Cell News

Newsletter of the German Society for Cell Biology

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01/2026

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DGZ Office

Sabine Reichel-Klingmann
c/o Deutsches Krebsforschungs-zentrum (DKFZ)
Im Neuenheimer Feld 280
69120 Heidelberg
Tel.: 0 62 21 / 42-34 51
Fax: 0 62 21 / 42-34 52
E-Mail: dgz@dkfz.de
Internet: www.zellbiologie.de

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Cover Image:
International Meeting of the German Society for Cell Biology, March 14-17, 2027, Bonn, Germany.

Dear members of the DGZ,

We hope that you have had a successful 2026 thus far.

In this issue of Cell News, we begin a new spotlight series featuring the speakers of our DGZ Work Groups (pages 6-13). Their commitment is essential to the vibrant exchange and collaborative spirit within our society, and we are delighted to introduce their work and scientific perspectives. Our Work Groups provide important platforms for networking, discussion, and collaboration across institutions and career stages, while also helping to shape emerging directions in cell biology. We invite all DGZ members to learn more about these activities and consider to join one of the groups (more information: https://www.zellbiologie.de/workgroups/).

Supporting scientific excellence remains at the heart of the DGZ's mission. We therefore encourage all eligible members to consider applying for or nominating colleagues for the current **DGZ Awards**. Recognizing outstanding achievements is an important way of highlighting the excellent research carried out within our community and of encouraging the next generation of cell biologists. Please find this year's calls on pages 14-15. The award ceremonies will take place at next year's international DGZ meeting in Bonn (**14.-17.3.2027**, page 5).

We were deeply saddened by the loss of two outstanding scientists in recent months: **Jochen Guck** and **Pierre Chambon**, whose pioneering contributions have had a profound impact on cell biology, biophysics, and biomedicine. Spanning different fields and generations, both advanced our understanding of fundamental biological processes and inspired countless researchers around the world. We are grateful for their extraordinary scientific legacy and remember them with the utmost respect and appreciation (see pages 18-19).

Looking ahead, we would like to draw your attention to the upcoming **DGZ General Assembly** (page 17). The continued success of our society relies on the engagement of its members, and we encourage all of you to take part in this assembly and help shape the future direction of the DGZ. Moreover, the **DGZ elections** for the Executive Board and Advisory Board will be held this autumn (more information will follow soon).

Beyond the activities within our society, preparations are beginning for the next **DFG Review Board elections in 2027**. The Review Boards (Fachkollegien) play a crucial role in ensuring high-quality peer review and adequate representation of scientific disciplines within the German funding landscape. We are very happy that already now several DGZ members are acting in different Review Boards. To identify for the next term (2028-2032) additional strong candidates who can represent the breadth of cell biological research, the DGZ welcomes suggestions from its members (e-mail to DGZ office by **August 15, 2026**).

Another important topic attracting considerable attention is the future of fixed-term employment contracts in academia. Interestingly, current policy discussions appear to be moving in two different directions. On the one hand, the proposed reform of the Wissenschaftszeitvertragsgesetz aims to strengthen predictability and improve career perspectives within academia. On the other hand, broader labour market reforms recently proposed by the Federal Government would expand opportunities for fixed-term employment in the general economy. How these developments will ultimately affect scientific careers in Germany remains to be seen. Given the importance of attractive and sustainable career paths for recruiting and retaining talented researchers, the outcome of these discussions will be highly relevant for the future performance and competitiveness of the German research system.

As always, we hope that this issue of CellNews informs, inspires, and stimulates discussion within our community. We thank all authors and contributors for their efforts and wish you an enjoyable read.

Best regards,

The DGZ Board –
Julia Groß, Jörg Höhfeld, Maria Bohnert & Sandra Iden

Dear colleagues, dear friends,

On behalf of the **German Society for Cell Biology (DGZ)** and its meeting organizing committee, we are pleased to announce the **DGZ International Conference**, to be held in **Bonn from March 14 to 17, 2027**.

Our meeting aims to highlight a portfolio of today's cell biological research with many of its aspects. We will offer a diverse, multidisciplinary program that fosters collaboration, advances new concepts, and serves as a primary platform for the exchange of expertise and developments in the dynamic fields of cell biology.

To achieve this, we plan to bring together a group of scientific leaders whose expertise encompasses key themes, including, but not limited to the main topics currently covered by the **DGZ work groups**:

- Physics of the cell
- Cilia & centrosomes
- Cell adhesion & mechanobiology
- Cell polarity & cell migration
- Membrane organization & contact sites
- Cell Biology of the immune system
- Functional organization of the nucleus
- Imaging for cell biology
- Mitosis & meiosis
- Cellular & organismal proteostasis
- Membrane trafficking & EVs
- Cytoskeleton & molecular motors

The conference will begin at noon on **Sunday, March 14, and will conclude at noon on Wednesday, March 17, 2027**. As meeting venue, we have selected Bonn's new University campus, which is close to the city center, in walking distance to the Botanical Gardens, the historical castles and the central railway station.

best regards
the organizing committee

Oliver Gruß
Jörg Höhfeld
Maja Köhn
Katrin Päschke
Dagmar Wachten

DGZ Workgroup Cilia & Centrosomes: Focus on Workgroup Speakers

Dagmar Wachten and David Mick

Dagmar Wachten

University of Bonn, University Hospital (Institute of Innate Immunity, dwachten@uni-bonn.de)

David Mick

Saarland University School of Medicine (Center for Molecular Signaling, Homburg, david.mick@uni-saarland.de)

Q (DGZ): Dagmar and David, you have been chairing the DGZ workgroup "Cilia and Centrioles" since the very first day we launched this new format in 2021. Since then, you have supported our community with engaging Focus Workshops and important internal feedback. Could you briefly introduce yourselves?

DW: I studied Biology at the University of Cologne, where I also completed my PhD in Biochemistry. Following postdoctoral research at the Babraham Institute in Cambridge, UK, I established my independent research career in Bonn as a Max Planck Research Group Leader. Since 2020, I have been Full Professor of Biophysical Imaging and Director of the Institute of Innate Immunity at the University Hospital Bonn.

Throughout my career, I have been fascinated by how cells sense and respond to their environment. This interest ultimately led me to the study of cilia, highly specialized signaling organelles that play central roles in development, tissue homeostasis, and disease.

