

Departement Biomedizin



Newsletter May 2022



Editorial Interview Diary Entry





Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Editorial

Dear Reader,

I am delighted to present you the inaugural issue of the DBM newsletter! The content and structure leverage the popularity of the former publication DBM Facts, while the new electronic design enables a broader reach in a sustainable format. Shining a spotlight on recent achievements, developments and events at the DBM while including personal notes from some of its members, is beneficial on a number of different levels. First, making the DBM visible on the national and international stage is critical to boosting the department's profile, which will contribute, among other things, to competitive recruitments and partnerships. Second, communication with the local community offers the opportunity to network and interact up close, as well as to offer an informal report on the outcome of institutional investments. Third, and for me most important, the internal exchange of information and views within the DBM is necessary to further develop a spirit of collective identity and a culture of common values, as a compelling foundation to leverage the opportunities of working together.

I therefore encourage you, wherever you are, to leaf through these electronic pages and enjoy at least some of the sections. This will also be the best way to express your gratitude to the dedicated communication teams at the DBM, as well as to everyone else who contributed to the design and content of this newsletter!



Ivan Martin
Director of the Department of Biomedicine





Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Interview with Tania Rinaldi Barkat

Tania Barkat, you were last year given the responsibility for the Ressort Communication and Outreach within the department's management team. Could you tell us a little more about this role and give us some insight into what you are working on and your goals for the next 2 to 3 years?

The addition of Communication and Outreach to the management team really highlights that it is a top priority for the department. In a nutshell, our goal is to raise the department's profile. At the moment, even though many of our scientists are well known for their research, their affiliation to the department flies often under the radar. We want to change that. By promoting success stories and breakthroughs, we want to create a unique identity that can be recognized by the outside world, while also being accessible internally. To accomplish this, we need to establish a framework that facilitates the recognition of success among our peers, that fosters discussion and sharing of ideas, feedback and criticism, and that increases transparency about how and why decisions are made.

The benefits of these actions are threefold: attracting talent, boosting the visibility of our research in the scientific community and the general public, and improving the feeling of belonging to the department for its members.

Who is on this communication committee? And how often do you meet?

The Communication and Outreach committee comprises five research group leaders: Andrea Banfi, Carolyn King, Heinz Läubli, Anne-Katrin Pröbstel, myself and the Head of Operations, Andrea Ottolini.

Together, we represent the department's diversity, spanning basic and clinical research in all of the focal areas and across a number of physical locations. We meet at least once every two months to discuss communication strategies, concepts and measures. Our first few months of work have focused on auditing the status quo and laying out a plan for the future. The responsibility of the implementation of the communication strategy and its measures lies with the operational communication team of the DBM.

How important do you think internal communication is? And what changes are planned for the near future?

Internal communication is crucial. You cannot have credible external communication if it does not fit with what the department's members experience, feel, and think. The best ambassadors for our department are its members.

One important measure that we've already implemented is increased transparency. For example, the minutes of the management team meetings are now distributed to Research Group Leaders and Core Facility Heads on a monthly basis. We want members of the department to be informed about decisions, to understand them and to give feedback on them. One of our highest priorities going forward is to address the fact that not all of our members have the sense of belonging to the same unit. This is partly because we are spread across five different buildings, but also because there is a broad thematic range of research being carried out under one umbrella - this should ultimately be considered a benefit and opportunity for synergy within our department! While the planned new building will definitely improve the situation, we also need short-term measures, like re-launching research group leader lunches, creating an intranet for the department, and more consistent sharing and celebration of the success of our colleagues. Luckily we are not starting from scratch: our PhD and postdoc clubs and retreats are great examples of cross-disciplinary interactions. Finally, we want to establish new measures that allow our members to provide critical feedback. People need to have a voice. The idea is to openly discuss change where it is possible, and to clarify information and decisions where it is not.



Xiomara Banholzer interviewing Tania Rinaldi Barkat



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Interview with Tania Rinaldi Barkat

What do you think makes the Department of Biomedicine different from other institutions?

Our department brings together basic and clinical scientists to advance our understanding of health and disease – a combination that ultimately has the potential to bridge the gap from bench to bedside. But, of course, this is an evolving process: it takes time and open engagement to nurture a foundation of excellence and develop the corresponding culture.

The department's location is also one of its key strengths. Not only is it based on-site at the university and the hospital, but our close proximity to other outstanding research institutes, including the Biozentrum, the FMI and the DBSSE, as well as companies such as Roche and Novartis, places us in an excellent position to explore further and develop the innovation potential of our research. Basel is one of Europe's top life science hubs, and our department is an important catalyst driving this.

Tania Rinaldi Barkat Professor of Brain and Sound Lab and Ressort Leader Communication and Outreach

Xiomara Banholzer Co-Head Department Administration





Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Diary Entries

This section is dedicated to introduce you to our Director, Ivan Martin, and our Head of Operations, Andrea Ottolini-Voellmy. We asked ourselves: "What is the best way to get to know someone a bit better?" We are aware that the best way would be a one-on-one conversation. But in a department like ours, with a team of over 800 people, how would that possibly work?

So, we came up with a new approach: we will print diary entries from both. After all, what could be more personal than that?

We were able to convince Andrea and Ivan to share their diaries with us. Thank you both for your openness!

We hope you enjoy reading these entries!



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Diary Entry by Ivan Martin

Saturday, May 18, 2019, 7:00 am - The unexpected adventure begins

Dear Diary,

Yesterday I met with Daniel Pinschewer, who asked me to have a short chat with him about the fact that "Radek is going to step down as head of the DBM in the not so distant future" (quoted from his email last Wednesday). I had diligently prepared myself with a set of names to recommend as possible successors, but I was totally unprepared for his question, on behalf of the working group he was representing, as to whether I myself would have an interest in the position. I can easily justify my surprise by the fact that my participation in the meetings of the "DBM Leitung", of which I have been a member for a few years, was generally rather "discrete": I was observing with interest the group dynamics, but somehow did not feel inclined to make an active contribution and add fuel to the discussions, possibly because others were already doing so.

Confronted with Daniel's query, a somewhat unsettling thought entered my mind and challenged my deeply held attitude towards the DBM. Indeed, I joined the department more than 20 years ago and I have benefited enormously from its services, infrastructure, and the organization of the core facilities, as well as from interactions with high-profile research groups, including both fundamental biologists and clinical scientists. All these opportunities were simply at my disposal, without my having to move a finger – thanks to the efforts of a committed director and his institutional partners. But perhaps the time has come, with the progression of my career (and of age as well!), for me to take a step forward, to support and further develop a system enabling the career progression of the other Pls at the DBM, especially the junior members who need to concentrate on developing their research.

I left Daniel trying to hide my emotions and inner confusion, promising that I will reflect over the weekend and let him know if I have even a remote interest in his proposal. But what answer shall I give him next week? Am I ready to look after a bigger garden, accepting that somehow its fruits will not belong to my table? This Saturday morning, before my family wakes up, I will do a few minutes of meditation – since taking a decision about this mission requires inspiration and enthusiasm (from the Greek "en – theós") that must transcend my ego. I will then take advantage of the nice weather and spend some time in the garden to replanting "my" tomatoes.

Wednesday, December 1, 2021, 6:15pm – What a wonderful team!

Dear Diary,

It's now exactly six months since I formally took over the new role as Director of the Department at the DBM. The new proposed governance structure has been approved, the members of the Management Team have been appointed, and I have found in Andrea Ottolini, the new Head of Operations, a highly professional, loyal, committed and friendly partner to lead the DBM. I very much enjoy working with the Administration and Services team, who accepted me wholeheartedly and are making possible a smooth transition to the new leadership.

Over the past months, I have also received clear and encouraging support from the Medical Faculty and the University Hospital, from the highest institutional executives through to the technical and operative divisions. Last but not least, I was able to rely



Ivan Martin Professor of Tissue Engineering and Director of the Department of Biomedicine

on Radek's advice on multiple occasions: his experience and knowledge of the DBM is unimaginable and I'm grateful for his transparency, taking a few steps to the side, but remaining present.

Today is also a special day, as we held the first Leadership Retreat (previously Research Group Leader Retreat) since I took up my new position. I truly enjoyed the genuine engagement and motivation displayed by the members of the Management Team, of the committees around each ressort, of the core facility heads and of all group leaders who contributed to the live and respectful discussions.

