The HUPO Industrial Advisory Board

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To meet the ongoing changes in the proteomics environment made it necessary for HUPO to find productive ways for intensifying contacts with industry partners developing the leading technologies and standards required for the field of proteomics to go forward. Bridging between technology/tools providers and the users of such technologies, for example represented by the HUPO Scientific Initiatives, has been a driver to establish the formation of the HUPO-Industrial Advisory Board (IAB)[1], which was approved by the HUPO Board of Directors during the HUPO 5th Annual World Congress in Long Beach. The mission for the HUPO-IAB was stated as to provide the HUPO Executive Committee counsel advice on opportunities for HUPO and to play an instrumental role in identifying industry trends and positioning HUPO to meet the future challenges of its partners and organization.

Immediately after the HUPO 2006 Long Beach congress a recruitment plan was initiated and upon a first round recruitment drive, 16 companies agreed to take part in the HUPO-IAB by the end of 2006, and have grown continuously to reach 26 members currently (for a listing of the HUPO-IAB members, please see the web site of HUPO).

The first official IAB of HUPO meeting took place on March 12, 2007 at the Wellcome Trust Genome Campus in Hinxton, UK to constitute itself by defining the areas the IAB will provide leadership and support to the goals and objectives of HUPO and it's initiatives. General consensus was reached to support and collaborate with HUPO on its goals in Education, Data and Sample Standardization, and Scientific Initiative Projects with a common goal to promote proteomic sciences. Especially with respect to Education it was recognized that most companies do invest a considerable effort and consequently have considerable expertise in this area. Data, sample and performance standardization was largely agreed upon as a key driver for the continuing success of proteomics. HUPO has already started to work with providers to define protein standards, but this whole area has been perceived as largely underdeveloped.

The 2nd HUPO-IAB meeting, held during the 6th HUPO Annual World Congress in Seoul, Korea in the fall of 2007, focused on the importance of reproducibility in proteomics experiments, and the concerns rose by funding agencies on this topic. The central topics of training and education in combination with the availability of tools to establish a minimal standard of reproducibility were targeted to be one of the topics for discussion in the Barbados conference, organized by John Bergeron, Peipei Ping, and Mathias Uhlen, from January 4th to 11th, 2008.

As a first step in the direction of creating an effective test sample (for MS), a study has been initiated with the support of Invitrogen, to run a protein mixture in multiple labs (including the support labs of the MS vendors participating in the HUPO-IAB) and to assist/provide training/support to help each individual lab to achieve a 100% success rate for the test sample analysis. In addition to the test sample initiative described above aiming at obtaining a 100% success rate in identifying the content of a protein mixture by MS methods, a second reproducibility test was initiated during the year by IAB members to address the question of reproducibility of 2D gels.

After the first IAB meeting in March 2007 in Hinxton a start was made to initiate a study to objectively test the reproducibility of analyzing a standard sample on 2D gels. Using the regions defined by HUPO 5 labs in Asia/Australia/Oceania, the Americas, and Europe/Russia/Africa were selected to participate in the study. Initial results coming out of this study were seen as being a major success and have led to discussions to create and distribute a common test sample and to drive forward this process to include a future study aiming at defining reproducibility criteria for LC-MS experiments.

The next HUPO-IAB meeting is scheduled to take place during the 7th HUPO Annual World Congress to be held in Amsterdam in 2008.

[1] The abbreviation used is: IAB, industrial advisory board.

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