

Upcoming Events from the Gene Microarray Shared Resource (GMSR) – SAVE THE DATES!

- **Oct. 14:** Tumor Immunology application of FACS and microarrays - GMSR Microarray Users Forum
- **Oct. 21:** Geospiza webinar on Gene Expression Profiling in Cancer Research
- **Oct. 30:** Affymetrix Microarray Core User's Workshop
- **Nov. 4:** Affymetrix technical seminar on recent clinical, cancer related array technologies
- **Nov. 6:** Hands-on microarray data analysis workshop using GeneSifter software
- **Nov. 11:** microRNA array assays - GMSR Microarray Users Forum

GMSR Microarray Users Forum – Discussion title: *High speed flowcytometry cell sorting meet gene microarray - How to control tumor-induced regulatory CD4+CD25+ T cells and inhibit their suppressive function in a model of lymphopenic reconstitution and tumor vaccination* – **Oct. 14, 2009**, 11AM-Noon, OHSU Main Campus Library BICC 124 with video conferencing to VGTI, West Campus. Dr. Christian Poehlein, MD, of the Laboratory for Molecular and Tumor Immunology at Providence Portland Medical Center, will describe his work on a melanoma vaccine model and lead a discussion of the experimental model, the use of efficient flow cell sorting to reach >99% purity for RNA isolation of the different cell subsets, and some of the markers identified by the results of the gene microarray analysis. Contact Michelle Garred, GMSR User Support (garredm@ohsu.edu), for further information.

Webinar: *Gene Expression Profiling in Cancer Research: Microarrays, Tag Profiling and Whole Transcriptome Analysis* – **Oct. 21, 2009**, 10AM. Using data drawn from the GEO data repository and the Short Read Archive gene expression in Melanoma will be examined using microarrays, massively parallel sequencing (aka next gen sequencing) tag profiling and massively parallel sequencing whole transcriptome analysis data. This presentation will provide an overview of the gene expression data analysis process for these applications with an emphasis on identification of differentially expressed genes, identification of novel transcripts and characterization of alternative splicing. Presented by Dr. Eric Olson, Geospiza VP of Product Dev. **To register for the webinar**, go to <http://www.geospiza.com/News/events.shtml>

Affymetrix Microarray Core User's Workshop: 3' IVT expression arrays – **Oct. 30, 2009**, 10AM – Noon, OHSU CHH 14010 (Center for Health & Healing, 14th floor conference room). This 2-hour workshop will focus on the use of Affymetrix GeneChip arrays for gene expression analysis, including 3'IVT arrays, whole transcript Gene and Exon arrays, and microRNA arrays. We will cover array design, data formats, and Affymetrix expression analysis algorithms, data quality control procedures, and a brief overview of post-assay data analysis steps and software options. The analysis component of the workshop will largely focus on the 3'IVT array assay. The workshop is designed to assist investigators in understanding and interpreting the microarray data provided to them by the Core and is being presented by Dr. Chris Harrington, AMC Director and Michelle Garred, GMSR/AMC User Support Specialist. **Pre-registration** for the workshop is appreciated; e-mail Michelle Garred at garredm@ohsu.edu.

Affymetrix Technical Seminar on (1) working with FFPE clinical samples for expression profiling, (2) the Medical Genomics Research Program, and (3) DMET array technology – **Nov. 4, 2009**, 2-4PM, HRC 14D03 (Hatfield Research Center bldg of OHSU main campus). In this three-part seminar, an application seminar on successfully using formalin-fixed Paraffin-embedded (FFPE) clinical samples for whole-transcriptome microarray analysis will be presented by Dr. Elai Davicioni from GenomeDx. Also, Affymetrix scientific staff will discuss the Medical Genomics Research Program and the recently

launched DMET (Drug Metabolism Enzymes and Transporters) array panel and assay including how the Marshfield Clinic used the panel to more accurately define Warfarin dosing. The DMET™ Plus panel can be used to discover new biomarker associations, determine drug responders vs. non-responders, optimize drug dosing, selectively recruit for clinical trials, and much more. See the attached .pdf for a breakdown of the event schedule. **Pre-registration** is appreciated but not required; e-mail Michelle Garred at garredm@ohsu.edu.

GeneSifter Hands-on Analysis Workshop using Microarray Expression Data – Nov. 6, 2009, 1:30 – 3:30PM, BICC 120, presented by GeneSifter Scientific Staff, Drs. Eric Olson and Hugh Arnold. Hands-on microarray analysis with your own data and/or sample data provided at the session (expression data from Affymetrix, Illumina and other platforms). GeneSifter includes options for statistical analyses, data reduction/filtering, data visualization, and integration of current biological annotation including pathway and functional information. The GMSR currently licenses GeneSifter as one of the downstream analysis options for core customers. **Pre-register** with Michelle Garred (garredm@ohsu.edu). Space is limited.

GMSR Microarray Users Forum – Discussion title: *microRNA array assay options and project design considerations*: GMSR Microarray Users Forum – **Nov. 11, 2009**, 11AM-Noon, BICC 124 with video conferencing to VGTI, West Campus. The discussion will be lead by Dr. Chris Harrington, Affymetrix Microarray Core Director. Current users with microRNA data are also encouraged to attend to discuss strategies and challenges associated with the array data analysis. Meeting contact: Dr. Chris Harrington, AMC Director (harringc@ohsu.edu).

Announcements

- **Analysis Software:** Through generous support of the Oregon Clinical and Translational Research Institute (OCTRI) and the Human Genetics Initiative, the GMSR currently hosts the following software licenses that are available for core customer usage on a time-limited “analysis session” basis:

- Partek Genomics Suite (www.partek.com)
- GeneSifter (www.geospiza.com)

Also available for customer access are platform-specific operating/analysis software for Illumina and Affymetrix Users such as GenomeStudio (Illumina) and GCOS/Command Console/Expression Console/Genotyping Console (Affymetrix).

Support for data upload and basic software navigation using the above mentioned programs is also available. Please contact Michelle Garred, GMSR User Support Specialist (garredm@ohsu.edu), for software access terms or any questions regarding analysis software options/needs.

- **Notification of Publications/Patents:** Please send citation information to garredm@ohsu.edu for publications and/or inventions that include data from microarray assays performed in any of the GMSR cores (AMC, IMC, SMC). This information is necessary for core reporting and core funding applications.

If you wish to remove your name from the AMC mailing list, please let us know at garredm@ohsu.edu.