I feel happy – about the decision I took two years ago and about the outstanding group of people I work with to further develop a very special and unique department! I understand that the challenge has just begun and that the path will be arduous, but it's important to enjoy and celebrate the present moment. I will now start an exercise session guided by my virtual coach on the Freeletics app and then have an ice cream – my wife Gabriella told me that for the gelateria she has made a sorbet out of freshly squeezed pomegranate and a custard crème with star anise: I absolutely have to try those new winter flavours tonight!



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Diary Entry by Andrea Ottolini-Voellmy

August 31, 2021 - Of locked gates, glass rooms and a good conversation

Dear Diary,

Today was an incredibly important day for me. I had my second interview for the job at the Department of Biomedicine. I was wildly excited. I had prepared very well and had timed everything. When I arrived at the appointed place however, access to the area was closed with a gate due to Corona! This raised my stress levels; I suddenly didn't know how to get into the building! Fortunately, I eventually managed to find a way into the building (which I had only known from the "KinderUni" and a couple of other events). I was very impressed, imagining that I might soon be working there.

The invitation to the interview said "take the lift to the first floor, you will be picked up there". I got into the lift in order to go up to the first floor. Suddenly, I noticed that the entrance area was already on the first floor. This triggered a second wave of stress! Where did I have to go? I went down one level to the ground floor and then back up to the first floor. Really? Was I going to fail my interview after months of preparation because I couldn't find the right floor?

I fumbled in my backpack and carefully read the invitation again. There was no way I could be in the wrong place - what a disaster! That's when I heard the redeeming words "Mrs Ottolini?". My (perhaps) future boss had come to collect me. For a brief moment, the tension eased. On the second floor, my other interview partners were waiting in a glassed-in room. I think the interview went well in the end. It was difficult to assess the situation clearly, because the conversation took place with masks on, and I couldn't properly make out the facial expressions of the committee members.

They asked me numerous questions about a wide variety of topics. At some point, the tension eased a bit, and the conversation actually became quite pleasant. I think I answered the questions reasonably well. The female professor had a very encouranging expression in her eyes and I looked at her every now and then after answering the questions to get some feedback. The men were a bit more distant, but still very nice and open towards me.

I found my "new boss" very sympathetic; I thought that things could work out well. He and I went to his office after the interview, where I had to write a test email. This seemed a bit strange to me, as I have been writing hundreds of emails a day for many years. Between you and me, I was so excited that it took me almost 10 minutes to write the email. Well, it's over now and all I can do is wait. I just hope that I don't have to wait as long as I did before. After all, it's been over three months since I applied. So far, they have taken their time...

That's all for now. I can hear Reto setting up the table tennis table. I'm sure I'll win today...

October 18, 2021 - Of laboratories, freezers and Netflix series...

Dear Diary,

Today was the day! My first official day of work at the Department of Biomedicine. Well, it was actually only a half-day, since I will be working 20% at my old job this month.

Funnily enough, because things suddenly started to move extremely quickly after I was accepted for the new job, I was able to negotiate a notice period of only one month and already started working today.

I had a good impression of everything: my boss is very likeable (I wasn't wrong about that) and the team is open-minded. I don't have an actual office yet. Apparently, there is still some reconstruction to be done. I do not really understand this so far... And, my schedule is already more packed than ever.

Today I was given a tour of all the different labs and basements with Roy and Yves. The lab landscape was very impressive: lots of people, lab coats, equipment, freezers and so on. I felt a bit like I was walking through one of the sci-fi series on Netflix I like to watch – only for real. When they asked me to go into the big freezer-room, I laughed and said "No way!" I don't know them well enough yet to go alone into a cold room with a thick armored door! Again, like in my favourite Netflix series!



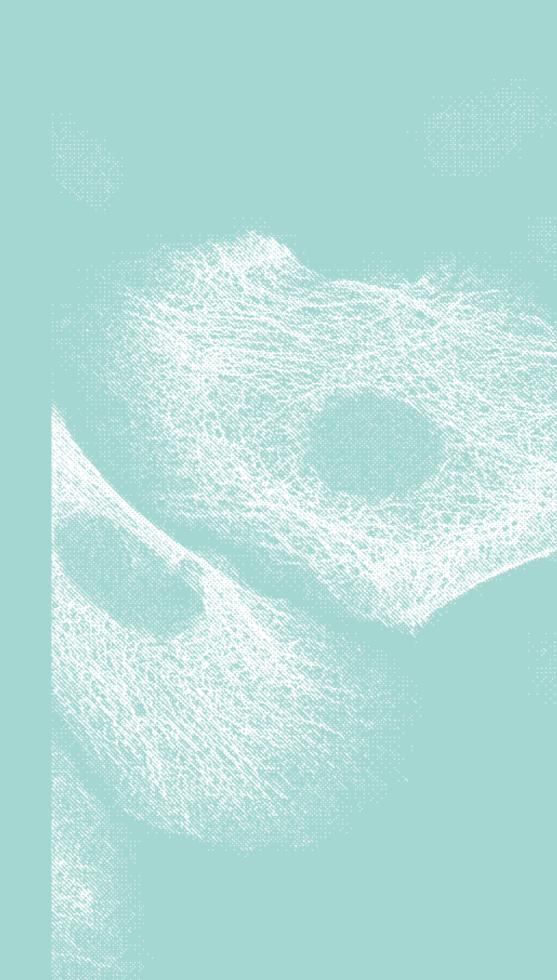
Andrea Ottolini-Voellmy, Head of Operations

In summary, it was a great day, I felt warmly received and welcome. Somehow, everything is new and not yet entirely real. At the same time, it feels like I've been here forever. I am very happy that I was given this opportunity and that I accepted the challenge. I'm curious to see how it will all turn out and where exactly the journey will take me.

One thing is clear: it certainly won't be boring at the DBM!



Research Group at a Glance Dedication Publications





Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Research Group at a Glance Obesity Research

A quick Overview of Our Research:

Obesity is a global socioeconomic health burden of epidemic dimensions. The brain acts as a master regulator directing whole-body energy homeostasis. Mounting evidence points to the fundamental role of astrocytes in the pathophysiology of obesity and associated systemic metabolic dysfunctions. Moreover, recent studies in rodents highlight the importance of the olfactory system in systemic metabolism control and the development of obesity.

Using patient-derived data from clinical studies, a variety of genetically modified mouse models and different pharmacologic approaches, including metabolic phenotyping in vivo as well as in primary cell culture in vitro combined with metabolomics, lipidomics and sequencing analysis, we aim to unravel the role of astrocyte metabolism and subtrate utilization in directing whole-body energy homeostasis and obesity development. Moreover, we strive to understand whether alterations of the olfactory system and olfactory stimulation directly impact systemic metabolism in a truly translational manner.

Highlights, Breakthroughs or Current Projects:

Using different genetically modified mouse models in vivo, we uncovered a fundamental role of astrocyte fatty-acid metabolism in obesity development, specifically by impacting food intake. Further analyses in primary astrocyte cultures in vitro strongly point towards a critical role of mitochondrial alterations as a driver of the observed metabolic phenotype in our mice.

In another project, using inducible transgenic mouse models to specifically target astrocyte mitochondrial function, we discovered that astrocyte substrate utilization directs whole-body glucose homeostasis, possibly by impacting liver physiology.

Interim analyses of our running clinical studies revealed that systemic metabolism is impacted by acute olfactory odor stimulation in obese humans.

Our Vision for the Future:

Through our research, we aim to decipher the role of astrocyte metabolism and the olfactory system in whole-body energy homeostasis and obesity development, with the overall goal of uncovering novel targets and strategies for the successful treatment of obesity and associated metabolic diseases in the future.

Obesity Research









Katharina Timper Timothy O









Jochen Schmid

Metabolism research is best done in controlled real-life settings!

We are a young, diverse team with different backgrounds and skills, united in our passion for science and the belief that we are strongest and happiest together.

We are:

Katharina Timper: Group leader, started the lab in 2019, passionate about obesity and metabolism in humans and mice, constantly shuttling between bench and bedside.

Alexandra Gnann: Lab manager, joined the lab in July 2019, vast expertise with all kinds of molecular-biology techniques and indispensable for keeping the lab and all its projects running and organized, spoils the lab with delicious Christmas cookies.

Timothy Odermatt: Postdoc, joined the lab in July 2021, crazy about special lipids, walks at least 14,000 steps every day whatever the weather.

