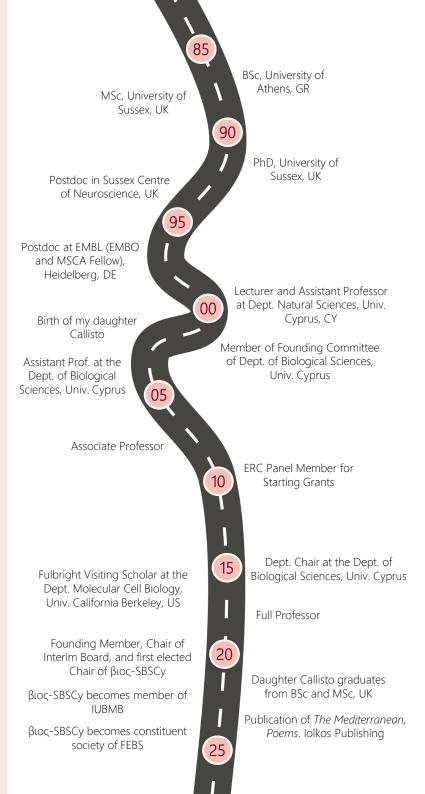


Niovi Santama βιος-Society of Biological Sciences in Cyprus, βιος-SBSCy



Research

I am a molecular cell biologist with a background in neuroscience. My PhD focused on neuropeptide gene expression in the brain, and my early postdoctoral work delved into the structure and function of subnuclear domains in mammalian neurons. The latter part of my postdocs sparked my interest in the molecular and cell biology of molecular motor proteins, which became the cornerstone of my initial work as an independent investigator. My lab explores several major themes in molecular cell biology, including the molecular physiology of neurodegenerative disease, ciliogenesis in mammalian cells, the mechanisms of nuclear envelope and endoplasmic reticulum morphogenesis in human cells, and the regulation of rRNA transcription and its integration with cytoskeleton dynamics.



Career

I studied and was trained scientifically in Greece, the UK, and Germany. As a young researcher taking up an academic appointment, I was the first biologist recruited at the then newly-established University of Cyprus, the first and only academic institution on the island at the time. I thus may serve as a role model and trailblazer for biological research and the biological community in my country. I established the first purely research-oriented laboratory in Biology in Cyprus, was amongst the first in Cyprus to obtain EU research funding, and was subsequently instrumental for the foundation of the Department of Biological Sciences at the University of Cyprus (the first such department in the country). In my lab, I worked and published in molecular cell biological research and trained young scientists at all levels. I strove to promote Cyprus at EMBO and later was one of the founding members of β_{IOC} -SBSCy, a scientific society unifying biologists from different sectors in Cyprus and linking them to the European and international societies through participation in FEBS and IUBMB.

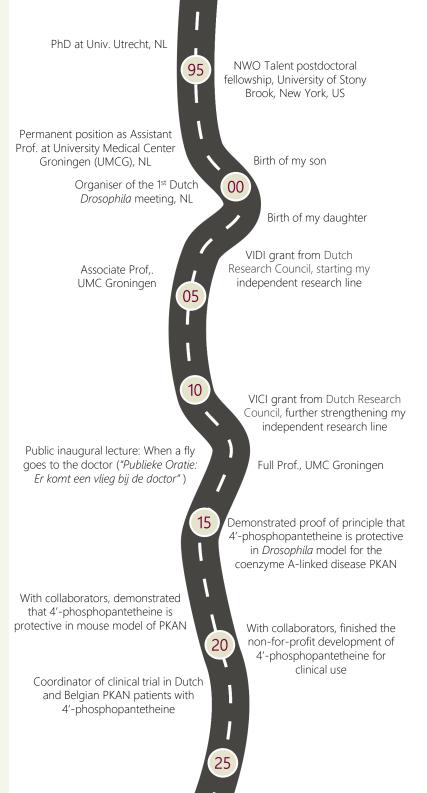


Ody C. M. Sibon The Netherlands Society for Biochemistry and Molecular Biology, NVBMB



Research

My lab studies metabolism in health and disease, focusing on inherited metabolic coenzyme A-linked diseases. We begin at a fundamental level, using yeast and fruit flies as model organisms to understand the mechanisms behind these diseases and identify potential treatment options. These findings are further studied in mice and developed towards clinical studies. Our research has revealed the presence of alternative routes for the biosynthesis of coenzyme A. These newly identified routes form the basis for the clinical trials currently running.



