

## InvOW Codes of Conduct

### General Code

This project seeks to nurture a culture at the intersection of Earth-based and Planetary science, where diverse disciplines can build on insights and approaches gained from one another. Effective communications will be critical to the success of this venture, but we should recognize that the level of cross-investigation effort required throughout the team may prove challenging. In small part this may arise because we are separated by space and time zones, requiring that the majority of our communication will be via Zoom rather than in person. But our greater challenge comes from the very fact that our project draws upon such a diverse, talented team: at times, we will all experience, and need to be OK with, feelings of profound ignorance about each others' expertise. It is vitally important, therefore, that we interact in a spirit of listening and learning, collegially; a safe space, where there are no science questions too dumb to ask. Hence, we ask all team members to read and document their agreement to this code of conduct. All team members should also do the same with our [collaboration code of conduct](#) and, where appropriate, our [fieldwork code](#). All three codes are "living documents" subject to revision by ExComm, following discussion of any topics raised by any team member, throughout InvOW's duration.

**Expectations:** To foster an atmosphere that provides equitable voice to all, InvOW leadership expects everybody to engage constructively with others' ideas. To that end, all participants shall participate under the philosophy of equality of opportunity and treatment for all members, regardless of gender, gender identity or expression, race, color, national or ethnic origin, religion or religious belief, age, professional seniority, marital status, sexual orientation, disabilities, veteran status, or any other reason not related to scientific merit. Further, while scientific debate is to be expected and encouraged, any critiques should be focused on the work, and expressed in a professional and respectful manner. Dismissive, belittling, or mocking responses to ideas, in meetings, written communication, or informal discussion, are inconsistent with the InvOW code.

**Unacceptable conduct:** We hope there will never be a need to consider more extreme issues, but any severe misconduct (including harassment, discrimination, threats, intimidation, exclusionary behavior, or any actions that violate professional or legal standards) will be considered unacceptable. Anyone violating our Code of Conduct in this way should expect to be removed from the relevant InvOW activity immediately. Egregious behavior may result in more significant sanctions, in liaison with the University /Institution authorities applicable to the individuals involved, and with NASA Astrobiology Program leadership.

**If you experience or witness instances of harmful interactions** during any InvOW activity:

1. Tell someone you trust, whether within the InvOW team or beyond.
2. Document the incident, to the extent that you are able.
3. Communicate the occurrence (in person or via a trusted representative) to a member of the InvOW Executive Committee (Andy, Susan, Wanying, Brandy, Marc, Melisa) or the InvOW early career representative(s).

All efforts will be made to respect the privacy of individuals involved, while recognizing that some information may need to be shared with appropriate parties, in order to investigate and address concerns effectively.

### The Bottom Line: InvOW's Ethos

InvOW has been designed for us to pursue a research program that is collegial, inclusive and enjoyable – something that it is a pleasure and rewarding to be part of.

So, if **anything** arises among our interactions that makes you feel uncomfortable or detracts from that goal, please don't hesitate to reach out through trusted colleagues for support.

## Research Collaboration, Co-Authorship & Acknowledgements Code

The ethos that guides our InvOW consortium is one that encourages open sharing of ideas and by design the integrated whole of our achievements should be far greater than just the sum of its component parts. It is for this reason that our research program has been structured to integrate contributions from across a cascade of interdisciplinary *Investigations*, *Objectives* and *Tasks*. From the outset, therefore, we can anticipate that the outcomes and results of our InvOW research will reflect that same interconnectedness and complexity in novel and varying ways.

To help navigate that complexity, the guidelines and procedures provided here seek to ensure that work efforts from across our team are represented *fairly and equitably* in all resulting output. While the following guidance was constructed from the perspective of one key metric of research success, *peer-reviewed publications*, the ideal is that it proves broad enough to be generally applicable to all types of InvOW research products, including conference abstracts, research seminars, code development or any other product to be publicly archived in the Astrobiology & Habitable Environments Database. In anticipation that new situations might well arise as InvOW evolves, this should also be considered a *living* document throughout the duration of InvOW.

