Translation is the process of turning scientific discoveries into relevant medical benefits for patients and society. The process is long, costly and failure is more common than success. One element to minimise the risk of failure and maximise patient and society/population benefit is to increase and improve the robustness of translational research. As part of an EOSC-Life training open call, a team of training enthusiasts, set-out to offer an e-learning on Robust Research for Translational Students and Researchers. These training enthusiasts came from the training team of EATRIS, the Charité teams of BIA (BIH Biomedical Innovation Academy) and the QUEST Center for Responsible Research.

Instead of reinventing the wheel, we re-used each other’s training materials and adapted them to new target audiences, thus putting FAIR principles into practice. EATRIS created an e-learning targeted to Translational Researchers, named “Robust Research for Translational Medicine”, based on the BIH QUEST course “Fundamentals of Responsible Research, FoRR”, while QUEST used materials from EATRIS’ e-learning “Introduction to translational medicine” to complement their course tailored to medical and PhD Students.

During the kick-off meeting in Berlin in January 2023, we started the exciting journey of putting FAIR principles into practice by reusing each other’s materials. We discussed the approach for jointly reviewing, curating and packaging existing content so that it addresses the needs of the new target audiences.

Starting point was the shared observation that senior professionals often perceive trainings on robust research as criticising their current practice or as nice-to-have that doesn’t benefit their current research. Hence, our main focus on addressing this challenge by communicating the relevance and benefits to researchers as clearly as possible. We therefore reformulated the learning units so that they directly speak to researchers

- How do I identify research questions that help patients?
- How can I optimise evidence generation in experiments?
- How do I best manage and visualise my data?
- How can Open Science support my research?
- Why is my mindset essential to robust research?

In addition, a visual was created that introduced the learning units above in a cartoon-like setting to help researchers relate to the topics.

The course “Fundamentals of Responsible Research, FoRR” from the BIH Quest Center was developed to raise medical doctoral and PhD students' awareness about research integrity, reproducibility, and transparency. The main goal was to implement these responsible practices in their doctoral theses and improve research quality. In the module named “Translation / Reproducible translational research” that we developed for the EOSC-Life project, medical and PhD Students are introduced to core concepts of translational research. Using concrete examples from translational projects and clinical studies, Students learn

- How is a translational project conceived?
What are the different aspects of a translational project?
What are preclinical and clinical studies?
What is reproducible research?
What are the role and functions of translational networks and institutes?

For this module, the Charité team also interviewed the CEO of the Berlin Institute of Health at Charité (BIH) to illustrate and deepen these aspects.

The EOSC-Life training open call funding also included legal consultancy to ensure that materials are re-used in a legally compliant way to avoid copyright conflicts. This consultancy helped navigate the not always straightforward license situation of e-learning material from diverse sources to allow its re-use. As the §60a UrhG (German Copyright Act) or the German Copyright Science Act has no direct equivalent in the Dutch Auteurswet, it was recommended that EATRIS should ensure provenance and permission of all materials, also for lectures and other materials that were published under open licenses. In summary, looking at the legal aspects required far more time than originally expected. Consequently, less content could be re-used “as is” and thus will delay the final publication of the e-learning. Nonetheless, it was a very rewarding and instructive experience.

Resources

- Link to EATRIS e-learning course: e-learning.transmedacademy.eu: All courses
- Visual created

[Image of visual created]
Welcome to EATRIS’ online learning platform for translational scientists.

Please see our offering of self-paced online courses below. Or explore our portfolio of live courses, recorded webinars and resources here.

Courses

- Self-paced online courses
  - Introduction to Translational Medicine
  - Cell & Gene Therapy/ATMP Development
  - Regulatory aspects of vaccine development
  - Personalised Medicines - PERMIT Overview
  - Ignite research in translational medicine (Coming soon)