Career

I received my PhD in Molecular Cell Biology from the University of Utrecht, The Netherlands, where I studied the localisation of nuclear mRNAs at the ultrastructural level. I then moved to the University of Stony Brook, US, for a postdoc where I conducted genetic screening in *Drosophila melanogaster* to identify genes required for rapid cell cycles during embryonal development. In 1998, I moved to the University of Groningen, The Netherlands, to start my own research group and where I currently am a Full Professor. I received a VIDI grant in 2002 and a VICI grant in 2011 from the Dutch Organization for Scientific Research (NWO). My current research focuses on understanding the mechanisms of an altered coenzyme A uptake route and its potential implications for health and disease. I am co-inventor on several patents based on my discoveries related to coenzyme A metabolism. Some of my fundamental research findings are being developed into therapies for coenzyme A-related diseases in a not-for-profit manner.



Olga Gornik Kljaić Croatian Society for Biochemistry and Molecular Biology, HDBMB



Research

My lab investigates the N-glycosylation of human proteins, delving into its significance, genetic control, and biomarker potential across various physiological and pathophysiological conditions with a particular focus on diabetes. Our goal is to better understand the role of N-glycosylation in the development and progression of this condition and to identify novel diagnostic and prognostic biomarkers, along with potential therapeutic targets. Additionally, we develop innovative glyco-analytical methods employing cutting-edge techniques.



Career

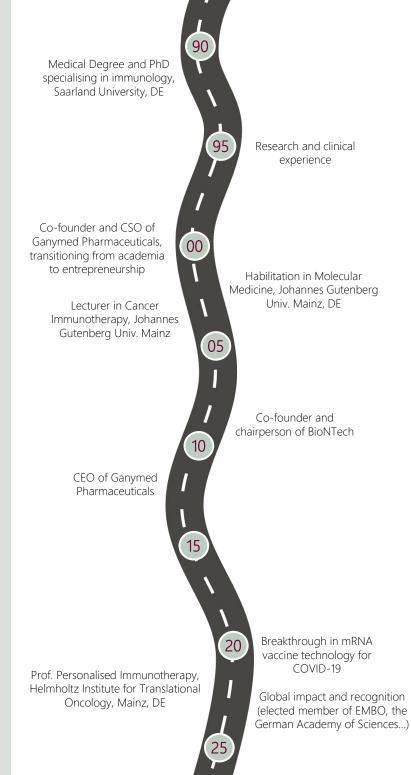
I studied Medical Biochemistry at the University of Zagreb Faculty of Pharmacy and Biochemistry and I have been working there since 2001. In 2006 I visited the University of Oxford and did part of my PhD at the Institute for Glycobiology. I obtained my PhD in 2007 and currently, I am a Full Professor and the Head of the Department of Biochemistry and Molecular Biology. I have been awarded for my scientific and teaching success at my institution. My career has been very fruitful, although interrupted by three maternity leaves. I enjoy science, but I love spending time with my family the most. I have published 75 scientific papers and have been a PI on different national and EU projects. I am also an inventor on a patent granted in EU, China and USA for the prediction of type 2 diabetes development. I truly enjoy collaborating with colleagues from abroad.

Özlem Türeci Turkish Biochemical Society, TBS



Research

I am an immunologist and entrepreneur, known for my contributions to cancer research and vaccine development. My research spans a wide array of topics within immunology, oncology, and molecular biology, with a focus on harnessing the power of the immune system to combat cancer and infectious diseases. My research contributions are in the field of cancer immunotherapy advancements, mRNA vaccine technology, targeted therapies for cancer, infectious disease vaccines, translational research, and clinical trials.



Career

With a medical background and specialisation in immunology, I have dedicated my career to advancing the understanding of the immune system's role in health and disease. I co-founded Ganymed Pharmaceuticals in 2001, focusing on the development of monoclonal antibody therapies for cancer. In 2008, my husband, Dr. Uğur Şahin, and I founded BioNTech, where we pioneered mRNA vaccine technology. My leadership at BioNTech was pivotal in the development of one of the first mRNA-based COVID-19 vaccines in collaboration with Pfizer. Throughout my career, I have been recognised for my innovative contributions to medicine, earning numerous awards and accolades for my work. I continue to inspire and drive advancements in immunotherapy and vaccine research, with a relentless commitment to improving global health outcomes.

