

Children’s Hospital of Pittsburgh

Research Development Report

Reporting Period:

July 1, 2009 - June 30, 2010

Commercial Development of Research

No activities during the reporting period related to any Tobacco Funds for Children’s Hospital of Pittsburgh research recipients.

Research Licensing Agreements

Children’s Hospital of Pittsburgh of the University of Pittsburgh Medical Center Health System (CHP) researchers are faculty of the University of Pittsburgh. CHP and the University have an agreement that all intellectual property developed through CHP researchers be assigned to the University of Pittsburgh.

The University of Pittsburgh Office of Technology Management (OTM) and its affiliate office, the Office of Enterprise Development Health Sciences (OED) is a service of the Office of the Senior Vice chancellor and acts as resources for health science faculty pursuing entrepreneurship and interactions with industry. (<http://www.oed.pitt.edu>) OED is a central link bringing the University of Pittsburgh’s world class researchers together with the life sciences business community. The OTM serves as the hub of all technology commercialization activities at the university. The OTM assists in fulfilling the University’s mission of education, research and public service by facilitating the development of products and processes from University technology for the benefit of the University, its faculty and staff, and the community. OTM provides an Inventors Handbook to researchers to help them become well informed, effective participants in the process of transferring University inventions to the commercial sector. The OTM has a comprehensive web site <http://www.otm.pitt.edu> designed to assist investigators in all aspects of technology management, including licensing. To manage the commercialization activities for staff, the OTM employs intellectual property experts, specialized licensing managers, business development and technology marketing professionals, education and outreach teams and reporting and compliance personnel.

The OTM and OED continue to focus on engaging more faculty, staff and students in the innovation commercialization process; educating them about such endeavors; and building a community of “Pitt Innovators,” who are defined as those who enter the process officially by submitting invention disclosures for commercial consideration.

Training Students and Health Professionals

Children's Hospital of Pittsburgh maintains a very successful pediatric training program for our students, residents, fellows and junior faculty. For FY09 the Department of Pediatrics had 109 residents in its Categorical, Medicine-Pediatrics, and Triple board (Peds-Psych-Child Psych) and Child Neurology programs. Three residents were recognized by the Rossin Foundation Scholarship for outstanding scholarship potential among the senior residents' class. Seventeen of twenty-nine graduates from the 2009 class matriculated in fellowship programs or took faculty positions at CHP. Of the fifteen graduates that have gone onto fellowship programs, 7 remained at CHP, 2 are at Johns Hopkins and 1 each went to Boston Children's, CHOP, Stanford, Columbia, Northwestern and Penn. New initiatives in simulation training, global health experiences for residents, pain/palliative care rotations and resident participation in quality improvement were undertaken this year.

A total of 78 fellows are now enrolled in subspecialty training programs of the Department. This has grown from 30 fellows in FY01, largely fuelled by extramural funding through 6 NIH T32 grants and 2 HRSA training grants. Two graduates of these programs who have taken positions within the Department faculty were recognized by the Department of Pediatrics Sponsored Awards. Additionally the Division of General Academic Pediatrics was recognized with the 2009 Teaching Award from the Academic Pediatric Association.

The internal Research Advisory Committee (RAC) of Children's Hospital of Pittsburgh is responsible for soliciting, evaluating, awarding and administering internally funded research grants, fellowships and a mentored student summer program. During this reporting period the RAC received a total of 16 new proposals and 6 second year proposal request. Funding was granted to 7 new proposals and 6 second year proposals. New proposals were funded in the following categories: Start-up/Seed (2), Fellowship (2), and Graduate Student Researcher (3). These awards undergo a competitive peer review process under the direction of senior research faculty. The 2009 awards to young investigators included the divisions of Pulmonology, Orthopedics, Medical Genetics, Adolescent Medicine and General Academic Pediatrics. Year 2 proposals were funded in the division of Emergency Medicine, Medical Genetics, Immunogenetics and Infectious Diseases.

CHP collaborates with the University of Pittsburgh and the University of Pittsburgh Medical Center (UPMC) to offer didactic training courses designed for all levels of trainees and faculty. In addition, the Department of Pediatrics sponsors a bi-weekly Continuing Medical Education opportunity for continuing education and collaboration on the CHP campus. The 2009-2010 reporting periods sponsored 47 guest speakers, 19 of whom were invited guest lectures from academic institutions throughout the country.

Commercial Research Development Training

All activities related to Commercial Research Development Training are conducted through the University of Pittsburgh.

A specific function of the Office of Technology Management is education and training opportunities to faculty, staff, postdoctoral fellows, and graduate students related to commercialization of research. Additionally, the Office of Enterprise Development offers customized seminars to department and centers on issues related to commercialization, such as Intellectual Property, Corporate Collaborations, Funding for Commercial Development, and Starting a Company. During this reporting period, the OTM engaged in a series of activities to provide training opportunities. The office also sponsors weekly lecture series, workshops and courses as well as bi-weekly email newsletters aimed at educating and training staff. An abbreviated list of the training opportunities is included below.

