Re: PRG2009 Relative Protein Quantification in a Clinical Matrix Study - Sample Request

September 16, 2008

Dear Fellow ABRF Member:

An increasingly common request for proteomics laboratories today is determining quantitative differences among samples in clinical matrices such as urine, plasma or CSF. The experiment often begins with a small set of pilot samples (case versus control) where putatively differentially expressed protein species are identified. Subsequently, further sample sets are provided for a more detailed examination of these proteins to determine if the initial observation of quantitative differences holds within a larger patient cohort. The major challenges associated with this type of analysis are detection and accurate quantification in these very complex matrices. The Proteomics Research Group (PRG) of the Association of Biomolecular Resource Facilities (ABRF) would like to invite you to participate in a study that explores the use of different approaches for determining quantitative differences for several target proteins in six samples of human plasma.

The PRG anticipates that the samples can be successfully characterized by scientists with different levels of experience using a wide variety of approaches and platforms. The primary goals of this study are to document the breadth of approaches used by the ABRF community and to highlight the type of information obtained. Participants will be asked to provide the following:

- Relative quantification of three specified proteins in human plasma.
- Information about methods used to analyze the samples.
- Information about the experimental design used for quantification.

Sequence information on the three target proteins will be provided. At least two of the target proteins will be currently relevant human biomarkers. When submitting their results, participants will be asked to report the relative quantification for these target proteins in the plasma samples (two controls and four cases). The PRG will compile descriptions of the experimental methods that were used and highlight methods that successfully determined known differences in the sample sets. This information will be presented at the 2009 ABRF Meeting (February 7 – 10, 2009, Memphis, TN) and will be published on the ABRF website so that other researchers can compare results and adopt best practices.
**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 PRG expects to distribute the samples in October 2008 and requests that the resulting data be returned by January 05, 2009.

Requests for samples must be submitted by e-mail to PRG2009anonymous@gmail.com. Please include the words “PRG2009 SAMPLE REQUEST” in the subject line to indicate that you are requesting samples for the PRG2009 Relative Quantification in a Clinical Matrix Proteomics Study. If your facility places restrictions on the types of biological samples it can receive, please include the text "more information" in the subject line of your request, and we will send you additional information about the nature of the study samples in order to expedite delivery.

Because of the significant effort that goes into the preparation of the samples by the PRG, the research group asks that a sample set only be requested if there is a reasonable probability you will be able to return data by the deadline. Similarly, each participant should only request one sample set. As in the past, result submissions will be coded to ensure anonymity of the participating laboratories.

We thank you for your support of the ABRF and look forward to your participation in this study.

Sincerely,

*The ABRF Proteomics Research Group*

Michael MacCoss (Chair) - University of Washington  
Allis S. Chien - Stanford University  
David B. Friedman - Vanderbilt University  
David Hawke – MD Anderson Cancer Center  
Jeroen Krijgsveel - Utrecht University  
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