SOME NOTES ON SEED GRANTS

Brian Foster, Provost August 20, 2010

As the Mizzou Advantage process has unfolded, we funded a significant number of seed grants. A second request for proposals (RFP) was issued in May for additional seed grants to total as much as \$1.5 million dollars. In our discussions with faculty, staff, and others, a number of questions have arisen about just what we mean by "seed grants," and how does one prepare a proposal for such funding?

The notes that follow are my thoughts on this matter. They are not definitive in the sense that I've covered all of the possibilities. Rather, they are to "seed" the idea of seed grants, if you will. There are many possibilities that I've not touched on—some that I have thought about, but many more than have never occurred to me. It is the creative thinking of our faculty that will find interesting and heretofore untried approaches.

I want to stress at the outset that I see opportunities for such grants in all colleges and all disciplines. They will not just be in the areas where faculty routinely seek large grants (though that will be one critical area), but also in the arts, humanities, professions (e.g., law, business), and social sciences—in basic and applied research, instructional programs, service delivery, economic development, policy work, and other areas.

Starting point: What are we trying to seed?

The core idea of a seed grant, of course, is to plant a seed for a larger, longer-term project—to do preliminary work on the basis of which a larger project will be based. It follows, then, that the first step is to know what it is that we're trying to seed. Significant, influential research, training, service, and economic development projects take many forms. The following are examples only; the list is NOT comprehensive, but only suggestive.

EXAMPLES of larger projects resulting from seed projects

Major external collaborations

- Large corporate collaboration (e.g., MU's collaboration with CERNER Corp.)
- Collaboration with a foundation (e.g., MU's work with Kauffman Foundation on the model charter school in inner-city Kansas City)
- Long-term collaboration with another university (e.g., MU and Western Cape; MU and St. Andrews)
- Collaboration in research/education with military units (e.g., MU's contracts with Fort Leonard Wood and Fort Leavenworth)
- Collaboration with a federal agency (e.g., MU's collaboration with National Geospatial Intelligence Agency)

- Collaboration with an educational organization (e.g., MU's relationship with the Great Plains Consortium; potential collaboration with Western Governors University)
- Research with other kinds of external organizations where prior major collaborations exist (e.g., Missouri Botanical Garden, National Museum of Natural History, Smithsonian Tropical Research Station)

Establish a new organization of significance

- Establish a think tank (e.g., Reynolds Journalism Institute)
- Found a large federal facility (e.g., NBAF: MU applied, awarded to KSU)
- Build a regional service facility (e.g., Regional Biocontainment Lab)
- Build an overseas campus (e.g., possibility of campus in Korea)
- Establish a physical presence in a Missouri city (e.g., the Mizzou Center in Blue Springs)
- Build an incubator (e.g., the MU Life Science Incubator)

Create long-term collaborative groups

- Establish a public/private consortium for business and research (e.g., NTEC)
- Build a long-term basic research network on campus (e.g., the Interdisciplinary Plant Group)
- Build a facility-based collaborative unit (e.g., the Bond Life Science Center)
- Build a new center (e.g., Thompson Center for Autism and Neurodevelopmental Disorders, Neuroimaging Group)

Create a major new facility

- Build a facility based on a sophisticated technology (e.g., MU's Brain Imaging Center)
- Build a large-scale research center (e.g., International Institute of Nano and Molecular Medicine)
- Build a unique research facility (e.g., MURR)

Create external instructional collaborations

- Create collaborative degree programs (e.g., UM Nursing graduate degrees)
- Create collaboration to deliver a program at MU (e.g., the UMKC Pharmacy program at MU)
- Development program delivered by MU on other campuses (e.g., the OT and PT Assistant program which MU delivers at five community colleges)
- Institutes for Advanced Topics in the Digital Humanities (or several related programs through NEH and other federal sources)

Create long-lasting funded projects (i.e., sustained external funding)

• Long-term foreign aid project (e.g., MU's AID-funded project in Sub-Saharan Africa)

