Supporting Academic Women in STEM:
The Post-Doc Institute

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Gender Summit 3
2013
North America

Improving Career-Life Balance
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Outline of this talk

♦ Need for PDI type workshops?

♦ Planning the series of workshops
  - topics
  - timeline
  - modes

♦ Running the workshops
  - choosing the expert panelists and presenters
  - preparing the presenters
  - preparing the audience

♦ Challenges which had to be overcome

♦ Evaluation

♦ Lessons learned

Need for Post-Doc Institute type workshops?

- was a key component of the 2-year post-doc program part of NSF ADVANCE program at UIC
- training for post-docs & grad students
- support and development for new assistant professors

Choice of Topics

- guided by experience as a 40-year academic:

- guided by HHMI / Burroughs-Wellcome workshops [*Making the Right Moves. A Practical Guide to Scientific Management for Postdocs and New Faculty*, 2nd Ed]

Timeline

Modes used

- Presentation by an expert; discussion
- Panel of experts compare and contrast; discussion
- Guided discussion of case studies (some clear cases, also grey areas)
- Anonymous review of participant's manuscript by topic expert; discussion with mentor how to respond to reviewer comments
- Written anonymous review of participant's proposal by topic expert, followed by panel review of same by discipline experts with program-officer experience

modes used (cont.) …

- Team-on-one discussion of academic job search; preview of draft application package
- Panel review of complete application package of participant by mock search committee
- Participant "job talk" to panel of faculty (mock search committee members of hiring department) followed by realistic probing Q&A
- Formal research seminar by participant in standard setting of a "hiring department"
- One-on-one 30-min interview of participant with a senior faculty of "hiring department"

The Postdoc Institute

1. Balancing personal and professional life	2. Research integrity, data management, managing your research	3. Getting mentored, networking. Cultivating "sponsors". Setting up collaborations	4. The job search: finding the right match	5. Overview of the funding process NSF. NIH, DOE, DoD	6. Getting published. Responding to reviewers
7. Panelists discuss each submitted proposal in turn	8. Preparing an application package I: CV, cover letter, research statement/proposal, teaching philosophy	9. Preparing an application package II: finding a suitable niche, positioning oneself in the faculty job market	10.. Search Committee review of submitted application package	11. Preparing for the campus interview, negotiating an offer	12. Giving a job talk (research proposal)
13. A 30-min mock job interview one-on-one with a senior professor of the hiring department	14. Research presentations formal 50-min talks by participants on their completed work to host department	15. Anatomy of an NSF proposal. Preparing a budget for an NSF CAREER proposal.	16. Getting started, Staffing your laboratory	17. Your role as a lab leader, building & sustaining an effective team	18. Becoming an effective teacher, the impact of gender on the evaluation of teaching

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The Postdoc Institute

1. Balancing personal and professional life	integrity, management, managing	package review by	The job	ng to
7. Panelists discuss each submitted proposal in turn	lication package I: CV, cover letter, research statement/propos al, te philo	Preparing application package II: finding a suitable niche, positioning	10.. Search Committee review of	11. Preparing for the campus inter	12. Giving a
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Speech bubble labels:
Panel discussion
Panel of experts
Manuscript review
Panel of experts
Team-on-one
Informal job talk (proposal) to mock search committee
Case studies
Proposal review by panel
One-on-one interview
Research talk to mock hiring department
Presentation followed by discussion
Presentation followed by discussion

Running the workshops

- choosing the expert panelists and presenters, moderator for each session
- preparing the experts
- preparing the participants

Faculty of the Post-doc Institute

- 39 individuals, 17 women 22 men, all research active (except for budget expert at grants office), 27 full professors, several professors are former or present federal agency funding officers, 3 scientists from Argonne National Lab, several Distinguished Professors, 3 department heads, 2 deans, 3 professors visiting from other institutions

- some served as anonymous expert reviewers of manuscripts and proposals

- 3 professors from liberal arts colleges provided materials, one participated in a panel

- UIC's Research Standards Officer -- Research Integrity

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Preparing the experts

- Provide very clear guidelines on goals to be achieved in the specific session
- Give some indication how these goals might be achieved
- Define scope of session and how it fits into series
- Describe sequence and timing of parts of session
- Provide a session flyer with biosketches (& copy of e-mail invitation to participants)

Do not tell them how to do their part.

Preparing the participants

- Provide (a) purpose of session, (b) names & qualifications of experts, (c) the nature of their participation (e.g., submit a proposal by a specific date, bring a list of questions, ...)

- Attach a session flyer to the e-mail invitation to STEM post-docs (occasional senior grad students, first year faculty, as appropriate).

- 3-4 wks ahead of time, collect the 'tickets of admission' to sessions where the participant's work is to be evaluated .

Challenges which had to be overcome

- Recruiting the experts: faculty willing to contribute to the effort, anonymous expert reviewers appropriate for manuscript or proposal, seasoned search committee members, ...

- Getting the participants to provide their own work to be evaluated

- Organizing the labor-intensive sessions, e.g., written reviews of manuscripts prior to 'responding to reviewers' session

Evaluation

- Survey questionnaire administered at end of each session
- On-line survey of mentors included questions about the Post-doc Institute.
- Individual interviews of the 5 WISEST postdocs by project evaluator

Lessons learned

- Each workshop needs planning:
(a) specific goals, (b) time allotted and mode best suited to achieve these goals, (c) choice of experts.

- Choice of experts is crucial to quality of the session, important to instruct them about goals, scope, context of the session.

- The most successful sessions are very labor intensive and <u>participants had to provide their "ticket of admission" to the session ahead of time</u> (proposals, manuscripts, application packages, job talks: participants prepare materials to be evaluated by experts). Two of the most successful sessions were the panel of proposal reviewers and the mock interview "chalk talk".

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The post-docs did not even realize what incredibly incisive, insightful assessment and advice they received!

Besides design/planning/implementing, the coordinator needs an assistant who will:

- Monitor a checklist for each session
- Do promotional work (who? – research advisers, dept heads, deans, graduate secretary, where? – websites, list-serves, newsletters)
- Maintain e-mail list of possible participants and recipients of promotion
- Print up materials for distribution
- Distribute/collect the attendance/survey questionnaires
- See to the room/AV/refreshments

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