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Imagine a universe with 85% down quarks: Mentoring for inclusive excellence in nuclear science. SHERRY J. YENNELLO, Texas A&M University

If nature created six down quarks for every up quark the world might be a bit more strange. The US population is made up of over 50% women. Hispanic Americans and African Americans make up over 30% of the US population. The processes by which we foster curiosity, educate our youth, encourage people into science, recruit and retain people into physics and welcome them as members of our nuclear physics community results in a much different demographic in the membership of the DNP. Enabling the development of an identity as a scientist or nuclear scientist is a crucial part of mentoring young people to successful careers in nuclear science. Research experiences for students can play a critical role in that identity development. Since 2004, over 170 students have explored nuclear science through the Research Experiences for Undergraduates program Texas A&M University Cyclotron Institute.