

# RFQ Response Form

## *RFQ for Participation in a University/Government Research Partnership*

### APPLICANT INFORMATION

Applicant Name: **Brad Dicianno, MD**

Authorized Representative Name & Title: Jennifer E. Woodward, PhD, Vice Chancellor for Research Operations

Address: 3471 5<sup>th</sup> Avenue, Suite 202, Pittsburgh, PA 15213

Telephone: 412-648-6666

Email: dicianno@pitt.edu

Website: www.rehabmedicine.pitt.edu

Partners included in this Application: **Amy Houtrow, MD, PhD, MPH**

How did you hear about this RFQ? Email from DHSProposals listserv

### REFERENCES

Provide the name, affiliation and contact information [include email address and telephone number] for three references who are able to address relevant experience with your organization.

*Please do not use employees of the Allegheny County Department of Human Services as references.*

**Gwendolyn Sowa, MD, PhD**, Professor and Chair, Dept. of Physical Medicine and Rehabilitation (PM&R) at the Univ. of Pittsburgh School of Medicine (UPSOM), Director of UPMC Rehabilitation Institute, and Co-Director of the Ferguson Laboratory for Orthopaedic and Spine Research at the University of Pittsburgh [REDACTED]

**Michael Boninger, MD**, Professor and UPMC Endowed Vice Chair for Research in the Dept. of PM&R at UPSOM, Senior Medical Director for Post-Acute Care for the Health Service Division of UPMC, and Vice President for Medical Affairs for Community Provider Services [REDACTED]

**Amy Wagner, MD**, Professor and Vice Chair for Faculty Development, Director of Translational Research, and Director of the Brain Injury Medicine Fellowship Program, Dept. of PM&R, Univ. of Pittsburgh School of Medicine [REDACTED]

### CERTIFICATION

Please check the following before submitting your Proposal, as applicable:

By submitting this proposal, I certify and represent to the County that all submitted materials are true and accurate, and that I have not offered, conferred or agreed to confer any pecuniary benefit or other

## RFQ Response Form

### *RFQ for Participation in a University/Government Research Partnership*

thing of value for the receipt of special treatment, advantaged information, recipient's decision, opinion, recommendation, vote or any other exercise of discretion concerning this RFP

#### **REQUIREMENTS**

Please respond to the following. The maximum score a Proposal can receive is 75 points. Your response to this section should not exceed 10 pages.

#### Background (30 points)

1. Describe your experience and/or interest in conducting research on topics related to improving local government/social services.

Drs. Dicianno and Houtrow have dedicated their careers to developing, deploying and improving services targeted toward vulnerable populations, particularly children and adults with disabilities.

**Brad Dicianno, MD** is an Associate Professor in the Department of Physical Medicine and Rehabilitation (PM&R) at the University of Pittsburgh School of Medicine (UPSOM). He serves as the Medical Director and COO of the Human Engineering Research Laboratories (HERL). He is the Medical Director of the UPMC Center for Assistive Technology and the Director of the UPMC Adult Spina Bifida Clinic. His research interests focus on developing and studying interventions targeted to improving health and wellness in individuals with complex disabilities, particularly those which impact social determinants of health. He also holds a Masters Degree in Bioengineering.

**Amy Houtrow, MD, PhD, MPH** is an Associate Professor and Vice Chair for Pediatric Rehabilitation Medicine in the Dept. of PM&R at UPSOM. Dr. Houtrow's main clinical focus is caring for children with disabling conditions and helping to improve function and quality of life to the greatest degree possible. Her patients include children with spina bifida, cerebral palsy, rheumatologic disorders, brain and spinal cord injuries, and orthopaedic, musculoskeletal, and neurological disorders and conditions. Complementing her clinical focus, Dr. Houtrow's research focus is recognizing the impact raising children with disabilities has on families and developing channels to improve service delivery. Dr. Houtrow holds an MPH in health policy and management and a PhD in medical sociology.

Both Drs. Dicianno and Houtrow completed an NIH fellowship within the Rehabilitation Medicine Scientist Training Program.

Drs. Dicianno and Houtrow have collaborated extensively with leaders in rehabilitation research and health services research around the country and internationally. They have extensive funding from multiple federal agencies and foundations to conduct research relevant to individuals with disabilities living in Allegheny County. The following are some examples of major efforts in these areas.

