UPDATE TO THE UNIVERSITY COMMUNITY:
October 2010

The School Based Research and Practice Network (SBRPN), a partnership between the University of Pittsburgh’s Clinical and Translational Science Institute and Center for Public Health Practice, was established in 2008 to advance the science of community-engaged research in schools and to increase the pace of “translation” of research results into policy. The SBRPN is designed to create communications between schools and investigators; assist investigators in all facets of school based research; and connect investigators with school districts.

This report details progress to date and describes how SBRPN can help link schools and researchers for projects of common interest and benefit. Although based at the University of Pittsburgh, SBRPN works with investigators from a range of institutions, including University of Pittsburgh Medical Center (UPMC) and Carnegie Mellon University.

Schools and Investigators

SBRPN has to date met with 41 of 43 school districts in Allegheny County, as well as the Diocese of Pittsburgh School District. It has successfully connected seven investigators with 17 different school districts (over 100 schools) and five private schools (see Figure 1). Six schools/districts are involved with multiple projects.

Three projects are actively recruiting additional schools, and two more are pending (one looking at the effect of school-based peer-relationships on children with traumatic illnesses or who have had traumatic experiences, and a second study on childhood depression).

1. **Childhood Anxiety Treatment Study (CATS)**
   Neal Ryan, MD, PI
   Ronald Dahl, MD, Co-PI

   Schools/School Districts: Bethel Park, Sto-Rox, Diocese of Pittsburgh, Kentucky Avenue School, West Mifflin, Shaler, Hampton, Community Day School, Falk Laboratory School, Ellis School

   Young people with anxiety disorder have or can have social, behavioral, and academic problems in school. CATS find ways to help these students overcome these problems. CATS educates the entire school community about childhood anxiety and how to identify and deal with it. Once identified, eligible students (aged 9–12) may enter the study with parent approval.
CATS is studying students to determine how talk therapy influences children and young adolescents with anxiety disorders. This will help to diagnose anxiety disorders earlier and improve their treatment by determining which of the currently accepted treatments work best under which conditions.

2. **Pediatric Environmental Medicine Center (PEMC)**
   Fernando Holguin, MD, PI  
   Shean Aujla, MD, Co-PI

   School Districts: Woodland Hills, Clairton, South Allegheny

This project in the Pediatric Environmental Medicine Center seeks to better understand how environmental factors affect childhood asthma, and how reduced exposure to environmental triggers may improve asthma outcomes in children. Project staff members educate the entire K–12 school community about asthma to improve understanding. They work to improve identification and overall treatment of children with asthma through education and environmental intervention. PEMC will screen children aged 4 –18 for prevalent and incident asthma cases. Once identified, eligible students may enter the study with parent approval.

3. **Early Steps**
   Dan Shaw, PhD, PI

   School District: City of Pittsburgh

The Early Steps Project uses longitudinal data from the Pitt Mother & Child Project (which established associations between early risk factors and later problem behavior and school achievement) to assist parents to use positive parenting strategies and to promote better self care and family relationships. The Project involves family interventionists working with school-age children (grades 1 through 4) and their parents. The work with the school includes an assessment of peer relationships using observations of the child at recess along with teacher surveys.

4. **Autism Center of Excellence**
   Nancy Minshew, MD, PI

   Schools/School Districts: Central Catholic High School, Pine Richland, West Allegheny, Brentwood, Highlands, West Mifflin, Hampton, Kentucky Avenue School

The NIH-funded Autism Center of Excellence seeks to understand the earliest signs of autism, the relationship between brain processing disturbances and brain function and structure, and the differences in thinking between individuals with autism spectrum disorders (ASD) and normally developing individuals. Better insight into these issues will support earlier and improved diagnosis, behavioral management and identification of the most effective targets for interventions for those with ASD. The autism study educates the entire school community about ASD, and can help teachers working in the classroom. Once identified, eligible students
aged 8–17 may come into the study with parent approval. The study also enrolls normal healthy student volunteers, who are matched with ASD students, to help investigators understand the differences between the two.

5. **Teach Your Children Well**  
   Aleatha Akers, MD MPH, PI
   
   School Districts: Steel Valley, Sto-Rox, Highlands

“Teach Your Children Well” seeks to determine if Web-based programs can help teach parents skills for communicating with their children about health and risk behaviors such as sexuality, nutrition, smoking, and drug and alcohol use. The primary objective is to reduce those behaviors among middle and high school students. The first step in this process is to understand the availability of internet/computer resources to parents. This is being done through a survey in participating school districts. Parents will be engaged to identify areas of interest and difficulty in communicating, and interventions will be designed and implemented based on their input.

