September 13, 2005

Dear Fellow ABRF Member,

A principal task of proteomics laboratories is protein identification. The number of laboratories entering the field of proteomics research continues to expand at an impressive rate. Because laboratories new to proteomics have no objective way of ascertaining their level of performance, especially relative to laboratories with extensive experience in proteomics, a clear need exists for a reasonably complex, well-defined mixture of proteins to serve as a reference standard. To meet this need, the Proteomics Standards Research Group (sPRG) has developed a prototype standard protein mixture.

The sPRG of the Association of Biomolecular Resource Facilities (ABRF) would like you to participate in a collaborative study focusing on evaluating the ability of proteomics laboratories to determine the identities of multiple proteins present in this standard mixture.

The primary goals of this study are to provide each participating laboratory an opportunity to evaluate its capabilities and approaches with regard to:

- Separations technologies employed in proteomics analyses
- Methodologies used to identify proteins
- Bioinformatics tools used to consolidate protein identifications

The ultimate goal of this study is to fully evaluate this protein mixture as the first step in the development of a recognized standard within the proteomics community.

Laboratories requesting samples will receive a mixture containing up to 50 proteins representative of a single species. The proteins will be present in amounts sufficient to utilize to a wide variety of proteomics platforms and strategies. The sPRG will request that along with the final list of identified proteins, participants complete a web based questionnaire summarizing results and methods used. The sPRG will also encourage submission of raw data files, which will be made available for bioinformatics studies.
This year’s study is again open to both ABRF members and non-members. However, the total number of samples is limited, and priority will be given to ABRF members. Non-members are encouraged to join the ABRF (For more information go to http://www.abrf.org.).

The sPRG anticipates distributing the samples in the second week of October 2005, and requests that the resulting data be returned in mid November, so that sufficient time will be available to tabulate the results and to present them at the 2006 ABRF Meeting (Feb. 11-14, 2006 in Long Beach, CA).

Requests for samples must be submitted by e-mail to Dr. Mary Ann Gawinowicz at mag4@columbia.edu prior to Oct. 1, 2005. Please include the words “sample request” in the subject line and provide contact name, affiliation and complete mailing address in the body of the message. Because of the significant effort that goes into the preparation of the samples by the sPRG, the research group asks that samples only be requested if there is a reasonable probability you will be able to return data by the deadline. As in the past, result submissions will be coded to insure anonymity of the participating laboratories. A summary of the results of this study will be presented orally and as a poster at the ABRF ‘06 meeting, subsequently posted on the ABRF website, and ultimately published in the Journal of Biomolecular Techniques.

We thank you for your support of the ABRF. We look forward to your participation in this study and your help is producing a community standard.

Sincerely,

The ABRF Proteomics Standards Research Group

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