

2023 - New EMBL Alumni Association Board

Chair

Pavel Tomancak



Now: Senior Research Group Leader, Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany

EMBL: Predoc, 1995-2000, Developmental Biology, EMBL Heidelberg

Profile: Pavel studied Molecular Biology and Genetics at the Masaryk University in Brno, Czech Republic. He then did his PhD at EMBL in the laboratory of Anne Ephrussi, studying the establishment of polarity in the *Drosophila* oocyte. During his postdoctoral time at the University of California in Berkeley at the laboratory of Gerald M. Rubin, he established image-based genome scale resources for patterns of gene expression in *Drosophila* embryos. Since 2005, he leads an independent research group at the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG) in Dresden where he became senior research group

leader in 2013. In 2016, Pavel was elected EMBO Member. His independent laboratory at MPI-CBG studies patterns of gene expression during development by combining molecular, imaging and image analysis techniques. The group has led a significant technological development aiming towards more complete quantitative description of gene expression patterns using light sheet microscopy. The emphasis on open access resulted in establishment of major resources such as OpenSPIM and Fiji. Presently, the Tomancak lab is particularly interested in studying the evolution of morphogenesis during early development using quantitative comparative approaches in several invertebrate species.

Election Statement: "EMBL's scientific culture is something special. As one of the first PhD students from Central and Eastern Europe, I was immediately enchanted by the openness and the spirit of fruitful collaboration and friendship that defines EMBL. I have been benefiting from the network established during my time at EMBL ever since. I would like to contribute towards spreading the unique aspects of the EMBL culture, in particular towards the East. MPI-CBG is of course a great start and a shining example of that. But why stop there? Based on my recent experiences with science politics in my home country, the Czech Republic, I conclude that they need our help and the EAA can contribute."

Vice-Chairs

Anne-Marie Glynn



Now: Chief Operating Officer, Global Brain Health Institute, Trinity College Dublin, Ireland & University of California, San Francisco, USA

EMBL: Manager EMBO Courses & Workshops; Head of EMBO Global Activities; Deputy Head Administration and Finance, EMBO (2008-2016), PhD & Postdoc Researcher, Structural and Computational Biology (2004-2008); Trainee, Cell Biology and Biophysics (2002), EMBL Heidelberg

Profile: Anne-Marie has served as Vice-Chair of the EMBL Alumni Association Board since 2020. She's experienced the research and administrative sides of EMBL/EMBO: first tasting the EMBL environment as a trainee (Nebreda lab); subsequently completing PhD and Postdoc work (collaborating with Frangakis and Dubochet (Lausanne) labs); and acting as Staff Association representative.

Subsequently, Anne-Marie was privileged to engage with researchers worldwide via EMBO Courses & Workshops, EMBO Laboratory Leadership, and EMBO Global Activities. Six years ago, Anne-Marie joined the Global Brain Health Institute (GBHI), which is dedicated to brain health including reducing the impact of dementia. Anne-Marie is honoured to support the success of members of the GBHI network and raising their profile, individually and collectively.

Election Statement: "I have been privileged to work with the EMBL Alumni Relations team to create the Alumni Mentoring scheme and diversify awardees nominated for the John Kendrew and Lennart Philipson Awards. I would relish the opportunity to continue to contribute – please feel welcome to reach out with your ideas how best to further develop the EMBL/EMBO alumni community."

George Simos



Now: Professor of Biochemistry & Director of the Laboratory of Biochemistry, Faculty of Medicine, University of Thessaly, Larissa, Greece

EMBL: Postdoc, 1990-1995, Cell Biology and Biophysics, EMBL Heidelberg

Profile: After completing his PhD in Greece, George joined EMBL Heidelberg as an EMBO Postdoctoral Fellow. He worked in the Spyros Georgatos group (1990-94) studying interactions between lamins, the nuclear membrane and chromatin. He then joined the Ed Hurt group (1994-95) in EMBL and, subsequently, in BZH, University of Heidelberg (1995-2000) to work on nucleocytoplasmic transport. George returned to Greece in 2001 to join the University of Thessaly. His current research focuses on the mechanisms underlying the adaptive genomic and metabolic reprogramming that occurs in mammalian cells when exposed to hypoxia, processes that are also exploited by cancer cells in the hypoxic solid

tumors. His expertise in Cell Biology, helped his group delineate regulatory mechanisms involving nucleocytoplasmic trafficking of HIFs, the major transcription factors induced by and orchestrating the response to hypoxia. George has been an active member of the Greek EMBL Alumni chapter and as a member of the executive board of the Hellenic Society of Biochemistry and Molecular Biology contributed to fostering the links between EMBL and the Greek life science community. George 'lost his heart in Heidelberg' and is married to EMBL alumna Froso Paraskeva. Their son was also born in Heidelberg.

