Universität Basel

Department of Biomedicine

DBM Basel

# Newsletter

## May 2026

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# Intro

**Welcome to our second newsletter of the year!**

In our cover story, we address one of the most stubborn problems in neurology: Why does multiple sclerosis keep progressing, even when inflammation appears to be under control? Tobias Derfuss, Jens Kuhle, and their colleagues at RC2NB may not have all the answers yet, but they are asking the right questions, and building the tools to answer them. From blood biomarkers that are already changing clinical practice to the Swiss MS Cohort following over 2,200 patients, the translational machinery connecting bench to bedside is impressive.

Meet Yavuz Yazicioglu, who joined the Hess Lab in May 2025 and has recently secured three consecutive postdoctoral fellowships — from EMBO, SNSF, and Marie Skłodowska-Curie — which will fund his research through to 2030. We sat down with Yavuz to find out how he did it. His answers are candid and practical. The part about having to rewrite a proposal in five days reminds us that even the smoothest-looking trajectories have their challenges. If you are an early-career researcher, read this one first!

In “Research Groups at a Glance”, we visit two labs. The Banfi Lab studies how blood vessels grow in adult tissue, a deceptively tricky question with real stakes for wound healing, bone repair, and beyond. The Finke Lab, on the other hand, investigates innate lymphoid cells, a relatively young area of immunology with connections to cancer, allergies, inflammatory bowel disease, and more. Both groups give a candid picture of where the science currently stands and where it is heading.

Beyond the science labs, it has been a busy few months at the DBM. In March, the Xenium spatial transcriptomics platform was launched, a significant new capability for the region and a joint investment with ETH Zurich’s D-BSSE. The DBM and the Department of Pharmaceutical Sciences held their first joint meeting and left with many topics to discuss. Twenty-one PhD defenses have taken place since January, and there has been a strong round of new SNSF and Swiss Cancer League funding. There were many very notable recognitions, among them Karin Hartmann receiving a Lifetime Achievement Award.

We hope you enjoy reading it!

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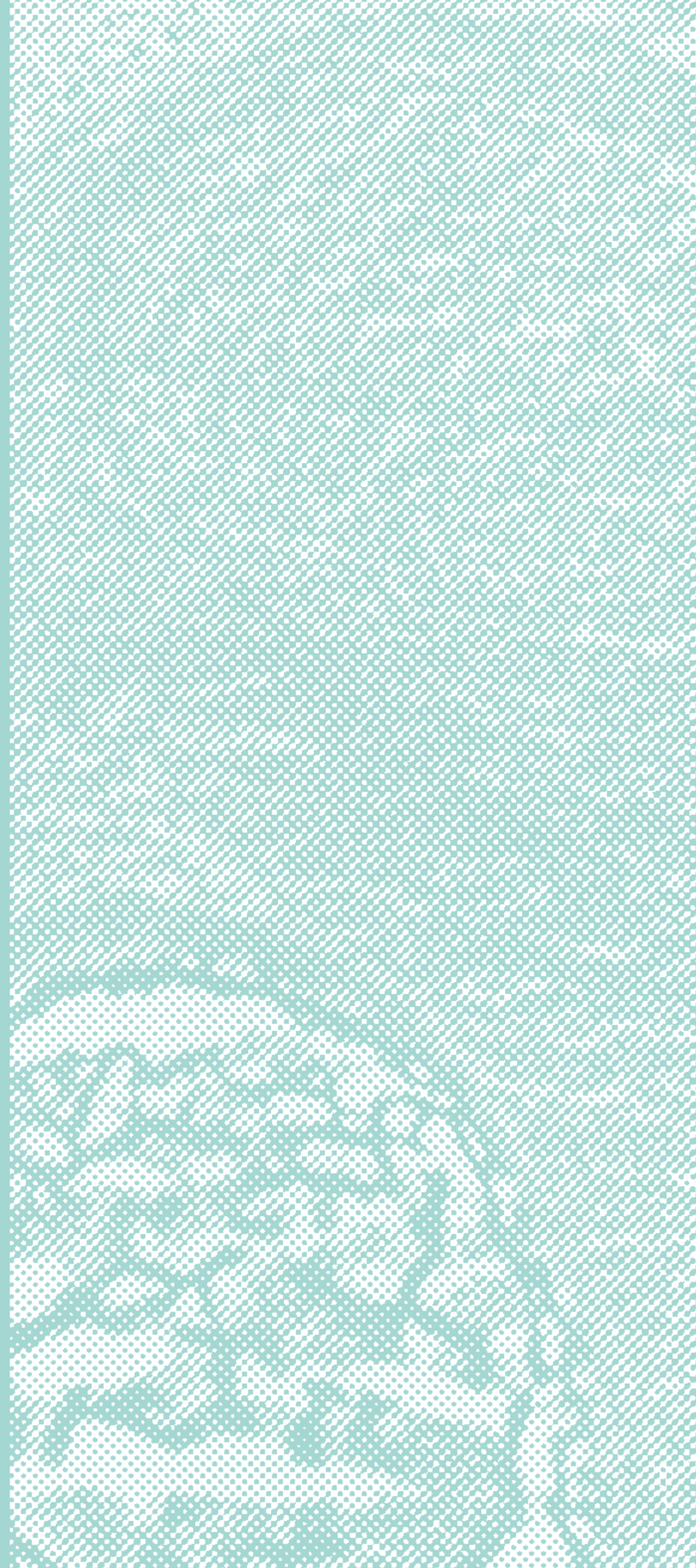
# Cover Story
# Success Story

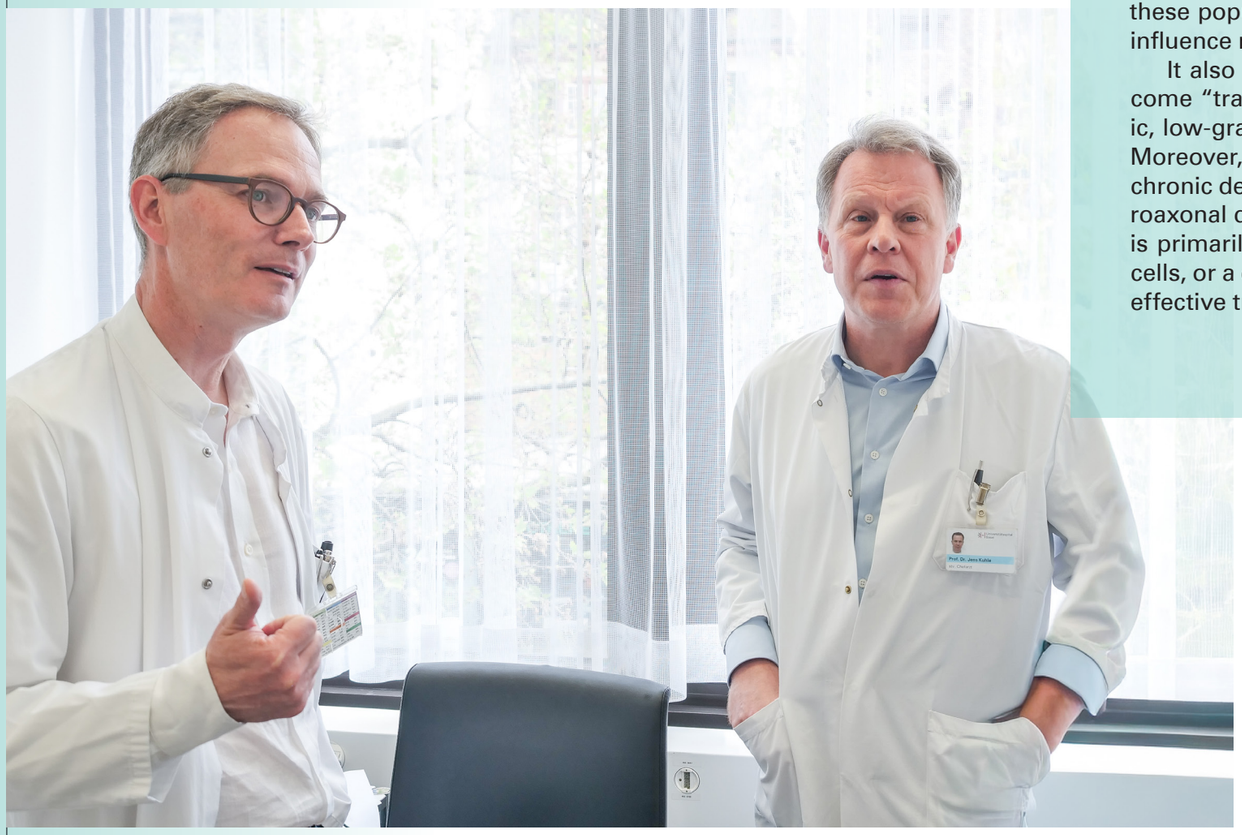


# DBM Cover Story

## What Drives Disease Progression in Multiple Sclerosis and Other Neurological Diseases?

A Translational Perspective from RC2NB

**Multiple sclerosis (MS) does not follow a single path: Despite modern high-efficacy therapies, many patients experience steady worsening of their neurologic functions. Imaging reveals one dimension, more recently, soluble biomarkers from the blood have emerged as another, while clinical observation adds essential depth. However, much of the underlying biology is still only partially understood. At the Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC2NB), uncertainty is where the most meaningful research begins.**



### Understanding Disease Progression in MS

"One of the most fundamental, unresolved questions in multiple sclerosis concerns the mechanisms that initiate and, especially, sustain the progression of neurological disability. While early, relapsing phases of the disease are relatively well characterized as immune-mediated inflammatory attacks on the CNS, the transition to a progressive phase remains poorly explained.

A central difficulty lies in the limited ability of current animal models to reproduce the chronic, smoldering progression seen in human disease. These models capture acute inflammation reasonably well, but they fall short in mimicking the slow accumulation of neurodegeneration, axonal loss, and compartmentalized inflammation that defines progressive MS. Another major gap is our incomplete understanding of the complex cellular interactions within the CNS. The disease involves a dynamic interplay between CNS-resident cells, such as microglia and astrocytes, and infiltrating immune cells, including T and B lymphocytes. How these populations communicate and shift over time – and how they collectively influence neurons and oligodendrocytes – is still not fully understood.

