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MEETING ABSTRACT

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Applying competency profiling of user groups to develop a training programme in Computational Biomolecular Research

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Life Science research has become increasingly digital and has a direct influence on our daily life in areas such as health and medical applications, the development of new drugs, efficient drug delivery, biotechnology, environment, agriculture and food industry. It is one of the largest and fastest growing communities in need of high-end computing, leading to an increasing number of life science researchers who are not computing experts but who need to use complicated computationally intensive biomolecular modelling tools. BioExcel is a newly launched Centre of Excellence (CoE; funded by EC Horizon 2020) for Biomolecular Research aimed at supporting these academic and industrial researchers in the use of high-performance computing (HPC) and high-throughput computing (HTC). As part of the project we have identified a number of user groups, called Interest Groups; initially, the Interest Groups are tied to the project's pilot use cases but this will be expanded when the centre grows. To make sure that the biomedical research communities can fully profit from the training offered through the new centre of excellence we will be determining the training needs for each of the Interest Groups by drafting a competency profile. The competencies will be determined with the aid of the community and sent out for wide consultation. To enrich the competency profile we will, for each competence, define what an individual will need to know and what skills they need to have to exhibit competence in a specific area, as well as list what behaviours are suited and unsuited to an individual with that particular competency—so that individuals can assess their own competence in each area and select appropriate training. The competencies will be mapped against existing training and new training courses and material will be developed where gaps are revealed.

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