Election Statement: "During periods of economic and political crises, societies – even scientific ones – often resort to isolationism. In such times, an active and strong EMBL Alumni Association network can use EMBL's successful example to support the need for strengthening international and interdisciplinary collaboration in life sciences. The EMBL Alumni Association needs to provide the necessary means to its members to share the benefits of their training in EMBL with the scientific communities at home, so as to sustain the commitment of the member states and enthuse them, especially the younger generation, with the "spirit" of EMBL and the principles and profits of excellent, integrative and curiosity-driven research."

Regular Members

Marina Chekulaeva



Now: Group Leader, Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC), Berlin, Germany

EMBL: Predoc, 2001-2006, Developmental Biology, EMBL Heidelberg

Profile: Marina is a group leader at the Berlin Institute for Medical Systems Biology. She embarked on her scientific journey in 2001, joining the European Molecular Biology Laboratory (EMBL) as a predoc in Anne Ephrussi's lab. There, she unraveled a novel mechanism of translational repression in her PhD work, adding depth to our understanding of developmental and neurobiology. For her postdoctoral research, Marina delved into the intricacies of miRNA function. Now, as the leader of her own lab since 2013, Marina's focus is on RNA localisation and local translation in neurons, a promising area that bridges her research with motor neuron disorders. Marina extends her impact beyond her research, making

significant contributions to the scientific community. She teaches at the Free University Berlin, organises the RNA Club Berlin, and has served as a board member of the EMBL Alumni Association since 2020. In particular, she was involved in initiating the mentorship program for EMBL alumni, connecting alumni across the globe.

Election Statement: "For me, EMBL is about scientific excellence, empowering each other, and making lifelong friends worldwide. As part of the EMBL Alumni Association, I want to help make these bonds even stronger, spread our unique EMBL spirit, and support young scientists on their academic journey. Having kick-started the EMBL alumni mentorship program, I've seen how powerful it can be in achieving these objectives. Let's strengthen these connections and continue fostering our unique community!"

Emmanuelle Fabre



Now: Research Director, CNRS, St Louis Hospital, Paris, France

EMBL: Postdoc, 1992-1994, Cell Biology and Biophysics, EMBL Heidelberg

Profile: Genomic research has reached a milestone with two decades of high-throughput sequencing and microscopy data leading to the characterisation of the primary sequence of the genomes of multiple organisms and to describe for the first time their three-dimensional organisation in cellular space. With her team, Emmanuelle investigates the functional role of three-dimensional (3D) chromatin architecture in genome integrity and how this 3D chromatin architecture and transposable elements together contribute to genome organization and expression in the budding yeast model. Currently, they address how DNA damages such as double strand breaks (DSBs), can lead to complex spatial organisation at the scale of the chromosomes and what controls chromosome

mobility and repair. They have developed tools to generate DSBs at desired positions in the genome. By combining yeast genetics and genomics, cell biology in living cells and live-video microscopy and image analyses tools, they study chromosome mobility and architecture after DNA damage. They are interested in the interdisciplinary aspects of their research and regularly collaborate with physicists to refine chromosome models based on polymer physics and super resolution imaging.

Election Statement: "I was trained in cutting-edge science at EMBL in a spirit of permanent sharing and exchange; I am research director of a team where young students are promoted to relevant, inventive and rigorous science; I am deputy director of a research group of 50 labs at the interface between biology and physics; and I am strongly involved in introducing school students to science and critical thinking through the Association Arbre des Connaissances. I wish to put these skills at the service of EMBL's Alumni Relations Programme in order to promote the EMBL spirit and foster links between alumni and with society, particularly in light of current climate challenges."

