

TRR179 Newsletter

22/02/2021

Information & News of the TRR179

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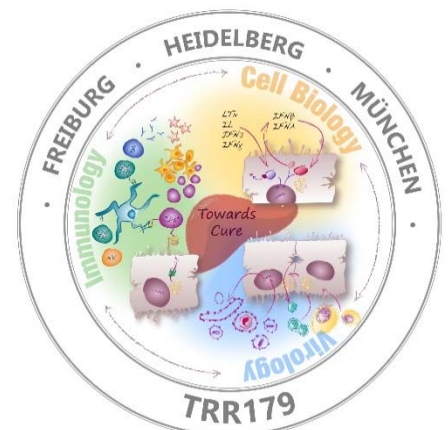
Dear TRR179 members,

We are happy to present you the next newsletter of our TRR179. The aim of this newsletter is to bring everybody to the same level of information on recent developments and results obtained within the TRR179, the work of the IRTG "Immunology" and the executive board as well as administrative affairs.

Unfortunately, we are still in lock-down because of the Coronavirus pandemic, but we should not forget our ultimate goal, i. e. to decipher the mechanism of chronic viral hepatitis and to devise approaches to overcome chronicity. We hope you are doing well and developed your routine in this extraordinary situation, in order to stick, at least in part, to your planned research.

In spite of uncertainty, we are still hoping to conduct our annual retreat, which is planned for July, 18/19th 2021, as an on-site retreat to meet each other in person. Honestly, we are eager to see you all again. Especially, for our youngsters and new members of the IRTG, it would be most beneficial to get to know each other in person. The IRTG-Retreat is planned right after the general retreat on July, 19./20.th 2021.

We hope you will enjoy this newsletter and we wish you best of success for your collaborative efforts.



*We are looking forward
to another successful,
second funding period*

Organs of the TRR179

Executive Board

Speaker: Prof. Ralf Bartenschlager, Heidelberg

Co-Speaker: Prof. Robert Thimme, Freiburg and Prof. Ulrike Protzer, München

Representative for...

Equal Opportunity: Prof. Ursula Klingmüller, Heidelberg

IRTG: Prof. Hartmut Hengel, Freiburg

Junior Group: Prof. Sabrina Schreiner, München

Students: MSc Martin Feuerherd, München

Board of the IRTG

Speaker: Prof. Hartmut Hengel, Freiburg

Co-Speakers: Prof. Volker Lohmann, Heidelberg; Prof. S. Schreiner, München

Students' Speaker: MSc Martin Feuerherd, München

Events

Kick off meeting of the TRR179

We enjoyed meeting you during our intense virtual kick off meeting on November, 16/17th 2020. It became obvious that all projects are well aligned and important results have already been obtained within the short time from funding approval until today.

Keep it up going!

Retreat 2021

We are hoping to meet you all in person at our retreat in July this year. We could secure a location, which is reachable in a reasonable time from all three TRR sites and has capacities to combined the juniors retreat with the general retreat. The dates which are foreseen for the retreat are:

19/ 20th July 2021: General Retreat for everybody

20/ 21th July 2021: IRTG-Retreat

Please, reserve these dates in your calendars!

Symposium 2022

The planning for the international TRR179 symposium has started. It will take place from **Monday, May, 30th 2022**, starting early morning, until **Tuesday, May, 31st 2022** early afternoon. Our colleagues in **Freiburg** could reserve the Kollegiengebäude, a nice venue downtown that can accommodate up to 300 participants, and is located close to the train station. We are planning a hybrid event with presence (which counts for all of the TRR179 members) and the possibility for remote attendance, which might be attractive especially for speakers outside of Europe.



The TRR179 offers Gerok stipends in Munich and Freiburg



News

Gerok stipends

Dr. Carolin Mogler (Munich) and Dr. Giuseppe Rusignuolo (Freiburg) are using their Gerok positions for TRR179-related work. We will surely learn about their results during our next retreat. Since their funding time ends in July 2021, we have capacities for new Gerok fellows. If you are interested in a Gerok position for the coming year, please contact Katrin Woll in the administration office.

