

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

APPLICANT INFORMATION

Applicant Name: Robert Morris University

Authorized Representative Name & Title: Sushil Acharya, D. Engr., Associate Provost for Research, Graduate Study, and International Programs

Address: 6001 University Blvd., Moon Township, PA 15108

Telephone: 412-397-4023

Email: acharya@rmu.edu

Website: www.rmu.edu

Partners included in this Application: None

How did you hear about this RFQ? Community Network

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

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.*

1. Ben Stahl, D.Sc.
Chief Executive Officer
The Veterans Leadership Program of Western Pennsylvania, Inc.
[REDACTED]
[REDACTED]
2. Kiandra Foster
Program Manager, Financially Struggling Families & Southwest PA
United Way of Southwestern Pennsylvania
[REDACTED]
[REDACTED]
3. Pam Iovino
Chief Veterans Affairs Officer
Department of Administrative Services
Allegheny County
[REDACTED]
[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 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.

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

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.

Robert Morris University (RMU) is a nationally ranked, doctoral-granting institution with programs in Business; Communications and Information Systems; Education and Social Sciences; Engineering, Mathematics, and Science; and, Nursing and Health Science. The faculty at RMU have a diverse research agenda much of which directly involves conducting research on topics related to improving local government and social services. Each of the Schools within the University has its own particular interests with respect to local government and social services but each has contributed greatly to both the region and the knowledge base around these issues. While not exhaustive, some examples of the research and experience relating to this request for qualifications follows.

Bayer Center for Nonprofit Management

RMU is home to the Bayer Center for Nonprofit Management. The Bayer Center, located in Downtown Pittsburgh, has a long history in the local community in supporting nonprofit management and governance. The Bayer Center is the author of many studies on wage gaps in the nonprofit sector. Further, the Bayer Center has received funding from the Alcoa Foundation to support local nonprofit board development.

School of Business (SBUS)

For several years, RMU and the School of Business have partnered with the United Way of Western Pennsylvania in the Volunteer Income Tax Assistance program. As a partner in this program, RMU volunteers have prepared more than 2,000 tax returns for low-income families in the region; partnered with the military community to prepare military returns; and, is an IRS Certifying Acceptance Agent helping international members of the community apply for Individual Taxpayer Identification Numbers (ITIN). In the coming weeks, our Acceptance Agent is presenting to local members of the Spanish speaking community on what needs to be done to apply for ITINs, paying taxes, and the types of documentation that they need.

The faculty have conducted economic impact studies for both for profit and non-profit organizations. Our faculty conducted the economic impact study for the Shell Appalachia Ethylene Cracker Plant. Currently, faculty are working on economic impact studies for the Veterans Leadership Program of Western Pennsylvania and Hollow Oaks Land Trust demonstrating the positive economic and social impact that these organizations have for our community.

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

School of Education and Social Science (SESS)

RMU is home to the Oral History Center which is a project of the History faculty in the Social Sciences Department at RMU. The project grew out of a joint effort between RMU and Moon Township to get a local neighborhood included on the National Register of Historic Places. The Oral History Center facilitates research into recent American history, allows students to get involved in oral interviews, and serves as a repository of archival materials.

The Center is currently conducting the Iraq/Afghanistan Veterans Project (IAVP), which aims to preserve first-hand, on-the-ground histories of America's wars in Afghanistan and Iraq. The IAVP aims to further historical understanding of both the Iraq and Afghanistan wars and the Global War on Terror from the veterans' point of view. The project preserves first-hand, on-the-ground oral histories of America's wars in Afghanistan and Iraq and the Global War on Terror, while memories are still relatively fresh in the minds of the participants. It involves interviewing at least 100 veterans, transcribing the interviews, and creating an online repository of materials open to researchers throughout the country. Grants from companies like Walmart have assisted the Center in pursuing its goals.

School of Engineering, Mathematics and Science (SEMS)

For over a decade now SEMS students and faculty have been actively involved with school-age students, sharing their knowledge and exposing them to the many exciting STEM career options. On campus, SEMS hosts various annual Science, Technology, Engineering, and Mathematics (STEM) events for students K-12 (including those for women and minorities) who receive instruction from faculty experts in STEM disciplines, have access to our state-of-the-art research laboratories, and get hands-on experience with technologies like 3D printing and robotics. In addition, SEMS-Outreach goes out into the community, bringing materials and experts on-site to local schools and other locations.