DM: I studied Molecular Medicine at the University of Freiburg, where I trained as a biochemist. I also completed my PhD in Freiburg, focusing on the assembly of mitochondrial respiratory chain complexes. After a postdoctoral period at the University of Göttingen, I spent five years at Stanford University in the lab of Max Nachury, where I investigated primary cilia. I was recruited to Saarland University in 2017 as a Junior Professor and was tenured as Full Professor of Pathobiochemistry in 2023.

My research has consistently focused on the molecular mechanisms underlying protein biogenesis, transport, and the formation of complex cellular structures, which naturally drew me toward primary cilia—an especially fascinating organelle that integrates complex cellular architecture with intriguing protein transport mechanisms.

Q (DGZ): What is the main focus of your current research?

DM: In my current research we are trying to understand how defects in basic processes of primary cilia, such as protein trafficking and molecular signaling, lead to cell type-specific defects, as observed in syndromic disorders, termed ciliopathies. As an example of how primary cilia process external signals and transmit these on a molecular level, we are investigating the developmental signaling pathway, Hedgehog signaling, which is strictly dependent on primary cilia in vertebrates. We study these processes in a cell type-specific manner with a focus on the import and export of proteins, which we investigate in an unbiased fashion by time-resolved proximity labeling-based proteomics.

DW: My research focuses on understanding how primary cilia function as cellular signaling hubs. We are particularly interested in ciliary second messenger signaling, especially cyclic AMP (cAMP), and how these signaling pathways can influence cellular decisions at the tissue and organismal level. To address these questions, we combine advanced imaging approaches with optogenetics and transfer our knowledge in vivo in mouse models as well in ciliopathy patients. We have been studying the role of cilia in metabolic diseases, including obesity-associated inflammation and polycystic kidney disease.

Q (DGZ): What aspects of your workgroup's topic do you find particularly exciting or relevant today?

DW: What excites me most about cilia research today is that the field is now moving beyond just describing the molecular composition of these fascinating organelles. We can now understand how ciliary signaling influences tissue function, organismal physiology, and ultimately human health.

In my own research, and particularly through our involvement in the Collaborative Research Center SFB1454 Metaflammation and Cellular Programming, we are investigating how primary cilia contribute to obesity-associated inflammation and metabolic disease. This allows us to bridge fundamental cell biology with clinically relevant questions, connecting molecular mechanisms within a tiny cellular compartment to complex disease processes in patients, e.g. in patients with Bardet–Biedl syndrome. Cilia biology is becoming increasingly translational. Through interdisciplinary collaborations that bring together molecular biology, imaging, immunology, systems biology, and clinical research, we can begin to translate discoveries from the laboratory into a better understanding of human disease and, ultimately, novel therapeutic approaches.

DM: What I find particularly exciting at the moment is the growing recognition that these tiny primary cilia influence the function of other subcellular structures and organelles. Over the past few years, cell biology has increasingly focused on how organelles communicate and exchange information. In this context, the primary cilium has emerged as a central signaling hub that integrates and coordinates cellular processes far beyond what was previously appreciated.

We are currently especially interested in its role in cellular metabolism, an area that is only beginning to be explored. Understanding these connections will not only help to better explain cilia-related pathologies but also opens up new perspectives on the therapeutic potential of targeting ciliary signaling.

Q (DGZ): Which mysteries remain thus far in your research field, and what are the key challenges and goals in that field?

DM: Cilia and flagella are conserved across almost all eukaryotic lineages, yet a central unresolved question is why, within the same clades, some organisms have completely lost these structures while others retain them. This variability makes it difficult to define a single essential function of cilia and suggests that their roles -from motility to sensory signaling- are highly context-dependent and evolutionarily flexible. This functional diversity is also reflected in the different types of cilia in more complex organisms such as humans.

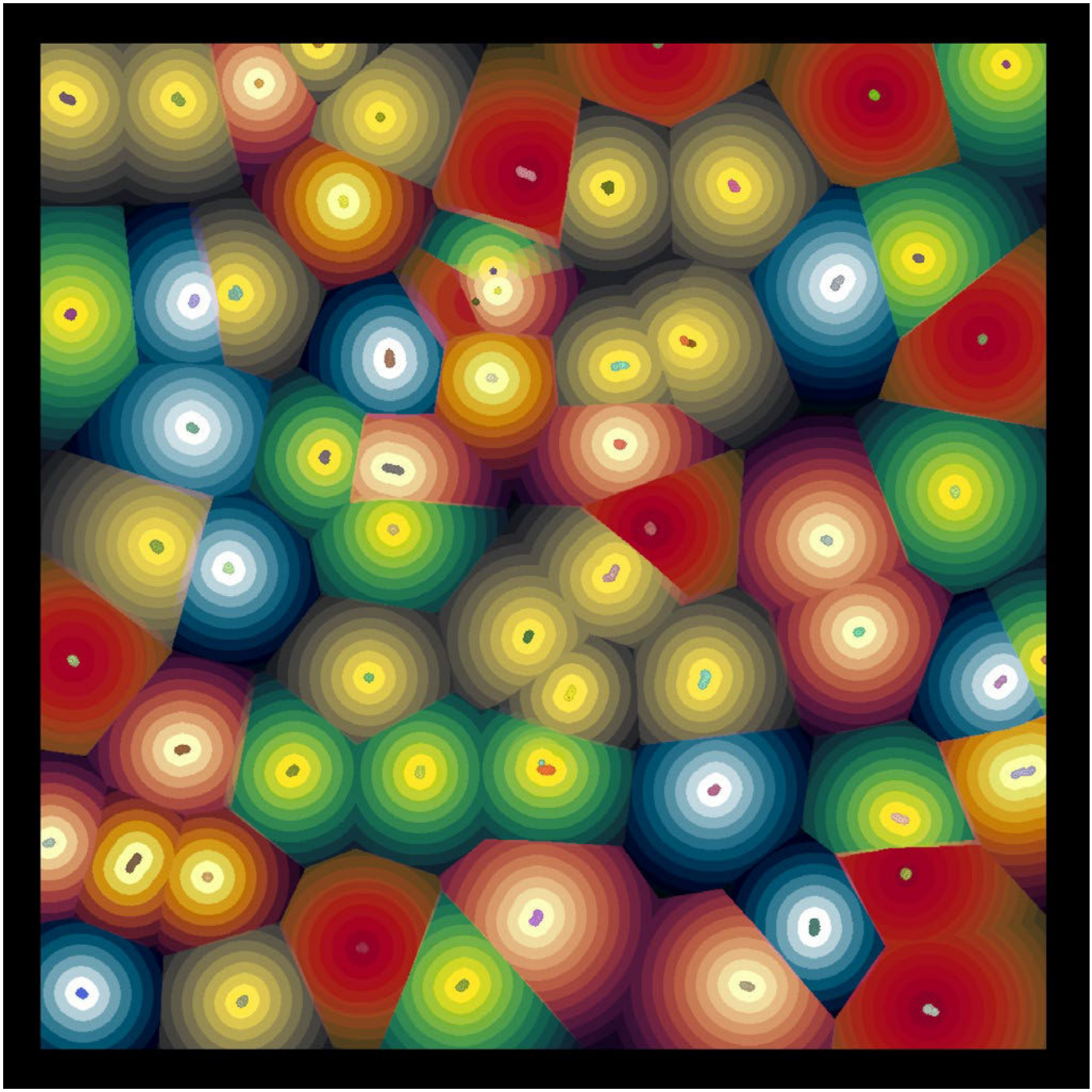
A key challenge in the field is methodological: primary cilia are extremely small, dynamic, and diverse, which limits our ability to study their molecular composition and function in detail using conventional biochemical and imaging approaches. One major goal, therefore, is to develop technologies that enable mapping of ciliary proteomes in different cell types and states. To this end, my team is continuing to develop proximity labeling approaches for time-resolved cilia proteomics. Using these methods, we aim to systematically characterize ciliary composition and uncover how primary cilia function as dynamic signaling organelles in different biological contexts.