MD stipends

Currently, MD stipends are held by Stefan Marinescu (FR/TP04): "Analysis of HEV-specific CD4 T cell responses"; Charlotte Rohrer (FR/TP01): "Influence of hypoxia on HBV- and HCV-specific CD8+ T cells"; Maria Zehentmeier (MÜ/TP18): "Identifying mechanisms how HBV prevents T-cell killing of hepatitis virus-infected hepatocytes"; Felix Hiebinger (HD/TP11): "The role of interferon / cytokine resistance in the development of virus-associated liver cancer". As of May 2021, we will have one further MD stipend fellow, namely Andreas Betz (HD/TP17), who will work on the project "Definition of a Toll-like receptor 3 specific gene induction profile in hepatocytes".

Cooperations

We are happy to inform you that we started a new cooperation with the SFB "Chromatin landscapes shaping Monarchies and Hierarchies". This SFB was renewed for another four years by the Austrian Science Fund (FWF) in 2020. The aim of this SFB is to gain further insights into the role of the JAK-STAT signalling pathway in the development and treatment of infections, inflammations, and cancer. We are already in close contact to one of the PIs, Thomas Decker, in order to discuss possibilities to formalise collaboration. For further insights into their research, please use this link: [JAK Stat Monarchies \(jak-stat.at\)](https://jak-stat.at)

Our longstanding cooperation to the research Consortium CanHepC in Canada is still ongoing, although at the moment on hold due to travel restrictions. Please check [CanHepC - Canadian Network on Hepatitis C for their work.](#)

Seminar series

- | | |
|-------------------|---|
| TBA/2021 | Dr. John Schoggins "Host-based antiviral mechanisms targeting coronavirus and flavivirus" |
| 03/03/2021 | Prof. R. Bartenschlager "TRR179: A collaborative research network on hepatitis virus persistence and antiviral immunity" |
| 30/03/2021 | Prof. Florian Krammer "Antibody responses to SARS-CoV-2 infection and vaccination" |

Thursday Lunch Talks take place every first Thursday of the month at 12.00 o'clock and each TRR179 member is welcome to join!



Accomplishments

We are happy to announce that Ralf Bartenschlager, who is speaker of the TRR179, received the Beijerinck Virology Prize 2021.

Following the conditional marketing authorisation of Hepcludex, the first direct acting antiviral drug to treat chronic hepatitis D virus infection, which was developed by our TRR179 member Stephan Urban, has been licensed by the US company Gilead. In addition, to this economic success (purchase price around 1.4 billion €), this deal offers new opportunities for additional clinical trials, notably combination therapies for treatment of HDV and HBV co-infection and HBV mono-infection. In addition, the marketing of Hepcludex offers opportunities for investigator initiated trials.

In 2020, two members of our TRR179 belong to the top one percent of the most cited experts in their field. These are Mathias Heikenwälder and Ralf Bartenschlager. Congratulations! Further details can be found here:

[tps://recognition.webofscience.com/awards/highly-cited/2020/](https://recognition.webofscience.com/awards/highly-cited/2020/)

We congratulate all them for recognition and wish them best success.

TRR179 Homepage

We are happy to present you our homepage: www.trr179.de.

If you have any idea and suggestion how to improve our homepage, please do not hesitate to contact us. We will appreciate it.

And it's worth checking the homepage every now and then in order to find most recent information about the latest publications of the TRR179 or events which are frequently posted there.

Twitter

Latest news: We are also on twitter and looking forward to many followers [@trr179_2](https://twitter.com/trr179_2).

Please like and follow us!

Publications

This is a short list of the most recent publications of our TRR179, including some studies related to SARS-CoV-2 that affected research activities of several of us:

Hensel N, Gu Z, Sagar, Wieland D, Jechow K, Kemming J, Llewellyn-Lacey S, Gostick E, Sogukpinar O, Emmerich F, Price DA, **Bengsch B**, **Boettler T**, **Neumann-Haefelin C**, Eils R, Conrad C, **Bartenschlager R**, Grün D, Ishaque N, **Thimme R**, **Hofmann M**. Memory-like HCV-specific CD8+ T cells retain a molecular scar after cure of chronic HCV infection. **Nat Immunol.** 2021 Feb;22(2):229-239. doi: 10.1038/s41590-020-00817-w. (TP01, TP02, TP04, TP09, TP 20, TP21)

The aim of the graduate school is to train PhD and MD students to meet the challenges of interdisciplinary research.

