

INTERDISCIPLINARY EDUCATION IN ASTROBIOLOGY. A. U. Aydinoglu¹, ¹Research Center for Science and Technology Policies, Middle East Technical University, arsevu@gmail.com .

Introduction: Astrobiology is a grand challenge that requires significant levels of collaboration and interdisciplinary cooperation [1], [2], [3], [4], [5]. Interdisciplinary research requires scholars who are trained accordingly [6], [7]. “Training the next generation of astrobiology researchers” so that they can operate in an interdisciplinary and collaborative fashion is indeed one of the mission statements of the NASA Astrobiology Institute (NAI) [8]. This study investigates interdisciplinary education in astrobiology, barriers and facilitators the astrobiology students and the professors experience, and NAI’s support to early career people.

Methods: One hundred and fifty NAI researchers at all levels (from graduate students to principal investigators) were interviewed in their own institutions, labs, and offices about interdisciplinary education and research, the role of mentoring, and job prospects. The interviews were verbatim transcribed and analyzed by QDA software.

Results: A survey of NAI researchers revealed a young community. Out of 550 researchers, half of them received their Ph.D.s after 2000. Moreover, there is an additional 200 graduate students, which makes a young research network. Astrobiology community is a young community that is receptive to training. The main barriers for interdisciplinary research careers were identified as job prospects, too many things to learn about, different terminology in different domains, and communication barriers by the interviewees. On the other hand, increased exposure to other domains through field trips, summer & winter schools, visiting other labs, attending AbGradCon & AbSciCon helped students and postdoctoral researchers to overcome some of the barriers. NAI’s support has been instrumental in the process. In addition, the astrobiology Ph.D. program that is being offered at the University of Washington that was initiated through NSF IGERT grant has been critical to the community. Students in the program have been trained in interdisciplinary presentation and writing skills and spend a semester outside their immediate field. The graduates of the program have been spreading the best practice so far.

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