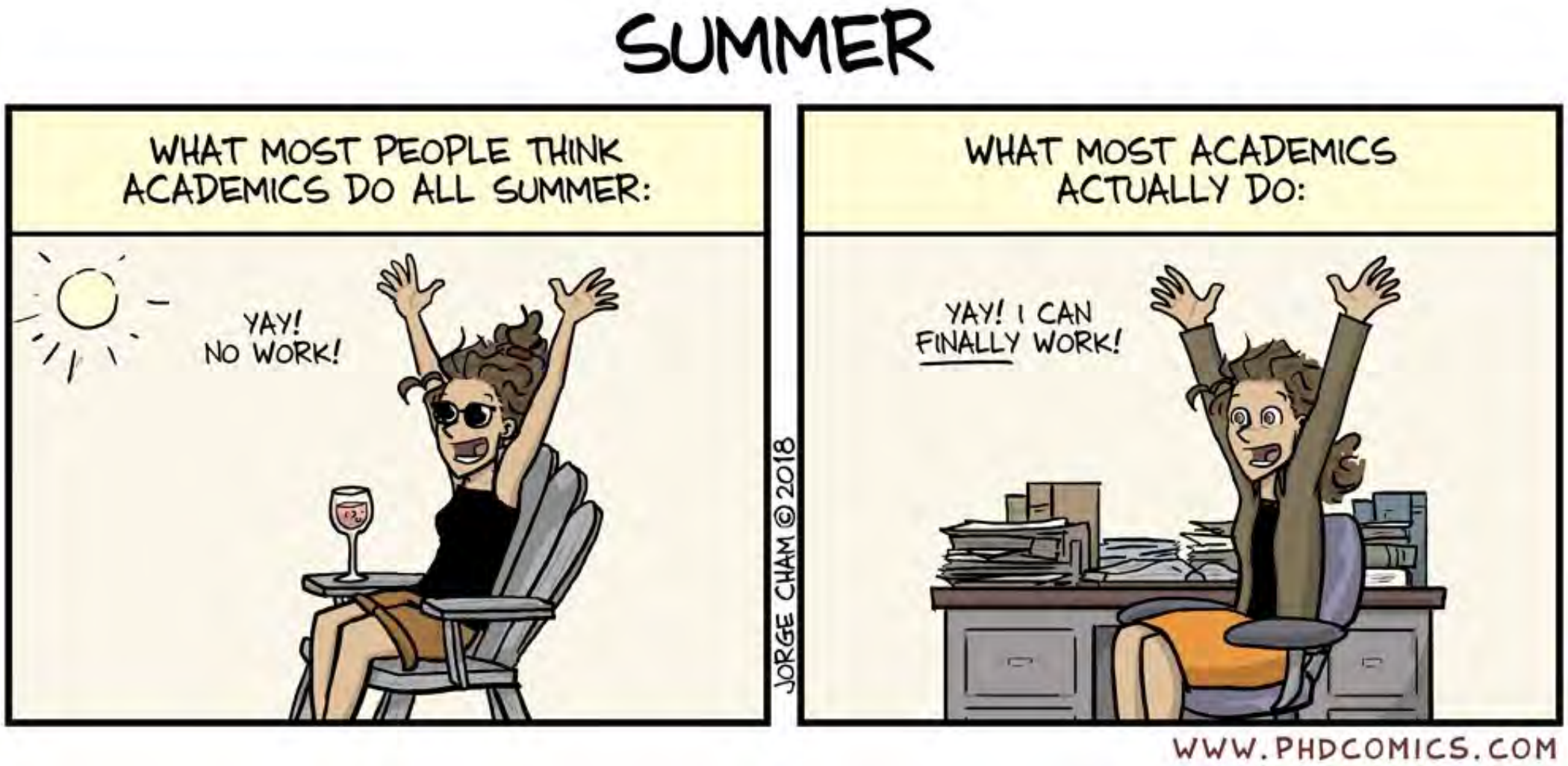
Commonwealth Campus Grant Writing Workshop