It also remains unclear why inflammation in progressive MS appears to become "trapped" behind a relatively intact blood-brain barrier, leading to chronic, low-grade damage that is less responsive to conventional immunotherapies. Moreover, the relative contributions of different pathological processes – such as chronic demyelination, failed remyelination, mitochondrial dysfunction, and neuroaxonal degeneration – are still debated. It is not yet clear whether progression is primarily driven by persistent immune activity, intrinsic vulnerability of CNS cells, or a combination of both. This uncertainty complicates the development of effective treatments, particularly for progressive forms of the disease."

**– Tobias Derfuss**

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The clinical picture of Neuroimmune diseases result of a complex of pathogenetic mechanisms. Due to the involvement of multiple biological systems, the individual disease course is unpredictable. Standard research has often been seperated into separate domains: clinical studies on one side and laboratory work on the other. Bringing these perspectives together remains an ongoing effort and conceptual opportunity. At the RC2NB, this is reflected in several parallel approaches, including digital monitoring of patients' daily life, imaging techniques that capture structural changes, and biological analyses to understand pathogenic mechanisms and identify molecular signals of damage or repair. The focus is not only to generate data, but also to connect these layers into a coherent framework.

This is where our department becomes directly relevant. Several groups at the DBM, including those led by Tobias Derfuss, Jens Kuhle, and Matthias Mehling, work on the cellular and molecular mechanisms that govern neuroimmune disease. Their interests range from immune cell behavior and signaling pathways to interactions between the immune system and the CNS, as well as the translation of these insights into clinical practice. They help to connect what we see in patients and imaging data with what is happening at the biological level.

For example, experimental models and patient-derived samples are used to study how specific immune cell populations contribute to inflammation and tissue damage, including recent work on B-cell–mediated mechanisms in MS **(Kim et al., Cell, 2026)**. At the same time, there are ongoing efforts to identify and validate biomarkers in blood and cerebrospinal fluid by highly sensitive assays that reflect disease activity and progression, such as serum neurofilament light chain (NfL) and glial fibrillary acidic protein (GFAP) **(Maleska et al., Brain, 2025)**. These markers are now increasingly used in clinical practice. Central to these efforts is the Swiss MS Cohort (SMSC), an internationally leading platform in MS research, following over 2,200 patients with standardized clinical, imaging, and biomarker assessments. With extensive longitudinal data and biosamples, the SMSC provides a foundation for validation across disease stages and patient populations. As Jens Kuhle notes:

**"Biomarkers have moved from exploratory tools to clinically actionable instruments. They already allow us to detect otherwise invisible disease processes, monitor treatment response, and stratify risk – supporting more personalized care. This transition is well advanced for NfL, which has entered clinical reality, while other candidates may follow in the near future, particularly for capturing biological processes of disease progression."**

**– Jens Kuhle**

**Jens Kuhle**

Jens Kuhle obtained his MD in Tübingen, Germany, and specialised in neurology at the University Hospital Basel.
After his PhD in Neuroimmunology in London, he returned to Basel as research group leader in Clinical Neuroimmunology, and Deputy Head of the Outpatient Clinic. In 2018 he became Head of the MS Center and in 2025 professor for Neuroimmunology and MS. In 2012 he started the Swiss MS Cohort (SMSC), now one of the largest clinical and imaging information resources worldwide and platform for biomarker development, clinical outcome research, and pragmatic trialling in national and international research projects.
He has established neurofilament light chain (NfL) as the first blood-based biofluid marker validated for personalised medicine in MS.
Jens Kuhle's research is supported by the Swiss National Science Foundation, the Swiss MS Society and the International Progressive MS Alliance. He has authored more than 450 scientific publications and is a 'Highly Cited Researcher' from 2022 to 2025.

This layered validation is particularly challenging in MS, where variability across individuals, disease stages, and treatment histories can obscure biological signals. The collaboration between the DBM and the RC2NB is therefore not based on simple knowledge transfer, but rather on continuous exchange.

Clinical observations – such as unexpected disease courses or treatment responses – can guide experimental work at the DBM. In turn, findings from laboratory studies inform the interpretation of clinical data and help refine hypotheses. This iterative approach is reflected in studies that combine immune profiling with imaging and digital monitoring to better understand how biological changes translate into clinical outcomes. As Jens Kuhle emphasizes, this process relies on structured validation across experimental and clinical contexts: "What builds trust in a new finding is its ability to translate beyond the laboratory into well-characterized patient populations in the SMSC with

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**Tobias Derfuss**

Tobias Derfuss is a clinical neurologist specializing in neuroimmunology. He completed his clinical training at the Department of Neurology at the Klinikum Grosshadern in Munich, Germany. His research at the Max Planck Institute for Neurobiology, Department of Neuroimmunology, focused on the identification of novel autoantigens in MS and the characterization of immune responses to latent herpesvirus infections. In 2010 he was appointed Professor and Senior Physician in the Department of Neurology, as well as Research Group Leader at the DBM at the University Hospital Basel. Since 2023 he has served as Vice Chair of the Department of Neurology in Basel. His research focuses on the mechanisms of action of disease-modifying therapies and on the role of autoantibodies and B cells in the pathogenesis of neuroinflammatory diseases, including MS and myasthenia gravis. In addition, Tobias Derfuss is actively involved in the design and conduct of clinical trials evaluating emerging therapies for MS.

sufficient longitudinal follow-up. We typically start by testing or searching for signals in extreme phenotype cohorts, where biological effects are most pronounced, and then validate them in broader, more representative populations. Consistency across these layers, combined with biological plausibility and robustness across platforms, gives us the confidence to take a finding further."

One of the less visible aspects of this work is the need to align methods and data across disciplines. Clinical and experimental studies often use different terms, endpoints, and standards of evidence. This requires efforts to standardize sample collection, harmonize data analysis, and integrate different types of data – from molecular readouts to imaging and clinical scores. This work is gradual and often technical, but it is essential to connect biological findings with patient data in a meaningful way.

**A Collaborative Model in Progress**

The collaboration between RC2NB, the University Hospital Basel, and the DBM reflects the continued expansion of neuroimmunology. Rather than treating clinical research and basic science as separate domains, there is increasing emphasis on linking them more directly. At the DBM, this connection is part of how research is organized. Shared infrastructure, joint projects, and regular exchange between the clinicians and basic scientists allow molecular findings to be examined in a clinical context and, conversely, clinical observations to inform experimental work at the DBM. At the same time, the process remains iterative and open-ended. Not all findings translate, and not all questions can be addressed immediately. What emerges is a more integrated, but also more realistic view of the field – one that acknowledges complexity, while gradually connecting biological mechanisms with patient experience.

**About the RC2NB**

The Research Center for Clinical Neuroimmunology and Neuroscience Basel (RC2NB) is a non-profit foundation established in 2019 by the University Hospital Basel and the University of Basel. It serves as a platform for clinically oriented research in MS and related neuroimmunological diseases, with a focus on integrating clinical observations and experimental approaches.

By combining patient-based research with mechanistic studies, the RC2NB aims to better understand disease processes and support the development of more targeted diagnostic and therapeutic strategies. Its work is closely linked to ongoing clinical care and embedded within a broader network of collaborations across disciplines.

**Website: rc2nb.ch**

# DBM Success Story
## Meet Yavuz Yazicioglu

### Yavuz Yazicioglu – In Brief

**Who he is:** Medical degree from Istanbul University (Turkey), with training stages in Heidelberg, Alberta, Melbourne, and at Harvard; PhD in Molecular and Cellular Medicine from the University of Oxford; postdoctoral research at Oxford and in the Hess Lab in Cambridge before joining the Hess Lab in Basel.

**What he studies:** How cellular regulatory mechanisms support immune cell function across physiological differentiation and pathological transformation.

**Based at:** Department of Biomedicine, University of Basel, in the laboratory of Prof. Christoph Hess (Lab of Immunobiology).

**Outside the lab:** Avid photographer who loves exploring streets and nature in search of unique perspectives. Also an enthusiastic swimmer and runner – and one of the driving forces behind the lab's weekly lunchtime running club.

### Three fellowships, four years, one goal – meet Yavuz Yazicioglu

Originally from Turkey, Yavuz completed parts of his medical degree in both Istanbul and Heidelberg, spent summers doing research in the USA, Canada and Australia, and worked as a frontline physician during the COVID-19 pandemic, all before beginning his PhD at the University of Oxford. Supported by the Kennedy Trust Prize Studentship as its top-ranked recipient, he spent four years investigating how mitochondrial biology and amino acid metabolism shape immune responses, publishing his findings in *Nature Immunology* and *Science Immunology* along the way.
In May 2025, he joined the laboratory of Prof. Christoph Hess at the DBM. Within months, he had secured three consecutive postdoctoral fellowships – EMBO, SNSF, and Marie Skłodowska-Curie – covering his research funding all the way through to 2030.

Yavuz Yazicioglu

*We sat down with Yavuz to hear about his journey.*

**1. Three fellowships in a row is rare – what did that moment feel like when you realized you got them?**

There was, of course, a deep sense of relief and joy following what had been a rather demanding application process. It also brought a form of external validation and encouragement that the ideas I have been developing and nurturing are worth pursuing and supporting.

At the same time, these outcomes also came with a real sense of responsibility, which I still feel almost every day. It was a reminder that the real work now begins and that what was promised must now be realised through meaningful science. In that sense, the whole experience has been both uplifting and grounding.

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**2. What attracted you to your current research topic, and what do you find most exciting about it?**

I have been fascinated by the immune system since my first year of medical school. What first drew me in was its remarkable ability to recognise an almost unimaginable diversity of antigens while remaining tolerant to self. As one of my undergraduate professors once put it, the immune system has the capacity to recognise and respond to molecules that have yet to evolve or be invented – even centuries from now.

Now, with a PhD in immunology, I can approach these concepts with a much deeper understanding than I could 12 years ago. Yet, if anything, the field has only become more captivating to me. The immune system still holds countless unknowns, and its complexity reflects a kind of raw biological beauty combined with translational potential. Coming from a medical background, I am constantly reminded that beyond fundamental science lies the opportunity to harness the immune system and translate discoveries into meaningful outcomes for patients. That combination is what makes this field so attractive to me and continues to motivate my work and future career in immunology.

