

Recommendations for George Mason University Sustainability Institute

from

Faculty Charrette

November 30, 2018

On November 30, 2018, seventy-two George Mason University (Mason) faculty members and academic and research leaders gathered for a day-long charrette at the Potomac Science Center to provide advice on the mission, vision, and research agenda of Mason's soon to be launched sustainability institute. Like the two other institutes identified in Mason's 2014-2024 strategic plan, the sustainability institute will catalyze research of consequence in the sustainability and resilience space. The frame for the institute will encompass natural sciences, social sciences and the humanities faculty in order to realize inter- and trans-disciplinary solutions to complex and challenging problems. This document details the thoughts that emerged from the charrette.

Drawing inspiration from internationally developed sustainable development documents including the *United Nations Sustainable Development Goals* and the *Future Earth Research Agenda*, the faculty community who are part of the institute will frame the research mission broadly to include sustainability and resilience problems relevant to production, mitigation and adaptation in three domains: campus to region; Virginia to the nation; and global.

The institute's mission will reflect three main thrusts: connecting research and scholarship to action, partnering with communities and stakeholders, and engaging actively in policy arenas. The institute will be intentionally inclusive and egalitarian, recognizing the potential contributions of all disciplines with scholars enjoying equal power, status, and eligibility to participate in order to catalyze creative and innovative connections and opportunities.

The institute faculty will **connect research and scholarship to action** by collaborating and coordinating with universities, NGOs, government agencies and communities, employing leading research findings, to advance practical applications. The institute will be highly translationally focused with considerations about ultimate end use central to the development of the research and scholarship agenda. Student scholars will benefit from experiential learning opportunities with partner organizations.

The institute faculty will **engage deeply with communities and stakeholders under stress** to understand the most pressing issues and their root causes in order to identify impactful solutions. The institute faculty will be highly engaged with communities of practice, on Mason's campus, in the region, as well as globally, to ensure a deep understanding of operational considerations that enable or constrain the development and adoption of sustainable solutions. The institute faculty will provide expert analysis of the interconnectedness of systems and nexus issues causing stress. Rather than focus on any particular issue (e.g. food deserts, sprawl, flooding) the institute scholars will work with communities to identify their problems, as well as to support their engagement in the design and implementation of solutions. The institute will focus not only on the natural systems but also the socio-economic-legal systems that enhance or detract from community resilience so that holistic solutions may be brought to bear. The institute faculty will encourage participation of diverse stakeholders with diverse viewpoints to gain a full understanding of problems and perspectives.

In addition to deep engagement with communities, the institute faculty will **engage the policy process** in novel ways leveraging our strengths in policy, law and the access and proximity to policymakers. The institute will foster a reputation as a place where civil discourse and dialogue can lead to solutions. The institute faculty will build close connections with government agencies, the private sector, and NGOs, serving as an honest broker of ideas, a convener, and a source for consensus building (through conflict resolution, creative works, and expertise in communication).

In addition, the institute faculty and students will engage deeply with the campus sustainability program. One specific project recommended in the first domain (campus to region) is that President Cabrera: 1) re-affirm Mason's commitment to achieving net zero emissions by 2050; 2) identify shorter term campus sustainability goals; and 3) charge the Campus Sustainability Director with developing a roadmap to accomplish these goals. The institute will serve as the portal into Mason for sustainability and resilience research, scholarship, and engagement. The institute will convene regularly, share opportunities, recognize our faculty and student scholars, and serve as a curator of information about sustainability and resilience, as well as a hub for Mason's research and practice community. This will require an integrative effort to link the campus sustainability program with teaching and curriculum development.

In order to have a thriving institute Mason must dedicate resources to this endeavor. The institute should provide internal project seed funding, travel support, support for convening and conferences, and administrative support (staff focused on communication, grant support, meeting support, cultivating external relationships) to reduce faculty's "time cost" for doing transdisciplinary translational work, as well as team teaching. The institute should also hold regular meetings, events, and other fora to connect institute faculty and students and build community.

The charrette participants expressed appreciation for the presence of \$500,000 to support the start-up of the institute, but they also expressed concern that it would really need a larger start-up package, and collectively affirmed a request to double this budget to \$1m. Further, there was widespread concern that the existing budget model at Mason will not support the transdisciplinary work, as it silos schools, and disincentivizes collaboration which might require team teaching, joint faculty hires, etc. Charette participants requested Mason leadership to address the problems for collaboration posed by the existing budgetary model.

Additionally, the faculty recommend a collaborative governance structure including transparency in the process for selection of projects to be supported by the institute. In the short term, the faculty recommend that the institute develop a governance structure and issue an RFP for four to six interdisciplinary projects, which would be selected in 2019 for internal funding. The faculty recommend that this call for proposals focuses on a theme within the institute so that focused work can begin within one thematic area. This would serve to build enthusiasm about the institute, foster collaboration between institute members, engage students in inter- and trans- disciplinary research, and heighten visibility across and beyond the campus, including to state, federal and foundation funding agencies. These projects should be

community focused and leverage existing connections through the university, Mason Small Business Development Programs, and the Commonwealth network of universities. Outcomes should be shared with legislators (municipal, state and federal) and other decision makers whose constituencies are engaged in the projects. The institute faculty should also explore mechanisms to enable faculty to work effectively across colleges and respond in a timely manner to the needs of stakeholders.

Longer term, the faculty recommend that the institute community seeks significant internal and external financial support for projects, since deep engagement is costly but necessary to solve these complex, “wicked” problems, via inter and trans-disciplinary collaborations. Additionally, the university should consider cluster hires across colleges focused on sustainability and resilience. The institute faculty should evaluate all potential curricular connections and leverage the scholarship and connections of the institute to enhance the student experience. The institute should develop a visiting scholars program in which external scholars spend time embedded within the institute at Mason with reciprocity for Mason scholars to embed at other institutions. The institute should also develop an internship and externship program in which promising students spend time with partner organizations and partner organizations send promising students to Mason for deep engagement and cross-fertilization of ideas.

In summary, the charrette attendees were very enthusiastic about the creation of a sustainability institute at Mason, and look forward to the development of collaborative research and practice, towards addressing complex problems with, rather than for, stakeholders.