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MEETING ABSTRACT

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**on-course®: a major upgrade of this course catalogue enhances its service to the biomedical community**

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**Background:** on-course® is the most comprehensive postgraduate biomedical course database in Europe [1]. Launched in February 2012, it has rapidly grown in size and functionalities since then. Based on feedback from the user base and in order to make use of newest technologies, on-course® was re-launched in November 2014 and presents a number of new and/or improved functionalities.

**Methods:** Since 2012, feedback from users has continuously been collected and analysed. In parallel, the on-course® curators team has developed many new ideas for additional functionalities and services, but has also faced limitations in handling the fast growing amount of data most effectively. Thirdly, IT experts provided advice regarding new technologies and solutions relevant to on-course®. These sources of information have been used to define the enhancements of the newly launched on-course® resource.

**Results:** on-course® was re-developed using the Django open-source content management system. This allows the on-course® team more independence from IT programmers and higher flexibility to react more quickly and effectively to customers' demands and habits. It also creates more visibility on internet search engines. The look-and-feel of on-course® has been improved based on user feedback and observations of user behaviours. Course seekers are now offered a 'google-like' free-text search functionality which, combined with the advanced search filters, increases the relevance of search results. The new bookmarking function allows users to add courses into comparison lists. Registered users can define their search preferences in their user profiles for repeated use. The amount and types of data fields have been adapted to a structure [2] which in future will allow automated data feeds from course providers' data bases more easily; pilots will be launched shortly to build reference cases. Course providers benefit from a simpler and better guided data entry and editing system. Course providers will soon be offered guidance for their choice of the right teaching methodology. This resource includes a learning-style quiz as well as a repository of existing teaching methodologies which aims to optimise selection. The on-course® platform now also provides more background information to users including statistics, relevant publications, graphs, information about gaps and trends and other facts and figures relevant to biomedical education and training [3]. In the back-end, the 'course management system' has been improved. The on-course® curators can run effective queries to monitor the status of course

information. This will further foster the quality of the data. New functionalities have also been implemented in support of the research on on-course® data. This will allow more effective screening, analyses and interpretation of data with regard to trends, gaps, and other relevant findings.

**Discussion:** The IT world is developing rapidly. Thus on-course® will also continue to develop to make use of newest technologies which appear on the market daily. The next steps include real-time visualisations of statistics and trends as well as the linkage between courses and competency profiles. The popularity of on-course® is growing rapidly with Google analytics showing the number of on-course® users and visits doubling since November 2014.

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**References**

1. Payton A, Janko C, Renn O, Hardman M, EMTRAIN Consortium: **on-course® portal: a tool for in-service training and career development for biomedical scientists.** *Drug Discov Today*, 2013; 18(17–18):803–806. doi:10.1016/j.drudis.2013.04.004
2. <http://www.xcri.co.uk>
3. Payton A, Dallakian P, Fitton A, Payton A, Hardman M, Yuille M: **Course fees and academic ranking: insights from the IMI EMTRAIN on-course® database.** *Drug Discov Today*, 2014; 19(7): 830–830. doi:10.1016/j.drudis.2013.12.001

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