

EMBL launches first training programme for research infrastructure scientists

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Life sciences open their doors for engineers

The European Molecular Biology Laboratory has secured 6.8 million Euros funding from the European Commission to launch a unique training programme. The [ARISE Programme](#) will train and develop Europe's next-generation leadership for research infrastructures in the life sciences.

Research infrastructures are increasingly important to research and development activity by providing access to the latest detection, imaging, computational and research techniques at scale. Maintaining and improving these infrastructures requires interdisciplinary skills bridging science, engineering, service provision and management, that are not usually provided by traditional training programmes in academia or industry.

"During the last years we noticed an increasing need to train more engineers, physicists and other technology experts to become research infrastructure scientists," says Rainer Pepperkok, Director of Scientific Core Facilities and Scientific Services. "Yet worldwide, to our best knowledge, there was no training programme to address it, with few specialists being trained at the interface of academia and industry."

The ARISE Programme

To address this problem, EMBL developed a unique new training programme for future research infrastructure scientists. Supported by a European Commission Marie Curie COFUND Programme grant of 6.8 million Euros and an EMBL investment of 5.9 million Euros, the Career Accelerator for Research Infrastructure Scientists (ARISE) Programme will train 62 Fellows over the next five years.

"Having received the European Commission's stamp of approval in the form of a COFUND grant, we hope that the ARISE Programme will be seen as a model for training of a research infrastructure scientists for European life sciences," adds Peer Bork, Head of the Structural and Computational Biology Unit at EMBL and ARISE Programme Director.

During their three-year fellowship experienced STEM (science, technology, engineering, mathematics) professionals will develop into future leaders in technology development and the operation of advanced life science research infrastructures in Europe. ARISE Fellows will work on a wide range of research and technology development in the different areas of expertise at EMBL and its 46 ARISE Programme partners. These include imaging, bioinformatics, data science and big data, structural

biology, genomics, proteomics, metabolomics and (bio)chemical engineering.

“After successfully finishing their training, we expect the ARISE Fellows to take positions as senior scientists or leaders in core facilities, research infrastructures or technology development groups across Europe,” says Tanja Ninković, EMBL Project Manager. “These positions could be in academia, industry, health care and sectors we are not aware of today.”

A unique European offering

With six sites in five European countries, state-of-the-art core facilities, research spanning the life sciences and international connections EMBL offers both the capacity and the capability to provide advanced training for many different types of research infrastructure scientists. Several engineering teams already support EMBL researchers in exploring new instrumental challenges and designing new instruments. EMBL has long-standing experience in training, has launched its international PhD programme in 1983. Nearly 250 pre- and postdoctoral fellows benefit from EMBL training each year.

The ARISE Fellows will be hosted by 39 participating groups at EMBL sites. All of them have a track record in developing new methods and technologies, and in providing scientific services. The EMBL Imaging Centre, currently under construction at EMBL Heidelberg, will also have a central role as a technology platform for state-of-the-art microscopy. It will also allow scientists, together with world-leading industry partners, to develop new microscopy techniques.

The first call for applications will open in autumn 2020.

Links

- [ARISE webpage](#)
- [European Commission Co-funding of regional, national and international programmes](#)

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