

MUSC Team Science Course (Instructor: Dr. Daniel T. Lackland)

A new course has been developed to emphasize the science of teams and the impact of teamwork on scientific productivity. This interprofessional course is IP772 "Team Science in Clinical Research." This course is taken by both traditional students as well as faculty engaged in the Masters in Clinical Research (MSCR) program at MUSC. In this course, an emphasis is placed on the competencies and processes associated with the concepts of **team science** in translational research. Solving complex societal problems (e.g., environment, poverty, and cancer, health care) requires the integration of specialized knowledge bases. However, as the volume of scientific knowledge has increased over time, it has become increasingly difficult for any single individual to have deep expertise in all needed areas of science. Addressing today's complex problems requires the high degree of cross-disciplinary collaboration, referred to as "Team Science". This course offers practical guidance about how best to engage in team science to: pursue complex scientific questions, work effectively with team members, and produce high impact research outcomes that help meet society's needs. This course seeks to provide the trainee with information and resources for the implementation of team

science concepts in the design and conduct of clinical research.

The competencies included in this source focus on translational teamwork. At the end of this course students are able to: 1) Build an interdisciplinary/ intradisciplinary/ multidisciplinary team that matches the objectives of the research problem, 2) Complete a search and

This Opportunity Addresses:

<u>Objective 2a:</u> Teach fundamentals of teamwork using the TeamSTEPPS framework to all students at MUSC from all 6 Colleges <u>Objective 1a:</u> Develop and implement applied teamwork skills curricula in formats designed to reach all students at MUSC from all 6 Colleges <u>Objective 1b</u>: Improve staff/faculty knowledge, skills and practice models to develop a richer environment in which team-based care training will occur in clinics and labs

identification of investigators making up their research team as multidisciplinary, interdisciplinary, and transdisciplinary research, 3) Complete a description of the research team in NIH grant format, 4) Complete the new NIH Biosketch including the 'team science' attributes, 4) Prepare a template describing the significance of published papers and abstracts as 'significant' for a promotion and tenure packet, 5) Prepare 'team science' ethics component for grant proposal, 6) Formulate a plan to evaluate a scientific team, 7) Develop a plan to manage an interdisciplinary team of scientists, 8) Development a working plan for a multidisciplinary research team with fiscal, personnel, regulatory compliance and problem solving requirements, 9) Advocate for multiple points of view, 10) Clarify language differences across disciplines, 11) Demonstrate group decision-making techniques, and 12) Manage conflict among team members.