

Empowering Future Scientists: My Journey in Creating a Tech Hub from High School to University

Presenting Author: Valbona Aliko

University of Tirana, Faculty of Natural Sciences, Department of Biology, Boulevard "Zogu I" 25/1, Tirana, Albania

Nanotoxicology Research Group, NanoAlb, Albanian Academy of Sciences, Tirana, Albania

Contact: valbona.aliko@fshn.edu.al

Abstract

This presentation shares my journey in creating a Tech Hub that bridges the gap between high school and university education, aiming to empower the next generation of scientists. By fostering a collaborative environment, the Tech Hub provides students with access to state-of-the-art tools and opportunities to explore the intersection of technology and biology. A key component of this initiative is the "One Day as Scientists" program, where we open our lab to high school students, allowing them to experience hands-on research alongside university scientists. This immersive experience has been instrumental in sparking students' interest in science, enhancing their understanding of experimental processes, and helping them envision a future in scientific research. I will discuss the challenges faced in establishing this platform, including curriculum integration and inspiring student engagement, as well as the successes we've achieved in encouraging curiosity-driven research. This initiative is designed to cultivate critical thinking, innovation, and interdisciplinary collaboration among young minds, preparing them for future scientific challenges.

Keywords: Science education, Tech Hub, High school outreach, University collaboration, Critical thinking, Interdisciplinary research.