Mustafa Coban: PhD candidate, joined the lab in July 2019, keen on lipid metabolism in astrocytes, owns a Golden Retriever model who thinks he is a human being.

Pierre Abiven: PhD candidate, joined the lab in April 2021, fascinated by cellular substrate perception mechanisms, uses a private jet to go where the most delicious oysters grow.

Jochen Schmid: PhD candidate, joined the lab in April 2021, fascinated by mitochondrial respiration, addicted to mountains (there is no mountain high enough...).

Anouk Hoogkamer: MD candidate, joined the group in October 2021, enthusiastic about olfaction, has the right nose for the right study candidates.



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Research Group at a Glance **Experimental Neuroimmunology**

A Quick Overview of Our Research:

Fundamental progress has been made in understanding that the "immune privilege" of the brain entails the physiological presence of immune cells in the central nervous system. Yet, the underlying pathophysiology of immune-mediated diseases of the central nervous system has not been fully elucidated. In this context, mounting evidence points towards the pivotal role of microbiota in shaping the immune response during health and disease. Taking cues from opposing clinical trial results with B celldepleting therapies in multiple sclerosis (MS), we recently discovered a novel subset of gut-originating anti-inflammatory B cells that traffic to the brain to counteract neuroinflammation in multiple sclerosis and potentially other neuroinflammatory conditions. Tying these findings to our longstanding interest in autoreactive B cells and antigen discovery, we aim to deconvolute the spatio-temporal cellular and molecular landscape of functionally heterogeneous B cells across compartments and their interaction with gut microbiota in neuroinflammatory diseases. Research in the Pröbstel Lab integrates a broad spectrum of methods combining human immunology and immune repertoire analysis, single-cell bioinformatics, microbiota sequencing and experimental (gnotobiotic) mouse models.

Highlights, Breakthroughs or Current Projects:

The high prevalence of neurological symptoms in COVID-19 patients has prompted the Pröbstel Lab to investigate the presence of viral transcripts and features of central nervous system (CNS) immunopathology in COVID-19 brains, in close collaboration with our neuropathology and neurosurgical colleagues. In line with recent reports, we found an increased level of innate immune activation associated with CNS border areas, as well as a compartmentalized cytokine response. Further, we found the presence of viral transcripts in the choroid plexus, suggesting the choroid plexus as a critical entry point for SARS-CoV-2. Notably, when comparing COVID-19 patients without autoimmune disease to a COVID-19 patient with MS, we found no evidence for MS disease exacerbation.

Deigendesch N, Sironi L, Kutza M, Wischnewski S, Fuchs V, Hench J, Frank A, Nienhold R, Mertz KD, Cathomas KD, Matter MS, Siegemund M. Tolnay M. Schirmer L. Pröbstel AK, Tzankov A. Frank S. Acta Neuropathologica, 2020:140(4):583-586, PMID: 32851506

SARS-CoV-2-specific neuropathology: fact or fiction? Pröbstel AK, Schirmer L. Trends Neurosci. 2021; 44(12):933-935. PMID: 34716032

Presence of SARS-CoV-2 transcripts in the choroid plexus independent of multiple sclerosis. Fuchs V. Kutza M. Wischnewski S. Deigendesch N, Lutz L, Kulsvehagen L, Ricken G, Kappos L, Tzankov A, Hametner S, Frank S, Schirmer L, Pröbstel AK. Neurol Neuroim

Etter MM, Martins TA, Duchemin W, Kulsvehagen L, Pössnecker E, Sanabria-Diaz G, Hogan S, Rychen J, Eberhard N, Melie-Garcia L, Eich C, Keller Emanuela, Jelcic I, Hench J, Tzankov A, Matter M, Frank S, Siegemund M, Kuhle J, Oechtering J, Lieb J, Psychogios M-N, Stalder

Our Vision for the Future:

The Probstel Lab aims to understand the functional diversity and antigen specificity of B cells and their interaction with gut microbiota that underlie immune-mediated diseases of the central nervous system, with the overall vision of developing strategies to foster immune regulatory responses through the targeted manipulation of the gut microbiome. We hope that the insights gained will pave the way for microbiome-based strategies to treat neuroinflammatory diseases.

Team Spirit – Introduction of us:

We are a newly established, international, interdisciplinary team with diverse clinical and scientific backgrounds, who are driven by curiosity and a passion for neuroimmunology. We are grateful for the wonderful support we have received in establishing our group in the past months.

Here are some snapshots inside and outside of the lab:





Anne-Katrin Pröbstel, Research Group Leader Anne-Catherine Lecourt, Lab manager/Technician

Tradite Neziraj, Postdoctoral Fellow/Resident

Julia Flammer, Postdoctoral Fellow/Resident

Lena Siewert, Postdoctoral Fellow

Ana Beatriz Gomes, PhD student

Laila Kulsvehagen, PhD student

Elisabeth Pössnecker, PhD student

Miriam Beyerle, Doctoral student

Tim Dürrenberger, Doctoral student

Patrick Lipps, Doctoral student

Luc Lutz, Master student

David Schreiner, Bioinformatician

Alumni: Vidmante Fuchs, Master student (now: PhD student, University of Freiburg, Germany)

Laura Rieder, Master student (now: Intern, Roche)

Find out more about the individual team members on our homepage www.proebstellab.com



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Dedication Gerhard Christofori

A key figure in metastasis biology: Gerhard Christofori

We often know about our colleague's scientific work and sometimes about their teaching, but we are rarely familiar with their personal histories, career paths, and global vision for science. A series of videos entitled "An oral history of mammary gland biology and breast cancer: Discussion with key figures" (https://enbdc.org/interviews/) is meant to fill this gap. The video of Prof. Gerhard Christofori from the University of Basel will be online in the next months, so stay tuned! In the meantime, here is a teaser.

Like in Hamlet or The Odyssey, we begin in medias res. Gerhard has retired after a very successful career at the Department of Biomedicine (DBM). His lab focused on mechanisms of metastasis and therapy resistance using a tumor biology and basic research approach. Gerhard was born in a little village called Lomersheim in southern Germany. It is now part of the city of Lomersheim near Pforzheim, the so-called "Golden City" and birth place of the Nobel Prize laureate Heinrich Otto Wieland, a chemist, who was awarded the Nobel for his research into bile acids. Gerhard has never been mainstream. Unlike his childhood friends, who were mostly drawn to study engineering due to the local car industry, Gerhard specialized in something else instead. Gerhard plays music (the Hammond organ and the pipe organ), and he was also a great gymnast, but he decided to keep these as a hobby and not to make a career out of them.

Gerhard grew up close to nature, plants, animals and a river with plenty to observe, explore and discover. This piqued his interest in biology, an interest that has never left him. After working in a hospital as part of his social service, he realized that he liked medical research. He moved to Heidelberg to study biology, with a fierce interest and curiosity, devouring all the course material. That was the time of the molecular-biology revolution, and Heidelberg was the place to be, with many researchers who had come back after training in the USA. There, Gerhard met some of his role models, like the famous researcher and professor Hermann Bujard, who developed the Tet regulatory system and whose lectures were always so overcrowded that students had to come 30 minutes in advance to find a seat. These professors, unlike many of their predecessors, treated their young students as peers in discussions. Scientific argumentation trumped hierarchy! This "democratic science" clearly appealed to Gerhard.

After his Diploma in Molecular Genetics/Microbiology, Gerhard continued with a PhD on polyadenylation of messenger RNA at the German cancer center in Heidelberg and subsequently at the Biocenter of the University of Basel, because his PhD advisor Walter Keller moved to Basel. Keller taught him to be highly critical and showed him how to design a thoughtful, clean and complete experiment (i.e., the esthetics of an experiment).

Then, in 1989, the year when Harold Varmus and Mike Bishop received the Nobel prize for the discovery of the cellular origin of retroviral oncogenes, Gerhard went to San Francisco as a postdoctoral fellow with Doug Hanahan at UCSF. There, he pursued more medically oriented questions, using transgenic mouse models of multistage tumorigenesis in a vibrant and international scientific environment. After many months of hard work, along with many failures, but also strong support and encouragement from Doug Hanahan, he achieved great successes that resulted in several frequently cited, high-profile papers (e.g., on mechanisms of angiogenesis and tumor progression).

