

Mentoring Plan Webinar

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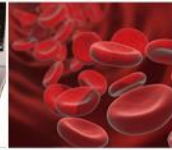
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Christopher Wright, University of Tennessee



**Community for Advancing
Discovery Research in Education**



Postdoctoral Mentoring Plan

- Is considered a component of broader impacts
- Is required for all proposals that include postdocs in the budget, including supplements
- Reviewers and Program Staff will evaluate the plans for mentoring activities that will be provided to postdoctoral researchers, including but not limited to:
 - Career counseling
 - Training in preparation of grant proposals, publications, and presentations
 - Guidance on ways to improve teaching and mentoring skills
 - Guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas
 - Training in responsible professional practices

Two CADRE Briefs on Mentoring

- “Early Career Researchers and Developers in the DR K-12 Program: Needs, Supports, and Recommendations” – CADRE (2014)
 - Survey of 50 early career researchers
 - Survey of 129 veteran PIs
 - Interviews with 20 early career researchers
- “Mentoring for the Postdoctoral/Early Career Researcher: Key Elements and Broader Impacts” – CADRE (2015)



Early Career Needs

Veteran PIs and early career respondents both had these as the top 4 of 11 areas in which early career folks need support.

- Developing proposals
- Identifying appropriate funding sources
- Networking and collaborating
- Writing and publishing

Early Career Needs

For some topic areas, early career respondents reported a substantial gap between needing support and receiving support.*

- Developing proposals (49% point gap)
- Developing and managing a budget (44% point gap)
- Hiring and supervising others (37% point gap)

** Based on “great extent” responses*



Sources of Support

Veterans and early career respondents agreed that the 3 most important sources of 8 were “formal advisors or supervisors,” “informal mentors,” and “peers and peer networks.”

- Informal mentors and peers are important.
- Possible benefits to multiple mentors, within and outside of institution.

Recommendations

Develop and regularly revisit a personalized plan for early career growth.

Have frequent discussions focused explicitly on career development and professional growth.

- “[My PI and I] met frequently to talk about my career. I’ve talked with other post-docs who had a different experience; they did not get that career-based information.” - *Early career respondent*



Recommendations

Give support in cross-cutting areas of R&D professionalism, such as:

- Developing proposals
- Identifying appropriate funding sources
- Networking and collaborating
- Writing and publishing
- Project management (Developing and managing a budget; Hiring and supervising others)



Recommendations

Involve early career researchers in project planning and management.

- “PIs should get early career researchers authentically involved in the process; I have learned more sitting in on meetings and phone calls, than I would have in other ways.” - *Early career respondent*
- “PIs should make decisions collaboratively: involve [early career researchers and developers] in every step of proposal preparation and project management.” - *Veteran respondent*



Recommendations

Support networking and collaboration with peers and veterans. Help mentees to seek out multiple mentors.

- “Networking is everything, though it is the one thing that I’m slow to adapt to.” - *Early career respondent*
- “Mentors should work tirelessly to bring them ‘into the fold’ in terms of networking.” - *Veteran respondent*



Perspectives on Mentoring

Christopher Wright, University of Tennessee

Julianne Wenner, Boise State University

John Settlage, University of Connecticut

Implications

Karen King, National Science Foundation



Questions



About CADRE

CADRE is the resource network for NSF's DR K-12 Program.

Learn more at:

Website: <http://cadrek12.org>

Email: cadre@edc.org

Social Media: <http://facebook.com/cadrek12>, @cadrek12

Slides and a recording of this webinar will be posted on our website.



CADRE Resources of Interest

- **Spotlight on Mentoring**

Featuring example mentoring plans, mentoring tips, a podcast, videos, a brief, and more:

<http://cadrek12.org/spotlight/mentoring>

- **CADRE Fellows**

Learn more about our CADRE Fellows program at

<http://cadrek12.org/cadre-fellows>

- **Spotlight on Early Career STEM Education R&D**

Resources and opportunities for early career researchers:

<http://www.cadrek12.org/early-career-stem-education-rd>

- **NSF Proposal Toolkit**

Writing a DR K-12 proposal? Check out this toolkit of helpful resources: <http://cadrek12.org/resources/nsf-proposal-writing-resources>

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