The SEMS research is characterized by close collaborations amongst the Engineering, Mathematics, and Science faculty. The research environment within SEMS is creative, stimulating and strongly encourages interdisciplinary research both within and outside of school. Some of the research topics at RMU include 3D manufacturing, engineering materials and high temperature processing, biomedical devices, head trauma detection, alternative energy, solar energy, operations research, logistics and supply chain management, mechatronics, optimization modeling, soil conservation, software verification and validation, statistics and actuarial sciences and many others. The SEMS faculty are also actively engaged in pedagogical research for developing and delivering novel methods for STEM education that have received national recognition.

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

School of Communications and Information Systems (SESS)

RMU's School of Communications and Information Systems focuses on designing, delivering, and interpreting information in a variety of forms, and safeguarding and improving the technology for sharing it. Faculty in the areas of cyber forensics and data analytics are engaged with corporate partners in the identification of security weaknesses. The faculty and students remain engaged with the local community. For instance, faculty and students recently developed a video series for the Military Affairs Council of Western Pennsylvania to promote the positive impact that the military has on the region. The video was used as part of the promotion package that the 911th put forward to secure the award of the C-17s resulting in an \$85-million dollar plus-up for the Pittsburgh International Airport.

These are just a few of the highlights that demonstrate RMU's experience and interest in working on topics related to improving local government and social services. A review of the publications of the faculty and the boards that our faculty serve on would further highlight RMU's deep interest in engagement and local development.

Infrastructure (45 points)

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

We envision that there are several categories of specific resources that RMU will be able to contribute to this project. While not exhaustive, the types of support that RMU may provide include the following:

RMU's Research & Grants Administration (R&GA) is committed to encouraging and supporting university faculty, staff, and students in their research, scholarship, creative work, and federal & industry inspired grants. R&GA shares funding opportunities, provides grant writing/management workshops, supports proposal submissions, and recognizes research & grant accomplishments. R&GA may be available to help facilitate grant writing, coordination of research and capabilities, and promotion of work that comes from this collaboration.

RMU Overview

RMU provides a substantial economic impact for the Pittsburgh region, not only as a major employer, but also due to the economic contributions of its alumni and students to the region's economy. There are 4,384 undergraduate students enrolled at RMU and 815 graduate students. About half of the undergraduate students live on campus. The University employs 626 full-time faculty and staff. There are 168 full-time teaching faculty and 51 administrators who hold faculty status. According to the most recent National Center for Education Statistics Integrated Postsecondary Data System, RMU employed 261 part-time faculty in 2015-2016. RMU has made substantial capital investments since 2010 which include construction of a new building for the School of

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

Communications and Information Systems, a new building for the School of Business, a new building for the School of Nursing and Health Sciences, a new recreation center and a new convocation center / basketball arena. Other schools within the University include the School of Engineering, Mathematics and Science and the School of Education and Social Sciences. Many of the RMU educational programs are nationally recognized for their excellence.

In addition to the economic impact of the University itself, the University's alumni make a substantial impact on the region both economically and in non-economic arenas. RMU has more than 22,000 alumni who reside in Southwest Pennsylvania. If RMU graduates earn \$50,000 per year on average, then their wages represent \$1,121,500,000 of the region's economy. Hence, RMU has a strong, vested interest in the development of the local government and social services that contribute to the growth of the region.

The impact of the alumni from Robert Morris University differs significantly from the alumni of other institutions in the region. RMU has historically recruited largely from the region and the alum have a higher rate of retention to the region than alum from other institutions. Hence, we believe that the overall economic and social impact of the alum to the region is higher than other institutions whose economic contribution to the region is temporary; typically limited to the length of stay for education.

Applications

As a research institution, RMU has access to a great deal of computer-based resources that they can provide where appropriate. For instance, the School of Business has Bloomberg Trading Terminals that contain information on every publicly traded firm in the world; legal and patent libraries; medical library; and information for calculating arbitrage, investment, and municipal research.