In 1994, Gerhard became Group Leader at the Research Institute of Molecular Pathology (IMP), Vienna, a scientific paradise, where he continued to ask big questions related to cancer biology (e.g., about mechanisms of survival/apoptosis and what we now call epithelial to mesenchymal transition (EMT)) and published several influential studies in top-tier journals. In 2001, Gerhard was nominated Professor and Chair of Biochemistry at the University of Basel. This coincided with the university's decision to reorganize preclinical and clinical research, placing them together in a single department, which culminated in the creation of the DBM, a unique environment where basic scientists intermingle with clinicians, making a big step forward. At the DBM, Gerhard continued his work on angiogenesis using transgenic mice and started several therapy-oriented collaborations with clinicians and with pharmaceutical companies in Basel, work that yielded numerous papers.

Gerhard and I first met in 2006. This meeting marked the start of a friendship and numerous interactions on thesis committees and at other joint meetings. I had the opportunity to witness the depth and breadth of Gerhard's expertise. Gerhard has always been interested in cancer initiation and progression to metastasis, but agnostic as regards the cancer type, on the grounds that the mechanisms he discovers may apply to several different cancer types. This approach led him to stumble across other processes and fields, like ferroptosis.



Gerhard Christofori, Professor of Tumor Biology



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Dedication Gerhard Christofori

In recent years, Gerhard has continued his in-depth analysis of the mechanisms of EMT, including the effects of metabolism, epigenetics and the tumor microenvironment. He dubbed the latter the "corrupt policemen". These comprehensive studies included performing unbiased screens, using computational and modeling approaches, developing original mouse models for the lineage tracing of EMT and pursuing hits identified from these screens. These studies have also resulted in numerous original papers.

Gerhard mentored many colleagues over the years, a task that he greatly enjoyed and will clearly miss, including over 33 postdocs, 29 PhD and MD-PhD students and 32 Diploma/Master students. Together, they published over 180 research papers, commentaries and reviews. In addition to his teaching duties, research and mentoring, Gerhard has been clearly community-oriented. He fulfilled numerous functions, such as vice-dean of research, chair of many thesis committees, chair of the focal area oncology at the DBM chair of personalized oncology in Basel. He has also been a member of several scientific advisory boards, grant-reviewing boards, the focal area of research in oncology (FARO) and the Basel Breast Consortium (BBC) committee. To thank Gerhard for his generous and self-less contributions, the BBC has created an annual award called "Gerhard Christofori BBC award" that will be given to the presenter of the best poster at its annual meeting on personalized breast-cancer treatment.

When asked what advice he would give to a president who wants to make biomedical research a national priority, Gerhard replied: "The focus has to be on science, bottom-up science. Leave room for curiosity-driven research; translational aspects are important, but they should not be the major mantra; interdisciplinarity is very important for today's research. Finally, let the scientists conduct research and don't steal their time for administrative tasks." Gerhard added that scientists should give everything they have to attain excellence! This is a great note to end this teaser on.

Tent

Mohamed Bentires-Alj
Professor of Tumor Heterogeneity,
Metastasis and Resistance







Gerhard Christofori Retirement Symposium

"News from the invasive front"

Thursday, June 30, 2022

08:30 - 18:00 h

Maurice E. Müller Lecture Hall New Biocenter, University of Basel Spitalstrasse 41, 4056 Basel

Morning Session

08:30 Welcome (Prof. M. Bentires-Alj)

08:35 Prof. Mohamed Bentires-Alj, Department of Biomedicine,
University of Basel, Switzerland
Breast tumor heterogeneity and metastasis: Act locally, think

09:05 Prof. Curzio Rüegg, University of Fribourg, Switzerland
Traveling and settling the brain: new insights into breast cancer
metastasis to the brain

09:35 Prof. Sabine Werner, Molecular Health Sciences, ETH Zürich, Switzerland Stromal-epithelial cross-talk in tissue repair and cancer

10:05 Dr. Heidi Lane, Basilea Pharmaceutica Ltd., Basel, Switzerland Targeted drug development for cancer therapy

10:35 - 11:00 Coffee break

11:00 Prof. Gabriele Bergers, VIB-KU Leuven Center, Belgium High-endothelial venules in cancer: vascular modulations to improve immunotherany?

11:30 Prof. Ugo Cavallaro, Department of Experimental Oncology Milan, Italy Ovarian cancer stem cells: still an elusive entity?

12:00 Prof. Mike Hall, Biocenter, University of Basel, Switzerland mTOR signaling in growth and metabolism

mTOR signaling in growth and metabolis

12:30 - 13.30 Lunch break

fternoon Session

13:30 Prof. Christoph Klein, Experimental Medicine and Therapy Research, University of Regensburg, Germany Cancer progression and the invisible phase of metastatic colleges from

Prof. Thomas Brabletz, Nikolaus-Fiebiger-Center for Molecular Medicine, University of Erlangen-Nürnberg, Germany Cellular plasticity in cancer: driving force and therapeutic target

14:30 Prof. Nicola Aceto, Institute for Molecular Health Sciences, ETH Zürich, Switzerland Circulating tumor cells: biology and vulnerabilities

15:00 Prof. Johanna Joyce, Ludwig Cancer Research, University of Lausanne, Switzerland Charting the Immune Landscape in Brain Cancers

:30 - 16:00 Coffee break

16.00 Prof. Douglas Hanahan, ISREC@EPFL, Lausanne, Switzerland New mechanisms and therapeutic targeting strategies for cancer hallmarks

16:30 Prof. Robert Weinberg, MIT, Department of Biology, Cambridge MA, United States
The EMT and the Stem-Cell State (by Zoom)

17:00 – 18:00 Prof. Gerhard Christofori, Department of Biomedicine, University of Basel, Switzerland
All's well that ends well

18:00 Recention

......

krebsforschung schweiz recherche suisse contre le cance ricerca svizzera contro il cancr swiss cancer research



BASEL







SWISS NATIONAL SCIENCE FOUNDATION

The Symposium is open to all interested scientists in person by first come, first served registration and by Zoom. Please register using the link below.

In person registration is open until June 1st.

https://www.eventbrite.ch/e/gerhard-christofori-retirement-symposiun tickets-287883024877



2



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Publications

Main publications we have received from the period between August 2021 and April 2022. The publications are listed by impact factor.

Direct antimicrobial resistance prediction from clinical MALDI-TOF mass spectra using machine learning. Weis C, Cuénod A, Rieck B, Dubuis O, Graf S, Lang C, Oberle M, Brackmann M, Søgaard KK, Osthoff M, Borgwardt K, Egli A. Nat Med. 2022 Jan;28(1):164-174. IF: 53.440

Serum neurofilament light chain for individual prognostication of disease activity in people with multiple sclerosis: a retrospective modelling and validation study. Benkert P, Meier S, Schaedelin S, Manouchehrinia A, Yaldizli Ö, Maceski A, Oechtering J, Achtnichts L, Conen D, Derfuss T, Lalive PH, Mueller C, Müller S, Naegelin Y, Oksenberg JR, Pot C, Salmen A, Willemse E, Kockum I, Blennow K, Zetterberg H, Gobbi C, Kappos L, Wiendl H, Berger K, Sormani MP, Granziera C, Piehl F, Leppert D, Kuhle J; NfL Reference Database in the Swiss Multiple Sclerosis Cohort Study Group. Lancet Neurol. 2022 Mar;21(3):246-257. IF: 44 182

Magnesium sensing via LFA-1 regulates CD8 + T cell effector function. Lötscher J, Martí I Líndez AA, Kirchhammer N, Cribioli E, Giordano Attianese GMP, Trefny MP, Lenz M, Rothschild SI, Strati P, Künzli M, Lotter C, Schenk SH, Dehio P, Löliger J, Litzler L, Schreiner D, Koch V, Page N, Lee D, Grählert J, Kuzmin D, Burgener AV, Merkler D, Pless M, Balmer ML, Reith W, Huwyler J, Irving M, King CG, Zippelius A, Hess C. Cell. 2022 Feb 17;185(4):585-602. e29. IF: 41.584

Manufacturing of Human Tissues as off-the-Shelf Grafts Programmed to Induce Regeneration. Pigeot S, Klein T, Gullotta F, Dupard SJ, Garcia Garcia A, García-García A, Prithiviraj S, Lorenzo P, Filippi M, Jaquiery C, Kouba L, Asnaghi MA, Raina DB, Dasen B, Isaksson H, Önnerfjord P, Tägil M, Bondanza A, Martin I, Bourgine PE. Adv Mater. 33, 2103737: 1-13 (2021). IF 30.849

