## Biostatistician

National Surgical Adjuvant Breast and Bowel Project (NSABP) now part of the NCI funded clinical trial group, NRG, is seeking a qualified individual to join their Molecular Profiling Group as a Translational Research Scientist. The Molecular Profiling Group works within the Division of Pathology and has one of the world's largest tumor tissue banks which have been collected from trials with clinical follow up. This individual will be involved in the analysis of molecular, pathological and clinical data. The ideal individual will have the following skills:

National Surgical Adjuvant Breast and Bowel Project (NSABP) is a NCI funded multi-center clinical trial group that conducts large scale clinical trials for breast and colorectal cancer. The Division of Pathology at NSABP has one of the world's largest tumor tissue bank collected from the trials with clinical follow up and was a key contributor to the development of OncotypeDx assay for breast and colon cancer. The lab has stable funding from PA State and is currently engaged in many large scale gene expression and mutation profiling studies to develop new prognostic tests that can guide treatment options for breast and colorectal cancers. The sample sizes of these studies typically are in the range of 2,000 to 3,000 cases, therefore providing unprecedented opportunities for bioinformatics investigation.

The ideal candidate will be able to demonstrate experience in the following areas:

- Ph.D in Biostatistics
- Strong academic understanding of molecular biological assays and principles.
- Ability to work independently and with others to carry out molecular biological assays and aid in their analysis.
- Ability to do quality control of diverse sets of molecular data, including but not limited to microarray, RNA-Seq, and DNA mutation Mass spectrometry
- Strong computer programming skills
- Strong communication skills in English
- Ability to conduct in the biostatistical analyses of correlative science studies in collaboration with other biostatisticians, statisticians and molecular biologists

## **Desired Skills**

- Able to perform statistical analyses and prognostic model development for gene expression, transcriptome sequencing, miRNA, and mutation profiling data.
- Able to develop pipelines for analysis of Next-Generation Sequencing data
- Ability to interact with IT staff to detail hardware needs and to assist in their implementation.
- Ability to review literature to find and employ bioinformatic tools for analysis of large data sets.
- Solid working knowledge of survival analysis of gene expression microarray data.
- Bioinformatics experience to conduct with association studies of molecular markers with clinical data and to generate models for prognosis and treatment prediction.