DW: Despite tremendous progress, many fundamental questions remain unanswered. We still do not fully understand how cilia dynamically adapt their signaling properties in different cell types and physiological contexts. Likewise, we are only beginning to appreciate how cilia communicate with other cellular compartments and how they integrate multiple signaling pathways simultaneously. One major challenge is that cilia are highly dynamic structures whose composition and function can change rapidly depending on developmental stage, tissue environment, or disease state. Capturing these dynamics in living tissues remains technically demanding.

Q (DGZ): What activities do you enjoy outside the lab to unwind from the demanding scientific arena?

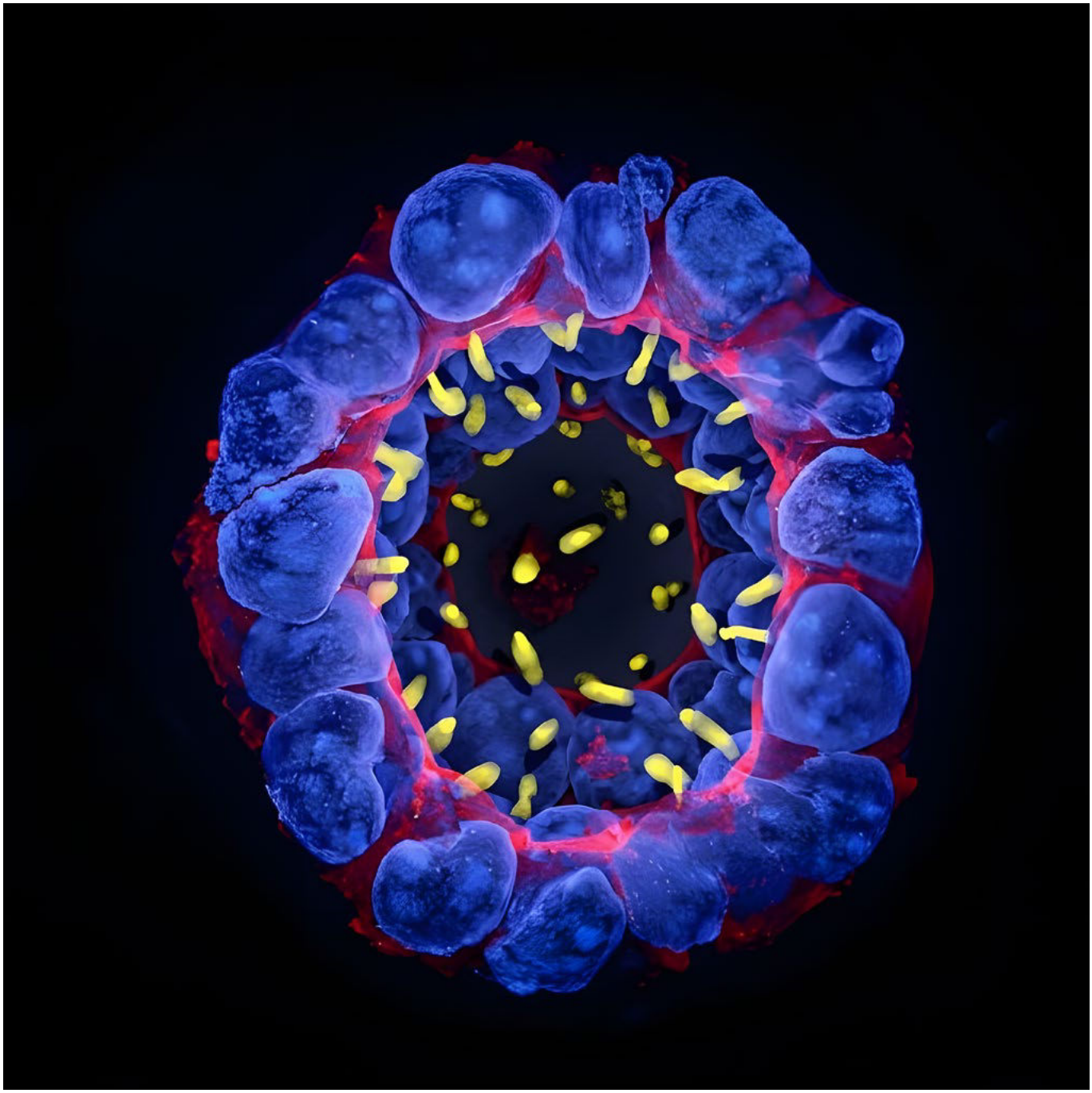
DW: Outside the lab, I enjoy spending time with family and friends. You can find me biking, rowing, swimming, or running. Physical activity helps me clear my mind, recharge, and often provides the space for new ideas to emerge. Finding a balance between science, sports, and social time is important to me and helps me maintain the energy that the job requires.

