YOUR WEBINAR WILL BEGIN SHORTLY

GRANTSEEKING STRATEGIES FOR EARLY-CAREER FACULTY

University of Tennessee Institute of Agriculture

May 6, 2024

WEBINAR LOGISTICS

RUNTIME 🕐 ~45 minutes (ending with 15 min. of Q&A)

Q&A ❓ Questions may be asked throughout the presentation; you may also ask questions via the chat link at the bottom of your screen and the presenter will reply.

RECORDING & SLIDES 🎞 All attendees will receive a copy of the recording, including the slides.

TODAY'S PRESENTER

Paul Tuttle, MA
GRANTS CONSULTANT

TOTAL WINS

$175+
MILLION

Total grant funding for clients since 2003 from nearly every Federal funder and many major foundations.
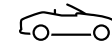
MAJOR AWARDS

- MA in English with a concentration in Rhetoric and Composition

- Former business and technical writing instructor

- Worked at Hanover 2011-2015 (and now 2022-present)

On a personal note . . .

Born and raised in North Carolina

Interested in classic and modern cars

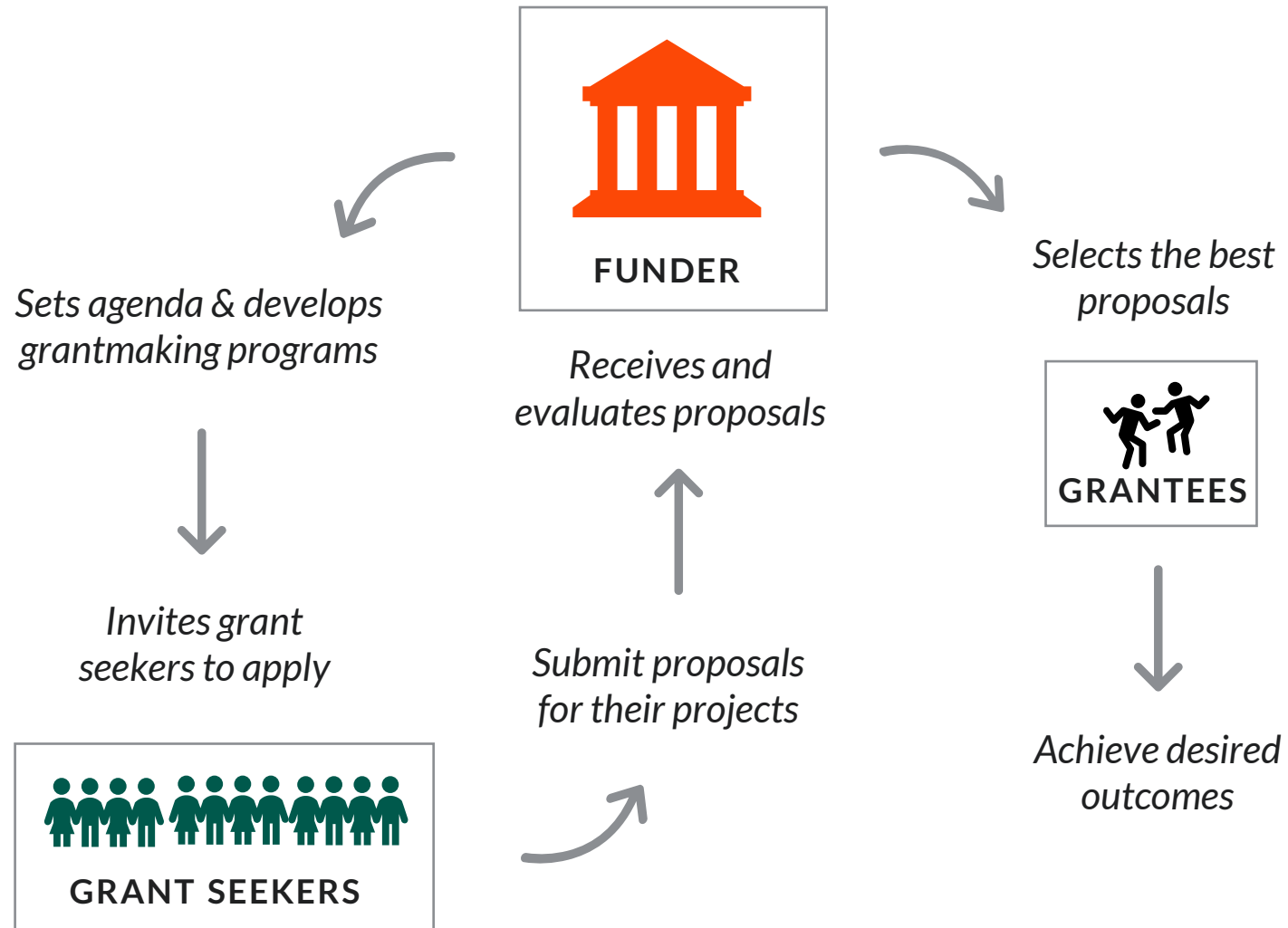Hiking, biking, swimming, and reading

TODAY'S AGENDA

- Understanding different contexts (the process, your field, likely funders, your institution/location)

- Preparing yourself to play in those contexts and moving forward

- Selected funding opportunities for early career researchers
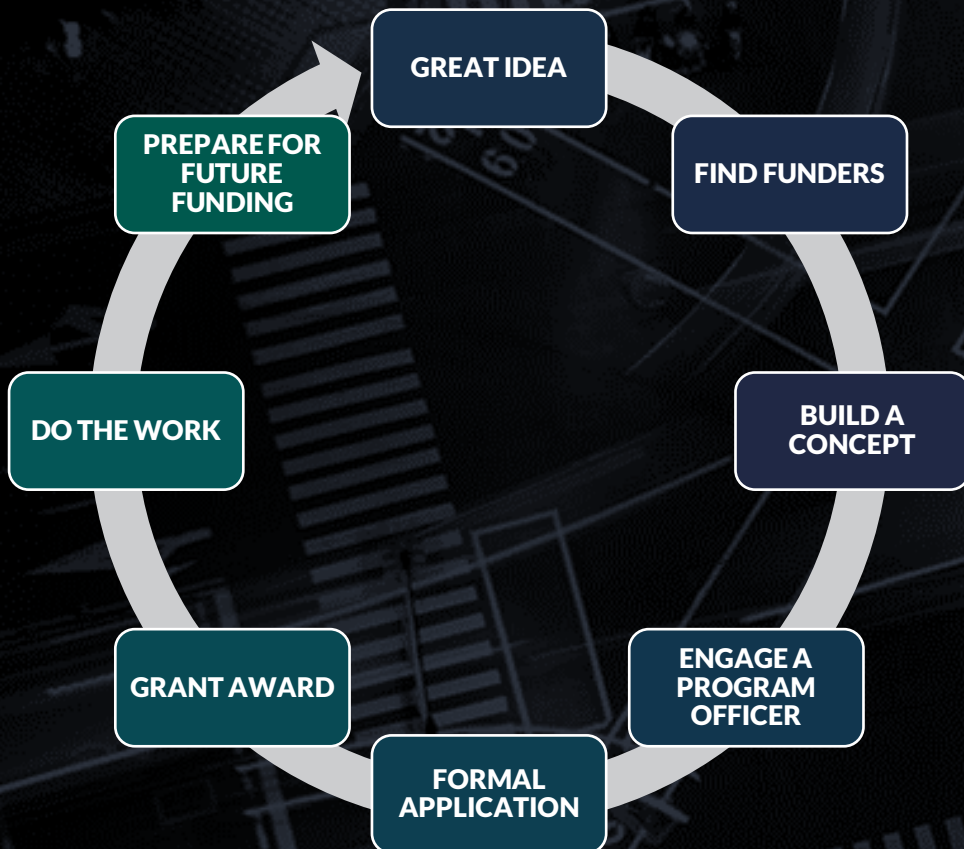
- Resources

- Q&A

UNDERSTANDING DIFFERENT CONTEXTS

THE GRANTSEEKING PROCESS

FUNDER

Sets agenda & develops grantmaking programs

Receives and evaluates proposals

Selects the best proposals

GRANTEES

Invites grant seekers to apply

Submit proposals for their projects

Achieve desired outcomes

GRANT SEEKERS

GRANTS

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THE GRANT LIFECYCLE

The grant funding process: from idea to implementation.

