

# Add-on Fellowships for Interdisciplinary Science and Transfer



**Vanessa Arnold**  
University of Tübingen

Research interests: 3D cell culture models, Drug screening, Computer-aided drug design, Bioinformatics, Neuro-oncology

Vanessa Arnold focuses on the development of therapeutic strategies against brain tumors. She develops physiologically relevant 3D cell culture models that enable patient-relevant analyses of drug efficacy and neurotoxicity while simultaneously reducing the need for animal experiments. Using these models, she systematically tests small-molecule inhibitors and integrates experimental findings with computational screening and modeling approaches to efficiently identify novel therapeutic targets. Previously, Vanessa Arnold studied Molecular Medicine and is currently completing a second master's degree in Bioinformatics. She is distinguished by her ability to integrate experimental neuro-oncology, chemistry, and bioinformatics, combining diverse methodological perspectives to develop resource-efficient and translatable solutions for cancer therapy. Her goal is to make research more sustainable and to improve long-term access to innovative treatments.



**Dr. Marjan Ashrafizadeh**

University of Jena

Research interests: Polymer Science, Colloid Science, Chemical Engineering, Transport in Porous Media

Marjan Ashrafizadeh's research integrates polymer science, chemical engineering, and environmental geoscience. She develops smart polymeric systems and investigates their behavior under diverse environmental conditions and within natural porous media. As a postdoctoral researcher at Friedrich Schiller University Jena, she combines polymer synthesis and characterization with pore-scale flow experiments and high-resolution X-ray micro-computed tomography to examine how soft colloids are transported, retained, and interact with geological structures. By linking material properties with geological processes, her interdisciplinary research addresses challenges in subsurface sustainability, with applications in carbon capture and sequestration and microplastic pollution. With the support of the Joachim Herz Add-on Fellowship, she aims to strengthen the quality and transfer potential of her research for future third-party funding and application.



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**Dr. Boas Bamberger**  
University of Cologne

Research interests: sales, business-to-business marketing, upper echelons, performance pressure, stress

I study how performance pressure affects organizations, focusing on sales teams as extreme laboratories for job stress. Customer-facing employees endure frequent rejection, unpredictable interactions, and relentless targets—stressors affecting all knowledge workers, just more intensely. My research on stopping stress in sales explores how voices reveal stress during conversations, offering a window into pressure people do not recognize until too late. This matters because companies mistake stress symptoms for motivation problems, responding with more pressure, creating destructive cycles, damaging people and profits. My other research examines how CEO compensation creates pressures cascading through organizations to customer relationships. By better understanding stress dynamics, I develop preventive approaches helping managers and teams excel at both performance and wellbeing, benefiting all stressed workers.



**Mariia Beliaeva, Ph.D.**

EMBL Heidelberg

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Research interests: Biocatalysis, Enzymology, Microbial drug metabolism, Bioremediation

How can we harness the hidden chemical potential of bacteria? My research explores how bacteria transform complex molecules and how these processes can be applied in environmental and medical contexts. Working at the interface of chemistry and microbiology, I combine bacterial cultivation with high-throughput mass spectrometry to discover novel enzyme activities. My key research focus is the biotransformation of synthetic steroids, such as corticosteroids and contraceptives, which persist as environmental pollutants. I have shown that gut and environmental bacteria can degrade these compounds. By identifying the enzymes responsible, my work enables the development of targeted bioremediation strategies—e.g., for wastewater treatment—while also advancing our understanding of steroid metabolism in the gut microbiome.



**Dr. Carlo Birkholz**  
University of Göttingen

Research interests: development economics, public economics, political economy, geospatial analysis, satellite data

My research leverages innovative data to address questions in Development Economics and Public Finance that conventional sources cannot capture. I focus on identifying causal effects using quasi-experimental designs that exploit spatial and temporal variation. For instance, I use household-level electricity data to detect tax evasion, satellite-based nightlight and population data to examine regional favoritism, and 2.6 million software developers' GitHub activity to measure trade in services. My recent projects focus on overuse of critical resources. In one, I study the ecological and socioeconomic impact of sand extraction from the Mekong River, exploiting variation in Chinese cement demand. In another, I analyze how industrial overfishing off the West African coast affects local nutrition and health.



**Ellen Bisle**

University of Ulm

Research interests: Microbiome, Major depression, Nutrition

Current transdisciplinary research suggests that depression is a systemic immunometabolic disorder associated with altered stress-response systems, inflammation, oxidative stress, and changes in the gut microbiome. The microbiome modulates immune function directly and via microbial metabolites such as short-chain fatty acids, indoles, vitamins, and antioxidants, which reduce inflammation, oxidative stress, and support mitochondrial energy production. Impaired mitochondrial function is linked to depressive symptoms including fatigue, low motivation, and concentration problems. Depression can negatively affect diet, leading to nutrient deficiencies and a pro-inflammatory microbiome, whereas healthy diet and probiotics can alleviate symptoms. My dissertation adopts an interdisciplinary approach examining microbiome composition, diet, microbial metabolites, mitochondrial function, and inflammatory processes.



**Nadja Born**

Technical University of Munich

Research interests: Organizational Behavior, Behavioral Economics, Computational Social Science

My research examines how leaders and decision-makers form judgments and allocate opportunities under conditions of uncertainty, and how these processes either perpetuate or mitigate inequality. I focus on three recurring mechanisms: ambiguity in evaluation criteria, social expectations about who “fits,” and institutional contexts that shape what decision-makers notice and reward. A second line of work examines how new technologies (e.g., AI-based decision support) interact with these mechanisms, sometimes amplifying bias but also providing opportunities for improvement. Methodologically, I combine machine learning with experiments and field data to identify where inequities emerge and to test scalable interventions in organizations. Across projects, my goal is to translate behavioral insights into practical actions that enhance fairness while maintaining organizational performance and effectiveness.



**Christoph Brielmaier**  
University of Bamberg

Research interests: strategy, organization theory, attention

My research focuses on the micro-dynamics of organizing—how people actually do strategy, take on roles, and coordinate their work in everyday organizational life. One part of my research focuses on attention as a central human resource. I study how managers' and employees' attention is shaped by communication channels and digital platforms, and how this affects what is seen as strategically relevant and worth acting on. I am particularly interested in how attention becomes fragmented and contested, and how organizations and its actors create focus and alignment under these conditions. Another part of my research focuses on openness in strategy processes. I examine what happens when strategy work becomes more transparent and inclusive: who gets involved, how new strategic roles emerge, and how openness changes social dynamics such as social comparison or belonging.





**Dr. K. Valerie Carl**

Goethe University Frankfurt

Research interests: Corporate Digital Responsibility, human-artificial intelligence augmentation, organizational (digital) resilience, digital ecosystems

Digital technologies, products, and services are becoming increasingly important in both our private and professional lives. While this opens up a wide range of opportunities that should be used sensibly, this development also comes with specific risks. My research focuses on digitalization that benefits all stakeholders. On the one hand, I want my research to help ensure that (technological) opportunities can be seized, especially in the context of human-artificial intelligence augmentation. On the other hand, I want to help address the emerging risks of digital technologies, products, and services so that all stakeholders ultimately benefit from advancing digitalization. I have a particular focus on organizations and consumers. Methodologically, I primarily conduct qualitative research (e.g., ethnographic studies), supplemented by quantitative research projects.