May 12-13, 2020

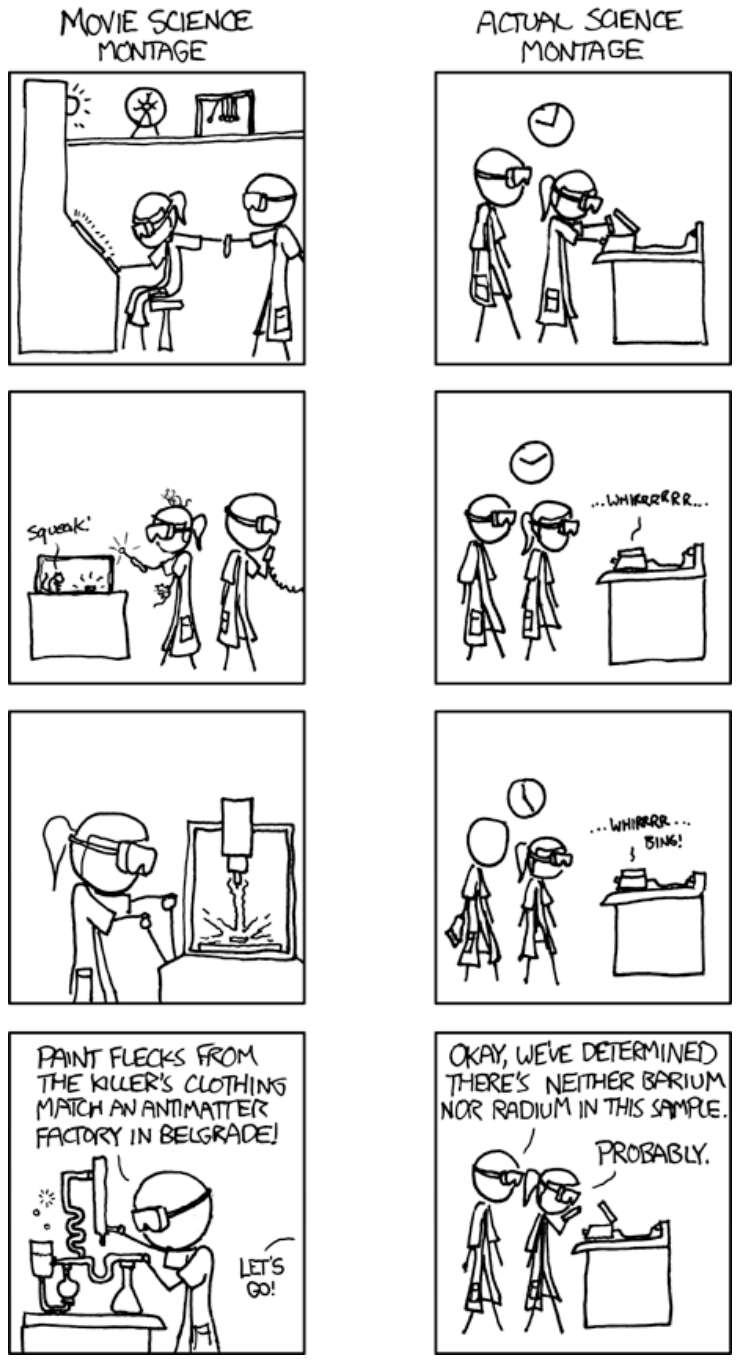


Workshop Overview

Tuesday
Introductions
Grant Writing Basics
Grant Writing I – Reading an RFP, Concept Papers

Grant Writing II – Proposal Writing + Feedback
Grant Writing III – Small Group Feedback
Day one wrap-up – Reporting from Small Groups

Wednesday
Budgets
Corporate + Foundation Funding
Disciplinary Panel Discussion





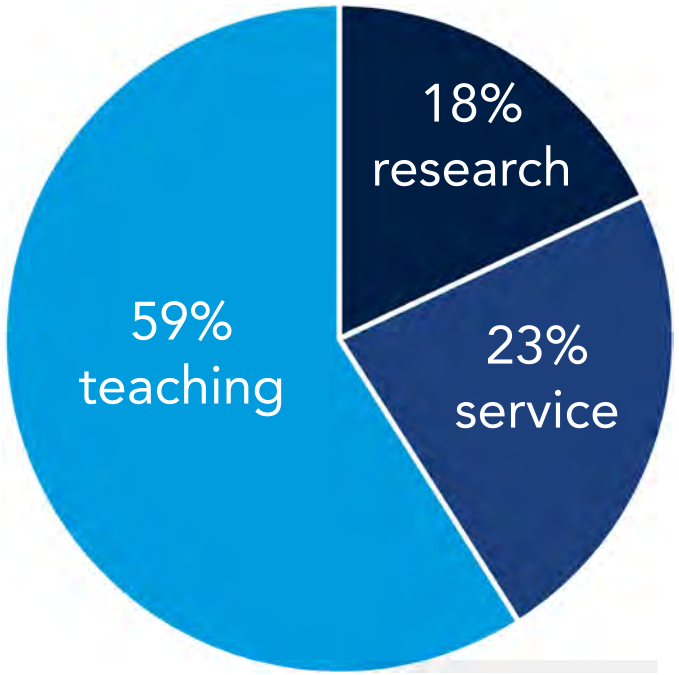
Grant Writing Basics

Corey Griffin
Associate Dean for Research
Associate Professor of Architecture

PennState
Altoona

How professors spend their time

How they actually spend their time:



source: Higher Education Research Institute Survey (1999)

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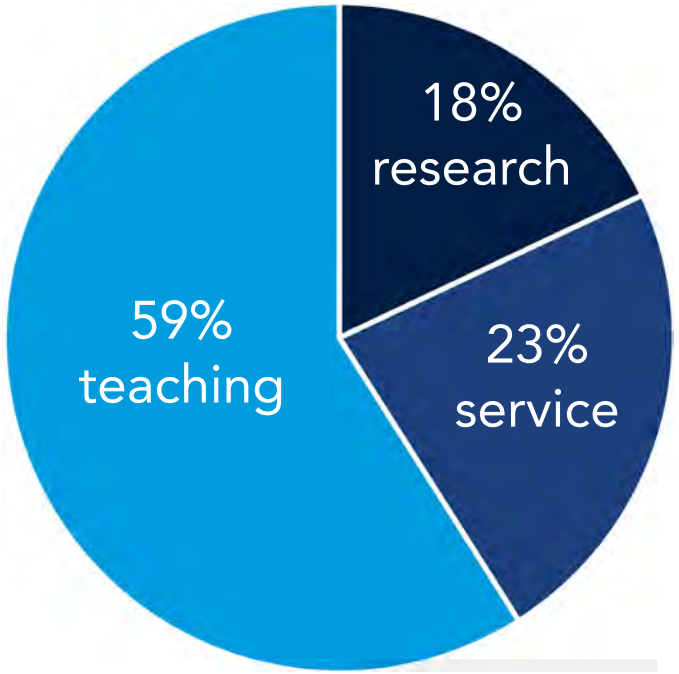
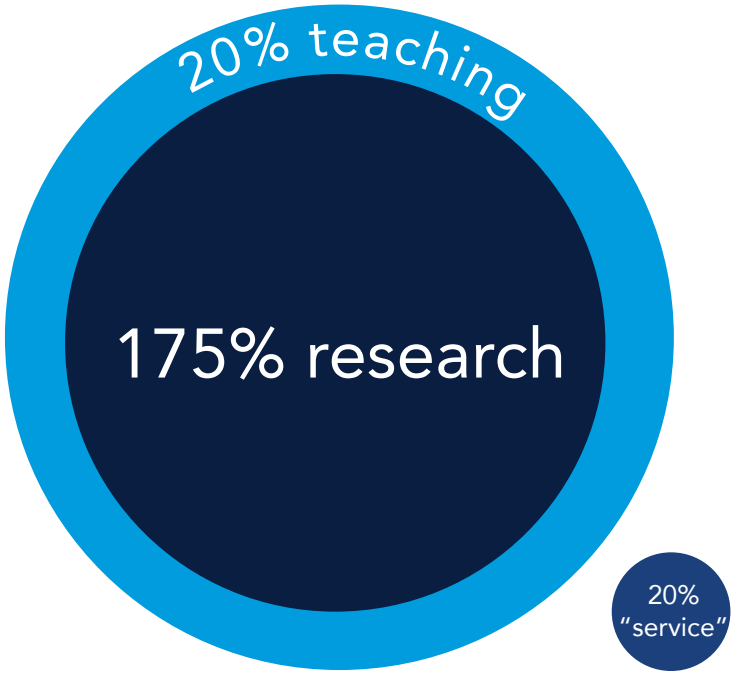


How their departments expect them to spend their time:



