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## RESOURCES

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**FACILITIES:** Specify the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Under "Other," identify support services such as machine shop, electronics shop, and specify the extent to which they will be available to the project. Use continuation pages if necessary.

**Laboratory:** The Center for Neuropsychiatric Genetics (CNPG; <http://www.upstate.edu/psych/cnpg>) and the SUNY Microarray Core facility at Upstate Medical University (SUNYMAC; <http://www.upstate.edu/sunymac>) are closely affiliated and physically adjacent facilities under the common leadership of Dr. Frank Middleton, an investigator on this application. The combined laboratories contain nearly 5000 sq. ft. of space. The CNPG includes four table-top centrifuges, an ABI 3130XL genetic analyzer for SNPlex high-throughput genetic analysis, an ABI 7000 sequence detection system (i.e. real-time PCR), an MJ Research Tetrad 4-block thermal cycler, several single-block thermal cyclers, and a host of general laboratory equipment and extensive refrigeration / freezing / cryopreservation capabilities. SUNYMAC is a complete Affymetrix microarray core facility, with approximately 600 sq. ft. of dedicated RNase-free wet lab space for sample preparation and labeling. Two thermal cyclers and incubators, two hybridization ovens, two high-speed centrifuges, a vacuum concentrator, and a low volume spectrophotometer are located within this space.

**Clinical:**All samples for this project will be drawn at the primary site, and no clinical facilities are required at SUNY Upstate Medical University for the execution of this project.

**Animal:**

N/A

**Computer:**SUNY Upstate Medical University has a SEL Concept 32 dual density 800/16000 BPI mainframe computer and a Computer Modeling Core Facility running several Unix based machines. Within this framework, the SUNYMAC maintains a network of six high performance Pentium PCs and a Linux-based data server. The PC's included in this network are used for running the Agilent Bioanalyzer, GeneChip Microfluidics station and Scanner, as well as data analysis, and programming. The SUNYMAC and CNPG facilities also operate additional Windows and Macintosh workstations for student, general and administrative uses. The SUNYMAC/CNPG facilities also run a RAID-5 Disk array with 384 Gb total storage, controlled by a Sun Microsystems SUNBlade 2000 UNIX workstation (dual 900mhz processors, 2 Gb Ram).

**Office:**

The CNPG and SUNYMAC also have 600 sq. ft. of office space used for investigator, administrative, technician and student offices. Both centers are also supported by departmental administrative assistance and office facilities. The PI also maintains an office in the Department of Psychiatry at SUNY Upstate.

**Other:**

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**MAJOR EQUIPMENT:** List the most important equipment items already available for this project, noting the location and pertinent capabilities of each.

**ABI 3130 XL genetic analyzer** – capable of running SNPlex protocols

**ABI 7000 sequence detection system** – CNPG lab; real time RT-PCR

**MJ Research Tetrad 4-block thermal cycler** – CNPG lab; traditional PCR

**Affymetrix hybridization oven, microfluidics station, & GeneArray scanner for use with Affymetrix GeneChips®** - SUNYMAC lab; enables use of latest, state-of-the-art Affymetrix 10k, 50k, & 250k SNP chips

See "Laboratory" for narrative descriptions of additional equipment.