Triggering Epicenters in Geoscience: Fostering the Next Generation of Seismologists

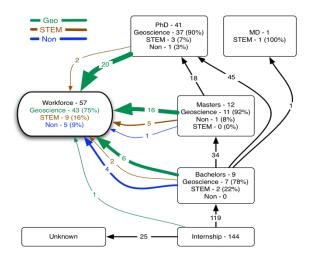
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Undergraduate research experiences in science are often associated with many benefits, including improvements in scientific thinking, gains in personal growth, and confirmation of career plans. Specifically, in the geosciences, undergraduate research experiences and internships may provide an opportunity to attract students from other STEM disciplines and support students from diverse backgrounds into the geosciences. While there are several well-established internship programs in the geosciences, few studies have focused on the longitudinal outcomes of those experiences and the reasons for successful programs.

As the IRIS internship program celebrates its 20th year, we look back to see how the program has grown, impacted students, and influenced our seismology community. Each year the summer program hosts ~15 students that experience a 1-week immersive orientation, 8-10 weeks of research guided by a science mentor, and a final presentation at the AGU Fall Meeting. We will present multiple years of quantitative and qualitative data highlighting pre and post internship experiences, along with information on the academic and career paths of intern alumni. This collaborative study, between IRIS EPO staff and the Geoscience Education Research (GER) community, explores the relationship among participants' paths with factors such as self-efficacy, intern group dynamic, and sense of belonging within the geosciences. Additionally, based on IRIS Internship Program success, we will discuss how the seismology community can apply program components at their own institutions and furthermore, participate in GER to strengthen both communities.



In Socorro, New Mexico, the 2017 IRIS interns install a seismometer with PASSCAL staff scientists.



Academic and career pathways of IRIS intern alumni, from 1998-2011.