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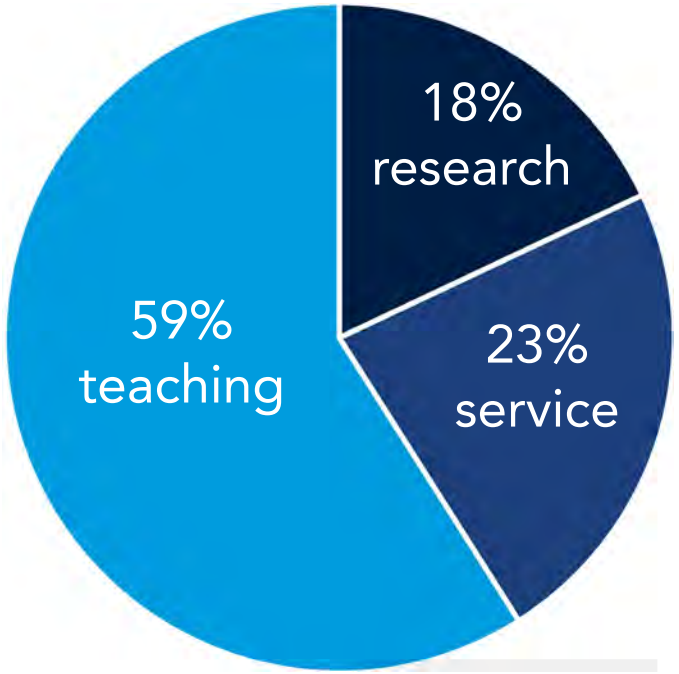

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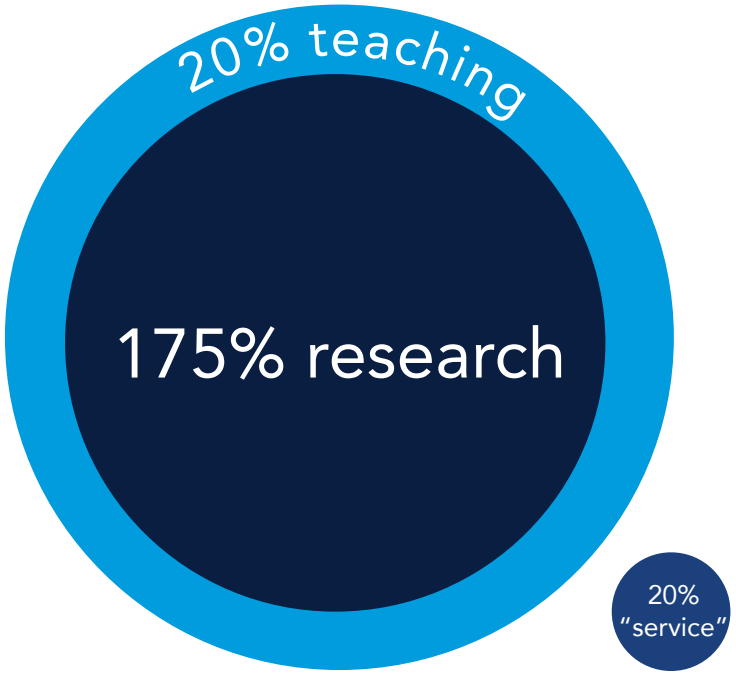

How professors would like to spend their time:

source: Higher Education Research Institute Survey (1999)

www.phdcomics.com

The first 15 years - milestones on a tenure-track trajectory

adapted from: David A. Stone, Chief Research Officer, Oakland University

https://vimeo.com/300582375

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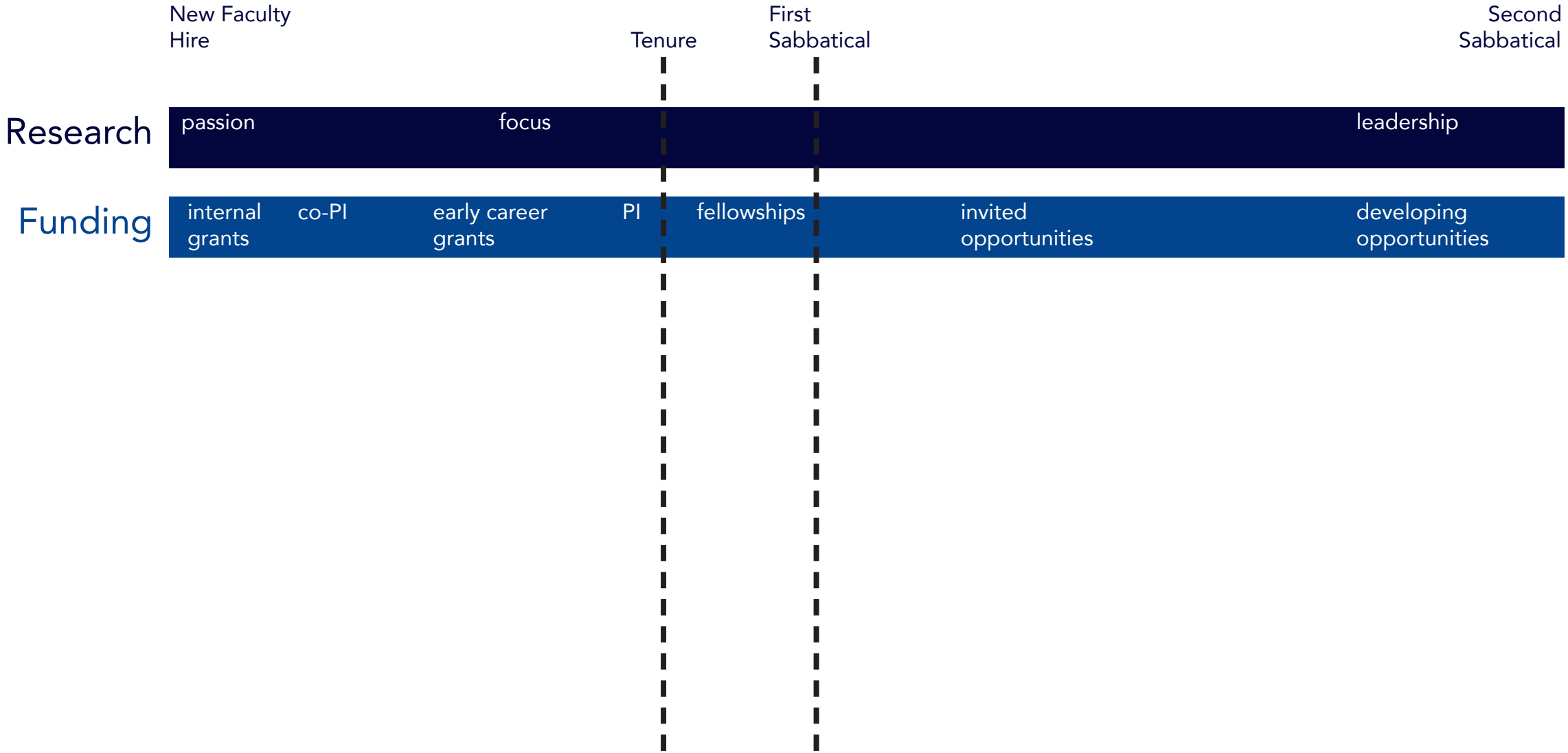