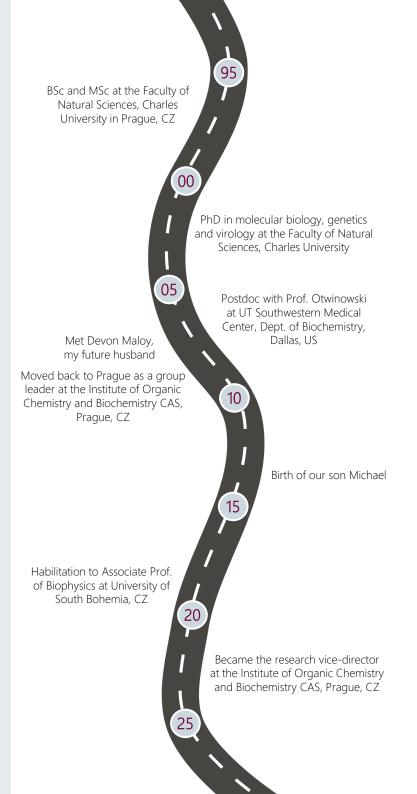


Pavlína Maloy Řezáčová Czech Society for Biochemistry and Molecular Biology, ČSBMB



Research

My research focuses on the structural characterisation of biological macromolecules, especially proteins and their complexes. The structural knowledge gained not only contributes to the solution of fundamental biological questions, but also serves as a basis for the design of compounds with potential therapeutic applications. I investigate enzymes of human pathogens and human enzymes involved in pathological conditions, especially in cancer. In the field of structural biology, I contributed to the understanding of the mechanism of transcription regulation through its work on prokaryotic transcriptional regulators.



Career

Growing up under the constraints of communist Czechoslovakia, the idea of exploring foreign lands and experiencing the freedom of travel seemed like distant dreams. Fortunately, the timing of the fall of the Iron Curtain coincided perfectly with my ambitions. Following my studies in Prague, I seized the opportunity to embark on a scientific career in the US. My postdoctoral experience in Dallas not only provided invaluable training but also introduced me to Devon Maloy, whose courage led them to join me on my journey back to Prague as I pursued an independent scientific path. Together, Devon and I are now raising a son, interlacing together our diverse backgrounds.



Peppi Karppinen

Finnish Biochemical, Biophysics and Microbiology Society, BioBio

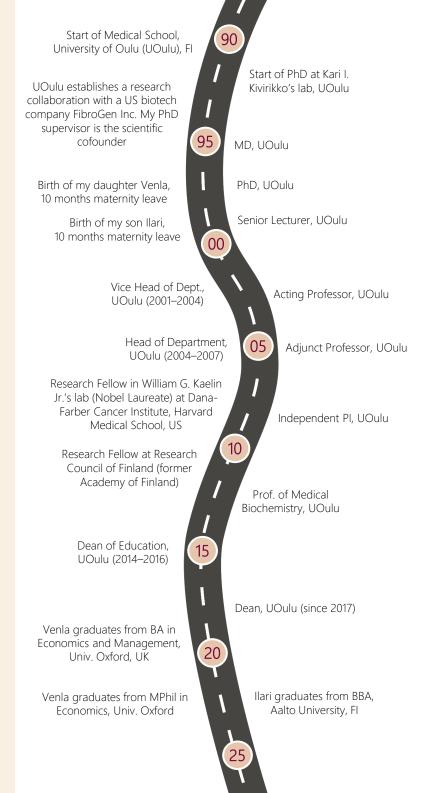


Research

Our group carries out biomedical basic and translational research on an enzyme family of 2-oxoglutarate-dependent dioxygenases (20GDDs). These enzymes sit at the nexus of fundamental biological processes sensing changes in microenvironment and responding to stress, such as hypoxia. 20GDDs are increasingly associated with diseases, including neurological, hematological and cardiopulmonary diseases, obesity, metabolic dysfunction and cancer. Our research methods include a large repertoire spanning from recombinant expression to *in vitro* enzyme kinetics, cellular studies, systemic studies in animals including disease models and epidemiological and clinical studies.

