Seed Systems for International Programs - Department of Plant, Soil and Microbial Sciences, Michigan State University

The Department of Plant, Soil and Microbial Sciences (PSM) in the College of Agriculture and Natural Resources at Michigan State University invites applications for an annual year (12-month), fixed term Assistant Professor position in Seed Systems for International Programs to help expand collaborative research, graduate training and outreach in integrated seed systems for global food security. The incumbent will work closely with scientists at MSU in diverse fields, including plant genetics, agronomy, food science, agricultural economics, rural sociology and community education and have the opportunity to interact with international programs such as the Legume Innovation Lab and the Global Center for Food Systems Innovation on campus. The incumbent could work on a variety of issues related to seed systems, including seed pathology, seed biology and seed technology to help create sustainable systems that enable smallholder farmers access to disease-free, high vigor, quality seed of adapted varieties that meet their needs to enhance productivity. The successful candidate will have 70% research, 10% teaching and 20% outreach responsibilities and will participate in both graduate and undergraduate programs in PSM. The position will be available July 2016.

Research responsibilities will include fundamental and applied research and development work in an area of seed science with a major emphasis on developing international programs to foster seed trade and ensure smallholder farmer access to high quality improved seed varieties especially of grain legumes and large seeded open pollinated cereals. Fundamental research will depend on the incumbent’s training, expertise, and interest, and may focus on seed biology, seed pathology, seed testing, production and distribution. The major objective of the applied research component is the development of a network of individuals interested in helping to bring technologies and innovative methodologies to smallholder farmers to foster sustainable production and distribution of improved varieties. Publication of research in major scientific journals will be required. The incumbent will be required to:

1) Participate in attracting competitive grants and external funding from federal agencies, development agencies, foundations, private sector and commodity groups to expand international linkages and collaborative programs.
2) Work with MSU scientists to support and network programs to develop collaborative research in international seed systems using advanced technologies.
3) Attract international research fellows, interns, and visiting scholars to MSU and develop collaborative programs to provide opportunities for MSU students and scientists to get exposure and expand linkages to global seed systems programs.
4) Organize international training programs, workshops, fora and conferences for sharing knowledge and exchange of experiences to help expand networks.
5) Provide leadership in teaching of CSS 151- Seed and Grain Quality.

This position will be a fixed-term Assistant Professor level position with a major component of the appointment placed in the Plant, Soil and Microbial Sciences department. The position has built in flexibility for a joint appointment in another department depending on the research focus of the successful candidate. The intention is to support and enable applied seed systems that target the constraints limiting the production and distribution of seed in developing countries as well as domestic seed production in the U.S. specifically in areas of minimal privatization. MSU is well positioned to help provide the research and science that supports new and adapted seed systems, based on previous experience in Latin America, Sub-Saharan Africa, Asia, and the U.S. Given the
policy emphasis on the link between smallholder agriculture and human nutrition in developing countries, significant resources are available for seed systems research to address poverty, dietary diversity, and resiliency to climate change. However, improved varieties must be adopted by farmers in order to impact crop yields, profitability, and quality of life. Unfortunately, there are significant barriers to adoption and most farmers in the developing world are not using newly released varieties, even in the areas for which these varieties have been developed. Additionally, poor quality low vigor diseased seed is often planted which compounds the production issues.

To support these activities, numerous collaborative opportunities are available at MSU in a broad range of scientific areas. A doctoral degree is required, with a preference in agronomy, plant breeding and genetics, plant pathology or related plant science disciplines. Postdoctoral and international experience is preferred but not required.

**Position duration:** Funding for the position is available for five years. Following an initial three-year appointment, the position will be renewed annually based on satisfactory performance.

**Application Procedure:** Qualified applicants should submit a letter of application, a summary of research accomplishments and future research objectives, a description of outreach interests, a current resume, and contact information for three references. Applicants can apply for this position via the Search Committee, (link at https://jobs.msu.edu, (posting #3079). Questions can be directed to Dr. James Kelly, Chair kellyj@msu.edu). Applications will be accepted until May 30, 2016 or until a suitable candidate is identified. MSU is an affirmative action, equal-opportunity employer. MSU is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. The University actively encourages applications and/or nominations of women, persons of color, veterans and persons with disabilities.

The Department of Plant, Soil, and Microbial Sciences, which includes the former Departments of Crop and Soil Sciences and Plant Pathology, is an internationally recognized department of more than 50 faculty members, with diverse interests spanning applied and fundamental research. At MSU researchers have worked to help identify traits and develop new varieties across a range of crops, including common bean. The Legume Innovation Lab has funded research and development by MSU breeders on bush and climbing beans for smallholder farmers in Africa and Latin America, but also to the benefit of Michigan farmers. Recently a Plant Breeder for International Programs was hired to lead in the development of improved varieties of regionally important crops. While many factors are involved with technology adoption, key problems stem from the lack of an effective seed system, and addressing these issues is critical for sustainable agricultural development in these countries.

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https://jobs.msu.edu/applicants/jsp/shared/frameset/Frameset.jsp?time=1459537756024