- Many-year research project funded by competitive grants (e.g., the \$8.5-million NIH Program Project Grant to Dalton Cardiovascular Center and the Medical School on exercise physiology and the microcirculatory system)
- Long-term state-wide service project (e.g., Extension project on nutrition education and food stamps)
- Long-term policy research efforts (e.g., FAPRI)
- Summer undergraduate research programs such as the NSF REU program that brings international students to MU for summer research

On-going academic programs

- New degree programs (e.g., Master of Public Health, Bachelor of Health Sciences, Information Technology)
- New certificate programs (e.g., Certificate in Autism and Neurodevelopmental Disorders)
- New doctoral program reflecting changes in a discipline (e.g., D.N.P., D.P.T.)
- New models of hands-on learning (e.g., competitions for IT apps in journalism and engineering)
- New online programs (e.g., recent UM System competition, MU competitive grants)

Long-term fee-for-service operations

- Services for corporate clients (e.g., RADIL, MURR)
- Services in education area (e.g., College Basic Academic Subjects Examination (College BASE, Assessment Resource Center)
- Health services (e.g., MU clinics)
- Drug discovery operations (TheraSphere; Quadramet)

Research and public service support

- Museum collections (e.g., world-class Grayson Archery collection in Museum of Anthropology; specimen collections to support climate change research; unique art collection donated by Mark Landrum)
- Museum exhibits (e.g., major collections brought in on rotating basis by the Museum of Art and Archaeology)
- Special library services (e.g., digital archives of MU research publications)
- MU-supported national databases (e.g., Quantum Fingerprinting data base, NSEI)
- Western Manuscripts Collection

All of the above examples are large-scale, continuing efforts based on early funding that continued or positioned the project for sustained funding. Examples of funding sources include the following:

- State line-item funding (e.g., MOBIUS, MOREnet (now funding from membership fees), financial aid programs)
- State and federal facilities funds (e.g., Bond Life Science Center)
- Federal grants (e.g., Interdisciplinary Plant Group)

- Federal earmarks (e.g., FAPRI)
- Large private gifts for capital construction (e.g., Reynolds Journalism Institute facility)
- Fee for service (e.g., Student Health Services, clinical services)
- Tuition (e.g., Master of Public Health (MPH) program)
- Student fees (e.g., Rec Center, Student Housing, study abroad programs)
- MU GO funds (e.g., seeding Dalton Center activities led to productive research engine)
- Recurring gifts for operations (e.g., Thompson Center, Reynolds Journalism Institute)
- Endowments for recurrent funding (e.g., scholarship programs)
- Mission Enhancement (e.g., Food for the 21st Century)
- Accumulated balances in colleges/departments/other units (e.g., RADIL facility)

These examples of funding and long-term projects are only suggestive—to illustrate the wide variety of different kinds of long-term undertakings that could be seeded by grants for initial design, foundational research, network building, and other essential foundational elements.

Also consider that a seed grant could be built around an idea that has the potential for high impact, but that may be too novel, span too diverse a range of disciplines, or be at a stage too early to fare well in the traditional peer review process. Awardees will have the intellectual freedom to pursue their ideas and follow them in expected or even unexpected directions.

The complete RFP, along with resources for developing proposals and other information, is available at <u>MizzouAdvantage.missouri.edu</u>. Mizzou Advantage facilitators are also available for consultation as proposals are developed:

- Food for the Future–Jo Britt-Rankin (britt-rankinj@missouri.edu)
- Media of the Future–Charles Davis (daviscn@missouri.edu)
- One Health, One Medicine—Carolyn Henry (henryc@missouri.edu)
- Sustainable Energy–Cerry Klein (kleinc@missouri.edu)
- Disruptive and Transformational Technologies—Carsten Strathausen (strathausenc@missouri.edu)

The facilitators can assist in identifying resources, both on and off campus, to increase the breadth and quality of proposals. Mizzou Advantage Education Coordinator LuAnne Roth (rothl@missouri.edu) is available for consultation as well.