Improve Human, Animal, and Environmental Health

- Improve animal and human health by reducing disease transmission between animals and humans.
- Advance community health in a changing world.
- Reduce chronic diseases in animals and humans.
- Analyze environmental, agricultural, and health policy and inform decision makers.
- Promote and support healthy and livable communities through education of all ages.

BACKGROUND: WHERE WE ARE NOW

Given the inextricable linkages among human, animal, and environmental health (One Health), understanding and addressing these complex challenges will require innovative thinking and multidisciplinary approaches. The University of Maryland (UMD), with the leadership of College of Agriculture and Natural Resources (AGNR), is well-positioned to become a global leader in several areas related to human, animal, and environmental health. Maryland provides a unique living ecosystem for the study of human-animal-environmental interactions with an abundance of rural and urban interfaces, a diverse animal industry, an international air and seaport, and proximity to the Chesapeake Bay.

OUR AREAS OF FOCUS

Based on existing strengths across the college and the importance of the problem to the citizens of Maryland, the U.S., and beyond, the team has devised an implementation plan that focuses on three areas:

1. Disease transmission between animals, humans, and environment
2. Dual-purpose, dual-benefit animal models of chronic disease for humans
3. Healthy communities

ACCOMPLISHMENTS

In 2018, we hosted a networking event with keynote speaker Dr. Adele Turzillo, Division Director of Animal Systems, United States Department of Agriculture National Institute of Food and Agriculture (USDA-NIFA). This event, with over fifty attendees, gave individuals the opportunity to network and form new collaborations centered around our initiative. In 2019, we launched a Seed Grant Program to stimulate trans-disciplinary research, Extension, and teaching to address challenges affecting human, animal, and environmental health.
**ACTIONS FOR 2020**

To encourage formation and/or strengthening of interdisciplinary teams, we will fund three or four proposals from our Seed Grant Competition. We will continue to foster interactions among scientists, economists, and Extension faculty to translate cutting-edge research into solutions for healthier communities. We hope to create UMD Extension workshops to educate stakeholders on the importance and indicators of improving human, animal, and environmental health. Workshops will be developed to focus on this initiative. We plan to evaluate existing courses to ensure comprehensive coverage of basic initiative concepts as well as contemporary issues, including the effects of climate change on the environment (sea level rise, drought, flooding) and integrated strategies to mitigate these effects. **AGNR’s 2020 Cornerstone Event** will be held in the fall and will focus on improving human, animal, and environmental health.