Career

I had the opportunity to start my scientific training already during Medical School in an excellent environment at a Finnish Center of Excellence studying biosynthesis of collagens. Biotech was my first choice after PhD, but due to family reasons and limited opportunities in Northern Finland I decided to pursue an academic career instead, which in hindsight was a very wise choice. I have been involved in-and enjoyed immensely-supervision of younger scientists throughout my career and I have trained 14 PhDs in my lab. I have also been trusted from early on major academic management tasks becoming Head of Department at 34 and now being Dean for the eight year. Highly important to my career was a senior postdoc period in the US in a world leading environment but which separated the family for a year since my husband Jari could not leave his job in Finland.





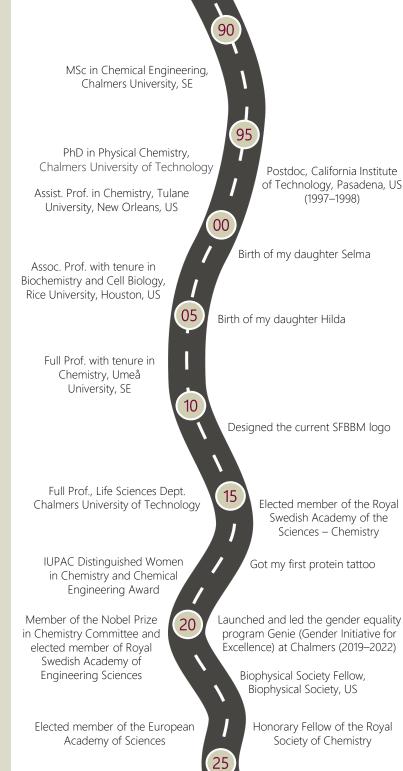
Pernilla Wittung-Stafshede

Swedish Society for Biochemistry, Biophysics and Molecular Biology, SFBBM



Research

When I started my independent career in 1999, I focused on protein folding, aiming to reveal general principles of folding reactions using an array of biophysical tools. My research group has made pioneering discoveries around the role of metals in protein folding, macromolecular crowding effects on folding reactions, as well as on mechanisms of copper-transport proteins. Over the years my research has developed towards the role of copper proteins in cancer and (most important) amyloid formation in neurodegenerative diseases. For example, we have identified how metals interact with amyloids, and how bacterial and food proteins can crossreact and modulate reactions. We are currently exploring the surprising finding that pathological amyloids can catalyze chemical reactions.



Career

I obtained my PhD in Physical Chemistry in 1996 at Chalmers University of Technology, Sweden. After a few years as a postdoc, I started my own research group at Tulane University, US. After a move to Rice University and having two kids, I moved back to Sweden in 2008 to become a full professor at Umeå University. In 2015, I returned to Chalmers to head one division in the newly founded Life Sciences department. With time, I have become more and more involved in academies and organizations, focusing on bigger issues in academia. In 2019, I initiated a pioneering gender equality initiative at my university, which was an investment of ca. 30 million euro towards making the university more attractive and successful. Since 2020, I have the honor to be a member of the Nobel Prize in Chemistry Committee.



Silvia Pastoreková Slovak Society for Biochemistry and Molecular Biology, SSBMB

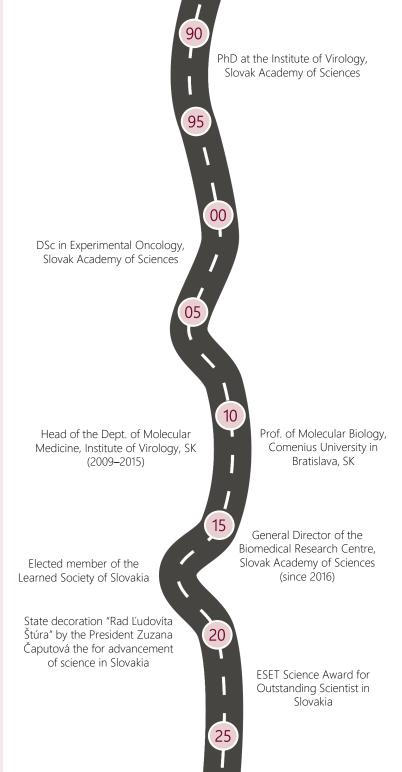


Research

My research is tightly connected with the investigation of molecular mechanisms enabling the adaptation of cancer cells to hypoxia and acidosis in tumour microenvironment. I am particularly keen to understand the impact of carbonic anhydrase IX (CA IX/CA9), a biomarker of tumour hypoxia, prognostic indicator and promising therapy target that was identified and characterised in our laboratory. My team focuses on elucidating the role of CA IX in shaping tumour microevolution and mediating resistance to therapy.

