

MIAP / LIC Mini Symposium

Best practices in Image Presentation, Image Analysis, and Figure Generation

And

CIBSS / SGBM Seminar

Dr. Rita Strack: A career as a professional scientific editor

and the opportunity for **Early Career Networking** and Discussion Opportunity with Dr. Rita Strack

Join us for the **LIC Mini Symposium on Best Practices in Imaging, Image Analysis, and Figure Generation**, where experts will share insights and strategies to enhance your research presentations.

In conjunction with the symposium, don't miss the joint **CIBSS/SGBM Seminar** featuring **Dr. Rita Strack**, a professional scientific editor. She will discuss her career journey and share best practices in publishing scientific papers, offering valuable tips on how to effectively communicate your research.

This is a fantastic opportunity to learn from industry experts and network with fellow researchers. We look forward to seeing you there!



Where? Lecture Hall, Institute of Biology I, Hauptstr. 1, 79104 Freiburg



When? Tuesday, March 25th, 2025 (9.30 am -11.00 pm)

with:

Jana Christopher, Image Data Integrity Analyst, FEBS Press, Heidelberg

Talk: Navigating image integrity, paper mills and the impact of generative AI

In the face of a perceived integrity crisis in scholarly publishing, many publishers and journals are advancing their vigilance and investing in the detection of image integrity issues, ranging from violations of good scientific standards in the processing and presentation of image data, to deliberate data alterations, and even use of AI-generated images in paper mill products.

Generative AI allows the scaled production of forged manuscripts that appear increasingly sophisticated and plausible, and are very challenging to detect.

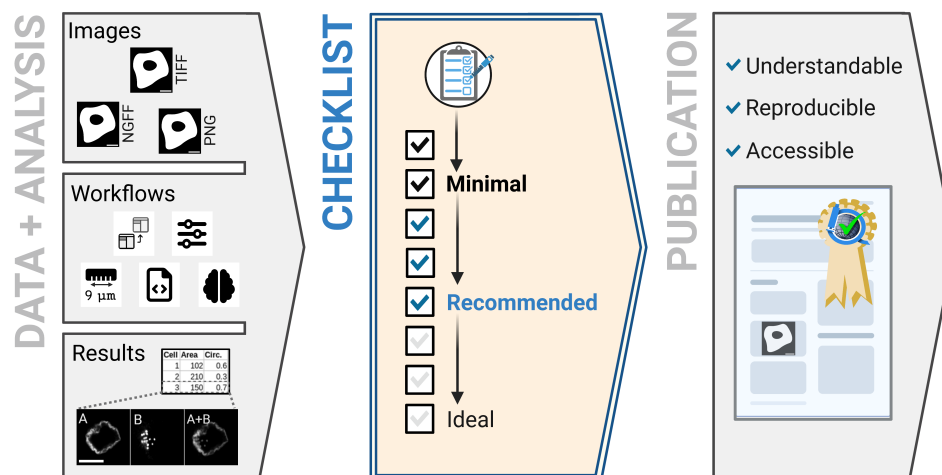
The standard of raw image data that is made available to journals is often insufficient, even meaningless, calling for stricter guidelines. Journal editors, reviewers, authors, and readers must be more aware of reporting standards and common pitfalls in the presentation of image data.



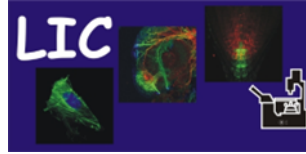
Christopher Schmied, Lead Data Scientist, Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP), and EU-OPENSOURCE, Berlin

Talk: **PixelQuality: best practices for publishing images**

Images document scientific discoveries and are prevalent in modern biomedical research. Microscopy imaging in particular is currently undergoing rapid technological advancements. However, for scientists wishing to publish obtained images and image-analysis results, there are currently no unified guidelines for best practices. Consequently, microscopy images and image data in publications may be unclear or difficult to interpret. Here, we present community-developed checklists for preparing light microscopy images and describing image analyses for publications. These checklists offer authors, readers and publishers key recommendations for image formatting and annotation, color selection, data availability and reporting image-analysis workflows. The goal of our guidelines is to increase the clarity and reproducibility of image figures and thereby to heighten the quality and explanatory power of microscopy data.




Helena Jambor, Associate Professor for Data Visualization, University of Applied Sciences of the Grisons, Chur, Switzerland, affiliate member Medical Faculty TU Dresden





Talk: **Take a sad pic and make it better (if I may....)**

Scientific publications in the life sciences regularly include image data. Image data can illustrate the appearance of specimen or be quantitatively analyzed. Published image figures are however not always fully understandable. I will present a survey of image figures, how this informed the development of image figure checklists for authors, and last also include advise for figures quantifying image data.

 17 (11.00 am -11.30 pm)

CIBSS / SGBM Seminar Dr. Rita Strack: A career as a professional scientific editor and best practices in publishing scientific papers

 Where? Cafeteria, Institute of Biology I

 17 (11.30 am -12.30 pm)

Early Career Networking and Discussion Opportunity with Dr. Rita Strack