- Fall 2009 - Seven-week course “Academic Entrepreneurship: The Business of Innovation Commercialization”
- October 2009 - OTM hosted its fifth annual Celebration of Innovation before an audience of more than 150 innovators as well as both University and external supporters.
- February 2010 - OED hosted a 10-week course “From Benchtop to Bedside: What Every Scientist Needs to Know”
- OTM/OED Introductory presentations in departments across campus designed to generate a new awareness of the University commercialization endeavours.
- OTM/OED distributed more than 500 “Commercialization Coaching Cards” to Pitt innovators in FY 2010 designed to provide tips on how to effectively convey innovation ideas to potential outside partners, including research collaborators, investors and entrepreneurs.
- OED hosted six Limbach Lecture Series featuring prominent local and national business/scientific figures and promoting entrepreneurship.

Outreach to Businesses Regarding Recent Research Developments

All activities related to Outreach Research Developments are conducted through the University of Pittsburgh.

- Database marketing - OTM continued to post its portfolio of available innovations on searchable online databases, including TechFinder, which is accessible through the OTM Web site (www.otm.pitt.edu) by industry, investors, and other outside parties. Included with each case listed are the title, non-confidential abstract, available patent link information, inventor Web site links, and technology licensing manager contact information.
- Business development - OTM and OED continued to pursue the development of new long-term relationships with industry for the purposes of sponsored research, clinical trials, and innovation out-licensing. Targeted companies included Pfizer, Glaxo Smith Kline, Roche, Johnson & Johnson, PGx Health, Merck, Sanofi-Aventis, Z-Cubed, Takeda, and Centocor.
- Commercialization Advisory Committee – The OED once again hosted a gathering of its Commercialization Advisory Committee to review and discuss potential start-up opportunities among Pitt innovations. The group is made up of business leaders and successful Pitt alumni.
- Technology conferences - OTM and OED representatives attended numerous conferences during this reporting period to meet with specific industry representatives and market specific innovations that are available for licensing.

- Community involvement - The OTM and OED have continued to reach out to the community and industry via the MIT Enterprise Forum of Pittsburgh, 3 Rivers Venture Fair, Entrepreneur's Growth Conference, local The Indus Entrepreneurs (TiE) events, OED's Limbach Lecture Series and quarterly BioBlast receptions, the BIO International Conference, annual conference of the Association of University Technology Managers (AUTM), the Association for Corporate Growth-Pittsburgh, State Science and Technology Institute (SSTI), the Pittsburgh Technology Council's Tech 50 Awards program, and several other technology-based industry conferences. The OTM/OED sponsor many of those events and manage exhibit booths to share Pitt's technology commercialization activities.
- Technology Showcase - OED worked with the Office of Academic Affairs, Health Sciences to organize the 7th annual Technology Showcase reception as part of Pitt's annual celebration of science and research, "Science2009." This event provided industry and venture capitalists with the opportunity to view and explore the latest innovations coming out of Pitt, with a focus on commercialization.
- Annual report - OTM, in September 2009, published its fourth annual report showcasing Pitt innovators and their commercially viable innovations. OTM sent the report to nearly 1,000 companies, economic development agencies, investment firms, foundations, and others to promote commercialization and foster more interaction with industry. The report also was distributed to nearly 500 faculty, staff, and students at Pitt in FY 2010.
- Celebration of Innovation - OTM and the Office of the Provost hosted the 5th annual celebration in September 2009 to recognize the involvement of faculty, staff, and students in the commercialization process.
- New exhibit booth – OTM/OED developed a new exhibit booth in 2010, along with related materials, around the "Partner with Pitt" theme to better convey Pitt's partnering message.
- New capability materials – OTM/OED began the development of "Partner with Pitt" documents that showcase a series of cross-disciplined research strengths at Pitt, including medical imaging, neuroscience, inflammation, vaccine research, and energy, among others.
- New Pitt Innovator's Guide to Technology Commercialization – This guide is aimed at motivating and educating Pitt Innovators about technology commercialization at Pitt. It is being distributed during faculty presentations and via the OTM's Web site.

Research Development Collaboration

Collaborative efforts continue to expand both the basic and clinical research areas with faculty at Children's Hospital of Pittsburgh and those of external institutions. Total research funding for the CHP rose to \$47 million for FY09 with twenty-two new NIH grants awarded to Department of Pediatrics faculty. Large ongoing collaborative initiatives are underway in the division of Pediatric Gastroenterology involving 13 academic institutions nationally and in Canada. In addition numerous collaborative research initiatives are underway within various pediatric divisions and academic institutions throughout the country.