1. Start with a great idea.
2. Find funders who are interested in the idea.
3. Build a solid project concept aligned with funder goals.
4. Sell the concept to funders.
5. Complete the formal application process.
6. Receive a grant award.
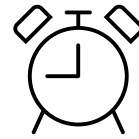7. Do the work.
8. Prepare for future funding.

This process can vary across funder types.
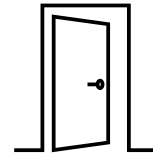
KNOW YOUR FIELD
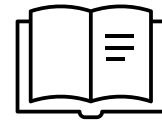
Understand the lay of the land.

Current trends in the field? In your subfield?

Gaps in knowledge hindering the field?

Ways to fill the gaps?

Current work addressing these gaps?

Impact of filling these gaps?

KNOW THE TERRITORY

With the overall field in mind, survey the funding landscape.

- Who are the **key funders** in your field?
  - Federal, state, foundation, corporate

- What are their **priorities**?
  - Both stated and unstated

- What are the overall **funding trends** in the field?
  - Are there potential untapped sources of funding in your field?
  - What are they?

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SURVEY THE FUNDING LANDSCAPE

FEDERAL AGENCIES   STATE AGENCIES   FOUNDATIONS

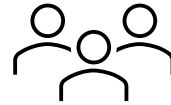CORPORATIONS   ASSOCIATIONS

GAUGE YOUR QUALIFICATIONS

Figure out where you stand.

Your publication record
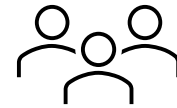
Your position and affiliation(s)
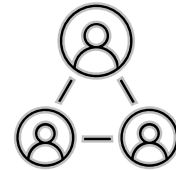
Your experience with:

- the proposed work

- funding

- trainees/outreach

GAUGE YOUR COLLABORATORS

What evidence can you point to?

Established collaborations > new collaborations > no collaboration

Evidence of collaboration is important:
Co-publications
Grant applications together
Preliminary data together
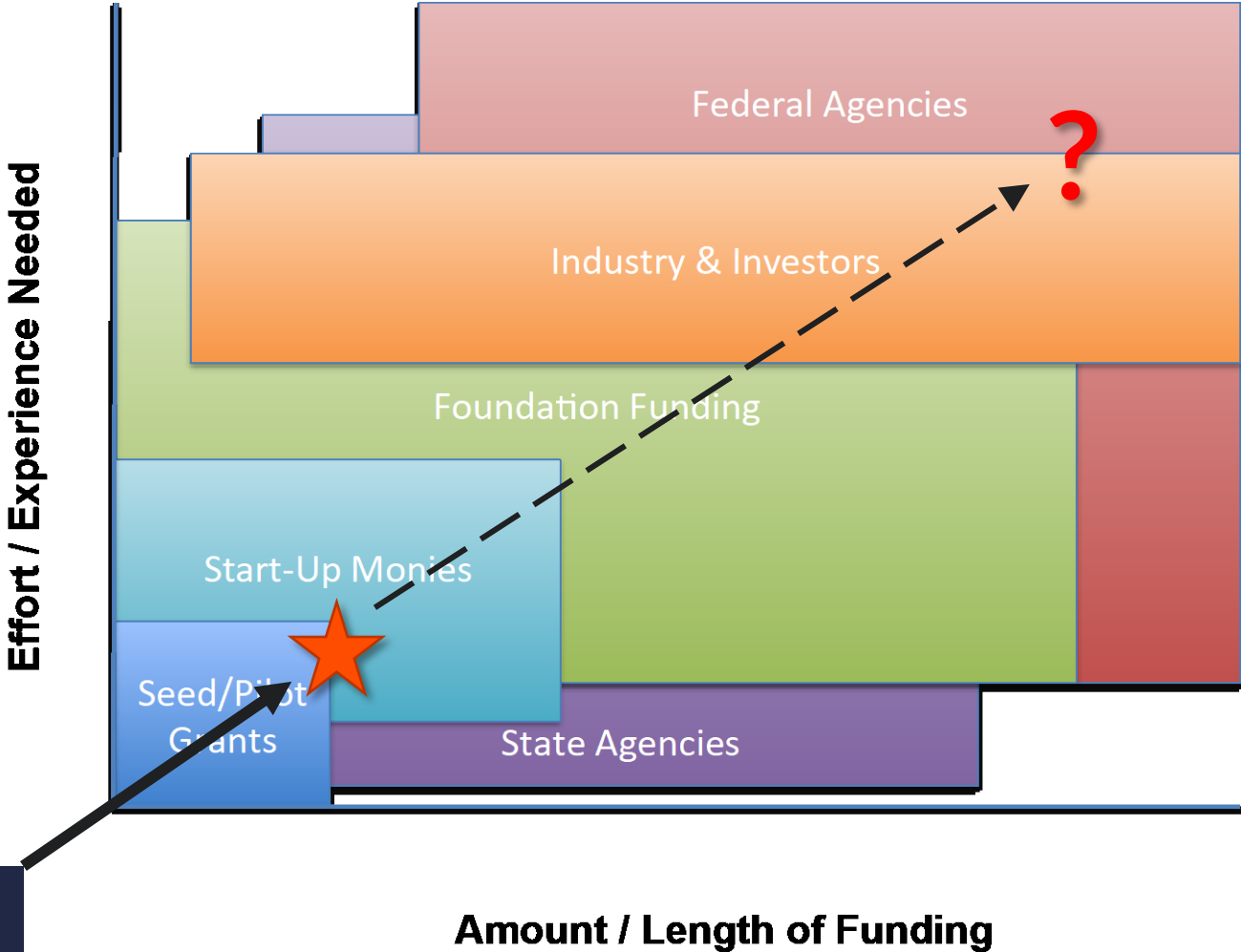
PREPARING YOURSELF AND MOVING FORWARD