**3. These fellowships are highly competitive. Looking back, what do you think made your applications successful?**

A big part of it came down to strategic planning. From the outset, I aimed to design projects that naturally brought together my PhD training with the expertise of my host lab, so that the ideas felt genuinely synergistic rather than forced.

Also critical was carefully considering the scope. Each fellowship scheme has its own vision for supporting science, and it quickly became clear to me that a one-size-fits-all approach would not work. Instead of recycling a single proposal, I developed distinct projects tailored to each scheme. As a side benefit, this allowed the awarded fellowships to follow one another without overlap. My host lab's broad network helped me secure the necessary collaborations, which strengthened feasibility.

Additionally, I received extensive support from my host supervisor Prof. Hess as well as colleagues and peers, including those outside my immediate field, which helped me see the proposals through the lens of diverse reviewers. I am particularly grateful to those who generously shared their fellowship applications with me as a source of reference and guidance (special thanks to Dr. Fabian Fischer and Prof. Mariana Borsa). To return that generosity, I now share my own proposals with others, seeing this as a way of paying that support forward.

**4. What did the environment at the DBM and in Christoph Hess's group enable you to do that you could not have done elsewhere?**

Prof. Hess's Immunobiology Lab offers a uniquely enabling environment. It is a large, dynamic group across two sites, including a second lab at the University of Cambridge.

During my PhD, I was the first student in a newly established group, so I had the opportunity to grow alongside the lab. In contrast, Prof. Hess's group provides a more established setting, with well-developed pipelines and a broad range of expertise, complemented by the DBM's excellent research infrastructure and facilities. Importantly, the research focus in his lab complements my PhD training very well, while also extending it into new challenges, together with the freedom to develop my own ideas. Expanding into adjacent areas at the PhD-postdoc transition not only aligns with the expectations of many fellowship schemes, but also helps avoid becoming too narrow in scope.

Additionally, the lab has already provided me with the opportunity to supervise two Master's students. I am grateful to Prof. Hess for his trust and to my students, Theodoros Basiakos and Maximiliane Wissler, for their dedication and enthusiasm in their research journey with me.

**5. In what way has mentorship influenced your scientific development and career plans?**

I met Prof. Hess after a seminar he gave in Oxford during the final year of my PhD. From that first interaction, it quickly became clear to me that he was someone I could genuinely look up to as a mentor. We agreed early on a clear plan to secure fellowships and eventually join his lab, which ultimately worked out seamlessly.

From the initial conceptualisation to the final stages, Prof. Hess was deeply involved in supporting my career and fellowship applications, providing detailed input across nearly every aspect, even in areas I would not have expected him to have time for. His feedback was an exceptional learning experience for me in grant writing, which is typically overlooked during PhD training.

Finally, I believe that strong PhD mentorship lays the foundation for postdoctoral success. I am, therefore, particularly grateful to my PhD supervisors, Prof. Alex Clarke and Prof. Mike Dustin, whose guidance deeply shaped my scientific thinking and trajectory.

I would also like to acknowledge Prof. Mariana Borsa, who was a close colleague, in fact my desk neighbour, in Oxford, and who supported me through many PhD challenges. Seeing her establish her own group in Basel around the time I moved here has been both inspiring and extremely motivating.

**6. What were the main challenges during the application process, and what did you learn from them? Was there a point where you thought the application might not succeed? What changed?**

Thinking back, the most challenging part was writing my first proposal. It was a pretty intense period: I was finishing my thesis, preparing for my defence, and revising my PhD paper all at the same time. Although I was already in close contact with Prof. Hess and had access to lab meetings and available data, I was not yet fully embedded in the group, which was an additional challenge.

There was also a moment when it genuinely felt like things might fall apart. For the first proposal, the guidelines around overlap with the lab's existing grants were not entirely clear. When we clarified this with the funding body, it turned out that my original idea might not even be eligible. I had to rework the entire proposal around a backup project idea within five days before the deadline. That proved to be the defining turning point for the application.

*Photo by Yavuz Yazicioglu*

With hindsight, the biggest lesson I learnt was to clarify uncertainties early. Small details in the guidelines can completely change the direction of such proposals. Once I joined the Hess Lab and developed a better sense of fellowship writing, the next applications felt more manageable and less stressful.

**7. What has surprised you most about your postdoctoral journey so far?**

How similar it feels to starting a PhD. In many ways, beginning a postdoc can feel just as daunting, especially when you step even slightly outside your area of PhD expertise and realise how much there still is to learn.

At the same time, you realise you have a different kind of perspective now. With more experience comes a greater awareness of what you do not know, but also a clearer sense of where to focus and how to improve. That makes progress more efficient and allows for more independence.

**8. What is one mistake you see early-career researchers make when applying for fellowships?**

One mistake I have seen in myself – and in many others – is becoming too absorbed in PhD deadlines without giving enough thought to what comes next. It is completely understandable, as the thesis naturally takes priority. However, for those staying on the academic path, identifying a suitable postdoc lab and supervisor, and coordinating fellowship applications is not something that can be done overnight. By the time the PhD is completed, it can already be quite late to navigate these processes.

The "academic clock" for many fellowships also starts ticking as soon as the PhD is defended, and there are often additional eligibility windows tied to time spent in the host lab once joined. These timelines directly affect eligibility, so being aware of them and planning around them accordingly is absolutely vital.

To give an example, I had to move my thesis defence forward by one month to remain eligible for one of the fellowships, which required the PhD to be defended by the application deadline.

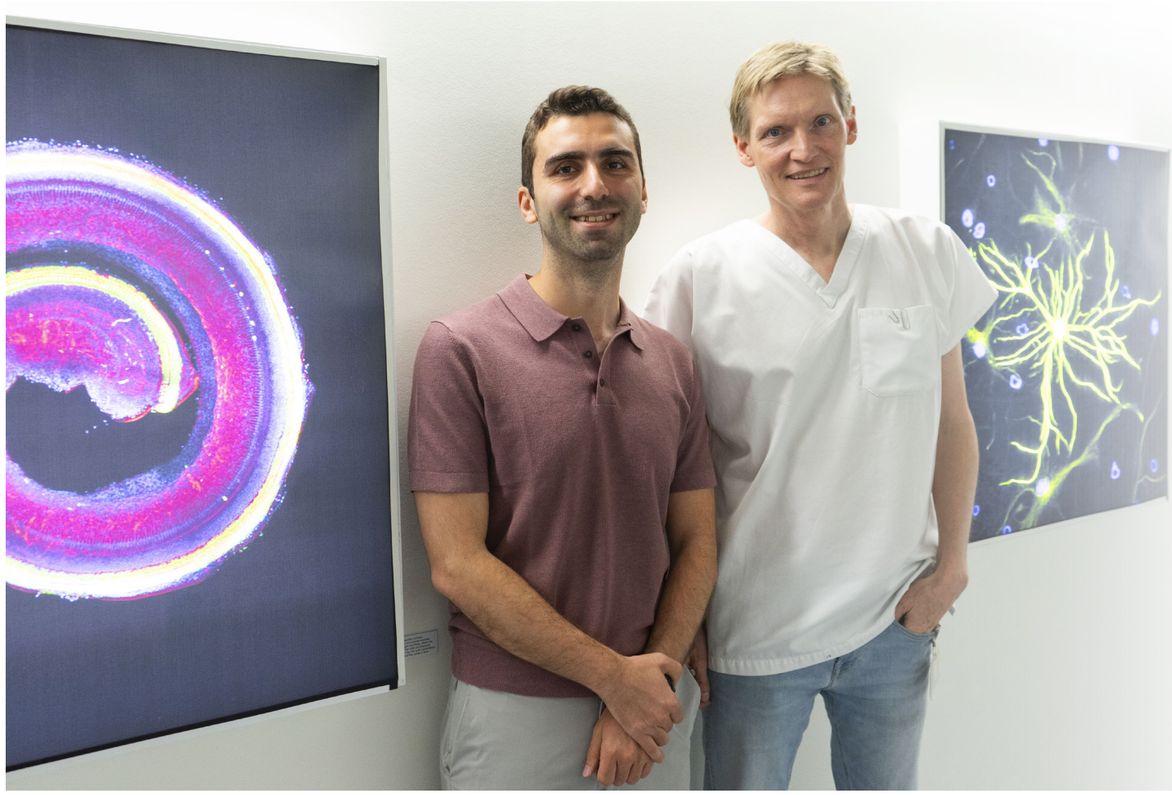
***Yavuz has reflected thoughtfully on the role of mentorship throughout our conversation. We put a few questions to his host supervisor, Prof. Christoph Hess, to hear the other side of that story.***

**1. What qualities make Yavuz stand out as a researcher?**

Yavuz combines intellectual curiosity, precision, and dedication. Reflecting a strong drive to learn from diverse environments, his curiosity has already led him to seek research exposure at several top institutions around the world and train towards his medical degree in an international context, too. He approaches research with exceptional enthusiasm and is extremely hard-working. Together with his razor-sharp mind and a kind, collaborative nature, these qualities make him both an outstanding scientist and a highly valued colleague.

**2. Why do you think his profile and projects were so successful in attracting competitive fellowship funding?**

I believe that Yavuz's success is grounded in his strong record of academic mobility and exceptionally productive PhD work, joined with original and ambitious thinking aimed at addressing "big questions", while maintaining the balance between vision and feasibility.



*Yavuz Yazicioglu and Christoph Hess*

**3. What does it mean for a lab and for the DBM to host fellows supported by prestigious international schemes?**

Hosting fellows supported by prestigious international schemes signals that the lab and the DBM are recognized as excellent environments for high-level research and training. It certainly enhances the institution's visibility and reputation, increases its attractiveness to top talents and collaborators, and reinforces its position as a competitive and trusted host for internationally funded research.

