

Dear members and friends of the CRC 1461,

I am happy that this time we have a two-pager for you again (well, almost...)!

Advanced Training Modules (ATMs)

The Advanced Training Modules (ATMs) are an integral part of the iRTG and also the entire CRC as they offer the possibility to introduce your colleagues to your work and the techniques you use in your subprojects and therefore foster an interdisciplinary environment. I have even heard they can be fun 😊

I am happy to announce that there are a couple of new ATMs available now (check “Upcoming Events” and OLAT) and more are currently in the pipeline. However, we need you to continue to offer new ATMs as well as revive the ones that already have been offered once! Please contact me about your planned ATMs any time!

ATMs are now open to every member of the CRC including postdocs and PIs, although iRTG-members do have priority! You may visit the ATM registration in OLAT to find out more!

News from the iRTG

After one year the iRTG board says thank you to Maxi Noll, Anna Linkenheil, Pia Holtz, and Jannes Freiberg for their amazing work as representatives of the early stage researchers in the CRC 1461. The iRTG general assembly elected their four new representatives on April 25, 2022. Blessing Adejube (C3), Bakr Al Beattie (B1), Sebastian Jenderny (A1), and Niels Röhrdanz (A3) attended their first iRTG board meeting on May 31 and started their one-year period on the iRTG board one day later

on June 1st. They will have their first meeting as official members of the iRTG board on June 23, 2022. Bakr will furthermore represent the early stage researchers in the CRC board.



The newly elected representatives of the early stage researchers in the CRC 1461 for the iRTG-board, from left to right: Sebastian Jenderny (A1), Bakr Al Beattie (B1), Blessing Adejube (C3), and Niels Röhrdanz (A3)

Upcoming Events

Colloquium title and speaker changed!
Jun. 23, 2022, 16:00 h CRC 1461 Colloquium: *Synchronizations in a layer-specific model of a cat’s visual cortical areas*– Roland Nickerl (UKE)

Jun. 29 - Jul. 01, 2022 Intelligent Materials Conference (IIM, CAU Kiel)

Jul. 01, 2022, 08:00 - 10:00 Women’s Breakfast at the IIM

Aug. 18 – 19, 2022 ATM B3/B4 (CAU Kiel): *Introduction to dynamical systems on networks*

Aug. 29, 2022 ATM B2 (CAU Kiel): *Circuit Design* Aug. 31 - Sep. 02, 2022 **Summer School** (NEZ Kollhorst, Kiel)

Sep. 05 – 08, 2022 **CRC International Workshop** (CAU and Color Line)

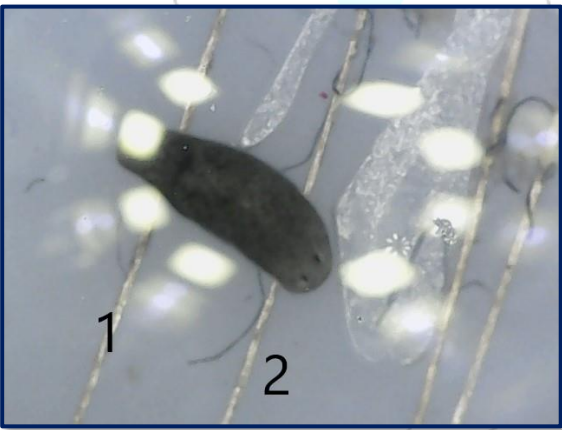
Members of the CRC

Interesting things are happening on the second floor of the old mathematics building where Jannes (subproject A3) has two labs, one slightly dark and cool, one light and warm, because this is how his model organisms, flatworms (planarians) and various plants like it. Jannes is studying their cognitive behavior and abilities to learn and memorize, and this with an enthusiasm that is contagious.



Jannes in the planarians-lab next to the wine refrigerators that allow for steady optimal temperatures for flatworms (stored in the transparent plastic boxes you see in the refrigerator on the right)

Planarians like it dark and prefer a steady temperature of 18° C, therefore a customary wine refrigerator offers perfect conditions for the small organisms of the species *Schmidtea mediterranea*. But can planarians learn to navigate through a simple maze? And can they memorize the way? The according experiments are currently running. To show the electrical signals produced by the flatworms' brain activity during those experiments Jannes uses an electroencephalogram (EEG). With an organism that is less than a cm in length this is a challenge in itself.



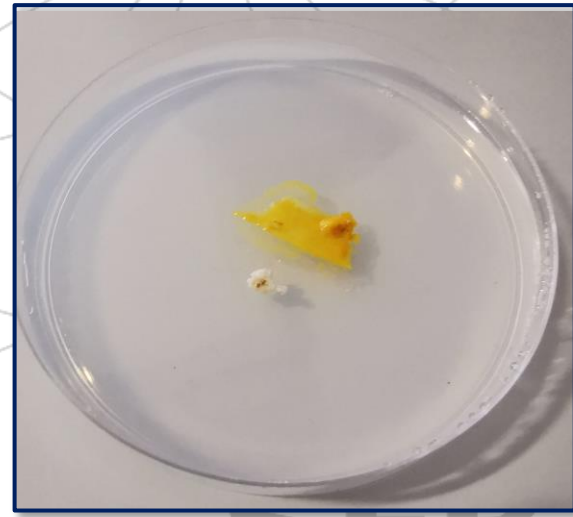
A specimen of *S. mediterranea* (about 8 mm in length) getting an EEG.

And what about the plants? Jannes could already show that mimosas can learn to connect a tactile stimulus with a light stimulus, but how do they store this learned behavior and can they even pass it on? The new experiments to try and answer these questions will start soon, but the mimosas have to grow a bit bigger first.



Mimosas waiting for their turn to take part in experiments about the learning abilities of plants

There is for sure more to come in future newsletters, so stay tuned for Science News on navigating flatforms, learning plants, and potentially for the new star of the show: the slime mold *Physarum polycephalum*.



To the left: *Physarum polycephalum*, a slime mold (yellow) and a piece of an oat as food for the slime mold (white)

CRC 1461 - Publication Performance	
Journal papers (peer-reviewed)	21
Conference papers (peer-reviewed)	8
Conference contributions	26
Total	55

Cheers, Sonja, Leonie and Hermann

Space for your notes...

(Please help us to avoid empty spaces like this one in future. Your contributions are always welcome!)