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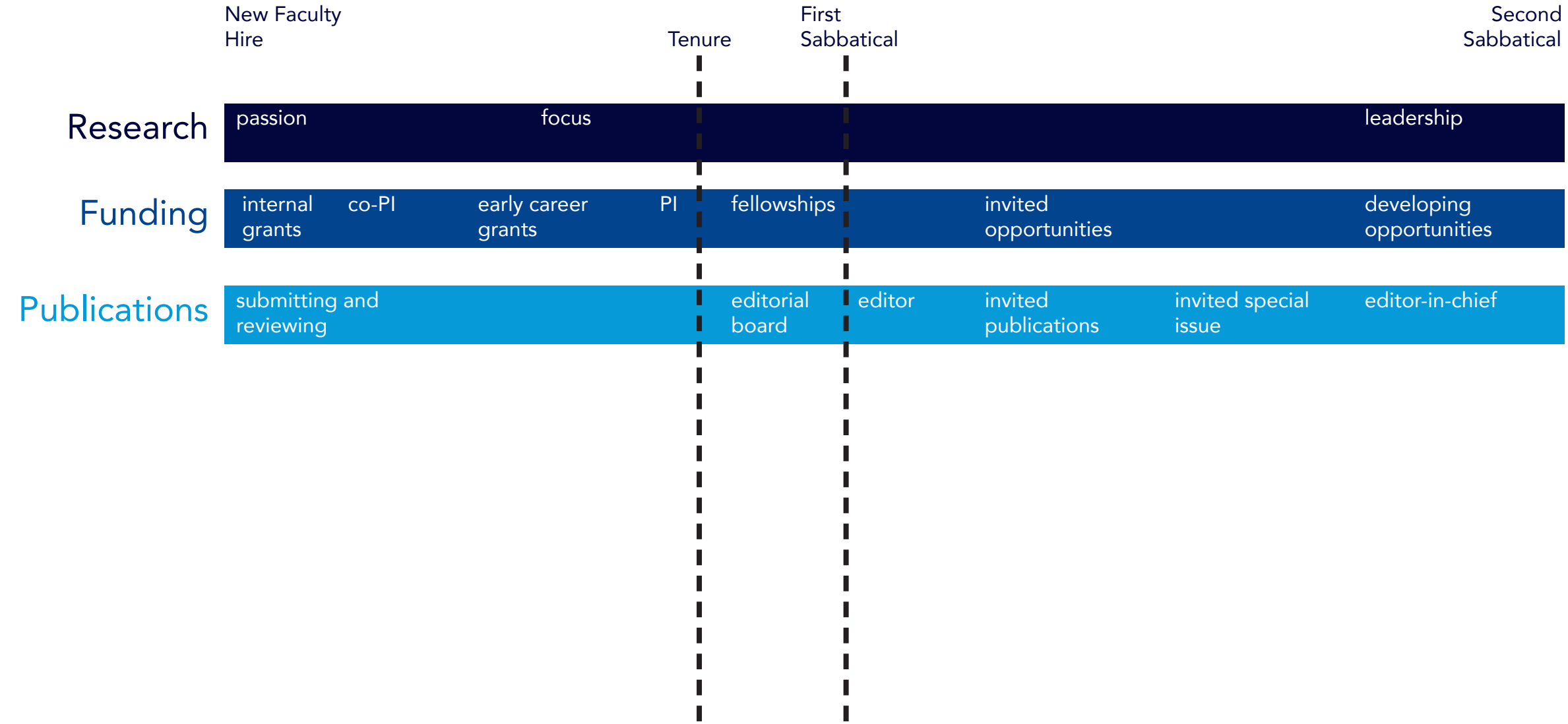