IBM SPSS is available on our systems for statistical analysis, but we also have faculty who know how to use R, Octave, and MATLAB. We have applications for 3D modeling and rendering. Our faculty are versed in running simulations and have experience in machine learning for more complex analysis. Dr. Marcel Minutolo, the lead on this project, is an expert in the Analytic Hierarchy Process (ANP/AHP) and its application to group decision making, modeling, and negotiations. He and Luis Vargas from the University of Pittsburgh, are currently working on applications of the ANP/AHP to police community engagement and resolution.

There are numerous other applications that RMU may be able to provide support that include items such as: production facilities; RISE simulation center; cyber security; CAD Design applications; and, many more. We will work with the partnership to identify the right resources and skills required on an "as-needed" basis.

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

Library Services

RMU has a complete library for research purposes and all of the resources that a fully supported library brings.

School of Business

The School of Business will be the primary lead on this project. As such, the administrative support provided the School of Business will be able to help support the project as needed.

Marcel C. Minutolo, PhD, will be the primary contact for this partnership. As such, Dr. Minutolo will be able to attend meetings as needed as well as provide his expertise. Dr. Minutolo has his PhD in strategic management with a minor in artificial intelligence from the Joseph M. Katz Graduate School of Business, University of Pittsburgh. He sits on the boards of Adagio Healthcare, Inc.; the Veterans Leadership Program of Western Pennsylvania; The Climate Reality Project Southwestern PA Chapter; and, he is the Chairman of the Military Affairs Council of Western Pennsylvania. Dr. Minutolo has publications using artificial neural networks, innovation and technology transfer, and social impact credits/bonds.

Additionally, the School of Business has faculty with deep expertise in data analytics, accounting, finance, and legal studies.

School of Engineering, Mathematics and Science

RMU's School of Engineering, Mathematics and Science undergraduate and graduate degree programs prepare students for success in such fields as engineering, actuarial science, applied mathematics, biology, and environmental science. Faculty members have extensive industry experience that informs their teaching and provides students with problem-solving knowledge and skills. The school is a nationally and internationally recognized leader in STEM education, with high-tech facilities, corporate partnerships, and a rock-solid alumni network.

RMU is designated as a Center of Actuarial Excellence by the Society of Actuaries. The undergraduate Engineering and Manufacturing Engineering degree programs are accredited by ABET.

The Research and Grants aspect of SEMS - ROC enhances STEM education for both undergraduate and graduate students at RMU, as well as for RMU faculty by creating channels for the academic scholarship. In particular, interdisciplinary research proposals and cross-institutional collaborations are developed to provide several pathways for RMU students to enhance their research experience at RMU.

The SEMS research center works closely with faculty to provide a creative, stimulating environment for collaborative interdisciplinary research that will lead to the development of successful research grants, research infrastructure and research opportunities within

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

SEMS. As an example, SEMS conducted a four-week Additive Manufacturing Bootcamp in partnership with 3D Veterans, America Makes, and GE CATA. The program was designed to train veterans to be part of the additive manufacturing workforce.

School of Nursing

Scaife Hall opened in 2016 and features a Nuclear Medicine Technology Lab and an expanded Regional Research and Innovation in Simulation Education Center (RISE). Thanks to close ties with regional healthcare agencies, students receive outstanding clinical opportunities and an edge in this competitive and changing industry.

The B.S.N., M.S.N., and D.N.P. programs are accredited by the Commission on Collegiate Nursing Education. The B.S. in Nuclear Medicine Technology is accredited by the Joint Review Committee on Education Programs in Nuclear Medicine Technology. The Regional Research and Innovation in Simulation Education (RISE) Center is accredited by the Council for Accreditation of Healthcare Simulation Programs.

RMU School of Nursing and Health Sciences uses life-like computerized mannequins and trained actors (standardized patients) in many of our undergraduate and graduate courses. The RISE Center is one of only a select few free standing nursing programs in the world accredited by the Society for Simulation in Healthcare. The RISE faculty and instructors adhere to the Standards of Best Practice: Simulation SM . All faculty and instructors are specially trained and certified in simulation.