Drs. Dicianno and Houtrow direct the pediatric and adult spina bifida clinics at UPMC and UPMC Children's Hospital of Pittsburgh. Their clinics are funded by the Pennsylvania Department of Health, Bureau of Family Health, to provide care coordination and multidisciplinary care to individuals with spina bifida. Individuals with spina bifida from across Pennsylvania attend these clinics because they are one of the few sites in the state (and in fact, nationwide) with expertise in the care of this complex

## RFQ Response Form

### *RFQ for Participation in a University/Government Research Partnership*

condition. The clinics are a partner of the Pennsylvania Medical Home Initiative. Dr. Houtrow also oversees the cerebral palsy clinic funded by the Department of Health.

Drs. Dicianno and Houtrow are PI and Co-PI on the National Spina Bifida Patient Registry, funded by the Centers for Disease Control and Prevention. This grant establishes the University of Pittsburgh pediatric and adult spina bifida clinics as two of 20 sites in the US contributing to the largest database of individuals with spina bifida. This multi-site collaborative project informs the evidence-based care of individuals with this condition. Research within the registry resulted in an international effort to develop the Guidelines for the Care of People with Spina Bifida, which is a comprehensive set of clinical practice guidelines spanning 23 health topics and involved over 100 participants from within and outside the US. Drs. Dicianno and Houtrow were leaders in this international effort.

Dr. Dicianno has been involved in developing and studying innovative care models for people with disabilities. He partnered with UPMC Health Plan on an innovative shared savings pilot program to evaluate the impact of a wellness program on individuals with spina bifida and spinal cord injury. The use of a mobile nurse case manager resulted in significant improvements in patient experience of care and medical outcomes, reductions in over-utilization of emergency room care, and data that defined parameters for scalability to other disability populations for future cost savings. Dr. Dicianno was also funded by the Office of Veterans Access to Care and the Office of Rural Health within the US Dept. of Veterans Affairs to develop and deploy a telemedicine program for provision of wheelchairs and scooters to Veterans with disabilities. This program resulted in significant levels of patient satisfaction and improved access to care by reducing Veteran travel from rural communities by an average of over 60 miles. Dr. Dicianno has won awards from the University of Pittsburgh Innovation Institute and also UPMC Health Plan for outstanding contributions to innovation in patient care and clinical outcomes.

Dr. Dicianno has multiple streams of funding from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), which is part of the Administration of Community Living, within the US Dept. of Health and Human Services. He is the Director of a Designated Rehabilitation Research Project (DRRP) grant entitled, "Innovation in Disability Empowerment and Service Delivery." This \$2.5M grant is a research partnership between the Dept. of PM&R, UPMC Health Plan, and multiple community-based organizations that promote independent living of individuals with disabilities. Five research projects within the grant are investigating the impact of various healthcare and community-based service delivery systems on the social determinants of health of people with disabilities. Dr. Dicianno also serves as the Research Director and Co-Director of another DRRP and a Rehabilitation Engineering Research Center funded by NIDILRR that investigate how accessible mobile health and communication technologies can promote self-management and independent living of individuals with disabilities.

Dr. Houtrow has received funding from several granting organizations including the National Institutes of Health (NIH), the CDC (as described above), NIDILRR, the Patient Centered Outcomes Research Institute (PCORI) and the Pennsylvania Department of Health. Her projects funded by the NIH examined the family impacts of childhood disability and the outcomes of fetal surgery for spina bifida. She was a co-investigator on a NIDILRR center grant focusing on personal assistance services for people with disabilities and partnered with communities to advance community living opportunities for people with disabilities. Her PCORI project evaluated early rehabilitation for children with brain

## RFQ Response Form

### *RFQ for Participation in a University/Government Research Partnership*

injury. For the Pennsylvania Department of Health, Dr. Houtrow oversees the Technology Assisted Children's Home Program which advances care coordination for children with disabilities requiring medical technology for survival. This project serves the western half of Pennsylvania.

Drs. Dicianno and Houtrow are also involved nationally in several important efforts at the national level aimed to improve care for people with disabilities. Dr. Dicianno is the Chair of the Professional Advisory Council and the Associate Medical Director of the Spina Bifida Association. Dr. Houtrow is on the Professional Advisory Council for the Spina Bifida Association with Dr. Dicianno. She also serves on the Board of Governors for the American Academy of Physical Medicine and Rehabilitation, served two terms on the Executive Council on Children with Disability for the American Academy of Pediatrics, was an advisor to the strategic initiatives of the CDC's Disability and Health branch, chaired the Committee on Improving Health Outcomes for Children with Disabilities for the National Academy of Sciences, Engineering and Medicine, Health and Medicine Division, is an expert advisor to the CDC and the American Academy of Pediatrics for the Zika crisis, and serves on the Pediatric Standing Committee for the National Quality Forum.

