June 29, 2023

Astropy Project

Background

The Astropy Project seeks to bring some more formalism around its community and community management efforts. They're bringing in a community manager at 50% time with key responsibilities as follows:

- Manage and support the existing Astropy Project Community, in consultation with that community.
- Work to grow the Astropy Project community, and identify opportunities for collaboration by establishing relationships with users, especially from underrepresented communities and institutions.
- Track and report engagement activities of the Astropy Project.
- Run surveys to better understand the needs of our community and how to improve participation in our communities for different stakeholders.
- Coordinate review and updates to the Astropy Code of Conduct, in consultation with the Astropy Coordination Committee.

Organizational Mycology is a consulting organization that works with many open science and open source software communities. Our team members have been in leadership roles within these communities and have helped other organizations build community management, engagement, and governance capacity. We do so with a combination of social science-based introspection and data collection, leadership coaching, and development of sustainable participatory community strategies (i.e., ways for organizations to continue building and evaluating their communities long after we fulfill a contract). These activities are beneficial both for project leaders at a strategic level (e.g., in developing new processes and making administrative decisions) and for community managers at a practical level (e.g., in collecting feedback from the community and fostering healthy community dynamics).

Based on initial conversations with the AstroPy team managing the community hire, we've developed an updated proposal below.

General Overview

We propose to focus the 6-month project on four areas: Community Management Coaching, Engagement Tracking, Community Surveys and Feedback Mechanisms, and Code of Conduct Review. These activities will support AstroPy's goal of having a ½ time community manager who is prepared and well-supported in their new role. In addition, the project will produce qualitative insights via surveys and interviews that will help AstroPy ensure that the community has substantial input to the project's direction going forward while maintaining a welcoming environment.

OrgMycology will work closely with the new community manager across this 6-month project by (1) providing coaching and (2) involving the manager in our efforts to develop strategies for tracking engagement, gathering community feedback, advancing the project's diversity, equity and inclusion (DEI) goals, and developing a revised Code of Conduct. After the 6 months, the community manager will be equipped with skills to carry each of these efforts forward on their own.

Across our three person team, we have the domain-specific (open science and OSS) experience and coaching skills to leave the organization in a strong position to get the most out of the community manager role, both in its current ½ time and future full-time capacity. We have extensive experience running interactive online workshops, designing surveys and interview schedules, and building active, participatory communities. We also understand and appreciate that community managers often become overwhelmed by the complex demands of their roles; all of our services are designed to alleviate this pressure by making it easier to gather and act upon feedback from the project community.

Proposal Outline for Further Discussion

What follows is what we understand from the job description for community manager, what we know about the AstroPy project overall, and our initial discussions with the AstroPy team. We welcome further discussion to focus these activities on acute and expressed needs in the community.

Overview

OrgMycology will work as a team to meet the needs of the Astropy project. One consultant, Jonah Duckles, will be the point-person and the lead coach for AstroPy's new community manager. Other OrgMycology consultants will back-stop and support Jonah to provide greater temporal coverage. They will also manage other major pieces of work, including Community Surveys and Feedback, Engagement Tracking, and the Code of Conduct Review.

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Community management coaching
- Working with the Community Manager to understand the community as it is today.
- Helping the Community Manager become the "voice" of the community, both by gathering feedback in the ways listed in the next sections and in general communication to/from the community.
- Guiding the Community Manager to ask, "How does AstroPy currently invite community participation? How do we want to invite participation?"
  - What are the "on-ramps" for contributing to the community?
  - What are the archetypal roles of people in the community?
  - How are people invited into these roles?
  - How do people grow within these roles?
  - What new roles might enhance the community?
- Coaching the Community Manager in administrative tasks.
  - Supporting design and execution of community events.
  - Coordinating and filling key community-facing roles.
  - Developing structures to provide greater responsiveness in forums, mailing lists, Slack, and anywhere else the community interacts.
  - Bringing together key activities across various channels into blog posts and / or regular community communications.

Engagement Tracking
- Identifying what can potentially be automated in terms of tracking. Examples:
  - PyPI statistics
  - GitHub activity
  - Publication metrics and citations
  - Community involvement / interaction
  - Educational activities
- Developing automated and non-automated ways of tracking social dimensions of the AstroPy project:
  - Gathering metrics on community participation on Slack, GitHub issues, email lists, etc.
  - Envisioning how to assess the health of community interactions (e.g., tone and sentiment analysis)
- In all cases, refining and extending what AstroPy already has in place.