DM: Outside the lab, I enjoy casual outings, baking and cooking, playing card or board games, or having good conversations with friends and family. For me maintaining a balance between structured work and unstructured leisure time is essential for staying motivated and productive in a demanding scientific environment.



Cilia in Resonance: *Sensing the Frequencies of Cellular Interaction Cilia modulate cellular responses to extracellular signals and help adapting intercellular communication to the environment. In doing so, they enable cells to tune into the "radio" of the tissue, sensing and integrating overlapping biological "frequencies"*

The ciliary mask was generated from Arl13b-positive cilia segmented using CiliaQ. This mask was used to compute a three-dimensional Voronoi distance map, in which each voxel within the image volume was assigned to its nearest cilium based on anisotropy-corrected Euclidean distances. The resulting distance map was subsequently used to generate concentric distance shells surrounding each cilium. For visualization, an RGB representation was created in which individual cilia were assigned distinct look-up tables (LUTs), while progressively lighter shades were used to indicate increasing distance from the cilium. (Daniel Burgdorf, Wachten lab)



Primary cilia in kidney spheroids:

This image depicts a spheroid formed by 3D culturing of kidney inner medullary collecting duct (IMCD3) cells polarizing along an apicobasal axis. Primary cilia are projecting into the spheroid lumen, indicated by staining for ARL13B (yellow). The actin cytoskeleton is depicted in red, DNA in blue. This model is widely used to study polarization of cells in a three-dimensional context as well as kidney cyst formation, processes in which primary cilia play critical roles.

The original confocal microscopy image was digitally enhanced using relighting and contrast adjustments to emphasize texture and three-dimensional appearance while still preserving the original structure. (Smilla-Maria Koy, Mick lab)

DGZ Workgroup Cytoskeleton and Molecular Motors: Focus on Workgroup Speakers

Franziska Lautenschläger and Anne Straube

Franziska Lautenschläger
Saarland University, Center for Biophysics, Saarbrücken,
f.lautenschlaeger@physik.uni-saarland.de

Anne Straube
University of Warwick, Warwick Medical School & Centre for Mechanochemical Cell Biology, Coventry, UK
a.straube@warwick.ac.uk

Q (DGZ): Franziska and Anne, you are the speakers of our DGZ workgroup "Cytoskeleton and Molecular Motors", thus representing central molecular frameworks and highly dynamic processes that many of our members are interested in. Could you briefly introduce yourselves?

FL: Sure! I actually studied physics in Leipzig but already specialized in Biophysics during my diploma thesis. That's where I got introduced to the cytoskeleton while stretching cells. I continued doing this particularly on stem cells trying to understand the role of the cytoskeleton during differentiation. During this time I started to correlate cell mechanics with migration behavior, which got me interested in immune cell migration and mechanics, which I continued as a postdoc at the institute Curie in Paris. In 2013 I started my independent research group at Saarland University, first as a Junior Group leader, now as a full professor. I had the luck to also be affiliated to the Leibniz Institute for New Materials during part of my junior time.

AS: I studied Biochemistry and Molecular Biology in Hamburg, and then did a PhD in Cell Biology at LMU Munich and MPI in Marburg, working on microtubules, dynein and kinesins. After a postdoc in Edinburgh, I started my independent research group at the Marie Curie Research Institute in Oxted in 2007. The institute closed in 2010 and my group relocated together with Rob Cross and Andrew McAinsh to Warwick where we co-founded the Centre for Mechanochemical Cell Biology. I am now a Professor at Warwick Medical School and a Visiting Professor at Lund University.

Q (DGZ): What models do you primarily use in your research, and what is the focus of your current research?

AS: A major current focus of the lab is biochemical reconstitution of microtubule transport. We purify recombinant human motors from insect cells and then use single molecule imaging and optical trapping to study their binding, motility and force generation on microtubules. Key questions are how motor activity is regulated and coordinated in teams of motors including those with opposite polarity. As cellular models, we use iPSC-derived neurons and various other cultured human cells.

FL: We use either cell lines or primary cell, but we do not limit ourselves to one particular cell type. We are generally interested in the role of the cytoskeleton in cell mechanics, migration, the immune system, and the generation of cancer. Here, we ended up to have projects on actin, microtubules, vimentin – all of them at once ☺.

Q (DGZ): What aspects of your DGZ workgroup's topic do you find particularly exciting or relevant today?

FL: The cytoskeleton has already received quite a lot of attention in recent years, however, often the focus was to understand single cytoskeletal elements. What is thriving our field forward now is the interaction between cytoskeletal elements with each other and their surroundings.

AS: Molecular motors are very cool and having tools that allow us to see them step along microtubules and react to loads we put on them is exciting.

Q (DGZ): Franziska, given your background in experimental phyiscs, how do you think physics can particularly help unravel the next mysteries in cell biology? What are the key challenges and goals in that field?

FL: This question has two aspects: Firstly, physical methods such as applying and measuring forces allow us to examine biological samples in ways that are often overlooked, sometimes even solving long-standing questions or mechanisms. Secondly, physical modelling of biological situations enables us to test open hypotheses and investigate parameters outside the feasible experimental range. Key challenges are certainly the different backgrounds, languages and considerations regarding what is important and how much complexity we want in our biological description.

Q (DGZ): Anne, we are grateful that you -despite pursuing your research in UK- are such an active member of our society. Is there anything you'd recommend to young scientists currently based in Germany who consider going for a research stay to the UK?

AS: The UK is still a great place to live and to do science. I find people have a more positive outlook and humorous approach to adversity, multicultural is the norm and the science funding landscape is very diverse. So, I recommend reaching out to any labs you think are doing interesting science and ask for opportunities to join. Starting an independent group is also possible with various fellowship schemes, so one doesn't need to wait for an advertised faculty position to make a move. I'd be happy for DGZ members keen to come to the UK as postdoc or PI to get in touch for some tips.

Q (DGZ): In your spare time, which hobbies or activities help you recover from intensive science?

FL: Spare time ... can you repeat please? ☺.. ah yes. I remember. Well, all my spare time is taken up by my family (I have two kids), but that's the best hobby I can think of. We like to be outside, ride bikes, hike, camp...

