

AGNR

FIVE STRATEGIC INITIATIVES

Optimize Urban Environments Through Design, Green Technology, and Community Engagement



- Define and improve the process and perception of urban/rural interface.
- Build capacity to develop and adapt sustainable communities.
- Encourage adoption of green technology by disseminating their benefits.

BACKGROUND: WHERE WE ARE NOW

One challenge for the AGNR Strategic Initiative team charged with optimizing urban environments is the complexity of urban and urbanized communities in Maryland. According to the U.S. Census Bureau, urban areas are classified as areas of 50K people or greater, with “urban clusters” having between 2,500 and 50K. Nationwide, there are 486 urbanized areas and 3,087 urban clusters and according to the 2010 census, these areas account for more than 80% of the US population (USCB, 2012). These population numbers are expected to increase for the new 2020 census, but growth increase has slowed from 2.4% to 1% annually since 1960 (World Bank, 2018). Within urban environments, population increase, food insecurity, environmental stressors including violence and poor environmental quality, to name a few, can have negative impacts on the quality of life. Although the traditional assumption in the U.S. is that urban areas are characterized by agricultural consumption rather than production, in many urbanized areas, demographic and social changes are driving a shift towards a more heterogeneous global model. This change is evident in Maryland, where a majority of the population lives in or close to urbanized environments.

OUR AREAS OF FOCUS

Our initiative addresses multiple issues associated with urban zones and the urban/rural interface. The ultimate strategic goal is to frame the College of Agriculture and Natural Resources and the University of Maryland as a leader and first-rank resource for information about and solutions to environmental and social urban sustainability problems. These include, but are not limited to creation and improvement of healthy and healthful environments, urban resilience in conditions of climate change, social justice, impacts of built environments on community health, maintenance of human dignity, equitable access to nutritious food, and access to formal / informal agricultural and environmental design education.



Urban Environments Co-Chairs

Angus Murphy

Chair, Professor, Department of Plant Science

Andrew Ristvey

Extension Specialist, Senior Agent, UME,
Wye Research and Education Center

Urban Environments Team Members

Gary Seibel

Research Engineer, Department of
Environmental Science and Technology

Cassandra M Mendez

Business Manager, ENGR-Electrical
& Computer Engineering

Erin Mellenthin

Agent Associate, UME, Baltimore County

Kelsey Brooks

Agent Associate, UME, Baltimore County

Nia Imani Fields

Principal Agent, Maryland 4-H Center

Jack Sullivan

Associate Professor, Department of Plant
Science and Landscape Architecture

Manami Brown

Senior Agent, City Extension Director, UME,
Baltimore City

Trish Moore

IT Support Assistant, UME, Baltimore County

Ginny Rosenkranz

Principle Agent Associate, Wicomico County

Meredith Brooke Epstein

Lecturer, Institute of Applied Agriculture

Victoria Chanse

Associate Prof, Department of Plant Science
and Landscape Architecture

Dennis Nola

Instructor, Department of Plant Science
and Landscape Architecture

Stephanie Lansing

Associate Professor, Department of
Environmental Science & Technology

David Myers

Associate Professor, Department of Plant
Science and Landscape Architecture

GOALS FOR THE FUTURE

We have already launched a college-wide survey aimed at identifying the multidisciplinary research, teaching and outreach programs including non-faculty research and work related to our strategic initiative. From that survey, we will develop a database. Further out, we can link programs (research, academic and Extension) between disciplines. We are looking forward to coordinating the Global Challenges interdisciplinary conference on Optimizing Urban Environments Through Design, Green Technology and Community Engagement. Eventually we can coordinate coherent interdisciplinary, inter-agency, and inter-community programs involving AGNR (Academic Departments and the four UME programs of Agriculture, Natural Resources, 4-H, and Family Consumer Sciences) and other colleges or schools that are addressing urban-social, economic and environmental problems.

TAKING ACTION

Our near-term goals will be accomplished in 2019 by:

1. Participation and tracking of participation in regional, national, and international conferences by UMD personnel in this subject area.
2. Organization of Ferdows Foundation / UMD Green Infrastructure retreat funded by the Ferdows Foundation in May 2019.
3. Organization of an additional initial interdisciplinary symposium for those identified in surveys implemented by the team and focused on topics identified in the Ferdows retreat process. This symposium will initiate the coordination of the multidisciplinary programs into a larger interdisciplinary framework.
4. Create a series of videos highlighting the various projects being undertaken by team members to inform stakeholders of the University of Maryland's College of Agriculture and Natural Resources' involvement towards our strategic mission. A template is being designed by the group to be used by subsequent participants. Some funding will come from the Strategic Initiative. Other funding is expected to come from partnering entities. The Team places a high priority on transitioning from AGNR-Initiative compliance-based funding to partner-based funding to promote innovation.

