The MSU application for the NIH Institutional Clinical and Translational Science Award requesting $20 million in funding over five years was submitted on October 21, 2008 by the Principal Investigators, Barbara A. Conley, MD and J. Randolph Hillard, MD. The NIH application will be reviewed on February 10-11, 2009, the scores released on or before February 23, 2009, and the Summary Statement released by April 17, 2009.

Summary Statement from Abstract
Michigan State University (MSU) is establishing a Clinical and Translational Science Institute (MSU-CTSI) that is uniquely embedded in communities throughout the State of Michigan. Following the traditions of a land-grant University, the Colleges of Human Medicine, Osteopathic Medicine, and Nursing have multiple community health campuses comprising regional community hospitals and research establishments; they also benefit from the Michigan State University Extension Service in all 83 Michigan Counties providing personal services to the population, including health-related knowledge, as well as a College of Veterinary Medicine. The hypothesis is that, with such a community-embedded infrastructure, MSU-CTSI is uniquely positioned to successfully accomplish its initiative to promote clinical and translational science-based research among Michigan citizens.

MSU-CTSI’s community-based health colleges will carry out translational work within the community and at community hospitals as and when needed, thus avoiding high fixed costs of a single, stationary research base. We will educate, train and mentor clinical and translational researchers for continuity, in communities that will benefit from the outcomes.

Planning Process
- Michigan State University received one of the 54 planning grants awarded (Barbara A. Conley, P.I.)
- Over 80 Faculty and Staff contributed to the grant application and participated in numerous ways by authorship, committee attendance and input, presentations at meetings and conferences, promoting and supporting the final submission. The participants were affiliated with Michigan State University’s three community-based Health Colleges of Human Medicine, Osteopathic Medicine, Nursing as well as the Colleges of Veterinary Medicine, Communication Arts and Sciences, Engineering, Natural Science, Agriculture & Natural Resources, and Social Science, MSU
Extension, the Office of University Outreach and Engagement, Office of the Vice President for Research and Graduate Studies, Office of the Provost, partnering community hospitals, practitioners, Grand Valley State University and the basic research entity Van Andel Research Institute. These entities form a powerful base for clinical and translational research.

- Formation of the new **Clinical & Translational Sciences Institute (CTSI)** as the home for clinical and translational research.
- CTSI as a focal point for MSU investments in Biomedical Research.
- A new level of focus on creating a vibrant biomedical enterprise among the MSU partners across Michigan, as well as within the East Lansing campus.

**Specific Aims addressed for the MSU-CTSI**

- Explore and understand communities' health problems and needs; and in collaboration with them, design, test and adopt solutions;
- Bridge the gaps between basic and clinical sciences bi-directionally, to optimize development of novel disease-modifying or -preventing interventions;
- Reduce any barriers to translational research in communities;
- Educate, mentor and nurture the next generation of clinical and translational researchers; foster creativity by providing a multidisciplinary, collegial home for interaction among relevant professional disciplines;
- Create novel methods to assess success and to motivate improvement; ensure cost-effectiveness of investments and processes emerging from clinical and translational research to improve human health; and
- Contribute to and benefit from the national consortium of CTSA recipients to advance the discipline of clinical and translational science.

**Infrastructure for the Overall Integrated Approach and Governance**
• **Institutional Advisory Board** will be made up of representatives from hospitals and educational institutes from our partner communities. In addition, there will be one community member not associated with hospitals, and two community practice representatives.

• **Scientific Advisory Board** will advise the MSU-CTSI of initiatives and directions in the individual colleges or other collaborating entities that have relevance to clinical and translational research.

• **Executive Committee** will be responsible for strategic direction, program implementation, financial oversight, and annual reporting to NCRR and MSU leadership. It will maintain healthy partnerships, following the “rules of federation”.

The Leadership teams of **Preclinical Research, Clinical Research, Community-Engaged Research, and Translational Research Education** will guide the

**Key Functions of** Participant and Clinical Interaction, Community-Engaged Research, Pilot and Collaborative Project Support, Regulatory Knowledge, Ethics, Culture and Society, Translational Communication, Design and Biostatistics, Biomedical Informatics, and Research and Career Training resources** to accomplish the Specific Aims, and will allow all partners to invest in the MSU-CTSI. Investigators and all partners will have access to the core facilities, resources and potential subjects at all other sites in the network.

**Roles of the Leadership Teams (LT)**

• **Preclinical Research LT**: foster further growth in this realm via seed funds for translational research projects, coupled with mentoring and coaching to encourage productive bench-to-clinic collaborations.

• **Clinical Research LT**: create a system wherein all investigators in the network have efficient access to the patient populations across the entire network of clinics and hospitals.
• **Community-engaged Research LT:** MSU’s history has created uniquely community-engaged human health colleges. Taking advantage of those strengths, our CTSI will have a strong focus on improving health outcomes by translating healthcare research into practice in the community, studying and improving the effectiveness of health care, prevention, promotion and public health, and assessing and studying the needs of the population for new or more effective health interventions or support systems.

• **Translational Research Education LT:** none of this can exist without the recruitment, training, mentoring, and career development of individuals who want to be part of translational research. An important role for the CTSI is to sponsor the curriculum and programs that will support careers in Translational research, and to develop in collaboration with partners, the materials and methodologies for communicating health education materials to the community at large.

Ultimately the grant application is asking to expand the goals of the MSU-CTSI to:

• An organization that develops the *infrastructure to support* the translational research activities of the affiliated institutions

• A group of people with the mission to help investigators with viable translation projects *navigate the process* and *access the resources and know-how* across the institutions

• A home for education and career development in translational research

• An organization that will advocate for the development of biomedical research capabilities – a voice for translational research.