

Name: Hilarie Uwamahoro

Degree: Ph.D. Student

**Discipline:** Integrative Biosciences

**Institution:** Tuskegee University, Alabama.

Internship Project: Biogas production, cover crops, as well as carbon decomposition on

vegetable and organic amended soils

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**Bio:** Hilarie Uwamahoro is a Rwandan scientist and doctoral researcher with a multidisciplinary background in biochemistry, environmental science, and agricultural science. She is currently pursuing a Ph.D. in Integrative Biosciences at Tuskegee University in Alabama, where her research focuses on the development of natural and designed cyclic peptides as potential broad-spectrum antiviral compounds.

Hilarie holds a master's degree in environmental science from Tuskegee University and a bachelor's degree in Agricultural Sciences from EARTH University in Costa Rica. Her scientific career includes significant contributions to biochemistry, plant and soil science, and renewable energy. She has five publications available on Google Scholar on antiviral compounds, antibacterial phytochemicals, organic residue decomposition, bio-methane production, and water purification. Hilarie has presented her work at international conferences and events across the U.S., Rwanda, and Costa Rica.

Beyond research, Hilarie is passionate about science education and community development. She has served as a teaching assistant in organic chemistry and has led science fairs and youth engagement programs. She is also the co-founder and finance manager of the Rwanda Youth Initiative for Agricultural Transformation (RYIAT), which promotes sustainable agricultural education in Rwanda.

Hilarie's work has been recognized through several fellowships and awards from the American Chemical Society, the USAID Science for Development Institute, the Mastercard Foundation,

Tuskegee University, and EARTH University. Fluent in English, Spanish, and Kinyarwanda, she exemplifies global scientific collaboration and leadership. Her interdisciplinary approach continues to bridge science, sustainability, and community impact in various regions.