THE ROLE OF METI IN CONTEMPORARY PUBLIC AND LIBERAL ARTS EDUCATION.  W. L. Alba, Carnegie Mellon University (Mellon College of Science, 5000 Forbes Ave, Pittsburgh PA 15213. alba@cmu.edu).

Introduction: The portrayals in popular media of human encounters with alien beings have an enormous impact on general perceptions of astrobiology and exoplanet astronomy.
Concurrently, scholars have been considering how to construct messages for extraterrestrial intelligence (METI).
This presentation describes how METI courses and presentations in schools, colleges, and other public venues can provide an important counterpoint to popular media, as a bridge to educate citizens on scientific and social issues with long time scales.
Background: Coinciding with Sputnik [1] and peaking in the 1970s, METI captured scholarly and public interest. Some proposals remained hypothetical [2], while others such as the Arecibo Message [3] and Voyager Record [4] were broadcast or launched.
Serious scientific discourse accompanied these early METI projects. In 1961, the National Academy of Sciences convened scientists at Green Bank to discuss interstellar communication; in 1971, the first international conference on contact with extraterrestrials took place in Armenia, with its proceedings published two years later [5]. Astronomers, biologists, and other scientists were actively engaged in how we would construct METI.
Scholarly [6] and philanthropic interest in METI is undergoing a resurgence since the discovery of exoplanets with Earth-like characteristics, including around our nearest stellar neighbor [7]. This presents an opportunity for educators to re-engage the general public on the history and current prospects of communicating with potential extraterrestrial intelligence.

Work:
METI courses. The focus of the presentation will be semester-long METI courses taught at Bard High School Early College (2004) and at Carnegie Mellon University (2009-2013). I will describe the development and delivery of these courses, including where these interdisciplinary courses were housed; the challenges of developing a syllabus, list of canonical texts and case studies; and evaluation rubrics; and examples of innovative pedagogical exercises.
Public forums. In addition, I will describe the role of METI to engage the public at family-oriented science outreach events, observatory lectures, and artists' conferences.
Outcomes: METI education enables the public to engage in several ways. First, the interdisciplinary nature of METI embraces diverse academic disciplines, including economics, mathematics, history, linguistics, psychology, astronomy, biology, materials science, literature, and politics. This emphasizes a need for multiple voices and perspectives, and encourages citizens to take global, multigenerational views, not limited to this singular METI issue.
Second, the study of past METI attempts unintentionally reveals assumptions of previous message composers. This holds a mirror to ourselves, inviting us to question what assumptions we might hold about our own views of the contemporary world.
Third, the act of communicating to an unknown recipient who cannot respond is an encouragement to all of us to exercise the act of communication thoughtfully and with great attention to the form and content of our messages.