

TRR179 Newsletter

1/2022

Information & News of the TRR179

In this issue

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

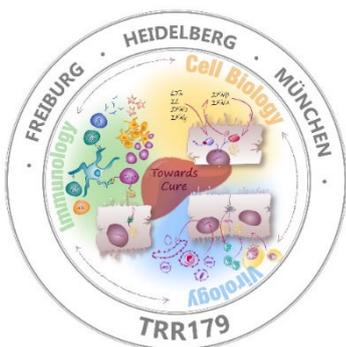
Dear TRR179 members, hello everyone,

we hope that you all had a good start into the new year and can face the new challenges with fresh vigour, including the still ongoing restrictions due to the coronavirus pandemic.

The highlight of this year for the TRR179 will be our planned international conference in Freiburg and we keep our fingers crossed that it can actually take place in full presence.

Today, we are happy to present you the next newsletter of our TRR179 in which we aim to bring everybody on the same page of what is going on in TRR179, the work of our IRTG "Immunovirology" and of the executive board as well as administrative issues.

Enjoy reading and please keep us informed about publications of your work, major project developments, prizes, public outreach activities, and any other TRR179-related event.



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: Matthias Reinscheid, Freiburg

Board of the IRTG

Speaker: Prof. Hartmut Hengel, Freiburg

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

Students´ Speaker: Matthias Reinscheid, Freiburg

Co-Speakers: Kira Leitl, Munich; Philipp Ralfs, Heidelberg

*We are looking forward
to further successful
board meetings*

Events

TRR179 - International Conference 2022

"Viral hepatitis and beyond: from basic science to cure"

The planning for the international TRR179 symposium is in full speed. It will take place in Freiburg on **Monday, May, 30th 2022** all day and **Tuesday, May, 31st 2022** 'till early afternoon. Currently, we are planning for an on-site meeting in person. With the "Kollegiengebäude", our colleagues in **Freiburg** found a nice venue downtown for about 300 participants, also close to the train station. We have the opportunity to display one poster per project, which will be discussed during breaks. For a social evening event we booked the Roof top terrasse (and indoor restaurant) at Karstadt (Galeria Kaufhof), which is in walking distance of the venue. We hope to see you all there to enjoy an easy evening together.

However, we ask **EVERYBODY of you to register via the TRR179 homepage**. The registration portal is already open. You can also find the program and information for hotel bookings there. Please make sure you can cancel whichever hotel you choose until a few days before the event. We just don't know the pandemic development till then, although we rate the chances for a rather relaxed Corona situation pretty high in late May.

Project reviewing meeting 2022

In order to prepare the next application for extension of our TRR, all PIs will meet on **November 21 and 22nd 2022 in Heidelberg**. Already now, please, block this date in your calendar.



The TRR179 offers Gerok stipends in Munich and Freiburg

News

Gerok stipends

Dr. Carolin Mogler (Munich) and Dr. Annegrit Decker (Freiburg) dedicate their Gerok positions to the TRR179 project and will start in July 2021 for one year. We wish them best success and look forward to learn about their project plans during the conference in May 2022. Furthermore, if you are interested in a Gerok position from July 2022 on, feel free to apply for it. In order to do so, contact the administration, Katrin Woll.

MD-Stipends

A new MD scholarship could be awarded to David Reeg (TP01), who started in October working on his project "Interplay of subset diversification and functional adaption of HBV- and HCV-specific CD8+ T cells in chronically infected patients". Moreover, due to the Corona situation, three further scholarship awards could be extended until December 2021.

The IRTG would like to take the opportunity to inform the PIs of the TRR179, that **two 12-months fellowships for MD students are available from January 2022 on**. The awardees are expected to suspend their curricular studies for one year to devote their time to the research project. Allocation of MD fellowships will be strictly guided by the individual excellence of the candidates. Moreover, each of the TRR sites is asked to provide one additional MD fellowship from institutional sources, as promised to the DFG. For more information, please contact Dr. Eva Schnober.

Cooperations

GRK2727



We congratulate our member Adelheid Cerwenka (TP07) for the approval of the DFG funded graduate school GRK 2727 "Innate Immune Checkpoints in Cancer and Tissue Damage" which started on January 1st, 2022. We are looking forward to future cooperation of this graduate school with our TRR179.

