

Discussion Topic 1 - Career paths: how do RSEs want to be hired, promoted and evaluated?

Members of Group

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Instructions

In your group, consider the topic, aiming to answer the following questions:

- What would you like to see done/changed to address the topic?
- Who needs to be involved to make change happen?
- What are the timescales?
- What is the highest priority?

Record your notes in this Google Document.

To finish the discussion, please suggest the two or three most important things that should be done, and who needs to do them:

1. Change evaluation structures
 - a. What: Need to establish appropriate evaluation criteria, leverage existing examples in academia, spread to more institutions
 - b. Who: RSEs (how do they want to be evaluated), managers (research faculty, senior research staff, etc.), institutions/HR structures, funding stakeholders (NSF, NIH, others; fund effort to define evaluation, change how funded staff are reported/described for NSF projects); professional communities
 - c. few years across community, perhaps shorter (or already done) at certain organizations
2. Develop more appropriate advancement structure
 - a. What: advancement/titling paths with more steps, that reward higher level tech skills, that don't force into people mgmt - project mgmt, instead; look to examples, especially in industry; professional communities
 - b. same as #1; look to industry for example; some pioneering institutions to move forward
 - c. Single institutions: maybe 1-2 years; closer to 5 years to reach across institutions
3. Enhance value for research software and development requirements over longer timescales
 - a. What: fund research software development/maintenance beyond initial development; invest in the 'right' software projects that will have greatest

benefit to community; in doing so, create more long-term opportunities for RSEs, rather than jumping between project every few year: elevate RSEs to partners, rather than temporary (disposable) resources for hire

- b. RSEs and professional communities, MORE/mostly from top-down stakeholders (funding sources, institutions, etc.), less-so from industry
- c. Few years to one decade, but with a long tail of transition across funding entities

What we've noticed: (initial discussion, which coalesced into the above)

(1) In employment history, people who just want to engineer software don't last as long or get promoted as much as people who drive publications - lack of reward system/acknowledgement/value

Evaluated like post-docs, etc., and need new model (need hybrid evaluation of researcher and programmer/compute professional

- e.g. NSF biosketches that acknowledge work other than publications

What metrics of evaluation:

(2) Need advancement/professional opportunities and seniority progressions, advancement, including criteria

Project mgmt versus people mgmt as one advancement opportunity.

(3) Funding structures devalue research software and the work to develop/expand/support them long-term and for broader/lasting research impact

Leads to RSEs having to switch project/research frequently, and to stagnating underdeveloped software

Leads RSEs to been seen as temporary hire, rather than 'partners' of research projects

Important for:

retaining/developing talent (paid better elsewhere, outside of academic research)
research progress/validity