**Claudia Carlantoni, Ph.D.**

University Medical Center Hamburg-Eppendorf

Research interests: Cardiovascular diseases, Endothelial cell biology, Tissue stiffness, Biomaterial science

Tissue stiffening is a hallmark of many disease settings, among which cardiovascular diseases are leading cause of mortality and morbidity worldwide. Treatment of these diseases requires new approaches to decipher their causes and to discover novel therapies. My research focuses on endothelial cells, which line all blood and lymphatic vessels. They are key regulators of cardiovascular health due to their ability to sense the tissue microenvironment and react to its variation. The aim of my work is to mimic in a tunable and reproducible way the different tissue stiffnesses in cardiovascular disease settings and observe how endothelial cells behave under those various conditions to generate innovative targeted therapies.



**Dr. Sonali Chowdhry**

DIW Berlin

Research interests: International economics, global supply chains, geoeconomics, industrial policy

Dr. Sonali Chowdhry is an economist specialising in international trade and investment. She is a Research Associate at the German Institute for Economic Research (DIW Berlin) and a Fellow at the Kiel Institute for the World Economy. Her work examines the evolution of global supply chains and the distributional implications of new trade policies. In 2025, she was a Visiting Fellow with the Growth Lab and Center for International Development at the Harvard Kennedy School. Previously, Dr. Chowdhry was a Max Weber Fellow at the European University Institute and earned her PhD in Economics from LMU Munich with funding support from the EU Horizon 2020 programme. She is a Rhodes Scholar from India and read for the MPhil in Economics at the University of Oxford.



**Veronika Ecker**

University Hospital Tübingen / University of Stuttgart

Research interests: Medical Data Analysis, Aging, Deep Learning, Population Data

My research explores how advanced artificial intelligence can strengthen public health by revealing hidden structure in large-scale biomedical data. I apply deep learning to population studies such as NAKO and the UK Biobank to uncover patterns linked to aging and disease risk. A central focus is the estimation of biological age, which reflects individual aging dynamics more accurately than chronological time. My current work focuses on developing organ-specific biological age models that integrate imaging, clinical, functional and laboratory information. This combined perspective enables a better understanding of aging trajectories and helps to guide focused public health interventions.



**Dr. Simon Feindt**

Potsdam Institute for Climate Impact Research

Research interests: Climate and environmental economics, inequality, distributional impacts of climate policy

Climate change and climate policy exacerbate social inequalities both between and within countries. In my research, I analyze how these inequalities emerge, what factors drive them, and which policy instruments can enhance welfare in the short and long term. To this end, I use microsimulations and statistical methods based on consumption and input–output data. A core objective of my work is to estimate the social costs of climate change while accounting for inequality. For this purpose, I extend the representation of country-specific distributional impacts in global integrated assessment models. However, public acceptance of climate policy depends on more than just the economic distribution of costs and benefits. Therefore, I also examine how socioeconomic characteristics and group affiliations shape the perception of climate policy and how central conflict lines can be constructively addressed to strengthen public support for climate action.



**Natalie Fischhaber**

LMU Munich

Research interests: Pandemic preparedness; siRNA therapy; Coronaviruses; Models of the human lung

I am developing an inhalable siRNA therapy to combat current and emerging respiratory viral infections. To evaluate and optimize delivery early in the development process, I work with advanced in vitro models that closely recapitulate the human respiratory tract, including air-liquid interface cultures, precision-cut lung slices, and lung-on-a-chip systems. These systems enable early evaluation of therapeutic efficacy while minimizing the need for extensive animal experimentation, which often fails to predict clinical outcomes. Beyond testing and optimizing our working group's own siRNA delivery strategies, ongoing and future interdisciplinary collaborations with academic and industrial partners in pharmacy and chemistry enable the integration and evaluation of cutting-edge delivery technologies in combination with our siRNA therapies within these physiologically relevant models.



**Dr. Anne Fota**  
University of Siegen

Research interests: Human-AI Interaction, Digitalization, Cross-Border E-Commerce

Using qualitative and quantitative methods, I investigate how consumers interact with intelligent systems, such as auditory AI, how new technologies are used in everyday life, and how digital innovations affect their consumption behavior. A central focus of my work is on vulnerable consumer groups, where I examine, through psychological processes, how digital experiences can support them in their everyday (consumption) activities. By analyzing these mechanisms, I gain insights at the intersection of marketing, information systems, and social sciences and derive practical implications to create inclusive, safe, and beneficial digital experiences that advance both research and the application of AI and e-commerce.



**Franziska Funke**

Technical University Berlin & Potsdam Institute for Climate Impact Research

Research interests: environmental economics, climate policy, political economy, inequalities

Decarbonization requires a rapid uptake of climate-friendly household technologies – such as heat pumps and electric vehicles. However, the capacity to transition to these climate-friendly alternatives is unequally distributed across society. Households that benefit most from green subsidy programs and can mitigate their exposure to carbon pricing by ‘making the switch’ tend to be financially advantaged, highly educated, and environmentally conscious homeowners. At the same time many households face structural barriers — such as landlord-tenant dynamics, or limited credit access — that prevent them from making the switch. By integrating economic and philosophical theory, microsimulation methods, and survey-based experiments, my research investigates how policy design that is sensitive to unequal "capacity to switch" can enhance the fairness and public acceptability of climate policy.





**Tina Gabriel**

TU Dresden, Else Kröner-Fresenius Center, Medical Faculty Carl Gustav Carus

Research interests: Quantitative Ultrasound, Medical Imaging & Diagnostics, Data-Driven Health Technologies, Digital Health

What if ultrasound could move beyond subjective grayscale images to deliver truly objective insights? Ultrasound is a highly promising imaging modality in the medical field. It offers real-time imaging, is cost-effective, and is safe for patients. However, the subjective evaluation of grayscale images remains a significant limitation, requiring extensive training and variability between examiners. My research focuses on overcoming this barrier by extracting quantitative parameters directly from raw ultrasound data, called „quantitative ultrasound“. Working within an interdisciplinary team of engineers, computer scientists, and clinicians, I analyse underlying frequency information to objectively characterize tissue changes. While liver fat quantification, tissue stiffness, or distinguishing between benign and malignant tumors are concrete examples, the methodology could be applied broadly to any disease involving structural tissue alterations. In a complementary project, we are developing advanced ultrasound techniques to capture microvascular perfusion, enabling early detection of pathological patterns.



**Anna Gasten**  
University of Göttingen

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Research interests: Development Economics, Behavioral and Experimental Economics, Migration Economics

My research investigates the drivers and consequences of forced and voluntary migration, combining quantitative causal methods with behavioral and experimental economic approaches. I examine how refugee and migrant inflows shape labor markets, social cohesion, and attitudes in host communities; how economic opportunities such as foreign direct investment influence mobility decisions; and how migrants contribute to climate resilience, including their willingness to provide informal and formal insurance against weather shocks for rural households. My work draws on original data and survey experiments, conducted in collaboration with UNHCR, the World Bank; as well as long-term migration panel studies.