The RISE Center was developed in 2009 and moved into a brand new 7000+ square foot space in the new Scaife Hall in January 2016. The RISE Center is a major regional educational resource and a center of excellence for simulation training and research. All RISE senior faculty have their PhDs and are recognized for their simulation research and are instructors in the RMU Leadership in Simulation Certificate program. RISE clinical instructors are all CHSE certified or working toward this certification.

Suzan Kardong-Edgren, PhD, RN, ANEF, CHSE, FAAN, is director of the RMU's Regional Research and Innovation in Simulation Education (RISE) Center. Suzie is the past editor-in- chief of Clinical Simulation in Nursing and past VP of research for the International Nursing Association of Clinical Simulation and Learning (INACSL). She is a Fellow in the American Academy of Nursing, the Society for Simulation in Healthcare, and the National League for Nursing.

The RISE Center facilitates simulation education in the School of Nursing and Health Sciences undergraduate and graduate programs, and with community partners and industry.

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

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

Marcel C. Minutolo, PhD, and the School of Business will be the primary point of contact for this project working with the office of Research & Grants Administration. R&GA spans the entire RMU community and is able to identify collaborative opportunities across the five Schools within the University. The R&GA will be able to support the development and writing of proposals aimed toward funding opportunities to support the collaboration. The R&GA has direct interaction with the Deans of all of the schools within RMU and will be able to share needs of the collaboration as they arise.

Dr. Minutolo is a member of the RMU Institutional Review Board (IRB). The RMU IRB is composed of members from each of the five Schools. Within the context of the IRB, review of potential projects that may involve human subjects can be considered and approved as appropriate. Additionally, potential research projects and questions can be shared across programs.

Dr. Minutolo also serves as an advisory member of the RMU Honors Program. RMU honors students are required to conduct research projects as part of their program of study. Dr. Minutolo will be able to discuss with the students potential research projects that may involve DHS and be directed to improving quality of life for Allegheny County residents.

Additionally, Dr. Minutolo is RMU's representative on the Higher Education Climate Consortium; a member of the Business of Humanity Project out of the Joseph M. Katz Graduate School of Business; and is the faculty advisor for the Society for the Advancement of Management. In his various roles, he will be able to build collaborations across the region, the University, and among student organizations on campus.

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

RMU offers several doctoral programs that are directly relevant to the data that DHS has. The Doctor of Nurse Practitioner, Doctor of Science in Information Systems and Communications, the Doctor of Philosophy in Instruction Management and Leadership all contain research agendas that fit within the DHS framework. There is a potential that some of the students working in these programs may take as dissertation topics research that benefits DHS.

While students can learn a lot in lecture halls, an RMU education also includes learning and growing outside of the classroom. Those experiences often can be equally as important as time spent in class. That kind of engaged, experiential learning is documented and recognized at RMU with the Student Engagement Transcript.

The Student Engagement Transcript is an official university endorsement of leadership roles, community service hours, international study trips, internships, research projects,

RFQ Response Form

RFQ for Participation in a University/Government Research Partnership

and more. It is supplied alongside the traditional academic transcript to prospective employers or graduate schools.

The Student Engagement Transcript documents engaged learning in six categories:

- Leadership
- Professional Experience
- Service
- Undergraduate Research
- Arts, Culture, and Creativity
- Global Experience

Additionally, each student organization, club, and fraternity/sorority is required to provide a certain amount of volunteer time. These organizations will be supported in providing time to Allegheny County and this project as appropriate. RMU's Office of Community Involvement publishes weekly service projects and volunteer opportunities that may be a resource for publicizing opportunities to support the DHS partnership.

RMU's faculty often take on "real-world" projects to bring actual experiences into the classroom. Dr. Minutolo will help to facilitate the identification of appropriate projects and courses wherein this type of collaboration makes sense.

Our career services program may be a resource to help publicize the opportunities for internships that RMU students may want to participate in. Projects may also be brought to the RMU Doctoral and Honors programs where students may wish to take on some of the projects for their thesis.