AS: I am a keen orienteer, which fills most weekends and summer holidays. I am always up for any other activities involving nature, mountains and lots of fresh air. Skiing on Telemark or Backcountry skis ideally somewhere away from the crowds. Hiking and cycling to fill the gaps.

Photo by Anne Straube, displaying C2C12 (mouse skeletal myoblasts; white: microtubules, orange: EB3)

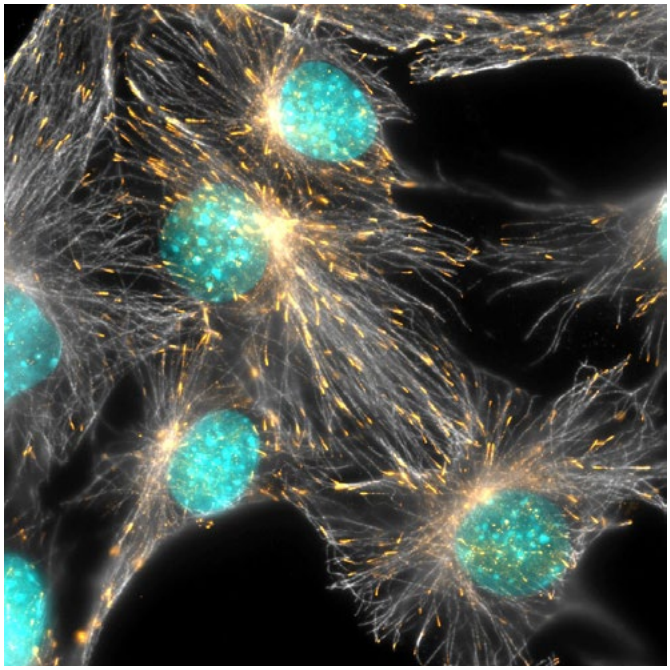
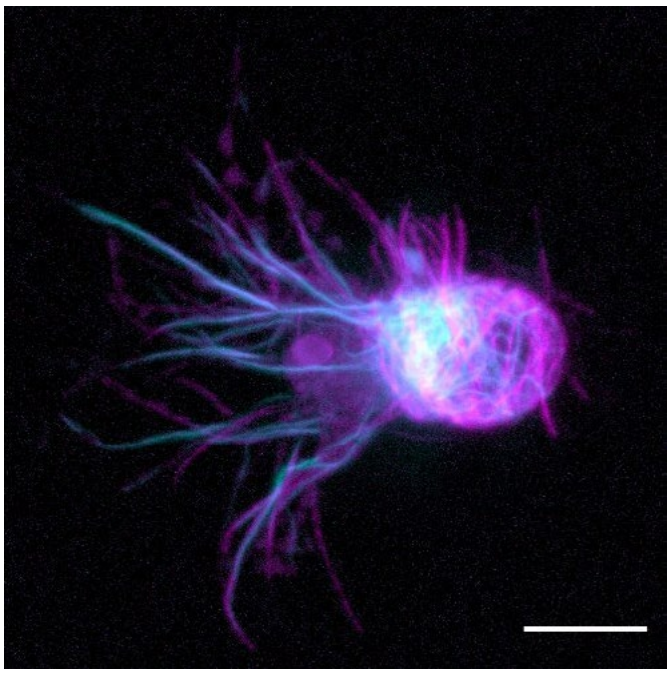


Photo by Franziska Lautenschläger, displaying an RPE-1 cell (microtubules in magenta, Vimentin in blue)



DGZ Workgroup Physics of the Cell: Focus on Workgroup Speakers

Leonhard Möckl and Pierre A. Haas

Leonhard Möckl
University Clinic Erlangen/
CITABLE
FAU Erlangen-Nürnberg,
Department of Physics
MPI for the Science of Light
leonhard.moeckl@fau.de

Photo: Stephan Spangenberg

Pierre A. Haas
Max Planck Institute for the
Physics of Complex Systems
Max Planck Institute of Molecular Cell Biology and Genetics
haas@mpi-cbg.de

Photo: Sven Döring

Q (DGZ): Pierre and Leonhard, you lead the DGZ working group "Physics of the Cell," which particularly highlights the interdisciplinary nature of our research community. Could you briefly introduce yourselves?

PAH: I am an applied mathematician by training. I failed to leave Cambridge for more than a decade, where I was an undergraduate, did my PhD at the Department of Applied Mathematics and Theoretical Physics (with Ray Goldstein), and was a Research Fellow at Magdalene College. In 2021, after a brief interlude on the Dark Side (i.e., at the Mathematical Institute of the University of Oxford), I moved to Dresden, to the Max Planck Institutes for the Physics of Complex Systems and of Molecular Cell Biology and Genetics, where I lead the research group "Self-Organisation of Multicellular Systems".

LM: I initially studied chemistry, but early on, I gravitated more and more towards biophysics. I still remember a lecture by Christoph Bräuchle, who would later become my PhD advisor together with Thisbe Lindhorst. In that lecture, he told us about his latest research at the intersection of biology and physics. That was in my third semester, and I was hooked. After my PhD (like Pierre, I could not leave my alma mater for a long time, eight years in my case) in 2016, I went to Stanford, where I joined the group of W.E. Moerner. Together with Carolyn Bertozzi, we worked on super-resolution microscopy of cell-surface glycans. In 2020, I became a group leader at the MPI Erlangen. Since 2024, I hold the professorship of nanooptical imaging at FAU Erlangen, located at the Departments of Medicine and Physics.

Q (DGZ): What models do you primarily use in your research, and what is the focus of your current research?

LM: We are investigating the functional role of cell-surface glycosylation. How does the cell-surface glycome display, integrate, and communicate information about the cell state? In order to answer this question, we centrally employ super-resolution optical methods. This is because we must resolve individual glycans (on the length scale of few nanometers) on the native surface of whole cells. We could recently demonstrate this information transfer through spatial cell-surface glycosylation in several proof-of-principle systems; and we are now excited to investigate its role in clinical settings.

PAH: I am a theorist, and our research focuses on the mechanics of morphogenesis. In particular, we want to understand how the mechanical properties of tissues emerge from the properties of individual cells. We study this problem in close collaborations with experimentalists, in systems ranging from Drosophila and zebrafish to in vitro culture, and also by solving more fundamental physics problems motivated by these biological questions.

