

## UPCOMING TRAINING COURSES

- **Online Image and Analysis Course** organized by Zoltan Cseresnyes, Ruman Gerst and Marc Thilo Figge from **28 March to 1 April**. For more information reach out to [Katja Präfke](#).
- **Jena Alliance Course** "Scientists on Stage: Communicating your Research in a Science Slam" with Marina Pekmezovic on **7-8 April** from 13:00 to 16:30 each day. Find more information [here](#). To register, send an email to [Katja Präfke](#).
- **Jena Alliance Online Course** "Impact Training – Skills to success" with Rosmarie Katrin Neumann. Learn strategic communication skills that increase your visibility, sharpen your profile and enable you to strengthen your career milestones. The course will take place via Zoom on **6 April** 9am – 4pm. Find more information and other courses [here](#).

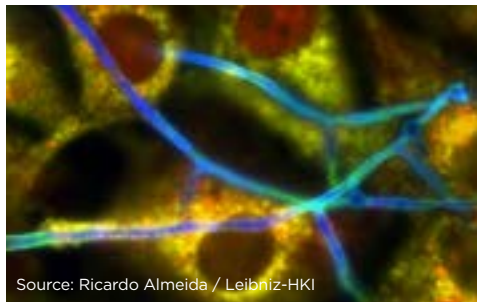
## FUNDING OPPORTUNITY

The profile line LIFE offers funding in order to bring together different disciplines to establish collaborative research programs at the University of Jena. The **LIFE-"Connect"-Fund** will support applicants with 15.000 € to 25.000 €. Apply via email directly to [Franziska Eberl](#) by **31 March**.

## NEW PUBLICATIONS AND PREPRINTS

**The thermoacidophilic red alga *Galdieria sulphuraria* is a highly efficient cell factory for ammonium recovery from ultrahigh-NH<sub>4</sub><sup>+</sup> industrial effluent with co-production of high-protein biomass by photo-fermentation**  
Georg Pohnert and colleagues | *Chemical Engineering Journal* | Jun 15, 2022

The red alga *G. sulphuraria* can function as a high-efficient cell factory for recovering NH<sub>4</sub><sup>+</sup> by photo-fermentation. Algae-based "waste-to-treasure" bioconversion for green manufacturing can be facilitated by this novel approach of non-sterile repeated fed-batch culture for cost-effective wastewater treatment and co-production of high-protein biomass. [Read more](#)



Source: Ricardo Almeida / Leibniz-HKI

**Immune regulation by fungal strain diversity in inflammatory bowel disease**

Li, *et int.*, Bernhard Hube and colleagues | *Nature* | Mar 16, 2022

In patients with ulcerative colitis, severe disease was associated with the presence of *Candida albicans* strains with high immune-cell-damaging capacity that release the peptide toxin candidalysin, triggering pathogenic immunological responses in the gut. [Read more](#)

**Fundamental resolution limit of quantum imaging with undetected photons**

Frank Setzpfandt, Thomas Pertsch and colleagues | *arXiv* | Mar 14, 2022

The authors theoretically investigated the transverse resolution of a non-local imaging scheme and showed that the resolution of quantum imaging with undetected photons is diffraction limited to the longer wavelength of the signal and idler pairs. This finding is also valid for other non-local two-photon imaging schemes. [Read more](#)

**Next generation opto-jasplakinolides enable local remodeling of actin networks**

Hans-Dieter Arndt and colleagues | *bioRxiv* | Feb 21, 2022

The natural product jasplakinolide is widely used to stabilize F-actin and influence actin dynamics. A new generation of functionally superior, photoswitchable jasplakinolides (optojasps) was synthesized that can be activated with longer wavelengths and rapidly return to their inactive state, enabling the reversible control of F-actin dynamics. [Read more](#)