Cortese M, Lee JY, Cerikan B, Neufeldt CJ, Oorschot VMJ, Köhrer S, Hennies J, Schieber NL, Ronchi P, Mizzon G, Romero-Brey I, Santarella-Mellwig R, Schorb M, Boermel M, Mocaer K, Beckwith MS, Templin RM, Gross V, Pape C, Tischer C, Frankish J, Horvat NK, Laketa V, Stanifer M, **Boulant S, Ruggieri A**, Chatel-Chaix L, Schwab Y, **Bartenschlager R**. 2020. Integrative Imaging Reveals SARS-CoV-2-Induced Reshaping of Subcellular Morphologies. **Cell Host & Microbe**. 2020 Nov 17:S1931-3128(20)30620-X. doi: 10.1016/j.chom.2020.11.003. (TP09, TP22)

Schulien I, Kemming J, Oberhardt V, Wild K, Seidel LM, Killmer S, Sagar, Daul F, Salvat Lago M, Decker A, Luxenburger H, Binder B, Bettinger D, Sogukpinar O, Rieg S, Panning M, Huzly D, Schwemmle M, Kochs G, Waller CF, Nieters A, Duerschmied D, Emmerich F, Mei HE, Schulz AR, Llewellyn-Lacey S, Price DA, **Boettler T, Bengsch B, Thimme R, Hofmann M, Neumann-Haefelin C**. Characterization of pre-existing and induced SARS-CoV-2-specific CD8+ T cells. **Nat Med**. 2020 Nov 12. doi: 10.1038/s41591-020-01143-2. (TP01, TP02, TP04, TP11, TP20, TP21)

Conlon TM, John-Schuster G, Heide D, Pfister D, Lehmann M, Hu Y, Ertüz Z, Lopez MA, Ansari M, Strunz M, Mayr C, Ciminieri C, Costa R, Kohlhepp MS, Guillot A, Günes G, Jeridi A, Funk MC, Beroshvili G, Prokosch S, Hetzer J, Verleden SE, Alsafadi H, Lindner M, Burgstaller G, Becker L, Irmeler M, Dudek M, Janzen J, Goffin E, Gosens R, **Knolle P**, Piroette B, Stoeger T, Beckers J, Wagner D, Singh I, Theis FJ, de Angelis MH, O'Connor T, Tacke F, Boutros M, Dejardin E, Eickelberg O, Schiller HB, Königshoff M, **Heikenwalder M**, Yildirim AÖ. Inhibition of LTβR signalling activates WNT-induced regeneration in lung. **Nature**. 2020 Nov 4. doi: 10.1038/s41586-020-2882-8. (TP05, TP06)

Basho K, Zoldan K, Schultheiss M, Bettinger D, Globig AM, **Bengsch B, Neumann-Haefelin C**, Klocperk A, Warnatz K, **Hofmann M, Thimme R, Boettler T**. IL-2 contributes to cirrhosis-associated immune dysfunction by impairing follicular T helper cells in advanced cirrhosis. **J Hepatol**. 2020 Oct 24:S0168-8278(20)33692-8. doi: 10.1016/j.jhep.2020.10.012. (TP01, TP02, TP04, TP20, TP21)

Robichon K, Maiwald T, Schilling M, Schneider A, Willemsen J, Salopiata F, Teusel M, Kreutz C, Ehltling C, Huang J, Chakraborty S, Huang X, Damm G, Seehofer D, Lang PA, Bode JG, **Binder M, Bartenschlager R, Timmer J, Klingmüller U**. Identification of Interleukin1β as an Amplifier of Interferon alpha-induced Antiviral Responses. **PLoS Pathog**. 2020 Oct 1;16(10):e1008461. doi: 10.1371/journal.ppat.1008461. (TP09, TP10, TP11)