**Maximilian Gießler**

Offenburg University of Applied Sciences

Research interests: Biomechanics, Humanoid Robots, Inertial sensors, Multibody dynamics, Reinforcement Learning

In my research, I develop novel inertial sensing principles to gain fundamental insights into the complex interplay between bipedal locomotion and situational balance loss. I apply this approach in two areas: First, I leverage precise kinematic measurements from wearable sensors for individual fall risk analysis in everyday life. The long-term goal is to objectively and data-driven assess the efficacy of interventions, such as training or medication. Second, I transfer this sensing technology to humanoid robotics to detect and compensate for perturbations—like impacts or uneven terrain—in real-time. By combining biomechanically inspired models and reinforcement learning, I equip robots with human-like compensation strategies, enabling them to navigate our world with robust bipedal stability.



**Leonhard Grabe**  
University of Cologne

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Eva Brans

Research interests: Personnel Economics, Management Accounting, Organizational Learning, AI-Agents

In my research, I examine how managers can leverage digital tools to support employee learning and performance. While many firms have adopted digital or AI-based tools to substitute for low-complexity tasks, less is known about how these tools can be used in jobs that depend on interpersonal interaction. To address this research gap, I use field experiments and econometric methods to analyze proprietary performance and text data. With the generous support of the Joachim Herz Foundation, I want to further explore which managerial tasks can and cannot be delegated to digital tools and identify the underlying characteristics that shape these boundaries.



**Mahish K. Guru**

Helmholtz Center Hereon

Research interests: Artificial Intelligence, Material Science, Computational Science, Modelling, Simulation

In my research, I navigate the intersection of Artificial Intelligence and Integrated Computational Materials Engineering (ICME) to revolutionize the design of sustainable Magnesium alloys. Recognizing that relying solely on historical data is insufficient for predicting complex dynamics, I develop hybrid, physics-informed methodologies. By fusing the grounding of data science with the perception of physical simulations (CPFEM), I aim to overcome the fragility of purely data-driven algorithms. I construct robust Process-Structure-Property linkages using Generative AI and deep learning, moving beyond black-box predictions to create "antifragile" design frameworks. This recursive combination of physical laws and machine learning allows me to solve complex inverse problems, tailoring microstructures for targeted performance and ensuring material innovation remains resilient against the limitations of traditional experimentation.



**Sarah Haggenmueller**

Technical University of Munich

Research interests: smart medicine, RNA nanotechnology, adaptive systems

Sarah Haggenmueller focuses on creating dynamic molecular systems that adapt their behavior based on external signals. After studying in Australia, Luxembourg, France, and the US, she worked at a biotech startup in Boston, where she developed expertise in RNA. Now she combines this knowledge with DNA origami to build reprogrammable tools that respond to changing needs. By designing RNA structures that detect signals and produce specific proteins or form regulatory elements, she enables smarter use of genetic material. A natural problem solver, Gabi works on replacing rigid, single purpose designs with systems that can do multiple things: a key step toward more sustainable biotechnology. Outside the lab, she loves kitesurfing, yoga, playing piano, and caring for her plants.



**Natalie Hanheiser**

Freie Universität Berlin

Research interests: microbiology, polyhalogen anions, surfactants

My research centers on the development of novel antimicrobial and virucidal agents through organic and inorganic synthesis to address the global challenge of drug-resistant pathogens. This includes the design of cationic surfactants effective against methicillin-resistant *S. aureus* as well as the discovery of new polyhalides as broad-spectrum antiseptics. Interdisciplinary collaborations with clinical microbiologists at Charité Berlin have been essential for understanding the activity profile and translational potential.

A further key component is elucidating the molecular and supramolecular mechanisms governing interactions between these agents and bacterial/mammalian cells. To this end, advanced imaging methods (e.g. confocal laser scanning microscopy, cryo-transmission electron microscopy) are employed. A further interest lies on the use of droplet microfluidics as a diagnostic tool for antibiotic susceptibility screening.



**Julian Hasselmann**

Münster University Hospital (UKM)

Research interests: Implant Coatings, Materials Testing, Surface Modifications, Additive Manufacturing, Biomaterials

Julian Hasselmann is developing an extracorporeally activatable, anti-infective coating for implants that enables targeted drug release using focused shock waves. His background in mechanical engineering with a specialization in materials engineering supports him in the development and analysis of this and other coating systems. In addition, he contributes to establishing a center for additive manufacturing at the point of care to make 3D printing technologies available for patient-specific medical applications. In his teaching activities, he supervises students and provides instruction in materials-related and biomedical topics. He also volunteers as a network coordinator in the VDI. The aim of his research is to reduce implant-associated infections and to enable therapy without the need for additional surgical intervention.





**Theresa Hauth**

Technical University of Munich

Research interests: Power-to-Methanol, Membrane Reactors, Sustainable Energy Generation, Carbon Capture and Utilization

One of the most crucial resources of the future will be energy that is sustainably generated, transported and stored. With the goal of mitigating climate change in mind, generating energy carriers from emitted carbon dioxide to close the carbon cycle will become increasingly important. My research focuses on yield-limited methanol synthesis, which requires large, energy-intensive recycles of unreacted reactants. To overcome this yield restriction, membrane reactors that remove the undesired byproduct water in-situ and shift the chemical equilibrium towards methanol production are being investigated. To better understand the mechanisms of water permeation and enable virtual prototyping, a computational fluid dynamics model has been developed that will be experimentally validated in a self-designed and constructed membrane reactor. Ultimately, the work aims to assess the benefits of membrane reactors on overall efficiency and the development of sustainable energy carriers.



**Carlos Alberto Hernandez Bautista**

Hannover Medical School

Research interests: human pluripotent stem cells, bioreactors, cardiomyocytes, bioprocess, upscale

Carlos focuses on the mass production of human pluripotent stem cells (hPSCs) in reusable glass stirred-tank bioreactors that serve as “raw material” for the creation of cell therapy products such as cardiomyocytes (hPSC-CMs) to treat heart failure. Previously, he studied Biotechnology Engineering at Monterrey Institute of Technology and Higher Education (ITESM) and a MSc in Biosciences at King Abdullah University of Science and Technology (KAUST) in Mexico and Saudi Arabia, respectively. Carlos envisions 3D-low plastic workflows that can still reconcile the high demands of cutting-edge research but no longer with the cost of environmental harm. The Add-on Fellowship serves him for deepening his knowledge in the sustainable topic and apply greener practices in the lab.



**Dr. Laura Hesse**  
Bauhaus University Weimar

Research interests: Transformative Service Research, Consumer Vulnerability, Artificial Intelligence

How do service systems enhance or constrain individual and societal well-being? My research approaches this question through the intersection of transformative service research, quantitative consumer research, and the analysis of consumer vulnerability. I investigate how people make decisions in complex service environments shaped by digital technologies, sustainability pressures, and structural constraints. A central aim is to understand when vulnerability emerges and how service systems can mitigate or intensify such disadvantages. To study these dynamics, I use controlled experiments, large-scale behavioral data, and AI-based analytical methods, including machine learning, to detect latent patterns in consumer responses. This perspective advances our understanding of service system functioning and supports the design of fair, resilient, and inclusive consumer experiences.



**Maximilian Hoffmann-Becking**

Max Planck Institute for Terrestrial Microbiology

Research interests: Synthetic Metabolism, Synthetic Cells, Directed Evolution, In vitro screening, CO<sub>2</sub> fixation

I am an enthusiast in synthetic biology and biochemistry, working on bottom-up strategies to build and evolve synthetic metabolic systems in vitro. My research centers on integrating transcription–translation-coupled DNA replication with engineered metabolic modules to generate controllable, self-regenerating biochemical networks. A key objective is the development of high-throughput platforms for enzyme screening and in vitro Darwinian evolution, combining compartmentalization, synthetic regulatory circuits, and next-generation sequencing readouts that inform machine-learning models. By uniting cell-free systems, synthetic metabolism, and big-data analysis, my work seeks to bridge classical cell-free biochemistry and living systems, enabling the construction of synthetic biological systems from scratch with life-like properties.