CanHepC



Our longstanding cooperation with the research Consortium CanHepC in Canada has been reactivated. Since the borders are now open again between Canada and Germany for vaccinated people, CanHepC and TRR179 networks announced their call for the exchange program. Deadline for submissions was **January 16th, 2022**. We are now in the review process and will inform the applicants soon about the decision.

Accomplishments

Ralf Bartenschlager will be awarded an honorary doctorate by the University Medical Center Mainz for his work related to the hepatitis C virus, which he conducted for almost 10 years as independent group leader at the Institute for Virology in Mainz. The ceremony will take place on February 3, 2022, and will be combined with the honorary ceremony for Prof. Huber, co-founder of BioNTec and Uğur Şahin and Özlem Türeci, co-founders of BioNTec and inventors of the mRNA vaccine Comirnaty.

TRR179 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 do appreciate all of your comments.

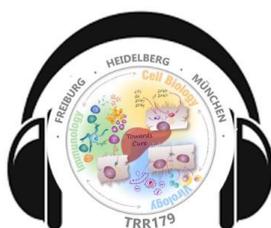
And it's worth checking the homepage from time to time in order to find information about the latest news, events, job offers and publications of the TRR179, which are frequently posted there.



Twitter

We are also on twitter and looking forward to many followers **@trr179_2**.

Please like and follow us! Furthermore, we are more than happy about every inspiration for tweets.



Podcasts

By now we already published the second and third issue of our Podcast. We hope you enjoy listening every now and then and stay tuned.

Our podcasts cover the following topics:

- 1. Podcast:** Latest research findings on "Memory-like HCV-specific CD8+ T cells retain a molecular scar after cure of chronic HCV infection": T. Boettler together with R. Bartenschlager, R. Thimme, and M. Hofmann.
- 2. Podcast:** TRR179 and SARS-CoV-2": We highlight how members of our research network applied their specific expertise to study SARS-CoV-2 in order to support the fight against the pandemic.
- 3. Podcast:** "Hepcludex": Tobias in conversation with S. Urban, who invented the first direct-targeting medication to treat chronic hepatitis D.
- 4. Podcast:** The next podcast will be published very soon. It will be a contribution by our colleagues in Munich, headed by Percy Knolle, who will talk about auto-aggressive T cells, which he and his team have discovered, and about the implications for liver inflammation in general.

Seminar series

Topic-specific lectures by TRR179 PIs ensure a high level of broad knowledge in the fields of immunology and virology, irrespective of the students' background and the focus of his/her individual PhD or MD project. Several of these talks are available as video lectures and accessible via the secured IRTG website!

Most recent and upcoming lectures:

Heidelberg:

Jan. 18, 2022: Dr. Wolfgang Schamel (Freiburg) "Blocking the virus-induced translation shutdown in CoV-infected cells"

Feb. 15, 2022: Dr. Barbara Rehermann, (NIH Bethesda): "Immunology of Chronic Hepatitis B and D: Beyond Virus-Specific T Cells"

Freiburg:

In March: Susanne Herold (Giessen/Marburg)

In March: Georg Munz (DFG, Bonn)

Munich:

Information follows

We keep you posted on upcoming seminars via email announcement. Please take the opportunity to follow interesting talks also from our partner sites online.

*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. If you have any questions, please ask Katrin Woll.

Contacts

TRR179

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IRTG

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Central Support

Gender measures



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 for example be spent on childcare during the events organized by the TRR179, for financing a flexible examined nanny 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). Also for child care during holidays, for setting up and operating a home office or setting up parent/child rooms, basically for everything that helps you to facilitate reconciliation of work and family or that supports especially women in research.

In 2021 we spent most 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 pandemic, and can be facilitated by the support of HiWis financed by the TRR179.

Furthermore, we provided funds for the seminar given by Vera Strauch on "Female leadership". This course targets women in leading positions and covers topics such as self-organisation, time management, networking, communication, prioritization, delegation and decision making. During five weeks, the participants are offered weekly live online seminars, combined with a daily working routine for self-reflection. The course is didactically optimised, with a 'media mix' that spans reading, video, audio and writing exercises.

Read here, what the participants experienced:

"The Female Leadership Program is a five-week online workshop designed by Vera Marie Strauch. You gain insights into various areas, such as project management techniques, time management and organization, communication in a team, the basics of personnel management and much more. The course is very well organized and you can internalize the content with the help of your personal workbook. I especially liked that you can work on the content very flexibly at your own pace, as all videos and live sessions can also be accessed later. In addition, you have the opportunity to exchange ideas with other women in the program in a mastermind group and develop together. In these five weeks you learn how to increase the quality of your work, proactive communication, successful conflict management and improved ability to structure and organize things. I learned many new impressions and tools in the program, for which I am very grateful. Overall, I can recommend the program to anyone who wants to develop both professionally and personally."

