50 YEARS AGO, IN 1964, THE EUROPEAN MOLECULAR BIOLOGY ORGANIZATION (EMBO) WAS FOUNDED by leading scientists who wished to create a network of cooperation in molecular biology. Since then, EMBO has had a major influence on the life sciences in Europe through important but often quite modest objectives and a clear mission to help scientists do their best research. We should celebrate half a century of EMBO’s achievements and ensure that it gets the visibility and support it deserves. In this respect, EMBO scientists are an important resource to promote the value of the organization and speak up for why we need to strengthen discovery research in the life sciences for the benefit of society.

Since the early days under the guidance of Raymond Appleyard, EMBO has introduced activities to support the career advancement of young scientists and underrepresented groups in science and has launched a series of high-quality peer-reviewed journals. It also has built strong courses and workshops and an EMBO fellowship program that is an internationally recognized label of excellence for a scientist. EMBO has awarded approximately 6000 long-term postdoctoral fellowships since 1964. Established in 2000, the EMBO Young Investigator Programme was one of the first initiatives in Europe to recognize the needs of young scientists who lead research groups and has helped more than 300 such investigators establish their first independent laboratories. Many of them have become distinguished senior scientists. And installation grants administered by EMBO are supporting young scientists who return to European countries where there are less developed infrastructures.

Speaking more personally, EMBO has been important to me in several ways. It has provided my own training opportunities and has supported postdoctoral fellows in my laboratory. In particular, a DNA cloning course held at the European Molecular Biology Laboratory in 1980 played a crucial role in my early career. It was organized by Noreen and Kenneth Murray, who were instrumental in developing a vaccine against hepatitis B, the first genetically engineered vaccine approved for human use. The course trained participants in gene cloning: how to construct plasmid and phage vectors, generate recombinant DNA molecules, and produce proteins in bacteria. Much of this work can be done with off-the-shelf kits today, but not then. The work was intense and exhausting but enormously instructive. As a student, I received lots of hands-on experience and exposure to some of the great lecturers in molecular genetics. I was starting my first independent laboratory at the University of Sussex in the United Kingdom and was making a transition from classical to molecular genetics with fission yeast to study the molecular basis of cell cycle control. This change was made much easier by this course, and I am sure many scientists worldwide have had similar EMBO experiences.

Today, the core of EMBO is its more than 1500 members and associate members—some of the most renowned scientists worldwide. This community is in an enviable position to build on the successes of EMBO’s activities for researchers. The input of the membership allows EMBO to guarantee the highest quality in its selection procedures for members and awards. This expertise will continue to guide the future direction of the organization, from objectives to support research to promoting sound science policies. I encourage scientists to communicate more widely to the public, funding agencies, politicians, policy-makers, and other opinion leaders about the accomplishments and goals of EMBO. By effectively describing what EMBO has achieved in the life sciences, we can argue for increased support to strengthen and expand its activities and ties with the international scientific community in the years ahead.

– Paul Nurse

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