

NEUBIAS: ADVANCED TRAINING IN BIOIMAGE ANALYSIS

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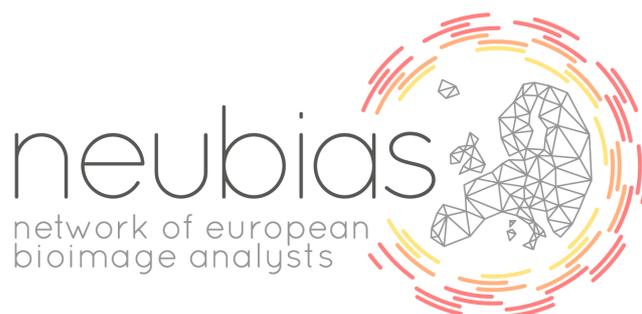
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ABSTRACT

NEUBIAS is a newly created Network of European Bioimage Analysts, which aims at maximizing impact of advanced imaging technology in life sciences, at promoting dedicated training and soft infrastructure for researchers in Bioimage Analysis, and providing a stronger identity to Bioimage Analysts through events that foster interactions between life-scientists, analysts, microscopists, developers and private sector players. In a 2015 survey across the biological community in Europe (1850 responders) bioimage analysis was considered a major limiting step in imaging-based projects, with 68% identifying lack of support & training more significant than limited access to hardware resources. Training is the core mission of NEUBIAS working group 2 (WG2), which has planned to organize in 4 years, 16 training schools (TS) for a total of 400 researchers of three groups: "Early Career Investigators (ECI)", "Facility Staff" and "Analysts". WG2 will also actively cooperate with WG6 in the preparation of new training materials. During the period 2016-2017, NEUBIAS organized 3 training schools: TS1 (Facility Staff - Barcelona/Spain), heavily focused on scripting with ImageJ and MatLab, while TS2 (ECIs) and TS3 (Analysts) took place in Feb 2017 (Oeiras, Portugal). TS2 trained ECIs with little to no background and the programme was designed to showcase typical workflows with tools such as ImageJ2/FIJI, Icy and CellProfiler; it also included Image restoration techniques and a discussion of ethics in DIP. The Analyst school TS3 aimed at increasing the knowledge and technical capability of bioimage analysts to improve their professional fluency in analysis. Selected trainees were expected to be experienced in at least one programming/scripting language and working on bioimage analysis in their daily life, and programme focused on inviting developers of various analysis frameworks (*e.g.*, ImageJ Ops/ImgLib2, Imaris-XT, KNIME, Icy) to introduce APIs and tool libraries in order to construct and benchmark complex workflows.

In this talk we will present our results and assessment from the evaluation of these TSs, discuss plans for the organization of future TSs and announce the new editions already planned for 2017-2018.



References: <http://eubias.org/NEUBIAS/training-schools/>