

Missouri Science and Technology Policy Fellowship (MOST Fellowship)

Project Summary

We seek to establish a pre- and post-doctoral Science and Technology Policy Fellowship (STPF) to assist with evidence-based policy decisions in the State of Missouri, following a model developed by the California Council for Science and Technology (CCST). Scientifically-trained fellows would inform legislators of potential outcomes associated with proposed policy, in order to promote long-term health, sustainability, and economic growth for Missouri communities. Before a Missouri STPF program can be established, we must first assess legal barriers and areas of need and greatest concern for Missouri legislators. The program development stage will require **\$45,000** to support legal council and a staff salary to coordinate research and networking efforts.

Background and Rationale

The American Association for the Advancement of Science (AAAS), the leading professional society in the sciences, coordinates a prestigious federal science and policy fellowship program. The goal of the AAAS STPFs are to provide research and technical support in making evidence-based policy decisions. In 2008, California formed a state-level science and technology policy fellowship for recent graduates of advanced degree STEM programs and subsequently, nine other states have adopted this state-level model to establish similar programs within their state government. The state-level programs mimic the AAAS STPF program, using best practices from the federal processes and tailoring other parts to the specific needs of each state. The State of Missouri is an excellent candidate in which to establish a state-level STPF due to the general assembly structure, growing science and technology industries, and trends in outward migration of locally-trained professional scientists.

The State of Missouri is composed of several unique regions, requiring ample representation in the state government. For this reason, our state has one of the largest general assemblies with 197 combined senators and representatives. Due to the sheer abundance and diversity of legislation passing through the assembly each session, legislators often must rely on external guidance to be adequately informed. Missouri STP fellows would serve as a consistent resource for policy makers when developing and voting on legislation that will impact their constituents.

Increasing technology start-ups and research incubators provide evidence of the growing science and technology sector in Missouri. St. Louis county hosts the largest number of Ph.D. holders in plant science per capita in the nation and start-up incubator, 39 North, continues to support the local biotechnology industry. Combined agricultural production in North Central Missouri and timber production in the Ozark region support Missouri as a leader in national trade. Kansas City and St. Joseph form a nationally-recognized corridor for animal health and nutrition companies. Central Missouri and Springfield area communities are home to world-leaders in financial, actuarial, and insurance professionals. State policy-makers have the

potential to foster growth in this sector, but in the increasingly complex world of science, technology, and engineering, legislators need proper support to make informed policies.

Several state-funded universities in Missouri train doctoral students in science and technology disciplines, yet many of these Ph.D. students do not remain in the state after graduation. The Missouri policy fellowship model will provide a career catalyst opportunity for in-state doctoral graduate students who wish to work in science policy upon graduation, retaining these students within the state that invested in their training and education.

Proposed Fellowship Program

A legislative science and technology policy fellow would provide much needed resources for Missouri State House and Senate. The fellow would assist in scientific, rather than legal, research before bills are written, and also help to inform senators and representatives on benefits and consequences of pending statutes and regulations. Outside of the short legislative session, fellows will assist with building evidence-based research capacity and training workshops for legislators and staff, giving them confidence to address issues about which they feel passionate and better address the needs of their constituents. Increased importance will be placed on state governance to address local approaches to pressing issues of our time; thus, Missouri lawmakers must be equipped to define and address these issues.

Our Ask

The University of Missouri-Columbia Graduate and Professional Council (GPC), is seeking \$45,000 in support for developing a Science and Technology Policy Fellowship customized to the interests of the State of Missouri. Before a fellowship program can be established, we must first establish a governing structure for the program, grow legislative support, and acquire funding for the planning process and a sustainable fellowship program support. Planning funds will include stipends for the individuals coordinating partner meetings and legislative research, as well as potential legal fees associated with placement logistics and non-profit organization formation.

The MOST Policy Fellowship program will form a partnership between the state legislature, higher education institutions in our state, and foundations seeking to advance science and technology. The benefits of this partnership and fellowship program are countless, allowing Missouri to maintain and advance its standing as a leading state in research and development, agricultural and environmental management, and health care. We look forward to your support to establish this program and improve our state.