Career

I accomplished my PhD thesis at the Institute of Virology, Slovak Academy of Sciences, under the supervision of Jan Zavada, a world-renowned expert in virus pseudotyping. During my PhD, I generated a monoclonal antibody (MAb M75) leading to identification of carbonic anhydrase IX (CA IX/CA9), a key pH regulating enzyme induced by hypoxia in tumour tissues. This has opened a new research avenue leading to better understanding of cancer cells' adaptation to hypoxia and acidosis. The research team, which I led together with my husband and lifelong collaborator Jaromír, brought the first evidences for the role of CA IX in pH regulation and acquisition of pro-metastatic phenotype, and resulted in the generation of additional CA IX-specific monoclonal antibodies that are now under development for cancer therapy. During my career, I was continuously affiliated with the Institute of Virology that later became a part of the Biomedical Research Centre in Bratislava, Slovakia. Through participation in the several EU consortia, I had the opportunity to collaborate with the world-leading scientists in the field of tumour hypoxia, acidosis and cancer metabolism. I also organised international meetings with the participation of top cancer scientists. My current research efforts continue to aim for a deeper understanding of mechanisms of cancer progression and its translation to the clinic.





Stefana Petrescu

Romanian Society of Biochemistry and Molecular Biology, SRBBM

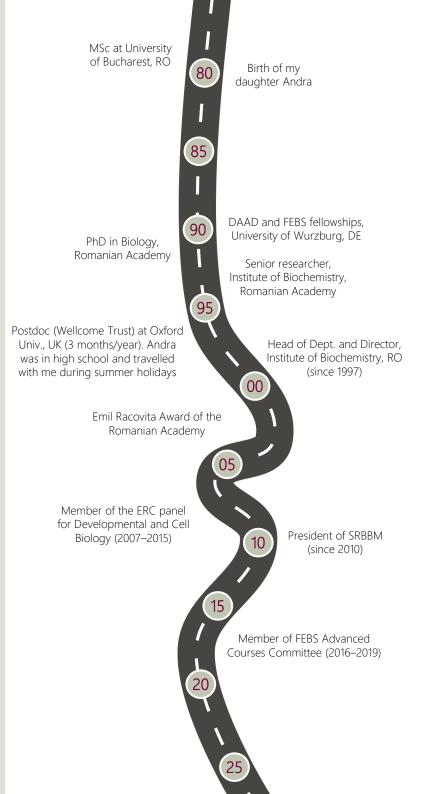


Research

My work is focused on understanding the processes that maintain the fine balance between newly synthesised and old or misfolded proteins, preserving the protein homeostasis and preventing various diseases. I found that glycosylation dictates protein degradation and antigen processing. Discovering protein interactors and cancer biomarkers by mass spectrometry-based proteomics is the most exciting research going on now in my group.

Career

My school passion for chemistry and problem-solving, developed later in my lifetime passion for science. Having a child and a scientific career has been challenging, but living in a two-scientists family was my luck and the help of my husband and my late mother was enormous. To my surprise, I am as enthusiastic about science now as I have been during my training in Oxford 30 years ago and as keen to pass on this passion to my collaborators and students.



Tatjana Simić Serbian Biochemical Society, SBS

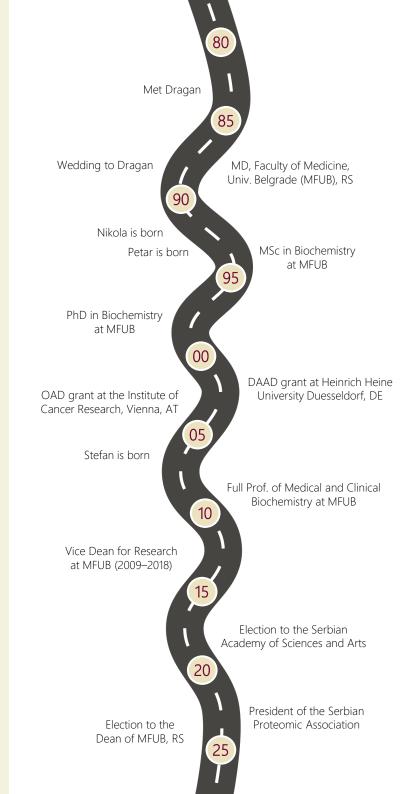


Research

My research has been devoted to the role of oxidative stress and gene-environment interactions in carcinogenesis and chronic cardiovascular diseases. The team of scientists in my lab showed that specific genetic variants of cytosolic glutathione transferases were associated with higher risk of urinary tract tumours and their chemoresistance. In these tumours we also discerned the inhibitory role of GSTP1 in apoptosis signalling. During COVID-19 pandemic we found that genetic antioxidant profile was associated with disease severity. In addition to the fact that I supervised 11 doctoral theses, I have dealt a lot with the relationship between supervisors and mentees. I believe that the quality of the supervisor-mentee relationship influences not only the outcome of a PhD project, but the whole career of a PhD student.