Develop a research funding plan!

- Definition: outline of research ideas that connects the big picture, in time, to its component ideas and to relevant funding opportunities

- Purpose: advance scholarship and facilitate progress in grant awards, publications, speaking engagements, and/or career goals

Pfirman, S., Bell, R.E., Culligan, P.J., Balsam, P., & Laird, J.D. (2008). Maximizing productivity and recognition, part 3: developing a research plan. Science Careers. Retrieved from http://sciencecareers.sciencemag.org

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- Characteristics of a research plan:
  - Well-thought-out ideas
  - Time element
  - Unifying technique, problem, or theme
  - Requires your unique skills set

A plan breaks your long-term research goal into units that can be finished in the typical grant duration: 2-5 years.

Gilmore, J. Writing the research plan for your academic job application. Retrieved from
http://www.acs.org/content/acs/en/education/students/graduate/writing-the-research-plan-for-your-academic-job-application.html

A SAMPLE RESEARCH PLAN

	Assistant Professor	Associate Professor	Full Professor
Y 1	Apply for: intramural funding, NIH K99-R00, K01, R03 or R21, <$300K NSF, CAREER, and smaller federal grants, ESI foundation, corporate funding Work on: collecting preliminary data, contact foundation, corporate relations, identify mentoring team, participate as co-investigator on a major award, limit committee and "service" work to focus on establishing research portfolio, identify timeline for transition from early funding to first R01, publications, develop an "idea bank" of research questions	Apply for: NIH R21, first or continuing R01, Foundation grants focusing on transitions, funding from national professional associations Work on: PI grants with Co-Is from other disciplines, direct a graduate program, direct a Center or Institute, build energy around ideas for P01 type grants or NSF center grants, high impact publications, develop an "idea bank" of research questions	Apply for: Continuing R01, P01, high-risk foundation grants like Simons or Keck, corporate funding such as 3M, Microsoft, Samsung Work on: Patents, solicit your VPR, Dean and Provost to kick in for funds to develop a team to seek center-type funding, which requires collaboration such as co-authorship, co-teaching, and/or co-funding, high impact peer review publications, develop an "idea bank" of research questions, mentor an ESI, develop a personal website, twitter
Y 3	Apply for: intramural funding, transitions from mentored awards to independent awards, corporate and foundation prospects gathered from corporate and foundation relations, if ready, first R01, NSF awards between $300-$400K Work on: leverage preliminary data gathered, high impact co-authorship with someone outside your discipline	Apply for: NIH R21, first or continuing R01, foundation grants focusing on transitions, funding from national professional associations Work on: PI grants with Co-Is from other disciplines, direct a graduate program, direct a Center or Institute, build energy around ideas for P01 type grants or NSF center grants, develop a personal website, twitter	Apply for: Continuing R01, P01, high-risk foundation grants like Simons or Keck, corporate funding Work on: Finalize patents and copyrights, build international collaborations, write first center award, conduct needs assessment if necessary, develop partnership with business school for business plans (necessary for successful center and program awards), identify excellent evaluators
Y 5	Apply for: "New Investigator" R01, R21 for additional research ideas, foundation "transitions" awards, professional society awards, PI grants with Co-Is from other disciplines, direct a graduate program, direct a Center or Institute Work on: Transition fully as an independent investigator, align research funding plan with promotion/tenure goals, consider ideas and research product for patent	Apply for: Continuing R01, NSF funded researchers apply for NIH, NIH funded apply for NSF, seek smaller NSF center and collaborative awards Work on: Request funding from Chair, Dean, VPR for interdisciplinary center or institute for collaborative research, degree or certificate program, learn how to develop a business plan	Apply for: Apply for P01 and center funding, high profile foundation funding, quick hitting corporate funding (Lockheed Martin, Pzifer, Shell) Work on: continuing R01s, mentor ESI, high impact publications with multiple disciplines, ERC/STC funding plans, collaborate with foundation relations on high impact and synergistic funding opportunities to bring together federal, foundation and corporate funding