Q (DGZ): What aspects of your workgroup's topic do you find particularly exciting or relevant today?

PAH: With my theorist's hat on, the beauty of cell biology is simply that there are new physics lurking behind every corner: for example, the interplay of the geometry of epithelial cells and cortex mechanics gives rise, at the scale of epithelial tissues, to mechanical behaviour that is absent from classical materials –

and this even in thermodynamic equilibrium, i.e., not taking into account all the other "odd" (not in the sense of "strange"!) mechanics that are made possible by the fact that subcellular processes continually inject energy at microscopic scales.

LM: I can only echo Pierre – physics is everywhere in cell biology, and it feels like biologists and physicists get increasingly excited about each other's fields nowadays. Also, the methodological progress in physics has been unparalleled over the past years when it comes to biological and even medical applications. It's really one of the most intriguing areas to be in, at least for me.

Q (DGZ): How do you think physics can help unravel the next mysteries in cell biology? What are the key challenges and goals in that field?

PAH: The questions of cell biology are in some sense questions of emergence that cross scales, from molecular scales of proteins to organelles to cells to tissues, and so they are naturally cast into the language of physics. This has of course motivated the close interplay of physical theory and cell biology in Dresden for more than two decades, but we are now – as also highlighted by Bill Bialek in his recent essay "Biological Physics comes of age" – at a stage where we can become increasingly quantitative: biophysical models are no longer only mathematical exercises motivated by biology, but, in many contexts, it is now possible to understand "messy" biological processes quantitatively. Especially at the scale of tissues, however, mechanical measurements remain a challenge despite many recent developments, and yet they are necessary to understand how biological form and function emerge robustly at organismal scales during development despite variability at smaller scales.

LM: Echoing Pierre once more, just on the experimental side: Methods from physics are now at a point where they can contribute insights to biology and biomedicine that would be hard or even impossible to obtain with "classical" approaches. If I may use an example from our own research: Mapping the glycosylation state of individual proteins in the native cellular context was thought to be impossible for a long time. But it can be done – but for that, we had to develop strategies that are grounded on super-resolution microscopy, which is essentially optics, image processing, and information theory. At the surface, this does not sound like the closest match to a biological question, but it is. I think we are now at an inflection point where such initial demonstrations must make the transition towards broader and more routine applications. So: robustness and easy implementation to new systems should be a prime focus.

Q (DGZ): Which hobbies help you decompress from a busy phase at work?

PAH: I like cycling a lot, and the small roads and the rolling hills of the hinterland of Dresden and the Erzgebirge are a paradise for locomotion on two wheels. I also enjoy reading cosy crime fiction and I play the classical guitar (but not all at the same time).

LM: I love to read, mainly classics and philosophy, and I spend a lot of time playing the piano and the organ. Besides that, I am rowing, which I should probably do more often, considering how happy my shoulders and my back are every time I step out of the boat. And we have a little one for close to a year now – he is not a "hobby", but certainly a key source of peace and happiness. I hope he feels the same way about my wife and me ☺.

Figure by Pierre A. Haas:

This figure illustrates the concept that mechanical properties at the tissue scale arise from the geometry of a collection of cells

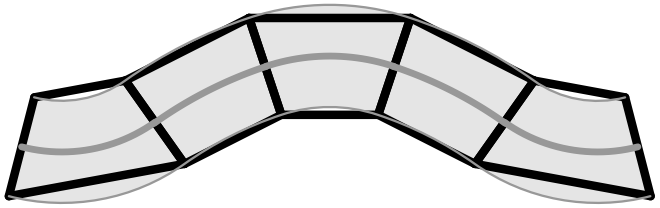
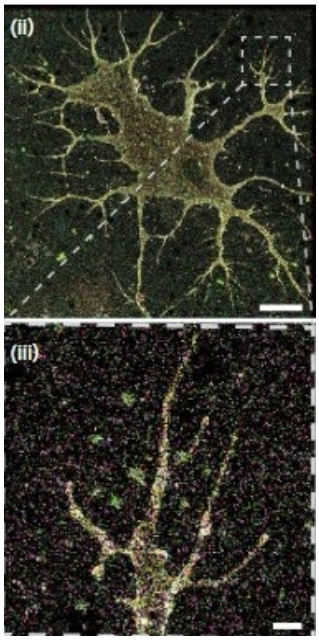


Figure by Leonhard Möckl:

Figure shows cell-surface glycans on the membrane of a primary neuron



The awards ceremony for all DGZ Awards 2026 will take place during the DGZ Meeting 2027, March 14–17, in Bonn

WALTHER FLEMMING AWARD 2026

The German Society for Cell Biology (DGZ) and ibidi GmbH offer the "Walther Flemming Award" for excellent research in cell biology. The award consists of a financial contribution of EUR 3000 and is given to senior postdoctoral researchers and early career group leaders for recent work that defines their emerging independent research profile.

Candidates need to be members of the DGZ and can either be nominated or apply directly for the prize.

Applications should be submitted **in a single pdf file (max. 10 MB)** and consist of cover letter, CV and copies of 1-3 publications that document the relevant work of the applicant. Applications will be reviewed by a dedicated award committee of the DGZ.

Please send your application by e-mail to the DGZ office:
dgz@dkfz.de

Deadline: **October 15, 2026**

NIKON YOUNG SCIENTIST AWARD 2026

The German Society for Cell Biology (DGZ) and Nikon Deutschland (Business Unit: Healthcare) annually offer the "Nikon Young Scientist Award" for excellent research in cell biology by PhD students or young postdoctoral researchers within 3 years after graduating (an extension of up to 2 years will be granted for periods of parental leave). The awardee will receive a financial contribution of EUR 1500.

Candidates need to be members of the DGZ and can either be nominated or apply directly for the prize.

Applications should be submitted **in a single pdf file (max. 10 MB)** and consist of cover letter, CV and copies of publications that document the work of the applicant. Applications will be reviewed by a dedicated award committee of the DGZ.

Please send your application by e-mail to the DGZ office:
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Deadline: **October 15, 2026**

The awards ceremony for all DGZ Awards 2026 will take place during the DGZ Meeting 2027, March 14–17, in Bonn

DGZ MASTER THESIS AWARDS 2026

Call for Nominations: DGZ Master Thesis Awards

Since last year the DGZ offers the DGZ Master Thesis Awards, an exciting opportunity to support and recognize excellent work by emerging cell biologists in Germany.