<u>Ubiquitous expression of HBsAg from integrated HBV DNA in patients with low viral load.</u>
Meier MA, Calabrese D, Suslov A, Terracciano LM, Heim MH, Wieland S. J Hepatol. 2021 Oct;75(4):840-847. IF: 25.083

Stimulatory MAIT cell antigens reach the circulation and are efficiently metabolised and presented by human liver cells. Lett MJ, Mehta H, Keogh A, Jaeger T, Jacquet M, Powell K, Meier M, Fofana I, Melhem H, Vosbeck J, Cathomas G, Heigl A, Heim MH, Burri E, Mertz KD, Niess JH, Kollmar O, Zech CJ, Ivanek R, Duthaler U, Klenerman P, Stroka D, Filipowicz Sinnreich M:Gut. 2022 Jan 20;gutjnl-2021-324478. doi: 10.1136/gutjnl-2021-324478. IF 23.059

Thymus extracellular matrix-derived scaffolds support graft-resident thymopoesis and long-term in vitro culure of adult thymic epithelial cells. Asnaghi MA, Barthlott T, Gullotta F, Strusi V, Amovilli A, Hafen K, Srivastava G, Oertle P, Toni R, Wendt D, Holländer GA, Martin I. Adv Funct Mater 31(20):2010747 (1-15) (2021). IF 18.808

Engineered nasal cartilage for the repair of osteoarthritic knee cartilage defects. Acevedo Rua L, Mumme M, Manferdini C, Darwiche S, Khalil A, Hilpert M, Buchner DA, Lisignoli G, Occhetta P, von Rechenberg B, Haug M, Schaefer DJ, Jakob M, Caplan A, Martin I, Barbero A, Pelttari K. Sci Transl Med. 13(609), eaaz4499:1-14 (2021). IF 17.992

Systemic identification of novel cancer genes through analysis of deep shRNA perturbation screens. Montazeri H, Coto-Llerena M, Bianco G, Zangene E, Taha-Mehlitz S, Paradiso V, Srivatsa S, de Weck A, Roma G, Lanzafame M, Bolli M, Beerenwinkel N, von Flüe M, Terracciano LM, Piscuoglio S, Ng CKY. Nucleic Acids Res. 2021 Sep 7;49(15):8488-8504. IF 16.971

Covalent Proximity Scanning of a Distal Cysteine to Target Pl3Kα. Borsari C, Keles E, McPhail JA, Schaefer A, Sriramaratnam R, Goch W, Schaefer T, De Pascale M, Bal W, Gstaiger M, Burke JE, Wymann MP. J Am Chem Soc. 2022 Apr 13;144(14):6326-6342. IF 15.419

Interferon lambda 4 impairs hepatitis C viral antigen presentation and attenuates T cell responses. Chen Q, Coto-Llerena M, Suslov A, Teixeira RD, Fofana I, Nuciforo S, Hofmann M, Thimme R, Hensel N, Lohmann V, Ng CKY, Rosenberger G, Wieland S, Heim MH. Nat Commun. 2021 Aug 12;12(1):4882. IF: 14.919

Spatial regulation by multiple Gremlin1 enhancers provides digit development with cis-regulatory robustness and evolutionary plasticity. Malkmus J, Ramos Martins L, Jhanwar S, Kircher B, Palacio V, Sheth R, Leal F, Duchesne A, Lopez-Rios J, Peterson KA, Reinhardt R, Onimaru K, Cohn MJ, Zuniga A, Zeller R. Nature Commun 12, 5557. IF 14.919

Conserved and species-specific chromatin remodelling and regulatory dynamics during mouse and chicken limb bud development. Jhanwar S, Malkmus J, Stolte J, Romashkina O, Zuniga A, Zeller R. Nature Commun. 12, 5685. IF 14.919

Integrative proteogenomic characterization of hepatocellular carcinoma across etiologies and stages. Ng CKY, Dazert E, Boldanova T, Coto-Llerena M, Nuciforo S, Ercan C, Suslov A, Meier MA, Bock T, Schmidt A, Ketterer S, Wang X, Wieland S, Matter MS, Colombi M, Piscuoglio S, Terracciano LM, Hall MN, Heim MH. Nat Commun. 2022 May 4;13(1):2436. IF 14.919

Alterations in homologous recombination repair genes in prostate cancer brain metastases. Rodriguez-Calero A, Gallon J, Akhoundova D, Maletti S, Ferguson A, Cyrta J, Amstutz U, Garofoli A, Paradiso V, Tomlins SA, Hewer E, Genitsch V, Fleischmann A, Vassella E, Rushing EJ, Grobholz R, Fischer I, Jochum W, Cathomas G, Osunkoya AO, Bubendorf L, Moch H, Thalmann G, Ng CKY, Gillessen S, Piscuoglio S, Rubin MA. Nat Commun. 2022 May 3;13(1):2400. IF 14.919

Persistent RNA virus infection is short-lived at the single-cell level but leaves transcriptomic footprints. Reuther P, Martin K, Kreutzfeldt M, Ciancaglini M, Geier F, Calabrese D, Merkler D, Pinschewer DD. J Exp Med. (2021) 218 (10): e20210408. IF 14.307

Adenylosuccinate lyase is oncogenic in colorectal cancer by causing mitochondrial dysfunction and independent activation of NRF2 and mTOR-MYC-axis. Taha-Mehlitz S, Bianco G, Coto-Llerena M, Kancherla V, Bantug GR, Gallon J, Ercan C, Panebianco F, Eppenberger-Castori S, von Strauss M, Staubli S, Bolli M, Peterli R, Matter MS, Terracciano LM, von Flüe M, Ng CKY, Soysal SD, Kollmar O, Piscuoglio S. Theranostics. 2021 Feb 15;11(9):4011-4029. IF 11.556

<u>Dual targeting of JAK2 and ERK interferes with the myeloproliferative neoplasm clone and enhances therapeutic efficacy.</u> Brkic S, Stivala S, Santopolo A, Szybinski J, Jungius S, Passweg JR, Tsakiris D, Dirnhofer S, Hutter G, Leonards K, Lischer HEL, Dettmer MS, Neel BG, Levine RL, Meyer SC. Leukemia. 2021 Oct;35(10):2875-2884. IF 11.528

Whole-genome sequence-informed MALDI-TOF MS diagnostics reveal importance of Klebsiella oxytoca group in invasive infections: a retrospective clinical study. Cuénod A, Wüthrich D, Seth-Smith HMB, Ott C, Gehringer C, Foucault F, Mouchet R, Kassim A, Revathi G, Vogt DR, von Felten S, Bassetti S, Tschudin-Sutter S, Hettich T, Schlotterbeck G, Homberger C, Casanova C, Moran-Gilad J, Sagi O, Rodríguez-Sánchez B, Müller F, Aerni M, Gaia V, van Dessel H, Kampinga GA, Müller C, Daubenberger C, Pflüger V, Egli A. Genome Med 2021 Sep 13;13(1):150. IF 11.117

NOX1 mediates metabolic heart disease in mice and is upregulated in monocytes of humans with diastolic dysfunction. Xu L, Balzarolo M, Robinson EL, Lorenz V, Verde GD, Joray L, Mochizuki M, Kaufmann BA, Valstar G, de Jager SCA, den Ruijter HM, Heymans S, Pfister O, Kuster GM. Cardiovasc Res. 2021 Nov 26;cvab349. IF 10.787

Culturing patient-derived malignant hematopoietic stem cells in engineered and fully humanized 3D niches. García-García A, Klein T, Born G, Hilpert M, Scherberich A, Lengerke C, Skoda RC, Bourgine PE, Martin I. Proc Nat Acad Sci USA. 118(40), e2114227118: 1-10 (2021). IF 10.700

Immunological Predictors of Dimethyl Fumarate-Induced Lymphopenia. Diebold M, Galli E, Kopf A, Sanderson N, Callegari I, Ingelfinger F, Núñez NG, Benkert P, Kappos L, Kuhle J, Becher B, Claassen M, Derfuss T. Ann Neurol. 2022 May;91(5):676-681. IF 10.422



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Publications

Task-induced modulations of neuronal activity along the auditory pathway. De Franceschi G, Barkat TR. Cell Reports. Reports 37, 11015. IF 9.423

