Below, please also find links to publications/datasets/organizations that may be of interest to the group and that I (mostly) referenced in my talk:

- 1. NAE Workshop Report: Fostering the Culture of Convergence in Research: <u>https://nap.nationalacademies.org/catalog/25271/fostering-the-culture-of-convergence-in-research-proceedings-of-a</u>
- NAE report Enhancing the Effectiveness of Team Science (2015)

 <u>https://nap.nationalacademies.org/catalog/19007/enhancing-the-effectiveness-of-team-science</u>
 It references an updated version, but that is being updated again, so this is the only version I can locate for you.
- 3. Field Guide to Team Science --- this is very old (2010), but it is still a terrific resource: <u>https://www.cancer.gov/about-nci/organization/crs/research-initiatives/team-science-field-guide/collaboration-team-science-guide.pdf</u>
- 4. The NUCATS resource directory,<u>https://www.nucats.northwestern.edu/research-resources/index.html</u> may be helpful as well. From this page, use the 'sort' pulldown to select team science and then you can visit a number of mostly free (registration may be required) tools you can access. The sample team science letters and agreements resource is useful, and I have also used the <u>teamscience.net</u> online training (free). These tools were developed with support from NIH.
- 5. Two professional associations/organizations are tied to Team Science: InSciTS: <u>https://sts.memberclicks.net/sigs</u> (Note that this page takes you straight to their special interest groups. I personally participate in the Intereach group (<u>https://www.intereach.org/</u>) when they present topics of interest to me. This is both a scholarly and practitioner organization. NORDP is really a professional organization for folks working in Research Development. I find they are less useful on team science, although their annual meetings frequently address team science topics.

6. The FACA database I referenced shows individuals serving on federal committees, review panels, etc. : <u>https://www.facadatabase.gov/FACA/FACAPublicPage</u>

From this home page, there are a couple of ways you can search, depending on what you want to see.

If you want to know who from your University has served on committees, you should click on the 'search' box at the top and then 'member search'. In the occupation/affiliation box enter 'University name' and select the fiscal year you want to see (unfortunately have to do this 1 year at a time). You can also select a single agency from the 'agency organization' pull down. Then hit search, and you will get everyone tied to that agency during that fiscal year. You can download and sort by specific committee name (e.g. Proposal Review Panel for Biological Infrastructure)

If you want to see everyone who has served on a specific committee (regardless of organizational affiliation, click on the Agencies/Committees link at the top of the main page and identify the specific agency committees of interest. There is a title and a number (e.g. NSF - 10743 - Proposal Review Panel for Biological Infrastructure) Write down the number, because that is easiest to search by. Once you write those down, you can go to the search feature/committee search and enter that number, select the fiscal year (again - 1 year at a time), and then scroll to the bottom and select 'member list' in the display box (lower right side). This will display the full panel listing, so you will know everyone on the panel for that year and their organizational affiliation. Again – you can download and sort in Excel.

One caveat. NIH Study Section membership is not reflected in this dataset, because NIH publishes the names of panelists on their website. NIH special emphasis panels and/or appointed committees DO appear in the dataset.

7. The USA Spending database <u>https://www.usaspending.gov/</u> I referenced shows every federal dollar that is obligated (it is a massive dataset). The resources page provides tutorials on how to use/search the data. Using the advanced search, you can enter your University's name as 'recipient', use the pulldown menu for award type to filter out things like direct payments and loans and focus only on grants and contracts, and even select a single agency to focus on. Of course, you can select one or multiple fiscal years. Using the advanced search tools, you could also select grants (award type) from USDA made to Higher education institutions (recipient type), that were between \$500,000 and \$600,000 (Award among min/max range), and get a list of all higher education that got awards from USDA in this price range. You can even download and manipulate those data once the search is completed and also click on the entries individually to go to the full USA Spending record on each that shows payments over time, subrecipients, the federal fund supporting the effort, etc. This takes some practice, but it can really help you understand who is getting funding to do what.

- 8. I WILL say that many universities subscribe to Academic Analytics or other similar tools that also offer visualizations (network mapping) for grants and publications. There is a pretty significant time lag, but these are easier to use tools, and subscribing universities have point persons identified who can help.
- 9. For those of you really interested, I will say that the scholars I follow/have followed (and even contracted with) in the area of team science, effective teaming, and convergence research include Dan Stokols (one of the original team science/interdisciplinary research scholars I particularly like this 2019 work: https://i2insights.org/2019/02/19/team-science-ecosystem/ and one of his older works https://www.sciencedirect.com/science/article/pii/S0749379708004091?via%3Dihub), Jeni Cross (analysis of team structures and evolution of effective teams here is a recent Nature paper: https://www.nature.com/articles/s41599-022-01388-x interesting outcome in this case-based study is that teams that practice the simple act of even turn-taking during meetings demonstrate much higher rates of team success); Michael O'Rourke (his Toolbox Dialogue is pretty well known). And ---- if you google Bonnie Spring team science, you will pull up a few YouTube links to presentations she has made on the Science and Praxis of Team Science that provide really nice overviews. (She is also the team science director at NUCATS referenced in #4).
- 10. Last, but not least.....during lunch I was speaking with several individuals and shared that I particularly like the book "Range why generalists triumph in a specialized world" by David Epstein. It is a quick and entertaining read that has several case studies involving research organizations (soldier through the first 60 pages or so, but DO read the whole book).

All the best,

Deborah

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