

SEMS ROC Research

Encourage Cross-Disciplinary Research Environment

- Create and nurture an environment of collaboration and creativity for STEM research. Create inventory of research interests.
- Breakdown discipline-based silos by organizing school-level informal meetings and seminars given by both internal faculty as well as external speakers. So far about 30 speakers have given their talks at SEMS – ROC meetings over the past three years.
- Collect and disseminate information about upcoming future funding opportunities to STEM faculty and encourage faculty to apply for those grant opportunities. Assistance is provided by SEMS-ROC director to write proposals, and develop budgets according to the guidelines provided by the funding agencies and according to the RMU policies for research fund management.
- Develop interdisciplinary work teams that are able to take on complex problems where solutions are inherently cross-disciplinary (Human-Centered Thinking Design). For example, to date strong collaborations have established between engineering, marketing and media art departments; engineering, science and nursing faculty; engineering, science and mathematics faculty; and engineering, communication and education faculty. Several successful grants applications have been created through these collaborations. SEMS has received 4 NSF grants for the past 5 years. Several journal papers, book chapters, books and conference papers and publications is the significant outcome of such collaborative work.
- Organize research seminars given by outside experts on RMU campus to develop inter-institutional and regional bonds of collaboration with RMU for faculty development, student internship opportunities, student and faculty exchange and collaboration research grant applications.

Build Research Profile for RMU SEMS

- Highlight and publicize the research conducted by faculty and students of RMU through the publication and distribution of Research Highlights newsletters. These newsletters are written in a manner where an average reader is able to appreciate the link between the research conducted within STEM fields at RMU and how it will contribute to the well-being of the society.
- Organize SEMS Research Open Houses for the benefit of entire RMU community
- Publicize research outcomes, opportunities and grants received through SEMS ROC website and other social media outlets.
- Develop MOUs with global research communities and institutions.
- Support industry connections between SEMS-ROC and local STEM community by providing educational and consulting opportunities to industry.
- Working with industry partners on strengthening hands-on component of our curriculum.

SEMS ROC Research Office and its Director endeavor to:

Create Research Environment

- Create and nurture an environment of co-operation, collaboration and creativity for STEM research. This is done through one-on-one meetings of SEMS-ROC director with the SEMS faculty to understand their research aspirations and guide them to fulfill their dreams.
- Breakdown discipline-based silos to get people to work together by organizing school-level informal meetings and organize seminars given by both internal faculty as well as external speakers. So far about 30 speakers have given their talks at SEMS – ROC meetings over the past three years.
- Provide guidance to the faculty to write proposals and obtain funding from external sources such as private foundations and governmental agencies. A research application flowchart has been created to assist the applicants.
- Assistance is provided by SEMS-ROC director to write proposals, and develop budgets according to the guidelines provided by the funding agencies and according to the RMU policies for research fund management.
- Collect and disseminate information about upcoming future funding opportunities to STEM faculty and encourage faculty to apply for those grant opportunities.

Develop Interdisciplinary Collaborative Research

- Develop interdisciplinary work teams that are able to take on complex human problems where solutions are inherently cross-disciplinary. For example, to date strong collaborations have established between engineering, marketing and media art departments; engineering, science and nursing faculty; engineering, science and mathematics faculty; and engineering, communication and education faculty. Several successful grants applications have been created through these collaborations. Several journal papers, book chapters, books and conference papers and publications is the significant outcome of such collaborative work.
- Inform, educate and support faculty in developing their research grant proposals and implement research projects.
- Disseminate information related to funding opportunities (governmental agencies, industry-based or private foundations) at all levels (local, state and federal) and help develop proposals in a team environment.

Build Research Profile for RMU SEMS

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- Organize Research Open Days for visible display of Research conducted at RMU for the benefit of entire RMU community.
- Develop Memorandum of Understanding with global research communities and institutions.
- Organize research seminars given by outside experts on RMU campus to develop inter-institutional and regional bonds of collaboration with RMU for faculty development, student internship opportunities, student and faculty exchange and collaboration research grant applications.