***We thank Yavuz and Prof. Hess for their time and openness, and wish Yavuz every success in the exciting years of research ahead.***

**Interested in Yavuz's work or want to connect?**
**You can find him on LinkedIn or drop him an email.**

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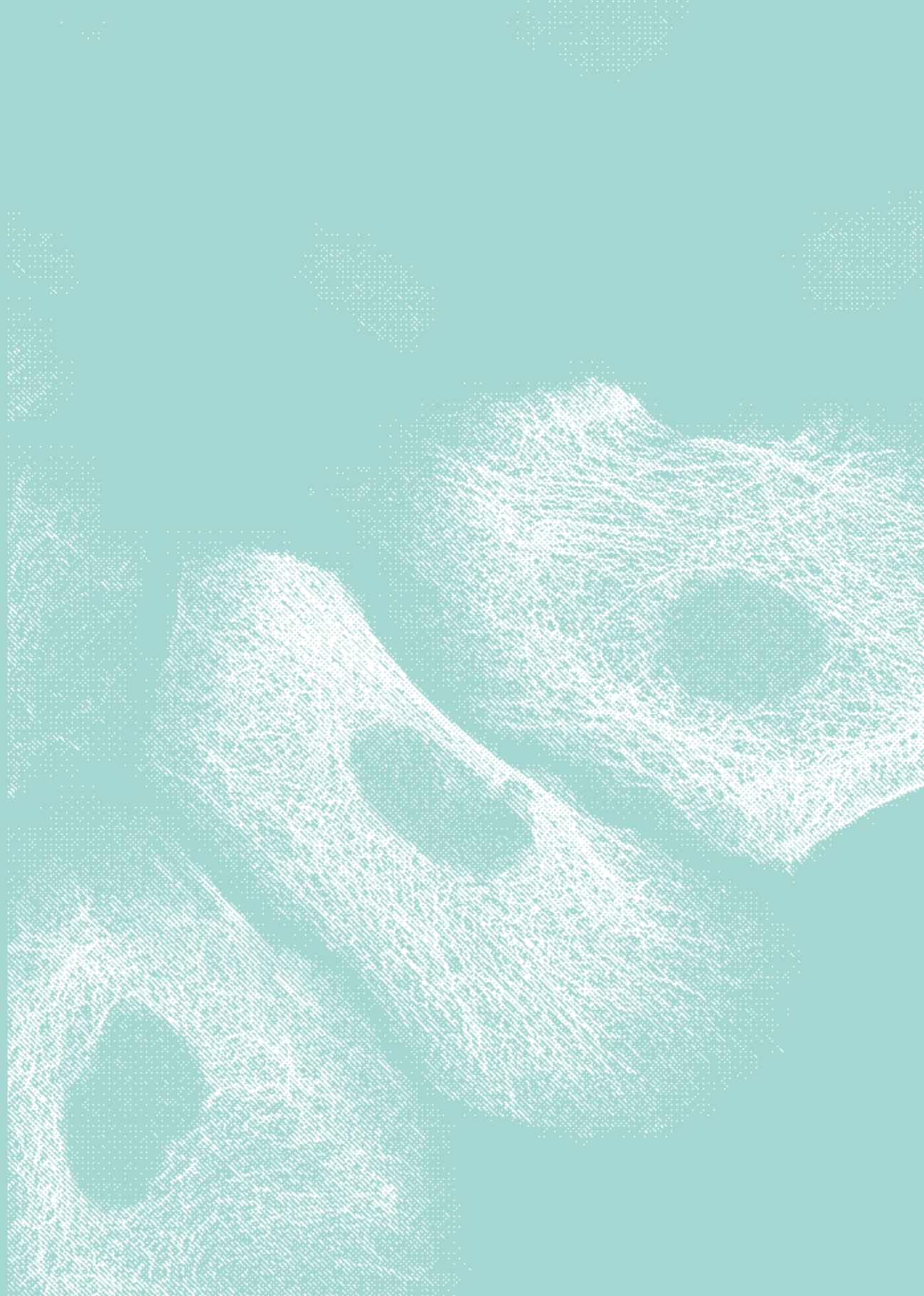

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# Research Group at a Glance
## Regenerative Angiogenesis
## Banfi Lab

*Regenerative Angiogenesis (from top to bottom):*
*Zeynep Yildiz*
*Tidarat Phakdeesorn*
*Alessandra Vescovi*
*Andrea Banfi*
*Roberto Gianni-Barrera*
*Nunzia Di Maggio*

### A Quick Overview of Our Research

Our research aims at promoting vascular growth for tissue repair, in particular skeletal muscle and bone, combining expertise on mesenchymal progenitor cell biology and vascular biology. We focus on: 1) elucidating the basic mechanisms governing the growth of blood vessels under therapeutically relevant conditions, and 2) translating these concepts into rational regenerative medicine approaches, to restore blood flow in ischemia and to regenerate vascularized tissues. In order to pursue these goals, we integrate multidisciplinary approaches, such as *ex vivo* transcriptomics, transgenic animal models, genetic modification of progenitors, and the engineering of controlled signaling microenvironments by factor-decorated smart biomaterials.

Our group benefits from a close collaboration with our clinical partners: 1) Prof. Edin Mujagic and Dr. Rosalinda D'Amico (Vascular Surgery) on therapeutic arteriogenesis strategies for the healing of diabetic chronic wounds; and 2) Prof. Dirk J. Schäfer and PD Dr. Max Burger (Plastic, Reconstructive, Aesthetic and Hand Surgery) on the engineering of vascularized bone substitutes for avascular necrosis of the bone.

### Highlights, Breakthroughs, and Current Projects

Blood vessels play important roles in tissue regeneration. They are not just conduits that deliver oxygen and nutrients, but they also functionally regulate resident stem cells in homeostasis and repair through so-called angiocrine signaling. We therefore investigate the cellular and molecular mechanisms of therapeutic angiogenesis in two relevant target tissues: skeletal muscle and engineered bone grafts.

Our current understanding of angiogenesis is mostly based on developmental models, in which new vessels sprout to vascularize non-perfused tissues. However, we found that the therapeutic delivery of vascular endothelial growth factor (VEGF) to adult muscle induces new vascular growth essentially without sprouting, but through the alternative mechanism of intussusceptive (splitting) angiogenesis. This entails an initial circumferential enlargement of pre-existing vessels followed by longitudinal splitting, and it remains a poorly understood process. We identified some pathways that regulate normal or aberrant intussusceptive angiogenesis, like PDGF-BB and EphrinB2-EphB4 signaling, or the stabilization of the resulting microvascular networks through a novel Sema3a/Nrp1-expressing monocytes/TGF-β1 paracrine axis. Currently, we are dissecting the regulatory landscape of intussusceptive angiogenesis in muscle by a combination of unbiased single cell transcriptomics and high-resolution multiplexed confocal microscopy (4i imaging) and have identified a key process that defines intussusceptive vs. sprouting angiogenesis.

The need to rapidly vascularize tissue-engineered grafts is a major limiting factor towards their clinical implementation. The interaction with extracellular matrix is key for the physiological functions of VEGF. We have therefore developed a platform to decorate a fibrin-based regenerative matrix with a cross-linkable version of growth factors, enabling us to precisely engineer the signaling microenvironment of embedded or ingrowing cells. Taking advantage of this highly controlled model, we found that a narrow range of matrix-bound VEGF doses can induce a specialized pro-osteogenic endothelial phenotype, through activation of Notch1 signaling, that drives osteoprogenitor commitment and stimulates regeneration of vascularized bone tissue. We currently seek to dissect the molecular crosstalk between pro-angiogenic endothelium and osteogenic progenitors (angiocrine signaling) by a combination of single-cell and spatial transcriptomic analyses and functional approaches.

Lastly, we use a similar strategy to decorate the endogenous *in vivo* matrix of dermis with engineered versions of recombinant growth factors, to stimulate both angiogenesis and arteriogenesis and promote wound healing in diabetic skin.

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**Our Vision for the Future**

The long-term goal is to gain a thorough understanding of the mechanisms of therapeutic angiogenesis and translate this knowledge into better molecular targets for treatment. The therapeutic delivery of VEGF is challenging due to its physiological binding to extracellular matrix, which means it is necessary to control its distribution in the microenvironment, rather than simply the total dose. Therefore, ancillary pathways that modulate the signaling output of different VEGF doses could be targeted pharmacologically to ensure effective and safe vascular expansion even if the distribution of VEGF dose in tissue cannot be controlled.
Engineered signaling microenvironments can be powerful tools for regenerative medicine, but also to provide a vascularization component to patient-derived xenografts in personalized oncology and to *in vitro* microphysiological systems for complex tissue models of regeneration and disease.

**Team Spirit – Introduction of Our Team**

We are a diverse group of scientists, bringing together different cultures, backgrounds and expertise, but sharing a passion for blood vessels. We value trust, empathy, and open communication to foster an environment where everyone can grow while pursuing common goals. Everyone is ready to support and learn from each other, and we like to celebrate every achievement together.

*Regenerative Angiogenesis (from left to right):*
*Rosalinda D'Amico, Maximilian Burger, Roberto Gianni-Barrera, Andrea Banfi, Nunzia Di Maggio, Zeynep Yildiz, Tidarat Phakdeesorn and Alessandra Vescovi*

**Our Group Members**

| | |
|---|---|
| Andrea Banfi | Research Group Leader |
| Roberto Gianni-Barrera | Project Leader |
| Nunzia Di Maggio | Project Leader |
| Alessandra Vescovi | PhD student |
| Tidarat Phakdeesorn | MSc student |
| Zeynep Yildiz | MSc student |
| Rosalinda D'Amico | Oberärztin Vascular and Transplantation Surgery |
| Maximilian Burger | Kaderarzt Plastic and Reconstructive Surgery |

# Research Group at a Glance
## Developmental Immunology
## Finke Lab

### A Quick Overview of Our Research

The development of lymph nodes and Peyer's patches is directed by lymphoid tissue inducer (LTi) cells during early ontogeny. LTi cells are part of the type 3 innate lymphoid cell (ILC3) family, which are essential at mucosal barriers where they regulate immune responses, promote tissue repair, and maintain tolerance to commensal microbes.

The pathways controlling ILC development, plasticity, and functional specialization remain incompletely understood. In mice and humans, ILC progenitors and mature ILCs are found in many tissues, and infections can drive their expansion. Emerging evidence also links ILCs to diseases such as cancer, allergies, inflammatory bowel disease, and metabolic disorders, highlighting the need for deeper mechanistic insight into their roles in health and disease.

Our research focuses on the pathways that regulate ILC progenitor differentiation and plasticity, and on the mechanisms that shape their tissue-specific functions under homeostatic and inflammatory conditions. We are particularly interested in how local environmental cues influence ILC programming and how ILCs modulate T cell responses across tissues. To address these questions, we combine *in vivo* studies using genetically engineered mouse models, imaging, and omics to study ILCs in their physiological context.