Supervised learning based on tumor imaging and biopsy transcriptomics predicts response of hepatocellular carcinoma to transarterial chemoembolization. BoldanovaT, Fucile G, Vosshenrich J, Suslov A, Ercan C, Coto-Llerena M, Terracciano LM, Zech CJ, Boll DT, Wieland S, Heim MH. Cell Rep Med. 2021 Nov 16;2(11):100444.IF: 9.423

RBFOX splicing factors contribute to a broad but selective recapitulation of peripheral tissue splicing patterns in the thymus. Jansen K, Shikama-Dorn N, Attar M, Maio S, Lopopolo M, Buck D, Holländer GA, Sansom SN. Genome Res. 2021 Nov;31(11):2022-2034. IF 9.043

Nose to Spine: spheroids generated by human nasal chondrocytes for scaffold-free nucleus pulposus augmentation. Gryadunova A, Kasamkattil J, Gay MHP, Dasen B, Pelttari K, Mironov V, Martin I, Schären S, Barbero A, Krupkova O, Mehrkens A. Acta Biomater. 134: 240-251 (2021). IF 8.947

Presence of SARS-CoV-2 transcripts in the choroid plexus independent of multiple sclerosis. Fuchs V, Kutza M, Wischnewski S, Deigendesch N, Lutz L, Kulsvehagen L, Ricken G, Kappos L, Tzankov A, Hametner S, Frank S, Schirmer L, Pröbstel AK. Neurol Neuroimmunol Neuroinflamm. 2021; 8(2):e957. IF 8.485

Mass Cytometry of CSF Identifies an MS-Associated B-cell Population. Johansson D, Rauld C, Roux J, Regairaz C, Galli E, Callegari I, Raad L, Waldt A, Cuttat R, Roma G, Diebold M, Becher B, Kuhle J, Derfuss T, Carballido JM, Sanderson NSR. Neurol Neuroimmunol Neuroinflamm. 2021 Feb 15;8(2):e943. IF 8.485

Suppression of caspase 8 activity by a coronin 1-Pl3Kδ pathway promotes T cell survival independently of TCR and IL-7 signaling. Mori M, Ruer-Laventie J, Duchemin W, Demougin P, Ndinyanka Fabrice T, Wymann MP, Pieters J. Sci Signal. 2021 Dec 21;14(714):eabj0057. IF 8 218

Emergence and function of cortical offset responses in sound termination detection. Solyga M, BarkatTR. eLife. 10:e72240. IF 8.146

Improvement of muscle strength in a mouse model for congenital myopathy treated with HDAC and DNA methyltransferase inhibitors. Ruiz A, Benucci S, Duthaler U, Bachmann C, Franchini M, Noreen F, Pietrangelo L, Protasi F, Treves S, Zorzato F. eLife. 2022 Mar 3;11:e73718. IF 8.146

Determinants of SARS-CoV-2 transmission to guide vaccination strategy in an urban area. Brüningk SC, Klatt J, Stange M, Mari A, Brunner M, RoloffTC, Seth-Smith HMB, Schweitzer M, Leuzinger K, Søgaard KK, Albertos Torres D, Gensch A, Schlotterbeck AK, Nickel CH, Ritz N, Heininger U, Bielicki J, Rentsch K, Fuchs S, Bingisser R, Siegemund M, Pargger H, Ciardo

D, Dubuis O, Buser A, Tschudin-Sutter S, Battegay M, Schneider-Sliwa R, Borgwardt KM,

Hirsch HH, Egli A. Virus Evol. 2022 Mar 17;8(1):veac002. IF 7.989

Engineering of fully humanized and vascularized 3D bone marrow niches sustaining undifferentiated human cord blood hematopoietic stem and progenitor cells. Born G, Niko-

lova M, Scherberich A, Treutlein B, García-García A, Martin I. JTissue Eng. 12: 1-11 (2021). IF 7.813

Epithelial GPR35 protects from Citrobacter rodentium infection by preserving goblet cells

Epithelial GPR35 protects from Citrobacter rodentium infection by preserving goblet cells and mucosal barrier integrity. Melhem H, Kaya B, Kaymak T, Wuggenig P, Flint E, Roux J, Oost KC, Cavelti-Weder C, Balmer ML, Walser JC, Morales RA, Riedel CU, Liberali P, Villablanca EJ, Niess JH. Mucosal Immunol. 2022 Mar;15(3):443-458. IF 7.313

Chronic inflammation and extracellular matrix-specific autoimmunity following inadvertent periarticular influenza vaccination. Hirsiger JR, Tamborrini G, Harder D, Bantug GR, Hoenger G, Recher M, Marx C, Li QZ, Martin I, Hess C, Scherberich A, Daikeler T, Berger CT. J Autoimmun. 2021 Nov;124:102714. IF 7.094

T-cadherin Expressing Cells in the Stromal Vascular Fraction of Human Adipose Tissue: Role in Osteogenesis and Angiogenesis. Guerrero J, Dasen B, Frismantiene A, Pigeot S, Ismail T, Schaefer DJ, Philippova M, Resink TJ, Martin I, Scherberich A. Stem Cells Transl Med. 11(2): 213-229 (2022). IF 6.940

SMAD4 target genes are part of a transcriptional network that integrates the response to BMP and SHH signaling during early limb bud patterning. Gamart J, Barozzi I, Laurent F, Reinhardt R, Martins LR, Oberholzer T, Visel A, Zeller R, Zuniga A. Development. 148, dev200182. IF 6.868

Model-based inference of neutralizing antibody avidities against influenza virus. Linnik J, Syedbasha M, Hollenstein Y, Halter J, Egli A, Stelling J. PLoS Pathog. 2022 Jan 31;18(1):e1010243 IF 6.823

Siglec receptors modulate dendritic cell activation and antigen presentation to T cells in cancer. Wang J, Manni M, Bärenwaldt A, Wieboldt R, Kirchhammer N, Ivanek R, Stanczak M, Zippelius A, König D, Rodriques Manutano N, Läubli H. Front Cell Dev Biol. 2022 Mar 3;10:828916. IF 6.684

Identification of TPM2 and CNN1 as Novel Prognostic Markers in Functionally Characterized Human Colon Cancer-Associated Stromal Cells. Mele V, Basso C, Governa V, Glaus Garzon JF, Muraro MG, Däster S, Nebiker CA, Mechera R, Bolli M, Schmidt A, Geiger R, Spagnoli GC, Christoforidis D, Majno PE, Borsig L, Iezzi G. Cancers (Basel). 2022 Apr 16;14(8):2024. IF: 6.639

Engineering of Tracheal Grafts Based on Recellularization of Laser-Engraved Human Airway Cartilage Substrates. Baranovskii D, Demner J, Nürnberger S, Lyundup A, Redl H, Hilpert M, Pigeot S, Krasheninnikov M, Krasilnikova O, Klabukov I, Parshin V, Martin I, Lardinois D, Barbero A. Cartilage. 1-12 (2022). IF 6.634

Epigenetic priming in chronic liver disease impacts the transcriptional and genetic landscapes of hepatocellular carcinoma. Gallon J, Coto-Llerena M, Ercan C, Bianco G, Paradiso V, Nuciforo S, Taha-Melitz S, Meier MA, Boldanova T, Pérez-Del-Pulgar S, Rodríguez-Tajes S, von Flüe M, Soysal SD, Kollmar O, Llovet JM, Villanueva A, Terracciano LM, Heim MH, Ng CKY, Piscuoglio S. Mol Oncol. 2022 Feb;16(3):665-682. IF 6 603

Deep learning enables the automation of grading histological tissue engineered cartilage images for quality control standardization. Power L, Acevedo L, Yamashita R, Rubin D, Martin I, Barbero A. Osteo-arthritis Cartilage. 29:433-443 (2021). IF 6.576

Targeting immunoliposomes to EGFR-positive glioblastoma. Kasenda B, König D, Manni M, Ritschard R, Duthaler U, Bartoszek E, Bärenwaldt A, Deuster S, Hutter G, Cordier D, Mariani L, Hench J, Frank S, Krähenbühl S, Zippelius A, Rochlitz C, Mamot C, Wicki A, Läubli H. ESMO Open. 2022 Feb;7(1):100365. IF 6 540