**Elisabeth Hofmeister**

Max Planck Institute for Innovation and Competition

Research interests: Innovation Economics, RnD Productivity, Science of Science, Life Science Industry

Solving grand challenges, whether in health, climate, or beyond, hinges on developing new technologies. Yet we still have much to learn about what drives their development. In my research, I examine the determinants of RnD productivity in research-intensive industries, particularly the pharmaceutical and biotechnology industries. I investigate questions such as: How do firms manage risk in technology development? What drives firms to pursue novel RnD projects? What motivates scientists and shapes their research direction? I examine these questions from both firm and scientist perspectives. Methodologically, I employ econometric methods using domain-specific data, including clinical trial data and bibliometric sources. To fully leverage these data, I apply advanced methods such as natural language processing to extract insights from rich textual information.



**Nives Hribernik, Ph.D.**

Freie Universität Berlin

Research interests: carbohydrate chemistry, bioresponsive materials, mucus, infection biology

My research tackles the growing burden of infections and the spread of antimicrobial resistance. Instead of relying on drugs that kill microbes, causing selective pressure, I aim to develop treatment concepts that selectively control microbial behavior, disarming potential pathogens while preserving beneficial community members. My inspiration is mucus, the natural protective coating that hosts trillions of microorganisms in our body. Mucus is an active material: it feeds microbes, presents biochemical signals, and creates a physical barrier. Much of this regulation is written in the carbohydrates displayed on glycoproteins called mucins. My goal is to decode this glycan-based communication system and convert it into programmable carbohydrate materials that can guide multispecies microbial communities and towards a stable, healthy state.



**Dr. Julia-Maria Hübner**

TU Dresden

Research interests: Battery Recycling, Ionometallurgy, Metal Recovery

Spent lithium-ion batteries are mainly recycled using hydro- and pyrometallurgical methods, which consume large amounts of chemicals or energy and generate waste. We are developing an alternative ionometallurgical process that employs low-melting salts (“ionic liquids”) to decompose metal oxides from waste batteries into metals and oxygen at moderate temperatures. Current ionic liquids often rely on environmentally-critical fluorinated components. To overcome this, our project aims to design more sustainable ionic liquids.



**Felix Hund**

RWTH Aachen University & University Hospital Aachen

Research interests: Medical Engineering, Cardiovascular Engineering, Neonatal ECMO Technology, Oxygenators

Felix Hund studied Mechanical Engineering with a specialisation in Medical Engineering at RWTH Aachen University. For his master's thesis, he developed a novel manufacturing method called barrier fluid potting for artificial lungs (oxygenators). Based on this work, his PhD research focuses on developing volume-adjustable oxygenators for future neonatal healthcare. He is addressing current limitations in extracorporeal lung support for extremely and very preterm infants by developing scalable oxygenator systems that are tailored to support infants with immature lungs. In the context of an artificial placenta, his work could enable the adaptation of gas exchange capacity to infants' small, dynamically increasing blood volumes.





**Dr. Zina Kallien**

Leuphana University Lüneburg

Research interests: Friction Stir-Based Processes, Solid-State Additive Manufacturing, Lightweight Materials, Repair, Materials Characterization

My current research is focused on the investigation of friction stir-based solid-state layer deposition processes in view of additive manufacturing and repair applications. These approaches can process various similar and dissimilar metallic material combinations and offer the advantage of low processing temperatures compared to fusion-based techniques. This avoids challenges related to large temperature gradients like residual stress or distortion and minimizes effects on the surrounding structure. My research explores the process capabilities and characterizes the deposited material, for instance, in terms of microstructure or mechanical properties. A combined approach is used, including experimental work, process modelling and machine learning approaches to decrypt the process-structure-property-relationship. The results provide the basis for the optimization of solid-state layer deposition processes for specific applications.



**Thea Kannenberg**

Karlsruhe University of Applied Sciences & Karlsruhe Institute of Technology

Research interests: materials science, microstructure simulation, chemo-mechanics, multiphase-field method

The objective of my research is to achieve a more profound comprehension of the microstructural processes that occur in metals such as steel. The processes in question are found to be significantly influenced by the interaction of chemical and mechanical driving forces. The focal point of my research lies in the development and analysis of numerical models that aim to elucidate the characteristics of microstructural evolution, using the phase-field method as a numerical tool. A central objective of my research is to create a precise map of the fundamental mechanisms of microstructure evolution during heat treatment and to capture their interactions both theoretically and numerically. The insights obtained provide a scientific foundation upon which long-term enhanced process strategies can be formulated, with the potential for more sustainable and efficient steel production serving as a motivating framework.



**Benedikt Keitel**

Hahn-Schickard & University of Ulm

Research interests: analytical chemistry, materials science, high-performance separation technologies, controlled release systems

My application-oriented research focuses on developing adaptive 3D printing processes for manufacturing bioinspired, functional materials that address two key global challenges: sustainable pest management in crop protection and access to clean water.

In crop protection, I am developing controllable release systems for long-term delivery of species-specific pheromones, enabling efficient and environmentally friendly pest control in viticulture, fruit growing, and forestry. In parallel, I am researching highly porous, molecularly specific 3D polymer filters that use “molecular fingerprints” to remove pollutants, pharmaceutical residues, or microorganisms from water. By combining chemistry, materials science, biology, and economic perspectives, I aim to translate scientific findings into scalable, sustainable solutions and to promote academic and industrial collaborations.



**Wolfgang Kies**  
University of Cologne

Research interests: Synthetic Chemistry, Organic Materials, 3D Printing

I am a chemist dedicated to developing innovative, metal-free battery materials that leverage earth-abundant elements to support a more sustainable future in energy storage. My work aims to eliminate the reliance on critical metals such as cobalt and nickel by harnessing the versatility of organic chemistry to design and synthesize advanced carbon-based framework materials. These materials are engineered to deliver strong electrochemical performance, structural tunability, and full recyclability. A central part of my research focuses on integrating these systems into additive-manufactured electrodes to enable scalable and environmentally responsible energy-storage technologies.



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**Monisha Krishnan**

Helmholtz Institute for Pharmaceutical Research Saarland & Saarland University

Research interests: natural products, human microbiome, molecular biology, antimicrobial peptides

The steep rise in antimicrobial resistance, coinciding with the persistent emergence of other diseases, underscores the urgent need for new natural products, including anti-infectives and other therapeutic agents. My research addresses this challenge by discovering and characterizing key chemical entities from important bacterial members of the human microbiome. By integrating bioinformatics-driven workflows with biotechnological tools, this work establishes a versatile platform for the expression, analysis and biotesting of ribosomally synthesized peptides and enables to deduce gene-structure-function relations.



