

Towards sustainable space science in Sweden

Problem formulation:

Most of the scientific progress is driven by post-docs. Yet post-docs in academia face harsh working conditions, with little to no support from their host institutions, not to mention lower salaries than their equally knowledgeable colleagues. Furthermore, Swedish space science does not seem to have a clear career path for post-docs. This results in a loss of talent and, to put it in most practical terms, waste of human resources, as well as introduces a gender and social standing inequality, where women and parents are particularly reluctant to remain in an unstable work environment without a defined way forward.

Proposed solution:

A national framework that defines career paths of space science post-docs. It should be clear for anyone considering a post-doc position anywhere in Sweden how a tenure track looks like at various institutions, which funding schemes are available at which career stages, at which career stage should one expect opportunities for a permanent position as well as careers alternatives.

Currently, such roadmaps and frameworks are left in hands of research institutions, resulting in a very varied preparedness level among their post-docs and ultimately, a flux of competence out of Sweden. Given that SNSA directly funds most of space research and works closely with the department of education, it is in position to provide guidelines on the research institutions to provide a working environment that is internationally competitive – with a goal of internationally leading.

As part of this framework, funding should be allocated to run a series of annual workshops (from a few days to a week long) on writing grant applications, where to find funding for space research, what to expect from the host institution in terms of support and provisions, the legal framework, salary negotiations. These will be particularly helpful for international post-docs who are not familiar with the Swedish system.

SNSA is well-equipped to provide such information given the connections to ESA and the space industry.

Initial project length: 1-2 years (framework setup, optimization)

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Possible collaborators:

Cecilia Flemström (head of staff, IRF) has started an initiative to investigate gender inequality among researchers at IRF, ideally each institution should have a contact

Investment estimate: 1 500 000 SEK