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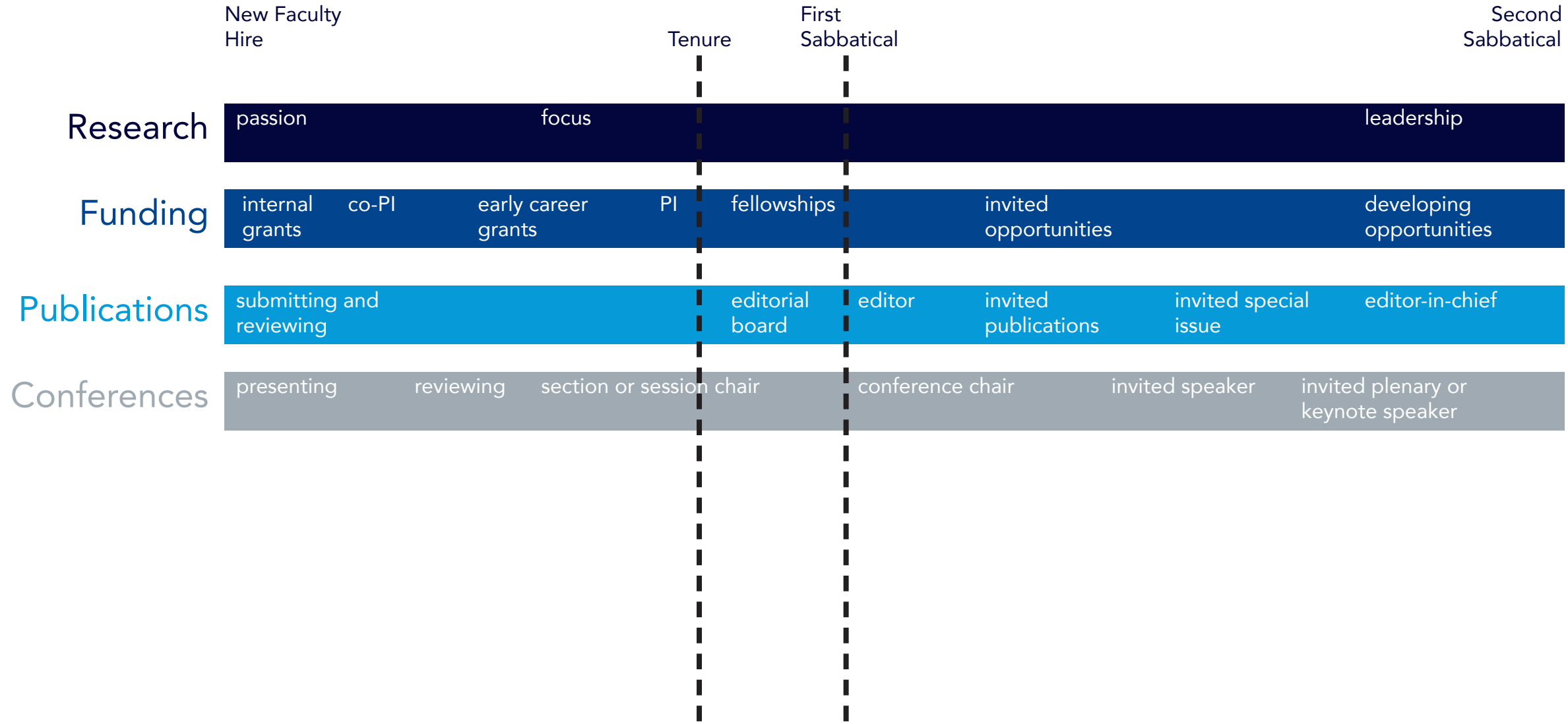

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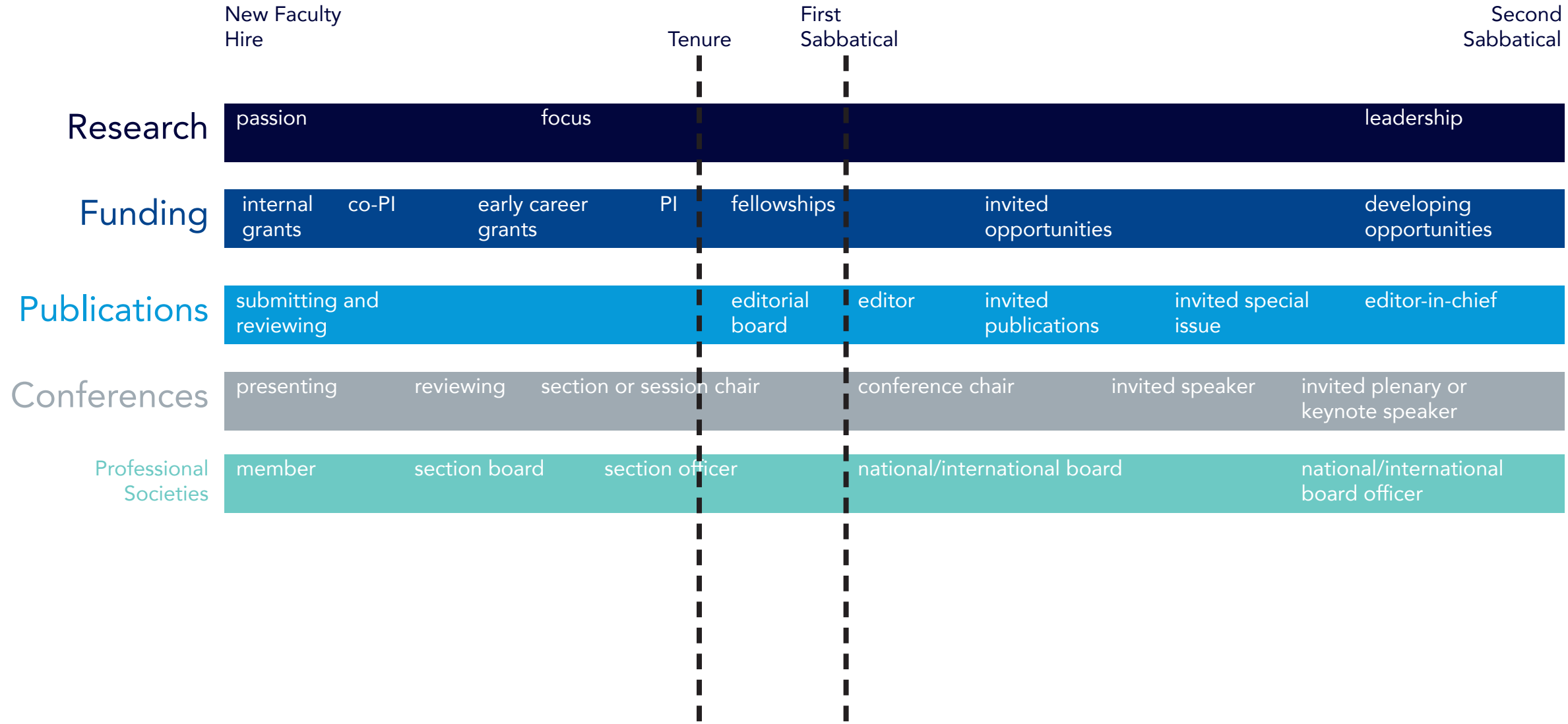