Overview
Awards: We will present two awards each year, with DGZ Workgroup speakers playing a key role in selecting the awardees.
Eligibility: PIs are invited to nominate Master theses from their current or former students. The thesis must have been completed within the past 12 months, and the nominee must be a DGZ member.
Workgroup Alignment: The application should specify which DGZ Workgroup aligns with the nominee's work.
Awards Details: Each awardee will receive EUR 500 and the opportunity to present their work in a 10-minute slot during the DGZ Award Session in autumn.

This initiative is designed to acknowledge early academic achievement in cell biology and provide a platform for the awardees to showcase their research.

We encourage you to participate in this initiative and look forward to your nominations from your lab. Please send your applications (cover letter, student CV and thesis) **as a single pdf file (max. 10 MB)** by e-mail to the DGZ office: dgz@dkfz.de

Your input will be invaluable in promoting the next generation of cell biologists in Germany.

Deadline: **October 15, 2026**

INNOVATION PRIZE 2026

The Innovation Award will be given for outstanding contributions to cell biology and is aimed at junior investigators that have already established and developed their own research profile. The awardee will receive a financial contribution of EUR 3.500.

Candidates need to be members of the DGZ and can either be nominated or apply directly for the prize.

Applications should be submitted in **a single PDF file (max. 10 MB)** and consist of cover letter, CV, a research profile and copies of three selected first/last author publications. Applications will be reviewed by a dedicated award committee of the DGZ.

Please send your application by e-mail to the DGZ office:
dgz@dkfz.de

Deadline: **October 15, 2026**

The elections for the next Executive Board and Steering Committee will take place in October 2026 (online voting system as in previous years). More information will follow soon.

SAVE THE DATE

DGZ MITGLIEDERVERSAMMLUNG 2026

Liebe Mitglieder der Deutschen Gesellschaft für Zellbiologie!

Wir laden Sie ein zur diesjährigen Mitgliederversammlung der DGZ, die am

Freitag, 4. Dezember 2026, 12.00 Uhr, online über zoom

stattfinden wird.

Tagesordnung:

1. Bestätigung des Protokolls der letzten Sitzung
2. Jahresbericht der Präsidentin mit anschließender Diskussion
3. Geschäfts- und Kassenbericht über das abgelaufene Kalenderjahr
4. Bericht der Rechnungsprüfer
5. Entlastung des Vorstandes
6. Ergebnisse der DGZ Wahlen 2026-2028
7. Sonstiges

DGZ MEMBER MEETING 2026

Dear Members of the German Society for Cell Biology!

We would like to invite you to this years' member meeting of the DGZ, which is going to take place on

Friday, December 4, 2026, noon, online via zoom

Agenda:

1. Confirmation of the minutes of the last meeting
2. Annual report of the president with discussion
3. Report on finances of the past calendar year
4. Auditors' report
5. Discharge of the board
6. Results of the DGZ election 2026-2028
7. Other items

Am 3. Oktober 2025 verstarb Jochen Guck nach längerem Leiden überraschend und viel zu früh.

von Jona Kayser, Kristian Franze, Franziska Lautenschläger, Moritz Kreysing, Timo Betz

Jochen wurde am 19. Januar 1973 in Schweinfurt geboren und wuchs in der ländlichen Kleinstadt Bad Königshofen in Unterfranken auf. Bereits in seiner Jugend musste er einen schweren Schicksalsschlag verkraften, als er durch einen Autounfall an den Rollstuhl gebunden wurde.

Jochen studierte Physik in Würzburg und ging im Rahmen des Amerika-Programms für eine Masterarbeit nach Austin, Texas (USA), was eine prägende Erfahrung war, und wo er auch seinen späteren Doktorvater Josef Käs kennenlernte. Käs erkannte früh Jochens außergewöhnliches Potenzial und bot ihm eine Promotion in Austin an. Diese sehr fruchtbare Zusammenarbeit führte zu einer bemerkenswerten Zahl bedeutender Publikationen, die Jochens wissenschaftlichen Weg nachhaltig prägten.

Gemeinsam entwickelten sie den „Optischen Stretcher", eine Weiterentwicklung der mittlerweile Nobelpreis-gekrönten optischen Falle. Mit diesem System konnten Zellen berührungsfrei verformt werden – und Jochen konnte zeigen, dass Krebszellen systematisch weicher sind als gesunde Zellen. Die beiden zugehörigen Arbeiten wurden über 3000-mal zitiert und haben die Krebsforschung grundlegend beeinflusst.

Nach seiner Promotion in den USA im Jahr 2001 übersprang Jochen die übliche Postdoc-Phase und wurde direkt Nachwuchsgruppenleiter am Institut für Physik der weichen Materie in Leipzig. In den folgenden fünf Jahren baute er dort eine schlagkräftige Arbeitsgruppe auf, die das Potenzial des optischen Stretchers weiter erforschte und neue Techniken zur Messung der Zellmechanik entwickelte. Zugleich widmete er sich weiteren spannenden Fragestellungen der Biophysik – insbesondere im Bereich des Nervensystems. Besonders hervorzuheben ist eine wegweisende Arbeit, in der er mit seinen Kollegen zeigen konnte, dass Müllerzellen in der Retina als optische Lichtleiter fungieren und damit der auf den ersten Blick „ungeschickte" Aufbau der Netzhaut auf elegante Weise verbessert wird.

Im Jahr 2007 folgte Jochen einem Ruf an die Universität Cambridge, wo er eine Lecturer-Position annahm. Dort entstand ein neues Zentrum für medizinische Physik, an dessen Aufbau er als Gründungsmitglied maßgeblich beteiligt war. In Cambridge weitete sich sein wissenschaftlicher Fokus deutlich aus – immer wieder angetrieben von Fragen der Zellmechanik, aber auch der Optik und der Physik biologischer Gewebe. Sein großes Potenzial blieb nicht lange unbemerkt: Bereits 2012 wurde er als Alexander-von-Humboldt-Professor nach Dresden berufen, wo er eine Professur für Zelluläre Maschinen übernahm.

