National Aeronautics and Space Administration

Partnerships/Collaborations between Agencies

Thomas Hams
Program Scientist
Astrophysics Division, Science Mission Directorate
Balloon Program, LISA, Portfolio lead PA, LW, FP in APRA, Pioneers Balloons, Deputy PhysCOS
Thomas.Hams@nasa.gov
202-358-5162

PhysCOS 2nd Early Career Workshop, Sept. 24, 2025

Strengthening the Team with Collaborations/Partnerships

PI-led investigations (ROSES: APRA, SAT, Pioneers, etc.) give a great deal of control to the PI and the team in all stages of the project:

- Building the Team,
- Defining the science question to be addressed,
  Development / Implementation,
- Analysis of the results and Publication

Collaborations / Partnerships affect all stages of the investigation's lifecycle and starts with the team building:

- efficient use of resources,
- augment needed team expertise / facilities when needed without replicating the efforts,
- sharing the workload and parallelizing the effort

The above ROSES proposal opportunities are an excellent entire point for first-time PI as well as leadership development opportunities within, e.g., by designating a Science-PI, or being an Institutional-led at a Co-Investigator Organization.

Forms of Collaborations/Partnerships

Multi-Institutional US-based Team that receive NASA funding

PI may work US-based any combination of Research Entities (for example: University, NASA-Center, US Gov Agency Lab (FFRDC), and private Sector).

The private sector has a fast-growing set of offerings and capabilities that PIs should pay attention to.

Historically the commercial sector, for R&A investigations, has been a vendor to provide sub-systems and design services.

More recently the commercial sector is providing also flight opportunities and payload integration.
See https://www.nasa.gov/stmd-flight-opportunities/

For example, since ROSES-2022, SMD has leveled the access for commercial suborbital (Balloons and Sounding Rockets) flight provider with NASA-own suborbital launch capabilities. APD is intentional in being explicit about these new opportunities in future ROSES call.

Recently, providing NASA funding to other Gov agencies and Federally Funded Research and Development Center (FFRDC) via the Interagency Agreement (IAA) process has required significant bandwidth of the SMD IAA team and may take up to a year to initiate and renew. PI are encouraged to reach out to their respective Program Scientist at HQ (either at the solicitation or portfolio level), see ROSES for call point of contact.

Forms of Collaborations/Partnerships

International collaborations to a NASA funded Team

In addition, a ROSES award PI in the US may collaborate Researchers outside of the US*).

The non-US based team members need to have their own funding support.

From NASA perspective since the non-US based team members do not receive funding from NASA they are considered Collaborators and not Co-Investigators (NASA funded) and in most cases the non-US based team members are considered PI partners not NASA partners.

These non-US based collaborators can be named at the proposal stage with their roles and responsibilities.

- collaborators have their funding already secured for the project:
  - their contribution could be assumed as a deliverable in proposal
- Collaborators seek funding in their home country
  - then their contribution is not secured, and the proposal has to offer either a risk mitigation or the offer their contribution as an add-one option to the NASA proposal.

Also, non-US based collaborators could join as PI partners after the PI proposal got selected and offer their contribution as an add-one option to the NASA proposal.

End