Sara Fahs



Now: Project Leader Medicinal Chemistry, BioNTech, Munich, Germany

EMBL: Predoc, 2014-2018, Genome Biology, EMBL Heidelberg

Profile: As an Associate Director (taking effect as of 01/07/23) in the Department of Medicinal Chemistry at BioNTech SE (Munich Small Molecules site), and with almost 5 years of experience in industry as a postdoc, then a scientist and team lead, Sara currently leads a group of scientist(s), research associates and trainees on an R&D project that is relevant to the company's pipeline. She also consults on select work packages from other projects where required. Sara researches current trends and new alleys in immunotherapy and tries to promote an interdisciplinary research environment in her department and in others. Owing to her enthusiasm for communicating science and enhancing meaningful conversations, Sara also organises and directs an internal "Talking Science" lecture series, where the

scientists from her site, across all departments, are encouraged to discuss their scientific findings or relevant literature for their research pipeline.

Election Statement: "I am grateful to have been nominated to be part of the EMBL Alumni Association Board. It is a great chance to reconnect with the prestigious institution from which I graduated, and to gain insights into its current research goals. Therefore, I am pleased to be able to use my skills/expertise where needed, and as much as I can, to provide support for EMBL through communications, give critical feedback on EMBL activities, and help advance alumni activities."

Mark Green



Now: Retired in 2018, Hertford, UK

EMBL: Head of EMBL-EBI Administration, 2003-2018

Profile: Mark retired in April 2018 and is currently a member of the EMBL Alumni Association board and the EMBL Archive Working Group. He has also undertaken interviews for the EMBL Oral History archive. He is a supporter of the annual EMBL-EBI PDBe Art Exhibition, and of the EMBL Environmental Research Initiative (ERI). Mark has also kept links to EMBL through attending *Coffee with EMBL* and other EMBL events. At a local and personal level, he has been involved with local groups such as the Hertford Oral History Group, as well as being the official photographer for the Hertford Choral Society and member of the Hertford District Camera Club.

Election Statement: "I joined EMBL in Heidelberg as the Internal Auditor in September 1997 and held the dual role, from 1999, of Head of Internal Audit and Head of EMBL-EBI Administration, becoming full-time at EMBL-EBI from 2005 onwards. I saw part of my role as being supportive of alumni activities, and was able help support and attend alumni events in Cambridge and on campus and contribute to workshops on alumni activities at Administrative Assembly workshops."

Johanna Höög



Now: Associate Professor, Department of Chemistry and Molecular Biology, University of Gothenburg, Sweden

EMBL: Predoc, 2003-2007, Cell Biology and Biophysics, EMBL Heidelberg

Profile: Johanna was a PhD student in the group of Claude Antony (electron microscopy facility leader) in EMBL Heidelberg from 2003-2007. During her PhD, she made the first electron tomography reconstruction of an entire yeast cell, an image which is still used on the Cell Biology and Biophysics program's webpage. Since then, she has been a postdoc at the University of Oxford, UK, with long scientific visits at the University of Colorado, Boulder, USA and the MPI-CBG in Dresden, Germany. Currently, Johanna is an Associate Professor at the Department of Chemistry and

Molecular Biology, University of Gothenburg, Sweden. Johanna's research focuses on human cilia and flagella structure which she studies by doing 3D reconstructions of sperm tails using various advanced electron microscopy techniques.

Election Statement: "I have now served one term at the EMBL alumni board and loved reconnecting with the EMBL family and scientific sites. The scientific upbringing that I received at EMBL is invaluable to me, and I would like to continue promoting EMBL in Scandinavia to increase the exchange between our scientific environments. At EMBL, I would like to promote some of the best things from Scandinavia, such as long parental leave and a healthy work-life balance. I am also passionate about equality and equity in science and everywhere."