Community Surveys and Feedback Mechanisms (including DEI goals)
- Understanding what AstroPy wants to know about its community, in consultation with project leaders and the new community manager. So far we will work from these two topics of community feedback:

- - Understanding the AstroPy community's DEI goals and where the community is falling short in the current state. Mapping the desire/interest/need for future DEI efforts and strategies for accomplishing these DEI goals.
    - Asking community members and potential members what they need to thrive in the AstroPy community.
- Developing a plan for soliciting these insights using social science methods (e.g. surveys, interviews, focus groups or archival/communication analysis) Our goals are to:
    - Emphasizing sustainable avenues for community members to share feedback.
    - Ensuring that feedback is gathered in ways that make it digestible, reproducible and actionable for the Community Manager.
- Creating two (2) primary feedback mechanisms using some combination of three possible methods: interviews (8 to 10 people interviewed), focus groups (3-4), and/or surveys:
    - Interviews: OrgMycology will create an interview schedule and with the scheduling and recruiting help of AstroPy, will conduct between 8-10 interviews with community members.
    - Focus Groups: OrgMycology will create an interview schedule and with the scheduling and recruiting help of AstroPy, we will conduct 3-4 focus groups with community members.
    - Survey: With the guidance of AstroPy, OrgMycology will create a survey instrument to be shared by AstroPy with their community.
- For the initial deployment of each of the feedback mechanisms, we will produce a descriptive analysis of the data collected either in a short report or online format (blog post).
- Please note that intensive analysis of the qualitative and quantitative data collected is not in the scope of this project and would require additional funding.

Code of Conduct Review / Update
- Examining any existing Code of Conduct violations and how they were handled
    - AstroPy shares documentation related to Code of Conduct violations, de-identified if necessary.
    - AstroPy shares documentation related to violation procedures (e.g., internal handling processes, third-party processes).
    - OrgMycology reviews perceived procedural justice (e.g., satisfaction surveys), if available. OrgMycology consults with the Community Manager about getting additional information from reporters and report subjects (i.e., "do you feel this was handled correctly?")

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- ○ OrgMycology compares AstroPy's processes (both by-the-book and in practice) to best-practices, assesses fit with AstroPy's specific community, and recommends changes.
- Developing strategies for community input on what types of micro-infractions need to be addressed.
  - ○ Options include anonymous surveys via Slack, GitHub Issues or other community input involvement.
  - ○ We are experienced in soliciting confidential, sensitive information from community members.
- Coordinate community members in honing the updated Code of Conduct.
  - ○ OrgMycology acts as a resource for the AstroPy community manager in developing a revised Code of Conduct draft and in getting community feedback on the draft.
  - ○ AstroPy facilitates a session to gather feedback and input on the Code of Conduct; OrgMycology assists in planning this session.
  - ○ AstroPy develops the final version of the Code of Conduct based on all feedback as well as OrgMycology's interpretation of the feedback.

Budget

Budget	$30,000							
					Project Months			
Category		Total	**M1**	**M2**	**M3**	**M4**	**M5**	**M6**
Community		$6,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Engagement Tracking		$4,800	$1,600	$1,600	$1,600			
Community Surveys		$14,400	$3,600	$3,600	$3,600	$3,600		
Code of Conduct Review		$4,800		$1,600	$1,600	$1,600		
	Invoices	$9,000	$4,340	$5,460	$5,460	$4,340	$700	$700
		30% upfront						

Terms

A deposit of 30% of the fee is required to secure the dates and services. This is payable within 7 days of invoice. The balance will be invoiced at the agreed to monthly schedule of work.

Cancellation Policy – 50% of our fees may be incurred for cancellation 10 to 5 working days from the date of a significant portion of work (e.g. facilitated workshop, extended meeting or design session).

100% of our fees may be incurred for cancellation within 5 working days from the date of a significant piece of work.

Any non-refundable expenses such as travel and accommodation that have already been booked will be charged in full.

Travel (if applicable): Passed on at cost. We are also happy for your team to book any travel or accommodation directly. Efforts will be made to share travel expenses with other clients, and to use Zoom/Teams where appropriate.

