12-4-16 FACILITIES AND OTHER RESOURCES

<u>Scientific Environment</u>. The University of Pennsylvania consistently ranks among the top universities in the annual U.S. News & World Report survey. Its reputation for educational excellence is complemented by 174 research centers and institutes and several infrastructure cores including, though not limited to, the Institute of Translational Medicine and Therapeutics (ITMAT), The Clinical and Translational Research Center (CTRC), The Center for Clinical Epidemiology and Biostatistics (CCEB) and The Clinical Research Center for Sleep (CRCS).

The Behavioral Sleep Medicine Program (BSMP) is one of 11 programs in the United States accredited by the Society of Behavioral Sleep Medicine. It was established in September of 2008 by Dr. Perlis and was one of the first programs to be accredited. The BSMP is one of several sleep medicine and sleep research programs at University of Pennsylvania including: The Penn Sleep Disorders Center and the Division of Sleep Medicine (Allan Pack MB ChB PhD, Center and Division Head); the Division of Sleep and Chronobiology (David Dinges PhD, Division Head); The VA Sleep Disorders and Research Programs (Samuel Kuna MD and Richard Ross MD); and the Sleep Center at the Children's Hospital of Philadelphia (Carole Marcus MD, Center Director). The central mission for the Behavioral Sleep Medicine Program (BSMP) is to apply cognitive, behavioral and neuropsychological principles to the study of sleep and the treatment of sleep disorders. Our program includes all three of the areas that are typical for academic medicine: Clinical service, Education, and Research, With respect to research, it is our ongoing plan to expand our research program so that our narrow focus/scope (insomnia) will be balanced by a profound depth of field (spanning from bench to bedside and from bedside to dissemination and implementation research). We are working to accomplish this vision by not only establishing collaborations with other prominent Behavioral Sleep Medicine programs but also by reaching out to programs across a wide range of disciplines, both within the university and nationally, so that our complimentary interests and skills can serve as a strong platform for novel investigations.

<u>BSMP Faculty/Staff</u>. The BSMP has two full time faculty (Clinical Psychologists), two clinical research coordinators, a half time business and grants administrator, and 1-4 Interns and/or work study students. In addition, we have 1 graduate student and 1 post-doctoral fellow that work with our group.

<u>BSMP Physical Plant</u>. The program maintains a suite of offices (3 units), storage space, and a small library that are cohoused with the Mood and Anxiety Disorders Treatment and Research Program (MAD-TRP) on the 6th floor of the Science Center at 3535 Market Street in Philadelphia.

<u>Clinical Research Center for Sleep (CRCS)</u>. The CRCS is a self-contained 4 bedroom unit (2,838 sq. ft. space) located at the University of Pennsylvania Hospital on the 11th floor of the Gates Building. The center, which also serves as a core laboratory for Penn's Clinical Translational Research Center, is accredited by the American Academy of Sleep Medicine and is entirely devoted to sleep-related research. The facility includes a central control area, 5 offices, 3 storage/equipment rooms, and a lunch/break room. The 4 bedrooms, 185 sq. ft. each, have fully-appointed private bathrooms, TVs, and a table and chair set for paperwork or administration of computer-based tasks. Adjoining the CRCS is a separate space with 4 offices for business staff, a secure file room, and a dedicated mail/copy/fax/supply room

<u>CRCS Technical Capabilities</u>. In addition to routine polysomnographic assessment (PSGs and MSLTs), the lab is set up to undertake several procedures including Quantitative EEG analyses, airway challenge tasks (P_{crit}) and neuropsychological testing as well as routinely offers several standardized protocols including single and serial Psychomotor Vigilance Tasks testing and partial or total sleep deprivation protocols. H&Ps can also be conducted at this site and nursing support may be extended to this site from the CTRC for the collection of biologic samples (e.g., blood and urine samples).







<u>CRCS Staff.</u> The lab is managed by a Chief Technologist/Technical Supervisor (RPSGT); in addition, there are 2 full-time technologists for scoring (1 RPSGT), 1 full-time daytime technologist (RPSGT) for managing home-based study projects, training new staff, scoring, and performing MSLTs, 2.5 night technologists (1 RPSGT) to perform overnight PSGs and P_{crit} studies.

<u>CRCS Equipment</u>. The CRCS has 4 PSG acquisition workstations for in-lab sleep data collection (Sandman SD23 digital system with Sandman 8.0 data collection and analysis software) and 4 sleep study scoring stations. Each station consists of a networked PC. The 4 sleep study scoring stations have internet access for e-mail communication and transfer of data files via web portal. Raw data is saved to CD or DVD and scored data archived manually over a LAN network to a Negear NAS server setup for double backup. The facility also hosts home studies with ambulatory equipment (Compumedics' Safiro, Embla's Embletta and Titanium). Finally, the facility also has dedicated copy machines, fax machines, and a scanner.

<u>CRCS Data Management</u>. All investigators are provided individual reports from each protocol and aggregated data (across subjects) for all measured variables in spreadsheet formats. All subject information is de-identified.

CRCS Computer Resources: Thirty desktop computers support day-to-day operations.