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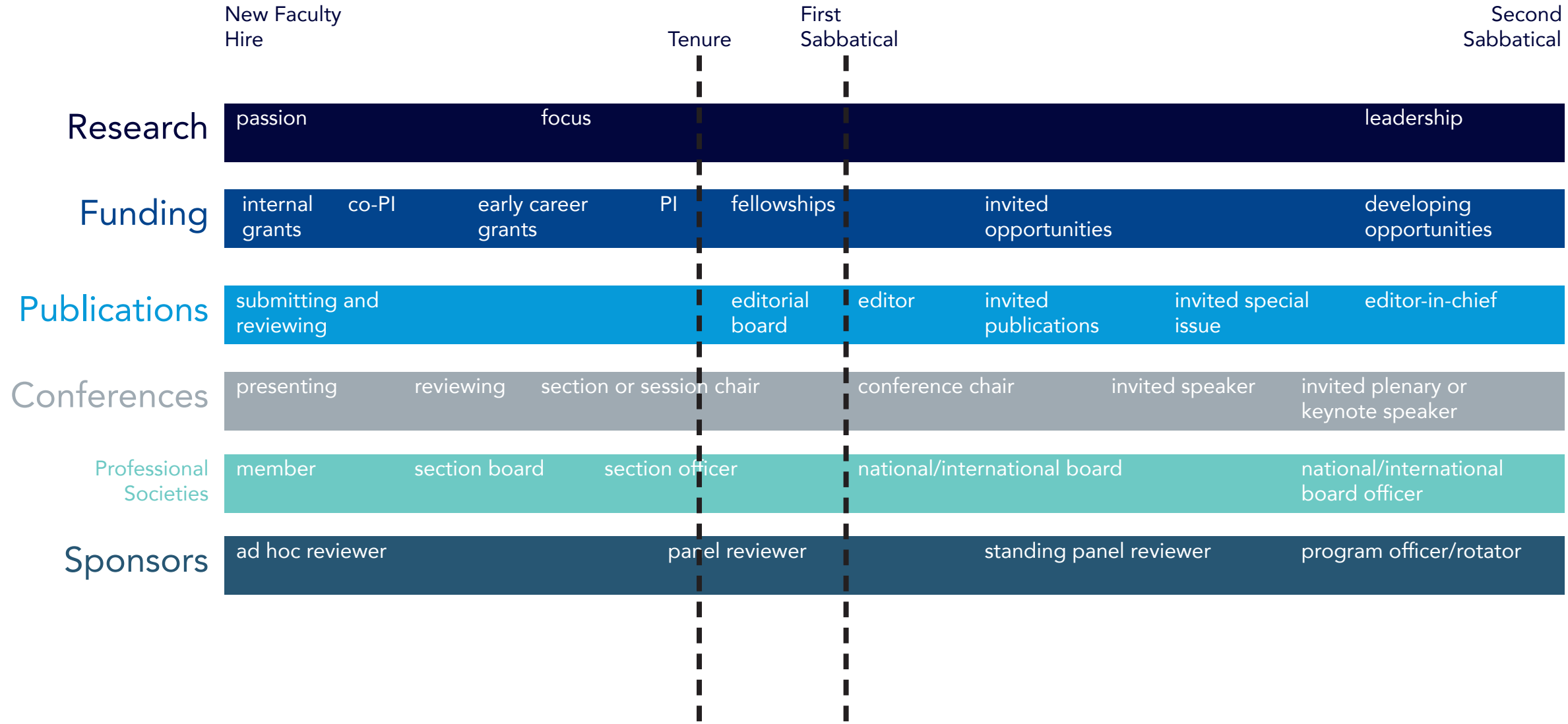

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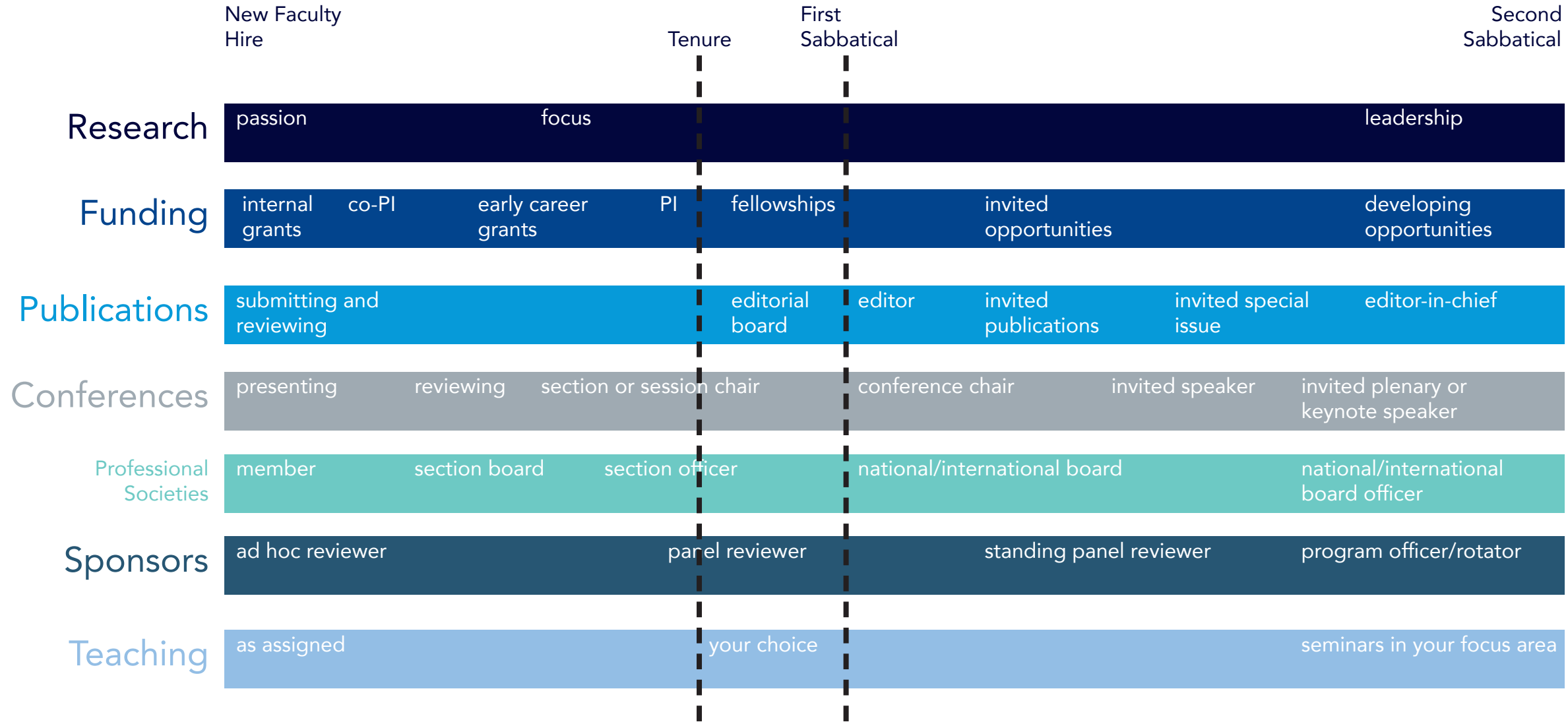