"The Female Leadership has already started on 01.11. and I am mega excited :) It's really fun and I already could apply and implement hints I got in the course in my daily life. I have been sent a whole box of things. There are even several books and a workbook. In addition, we also have a mastermind group, which consists of 4 participants with whom you meet once a week and have to do exercises together. That's really great, the regular exchange with women in the similar career stage as oneself. I have to say, I am so happy that I am allowed to participate."

"The heart of the course is a weekly online meeting in small groups, which were apparently assembled by participants' professional background. So it happened that we were a group of four young researchers all dedicated to viral hepatitis in one way or another. In addition to the structured discussion outline recommended by the instructors, we took advantage of the opportunity to exchange experiences and practical advice to career development in the German research system but also family commitments. This aspect was a coincidental, but highly valued side product of the course. Our ties will live beyond the five-week course and may well result in scientific collaborations at a later stage. Hence, although the daily workload of the course is quite high, it was time well spent. It was a lasting investment, which we would recommend for future members of the TRR179 starting at the postdoctoral level."

Publications

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

Neufeldt, C.J., Cerikan, B., Cortese, M., Frankish J, Lee JY, Plociennikowska A, Heigwer F, Prasad V, Joecks S, Burkart SS, Zander DY, Subramanian B, Gimi R, Padmanabhan S, Iyer R, Mathieu Gendarme, BDebs BE, Halama N, Merle U, Boutros M, **Binder M & Bartenschlager R** SARS-CoV-2 infection induces a pro-inflammatory cytokine response through cGAS-STING and NF- κ B. *Commun Biol* 5, 45 (2022). <https://doi.org/10.1038/s42003-021-02983-5> (TP09, TP11)

Wild, K., Smits, M., Killmer, S. Strohmeier S., **Neumann-Haefelin C, Bengsch B.**, Krammer F., Schwemmle M., **Hofmann M., Thimme R., Zoldan K. & Boettler T.** Pre-existing immunity and vaccine history determine hemagglutinin-specific CD4 T cell and IgG response following seasonal influenza vaccination. *Nat Commun* 12, 6720 (2021). <https://doi.org/10.1038/s41467-021-27064-3> (TP01, TP02, TP04, TP20, TP21)

Delphin M, Desmares M, Schuehle S, **Heikenwalder M**, Durantel D, Faure-Dupuy S. How to get away with liver innate immunity? A viruses' tale. *Liver Int.* 2021 Nov;41(11):2547-2559. doi: 10.1111/liv.15054. (TP06)

Lempp, F.A.; Roggenbach, I.; Nkongolo, S.; Sakin, V.; Schlund, F.; Schnitzler, P.; Wedemeyer, H.; Le Gal, F.; Gordien, E.; Yurdaydin, C.; **Urban, S** A Rapid Point-of-Care Test for the Serodiagnosis of Hepatitis Delta Virus Infection *Viruses*. 2021 Dec; 13(12): 2371. Published online 2021 Nov 26. doi: 10.3390/v13122371 (TP15)

Laudenbach BT, Krey K, Emslander Q, Andersen LL, Reim A, Scaturro P, Mundigl S, Dächert C, Manske K, Moser M, Ludwig J, **Wohleber D**, Kröger A, **Binder M, Pichlmair A.** NUDT2 initiates viral RNA degradation by removal of 5'-phosphates *Nat Commun.* 2021; 12: 6918. Published online 2021 Nov 25. doi: 10.1038/s41467-021-27239-y (TP11, TP18)

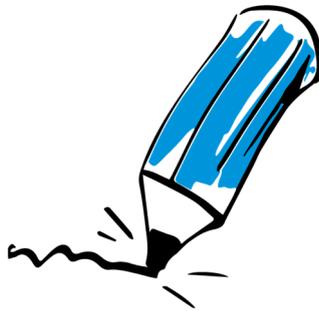
Altstetter, S.M.; Quitt, O.; Pinci, F.; Hornung, V.; Lucko, A.M.; Wisskirchen, K.; Jung, S.; **Protzer, U.** Hepatitis-D Virus Infection Is Not Impaired by Innate Immunity but Increases Cytotoxic T-Cell Activity Cells. 2021 Nov; 10(11): 3253. Published online 2021 Nov 20. doi: 10.3390/cells10113253 (TP14)