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from Tina Edgerly Campbell, MPH | Campbell Consulting Group | TheCampbellConsult@gmail.com

PREPARING YOURSELF (3)

Decide what your first project should be, based on your plan!

- Determine your idea's size and scope
    - What gap in knowledge does your idea fill (or partly fill)?
    - How does your idea relate to your research plan?
    - Can your overall idea be segmented?

- What does the initial project look like (years and dollars)?
    - What partners and resources will you need?
    - What additional education, training, or professional development will you need (if any)?

PREPARING YOURSELF (4)

Maximize your competitiveness!

- Determine your optimal funders
  - Which ones support investigations in your discipline (or your interdisciplinary intersection)?
  - Which ones have funded investigations similar to the one you're planning?

- Get to know those funders
  - Mission, vision, funding priorities
  - Strategic plan
  - Funding mechanisms/cycles
  - Award database searches
  - Review processes
  - Grantmaking culture

Search for funding and set up automated alerts!

- Search tools:
  - Grants.gov, NIH *Guide for Grants and Contracts*, NSF Funding site, and FedBizOpps (now "Contract Opportunities" at SAM.gov)
  - The Foundation Center (now Candid)
  - Pivot (formerly COS and the Community of Science), InfoEd SPIN, Grant Forward

- Alerts:
  - Grants.gov "Manage Subscriptions," NIH *Guide* "TOC listserv," and the NSF Custom News Service
  - InfoEd SPIN alert setup

A COMPETITIVE GRANT IDEA

- Fills a demonstrable gap (e.g., in services or knowledge)

- Is innovative and interesting to people in the field

- Produces something of value within a specified timeframe

- Has a strong, measurable impact

- Is timely

IF PEOPLE IN YOUR FIELD GET EXCITED ABOUT YOUR IDEA, YOU ARE ON TO SOMETHING.

GAUGE PROJECT DESIGN AND PRELIMINARY WORK
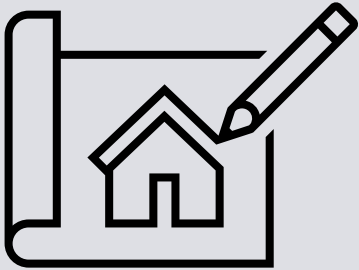
- How will you do the work?

- What preliminary work have you done?

CONTINUE MOVING FORWARD

- Establish and document appropriate collaborations.

- Publish preliminary studies.

- Increase the number of publications relevant to the proposed work.

- Know your research environment (personnel, equipment, institutional supports) to leverage its strengths, identify and address critical gaps, and minimize other weaknesses.

- Establish a "track record" of funding, even if it is mostly internal awards at this point (and publish your findings!).

- Take on trainees.

- Develop / participate in outreach activities, if relevant.

- Serve as a reviewer.

6 steps to improve your odds of being funded now and later:

1. Start small with pilot projects and internal funding mechanisms

2. Publish, publish, publish

3. Find ways to be a co-investigator on grant applications with established PIs

4. Serve as a grant reviewer

5. Pursue early-career (e.g., NSF CAREER) or small-dollar federal grants (for pilot projects, feasibility studies, proof-of-concept work, gathering preliminary data, etc.)

