

Integration Of Structural Science to Broaden the Participation Of Diverse Learners In STEM

Dr. Oluwatoyin A Asojo¹

¹Hampton University

oluwatoyin.asojo@hamptonu.edu

The Asojo laboratory investigates the chemistry of life processes, including deciphering the underlying mechanisms and structural basis of immune and suppression evasion by parasites, infectious agents, or host cells in cancer or reproduction as a preamble for the rational design of vaccines and therapeutics. Over the past two decades, we have used protein crystallography research to engage diverse students in chemistry and biochemistry. We will share approaches for incorporating structural biology into the formal curriculum at Hampton University, a predominantly undergraduate institution and historically black college and university (1). We will discuss the successes and failures in fully integrating pre-baccalaureate students in crystallography research as authors of peer-reviewed manuscripts (2-8). We will also discuss the transformative effect of crystallography on our students and department.

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Keywords: STEM education, crystallography, scientific identity