Career

I completed integrated medical studies at the Faculty of Medicine, University of Belgrade (MFUB) in 1988. I obtained my MSc (1994) and PhD (1998) from the same University, where I became a Full Professor in 2009. Over the years, I have held several leadership positions at my institute and faculty, including Vice Dean for Research, and have contributed to governmental bodies regulating scientific development. In 2018, I was elected a corresponding member of the Serbian Academy of Sciences and Arts. Recently, I was elected Dean of the Faculty of Medicine.





Una Riekstiņa Latvian Biochemical Šociety, LaBS



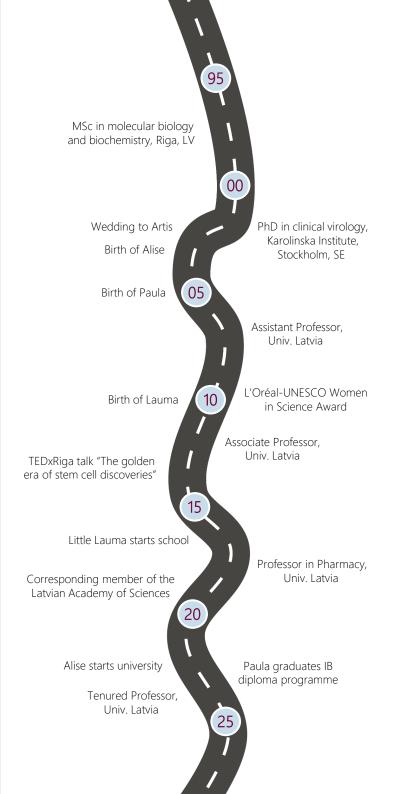
Research

My current research projects are focused on finding new treatments for rare diseases using induced pluripotent stem cells and organ-on-chip technologies. Other research interests are the pharmacological properties of plantderived natural products, the biocompatibility of biomaterials for tissue regeneration, and the use of aptamers as therapeutic and diagnostic tools.

Career

As a 3rd year biology student, I joined the gene engineering lab led by Prof. Aleksandrs Tsimanis at the Institute of Molecular Biology, Latvia. After Latvia gained independence in 1991, the borders opened, and I participated in student exchange programs at Uppsala University, Umeå University, and Karolinska Institute. I completed my PhD in Clinical Virology at the Karolinska Institute in 2002 and

returned to Latvia to start my family and an academic career at the University of Latvia. Along with academic duties, I have served as a preclinical expert for the Latvian State Agency of Medicine and the Committee of Advanced Therapies at the European Medicines Agency since 2014. I was elected a tenured professor in precision medicine at the University of Latvia in 2023 and look forward to implementing induced pluripotent stem cell, organoid, organ-on-chip, gene editing and other cutting-edge technologies in targeted therapy research. I am grateful to my beloved husband Artis for sharing my passion for family and research and for his endless support during my academic career. Our three girls, Alise, Paula, and Lauma, are a blessing and a never-ending source of happiness for us, as is my extended family. My sincere appreciation goes to my fellow scientists and colleagues for their cooperation and support in reaching our research goals. My students are my greatest teachers.