### Highlights, Breakthroughs, and Current Projects

Our work has helped define key pathways that regulate the development and function of ILCs. Studies from the lab established their role in lymphoid organogenesis and identified them as important regulators of immune homeostasis at mucosal surfaces.

We identified environmental signals, including retinoic acid and the cytokines IL-7, SCF, and Flt3L, that shape ILC development, as well as IL-1β, which promotes ILC activation and their ability to regulate T cell responses. We also showed that these functions are highly context dependent: in the intestinal mucosa, IL-23 and microbiota-derived signals restrain ILC-driven T cell activation; whereas in lymphoid tissues IFNγ enhances ILC-mediated T cell responses.

Current projects focus on ILC development, tissue adaptation and coordination of T cell responses. We are generating maps of ILC differentiation across tissues, combining an *in vitro* reconstruction of ILC development with *in vivo* validation of imputed developmental states and pathways.

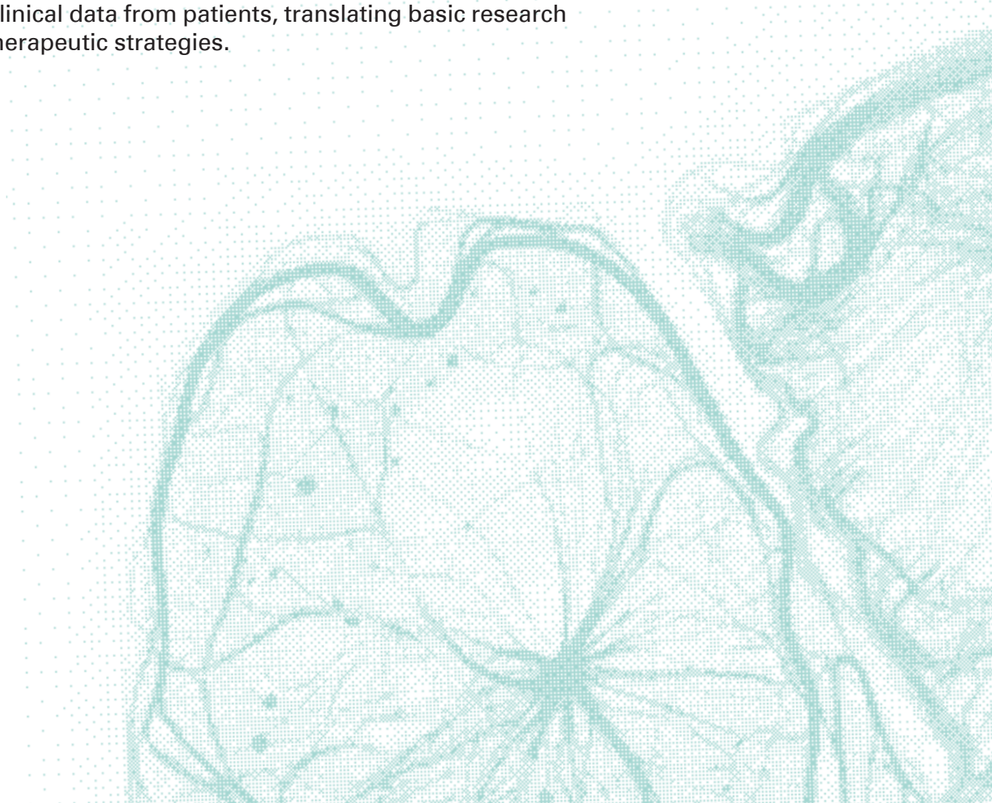
We further study how tissue environments shape the chromatin landscape of ILC3 and ILC3 interactions with T cells. In a lymphocytic choriomeningitis virus (LCMV) model, we found that ILC3s help maintain tissue-resident memory T cells, with potential relevance for improving vaccine-induced memory responses at mucosal surfaces.

We also developed a novel Split-Cre mouse model that enables selective targeting and monitoring of ILC3s *in situ*, whereas previous mouse models were not able to distinguish T cell from ILC3 targeting. This system is a useful tool that allows ILC3 tracking in tissues and the analysis of their tissue interaction partners in steady state and during a response to pathogens. As a complementary approach, we generated an improved proximity labelling toolkit allowing tracing of cell-cell interactions between many immune cell types. We are applying this method to study T cell responses after interactions with different antigen-presenting cells, including ILC3s, *in vivo*.

Overall, our research advances a deeper understanding of how ILC3s regulate immune responses within tissues, with the goal of informing future therapeutic strategies.

### Our Vision for the Future

Going forward, we aim to deepen our mechanistic understanding of how environmental signals shape immune responses and control ILC identity and plasticity under physiological and disease conditions. Our goal is to integrate fundamental discoveries from the bench and *in vivo* models, with laboratory and clinical data from patients, translating basic research findings into future therapeutic strategies.



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**Team Spirit – Introduction of Our Team**

Our research group brings together scientists from across the world, united by a shared curiosity about the immune system. We see diversity not just as a strength, but as a driving force behind how we think, question, and solve problems. Different perspectives challenge us, broaden our approaches, and create an environment where collaboration and mutual respect are fundamental.

We are a mix of postdoctoral researchers, students, and staff at different stages of our careers, each contributing unique expertise and experiences. Many of us balance life in the lab with life beyond it, including family, which shapes a culture that values flexibility, understanding, and support.

Beyond our research, we are an active and social group. Whether it is hiking, skiing, or cycling, we enjoy spending time outdoors. Just as important, we value coming together around food – sharing meals, conversations, and ideas. These moments strengthen the connections that make our lab not just productive, but genuinely enjoyable to be part of.

**Our Group Members**

| | |
|---|---|
| Daniela Finke | Research Group Leader |
| Aurelie Lenaerts | Postdoc |
| Edit Horvath | Laboratory Technician |
| Franziska Bosch | Postdoc |
| Gleb Turchinovich | Postdoc |
| Guerric Samson | Postdoc |
| Martha Gaio | Administrative Assistant |
| Sylvie Frey | Laboratory Technician |
| Yağmur Farsakoğlu | Postdoc |
| Zoé Rebischung | Master student |

*Developmental Immunology (from left to right): Daniela Finke, Edit Horvath, Guerric Samson, Zoé Rebischung, Gleb Turchinovich, Yağmur Farsakoğlu, Franziska Bosch, Sylvie Frey, Martha Gaio, and Aurelie Lenaerts*

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# Publications

All publications we have received from the period between January and May 2026. The publications are ordered by date of publication.

**A cooperative release of mitochondrial DNA from platelets and neutrophils drives an interferon signature in systemic sclerosis**

Giaglis S, Tiaden AN, Häner-Massimi S, Kyburz D, André C, Glück A, Ferrero E, Hawtin S, Junt T, Walker UA.

Arthritis Rheumatol. 2025 Dec 18. doi: 10.1002/art.70027.

**Identification of new interactors of eIF3f by endogenous proximity-dependent biotin labelling in human muscle cells**

Tintignac L, Mittal N, Alam S, Ataman M, Ertuna YI, Bock T, Erne B, Zavolan M, Sinnreich M.

Sci Rep. 2025 Dec 21;16(1):2812. doi: 10.1038/s41598-025-32702-7.

**Antigen-specific activation of gut immune cells drives autoimmune neuroinflammation**

Siewert LK, Berve K, Pössnecker E, Dyckow J, Zulji A, Baumann R, Munoz-Blazquez A, Krishnamoorthy G, Schreiner D, Sagan S, Nelson C, Sabatino JJ Jr, Nagashima K, Diard M, J Macpherson A, Ganal-Vonarburg SC, Fischbach MA, Zamvil SS, Schirmer L, Baranzini SE, Pröbstel AK.

Gut Microbes. 2026 Dec 31;18(1):2601430.
doi: 10.1080/19490976.2025.2601430.

**Non-cytolytic re-engineering of a viral vaccine vector enables durable effector-memory T cell immunity by reinforcing type I IFN induction**

Ciancaglini M, Avanthay R, Marx AF, Abreu-Mota T, Finozzi D, Fixemer J, Geier F, Burri D, Wagner I, Vincenti I, Kreuzfeldt M, Merkler D, Zimmer G, Pinschewer DD.

Mol Ther Nucleic Acids. 2026 Feb 2;37(1):102852.
doi: 10.1016/j.omtn.2026.102852.

**A mechanically active nucleus pulposus-on-a-chip for studying mechanobiology and therapeutic strategies in intervertebral disc disease**

Krupkova O, Aterini B, Rahal N, Schulze E, Darwiche S, Ehrbar M, Pelttari K, Martin I, Schären S, Mehrkens A, Barbero A, Mainardi A.

Biofabrication. 2026 Feb 5;18(1). doi: 10.1088/1758-5090/ae3d85.

**Avapritinib improves cutaneous involvement in patients with indolent systemic mastocytosis: Results from the randomized, phase 2, interventional PIONEER study**

Siebenhaar F, Broesby-Olsen S, Castells M, George TI, Livideanu CB, Álvarez-Twose I, Panse J, Barete S, Reiter A, Dybedal I, Akin C, Van Daele P, Radia DH, Cerquozzi S, Ustun C, Sabato V, Gotlib J, Rafferty M, DeAngelo DJ, Schafhausen P, Ungerstedt J, Ogbogu PU, Florell S, Wada DA, Rets A, Lin HM, Bidollari I, Hong J, Shaheen D, Lampson B, Hartmann K.

J Am Acad Dermatol. 2026 Feb 12:S0190-9622(26)00221-5.
doi: 10.1016/j.jaad.2026.02.025.

# Publications

**Guideline-based strategies to identify severe cytokine release syndrome in COVID-19 and cancer immunotherapy using large-scale electronic health records**

Robert PA, Denck J, Do CT, Ozkirimli E, Jamois C, Corso C, Wang K, Berger CT.

Front Digit Health. 2026 Feb 17;7:1625889. doi: 10.3389/fdgth.2025.1625889.