Targeting colonic macrophages improves glycemic control in high-fat diet-induced obesity. Rohm TV, Keller L, Bosch AJT, AlAsfoor S, Baumann Z, Thomas A, Wiedemann SJ, Steiger L, Dalmas E, Wehner J, Rachid L, Mooser C, Yilmaz B, Fernandez Trigo N, Jauch AJ, Wueest S, Konrad D, Henri S, Niess JH, Hruz P, Ganal-Vonarburg SC, Roux J, Meier DT, Cavelti-Weder C. Commun Biol. 2022 Apr 19;5(1):370. IF 6.268

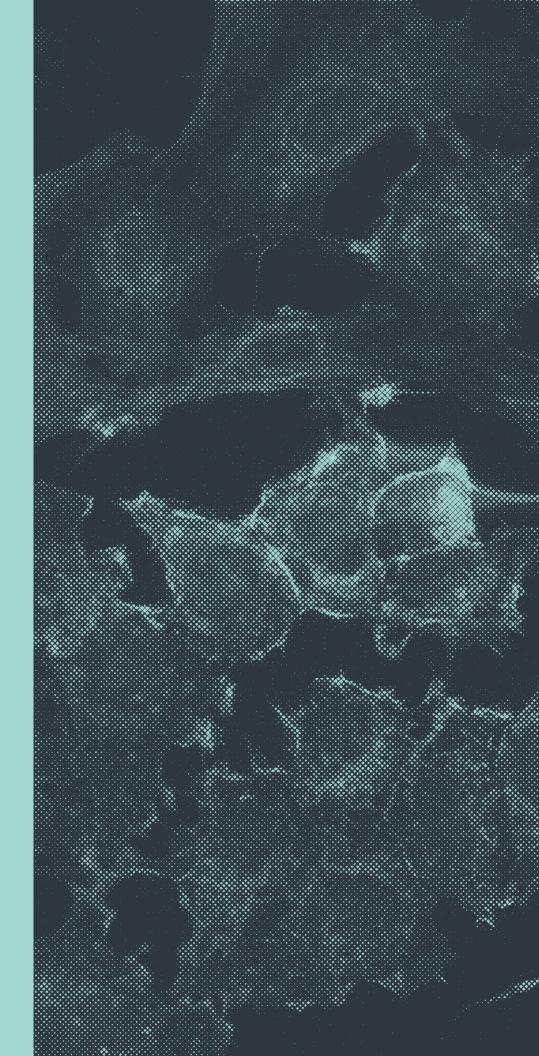
Case Report: Reconstruction of a Large Maxillary Defect with an Engineered, Vascularized, Prefabricated Bone Graft. IsmailT, Haumer A, Lunger A, Osinga R, Kaempfen A, Saxer F, Wixmerten A, Miot S, Thieringer F, Beinemann J, Kunz C, Jaquiéry C, WeikertT, Kaul F, Scherberich A, Schaefer DJ, Martin I. Front Oncol. 11: 775136 (2021). IF 6.244

Standardizing Patient-Derived Organoid Generation Workflow to Avoid Microbial Contamination From Colorectal Cancer Tissues. Marinucci M, Ercan C, Taha-Mehlitz S, Fourie L, Panebianco F, Bianco G, Gallon J, Staubli S, Soysal SD, Zettl A, Rauthe S, Vosbeck J, Droeser RA, Bolli M, Peterli R, von Flüe M, Ng CKY, Kollmar O, Coto-Llerena M, Piscuoglio S. Front Oncol. 2022 Jan 10;11:781833. IF 6.244

The Genomic Landscape of Serrated Lesion of the Colorectum: Similarities and Differences With Tubular and Tubulovillous Adenomas. Tornillo L, Lehmann FS, Garofoli A, Paradiso V, Ng CKY, Piscuoglio S. Front Oncol. 2021 Oct 12;11:668466. IF 6.244



Congratulations Events





Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

The DBM congratulates

Awards since 2021

April 2022

Lukas Jeker Startup of Cimeio Therapeutics AG (Cimeio)

March 17-18, 2022

Prize for the best scientific abstract at the annual congress of the Swiss Society of Rheumatology to **Stavros Giaglis** (Diego Kyburz Lab)

March 17, 2022

ERC Consolidator Grant to Carolyn King

The ERC aims to encourage the highest quality research in Europe through competitive funding and to support investigator-driven frontier research across all fields.

January 27, 2022

Maud Wilhelm and Amandeep Kaur's work (Hirsch Lab) was elected as one of the top 3 laboratory papers by the Scientific Board of the Swiss Transplant Society. Even more, it was voted as the Number 1 presentation at the 19th Annual Meeting of the Swiss Transplant Society in Thun.

November 26, 2021

Carolyn King was awarded with the Amerbach Prize at the Dies Academicus

The Amerbach Prize is awarded by the University of Basel annually to young academics for outstanding research.

November 19, 2021

Ingrid-zu-Solms-Price in Medicine to Anne-Katrin Pröbstel

Advertised by the Ingrid zu Solms Foundation, Frankfurt am Main, for a pioneering, scientific original work (Habilitation thesis or publication/s according to international peer review criteria) by a young researcher working in the field of basic research in clinical medicine or medical psychotherapy is working.

September 21, 2021

Fritz-and-Ursula-Melchers-Postdoctoral Prize to **Anne-Katrin Pröbstel**The German Society for Immunology (DGfl) annually awards the
Fritz-und-Ursula-Melchers Postdoctoral Prize to one of its members.
The prize is awarded to postdocs (up to 35 years of age) for their achievements in the field of immunology.

August 20, 2021

Paul Klee Research Award for Fibrosing Diseases to

Robert G. Brenig (Christiane Bernsmeier Lab)

In his doctoral project at the Cantonal Hospital of St. Gallen and the University Hospital of Basel, Robert G. Brenig dealt with the causes of the reduced immune system in patients with advanced cirrhosis of the liver.

PHD Defenses since August 2021

Cell Biology	Qinmei Yang	05.10.21
Bioengineering	Andrea Mainardi	12.10.21
Genetics	Simon Schwarz	15.10.21
Medical-Biological Research	Pauline Hanns	02.11.21
Medical-Biological Research	Milica Vulin	19.11.21
Cell Biology	Julie Ruili Jin	22.11.21
Neurobiology	James Alexander Taylor	16.12.21
Medical-Biological Research	Jennifer Anne Brown	20.12.21
Medical-Biological Research	Jinyu Wang	20.12.21
Neurobiology	Laura Colombo	27.01.22
Genetics	Jonas Malkmus	24.02.22
Medical-Biological Research	Aline Cuénod	03.03.22
Molecular Biology	Nina Marty	22.03.22
Bioengineering	Gordian Born	21.04.22



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Plenary Assembly March 18, 2022

More than 100 people from all our DBM sites, from different disciplines and many different research groups, from administration and laboratory services came together to listen to the various presentations and to exchange ideas.



Ivan Martin introducing the plenary assembly



Xiomara Banholzer informing the audience about the new communication measures



Jelena Markovic Djuric on the DBM Flow Core Facility

The aim of the meeting was to bring together our experts in the various research areas and in the operational services. We are already looking forward to the next plenary assembly.



Visitors and audience members at the plenary assembly





Stefan Klauser and Daniel Wyniger on 3D scientific manufacturing



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Athena's Journey

The Athena's Journey series began on 28th of April 2022. These talks are an effort towards empowering women in science. They aim to share the challenges women face during their career progression as well as factors that may have affected their career choices. The talks would take place on the second Thursday of every month at the ZLF, in an intimate and friendly environment, where either one or two speakers will share their incredible journeys and the audience would have a chance to peek into their lives, learn from them and interact with them informally at the apero afterwards. Even though the speakers will always be women, men are more than welcome and strongly encouraged to attend these events.

Andrea Ottolini-Voellmy, the head of operations at DBM, opened the event with a compelling speech which set the tone for the event. The first speaker of this series was Prof. Dr. Daniela Finke, Senior Physician and research group leader at the University Children's Hospital of Basel (UKBB) and the Department of Biomedicine. The enthusiastic immunologist spoke in great detail about her tumultuous, yet successful, career path. She spoke of crucial decisions that were made during her career: Medicine vs Science; Europe vs USA; whether to settle for a "safe" in-hand option or to explore a riskier, but more interesting option. She spoke of the mentors, both men and women, in positions of power who supported her and helped further her career. One such mentor was Dr. med. Conrad E. Muller, former President of UKBB, who not just attended the event, but also encouraged it and found it to be an important step for highlighting the importance of women in higher positions of power. The way Prof. Finke spoke about her struggles and not just her victories made the talk extremely relatable. She ended her talk by saying, "If you can't find the correct room, open several doors until you do". The audience was captivated and this in-turn led to an interesting discussion after the talk.

