THE ASTROBIOLOGY PROJECT: A SCIENTIFIC AND ARTISTIC SYNTHESIS OF HUMANKIND'S MOST PROFOUND QUESTIONS. S.L. Potter-McIntyre[1] and R. Conger[2], [1]Southern Illinois Unviersity, Geology Department, Parkinson Lab, Mailcode 4324, Carbondale, IL 62901, pottermcintyre@siu.edu, [2]Southeast Missouri State University, Department of Music, One University Plaza, MS 7800, Cape Girardeau, Missouri 63701, rconger@semo.edu.

Introduction: Astrobiology is a branch of science that attempts to answer some of humankind's most provacative questions and this contemplative philosophical context makes it an ideal subject for public science education. "The Astrobiology Project: A Scientific and Artistic Synthesis of Humankind's Most Profound Questions" will incorporate a science lecture and visual media with live music and dance performance to reach the public on both intellectual and emotional levels. This presentation aims to demontrate the importance of science by using varied media of artistic expression to foster curiosity about our very existence. The audience will be engaged in a tapestry of commincation modes with the goal of educating them about the importance of science in general and of planetary science, astrobiology and environmental research in particular.

What is "The Astrobiology Project"?: The Astrobiology Project will explain astrobiology and express the attempt to answer some of humankind's most profound questions by both scientists and artists: What is Life? Where did we come from? Are we alone? What is the future of humankind? It is our expectation that this project will reach a broad audience and will encourage the public to realize the interconnectivity of science with their everyday lives by synthesizing scientific and artistic expression to convey the wonder of our natural world.

For as long as we have had the ability, humankind has attempted to answer profound existential questions. Naturally, we do this using all of our tools – art, science, philosophy – and we intuitively synthesize the information on emotional and intellectual levels. This performance project will engage the audience on multiple levels of cognition with the expectation of connecting the public in a visceral way to the value and relativity of science.

Rationale: Many challenges exist when communicating science to the public including: 1. Reaching a broad enough audience, 2. Communicating the importance of the subject clearly, and 3. Captivating and holding the attention of a public audience while communicating fairly esoteric information. Public science education is an important job for any scientist, but it is often overlooked for a variety of reasons including: 1. Lack of incentive in the drive for tenure and promotion, 2. Fear of being misunderstood and misrepresented by the public, and 3. A simple ignorance of how to do it effectively [1, 3]. Additionally, studies suggest that scientists overestimate the ability of the public to pay attention during complex presentations of science resulting in miscommunication [3] These findings help to explain the misconception of science as inaccessible, incomprehensible, and irrelevant; people may intellectually understand science, but they feel disconnected to its significance in their everyday lives [4].

Astrobiology and Art – the Perfect Collaboration: Astrobiology is the study of the origin, evolution, distribution, and future of life in the universe. It, by definition, is a cooperative undertaking incorporating astronomy, biology, and geology. Using artistic expression as a means to teach science is shown to be an effective methodology foe developing adaptability, complex communication, and systems thinking among other skills [5]. Studies of hominid evolution suggest that as soon as our early ancestors could sing, they did [6]. As a species, we are geared to understanding and learning via a blending of communication techniques using language, visual art, and song. This project will incorporate a fusion of science and art to communicate astrobiology and the relevance of science to a broad section of the public and engage the audience to consider these profound philosophical questions expressed through a synthesis of scientific and artistic expression

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