**Louisa La Porta**  
Freie Universität Berlin

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Research interests: management, corporate governance, strategy, strategic leadership

My research examines the role of organizations and their leaders as responsible actors in an increasingly polarized society. A central focus is CEO activism, the socio-political engagement of top executives, and its effects on career trajectories, stakeholder perceptions, and firms' strategic positioning. In a multi-part research program, I investigate the conditions under which CEOs take public stands, the associated risks and opportunities, and how this influences organizational decisions. Drawing on insights from management studies, organizational psychology, and corporate governance, I set up the projects to employ both quantitative and qualitative methods to provide a comprehensive understanding of the interplay between leadership, societal engagement, and corporate strategy.



**Dr. Bastian Latsch**

Technical University Darmstadt

Research interests: sensors in human-machine interaction, interfaces for human movement assistance, 3D-printed sensors

For the intuitive control of modern assistive devices and for use in rehabilitation, precise measurement of muscle activity is essential. My project employs novel piezoelectret sensors that detect muscle contractions flexibly, sensitively, and cost-effectively. They offer advantages over electromyography electrodes, such as sweat-resistant skin contact, high signal quality, and the ability to capture passive deformation. The next steps involve further developing the technology for practical applications and integrating it into textiles to enhance wearing comfort and everyday usability through wireless operation. This material-efficient approach is highly relevant for improving the quality of life of people with physical limitations. In the long term, additional applications in robotics or wearables are possible. Based on published doctoral research, several prototypes and experiments will now be transferred into fundamental participant studies that also investigate muscle fatigue.



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**Dr. Ann Sophie Lauterbach**  
Technical University Dresden

Research interests: organizational behavior, occupational health, labor economics, attendance, vulnerable workers

My research examines how contemporary work environments shape employee well-being and behavior. Drawing on organizational behavior, occupational health psychology, and labor economics, my work focuses on how physical, digital, psychosocial, and institutional contexts influence health-related outcomes, particularly attendance patterns such as presenteeism and absenteeism. A key goal of my research is to generate evidence that supports organizations and policymakers in designing work environments that promote health, inclusion, and sustainable performance.





**Dr. David Lohmar**  
University of Münster

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Kalle Kröger

Research interests: Managerial Cognition, Strategy, Digital Transformation, Innovation, Entrepreneurship

My research sits at the intersection of managerial cognition, strategy, and innovation. I study how executives' ways of thinking shape strategic direction, digital transformation, and firms' ability to innovate. A central theme of my work is cognitive alignment among senior leaders and how shared understanding or cognitive models influence outcomes such as radical innovation, strategic dynamism, and digital orientation. Empirically, I examine both established organizations and entrepreneurial contexts, including internationalization, crowdfunding, and corporate venture capital. My ongoing work expands this agenda by exploring the links between technology and ESG, the innovation effects of corporate venture capital investments, and the role of CIO characteristics in shaping digital strategies. Overall, my research highlights cognition as a subtle but powerful driver of strategic and technological change.



**Lillan Lommel**

Leuphana University Lüneburg

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Lüneburg

Research interests: Organizational Research, Futures, New Forms of Organizing, Organizational Space

In my research, I investigate how futures are mobilized in and produced through organizational processes. My understanding of organizational processes extends beyond what may be considered 'traditional' organizations and includes organizing characterized by informality and the ambition to change the dominant socio-economic order. I am particularly interested in the role of technology and organizational space in these processes, including design aspects and experiences of space. In addition, I investigate how organizational research as a discipline can contribute to futures deemed desirable. To this end, I explore ways of doing research that offers actionable guidance to organizations. I use qualitative and especially ethnographic methods.



**Dr. Atreya Majumdar**  
University of Duisburg-Essen

Research interests: Deep learning, Reinforcement learning, Magnetism, Unconventional computing

Advancements in the 21st century are driven by the convergence of materials science and artificial intelligence, a synergy that underpins my research. I focus on unconventional, non-Von Neumann computing paradigms grounded in the intrinsic physics of spintronic systems. My work explores in-materio computing, where computation arises from the collective dynamics of magnetic nanostructures, including skyrmions and other topological spin textures. In parallel, I apply machine learning and data-driven approaches to analyze, explain, and optimize magnetic material properties, bridging fundamental physics with device-level functionality. Overall, my research aims to advance the understanding of emergent magnetic phenomena and to enable energy-efficient, scalable computing concepts for sustainable information technologies.



**Dr. Sara Marchini**

Dresden University of Technology

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Research interests: Multiphase flows, reactor modeling, chemical energy storage, industry decarbonization, engineering education

My research focuses on multiphase flows and reactor modeling to develop sustainable and energy-efficient process technologies. I investigate hydrodynamics and mass transfer in multiphase systems, using advanced experimental methods. Key application areas include chemical energy storage, biomass valorization and gas cleaning processes that support industry decarbonization. I work on intensified and hybrid process concepts (such as advanced thermal separations, structured and sandwich packings) to better understand complex flow behaviour and improve predictive design tools. Alongside these activities, I contribute to engineering education innovation through international projects aimed at integrating sustainability, digital competencies and modern reactor engineering into chemical engineering curricula.



**Max Marczinek**

Humboldt University of Berlin & University of Oxford

Research interests: international trade, economic growth

My research is concerned with several pressing issues of our time: labour scarcity, productivity, AI and automation, industrial policy, and resource transitions. I combine trade models with novel and often historical data sources, using theory to extract new insights from granular or unstructured data. My job market paper, on labour scarcity and growth, exemplifies this agenda. I use a natural experiment, the last Nordic plague of the 1710s, to argue that labour scarcity causes productivity growth. In the future, I will continue to work on policy-relevant topics in economic growth and trade. In particular, I am intrigued by the potential of industrial and trade policy to shape and accelerate processes of economic development.



**Mara Mattes**

Heinrich Heine University Düsseldorf

Research interests: Causal Inference, Econometrics, Machine Learning

My research focuses on applying machine learning and deep learning methods to economic questions. One key area of my work involves using deep learning techniques to detect bid rigging in public tenders. Another central focus is the estimation of causal effects using modern machine learning approaches. In an ongoing project with co-authors, we estimate causal effects while explicitly accounting for spillovers in network settings. Graph neural networks learn data-driven exposure mappings that capture how individuals are influenced by the treatment of others, enabling the identification of direct effects. The goal is to model complex economic interactions more accurately and to improve the precision of policy evaluation.



**Johannes Mersch**  
Technical University Dresden

Research interests: textile engineering, smart materials, measurement technology, adaptive fibers

Johannes Mersch is researching new textile, fiber-based materials with active and sensory properties. In this context, he considers the entire system, from fiber production and fabric production to applications. One example are highly twisted, helical fibers that undergo significant deformation when activated by a rise in temperature. However, these materials can also replace climate-damaging refrigerants as elastocaloric materials. In addition to the material properties, suitable textile manufacturing and processing methods are also necessary in order to scale the technology from the laboratory. Johannes previously completed his doctorate at the Institute for Solid-State Electronics on soft, adaptive materials and then conducted research at the Johannes Kepler University Linz as a postdoctoral fellow of the Austrian Academy of Sciences.



**Dr. Sophie Moser**  
University of Konstanz

Research interests: organizational behavior, diversity and inclusion, future of work

Why do some workplaces produce larger gender inequalities than others, and what helps reduce them? My research develops a contextual perspective on gender discrimination at work, focusing on three core themes. First, I examine subtle mistreatment as a pervasive yet often underestimated contemporary form of gender disadvantage in today's workplace. Second, I study temporal trajectories, asking how gender discrimination and its consequences evolve across early careers and over longer career paths. Third, I adopt an intersectional lens to explain systematic heterogeneity in gender inequality depending on other social characteristics, particularly migrant status. Methodologically, I use large-scale quantitative designs to better understand gender inequality at work. My long-term research goal is to inform actionable strategies that effectively foster more equitable workplaces.