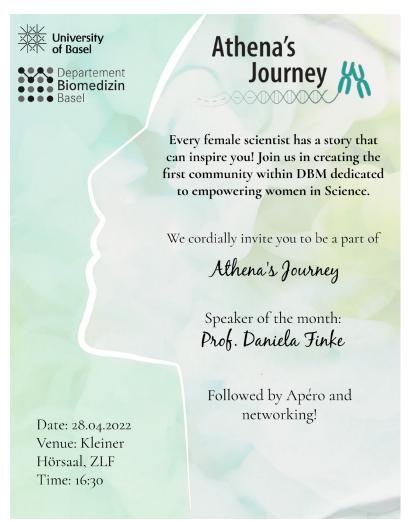
The lively discussions continued at the apero where men and women from several professional backgrounds and career levels enjoyed snacks and drinks in the sun. The core committee members were seen networking and simultaneously providing information about the event. It was an extremely successful first event for Athena's Journey and attendees remarked that they look forward to the monthly series. Athena's Journey is continually looking for female researchers who are interested in sharing their research journeys – so if you know a suitable speaker, or are feeling brave, get in touch with the core committee! Remember: every female scientist has a story that can inspire you!

Janhavi Apte | PhD Student



Core Committee:

Janhavi Apte
janhavi.apte@unibas.ch
Franziska Bosch
franziska.bosch@unibas.ch
Federica Richina
federica.richina@unibas.ch
Evelia Plantier
evelia.plantier@unibas.ch
Gina Boot:
gina.boot@unibas.ch



First Event of Athena's Journey



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulation

Events

New Colleagues

Upcoming Events

10.06.2022

Symposium and ceremony: 15 years of DBM management Radek Skoda

30.06.2022

Gerhard Christofori's Retirement Symposium: "News from the Invasive Front"

31.08.2022

DBM Summer Symposium 2022 and barbecue

For all upcoming Seminars please follow this <u>link</u>.



Symposium in Honor of Radek Skoda

Chair of the Department of Biomedicine 2006 - 2021

Friday, June 10, 2022 13:15 - 17:45 Grosser Hörsaal, ZLF, Hebelstrasse 20

DBM science highlights

- 13:20 Ivan Martin, Chair of the DBM since 2021 Welcome
- 13:30 Anne-Katrin Pröbstel, DBM Focal Area "Immunology"
 How much gut needs the brain? Microbiota-immune crosstalk in neuroinflammation
- 13:50 Rolf Zeller, DBM Focal Area "Stem Cells and Regenerative Medicine"
 Robust gene networks from the depths of our evolutionary history
- 14:10 Tania Rinaldi Barkat, DBM Focal Area "Neurobiology" Making Sense of Sounds
- 14:30 Mohamed Bentires-Alj, DBM Focal Area "Oncology"
 Mechanisms of tumor dormancy and personalized medicine
- 14:50 Keynote lecture Jim Norman, Cancer Research UK- Beatson Institute, Glasgow, UK Mammary Carcinoma alter Circulating Metabolic Landscapes to favour Metastasis

15:20 – 16:00 Break and Apéro

The genesis and advancement of the DBM 2006 -2021

16:00 Andrea Schenker-Wicki, Rector of the University of Basel Jürg Schifferli, former Head of Internal Medicine at the USB Markus Heim, DBM research group leader Jim Norman, Member of the DBM Scientific Advisory Board Primo Schär, Dean of the Faculty of Medicine Werner Kübler, Director of the University Hospital Basel Radek Skoda, Chair of the DBM 2006 - 2021

17:45 End



New Colleagues



New Colleagues from January to April 2022

Content

Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

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

Arslan Aybüke Cartilage Engineering Baixauli Francesc **Immunobiology** Benjak Andrej Visceral Surgery and Precision Medicine **Boulay Pierre** Cancer- and Immunobiology Brasche Heidi **DBM-Zentrale Dienste Mattenstrasse** Cenciarini Mattia Cell and GeneTherapy Christiaens Noor Cardiac Surgery and Engineering Colombo Rodrigo **Experimental Immunology** Dell'Aglio Alessandro Di Sapia Eleonora

Dixon Karen Olivia

Don Leyla

Durano Célia

Latino Lorenzo

Lock Melissa

Leal Fischer Karen

Ledergerber Isabelle

Molecular Immune Regulation
Cell and Gene Therapy
Cancer Immunology
Cancer Immunology
Brain Tumor Immunotherapy and
Biology

Fashola Oluwatobi Immunodeficiency
Frey Nina Skin Biology
Fusi Irene Cancer Immunology
Ganea Dan Cellular Neurophysiology
Geiger Gavin Allergy and Immunity
Genty Lucile Tissue Engineering
Gomes Joana Isabel Ferreira Cellular Neurophysiology

Gomes Joana Isabel Ferreira da Graca **Gress Ulrich** Clinical Neuroimmunology Guja Karolina Visceral Surgery and Precision Medicine Hasbargen Kathrin **Ovarian Cancer Research Hupfer Robin Immunodeficiency** Iorio Maria Tissue Engineering Keller Aramis Cancer- and Immunobiology König David Cancer Immunotherapy Lamberti Jessica Visceral Surgery and Precision Medicine Lambrecht Victoria Visceral Surgery and Precision Medicine Laschet Nathalie Tumor Heterogeneity Metastasis and Resistance

Resistance
Ocular Pharmacology and Physiology
Cell Adhesion
Skin Biology
Experimental Hematology

Makeeva Alina Allergy and Immunity
Marty Talea Molecular Immune Regulation

Matter Madlaina Allergy and Immunity

Melone Viola Visceral Surgery and Precision Medicine

Mokhtari Ines Skin Biology

Neziraj Tradite Experimental Neuroimmunology

Nimmerfroh Johanna Cancer Immunology
Oelgarth Nicole Cancer Immunology

Oparija-Rogenmozere Lalita Cancer- and Immunobiology
Orbegozo Clara Cancer- and Immunobiology

Pinter Leonora Myocardial Research
Puche Raoul Inner Ear Research

Rafaeva Maria Tumor Heterogeneity Metastasis and Resistance

Rastogi Vanshika Experimental Immunology Rathgeb Moira Allergy and Immunity

Rees Sylvie DBM-Zentrale Dienste Mattenstrasse

Rodic Andrijana Cancer Immunology

Roider Elisabeth Skin Biology

Rolli Helene Psychopharmacology Research
Sadeghi Ahmad Pulmonary infection biology
Saemann Attill Brain Ischemia and Regeneration
Samson Guerric Developmental Immunology

Seitz Luca Immunodeficiency
Seven Cemre Experimental Virology
Sheremeti Etnik Allergy and Immunity

Skomorokhova Elizaveta Transplantation and Clinical Virology

Sonsöz Orhan Inner Ear Research
Sprich Florian Cell Adhesion
Strobbe Dennis Infection Biology

Sulger Jael Department Administration
Tanner Nina Ovarian Cancer Research

Ushurova Feruza DBM-Histology

Vazquez Noemi Clinical Neuroimmunology
Vuong Luca Cancer- and Immunobiology
Wälchli Denise Applied Microbiology Research

Weyhenmeyer Daniel Tissue Engineering

Zavialov Vladimir Cellular Neurophysiology



Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues

Thank you!

The DBM newsletter team would like to thank all the contributors for their work. We hope you enjoyed reading the newsletter, and we wish everyone a great summer.

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

communications-dbm@unibas.ch

Find us on Social Media:



Linkedin:

Department of Biomedicine

Twitter:

@DepBiomedicine



Publishing Information Imprint

Content

Editorial

Interview

Diary Entries

Research Group at a Glance

Dedication

Publications

Congratulations

Events

New Colleagues **Publisher:**

Department of Biomedicine University of Basel Hebelstrasse 20 4031 Basel Switzerland

Concept: Xiomara Banholzer

Editorial team:

Xiomara Banholzer, Jael Sulger, Manuela Bernasconi, Michael Schär from bom! communication

Layout and Photography: Jael Sulger

Contact:

Department of Biomedicine Hebelstrasse 20 4031 Basel Switzerland

Email: communications-dbm@unibas.ch

© Department of Biomedicine Basel, University of Basel, University Hospital Basel and University Children's Hospital Basel May 2022



Departement Biomedizin