6. **Interactive Sleep Education Program**  
   Jennifer Cousins, PhD, PI
   
   School District: Diocese of Pittsburgh

Significant sleep issues affect an estimated 40–60 percent of children and adolescents. The Interactive Sleep Education Program seeks to create and test a six session intervention for middle school students that is focused on education about sleep, methods to improve sleep, and ways to reduce negative outcomes related to sleep deprivation (e.g. daytime sleepiness, inattentiveness).

7. **Concussion Study**  
   Patrick Sparto PhD, PT, PI
   
   School District: South Park, Quaker Valley

Many people (including teens) with concussions require rehabilitation for gait and balance. However, the current standards for gait and balance measurement are based on senior citizens. This study will measure gait and balance for normal healthy teens (grades 9–12) in order to create a standard against which teens that have had concussions can reliably be measured. This is important information for gauging the safe return of a student to school and/or athletic endeavors and in measuring recovery.
Figure 1: MAP OF RESEARCH PROJECTS AND SCHOOL DISTRICTS

Not Shown: Central Catholic High School, Community Day School, Diocese of Pittsburgh, Ellis School, Falk Laboratory School, and Kentucky Avenue School
School Research Interests

SBRPN was able to create partnerships with schools and school districts through meetings and discussions with superintendents, principals, and their staffs. In these meetings and in follow-up focus groups school representatives were asked a series of questions including:

- What are some of the pressing health or educational issues within your school or district that could be the focus of research?
- What concerns or issues would you have about conducting research in your school or district?
- What would you want researchers to know about your school and students?

From these queries, school districts identified their top ten research interests:

1. Wellness/Illness/Fitness
2. Mental Health
3. Obesity
4. Parental Involvement
5. Technology
6. School Day/Year Structure
7. Testing
8. School Readiness
9. Anxiety
10. Absenteeism

Most schools suggested that they are open to consideration of projects if they are appropriate and designed with student improvement and wellness in mind. Schools would like to have effective solutions to the problems they confront. A complete description of the project and research interests of nearly every school district in Allegheny County, PA is found in A Research Agenda for Schools in Allegheny County: A Policy and Practice White Paper. It can be downloaded at www.cphp.pitt.edu/report/Default.aspx.

SBRPN and Investigators

The SBRPN is designed to create communications between schools and investigators; assist investigators in all facets of school based research; and connect investigators with school districts. Specific services are listed below:

- Provide training on how to do research with schools
- Help design research which is “school friendly”
- Advise and assist on writing grant proposals, including design, implementation, and incentives
- Provide feedback on existing protocols and proposals
- Advise on Pitt/School Institutional Review Board (IRB) processes and challenges
- Introduce and match researchers with schools and school systems
- Facilitate implementation of research protocols
- Assist researchers to find temporary staff or volunteers for school research tasks
Coach and train staff working in schools

Provide outreach to public, private, parochial, and charters schools in Pittsburgh and Allegheny County

SBRPN has trained over 100 investigators and their staff members in a formal training program “Research with Schools.” They have also provided advice to 23 investigators. They have also spoken about school-based research in state and national forums, including the National Association of County & City Health Officials Preparedness Summit, the NIH Clinical and Translational Science Awards Community Engagement Key Function Committee Annual Face-to-face Meeting, and the PA Public Health Association Annual Meeting. They presented the keynote address, “Working With Schools: Health Priorities of Schools in Allegheny County”, at the PA Association of School Nurses and Practitioners annual meeting.

The Future

The next steps for SBRPN are to

- Improve communication of research findings from investigators to schools through direct contact with schools, working with Intermediate Units and utilization of the existing school administration journals and newsletters.
- Expand the local network into a regional network by including public schools in the surrounding counties and private and charter schools.
- Advance scholarship and practice in school based translational science through scholarly publication.
- Help to create school based networks in other parts of the country by speaking at local regional and national conferences.

SBRPN is actively working to link schools and investigators. If you are interested, please contact Project Director Chuck Vukotich at 412-383-2882 or charlesv@pitt.edu. The Principal Investigator of SBRPN is Samuel Stebbins, MD, MPH at the University of Pittsburgh Graduate School of Public Health. He can be contacted at 412-383-2400 or stebbins@pitt.edu.