15 July 2015

National Science Foundation CAREER Program 4201 Wilson Boulevard Arlington, VA 22230

Dear Program Representative:

On behalf of the Department of Environmental Conservation at the University of Massachusetts Amherst, I am very pleased to support Dr. Benita Franklin's application for the National Science Foundation CAREER Award. Dr. Franklin has proposed a comprehensive and innovative CAREER plan that will strengthen multidisciplinary collaboration while integrating research and educational activities that promote environmental conservation and sustainability.

Dr. Franklin is working in an exciting research area at the intersections of civil and environmental engineering, urban planning, public policy, landscape ecology, urban forestry, and architecture. Her ability to combine these separate fields of scholarship and to create strong collaborative relationships to further her research mission is a testament to Dr. Franklin's capacity to build and lead multi-disciplinary research teams. The work she is proposing will integrate computational methods, policy and planning theory, and numerical analysis to produce results that will be critical to addressing sustainable policies for urban areas around the world. Her focus on analyzing the environmental impacts of urban development will help to create more sustainably designed urban environments around the world, which is critical towards mitigating the most pressing problem of this century: climate change. I am particularly impressed by Dr. Franklin's focus on facilitating local sustainability planning efforts in our own local communities in the Pioneer Valley of western Massachusetts. She has already developed partnership agreements among the town planners in Amherst, MA as well as members of the Pioneer Valley Planning Commission and the Franklin County Planning Board. Her academic partners span several different departments, from Transportation Engineering to Urban Planning to Campus Planning. She plans to bring together academic researchers, planners and planning commissions through an Advisory Board that will help her to achieve her research goals, support outreach and dissemination of her work, and to systematically create a trajectory between her research and the development of urban sustainability policies. This will ensure that the methods and framework she will develop have a real and powerful impact to transform the way urban planners and policymakers evaluate, predict, and design climate responsive strategies and programs that can achieve tangible and measurable targets. Not only does Dr. Franklin have a vested interest in her own communities, she is also seeking ways to enlarge her research impact by collaborating with colleagues from the National Center for Smart Growth at the University of Maryland. Her collaborators there will provide her with access to larger towns and urban centers against which she can test her proposed tool, gain greater visibility for her research, and make a larger impact on urban sustainability planning processes.

Not only has Dr. Franklin amassed a remarkable body of work that showcases the scope and potential for truly interdisciplinary research, her educational and outreach efforts at this department, in our college, and across the University have also brought her great attention and

visibility. She has been nominated three times for the Distinguished Teaching award, which is the only student-recognized teaching award at the University. She is an extremely capable and dedicated teacher working on innovative teaching methods and materials to broadly engage college students on the science of sustainable urban development. This year she focused on developing Team-Based Learning projects in order to improve her teaching strategies, despite already having very high evaluations in her courses. Dr. Franklin attended a four day workshop that provided her with the tools and strategies as a Team-Based Learning (TBL) Certified Instructor. She also attended a Faculty Bootcamp sponsored by her professional organization to develop TBL strategies that are relevant to her discipline. Clearly, she is truly dedicated towards improving the educational experience for students, and has continually designed or improved workshops, field trips, and team-based projects in her courses to engage her students. Her interest in developing a new course on urban sustainability for undergraduate students aligns with our department's mission to create a new interdisciplinary Sustainability Science track that will expose our students to the breadth of research and learning opportunities that underpin Environmental Conservation. Dr. Franklin also has a very dedicated cohort of graduate students from Architecture, Urban Planning, Civil Engineering, and Building Systems whom she teaches and mentors. She provides them with a compass for how to move progressively through their theses and to become self-starters in achieving their research goals.

In her work with Girls, Inc. of Holyoke and the College of Natural Sciences, Dr. Franklin has planted the seeds for long-term mentoring and educational experiences for minority girls from disadvantaged communities in Holyoke, MA. Her vision for broadening the impact of her own project now encompasses over 60 workshops and has expanded into a program the whole college profits from. She is and has continued to act as the leading organizer for the Eureka! program on campus and has seen to it that the program has grown into the incredible success that it is.

I have read and I endorse this career-development plan. I attest that Dr. Franklin's careerdevelopment plan is supported by and integrated into the educational and research goals of the Department and University of Massachusetts Amherst. I personally commit the Department to the support and professional development of Dr. Franklin. I verify that Dr. Franklin is eligible for the CAREER award; as of the date of this letter, Dr. Franklin holds a doctoral degree in Architecture, is untenured, has previously submitted two CAREER proposals (but was not awarded), and is employed in a tenure-track position at the University of Massachusetts Amherst.

Sincerely,

Abraham Lincoln Professor and Department Head