Photo: F. Lautenschläger

In den folgenden Jahren entwickelte er eine neuartige, hocheffiziente Methode, um die mechanischen Eigenschaften von Zellen schnell und präzise zu messen. Inspiriert von mikrofluidischen Ansätzen des optischen Stretchers kombinierte er hydrodynamische Krafterzeugung mit Hochgeschwindigkeitskameras und passenden medizinischen Anwendungen, um Blut und andere Zellproben mit zuvor unerreichbarer Geschwindigkeit zu charakterisieren – die Real-Time Deformability Cytometry (RT-DC).

Seine außergewöhnlich vielseitige Expertise in medizinischer Physik, Zellmechanik und Optik führte schließlich dazu, dass er 2018 einen Ruf als Direktor an das Max-Planck-Institut für die Physik des Lichts und das neu gegründete Max-Planck-Zentrum für Physik und Medizin mit einem Lehrstuhl an der Friedrich-Alexander Universität Erlangen-Nürnberg erhielt. Dort konnte er eindrucksvoll zeigen, wie transformativ mechanische Einzelzellanalysen für die biomedizinische Forschung sein können. Besonders hervorzuheben sind seine Arbeiten zur mechanischen Charakterisierung von Blutzellen direkt aus Patientenproben, die neue diagnostische Möglichkeiten für hämatologische und immunologische Erkrankungen eröffnen. Ebenso beeindruckend waren seine Beiträge zur Weiterentwicklung der Brillouin-Mikroskopie, einer Methode, mit der sich mechanis-

che Eigenschaften direkt bildgebend erfassen lassen. Die enorme wissenschaftliche Tragweite dieser Arbeiten spiegelt sich auch in der Verleihung der Carl-Zeiss-Lecture der DGZ (2023) sowie des Greve-Preises der Leopoldina (2024) wider.

Neben seiner wissenschaftlichen Exzellenz war Jochen Guck ein außergewöhnlicher Mentor. Er verstand es, Erfolg zu teilen und insbesondere junge Kolleginnen und Kollegen sichtbar werden zu lassen. Viele seiner ehemaligen Mitarbeitenden haben selbst erfolgreiche wissenschaftliche Karrieren eingeschlagen und bekleiden heute Professuren oder andere leitende Positionen im In- und Ausland. Jochen baute stets eine lebendige, inspirierende Community um sich auf – geprägt von seiner Großzügigkeit, seiner ambitionierten Art und seiner bemerkenswerten Fähigkeit, Menschen durch präzises, konstruktives Feedback wachsen zu lassen. Jochen verstand es wie kaum ein anderer, Brücken über fachliche und institutionelle Grenzen hinweg zu bauen und die richtigen Menschen zusammenzubringen, um gemeinsame wissenschaftliche Durchbrüche zu ermöglichen. Er war ein verbindender Netzwerker, mehrfacher Firmengründer und ein verlässlicher Unterstützer junger Talente. Seine Begeisterung für Wissenschaft blieb bis zuletzt ungebrochen und wirkte selbst dann ansteckend, als ihn seine Krankheit bereits stark einschränkte.

Wer Jochen kannte, weiß, dass ihn außergewöhnliche Klarheit, Zielstrebigkeit und innere Stärke auszeichneten – Eigenschaften, die ihn durch viele Herausforderungen seines Lebens trugen und ihm eine beeindruckende Resilienz verliehen.

Besonders bemerkenswert war seine Haltung, keine Situation zu scheuen, in der seine Behinderung eine Herausforderung darstellte. Im Gegenteil: Er nutzte solche Momente, um auf die Barrieren aufmerksam zu machen, die Menschen mit Behinderung im Alltag begegnen – und zeigte zugleich, dass man trotz dieser Hürden auf höchstem Niveau wirken kann.
Wir werden seine brillanten Ideen, seinen trockenen Humor und seine unvergleichlich direkte, zugleich aber empathische Art, Diskussionen zu führen, schmerzlich vermissen. Mit Jochen Guck verliert die Biophysik – insbesondere die Zell- und Gewebemechanik – einen herausragenden Wissenschaftler, Lehrer und unvergesslichen Kollegen.

PIERRE CHAMBON

7 February 1931 — 5 May 2026

The DGZ mourns the loss of its Honorary Member Pierre Chambon, one of the founding architects of modern molecular and cell biology. His groundbreaking work on gene regulation and nuclear receptor signalling transformed our understanding of fundamental biological processes. In addition, he was instrumental in developing inducible transgenic mouse models based on Cre/loxP technology, allowing precise temporal and tissue-specific control of gene function in vivo. These innovations revolutionized the study of gene function and became foundational tools of modern biomedical research. Pierre Chambon's scientific legacy will continue to inspire generations of researchers, and he will be remembered with great respect and gratitude.

Please find a detailed obituary by the Institute of Genetics and Cellular and Molecular Biology (IGBMC) here: https://www.igbmc.fr/en/igbmc/article/disparition-de-pierre-chambon

DGZ Focus Workshops 2026-2027

Zoom, last Tuesday of a month, noon – 2pm

(for questions contact Maria Bohnert, bohnertm@uni-muenster.de)

August 2026	Summer break
September 29, 2026	Imaging for Cell Biology Helge Ewers, Stefan Pfeffer
October 27, 2026	Functional Organization of the Nucleus Zuzana Storchova, Cristina Cardoso
November 24, 2026	Cellular and Organismal Proteostasis Jörg Höhfeld, Thorsten Hoppe
December 2026	Christmas break
January 26, 2027	Cell Biology of the Immune System Eva Kiermaier, Pablo Saez
February 23, 2027	Mitosis and Meiosis Simone Reber, Thomas Mayer

https://www.zellbiologie.de/workgroups/

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Editor-in-Chief:
Prof. Dr. Sandra Iden, President
(Universität des Saarlandes)

Editors:
Prof. Dr. Julia Groß
(HMU Health and Medical University Potsdam)
Prof. Dr. Jörg Höhfeld
(Universität Bonn)
Prof. Dr. Maria Bohnert
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(Universität Münster)

Editorial Office Manuscripts/Advertisements:
Sabine Reichel-Klingmann
Office of the German Society for Cell Biology
c/o German Cancer Research Center
Im Neuenheimer Feld 280
69120 Heidelberg
Tel.: 06221/42-3451
Fax: 06221/42-3452
E-mail: dgz@dkfz.de
Internet: www.zellbiologie.de

Media Creation:
Werner Rehberger
WR Grafik-Design
68799 Reilingen
wr@wr-grafikdesign.de

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