**The cTnI/cTnT ratio in myocardial injury: A multicohort and experimental synthesis**

Zimmermann T, Koechlin L, Walter J, Kimenai DM, Bularga A, Milan G, Sileo A, Fusco D, Mu X, Brunner FJ, Waldeyer C, Sörensen NA, Neumann JT, Muslimovic A, Vukusic K, Nestelberger T, Boeddinghaus J, Lopez-Ayala P, Rumora K, Puelacher C, Gualandro DM, Rentsch K, Strebel I, Diebold M, Twerenbold R, Lindahl B, Denessen EJS, Mingels AMA, Meex S, Mills NL, Marsano A, Hammarsten O, Mueller C; IT-Ratio Consortium.

J Am Coll Cardiol. 2026 Feb 17:S0735-1097(25)10659-1. doi: 10.1016/j.jacc.2025.12.078.

**Circulating clues in Ménière's disease: Elevated cell-free DNA and a pro-inflammatory signature in patients' blood**

Sekulic M, Kobivasan S, Giaglis S, Bodmer D, Petkovic V.

Int J Mol Sci. 2026 Feb 18;27(4):1948. doi: 10.3390/ijms27041948.

**Migration and chondrogenesis of cells from minced nasal cartilage in type I collagen hydrogel: A workflow for one-step engineering of injectable grafts**

Gensch A, Damle A, Sonsöz O, Mock D, Haug M, Adamo D, Bartoszek EM, Lehoczky G, Martin I, Barbero A.

Gels. 2026 Feb 25;12(3):190. doi: 10.3390/gels12030190.

**Neuregulin-1β augments adaptive concentric remodeling and systolic function without exacerbating hypertrophy during pressure overload**

Xu L, Aghagolzadeh P, Morandi C, Wagner J, Lépine LM, Segers VFM, de Keulenaer GW, Brink M.

Am J Physiol Heart Circ Physiol. 2026 Mar 1;330(3):H818-H837. doi: 10.1152/ajpheart.00371.2025.

**Anaphylaxis events in the PIONEER study of avapritinib in indolent systemic mastocytosis**

Pongdee T, Castells M, Akin C, Dybedal I, Gotlib J, Panse JP, Alvarez-Twose I, Cabeza CM, Cerquozzi S, Vadas P, Swarup V, Vachhani P, Wortmann F, Yi CA, Bidollari I, Newberry K, Shaheen D, Hartmann K.

World Allergy Organ J. 2026 Mar 14;19(4):101352. doi: 10.1016/j.waojou.2026.101352.

# Publications

**Delayed urticaria during treatment with anti-CGRP monoclonal antibodies in migraine**

Berger CT, Villena FB, Vogt SB, Heydrich L, Hartmann K, Papadopoulou A.

Headache. 2026 Mar 15. doi: 10.1111/head.70082.

**Decoding fibroblast diversity associated with the postnatal loss of cardiac regenerative capacity**

Aghagolzadeh P, Rapp V, Nemir M, Mahfoud F, Brink M, Pedrazzini T.

Int J Mol Sci. 2026 Mar 16;27(6):2709. doi: 10.3390/ijms27062709.

**Epstein Barr virus antigen-induced autoantibodies against complement C1q exacerbate renal disease in lupus-prone mice**

Tuncer E, Moll S, Dubler D, Schulz K, Trendelenburg M.

Front Immunol. 2026 Mar 18;17:1710424. doi: 10.3389/fimmu.2026.1710424.

**Alzheimer's disease pathology degrades an NMDA receptor-dependent spontaneous activity pattern in cortico-hippocampal circuits**

Ellingford R, Harris SS, Kehring M, Rajani RM, Lam FKW, Graykowski D, Böken D, Welikovitch LA, Khasnavis A, Laban R, Heslegrave A, Yaman U, Mate de Gerando A, Bond SA, Wray S, Salih DA, Dupret D, Dolan RJ, Klenerman D, Zetterberg H, Hyman BT, Busche MA.

Neuron. 2026 Mar 30:S0896-6273(26)00132-7. doi: 10.1016/j.neuron.2026.02.027.

**Perinatal infection elicits clonally restricted T follicular helper cell responses that drive antibody-mediated viral control**

Martin K, Reuther P, Geier F, Marx AF, Abreu-Mota T, Fixemer J, Kastner AL, Bonilla WV, Tintignac K, Stauffer K, Lu M, Schuler D, Wagner I, Merkler D, Pinschewer DD.

Immunity. 2026 Mar 30:S1074-7613(26)00115-9. doi: 10.1016/j.immuni.2026.03.004.

**Engineering of bacterial cellulose-based vascular grafts for small-diameter applications**

Fusco D, Christiaens N, Pederzani E, Martinazzi S, Isu G, Meissner F, Miazza J, Zenklusen U, Gregor M, Koechlin L, Pisanu A, Raimondi Lucchetti M, Fiore GB, Soncini M, Glatz K, Runtgascher A, Winkler B, Eckstein F, Marsano A.

Biomater Adv. 2026 Mar 31;185:214851. doi: 10.1016/j.bioadv.2026.214851.

**Human nasal cells in nanofibrillar cellulose hydrogel: viability, function, and implications for bone tissue regeneration**

Sekulic M, Korah A, Negoias S, Bodmer D, Petkovic V.

Cells. 2026 Apr 2;15(7):641. doi: 10.3390/cells15070641.

# Publications

**Renal denervation attenuates cardiac fibrosis and improves left ventricular function in rats with myocardial infarction**

Therre M, Hohl M, Aghagolzadeh P, Selejan SR, Lauder L, Tokcan M, Markwirth P, Engler H, Hübner U, Müller A, Huynh AKD, Kahles F, Konstandin M, Böhm M, Mahfoud F.

Sci Rep. 2026 Apr 26;16(1):13416.
doi: 10.1038/s41598-026-50195-w.

**Protocol for generating and characterizing matrigel-free prostate cancer patient-derived organoids**

Dolgos R, Parmentier R, Wang J, Templeton AJ, Mertz KD, Pueschel H, Seifert H, Mortezavi A, Vlajnic T, Rentsch CA, Bubendorf L, Le Magnen C.

STAR Protoc. 2026 Apr 7;7(2):104486.
doi: 10.1016/j.xpro.2026.104486.

**HIF-1α+ CD4+ T cells coordinate a tissue-resident immune cell network in the lung**

de Lima J, Swarnalekha N, Depew CE, Bartoszek E, Litzler LC, Esposito M, Erber M, Camarasa TMN, Iseppi L, Künzli M, Shenoy AT, Lammens I, Vanhee S, Lambrecht BN, Goldrath AW, Sun J, Schreiner D, King CG.

Immunity. 2026 Apr 14;59(4):1092-1106.e6.
doi: 10.1016/j.immuni.2026.01.023.

We acknowledge Andrea Banfi for his contribution and dedication to the publication list.

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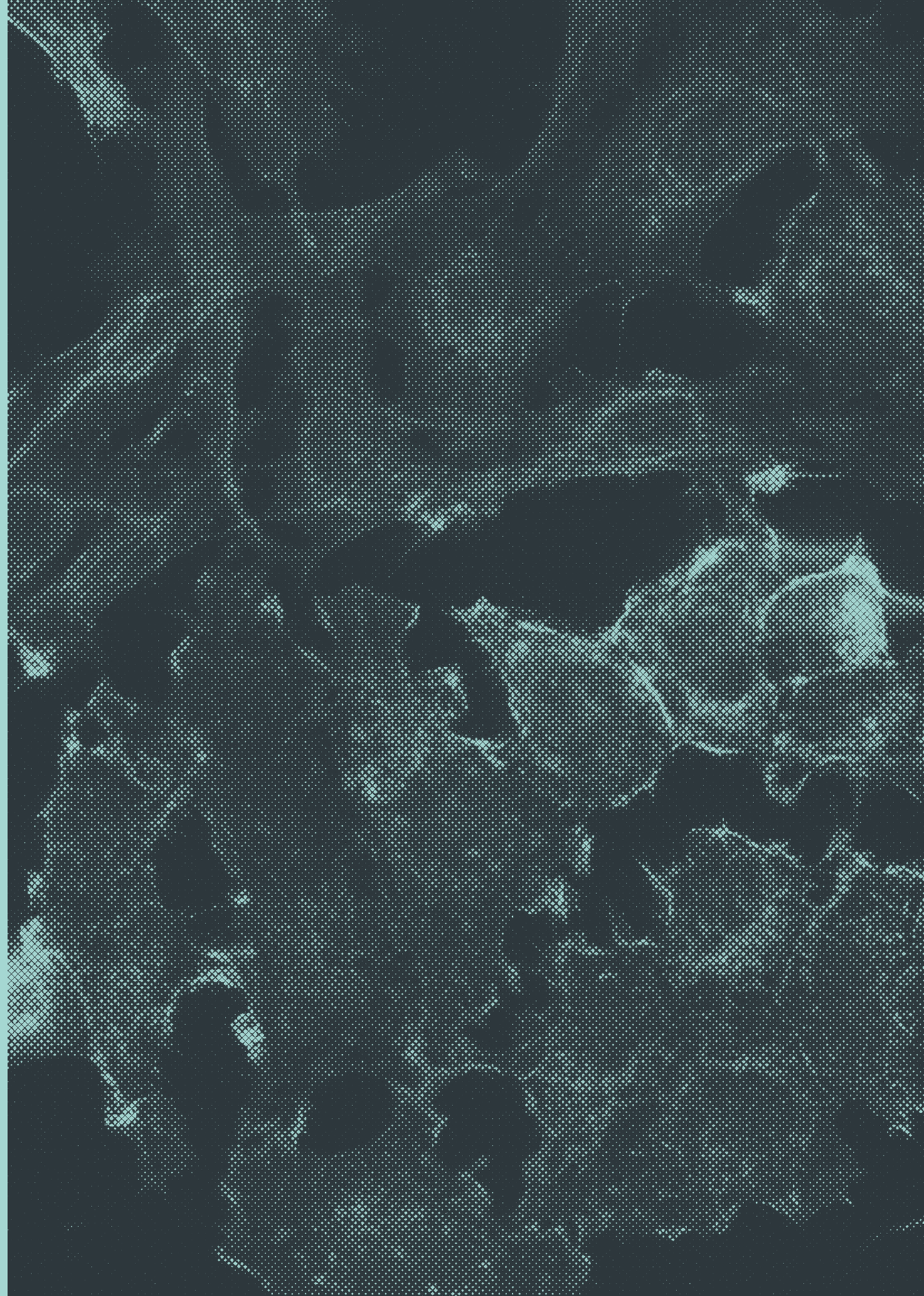

## Congratulations
## Events

# The DBM Congratulates

**Awards since January 2026**

We extend our heartfelt congratulations to the following DBM members for their remarkable awards and achievements since January 2026.