Anne-Sophie Huart



Now: Senior Scientist and project leader, ZoBio

EMBL: Postdoc, 2014-2018, Structural Biology, Hamburg and Cell Biology & Biophysics, Heidelberg

Profile: After studying life sciences at the Universities of Besançon and Lille, Anne-Sophie pursued her PhD studying a kinase in p53 pathway at the University of Edinburgh Cancer Research Centre. Eager to decipher protein-protein interactions at a molecular level, Anne-Sophie joined EMBL in 2014 with an EIPOD fellowship aiming to structurally and functionally determine the regulation mechanisms of selected kinases with Matthias Wilmanns and Carsten Schultz at EMBL in Hamburg and Heidelberg. In parallel, Anne-Sophie served as EMBL Hamburg postdoc representative and EMBL School Ambassador. In 2018, she joined the protein sciences group at ZoBio, a vibrant biotech company offering

fragment-based drug discovery research services. Now as a senior scientist and project leader, she applies her skills to innovate and support drug discovery projects in synergy with other researchers in industry and academia. Last but not least, together with her partner, she welcomed two children in 2019 and 2021, who have since then happily ruled their days and nights!

Election Statement: "What struck me the most at EMBL are the strong links created between researchers – there when I felt the most vulnerable in my research career, concurrently some of my strongest friendships were born. I believe people are the intrinsic force behind EMBL's achievements. In 2019, I had the honour to be elected to the EMBL alumni association board, where I could contribute to the fantastic work achieved by the alumni office. I will be very pleased to serve again the board for a second and last mandate, to further support EMBL and its alumni community with my opinion and experience, especially representing the Hamburg alumni and alumni now pursuing careers outside academic research."

Ramesh Pillai



Now: Professor, Department of Molecular Biology, University of Geneva, Switzerland

EMBL: Group Leader, 2006-2016, EMBL Grenoble

Profile: Ramesh has had a long-standing interest in RNA biology research. He carried out his PhD work in the laboratory of Daniel Schuemperli at the University of Bern, Switzerland. This research identified that the U7 snRNP, a factor involved in formation of histone mRNA 3' ends, carries a unique heptameric Sm/Lsm protein ring that is distinct from spliceosomal snRNPs. Postdoctoral research at the FMI Basel, in the laboratory of Witold Filipowicz, uncovered a role for small RNAs called microRNAs in translation control in mammalian cells. He began his independent research career at the EMBL Grenoble Outstation in 2006, where his group investigated germline small RNAs called piRNAs that are essential for

silencing transposable elements in animal germlines. In early 2016, Ramesh took up a Professorship at the University of Geneva, where his group is continuing research on small RNAs. The group also initiated new research into how RNA modifications are used to control gene expression. Ramesh continues to collaborate with his former EMBL colleagues.

Election Statement: "The EMBL Alumni Association provides a great opportunity to promote interactions between the alumni spread out in the member states and enable them to maintain strong links with EMBL. At the same time, many alumni reside outside of the borders of EMBL member states. I will continue to work to strengthen the networking opportunities for everyone and support the spread of the EMBL spirit of doing collaborative research."

Ernst Stelzer



Now: Professor, Physical Biology and Advanced Light Microscopy, and Dean of Research, Johann Wolfgang Goethe-Universität, Frankfurt am Main, Germany

EMBL: Predoc, 1983-1987, Physical Instrumentation; Project Leader, 1987-1989, Physical Instrumentation; Group Leader, 1989-2011, Cell Biology and Biophysics, EMBL Heidelberg

Profile: Ernst came to EMBL as one of the first six PhD students in 1983. From 1987-2011, he was a scientist in various Programmes/Units, most lately in Cell Biology and Biophysics. He organised the first of many EMBO courses on light microscopy in 1989 in Heidelberg; expanded them to various international locations (Lisbon, Ghent, Singapore) since the late 1990s and participated in further numerous workshops and courses. Ernst worked in physics, optics, and biophysics as well as in cell, molecular, plant and developmental biology. He

contributed to conventional, confocal, 4Pi and theta microscopy, optical tweezers and levitation, laser cutting and invented light sheet fluorescence microscopy (LSFM, SPIM, DSLM) in the early 2000s. His publications continue to influence many scientific areas. He is particularly interested in developing three-dimensional microscopies that enable observations under near-natural conditions as a function of time in cutting edge research. Most recently in studies of insect embryogenesis, e.g., *Tribolium* and eusocial *Apis*. Many of his former Diploma and PhD students as well as Postdocs continue to pursue successful academic and industrial careers of their own. By now, he published more than 270 papers and was granted several patents that resulted in commercially available instruments. Ernst has received numerous accolades, including protagonist of the "Method of the Year 2014" for LSFM, receiving the EMBL Alumni Association's Lennart Philipson Award in 2016, and being honored as an Honorary Fellow of the Royal Microscopical Society (RMS, Oxford, UK).

