## Astrobiology News March 2024: Community, Convergence, and Creative Interaction

Since I first started writing Astrobiology News columns for the Clergy Letter Project in April 2013,¹ shortly after the publication of *Visions and Voyages for Planetary Science in the Decade 2013-2022*,² I've stressed how the multidisciplinary nature of astrobiology requires collaboration across diverse fields of expertise. The National Academies of Sciences, Engineering, and Medicine (NASEM) recently published a new report, *Origins, Worlds, and Life: A Decadal Strategy for Planetary Science and Astrobiology 2023-2032*,³ which bears witness to this multidisciplinary nature through its inclusion of a 19-member steering group and 78 experts organized into six topical panels. For the first time in a planetary science decadal survey, the report highlights the importance of diversity, equity, inclusivity, and accessibility in maximizing scientific excellence.

In stark contrast to the stereotypical image of the lone scientific genius, the word 'community' best describes how scientific progress is actually made. In a recent article about astrobiologist Natasha Batalha, Batalha says, "I love being part of a larger community. We're working together to try to solve this question [Does life exist beyond Earth?] that people have been asking for centuries." As a person who identifies as female and LatinX, Batalha did not feel part of a community during her college honors physics classes (something to which I can relate, having been a female physics major at Cornell University many decades ago...). Batalha now works to empower the scientific community by building open-source tools, available to all, that help scientists use data from the JWST to study exoplanet atmospheres.

One outstanding challenge in fostering multidisciplinary research is interdisciplinary communication across fields of study that are often characterized by different 'languages' and methods. The *U.S. National Science Foundation's Growing Convergence Research* program is addressing this challenge by supporting new research collaborations that transcend disciplinary boundaries through novel conceptual frameworks, theories, and methods <sup>5</sup>

Community and convergence inspire creative interaction, a phrase that reminds me of a book to which I contributed several years ago, Interactive World, Interactive God: The Basic Reality of Creative Interaction, 6 which explores the fundamental nature of creative interaction across the sciences and in theological understandings. The Institute on

<sup>&</sup>lt;sup>1</sup>https://www.theclergyletterproject.org/Resources/Astrobiology.html

<sup>&</sup>lt;sup>2</sup>https://nap.nationalacademies.org/catalog/13117/vision-and-voyages-for-planetary-science-in-the-decade-2013-2022

<sup>&</sup>lt;sup>3</sup>https://nap.nationalacademies.org/catalog/26522/origins-worlds-and-life-a-decadal-strategy-for-planetary-science

<sup>&</sup>lt;sup>4</sup>https://www.nasa.gov/general/nasa-astronomer-sees-power-in-community-works-to-build-more/

<sup>5</sup>https://new.nsf.gov/od/oia/ia/growing-convergence-research-nsf

<sup>&</sup>lt;sup>6</sup>https://wipfandstock.com/9781498293884/interactive-world-interactive-god/

Religion in an Age of Science (IRAS) is an organization that "cultivates a community of informed and respectful inquiry at the intersections of science with religion, spirituality and philosophy in service of global, societal and personal well-being." IRAS has framed its 2024 summer conference around AstroAnthropology and AstroEthics, fields inspired by what theologian Ted Peters terms creative mutual interaction, to highlight the reciprocal nature of a conversation between the sciences and humanities raised by the prospects of alien life and human space exploration. IRAS members who can't make the journey to the beautiful location on Star Island can stream conference sessions and chapel talks for free!

Until next month,

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<sup>7</sup>https://www.iras.org/about.html

<sup>8</sup>https://www.worldscientific.com/doi/abs/10.1142/9789813235045\_0002

<sup>9</sup>https://www.iras.org/2024-summer-conference.html