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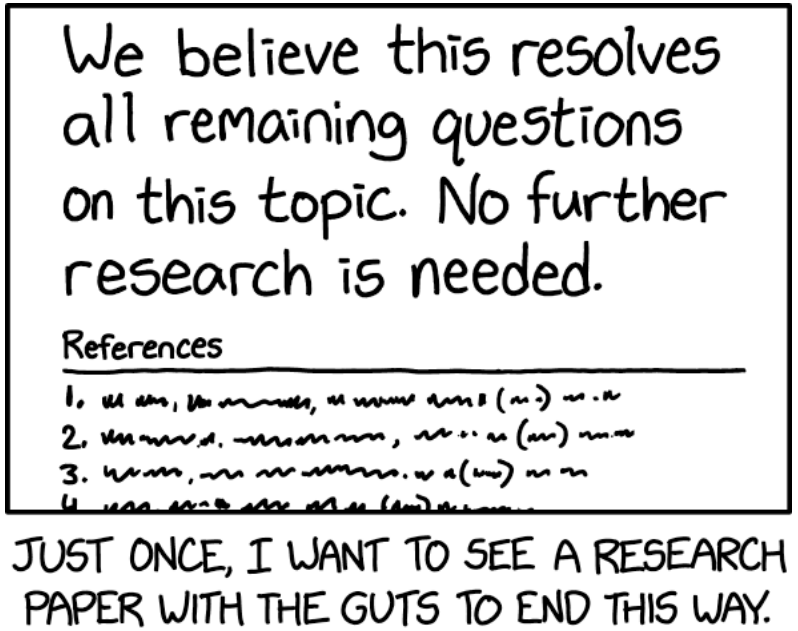
Two pieces of advice for navigating research and external funding

What is a grant?

Funding to achieve *specific tasks* that will advance your research agenda

Many different sources of funding: Federal, foundations, State, Regional agencies, internal seed funds

You should strive to match funding agency goals to your research goals through persuasive proposal writing



What is a grant versus a fellowship?

Grants are typically submitted through, awarded to and administered by Penn State

Fellowships are submitted by individual faculty members and funds are given directly to them

Both can contribute to your research agenda and the value of each varies by discipline

What work do I want to do and WHY?

Study a particular phenomenon like…

Survey people in the field about ….

Develop a new material for…

Evaluate different approaches in….

Examine the impact of the policy on…

Consider the impact of the research as soon as possible – this is your hook.

What resources do I need?

Do you need to hire someone to help?

- Undergraduate or graduate assistant, post-doc, technician, other staff

Supplies?

Equipment? Or time in shared user facility?

Travel money?

Your time (summer salary or course-release)?

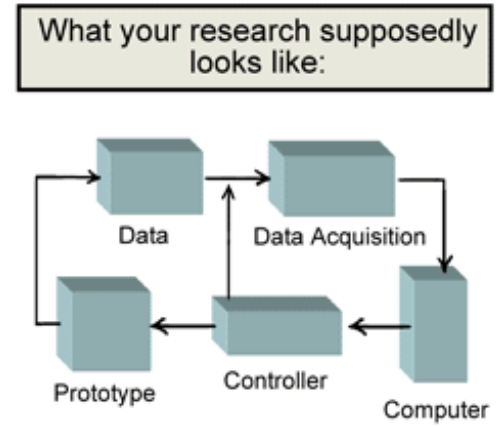


Figure 1. Experimental Diagram

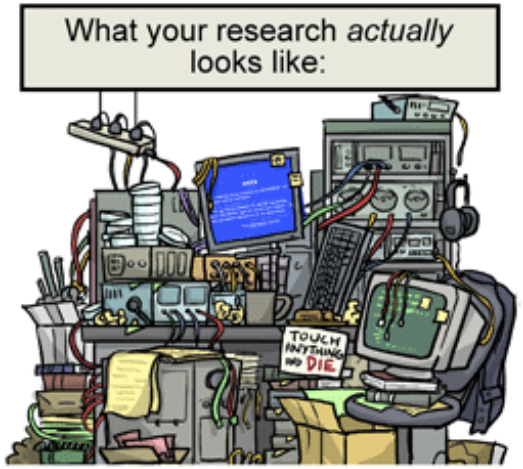
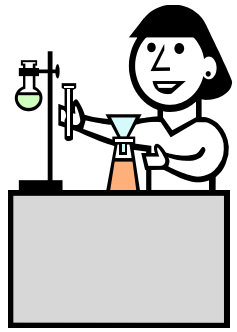


Figure 2. Experimental Mess

The Proposal Cycle

The IDEA



Preliminary Results

Proposal Preparation

Merit Review

A Decline

An AWARD!

Why should I bother writing proposals?

The funding rate is often less than 20%

To expand the impact or scope of your research agenda

You need equipment, instrument time, surveys, access to archives, etc.

To demonstrate your efforts and excellence in research

It provides 2-5 years of focused research effort w/o financial worries

Hiring students, post-docs, technicians, staff can boost productivity

Helps focus your research agenda

Proposal text can be used as part of your next publication

Gives you a voice in your department and college

How is my proposal reviewed?

NSF example, varies by agency

1. Program Officer (PO) reviews proposal to ensure completeness
2. Proposal sent to at least 3 external reviewers or an ad hoc panel of experts, or both (Intellectual Merit and Broader Impacts)
3. PO reviews expert input, considers portfolio of funded projects, provides recommendation to Division Director (DD)
4. If DD concurs, recommendation submitted to business end of NSF for processing
5. PI is provided copies of all reviews (whether funded or not)

https://www.nsf.gov/bfa/dias/policy/merit_review/

Merit Review criteria

NSF, though applies to others

What is potential for proposed activity to advance knowledge and understanding (Intellectual Merit) and to benefit society or advance desired societal outcomes (Broader Impacts)?

To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale?

How well qualified is the investigator(s) to conduct the proposed activities?

Are there adequate resources available to the PI?



Reading RFPs

Corey Griffin
Associate Dean for Research
Associate Professor of Architecture

PennState
Altoona

Requests for proposal (RFP)

Are you eligible?

Does your concept fit the synopsis? Do your methods fit?

Does the source provide the right level of funding you need?

When is the deadline? Is there time and are you committed to write a strong proposal with several stages of review and revision?

