Plug gap in essential bioinformatics skills

Life scientists urgently need early training in bioinformatics skills. That is the finding of surveys by the Global Organisation for Bioinformatics Learning, Education and Training (http://mygoblet.org). Bioinformatics is now intrinsic to life-sciences research, but the skills necessary for basic data stewardship are still taught in only some 25% of education programmes, creating an unacceptable chasm between theory and practice.

Almost 500 researchers worldwide, ranging from graduate students to career scientists, responded to the 2014 GOBLET survey on the extent of their bioinformatics training (see M. D. Brazas et al. Preprint at bioRxiv https://doi.org/10.1101/098996; 2017). The results revealed a high demand for short courses that could improve researchers’ expertise in data analysis and interpretation, ideally delivered before they embark on designing experiments and collecting data.

Universities must invest in degree-level education in bioinformatics, to ensure that wet-lab teams comprise computationally minded biologists who can take on programming and the statistical components of data analyses.

Meanwhile, the GOBLET foundation is working to enlarge the international community of bioinformatics trainers and training resources, to help prevent research progress being impeded as a result of gaps in researchers’ bioinformatics skills (see J. Chang Nature 520, 151–152; 2015).

Michelle D. Brazas Ontario Institute for Cancer Research, Toronto, Canada.
Sarah Blackford University of Lancaster, UK.
Teresa K. Attwood University of Manchester, UK.
michelle.brazas@oicr.on.ca