Warm congratulations to **Bojana Müller-Durovic** on receiving the Pfizer Research Prize in Infectious Diseases and Immunology.

**Tiago Almeida Fonseca Turpin** was awarded a poster prize at the 52nd Annual Meeting of the Arbeitsgemeinschaft für Dermatologische Forschung (ADF) in Freiburg, Germany.

**Jose Pedro Loureiro** won a best presentation award at the 21st World Immune Regulation Meeting in Davos, Switzerland, 11-14 March 2026, for his workshop presentation "Recognition of MR1-antigen Complexes by TCR Vγ9Vδ2".

**Elisabeth Roider** received an Innosuisse grant without an implementation partner for the project "Mitochondrial Modulation for Precision Skin Pigmentation Control." She is being funded to develop a first-in-class topical approach to safely and reversibly regulate melanin production, with potential applications in skin darkening, skin lightening, and photoprotection.

The paper by **Edveena Hanser** and **Diego Kyburz**, "Minimal information for studies of extracellular vesicles (MISEV2023): From basic to advanced approaches," was recognized as one of the top ten most-cited papers published by the Wiley journal in 2024.

**Karin Hartmann** received a Lifetime Achievement Award of the American Initiative in Mast Cell Diseases, with Keynote Address on May 16, 2026, at the AIM 2026 Physician & Investigator Conference, hold in Ann Arbor, Michigan.

The "De novo ossification using human engineered cartilage as a cell-free biomaterial (DENOVOSS)" project, with **Ivan Martin** and **Sébastien Pigeot** as co-recipients, receives funding from the European Innovation Council.

Huge congratulations to **Karen Dixon** for receiving one of 15 prestigious "AACR Trailblazer Cancer Research Grants" for Early-Stage Investigators for her project, "Identifying and Disrupting Neuro-Immune Circuits in Lung Cancer." The grant provides $1 million over three years.

**Anne-Sophie Korganow** (Strasbourg, France), **Bodo Grimbacher** (Freiburg, Germany), and **Mike Recher** (Basel, Switzerland) have successfully secured the opportunity to host the 23rd Biennial Meeting of the European Society for Immunodeficiencies (ESID) in Basel, Switzerland, from October 18–21, 2028. This event will provide an excellent platform for the immunology community at the DBM and in Basel to present new data to leading experts in the field, while also strengthening Basel's reputation as a premier destination for life sciences congresses. Further details will be shared once registration opens.

# The DBM Congratulates

## NEW SNSF PROJECT FUNDING

GLYCO-MET: Deciphering glycosylation dynamics during ovarian cancer dissemination
**Francis Jacob**
Start: 01.04.2026 | End: 31.03.2030

Clonal evolution and functioning of vaccination-induced B cell immunity to Lassa virus
**Daniel Pinschewer**
Start: 01.04.2026 | End: 31.03.2030

Optimizing bone healing: Unveiling the power of matrix-bound vs. media exosomes with ceramic scaffolds for advanced tissue engineering
**Arnaud Scherberich**
Start: 01.04.2026 | End: 31.03.2029

Ontogeny and reprogramming of ISG neutrophils in cancer – ORIGIN
**Alfred Zippelius**
Start: 01.05.2026 | End: 30.04.2030

## NEW KREBSLIGA SCHWEIZ FUNDING

A new lens on ovarian cancer: studying how tumor and immune cells communicate
**Francis Jacob**
Start: 01.02.2026 | End: 31.01.2029

Molecular dissection of the cause and complications of persistent polyclonal B cell lymphocytosis
**Mike Recher**
Start: 01.02.2026 | End: 31.01.2029

Irreversible inhibitors against the lipid kinase PI3Kα as a means to overcome cancer resistance
**Matthias P. Wymann**
Start: 01.02.2026 | End: 01.02.2028

Charting the high-dimensional metabolic landscape of lung tumors to enable drug repurposing
**Mattia Zampieri**
Start: 01.02.2026 | End: 31.01.2029

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**PhD Defenses since January 2026**

| | | |
|---|---|---|
| 23.01.26 | Cell Biology | Nicolas Kramer |
| 12.02.26 | Medical-Biological Research | Vivien Beyersdorfer |
| 25.02.26 | Biomedical Engineering | Andrea Mazzoleni |
| 05.03.26 | Neurobiology | Paula Torrents-Solé |
| 05.03.26 | Cell Biology | Natalie Kehrer |
| 06.03.26 | Medical-Biological Research | Juliane Heilig |
| 12.03.26 | Medical-Biological Research | Mika Schneider |
| 17.03.26 | Medical-Biological Research | Nicole Oelgarth |
| 19.03.26 | Medical-Biological Research | Lukas Kübler |
| 20.03.26 | Medical-Biological Research | Franziska Bosch |
| 23.03.26 | Medical-Biological Research | Elena Ratti |
| 30.03.26 | Cell Biology | Wadschma Naderi |
| 16.04.26 | Clinical Research | Aleksandra Maleska Maceski |
| 17.04.26 | Medical-Biological Research | Jochen Schmid |
| 24.04.26 | Medical-Biological Research | Juliane Klehr |
| 27.04.26 | Microbiology | Jean de Lima |
| 29.04.26 | Medical-Biological Research | Irene Fusi |
| 05.05.26 | Biomedical Engineering | Gregory Reid |
| 13.05.26 | Microbiology | Caroline Hillenbrand |
| 19.05.26 | Cell Biology | Vanshika Rastogi |
| 22.05.26 | Cell Biology | Carolina Hager |

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# International Day of Women and Girls in Science

## Symposium on Sex and Gender Differences in Medicine and Research

February 11, 2026

In honor of the International Day of Women and Girls in Science, the DBM celebrated progress and fostered dialogue this year. Four invited speakers – Dr. med. Jeanne Moor, PD Dr. med. et phil. Berna Özdemir, Prof. Dr. med. Mira Katan Kahles, and Prof. Dr. med. Angèle Gayet-Ageron – shared their insights with the large audience about the challenges and importance of integrating sex- and gender-specific perspectives into medical research and clinical practice. Jeanne Moor spoke about rethinking heart health through a sex- and gender-sensitive lens. Berna Özdemir gave a passionate talk about women in precision medicine. Mira Katan focused on integrating sex and gender in stroke care and research. Angèle Gayet-Ageron examined rethinking health research in general. The symposium concluded with a roundtable discussion, moderated by Marie Czech from Athena's Journey, followed by a network apéro.


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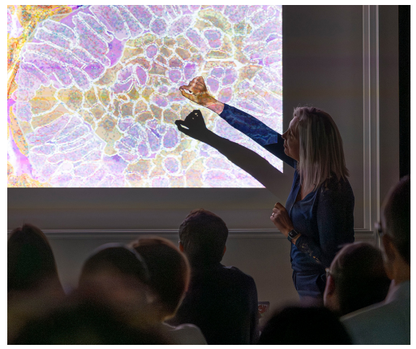
# Launch Event of the Xenium Spatial Transcriptomics Platform

March 3, 2026

The Department of Biomedicine and the ETH Zurich Department of Biosystems Science and Engineering (D-BSSE) celebrated the launch of the Xenium spatial transcriptomics platform in Basel. The room at the Biozentrum was packed. The DBM and D-BSSE made this joint investment possible through financial contributions from the DBM and 13 individual research groups from the DBM, Pathology, UKBB, and D-BSSE. The initiative was co-led by Judith Zaugg from the DBM and Andreas Moor from the D-BSSE and implemented in coordination with Diego Calabrese from the DBM histology core facility. The strong and broad support and interest were also evident at the official launch event. Given the heterogeneous audience, the talks and discussions were lively and interactive. The demand for spatially resolved molecular analyses in the region has now been met. As the first academic Xenium platform in Basel, the system will likely attract even more significant interest.





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# The Department of Biomedicine meets the Department of Pharmaceutical Sciences

March 5, 2026

Researchers from the Department of Biomedicine and from our future next-door neighbours from the Department of Pharmaceutical Sciences (DPhW) came together for an inspiring meeting. Presenting your own research in only three minutes can be challenging. However, this seemed far simpler than maintaining the tight schedule, given the many questions and meeting points between the individual researchers and the two groups. The lively discussions continued during the break and at the reception that followed. With a focus on collaboration and strengthening our research community, this goal was completely achieved.


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# DBM Plenary Assembly

March 19, 2026

The DBM Plenary Assembly was once again a very productive and engaging event. Andrea Ottolini-Voellmy welcomed everyone and provided an overview of our current situation with the new building. Yves Hartmann presented the findings of the February 2026 visit by the "Inspektor kantonales Arbeitsamt." The most significant findings have already been communicated via email. These findings require immediate attention and solutions. Simon Schwarz and Jerneja Koren then provided updates from the Postdoc and PhD Clubs, respectively. The last major topic before the social gathering was the upcoming switch to M365. Evelina Mayländer presented the next steps and measures to address the most common problems. The event concluded with an informal networking opportunity during the apéro.