**Max Müller**

University of Bonn

Research interests: Labor Economics, Behavioral Economics, Public Economics

My research lies at the intersection of labor and behavioral economics and studies how biased beliefs shape labor market outcomes. I combine theory-driven survey and field experiments with administrative data to measure firms' and workers' perceptions, benchmark them against objective outcomes, and quantify their economic effects. A central contribution is showing that firms systematically misperceive both workers' preferences for non-wage amenities and their own wage-setting power. These belief distortions lead to underprovision of amenities, wage-setting inefficiencies, labor shortages, and unequal outcomes. I identify interpersonal projection and information frictions as key mechanisms and develop parsimonious models that incorporate biased beliefs on the demand side of the labor market. Across projects, my goal is to refine standard labor market models, explain persistent misallocation, and inform policies and organizational practices that improve matching efficiency and worker welfare.



**Fabian Nocke**

University Hospital Essen

Research interests: biochemistry, product development, emulsions, artificial oxygen carriers

My research focuses on the development, modification, and optimization of perfluorocarbon-based artificial oxygen carriers (PFOCs) for medical applications. In particular, I am responsible for developing novel PFOCs and adapting existing products to meet the requirements of new application areas. Another key aspect of my work is improving the stability and functionality of these products. In addition to my research, I am actively involved in the training of students in the fields of medicine, biology, and chemistry. I organize and teach seminars, supervise practical courses, and mentor students during their thesis projects. What I find most exciting is working in interdisciplinary collaborative projects. Cooperation with experts from different fields repeatedly provides valuable input for optimizing existing processes and developing innovative solutions.



**Katharina Paetz**

Alfred Wegener Institute for Polar and Marine Research

Research interests: Microbiology, Macroalgae Aquaculture, Biomass Valorisation, marine Carbon Dioxide Removal (mCDR)

My research focuses on understanding and using interactions between microorganisms and the free floating macroalgae *Sargassum* to develop mCDR (marine Carbon Dioxide Removal), sustainable aquaculture and biomass valorisation strategies. By combining analysis of excreted organic matter and its degradation pathways, microbial functional profiling and fermentation capacity of associated yeasts, I investigate its potential how the macroalgae can be used in a sustainable future. My work aims to uncover the mechanisms underlying macroalgae-microbiome symbioses to better evaluate aquaculture attempts and optimize technological application from resilient aquaculture systems to mCDR strategies and biorefinery pathways.



**Dr. Sneha P.**

Berlin School of Economics, Hertie School, ESMT

Research interests: economics, labour-force participation, gender, education

My current research focuses on labour market policies in India and Rwanda. In Rwanda, I study the role and effects of digital skills training in vocational education. Specifically, how does digitisation improve educational delivery and how to motivate participation in such programs. In India, I work on understanding the various factors motivating and preventing labour force participation among young graduates and, women in general. Across multiple projects, I study the role of family structure, educational inputs, job search efforts, weather and social norms. My latest research can be accessed here: [www.snehapmenon.github.io/research](http://www.snehapmenon.github.io/research)



**Marika Platz**  
University of Münster

Research interests: change management, innovation, organizational behavior

My research explores how organizations navigate major transformational pressures by examining both leadership-driven and employee-centered dynamics of change. I study how top executives shape strategic change through their demographic characteristics, psychological traits, and emotional states. Drawing on panel data and meta-analytic evidence, my work shows how factors such as CEO gender, optimism, and emotions influence organizational responses to sustainability demands and digital transformation. Complementing this top-down perspective, I investigate bottom-up reactions to change, including how employees perceive and adapt to new work models such as the four-day workweek. Across these projects, my research integrates change management, behavioral strategy, and upper echelons theory to explain how organizations initiate, implement, and sustain change.

**Dr. Franz Prante**

Chemnitz University of Technology

Research interests: meta-analysis, macroeconomics, economic policy, energy economics, open science

My research focuses on macroeconomics, monetary and fiscal policy, inequality, and the socio-ecological transition. In large-scale meta-analyses, I synthesize the empirical literature on the macroeconomic effects of conventional monetary policy and on energy price elasticities relevant for carbon pricing. A key finding across both subjects is that published effect sizes tend to be inflated due to p-hacking and publication bias. In ongoing work, I examine macroeconomic, socio-economic and environmental effects of green public expenditures in the EU. Methodologically, I am committed to improving Open Science standards including pre-registration and open data. I also develop interactive tools and resources to make macroeconomic research and educational materials accessible to broader audiences.



**Dr. Christian Pugnaghi Zimpelmann**  
University of Hamburg

Research interests: labor economics, behavioral economics, household finance

I am interested in labor supply and financial decision of households, with a particular focus on the behavioral foundations underlying these choices and how they are influenced by the institutional environment. Methodologically, I use advanced econometric and computational methods and utilize both self-collected survey data and large-scale administrative data sets.



© Faisal Qayyum

**Dr. Faisal Qayyum**  
TU Bergakademie Freiberg

Research interests: Crystal Plasticity, Material Characterization and Mechanical Testing, Thermo-Mechanical Fatigue

The focus of my current work the ongoing studies is to: - Reduce dependence of metal and forming industry on critical alloying elements - Shift processes to clean and sustainable energy sources - Improve process efficiency and reduce energy requirements - Directly and indirectly reduce carbon foot print of the production processes - While doing all of above, keep the mechanical properties and service life of the components same or improve them more for targeted applications.





**Dr. Manuel Reppmann**  
University of Hamburg

Research interests: sustainability transformation, stakeholder engagement, sustainability reporting & communication

In my research, I study how organizations strategically transform toward sustainability and how communication, reporting, and stakeholder engagement shape organizational change as well as internal and external stakeholder-related outcomes such as consumer behaviour. Methodologically, my research combines quantitative empirical analyses, experiments, and longitudinal case-based approaches. I am particularly interested in linking micro-level stakeholder responses to macro-level sustainability transformation outcomes.



**Dr. Franziska Riedel**

German Federal Institute for Risk Assessment (BfR)

Research interests: Contact allergy, in-vitro diagnosis, T-cell-receptor repertoires

Contact allergies are a major public health concern, with sensitization rates of 19 – 27% in Europe. Patch testing is the diagnostic standard, but suffers from limited reproducibility, standardization issues, and missing test preparations. Similarly, regulatory hazard assessment of sensitizers still heavily relies on in vivo methods. Addressing the diagnostic and regulatory challenges and elucidating the immunological mechanisms of contact allergies requires interdisciplinary research. Within the scope of my research, I adapted a T cell-based activation-induced marker (AIM) assay to detect chemical-specific immune responses in blood. Combined with high-throughput T cell receptor (TCR) sequencing this allows for a sensitive and quantitative tracking of (cross-) allergic reactions, useful for contact allergy diagnostics or novel substance screening. My research focuses on major metal allergens to define reactive T cell frequencies, cross-reactivity and TCR binding sites.