Tu T, Zehnder B, Qu B, Ni Y, Main N, Allweiss L, Dandri M, Shackel N, George J, **Urban S**. A novel method to precisely quantify hepatitis B virus covalently closed circular (ccc)DNA formation and maintenance. **Antiviral Res**. 2020 Sep;181:104865. doi: 10.1016/j.antiviral.2020.104865. (TP15)

Keep yourself informed about the latest research which can also be found on our website
www.tr179.de



IRTG „Immunovirology“

“Doktoranden-Café”

This event serves to foster communication amongst each other, present latest research results, and get insights into different professional careers of invited speakers or Alumni of the TRR179. Although we have only started the “Doktoranden Cafés” in the second funding period, they are already well accepted and we see them as valuable events with fruitful discussions.

The next Doktoranden Café will take place on March, 4th 2021 with Dirk Grimm as our guest.

Thursday Lunch Talks

These seminars of the TRR179 take place as online lunch talks every first Thursday of each month from 12:00-13:00 o'clock. There, PIs will present detailed talks about their most recent work (30-35 minutes). The lunch talks are chaired by the local speaker of TRR179, who will also guide through the discussions.

EVERYBODY is invited to join!

Lecture series

Topic-specific lectures by TRR179 PIs ensure a high level of broad knowledge, irrespective of the students' background and the focus of his/her individual PhD/MD project. Several of those lectures are available as video lectures and accessible via the IRTG secured website! Each lecture contains 5 questions, which must be answered in written form and approved by the supervising PI in order to be accepted by the IRTG as curricular activity.

MD Stipends 2020/2021

As mentioned before, Andreas Betz in Heidelberg will start his 12-month MD stipend in May 2021.

In general, the IRTG *Immunovirology* offers short-term (i. e. 12 months) fellowships for MD students. They are expected to suspend their curricular studies for one year and to dedicate full time to their research project. Allocation of MD fellowships will be strictly guided by the individual excellence of the candidates. **Applications can be sent any time!!**

Secondments

In case you would like to go to one of the laboratories within our TRR for learning novel techniques, gaining novel expertise or other, you can apply for funds to do so. Eva Schnober and Katrin Woll will support you in realizing the secondments. **If you are interested, please send us your expression of interest for the exchange program latest on October 31, of the respective year.**

In case you have any questions, please send a short note to Eva Schnober.

*There are no
problems, only
challenges!*

Central Support

Travel Expenses

According to the grant approved by the DFG and the decision of the steering committee of the TRR179, every **project leader (PI)** of the TRR179 can be supported with up to 1.500 € travel expenses each year. This amount of money can also be spent by anyone working within the PIs' project. Please submit the travel proposals **prior** to the journey to Katrin Woll and for reimbursement please send **all original** documents, together with the reimbursement-form of the university hospital Heidelberg to Katrin Woll.

NOTE: Registration fees for online conferences can also be reimbursed. The procedure is the same.

Publication Expenses and reference to TRR179

Expenses for publications within the TRR179 will be supported if the first author is supported by the TRR179 and the TRR179 is cited in the acknowledgement. Please note that we must **cite according to DFG guidelines**: „Gefördert durch die Deutsche Forschungsgemeinschaft (DFG) - Projektnummer 272983813 – TRR 179“ or “Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) - Project-ID 272983813 - TRR 179“, respectively.

For funding please agree with the publisher on a bill with the billing address of the TRR179 (s. below). If you have any questions, please ask Katrin Woll.

Equal opportunity funding

If you are a female scientist, who wants to be supported in career development or a young researcher in our TRR who needs (financial) support in compatibility of job and family, please let us know. We get specific financial funding from the DFG, which can be spent e.g. on childcare during the events organized by the TRR179, for financing a "mobile educator" or a baby sitter service (only for times outside the usual childcare hours, which are justified by the time necessities of the project or for special occasions, e.g. illness). Child care during holidays, for setting up and operating a home office or setting up parent/child rooms.

In 2021 we already dedicated a vast amount of the money to support young male and female PIs, who are parents of young children to allow them more flexible working hours. This is enormously important and helpful, especially in times of the pandemic, and can be facilitated by the support of HiWis financed by the TRR179.



Contacts

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