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# Upcoming Events

**Athena‘s Journey**

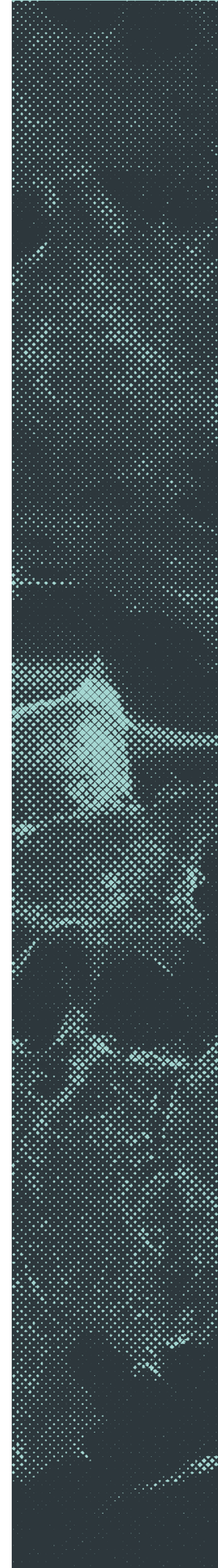
11.06.2026 and 09.07.2026

**DBM Summer Symposium**

09.09.2026

**Spatial OMICS Symposium**

11.09.2026



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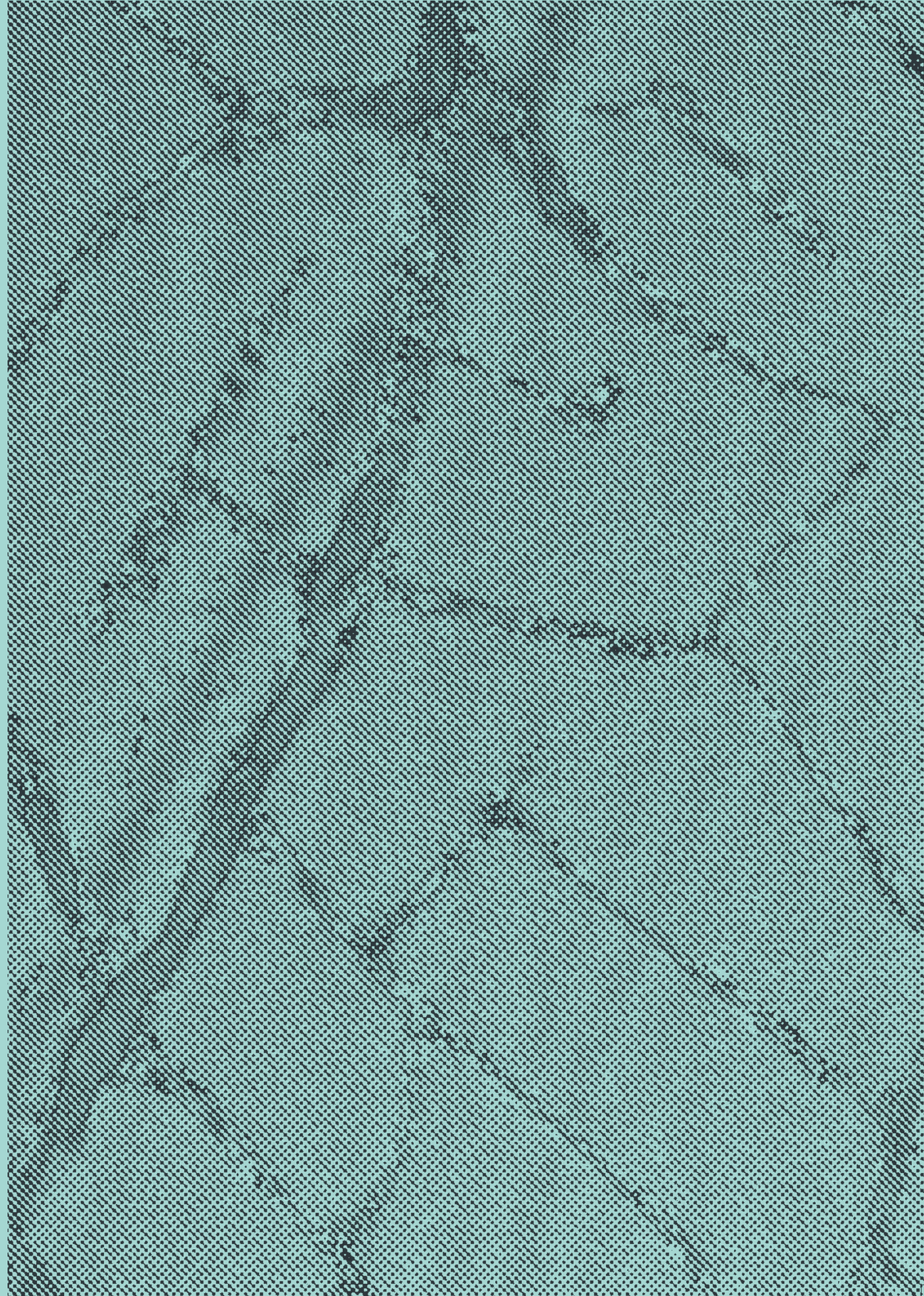

# New Colleagues

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# New Colleagues from January to May 2026

We are delighted to have you among us. We would like to express our warmest welcome and good wishes!

**Affeltranger Mejías Anna**
Tumor Heterogeneity Metastasis and Resistance (Bentires-Alj)

**Ajrullahi Fatlinda**
Myocardial Research (Kuster-Pfister)

**Andrieu Matthieu**
Cancer- and Immunobiology (Wymann)

**Bhattacharya Baivabi**
RNA Biology and Neurogenetics (Hilgers)

**Bloch Jason**
Cognitive Neuroscience (de Quervain)

**Blöchliger Koranan Nalani**
Infection Biology (Khanna)

**Bossuat Margaux**
Cancer- and Immunobiology (Wymann)

**Brait Sarah**
Cancer- and Immunobiology (Wymann)

**Bucher Livia Anna**
Blood Cancer Biology and Immunotherapy (Apostolova)

**Buglione Mario**
Neuroplasticity (Keller)

**Carré Alexia Sarah Morgane**
Experimental Neuroimmunology (Pröbstel)

**Celano Franco**
Infection Immunology (King)

**Deneer Lotte Jacoba**
Cartilage Engineering (Barbero)

**Ehrsam Nana**
Cognitive Neuroscience (de Quervain)

**Epple Raja**
Cartilage Engineering (Barbero)

**Esposito Cinzia**
Tumor Heterogeneity Metastasis and Resistance (Bentires-Alj)

**Ferizi Sara**
DBM – Zentrale Dienste (Felix)

**Ferrer Coloma Silvia**
Cancer Immunology (Zippelius)

**Fong Arwen**
Skin Biology (Navarini)

**Freitas Pontífice Encarnação de Oliveira Mariana**
Metastasis Biology (Sznurkowska)

**Geraci Andrea**
Cancer- and Immunobiology (Wymann)

**Gigliotti Alessandro**
Brain Tumor Immunotherapy and Biology (Hutter / Mariani)

**Giraulo Caterina**
Skin Biology (Navarini)

**Gyunesh Ayberk Alp**
RNA Biology and Neurogenetics (Hilgers)

**Hammersley Puentes Felipe Ignacio**
Cognitive Neuroscience (de Quervain)

**Han Bingqing**
Cartilage Engineering (Barbero)

**Hertzog Lina**
Bone Regeneration (Scherberich)

**Hess Cancino Maximiliano Sebastian**
Gastroenterology (Niess)

**Honetschlägerova Zuzana**
Translation Cardiology (Mahfoud)

**Horvathova Laura**
Ovarian Cancer Research (Heinzelmann)

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**Huber Jule**
Blood Cancer Biology and Immunotherapy (Apostolova)

**Kasap Pelin**
RNA Biology and Neurogenetics (Hilgers)

**Kaur Siyadeep**
Gastroenterology (Niess)

**Kaymak Tanay**
Hepatology (Heim)

**Kulkarni Shreya Kedar**
Immunobiology and Immunotherapy (Beltra)

**Lahmimti Asmaa**
Cancer- and Immunobiology (Wymann)

**Lambrecht Victoria**
Tissue Engineering (Martin)

**Li Qing**
Tissue Engineering (Martin)

**Matmat Karim**
Cancer- and Immunobiology (Wymann)

**Matzner Mirela**
DBM–Histology (Calabrese)

**McCall Lani**
Infection Immunology (King)

**Meier Giulian René**
Pulmonary infection biology (Boeck)

**Meyer Emmanuel**
Hepatology (Heim)

**Mirgel Fabiana**
Brain and Sound (Rinaldi)

**Mittelberger Luke**
Molecular and Computational Hematology-Immunology (Zaugg)

**Monti Elisa**
Cartilage Engineering (Barbero)

**Muhr Eliel Alexander**
Inner Ear Research (Bodmer)

**Neppelenbroek Sam**
Experimental Virology (Pinschewer)

**Ochoa Espinosa Amanda**
Ovarian Cancer Research (Heinzelmann)

**Ou Kristy**
Molecular and Computational Hematology-Immunology (Zaugg)

**Pérez Ochavo Marta**
Cancer Neuroimmunology (Dixon)

**Pfanner Tamara**
Cancer- and Immunobiology (Wymann)

**Pfenniger Anna**
Inner Ear Research (Bodmer)

**Posch Simone**
DBM–Microscopy (Lorentz)

**Ritter Kevin**
Systems Pharmacology (Zampieri)

**Rodrigues Mantuano Natalia**
Cancer Immunotherapy (Läubli)

**Salinas Laura**
Immune Cell Biology (Borsa)

**Schmid Luana**
Molecular Immune Regulation (Jeker)

**Schroeder Adam**
Cognitive Neuroscience (de Quervain)

**Schulz Kristina**
Clinical Immunology (Trendelenburg)

**Schwengeler Leora Madlaina**
Brain Tumor Immunotherapy and Biology (Hutter/Mariani)

**Seiller Anthony Charles**
Translational Genitourinary Cancer Research (Le Magnen)

# New Colleagues from January to May 2026

**Sonder Emanuel**
DBM–Bioinformatics (Ivanek)

**Souaqi Issam**
Cancer- and Immunobiology (Wymann)

**Stahel Cedric Frank**
Inner Ear Research (Bodmer)

**Steiner Janis Jodok**
Tissue Engineering (Martin)

**Sterk Katja**
Experimental Rheumatology (Kyburz)

**Sznurkowska Magdalena**
Metastasis Biology (Sznurkowska)

**Tousiaki Efthalia Natalia**
Ocular Pharmacology and Physiology (Neutzner)

**Verdonschot Giselle Hannah**
Pediatric Immunology (Holländer)

**von Versen Frauke**
Reproductive Biology and Health (von Versen)

**Wissler Maximiliane**
Immunobiology (Hess)

**Yildiz Zeynep**
Regenerative Angiogenesis (Banfi)

**Zwisler Laura**
DBM–Bioinformatics (Ivanek)

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# Thank You!

The DBM newsletter team would like to thank all the contributors for their work. We hope you enjoyed reading the newsletter.

Please feel free to submit your ideas and input for our next issue.

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DBM Basel

# Newsletter

## May 2026