Election Statement: "My 28 years at EMBL played a fundamental role in the development of my scientific understanding. I am grateful for the enriching experiences, fascinating discussions, and the freedom I had at EMBL. However, I witnessed misconduct and the varied trajectories of individuals within the scientific community. I also experienced the different European, Asian, and American implementations of schools, universities, and elite education systems on a close level. I am thankful for my time at EMBL and keen to contribute to the EMBL community with a critical but always positive perspective."

Erin Tranfield



Now: Head of the Electron Microscopy Facility at the Instituto Gulbenkian de Ciência, Oeiras, Portugal; President of the Portuguese Microscopy Society (2020-2023)

EMBL: Postdoc, 2009-2013, Cell Biology and Biophysics, EMBL Heidelberg

Profile: Erin obtained her PhD at the University of British Columbia (Canada), did a postdoc at NASA Ames Research Center (USA) and another at EMBL Heidelberg. In 2013, she moved to the Instituto Gulbenkian de Ciência to build a biological electron microscopy facility. Today, Erin and her team support the research of Portuguese-based scientists, aiming to answer a diverse array of biological and material science questions. She is the President of the Portuguese Microscopy Society, the co-chair of the ESA Topical Team on Celestial Dust Toxicity, part of numerous evaluation panels and she recently joined the Editorial

Board of Wiley Analytical Science. In 2020 Erin founded the TechEM Seminar Series which aims to bring advanced technical seminars to EM Facility staff all over Europe and Asia. Erin received the 2023 Alan Agar Award for Electron Microscopy from the Royal Microscopy Society for her outreach activities.

Election Statement: “I really enjoyed being at EMBL, working with state-of-the-art equipment and being surrounded by people with the attitude of “nothing is impossible, you just need to think harder”. After 10 years in Portugal, where funding is sparse and sporadic, I now see the other side of the challenge in science where the attitude is the same, but the resources are missing. I hope with re-election I can continue to bring to the board ideas on how to build more connections between the EMBL infrastructure and the member states to help support science from countries with reduced funding opportunities; and continue to advocate for the importance of Core Facilities in the evolving scientific landscape. I also hope I can be a positive role model exemplifying to young scientists that a successful career in science means more than just becoming a PI. And lastly, as the result of a horse-riding accident, I have the unique perspective of a successful career in science as first an able-bodied scientist and now a disabled scientist. This perspective gives me the rare opportunity to continue to advocate for change in science with the aim of making science a more humane and inclusive environment.”

Thomas Vaccari



Now: Associate Professor, Department of Life Sciences, University of Milan, Italy
EMBL: Predoc, 1999-2004, Developmental Biology, EMBL Heidelberg

Profile: Thomas obtained his Ph.D. at EMBL Heidelberg in 2003, working in the Developmental Biology programme in the group of Anne Ephrussi. He was among the first recipients of a joint title, previously only awarded by the University of Heidelberg. After leaving EMBL, He was a postdoc with David Bilder at the University of California at Berkeley (2004-2009). Later, he became a junior group leader at the IFOM institute of Molecular Oncology in his native Milan, Italy. Since 2017, Thomas has been an associate Professor at the University of Milan. During his career, he has explored how cells communicate between each other in tissues and how such communication is subverted in disease. A key aspect he studies occurs at the cellular level with fine regulation of intracellular compartment. To

study such topics, Thomas’s lab makes use of fruit flies, a premier genetic model organism that he first encountered at EMBL. Besides running a fundamental biology lab and training young scientists, as a professor he teaches undergraduate and graduate biology classes. He is passionate about science divulgation and in this capacity, since 2021, has co-hosted *Coffee with EMBL*, the online discussion forum of the EMBL Alumni community.

Election Statement: “EMBL felt home when I was a young scientist. This is because EMBL people not only guided my scientific education but also cared for me. I now want to give back to the alumni, my extended family. Alumni Relations is doing an outstanding job in engaging the community. I have seen it firsthand by co-organising *Coffee with EMBL*. I will expand on this commitment by identifying meaningful new ways to connect alumni, both scientists and non-scientist alike. I hope that future initiatives will let the alumni community partake in the progress of science to build a happier and smarter society.”