Dear members, associates and friends,

We wish you a belated Happy New Year and hope that you all have had a good start to 2017. This very issue commemorates the “1st anniversary” of The Cluster Times. To celebrate the occasion, I tried to find a few nice quotes to open this newsletter. However, most of those “inspirational quotes” are… Facebook material. I’ve settled on: “There’s two times of year for me: Football Proposal writing season, and waiting for football proposal writing season.” (Modified from: Darius Rucker). For us, it is definitely proposal writing season, and, to succeed, we will need to rely on your excelling minds. Thus, don’t let me keep you too long from working hard. You will find some facts about the new Excellence Strategy, some announcements and hopefully some fun on the following pages.

Yours,

Cluster Coordination Office

Winter is coming.

Read about Immuna and Immuno’s visit to the Winter School in Obergurgl on page 2.
Winter School in Obergurgl

The year 2017 has already started eventfully: The 1st Winter School for young scientists combining immunology with bioinformatics and genomics from January 3-7, 2017 in Obergurgl, Austria.

Roughly 11 months ago, the Immuno-Sensation Steering Committee decided to plan a Winter School for young scientists. No sooner said than done. We have asked some of the participants to describe their experiences:

“It was a great experience with extremely interesting and educational talks and lectures. One got a better understanding of how e.g. a stochastic population model or a RNA-seq workflow is set up. Besides the many fruitful discussions in poster sessions, there was even more time for networking, not only between the young scientists of the different disciplines as mathematics, bioinformatics, immunology and neuroscience, but also with the associated Cluster professors and also the really great external speakers. All in all, it was a really great course with interesting talks and helpful workshops.”

“During the winter school, I highly enjoyed the interdisciplinary discussions between PIs and students: getting input from biologists, mathematicians, computer scientists and a journal-editor led you to think about it from new perspectives.”

“It was great to have Peter Lee at the Winter School. Try to get journal editors in future, too.”
ImmunoSensation: Congratulations Bernardo to that huge success. So what is an ERC grant and why is everyone so excited about getting it?

Bernardo: I guess, I could not explain it better than this video, but I will give it a try: An ERC grant is a funding scheme from the European Research Council. Its designed to support individual researchers of any nationality and age to start, or consolidate their careers. Through competitions the grant offers substantial funds, and full financial and scientific autonomy to young, or experienced researchers in Life Sciences, Physical Sciences & Engineering, and Social Sciences & Humanities. The uniqueness of an ERC grant and one of the main selection criteria is the ‘high-risk/high-gain’ nature of the proposals. This forces applicants to ‘think big’, be innovative and try out ideas that could either lead nowhere, or change everything. I would say that this aspect is what differs from other funding agencies, which usually favor proposals with more guaranteed successes, solid preliminary data and feasibility. A lot of ERC-funded projects would very unlikely be funded elsewhere. Nevertheless, although the ERC is a young funding scheme, it was created in 2007, it has already shown that investing in high-risk high-gain ideas pays off. A recent report revealed that 70% of completed ERC-funded projects led to scientific breakthroughs or major scientific advances.

ImmunoSensation: And what is your research all about?
Bernardo: I want to investigate the immunological contributions of platelets to host-resistance to infection, and to the development of autoinflammatory diseases. Platelets are the second most abundant cell in the blood. They outnumber by far any immune cell you can think of. Still, they are not yet considered as immune cells. I think it is time to change that. Platelets very much behave like an immune cell, being able to trap and kill microbes, release cytokines, chemokines, growth factors and lipid mediators, and help immune cells to develop their functions. There are even reports of MHC molecules expressed on platelets, which suggest that they can present antigens to T-cells and drive acquired immunity.

ImmunoSensation: And how can you save the world with it?

Bernardo: If we understand the whole functions of platelets in the body, besides their well-establish roles in blood clotting, we could learn to modulate their functions and use them for many applications. Some examples: because they interact very closely with immune cells and cancer cells, we could direct them to deliver drugs to specific cell population. Because they’re crucial for the immune functions of immune cells (i.e. neutrophils and monocytes), we could use them as copilots to redirect the immune attack of these cells and avoid tissue damage. Among other crazy ideas.

ImmunoSensation: Where do you think will the field of Innate Immunology stand in 10 years?

Bernardo: Hopefully with platelets being part of it. At least, if everything goes as plan, I hope immunologist and text books start seeing platelets as another immune cell with important functions in immunology.

ImmunoSensation: Do you think that riding up the hill every day with your bike was a key success factor for receiving the ERC grant? And if not, what was?

Bernardo: I’m not sure. There are those who defend that exercising increases the blood flow to the brain and boost one’s creativity. I tend to agree, as I do have some ideas while running or cycling, but most of them turn out to be useless. At least, if it does not help, it will give you nice legs. So, it’s worth the shot.

PEOPLE

New (old) Members

Welcome back to a new (old) member of the Cluster Coordination Office (CCO). Cornelia is back from her parental leave and will take care of the coordination of the new Master’s program.