**Dr. Maria Luisa Romo Perez**

University of Hohenheim

Research interests: horticultural sciences, postharvest quality, metabolomics, organic farming

I am an agricultural scientist working on organic vegetable production, with a focus on onion and carrot systems under climate stress. My research combines field and greenhouse experiments to study how drought and nitrogen supply affect yield formation, plant physiology and product quality. I am particularly interested in linking agronomic traits with biochemical markers such as secondary metabolites and storage disorders along the value chain. To analyse complex multi-environment data, I use mixed-effects models, meta-analysis and multivariate approaches in R. Through collaboration with farmers, advisory services and value-chain actors, my work aims to develop practical strategies that improve resilience and postharvest performance in organic vegetable production.



**Elisa Rottner**  
ETH Zurich

Research interests: environmental economics, international trade, applied econometrics

I am an applied microeconomist with a focus on climate and international economics. My main research interest lies in the identification of the causal effects of climate policies, and the intersection between climate policies and international trade. I focus on the impact of climate policy on firms: I aim to gain insights into how spatial differences in regulation influence the effectiveness of climate policy, and how firms respond to climate policy measures. I use microdata to answer these questions. I rely on both statistical empirical methods and theoretical models which I quantify. In my future research, I will focus more on the effect of overlapping regulations and analyse how spatial differences contribute to production shifts across countries.



**Dr. Theresa Schaetze**

Max Planck Institute for Behavioral Economics

Research interests: Behavioral Economics, Applied and Experimental Economics, Social Psychology

My work combines experimental methods, survey data, and field collaborations to examine how preferences, norms, and institutional design influence human decision-making processes and policy-relevant outcomes. Currently, I working on public acceptance, perceptions of fairness, and the efficiency of urban policy reforms. In a complementary project, I analyze determinants of developmental delays during childhood in disadvantaged environments. My education includes economics, statistics, and social psychology, supported by research experience at the Max Planck Institute for Behavioral Economics as well as international academic exchange programs and collaborations.



**Dr. Julian Schmitz**

Bielefeld University

Research interests: Microfluidic single-cell cultivation, Heterogeneity analysis, bioprocess development, bioprocess scale-up

Novel bioprocesses for producing pharmaceuticals, enzymes, or biopolymers are typically developed at lab scale, but successful production requires scaling them to industrial dimensions. What works in small reactors, however, often fails at large scale - especially when living producer cells are involved. As a result, many promising bioprocesses struggle to move from academic research into commercial application. My research uses microfluidic single-cell cultivation to assess whether cells are truly fit for large-scale bioprocessing. By recreating the complex and fluctuating conditions of industrial bioreactors on a microfluidic device, we can evaluate producer cells under process-relevant conditions. This allows us to identify robust strains early, making bioprocess development faster, more cost-effective, and far more reliable.



**Laura Schmitz**

DIW Berlin

Research interests: Applied economics, environmental economics, education, inequality

My work examines how social and environmental policies shape health, inequality, wellbeing, and human capital. Current projects analyse how environmental regulations improve mental health and educational outcomes, how extreme heat affects intimate partner violence, and how information shapes public support for climate policy. Across these topics, I integrate administrative, environmental, and experimental survey data with quasi-experimental methods to generate evidence for policies that advance both climate mitigation and social equity.



**Dr. Betül Simsek**

University of Hamburg, Institute of Law and Economics

Research interests: Development economics, migration, international law, behavioral economics

My research is interdisciplinary and situated at the intersection of development economics and international law. I examine the determinants of migration, particularly how improvements in women's rights influence female migration flows, and I assess the effectiveness of development aid as a migration policy tool. A second important strand of my research investigates decisions to comply with legal norms. I analyze both individuals' decisions to comply with laws as well as states' compliance with international law, drawing on behavioralist theories. Methodologically, my research relies on cross-country data, and I am currently conducting survey experiments across several countries.





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**Dr. Lorenzo Skade**

European University Viadrina

Research interests: organization studies, strategy, temporality, innovation management

My research explores how organizational actors shape and are shaped by their wider societal contexts in everyday practices. I focus especially on time and temporality in organizations, examining how actors use temporal strategies to navigate large-scale challenges and uncertain futures. A second strand of my work investigates how political and institutional environments influence organizations and how they respond when their legitimacy is questioned. Empirically, I study startup accelerators, innovation contexts, and bureaucratic organizations such as the military industry. Overall, my research shows how organizations navigate complexity and uncertainty by coordinating actors over time and responding to shifting societal expectations.



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**Dr. Tomislav Stolar**

Federal Institute for Materials Research and Testing (BAM)

Research interests: mechanochemistry, chemical recycling, plastic waste, electronic waste, construction waste

I am developing innovative mechanochemical processes for chemical recycling of complex chemical and material streams. Specifically, mechanochemistry enables low carbon footprint and low energy access to critical raw materials from plastic, electronic, and construction waste.



**Jan Thiel**

RWTH Aachen University

Research interests: Elastic Yarns, Melt Spinning, Thermoplastic Elastomers, Textile Recycling, Circularity

Jan Thiel conducts research on novel production technologies for elastic yarns that are used in a growing amount of textile applications, e. g. medical textiles. The current state-of-the-art production of so-called elastanes requires potentially harmful solvents and mostly fossil-based resources. Jan Thiel develops solvent-free melt spinning processes and elastic yarns from polymers that are made of renewable feedstocks. Additionally, he investigates ways to enable or enhance the circularity of currently non-recyclable elastic textiles. At RWTH Aachen University, Jan Thiel received a master's degree in environmental engineering with specialization in recycling. Following the completion of his Ph.D. in mechanical engineering, he has been working as a postdoctoral researcher at the Institut für Textiltechnik of RWTH Aachen University.



**Jana Tissen**

Max Planck Institute for Behavioral Economics

Research interests: Development Economics, Health Economics, Behavioural Economics

My research examines the factors that shape how individuals develop their skills and (economic) potential. I investigate how education, social networks, digital resources, and reliable health information shape people's life choices and opportunities. One project evaluates a labor market training program for disadvantaged youth in several African countries. How do national economic contexts shape the effectiveness of such programs, and are participants with limited social networks affected differently? A second project studies how mobile internet use influences women's views on family, autonomy, and reproductive decisions in developing countries. Together, these studies aim to clarify how societal environments shape individual choices and opportunities, and how policy can support more equitable and sustainable development.



**Nathalie van Walraven**

Ostwestfalen-Lippe University of Applied Sciences & University of Limerick

Research interests: Bioactive peptides, circular economy, bioprospecting, extracellular matrix, cosmetics

Bioactive peptides are specific protein fragments that exert a positive impact on body functions. One specific group of bioactive peptides is known as matrikines; fragments from extracellular matrix molecules, functioning as signaling peptides and stimulating tissue repair activity. This concept is used for different applications such as cosmetic purposes and wound healing. Currently these matrikine-like peptides are produced synthetically or with recombinant technology, not meeting the demand for naturally-derived active ingredients. Therefore, the aim of this study is to obtain matrikine-like peptides from plant by-products from the food industry. Enzymatic hydrolysis, liquid chromatography tandem mass spectrometry (LC-MS/MS) and de novo peptide sequencing techniques are employed, and cell cultures are used to confirm bioactivity.