In summary, their expertise has prepared Drs. Dicianno and Houtrow well for participating in projects that meet the mission of DHS, particularly those that create an accessible, culturally competent, integrated and comprehensive human services that are tailored for individuals with disabilities and their families. The inclusion of the Dept. of PM&R at the University of Pittsburgh in a University and Government Research Partnership will allow us to further understand, improve, and evaluate initiatives and perform research that is in alignment with the values of DHS and directly benefits the residents of Allegheny County, particularly those with disabilities. This important work will undoubtedly inform the DHS research agenda in the future.

#### Infrastructure (45 points)

2. Describe the specific resources (academic/administrative staffing, materials, etc.) that will be dedicated to this project.

Drs. Dicianno and Houtrow will apply jointly with DHS for outside funding opportunities that will support this partnership and will attend required meetings.

Both oversee research facilities with extensive resources. Dr. Dicianno is the Medical Director and COO of the Human Engineering Research Laboratories (HERL) located in Bakery Square in the East end of Pittsburgh. HERL is comprised of 40,000 sq. feet of laboratory space within a state of the art, LEED certified building and has approximately 60 faculty, staff, and students with expertise in research and development activities related to disability. HERL also houses the VA Center on Wheelchairs and Assistive Robotics Engineering (WARE), which is a center of excellence of research on assistive technologies that improve the mobility of individuals with disabilities and funded by the US Dept. of Veterans Affairs. Dr. Dicianno is the Co-PI of this \$4.5M federal grant and Medical Director of WARE.

Dr. Houtrow runs a health services research lab at the UPMC Children's Hospital of Pittsburgh. Her collaborators include physician scientists from multiple departments, public health trainees and faculty from the School of Health and Rehabilitation Sciences and the Pitt Law School.

## RFQ Response Form

### *RFQ for Participation in a University/Government Research Partnership*

Besides having access to world class research and clinical facilities, both Drs. Dicianno and Houtrow have access to many individuals with expertise relevant to this partnership. This includes a biostatistician with expertise in both quantitative and qualitative analyses. Their teams also include other critical personnel such as research study coordinators and administrative staff needed to support projects.

3. Describe the governance structure within your organization that will support this project, integrating other faculty, students, etc.

The Department PM&R at UPSOM is one of the leading academic Rehabilitation practices in the country, currently ranked first in National Institutes of Health funding for rehabilitation research. Our practice consists of over 60 physiatrists and PhD faculty and a residency program with 38 residents and interns. We have 7 inpatient rehabilitation units and several outpatient specialty clinics which comprise the UPMC Rehabilitation Institute. We are housed within the University of Pittsburgh School of Medicine, which is one of the highest ranking and heavily funded medical schools in the nation, and are a National Institute on Disability and Rehabilitation Research Model System Center on Spinal Cord Injury.

UPMC is an integrated global health enterprise and one of the leading nonprofit health systems in the United States. By integrating 42 hospitals, 400 doctors' offices and outpatient sites, long-term care facilities and an integrated health insurance services division (UPMC Health Plan), and in collaboration with the University of Pittsburgh, UPMC has advanced the quality and efficiency of health care and developed internationally renowned programs in rehabilitation, urology, transplantation, cancer, neurosurgery, psychiatry, orthopedics, and sports medicine, among others.

Children's Hospital of Pittsburgh of UPMC is ranked in the top ten in number of awards from the National Institutes of Health (NIH) for children's hospitals in the U.S.

4. Describe activities, such as internships and fellowships, that will support this project.

Drs. Dicianno and Houtrow serve in several roles that provide opportunities for trainees to conduct clinical internships and fellowships as well as research programs.

Dr. Dicianno is an Assistant Dean for Medical Student Research at UPSOM and also the Director of Graduate Studies for the Department of PM&R, overseeing the clinical and research internships of all trainees (medical students, residents, fellows, Masters, PhD, post-doctoral, and other) in the Department. He is also graduate faculty at the University and has personally mentored 44 pre-doctoral and 25 post-doctoral trainees over his career. He also directs a national program for rehabilitation for research for medical students which has trained over 70 medical students to date, and was principle investigator of an NIH funded T35 program that trained 25 medical students.

Dr. Houtrow directs the ACGME accredited Pediatric Rehabilitation Medicine Fellowship and is the Chief of Pediatric Rehabilitation Medicine Services at Children's Hospital of Pittsburgh of UPMC. As such she oversees the clinical and research experiences of pediatric rehabilitation medicine fellows and clinical experiences of those rotating through the Department. She also serves as a mentor to

## **RFQ Response Form**

### *RFQ for Participation in a University/Government Research Partnership*

medical students in the Deans Summer Research Program and Longitudinal Research Program at UPSOM. Several of her mentored trainees have become successful researchers. Her trainees include undergraduate, graduate, medical and post-doctoral students.