

TRR179 Newsletter

06/10/2020

Information & News of the TRR179

In this issue

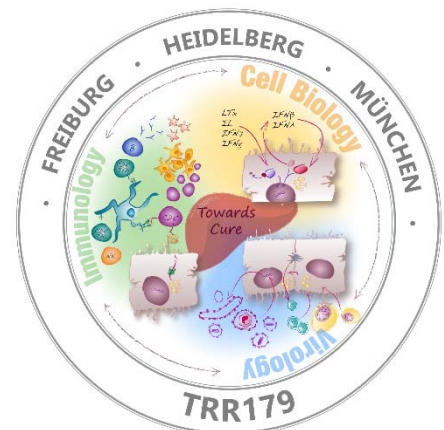
- Letter of the speaker
- Organs of the TRR179
- Events
- News and Accomplishments
- Publications
- IRTG Immunovirology
- Central Support

Dear TRR179 members,

We are happy to present you the third 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 of the executive board as well as administrative issues.

Fortunately, we were able to conduct the in-site review for the second funding period of our TRR in March of this year; right thereafter the Corona lockdown started. Now, even more, we are happy that our SFB/TRR179 is being funded for another period of four years from July 1st until June 30th, 2024. We are looking forward to continue our successful collaborations. In spite of the Coronavirus pandemic, we should not forget our goal, i. e. a cure for chronic viral hepatitis. This has become available for hepatitis C and the recent approval of Hepcludex, developed by Stephan Urban, is another key milestone towards this goal. We have now 4 years to take the next important steps towards a curative therapy for chronic hepatitis B. So let's team up and do our best – as the new logo highlights it – towards cure!

We hope that you will enjoy this newsletter and of help 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: Dr. Sabrina Schreiner, München

Students: Martin Feuerherd, München

Board of the IRTG

Speaker: Prof. Hartmut Hengel, Freiburg

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

Students' Speaker: Martin Feuerherd, München



Events

Kick off meeting of the TRR179

As we don't know how the situation regarding Corona will develop, we are planning for a virtual kick off meeting. We regret this very much, but we are sure that everybody of you can understand the reasons. We are already looking forward to the next opportunity to meet you all in person again. Until then we would like to ask you to keep the date for the kick off meeting on 16./17.11.2020 free.

Retreat 2021

We hope to meet you all personally at our retreat next year. The location is still to be found. As information for you, we are planning to hold the meeting for two days in the week 19.-23. July 2021.

Please, block this week in your calendar. The exact date will be announced as soon as possible.

The TRR179 offers Gerok stipends in Munich and Freiburg



News

Gerok stipends

Munich - the first Gerok-Stipend of the new funding period is C. Mogler in Munich. She will spend her Gerok-clinical leave time to establish a human database with special focus on viral hepatitis. Her aim is to generate a database accessible to all members of the TRR179, which will include the largest possible number of paraffin liver samples with viral hepatitis. We will let you know as soon as the database is available.

Freiburg - the candidate who holds the Gerok position in Freiburg is Dr. Giuseppe Rusignuolo, a resident physician in the Department of Internal Medicine II in Freiburg. He collected a cohort of special HBV patients (transmission pairs both perinatal as well as adult; stem cell transplanted patients) and will process them immunologically. You will get further details about the project soon.

MD stipends

We are happy to announce that we have four new members in the TRR179 with our MD-Stipends starting from October 1st, 2020 on. The students will conduct their MD thesis in several labs within the next 12 months. Get to know them in person at the next retreat!

Here is just a brief introduction:

- 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"

Henrike Salie (FR/TP21): "Assessment of the exhaustion of the HCC tumor microenvironment in HBV and HCV patients" was our MD stipend last year and she is still involved in the project.

Seminar series

24/09/2020 Prof. Dr. Eberhard Hildt, Paul-Ehrlich-Institut (Langen) gave a seminar about „Infection research about hepatitis B virus: from basic research to the development of novel therapeutic strategies“ in Freiburg.

04/09/2020 Dr. Katarzyna Grzes, Max Planck Institute of Immunobiology and Epigenetics (Freiburg) gave a seminar about the "Role of survival cytokines in human plasmacytoid dendritic cells and monocyte-derived macrophages".

In general, the seminars will be recorded upon agreement of the speaker and provided for internal use through the IRTG homepage. Please contact Eva Schnober how to get access.



Accomplishments

Prof. Dr. Robert Thimme was appointed to the National Academy of Sciences, the Leopoldina. This election is considered one of the highest awards for researchers in Germany.

The new Management Board of the Society for Virology (GfV) has been installed: Prof. Ralf Bartenschlager from Heidelberg University was elected as president of the society. Besides him, Prof. Thomas Stamminger (1. Vice president, Ulm), Prof. Ulf Dittmer (2. Vice President, Essen), Prof. Sandra Ciesek (Reporting Clerk, Frankfurt), and Prof. Klaus Überla (Treasurer, Erlangen) have been elected.

In Heidelberg, scientists spent decades researching an active substance against hepatitis D virus. Now the drug Hepcludex has been approved by the European Commission. This could give hope to millions of infected people. The leading researchers in this field is Prof. S. Urban, one of our project leaders in the TRR179.

EMBO has bestowed upon 63 leading scientists the lifetime honour of EMBO Membership in recognition of their remarkable achievements in life sciences. As announced today, "The new Members have contributed to the success of research in the life sciences in Europe and around the world," said EMBO Director Maria Leptin. "As EMBO Members they can help to shape the future through EMBO's work to support talented researchers, bring ideas together, and promote an international research environment conducive to excellent science." One of the new elected EMBO members is Ursula Klingmüller (TP10).

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 ideas and suggestions or think there is something missing on the homepage, please do not hesitate to contact us. We will appreciate it.