Knolle, P.A.; Huang, L.-R.; Kosinska, A.; **Wohleber, D.; Protzer, U.** Improving Therapeutic Vaccination against Hepatitis B—Insights from Preclinical Models of Immune Therapy against Persistent Hepatitis B Virus Infection *Vaccines (Basel)* 2021 Nov; 9(11): 1333. Published online 2021 Nov 16. doi: 10.3390/vaccines9111333 (TP05, TP18)

Manske K, Schneider A, Ko C, **Knolle PA**, Steiger K, **Protzer U, Wohleber D.** In Vivo Bioluminescence Imaging of HBV Replicating Hepatocytes Allows for the Monitoring of Anti-Viral Immunity *Viruses*. 2021 Nov; 13(11): 2273. Published online 2021 Nov 13. doi: 10.3390/v13112273 (TP05, TP18)

Quitt O, Luo S, Meyer M, Xie Z, Golsaz-Shirazi F, Loffredo-Verde E, Festag J, Bockmann JH, Zhao L, Stadler D, Chou WM, Tedjokusumo R, Wettengel JM, Ko C, Noeßner E, Bulbuc N, Shokri F, Lüttgau S, **Heikenwälder M**, Bohne F, Moldenhauer G, Momburg F, **Protzer U.** T-cell engager antibodies enable T cells to control HBV infection and to target HBsAg-positive hepatoma in mice. *J Hepatol.* 2021 Nov;75(5):1058-1071. doi: 10.1016/j.jhep.2021.06.022. (TP06, TP14)

Rapti K., **Grimm D.** Adeno-Associated Viruses (AAV) and Host Immunity – A Race Between the Hare and the Hedgehog *Front Immunol.* 2021; 12: 753467. Published online 2021 Oct 29. doi: 10.3389/fimmu.2021.753467 (TP18)



Keep yourself informed
about the latest
research results which
can also be found on
our website
www.trr179.de



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

IRTG „Immunovirology“

New IRTG members:

Jan Becker, TP04, Freiburg, Ariane Eceiza, TP05, Munich, Bo Hung Liao, TP18, Munich, Merve Gültan, TP18, Munich, Sarah Prallet, TP22, Heidelberg and Jana Schmehl, TP22, Heidelberg have joined Immunovirology. We welcome all of them warmly in our IRTG.

Workshops:

In a quick survey regarding planned workshop topics and courses within the TRR179, we asked the IRTG students about their preferences. Since many members were interested in a biostatistics course, a practical course “**Introduction to Biostatistics**” will be offered on **17-18 March 2022** by Dr. Florian Battke, SCIENTIA, Life Science Services. The online course is tailor-made to the needs of life scientists.

Another course on **Good manufacturing practice** will be offered in cooperation with other CRCs in Heidelberg. Depending on the consent of the PIs, the IRTG students can participate in a one week GMP course, which will take on **March 7-11, 2022** as an online event.

Lunch Lectures:

The TRR179 Thursday Lunch Lectures started on January 13, 2022 with the talk given by Dr. Marco Binder, TP11 on “The winner takes it all and Covid-19 likes to win – dynamics of viral replication vs. cell-intrinsic immunity”. As usual, the TRR179 Thursday Lunch Lectures will be announced in advance and takes place on the **first Thursday of every month from 12.00 – 1.00 p. m.**. All lectures will be recorded and stored on the IRTG server and can be watched on demand.

IRTG-Café

The next IRTG-Café with Dr. Joachim Lupberger, group leader at INSERM u1110, Strasbourg, France, will take place on **25. February 22, 4 p. m.**. In a relaxed atmosphere, we will talk about career paths abroad and more. All interested IRTG members are invited to participate.

IRTG-Retreat 2022 – save the date

The annual IRTG-retreat will take place from **5. – 7. September 2022** in St. Peter, Haus Maria Lindenberg near Freiburg where we have already had a retreat with great success some years ago. The IRTG students´ speakers will invite a selected guest scientist for a keynote lecture. Moreover, Prof. Hartmut Hengel, the head of our IRTG will give a lecture on ‘Good Scientific Practice’. As another highlight, we will produce a podcast during the retreat to present Immunovirology to the public.