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MEETING ABSTRACT

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on-course®: a research tool for analysing cross-sectional and longitudinal trends in post-graduate course provision in Europe

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Background: The Innovative Medicines Initiative (IMI; www.imi.europa.eu) supports the European Medicines Research Training Network (EMTRAIN; www.emtrain.eu) as a collaborative education and training project with 12 academic and 15 industrial partners. One of EMTRAIN's deliverables is the online database on-course® (www.on-course.eu), which compiles information about European postgraduate biomedical courses (continuing professional development (CPD), master and PhD) [1] to overcome the difficulty in finding and accessing training programmes. The amount and the quality of the information contained in the on-course® platform provides both an effective search tool for course seekers, and a unique resource for research and analyses of cross-sectional and longitudinal trends in post-graduate course provision in Europe. So far, two key questions have been investigated: (1) does course provider reputation as assessed by university ranking correlate with course fees for master trainings? and (2) what is the impact of using English-taught medium in biomedical master courses in Europe?

Methods: (1) For the question of correlation between fees and university ranking, the master course data and fees were reviewed from the on-course® catalogue and the correlation between course fees and university ranking was analysed. The on-course® platform contained—at the time of the analysis (August 2013)—2,360 courses leading to a master's degree, of which 1,951 courses were predominantly set in a teaching environment (taught courses) and 409 were predominantly set in a research environment (research courses). After weighting the merits of the various ranking systems we chose Webometrics Ranking (http://www.webometrics.info/en). This system provided the most comprehensive list (over 21,000) of ranked higher education institutions in the world and was the only ranking system that could be applied to every institute captured on on-course® [2]. Our analysis looked at courses from 370 universities that Webometrics ranked in Europe between position 1 and position 2,712. (2) A more recent investigation (July 2014) of language trends in 2,370 taught master's courses looked at: (i) The distribution and ratio of English-taught courses in EU member states, (ii) the influence of English-taught medium on student and staff mobility, and (iii) the influence of English-taught medium on course fees and university ranking.

Results: For question 1 (course fees vs. university ranking), we observed a negative and significant ($p > 0.001$) correlation between research master's course fees and university ranking for EU student fees and non-EU student fees where the top-ranking universities correlated with higher fees. We observed a similar significant trend for taught master's fees for non-EU student fees. However, our results showed no significant correlation between university ranking and taught master's course fees offered to EU students, suggesting that EU students are paying the same for biomedical courses regardless of the quality of the university [2]. For question 2 (English-taught course), we found that the number of English-taught master courses increased by 26% between the end of 2011 and June 2013 in European countries where English is not the primary language. There are several reasons that may be responsible for this growth that include greater scope for inter-country development/delivery of joint curricula, increased competitiveness of the course on the international market, improved employability for the student and an increase in domestic demand for such courses We observed a wide variation in the number and ratio to non-English-taught courses across Europe. We also found that the use of English medium is positively correlated with mobility, an increase in course fees and better ranking. Details of these results are being prepared for a publication.

Discussion: The amount and quality of the information gathered in on-course® has proven to be a unique resource for research on trends and gaps in the biomedical education and training sector. Further investigations of on-course® data will follow. The results will inform the European biomedical education and training community (course providers, employers, professional/scientific bodies and individual professionals/scientists) about trends and gaps. These results will be shared primarily through the on-course® and the LifeTrain (www.lifetrain.eu; [3]) platforms.

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