6. Apply!

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SELECTED FUNDING OPPORTUNITIES FOR
EARLY CAREER RESEARCHERS

OVERVIEW OF SELECTED FEDERAL AGENCY FUNDING PRIORITIES

Agency	Priorities	Notes
National Science Foundation (NSF)	Research in science, mathematics, engineering, social science, and education as well as programmatic efforts in STEM education, fellowships, and instrumentation	Primary funder of academic and science research, with a focus on basic (bench) research as well as industry partnership and commercialization; does not fund health sciences research with clinical/human health outcomes
Department of Energy	Research in energy, environmental, and nuclear sciences	Many of its research programs and student support programs are funded through its Office of Science
Foundation for Food and Agriculture Research (FFAR)	Research in agrosystems, food systems, production systems, and the scientific workforce. Support for scientific consortia in key interdisciplinary areas.	"Drives systemic change by taking a broad view of US agriculture, considering its social, environmental, and economic benefits and impacts."

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CAREER

Faculty Early Career Development Program

A Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.

Funds a 5-year project

Research and Educational/Outreach components are equally important

PECASE (Presidential Early Career Awards for Scientist and Engineers) are selected from CAREER applicants

Early Career

DOE Early Career Research Program

To support the research of outstanding scientists early in their careers. Funds a five-year project with ~$750,000 total budget in the following areas:

Advanced Scientific Computing Research (ASCR)

Biological and Environmental Research (BER)

Basic Energy Sciences (BES)

Fusion Energy Sciences (FES)

High Energy Physics (HEP)

Nuclear Physics (NP)

NOTE: *Mandatory preapplications for the FY 2024 program were due January 30, 2024, at 5:00 p.m. ET.*

New Innovator

FFAR's New Innovator in Food & Agriculture Research Award helps launch the research careers of promising junior faculty and scientists working to address significant food and agriculture challenges by enabling them to focus on their research early in their careers without the pressures of repeated grant applications.

Eligibility: In a tenure-track position no longer than three years; within eight years of receiving the PhD. Cannot have had significant research experience (e.g., 3- to 5-year projects totaling over $1M).

Awards: Up to $150,000/year for up to three years (totaling $450,000). No cost match is required.

BYI

Beckman Young Investigator Program

Provides research support to the most promising young faculty members in the early stages of their academic careers in the chemical and life sciences, particularly to foster the invention of methods, instruments and materials that will open up new avenues of research in science.

4-year project period

Up to $600,000 total, no indirect costs

Must be within first 3 years of a tenure-track position

LEVERAGE YOUR RESOURCES

RESOURCES AT YOUR INSTITUTION

UTIA Office of Sponsored Programs

We provide all pre-award services to all of the UT Institute of Agriculture, including AgResearch, UT Extension, the Herbert College of Agriculture, and the College of Veterinary Medicine.

2621 Morgan Circle
225 Morgan Hall
Knoxville, TN 37996-4514
Phone: 865-974-7357
Fax: 865-974-7451
Email: aggrant@utk.edu or
extensiongrants@utk.edu

GRANTS SOLUTIONS FROM HANOVER RESEARCH

GRANTS CAPACITY DEVELOPMENT

Developing organizational capacity to pursue and win grant funding, through training, strategic assessment, and benchmarking.

FUNDING RESEARCH

Identifying and evaluating grant opportunities aligned to member projects, while enabling longer-term planning through funded project research and forecasting.

PRE-PROPOSAL ACTIVITIES

Assessing and developing competitive project concepts, helping members to navigate funder requirements and build relationships prior to completing submissions.

PROPOSAL SUPPORT

Supporting member-led grant proposal projects by providing review and revision services designed to ensure the strongest possible proposals are submitted.

PROPOSAL DEVELOPMENT

Leading programmatic grant proposals, in close coordination with member teams, crafting narrative drafts over a defined timeline towards a polished submission.

GRANTS LEARNING CENTER - GRANTS ESSENTIALS

Hanover's Grants Learning Center (GLC) has a new nine-module series designed to help you hone key grantseeking skills. The GLC also houses trainings on NSF CAREER and NIH R-Grants. Register today with the referral code **Smokey**.