Vassiliki Kostourou Hellenic Society of Biochemistry and Molecular Biology, HSBMB

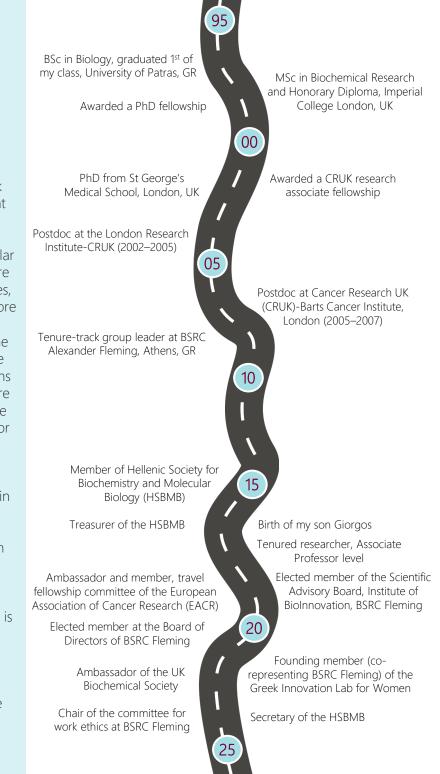


Research

My research mission is to discover the fundamental principles governing the cross-talk of the blood vessels with the tissue environment in health and disease. Specifically, my lab investigates how the adhesion properties of endothelial cells and in particular cell-extracellular matrix (ECM) adhesions, regulate the vasculature and affect tissue homeostasis. During my studies, I developed a "soft-spot" for cancer and therefore my lab explores the impact of cell adhesion on tumour microenvironment. Recently, we became particularly interested in understanding how the mechanical signals sensed at cell-ECM adhesions regulate endothelial function and cancer. I aspire someday the findings of our research to provide new therapeutic and diagnostic opportunities for unmet medical needs

Career

I am a group leader at Biomedical Sciences Research Centre "Alexander Fleming" (BSRC Fleming) in Athens, Greece. I graduated with honours from the University of Patras School of Biology, Greece, and continued my postgraduate studies at Imperial College London and my doctoral studies on tumour angiogenesis at St. George's Medical School, London. My post-doctoral training in London Research Institute-CRUK (now the Francis Crick Institute) and at Cancer Research UK (CRUK)-Barts Cancer Institute, provided me with valuable expertise on mouse models of vascular development and integrin-mediated adhesion in tumour vasculature. My inquisitiveness to study the biological events in real time and space, led me to establish and oversee the Imaging Facility at BSRC, which is now a central point of the National Research Infrastructure "Biolmaging-GR". My passion for cell biology and life sciences motivated me to join the Hellenic Society of Biochemistry and Molecular Biology, a constituent member of FEBS and IUMBB, where I served as treasurer and now as the secretary. Facing the challenges of being a researcher and a mum, I became an enthusiastic proponent for women in science and therefore I participate in committees and boards to promote science, gender equality, and work ethics.





Vilmantė Borutaitė

Lithuanian Biochemical Society, LBD



Institute, Lithuanian University of Health Sciences.

I graduated from Vilnius University and received my PhD degree in Biochemistry at Kaunas

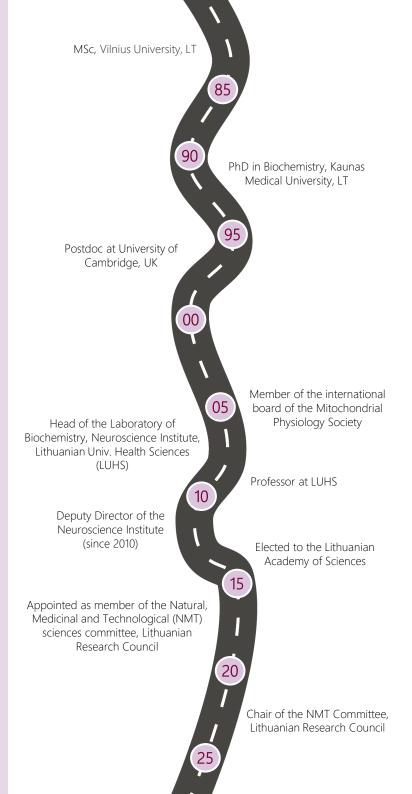
Medical University. Later, I obtained several postdoctoral fellowships (including FEBS, EMBO,

and NATO/Royal Society Postdoctoral Fellowship) to continue my research at the University of

Cambridge. Since 2006, I am the Head of the Laboratory of Biochemistry at the Neuroscience

Research

We investigate cellular and molecular mechanisms of neuronal death induced by beta-amyloid, tau, and other aggregating proteins. Particularly, we are interested in exploring the role of mitochondria in neurodegeneration, cell death, and neuroinflammatory responses to brain ischemia, aiming to find efficient therapeutic compounds for the treatment of ischemic stroke



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Our sincere gratitude to all the women who shared their stories and to the FEBS Constituent Societies that nominated them





















































