Risks

One of the most difficult activities in qualitative research is participant recruitment. We will require help from the leadership of AstroPy to frame invitations for participation in surveys and interviews and identify the best platform for sending them (e.g., email, Slack, forums).

Much of the proposed work requires AstroPy representatives to make time available to the consultants. For the effort to be successful, we'll need all

participating parties to prioritize the outlined efforts during the 6-month activity window.

Payment

This contract will run through Whale Bytes Ltd, a NZ Company (8241165) trading as Organizational Mycology NZ.

Pay by wire or ACH to:
Account holder: WHALE BYTES LIMITED
ACH and Wire routing number: 0840095191
Account number: 9600004770793612
Account type: Checking
Bank Address
        30 W. 26th Street, Sixth Floor
        New York NY 10010
        United States

Agreed to By

Start date: August____ , 2023

_____   _____
Jonah M Duckles   Date

_____   _____
AstroPy Representative   Date

References

The following individuals know all of our principal consultants and are familiar with the range of work we've done across open communities.

- Stef Butland - stefaniebutland@gmail.com - former rOpenSci community manager
- Lou Woodley - louwoodley@cscce.org - Director of CSCCE
- Greg Wilson - gvwilson@third-bit.com - Founder of Software Carpentry

Our work

The following shares examples of our experience, skills and expertise at Organizational Mycology.

- Data Science Investment Case – We conducted market research for a data science tool's investment case, where we explored how a variety of data scientists used a CI/CD tool developed by a niche data science consultancy. Their tool was being considered for a venture investment; the OrgMycology team interviewed 10 data science practitioners about how they use and think about CI/CD in their workflows, analyzed their responses, and made recommendations to the investment firm.
- Governance of Open Source Software Projects - We conducted a qualitative study of four open source software projects, interrogating similarities and differences in how these projects incentivize and regulate contributions, build community, and scale the project. We aided in the development of contribution guides, community calls, and review processes.
- Adoption, Resistance, and Adaptation of New Technologies - We routinely conduct academic and applied research that uncovers the factors that shape users' decisions to adopt or resist new technologies in industries that include healthcare (electronic medical records), municipal government (records management systems), international development projects (banking software and educational technologies), and warehousing (AI-enabled robotics). The studies always begin by recording user perceptions pre-adoption, then document their behaviors post-adoption and assess the impacts of these decisions/behaviors on implementation outcomes.
- Landscape Analysis of High-Impact Communities – Working for a computer science nationally funded project in New Zealand, our team conducted research to list impact-driven organizations that this organization may want to emulate as they built a long-term sustainment plan for their work. This involved a global search and creation of a database of high-impact open science communities that enable and empower researchers worldwide.
- Molecular Science Software – Our team worked for several months with a leading NSF funded open molecular science software team to explore past successes, strategize about future possibilities, and lay the foundations for a financially sustainable organization. This work involved weekly facilitated meetings with senior post-doctoral researchers on the team to empower them to co-design the organization they want to see in the future. We also helped them develop some market exploration for an industrial affiliates program, which could be one leg of their sustainability strategies.

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- New Zealand Digital Collective - We helped build a community around working openly on public-sector projects that can benefit society in Aotearoa. This involved early community-formation, strategy development and culture-building work to ask what this community collectively wants to be, to accomplish, and to work on together.
- Indigenous-inspired transformational change - We worked with a transformational change consultancy to strategize and advise on the creation of an engaged and interactive international community around their consulting practices. This work helped to scale the organization up from a one-person consultancy to a broader global movement.
- Industry Research - We designed and conducted multiple collaborative and highly-sensitive internal research projects for a Fortune 100 technology company. The work involved gaining technical expertise, conducting interviews with subject matter experts, creating systems for collaborative data analysis and delivering impactful and visually-engaging final products for consumption by the technology company.
- Mixed-methods Research Coaching - We have coached individuals and research teams with a background in science, technology, engineering and the social impact sector on running mixed-methods research projects. We delivered research assessments, mentored researchers, developed workflows, guided leadership and upskilled teams on methods, analytical skills and client presentations.
- Facilitation - We routinely draw on a toolbox of facilitation skills and approaches to create impactful workshops across a variety of scientific disciplines, small / large projects and organizations.
- Community Formation and Management - One of our consultants is a Founder and Co-Director of a peer support community for people with a PhD. The work included applying for and receiving grants, running workshops and community calls, and conducting community driven open research.
- Diversity, Equity, and Inclusion Research Methods - We taught qualitative research methods within a fellowship for data equity among university data professionals and diversity, equity and inclusion (DEI) professionals.