What required components are needed; can you provide them? If not, can you find collaborators to work with?

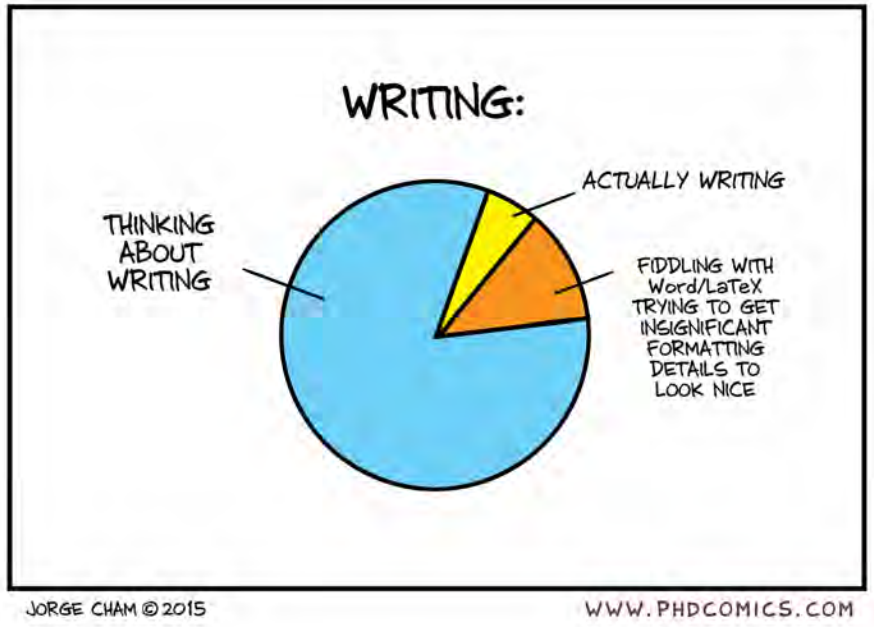
“No” to any of these questions, move on or plan for the next submission deadline

Requests for proposal (RFP)

If you are not familiar with the program or foundation, do research on who and what has been previously funded.

Read the RFP closely and highlight key points. Note which points your proposal will address.

At the NSF and other organizations, make ***early*** *initial contact with Program Officer with your concept.*



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Engineering for Civil Infrastructure Webinar

Learn about the program scope and research thrusts

May 11, 2020 1:00 PM to
May 11, 2020 3:00 PM
NSF (virtual)

The Engineering for Civil Infrastructure webinar will introduce and answer questions related to NSF's Engineering for Civil Infrastructure (ECI) program on Monday, May 11, 2020, from 1:00 pm to 3:00 pm EDT.

The ECI program is a core, unsolicited research program in the NSF Division of Civil, Mechanical and Manufacturing Innovation, Directorate for Engineering. Program Directors will discuss recent revisions in the program scope and new research thrusts within the ECI program.

Join the Webinar
Register in advance for this Zoom webinar at: https://nsf.zoomgov.com/webinar/register/WN_Si7IAsmfQSeorgvbSQmlSg

View real-time captions during the webinar at: https://www.captionedtext.com/client/event.aspx?EventID=4415641&Customer...

Meeting Type
Webcast

Contacts

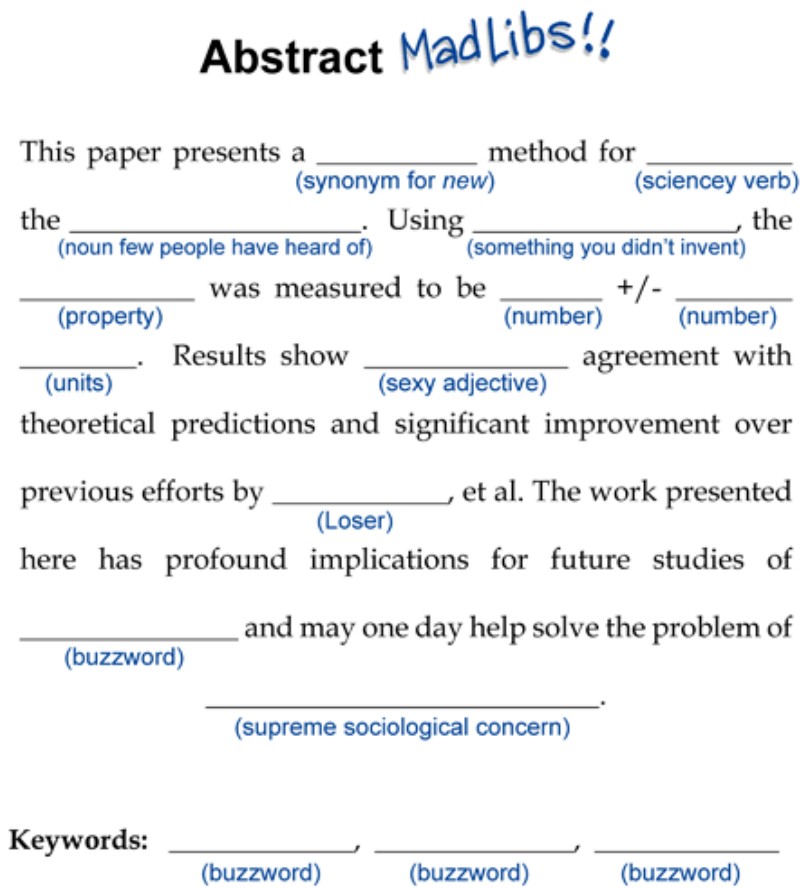
The Concept Paper

Brief 1- to 3-page papers completed prior to the submission of a full proposal.

Allows a program officers to offer feedback before the full proposal submission

Helps a program officer save time by eliminating concepts that are not likely to be funded by their organization.

Should respond to the key points highlighted in the RFP.



Abstract MadLibs!!

This paper presents a _____ method for _____
(synonym for *new*) (sciencey verb)
the _____. Using _____, the
(noun few people have heard of) (something you didn't invent)
_____ was measured to be _____ +/- _____
(property) (number) (number)
_____. Results show _____ agreement with
(units) (sexy adjective)
theoretical predictions and significant improvement over previous efforts by _____, et al. The work presented
(Loser)
here has profound implications for future studies of _____ and may one day help solve the problem of
(buzzword)
_____.
(supreme sociological concern)

Keywords: _____, _____, _____
(buzzword) (buzzword) (buzzword)

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