### a) Advance Notification / Pre-Submission Transparency

- *At their inception*, any plans for development of new research products should be included in InvOW monthly progress reports. This will ensure cross-team transparency and alert team members who wish to participate to communicate their interest (in person or via a mentor) to the lead/senior authors.
  - Lead authors should also circulate draft product / paper abstracts as soon as key results are established, at: [M365invow-OperationalScientificServices@whoiconmicrosoft.com](mailto:M365invow-OperationalScientificServices@whoiconmicrosoft.com)
- This should occur at least 1 month prior to submission to allow the rest of the team opportunity to comment or contribute more thoroughly, without slowing publication.
- Pre-submission materials can be shared on-line in the “*Research Products - In Development*” folder on the InvOW Google Drive, as soon as the core co-authors are ready to proceed.

### b) Authorship Inclusivity

The following is for general guidance but we recognize that exceptions may arise. Ordinarily, a team-member should expect to be *invited*<sup>1,2</sup> to be included as a co-author for any research product for which they have contributed to **two or more** of the criteria listed below<sup>3,4</sup>. By agreeing to be a co-author, team

|                                                                            |                                                                                                 |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Conception / Design of study                                               | Methodology                                                                                     |
| Providing scientific equipment                                             | Acquiring Data                                                                                  |
| Data manipulation & post-processing                                        | Data organization / curation                                                                    |
| Investigation of prior work / literature                                   | Data analysis and visualization                                                                 |
| Modelling in support of data interpretation                                | Writing & use of software code/scripts                                                          |
| Funding acquisition                                                        | Project administration                                                                          |
| Compiling results / generating first draft                                 | Early stage manuscript revisions                                                                |
| Significant work needed to finalize a manuscript / other research product. | Commenting on a manuscript and reviewing / providing input to final version prior to submission |
|                                                                            | .                                                                                               |

members acknowledge their responsibility to assist in preparing the manuscript for submission<sup>5</sup>.

<sup>1</sup> Particular consideration should be given to early career scientists for whom publications are especially important.<sup>2</sup> An important responsibility lies with each invitee to decide whether to accept co-authorship vs. acknowledgement.

<sup>3</sup> For flexibility, a *significant/essential* contribution in just one of these areas can also provide grounds for inclusion.

<sup>4</sup> For reference, the criteria listed here are informed by the recommendations of CRediT (<https://credit.niso.org>)

<sup>5</sup> Inclusion as co-author for any product requires **timely** review and formal sign-off of manuscript prior to submission.

In the case that agreement is not easily resolved, the ExComm will provide a vehicle to discuss options and make recommendations to guide the lead authors' final decisions.

c) Acknowledgements

All products should acknowledge support from NASA Award 80NSSC26K0263

## Fieldwork Code

This document should be read in conjunction with the [InvOW General Code of Conduct](#). The specific expectations for behavior during field work described below are additive to what is already included in that document.

InvOW leadership are committed to creating a field environment that is safe, inclusive, and respectful for all participants. Field settings, because of close living conditions, power dynamics, and physically demanding work, can heighten risks for harmful interactions, including incivility, microaggressions, harassment, and behaviors that undermine others' contributions. All team members are expected to treat one another with professionalism and respect at all times, both during work and in shared spaces. This includes valuing each person's contributions, communicating constructively, respecting boundaries, and avoiding behaviors such as hostility, exclusion, inappropriate comments or advances, or pressure to engage in unsafe or uncomfortable activities. Creating a positive field culture is a shared responsibility and is essential for both team well-being and scientific success.

All participants are expected to actively contribute to a culture of accountability and care. Concerns about safety, well-being, or interpersonal conduct should all be taken seriously. Clear, accessible reporting pathways will be provided (depending on field team structure) and communicated prior to and during fieldwork in addition to the standard reporting structure outlined in the InvOW code of conduct. Team members are encouraged to speak up, support one another, and seek assistance when needed, without fear of retaliation. Field leaders will model inclusive behavior, facilitate open communication (e.g., regular check-ins and debriefs), and ensure that concerns are addressed promptly and respectfully. Together, we aim to foster an environment where all individuals feel supported, respected, and able to fully participate in the field experience.