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

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

This is a short list of the most recent publications of our TRR179:

Urban C, Welsch H, Heine K, Wüst S, Haas DA, Dächert C, Pandey A, **Pichlmair A, Binder M**. Persistent Innate Immune Stimulation Results in IRF3-Mediated but Caspase-Independent Cytostasis. *Viruses*, 12(6), 635. <https://doi.org/10.3390/v12060635> (TP11)

Lampf S, Janas MK, Donakonda S, Brugger M, Lohr K, Schneider A, Manske K, Sperl LE, Wettmarshausen J, Müller C, Laschinger M, Hartmann D, Hüser N, Perrochi F, Schmitt-Kopplin P, Hagn F, Zender L, Hornung V, Borner C, **Pichlmair A**, Kashkar H, Klingenspor M, Prinz M, **Schreiner S**, Conrad M, Jost PJ, Zischka H, Steiger K, Krönke M, Zehn D, **Protzer U, Heikenwälder M, Knolle PA, Wohlleber D**. Reduced mitochondrial resilience enables non-canonical induction of apoptosis after TNF receptor signaling in virus-infected hepatocytes. *J Hepatol*. 2020;S0168-8278(20)30398-6.

Kok F, Rosenblatt M, Teusel M, Nizharadze T, Gonçalves Magalhães V, Dächert C, Maiwald T, Vlasov A, Wäsch M, Tyufekchieva S, Hoffmann K, Damm G, Seehofer D, **Boettler T, Binder M, Timmer J, Schilling M, Klingmüller U**. Disentangling molecular mechanisms regulating sensitization of interferon alpha signal transduction. *Molecular Systems Biology* 2020 Jul;16(7):e8955. (TP10)

Seitz S, Habjanič J, Schütz AK, **Bartenschlager R**. The Hepatitis B Virus Envelope Proteins: Molecular Gymnastics Throughout the Viral Life Cycle. 2020. *Annu Rev Virol*. 2020 Jun 29. doi: 10.1146/annurev-virology-092818-015508 (TP23)

Che C Colpitts, Ridewood S, Schneiderman B, Warne J, Tabata K, Caitlin F Ng, **Bartenschlager R**, Selwood DL, Towers GJ. Hepatitis C virus exploits cyclophilin A to evade PKR. *eLife*. 2020; 9: e52237. (TP09)

Stanifer ML, Kee C, Cortese M, Zumaran CM, Triana S, Mukenhirn M, Kraeusslich HG, Alexandrov T, **Bartenschlager R, Boulant S**. Critical Role of Type III Interferon in Controlling SARS-CoV-2 Infection in Human Intestinal Epithelial Cells. *Cell Rep*. 2020 Jul 7;32(1):107863. (TP22)

Stubbe M, Mai J, Paulus C, Stubbe HC, Berscheminski J, Karimi M, Hofmann S, Weber E, Hadian K, Hay R, Groitl P, Nevels M, Dobner T, **Schreiner S**. Viral DNA Binding Protein SUMOylation Promotes PML Nuclear Body Localization Next to Viral Replication Centers. *mBio*. 2020;11(2):e00049-20. (TP16)

Ni J, Wang X, Stojanovic A, Zhang Q, Wincher M, Bühler L, Arnold A, Correia MP, Winkler M, Koch PS, Sexl V, Höfer T, **Cerwenka A**. Single-Cell RNA Sequencing of Tumor-Infiltrating NK Cells Reveals that Inhibition of Transcription Factor HIF-1α Unleashes NK Cell Activity. *Immunity*. 2020 May 20:S1074-7613(20)30182-5. (TP07)

Kinast V, Plociennikowska A, Anggakusuma, Bracht T, Todt D, Brown RJ, Boldanova T, Zhang Y, Brueggemann Y, Friesland M, Engelmann M, Vieyres G, Broering R, Vondran FWR, Heim MH, Sitek B, **Bartenschlager R**, Pietschmann T, Steinmann E. C19orf66 is an interferon-induced inhibitor of HCV replication that restricts formation of the viral replication organelle. *J Hepatol*. 2020 73(3).475-744; e33-47. (TP09)

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

IRTG „Immunovirology“

Kick off meeting of the IRTG “Immunovirology”

The first meeting of the IRTG took place on August 27th, 2020 as online meeting. We are happy that so many of our PhD students participated in the meeting. During the meeting they decided to have a “Doktoranden-Café” as a fixed date for Zoom meetings in future every month. This should serve to exchange amongst each other, present latest research results and get insights into different professional careers of invited speakers or Alumni of the TRR179. Furthermore, the PhD students think of having their annual retreat attached to the TRR179 annual retreats in the future (as soon as personal meetings are possible again).



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 already 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.

Seminar Lectures 2020

These seminars of the TRR179 will take place as lunch talks on the first Thursdays each month from 12:00-13:00 o'clock as on-line meetings in future. Planned are detailed talks of the PIs of 30-35 minutes chaired by the location speakers and following discussions.

MD Stipends 2020/2021

The IRTG Immunovirology offers short-term (i. e. 12 months) fellowships for MD students. MD students are expected to suspend their curricular studies for one year and to dedicate their 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 register for the exchange program until Oktober 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.

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.

Hilfsfragebogen – Questionnaire

Currently, we are in the process of filling in the DFG database with information on personnel working in our TRR179. These data serve as a source for statistical analysis of the DFG funded projects. However, they are also the basis for us to gain information who is part of our TRR and who can receive funds from the TRR. We would like to thank you for your commitment in filling in the relevant personal data and your support

Equal opportunity funding

If you are a female scientist who wants to be supported in career development or a young researcher in or 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 for example be spent 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.



Contacts

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