**Paul Vilchez, Ph.D.**

LMU Munich, HTW Berlin, HIIG Berlin

Research interests: Organization, Sustainability, Entrepreneurship

My research is inherently interdisciplinary, exploring how business and technology shape society, and how they can be steered toward more positive impact. My doctoral project focuses on Indigenous knowledge systems, values, and ways of organizing as inspiration for solutions rooted in reciprocity with community and nature. I aim to highlight why strengthening the autonomy of local projects around the world matters, not only for their survival but for rethinking how we approach global challenges. Through this work, I show how Indigenous perspectives offer grounded, imaginative pathways for addressing grand challenges and envisioning more sustainable futures.



**Dr. Cäcilia vom Baur**  
ifo Institute

Research interests: Applied economics, labor markets, technological change, firm training

I am an applied micro-economist and Post-Doc at the ifo Institute at LMU Munich, leading a Big Data Junior Research Group in the Center for the Economics of Education. My research centers on the effects of technological change on labor markets, in particular on skill supply and demand, and its relations with labor shortages, and firm training investments.



**Moritz von Zahn**

Goethe University Frankfurt

Research interests: Information Systems, Artificial Intelligence, Human Behavior

Dr. Moritz von Zahn is a researcher at the Institute of Information Systems and Information Systems at Goethe University Frankfurt. His research primarily builds upon quantitative empirical methods and studies the application, development, and impact of artificial intelligence (AI) in organizations. His current projects examine how humans collaborate with AI to solve tasks and how the interplay between human-side factors (such as confidence judgments, information processing, and political partisanship) and AI-side factors (such as transparency and perceived fairness) shapes human–AI collaboration. In recent work, he also studies the use of causal machine learning for targeted behavioral interventions and recommendation systems, as well as the relationship between AI and human creativity.





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**Gerrit von Zedlitz**  
University of Mannheim

Research interests: Transparency, accountability, externalities, disclosure, non-traditional stakeholders

My research focuses on the role of transparency in markets and organizations as a second-order measure to address societal issues. Transparency is often used as a soft instrument to internalize such issues when other policy tools are not available. By leveling the playing field among stakeholders and/or increasing the visibility of behavior, it seeks to price socially harmful actions. Because transparency has such broad applications, my work spans a wide range of settings in which transparency is used as a second-order tool in markets and organizations, including consumer retail markets, black markets, police violence, workplace discrimination, and the green transition. I conduct this research in the field by collaborating with organizations, using new datasets, and running field experiments.



**Laura Watkowski**  
University of Bayreuth

Research interests: digital infrastructure, digital sovereignty, policy-informing, AI, governance

My research investigates the profound organizational and societal changes driven by digital infrastructures, especially AI. I focus on how digital infrastructures can be shaped sustainably, balancing ecological constraints with social and organizational requirements. Future digital infrastructures depend on large amounts of energy, water, land, data, and computing capacity, placing growing pressure on natural and infrastructural resources. At the same time, governance issues such as digital sovereignty, public value orientation, and societal resilience are becoming increasingly important. Using qualitative methods and collaborating with policymakers, municipal actors, and industry partners, my work examines the social, ecological, and political dynamics of digital infrastructures and develops interdisciplinary insights for steering digital transformation in a responsible and resource-conscious manner.



**Marlene Wätzold**

University of Göttingen

Research interests: Agricultural and resource economics, socioeconomic-ecological trade-offs, rural development

My research asks how we can develop sustainable food systems that support farmers' livelihoods, sustain ecosystems, and remain climate resilient. Using farmer household surveys, ecological plot data, and spatial information, I examine how land use practices such as agroforestry and market-based tools like sustainability certification affect livelihoods, biodiversity, and climate resilience. My work focuses on smallholder farmers in tropical cash crop sectors of the Global South who are highly exposed to climate change and global market shifts and manage farms in some of the world's most important biodiversity hotspots.



**Adrian Weich**

University Hospital Erlangen & Friedrich-Alexander University of Erlangen–Nuremberg

Research interests: bioinformatics, immunotherapy, cancer biology, systems biology, biomedicine

During my PhD, I work on improving the safety and effectiveness of chimeric antigen receptor (CAR) T cell therapy. In this treatment, a patient's immune cells are modified so they can recognize and destroy cancer cells. To achieve this, a new gene must be inserted into the cell's DNA. While necessary for the therapy to work, this process can also introduce risks. I use DNA and RNA sequencing technologies to study where and how this gene is inserted and to identify patterns that could lead to harmful effects. I have a background in molecular medicine focused on cancer biology and immunology, and I have previously worked as a bioinformatician on a range of immunotherapy-related projects.



**Xuefei Wu**

Leibniz Institute for Agricultural Engineering and Bioeconomy

Research interests: Agricultural Engineering, Animal Science, Environmental Science

My research focuses on livestock farming, with a particular emphasis on its environmental impacts. Employing a range of methodological approaches, I assess how housing structures and ventilation systems influence both production efficiency and the environment. The objective of my work is to enable efficient production while allowing farmers to maintain relatively low management costs, simultaneously advancing environmental sustainability throughout the production process and enhancing animal welfare.



**Schayan Yousefian, Ph.D.**

Charité – Universitätsmedizin Berlin

Research interests: Personalized medicine, immunotherapy, cell therapy, cell communication

Many cancer treatments today rely on immunotherapies that harness the body's immune system to fight disease. Yet only a subset of patients responds, and reliable methods to predict individual treatment outcomes remain limited. My research focuses on developing a diagnostic approach that measures interactions between immune and tumor cells, a process central to therapeutic effectiveness. Using this method in combination with computational analyses, cellular communication can be decoded in a simple, reliable, and cost-efficient manner. Initial studies show the potential for assessing treatment response before therapy begin. The long-term goal is to establish a clinically applicable tool that supports personalized therapy decisions, reduces unnecessary patient burden, and enables more efficient use of medical resources.



**Dr. Ting Zheng**

Darmstadt University of Technology

Research interests: human-centric production and logistics, behaviour operations management, inclusive production and logistics

My research addresses the pressing need to redesign logistics work in response to two converging trends: increasing automation and digitalization, and significant demographic changes such as aging workforces and labour shortages. While technologies like collaborative robots, digital twins, and assistive systems offer efficiency gains, they also risk intensifying tasks and increasing monotony for human workers. To ensure a balanced integration of technological innovation and human well-being, my research aims to develop sociotechnical solutions that redesign logistics work contents and workplaces. Through a combination of literature reviews, qualitative interviews, design science, statistical learning, and empirical experiments, I explore how to reduce cognitive and physical strain and improve job satisfaction of logistics workers, as well as create inclusive logistics work environments. By focusing on both productivity and human wellbeing, my research will generate practical recommendations for developing adaptive, human-centric logistics systems in the context of Industry 5.0.



**Jun.-Prof. Dr. Lennard Zyska**  
Leibniz University Hannover

Research interests: applied microeconomics, public economics, distributional economics, political economy

I am an applied microeconomist working on policy-relevant questions in public, labor, and distributional economics, as well as political economy. I study how institutional structures, policy design, and incentives shape individual behavior and economic outcomes, with much of my work focused on low- and middle-income countries. Using quasi-experimental methods and large-scale administrative, survey, and spatial data, I examine questions related to taxation, pension systems, distributive politics, and inequality. A central line of my current research analyzes the political economy and economic consequences of electricity scarcity in South Africa, including politically motivated allocation and the effects of unreliable access on income, labor, education, and health. A second line investigates how cultural factors shape sustainability preferences and support for environmental policies.