Contact her in case of: questions concerning the new Master of Science Program “Medical Immunosciences and Infection”. Find more information on page 10.

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RECENT PUBLICATIONS AND NEWS

Find here a selection of our latest publications and most recent news.

**Specification of tissue – resident macrophages during organogenesis**  
Picture: Prof. Dr. Joachim Schultze (left) and Dr. Marc Beyer  
More information [here](http://www.immunosensation.de/research/publications.html).

**Human lymphoid organ dendritic cell identity is predominantly dictated by ontogeny, not tissue microenvironment**  
*Science Immunology*, December 16, 2016  
More information [here](http://www.immunosensation.de/research/publications.html).

**CDK12 inhibition reverses de novo and acquired PARP inhibitor resistance in BRCA wild-type and mutated models of triple-negative breast cancer**  
Picture: Dinaciclib (green) as the active compound inhibiting the function of the kinase CDK12 (white/red). *Cell Reports*, Nov 22, 2016  
More information [here](http://www.immunosensation.de/research/publications.html).

Professor Eicke Latz and Professor Matthias Geyer, both Institute of Innate Immunity, are scientific Co-founders of IFM Therapeutics.  
November 2016  
More information [here](http://www.immunosensation.de/research/publications.html).

Dr. Andreas Schlitzer member of the Excellence Cluster ImmunoSensation and the LIMES Institute Bonn received the Post Doctoral Prize of the Robert Koch Foundation.  
November 2016  
More information [here](http://www.immunosensation.de/research/publications.html).

FIND ALL RECENT PUBLICATIONS HERE:  
http://www.immunosensation.de/research/publications.html
If you want to know more about everyday life in the Cluster, have a look at our ImmunoSensation blog, where young scientists write about aspects almost everyone has encountered during their PhD.

Our blog will soon be celebrating its second birthday and we are proud to feature our recently introduced article series: 

**Career Opportunities**
Which pathways can you choose apart from staying in the ivory tower of academia? Find the category here.

**Going Interdisciplinary**
How can other natural sciences help answering immunological questions? Find the category here.

Click on the picture to read the corresponding Blog article.

**PhD Life**
How to stay happily married to your project while the deadline approaches. Find the category here.

And in case you think – no time for anything but work: maybe you read our “Stressed like a PhD student” article and feel a bit better afterwards! Join the blog to connect the Cluster members even more closely!

This year we plan to upgrade the IITB Students’ Network Meeting to a full-grown Students’ Retreat. We are looking for committed IITB members to form an organizational team. The retreat will be a two-day event and will include networking, some science, career counselling and fun! We have some suggestions for the time and place, but input from your side is more than welcome.

If you are interested in organizing the Students’ Retreat 2017, please send an email to c.drescher@uni-bonn.de!
The Travel Grant application for the first half of 2017 is March 6, 2017.

Applications for the first round of ImmunoSensation Travel Grants in 2017 can now be submitted!

“Travel Grant 1: Technical Exchange” and “Travel Grant 2: Meetings and Seminars” are for IITB members only! If you are PhD student within the Cluster, but not an IITB member, you should consider applying for IITB membership.

Non-IITB members (e.g. other students and postdocs) who want to write a blog article can apply for “Travel Grant 3: Blog Support”. Funding is available up to 500 € per application.

Please be aware that ImmunoSensation Travel Grants will be awarded on a competitive basis, and there is no guarantee of funding. Travel support granted by the Cluster can only be used for reimbursement. That means, travel costs and meeting fees have to be paid in advance by the applicant (or the applicant’s PI/ lab).

Apply here eAntrag and send email to c.drescher@uni-bonn.de to open application.

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We want to continue our participation in the project “Alte Schuhe – Neues Leben” from the “Fördergemeinschaft Deutsche Kinderherzzentren e.V.” So, if Father Christmas gave you shoes and you have to get rid of the old ones in order to make room in your shoe cupboard or you decided that your winter boots do not fit anymore, give them to us and we will donate them in the name of the Cluster.

If you are interested in donating, please deliver the shoes to our office (basement BMZ) or contact immunosensation@uni-bonn.de (Nicole Dahms) and we will work something out. Delivery deadline: February 10, 2017.

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I am pleased to announce that ImmunoSensation will remain cooperation partner of the DGfI Autumn School “Current Concepts in Immunology”! The Cluster offers participants from the IITB: Full coverage of participation fees and reimbursement of travel costs. The goals of the Autumn School ‘Current Concepts in Immunology (CCII)’ are (1) to communicate to all participants basic and current concepts of the immune system, (2) to provide them with tools required to conduct experimental research, (3) and give them the opportunity to establish scientific networks. For some impressions from the 7th DGfI Autumn School, visit our Blog here.