Our capabilities include:

- Impact / Sustainability / Strategy
  - Program Evaluation with an eye to sustainability
  - Evaluation with an eye to future grant support
  - Design thinking for academic / science teams
  - Community management / formation
  - Strategic thinking
  - Business Model Exploration
- Evidence-based strategy development
  - Focus Group and Interviewing Skills
  - Stakeholder Research
  - Qualitative Coding
  - Qualitative and Quantitative Survey Development and Analysis
  - Persona and Journey Mapping
  - Landscape research and Analysis
  - Group concept mapping
- Coaching to enable and upskill staff on evidence-based methods
- Workshop Facilitation
  - Inclusive workshop creation
  - Leadership retreat design and facilitation
  - In-person / online / hybrid event design and facilitation
  - Cross-disciplinary Groups
  - Futures Exploration Workshops
  - Biomimetic Thinking Sessions
  - Co-creating Codes of Conduct

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Biographies:

Beth M. Duckles, PhD

Beth is a sociologist and research consultant who helps teams design, collect and use human centered data. She has worked in higher education, government, industry, tech, startups and nonprofits to design effective mixed-methods approaches to work on complex research questions and facilitate cross-disciplinary conversations. She has consulted with Nike, Meta/Oculus, Aledade, Openscapes, Hertz Foundation, Third Plateau, Pluto Virtual Reality, Yale, Northwest Commissions on Colleges and Universities, Oregon Health and Sciences University and Code for Science and Society.

She has taught graduate and undergraduate courses at Portland State University, Bucknell University, the University of Arizona and Jesuit Worldwide Learning through Regis University. She was also an AAAS Science and Technology Policy Fellow at the Department of Energy, led the inaugural Bucknell in D.C. program on Energy and the Environment and was a founding member of the Sustainability Working Group.

She is a mentor with Open Life Sciences, a Wrangler for Mozilla Festival's 2022 Sustainability and Climate Change Space and the founder and co-director of Open Post Academics (OPA), an online peer-support community for people with a PhD. Beth received a B.A. in Sociology/Anthropology from Earlham College and a M.A. and Ph.D. in Sociology from the University of Arizona.

Dan Sholler, PhD

Dan Sholler studies why and how organizations and workers adopt, adapt, and resist technologies in their day-to-day operations. His research aims to inform technology governance strategies and develop theories of technological change in the workplace. Dan is currently studying the implementation, management, and labor implications of robotics and AI-led automation in the manufacturing and packing industries. He has also studied technological change in the healthcare industry, in scientific research, in municipal governments, and in international development projects. Across his work, Dan uses a mix of methods, primarily relying on qualitative and ethnographic techniques.

Dan previously worked as a Project Scientist in the University of California, Santa Barbara Technology Management Department and as a Postdoctoral Fellow with the rOpenSci Project at the University of California, Berkeley. He received a Ph.D. from the University of Texas at Austin School of Information and a B.A. from the University of Pennsylvania Department of History & Sociology of Science.

Jonah Duckles, MS

Jonah has acted as an organizational leader in software and information systems at private sector companies, universities, and international non-profit organizations worldwide. He's worked to sustain the international non-profit The Carpentries, acting as the chief executive of Software Carpentry and Director of Membership at the follow-on organization, The Carpentries, an impact-driven global volunteer coordination organization.

He built innovation spaces, innovative computation environments, and a research informatics team that increased extramural funding competitiveness at The University of Oklahoma, participating as Senior Personnel, co-PI, or PI on $36.5-million in funded research in just 5-years. More recently, he has worked inside the hyper-growth software company to help advise and structure how skill development and learning are built into the fabric of a globally operating company.

As a consultant, he advised and facilitated for The Veracity Lab, MolSSI (Molecular Science Software Institute), Digital Aotearoa Collective, FutureBees NZ, and Walk Together Aotearoa on their structures, activities, impact, growth, and approaches to sustainment. Jonah received his MS in Forestry and Natural Resources in 2008, and a B.S. in Physics in 2001, both from Purdue University.