Introduction to Grantseeking
MODULE 1

Laying the Groundwork
MODULE 2

Concept Development
MODULE 3

Logic Models
MODULE 4

Prospecting
MODULE 5

Program Officer Engagement
MODULE 6

Essentials of Competitive Proposals
MODULE 7

Resubmission Strategies
MODULE 8

Stewardship
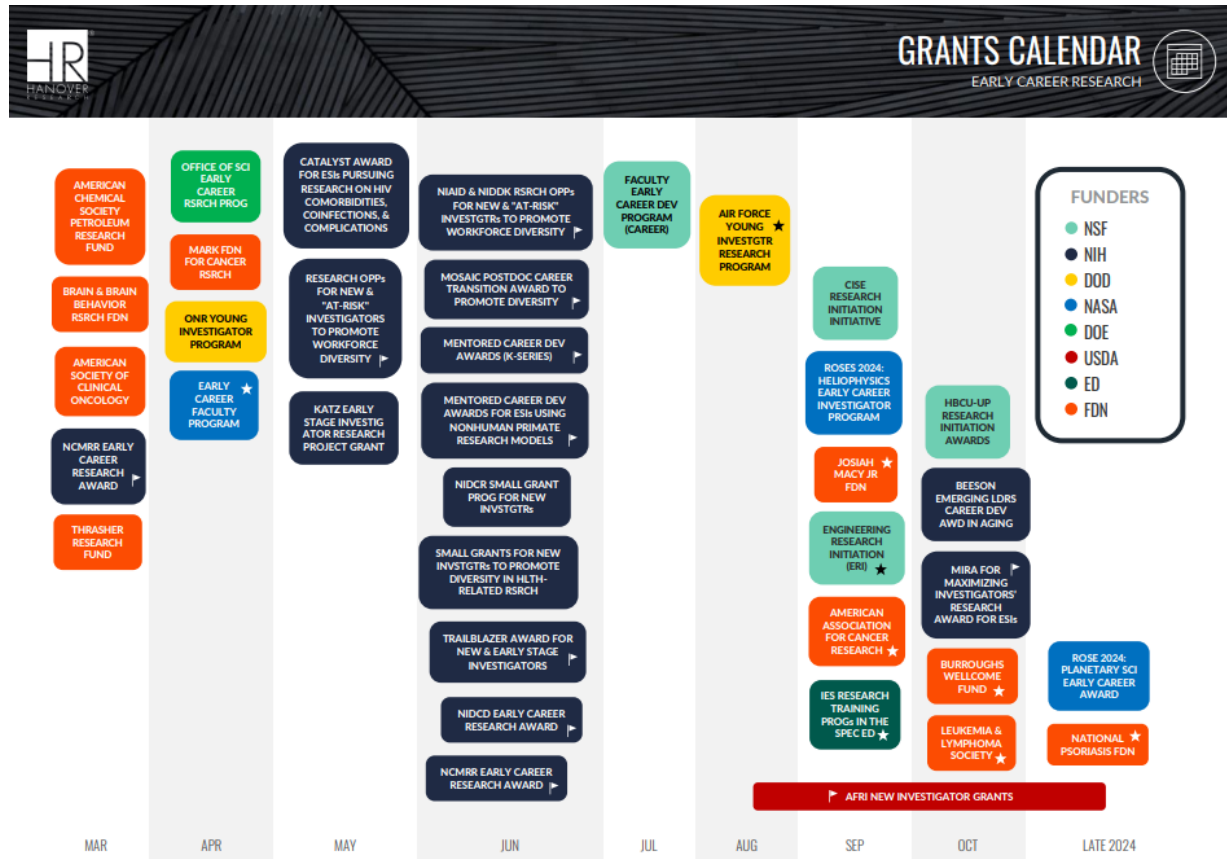MODULE 9

EMAIL ALERTS

GRANT ALERTS & DIGESTS

Get notifications of new funding opportunities in select areas.

FUNDING CALENDARS

Receive email updates twice a month on funding calendars on a variety of rotating topics, like the example on the left.

GRANTS WEBINARS

Get notified of upcoming grants webinars to strengthen grantsmanship skills and deepen the knowledge of funding mechanisms.

CLICK to subscribe:

Hanover Grants Email Alerts

Q & A

Kristen Beales, PhD

Content Director, Grants

4401 Wilson Blvd, Arlington, VA 22203
www.hanoverresearch.com

E: kbeales@hanoverresearch.com

P: 703-346-4762

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