If you want to secure your place for the 9th DGfI Autumn School, please send an email to me (c.drescher@uni-bonn.de) and I will open your eAntrag application.
Draft Proposal for Cluster of Excellence

During the coming weeks, you may notice that some PIs have basically disappeared from your radar. Actually, they are not gone, but busy putting their heads together to write a momentous draft proposal:

The proposal for the successor program to this Cluster of Excellence. For your information, here is a short recap of the new Excellence Strategy and the timeline (adapted from here) just in case you want to know when your PI might reappear.

In January 2016, the Imboden commission published their evaluation report for the first round of the Excellence Initiative. Following the suggestions of the report, the German federal and state governments approved the succession of the Excellence Initiative, the Excellence Strategy, in June 2016. Like the Excellence Initiative, the Excellence Strategy will continue to promote top-level research, support training and career conditions for young researchers and increase Germany’s international profile in scientific research. As during the Excellence Initiatives I and II, the DFG and the German Council of Science and Humanities will participate in the Excellence Strategy and implement the following two funding lines:

1. Clusters of Excellence for the project-based funding of internationally competitive fields of research in universities and university networks (DFG)

2. Universities of Excellence to strengthen universities as institutions and university networks in the long term and further develop their leading international role on the basis of successful clusters of excellence. (German Council of Science and Humanities).

More information can be found here and here.
HIGHLIGHT

4th Cluster Science Days

Here are some impressions from our Cluster Science Days in November. Thanks everyone for participating and making it a great success. The next Cluster Science days will be held in November 2017.
New Master’s Program
Medical Immunosciences and Infection

ImmunoSensation is proud to present the new Master’s course “Medical Immunosciences and Infection”, which will begin in Winter Semester 2017/18. We are looking for outstanding students with a profound interest in immunological topics. Applications via the MoveIn portal will be accepted until March 31, 2017 here.

The Master’s course aims to immerse students in the fields of translational immunology and infectious diseases.

Current concepts of immunology and infectious disease research will be discussed in literature seminars and directly applied to their research projects. Elective compulsory modules allow students to set their individual research priorities.

After finishing this course, students will be equipped with all the essential skills needed for independent academic work and a successful research career. Graduates of the program will have the opportunity to pursue a PhD or Dr. rer. nat. within the graduate program of ImmunoSensation.

You can find more information on our homepage here.

Expecting Parent?

You are an expecting parent in the lab and you are wondering how to deal with the legal guidelines concerning pregnancy in the lab and the time pressure before the baby is due? During pregnancy, while on parental leave or when you are returning from parental leave, Cluster mommies-to-be or already mommies can apply for a SHK in order to get some help in the lab. Cluster daddies can use this offer when they are on parental leave as well.

If you want more information please contact Nicole Dahms (immunosensation@uni-bonn.de).

Family Support: Needs analysis
The Cluster wants to give you the best family support. We need your help so as to improve our “Cluster support system”. Soon you will get a “needs analysis” via e-mail, which will hopefully lead to an even better system of support for Cluster members. So watch out for this e-mail – do not delete it!

“For every child the right kind of childcare!”
That is the slogan of our childcare partner “pme Familienservice”. Not only do they offer back-up childcare in the case of your regular kindergarten being on strike, or holiday care. The Cluster offers: support finding a place in kindergarten or finding a day-care ‘parent’. “pme” also offers lectures on family-relevant topics. We have extended the existing offers and now you can also get support finding a cleaner or an au-pair, training (e.g. first aid for children), specialized lectures and much more. And the best thing about this is that it is free for Cluster members.

For more information please contact Nicole Dahms (immunosensation@uni-bonn.de)
Welcome to the Dark side: Analysis vs. Interpretation. The workshop will cover the topics: Graphical presentation, quality management in science, including/excluding data, interpretation vs. manipulation of data, checking and improving figures, and more.

You will also have the opportunity to discuss questions related to your current research and work on solutions.

WHEN May 08, 2017
REGISTER UNTIL April 17, 2017

Figure Making

"Welcome to the Dark side: Analysis vs. Interpretation." The workshop will cover the topics: Graphical presentation, quality management in science, including/excluding data, interpretation vs. manipulation of data, checking and improving figures, and more.

WHEN October 13, 2017
REGISTER UNTIL September 22, 2017

Presentation Skills

The workshop “Presentation Skills” empowers life scientists to present with confidence and manage their fear of public speaking. To accomplish this, the workshop combines short practice talks with lessons on the three main topics - body language, slide construction and storytelling.

WHEN Aug 31 - Sep 1, 2017
REGISTER UNTIL August 10, 2017

Statistical Literacy

Collecting, Describing & Inferring are topics of this workshop. Practical tools and the theoretical background to understand how they work will be introduced. The goal is to enlighten via intuitive understanding, not to confuse participants with math.

WHEN Nov 29 - Dec 1, 2017
REGISTER UNTIL November 6, 2017
Imprint

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ABOUT   The ImmunoSensation Cluster of Excellence (University of Bonn) has been funded by the German Research Foundation since 2012.  
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