Tips on Acquiring a Faculty Position

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Acknowledgement

Much of the information within this presentation was provided by

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Outline

• General “career building” tips
• Identifying positions
• The application package
• The interview
• Post-interview follow-up
• Negotiating a “package”
Career Building

• Have to have a mentor
  – Senior person in your field whom you respect and trust

• Have to consider and plan your career strategically
  – Productivity, Recognition and Good Letters are important
Plan Your Career Strategically

• Hired at 30 …
  – You could be in academia/ research – perhaps at the same institution – for 35 years
• Coming up for tenure in your 6/7th year, your postdoc and the first 6 years of your academic lifecycle are special
  – Performance at this time sets the stage for the rest of your career
Why Planning is Important

• “… postdoctoral scholars who had crafted explicit plans with their adviser at the outset of their appointments were more satisfied with their experience than those who had not. In addition to subjective measures of success, postdoctoral scholars with written plans
  – submitted papers to peer-reviewed journals at a 23% higher rate
  – first-author papers at a 30% higher rate, and
  – grant proposals at a 25% higher rate than those without written plans.”

Why Productivity is Important
# Publications Most Influential Factor in CV Review

Steinpreis RE, Anders KA, Ritzke D. The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study
SEX ROLES 41 (7-8): 509-528 OCT 1999
Some Initial Recognition is also Important:

- Somewhat under internal control
  - Critical mass of publications (publication dep. on peer rev.)
    - Number depends on field and institution
  - Effectiveness as a teacher
    - Secondary to research except at teaching universities

- Dependent on external valuation
  - Excellent letters from people who are known in your field
    - Number depends on field and institution
  - Intellectual achievement - start to be “known” for something
  - Potential -- on a trajectory to be in the top X% of your field
    - Comparison list
  - Forms of external validation
    - such as grant support and invited presentations
Why Good Letters of Recommendation are Important

• An introductory section
  – Relationship of recommender with the applicant

• A body describing academic traits and achievements
  – Specificity of focus and record of the applicant
  – Evidence of productivity in research, effectiveness in teaching, and collegiality in service
  – Evaluation or comparison of traits and accomplishments of the applicant
  – Particular research of the applicant
  – Applicants abilities in research design
  – Contribution of applicant to research environment of laboratory, department, greater community

• A closing section where the recommendation is made

• Longer letters are better
  – Shows care on the part of the recommender
  – The more detail, the more persuasive

Doubt Raisers in Letters

In further studying the letters for female applicants, we developed a list of adjectives that we term ‘grindstone adjectives’, as in putting one’s shoulder to the grindstone. These include: ‘hardworking’, ‘conscientious’, ‘dependable’, ‘meticulous’, ‘thorough’, ‘diligent’, ‘dedicated’, and ‘careful’.

most impressive. This is not their usual role however. Of the letters for female applicants, 34 percent included grindstone adjectives, whereas 23 percent of the letters for male applicants included them. There is an insidious gender schema that associates effort with women, and ability with men in professional areas.

Within letters, 35 percent of those for women that mentioned ‘research’ at least once, mentioned it multiple times. In contrast, 62 percent of the letters for men that mentioned ‘research’ at least once, mentioned it multiple times. The

Gender Differences in Association of Possessives


![Bar chart showing gender differences in association of possessives across various domains such as Personal Life, Publications, CV, Patients, Colleagues, Training, Teaching, Application, Research, Skills & Abilities, and Career.](chart.png)
Thinking About Research Strategy

• Become known for something – preferably theoretical -- and keep within that general area
  – Develop expertise different from that of your PhD mentor
  – Don’t distribute yourself and your research over many communities
• Pick projects with an eye toward:
  – Publication possibilities
  – Grant support
• Contribute to the research of others so that they can carry you sometimes
Importance of Theoretical Foundation

- There is a “fairly clear hierarchy of value associated with scientific work”
  - Theoretical
  - Experimental (Observational?)
  - Technological breakthroughs
Be a Tree – not a Telephone Pole or a Shrub

Have a main area of focus that sets you apart from others

Don’t pursue so many fields that only a few know you in each community

Don’t specialize so much that you are boring

www.christmas-treasures.com/.../TreeSmall.jpg

www.mccullagh.org/.../apple_leaf_tree.html
Diverse vs. Specialized Academics

Note: The diverse scholar has a specialization score of <.22 and the specialized scholar has specialization score of >.58, the 25th and 75th percentiles, respectively, of the distribution of specialization scores.

Leahey et al. in review
In most fields, co-authorship is an accepted publication multiplier.

**Idealized Research Productivity**

- w/ others
- 1st author
- w/ mentor

PhD Candidate | Post Doc | Asst Prof/Res | Assc Prof/Res | Full Prof/Res

22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
Traveling to Meetings is Important

Following 9/11
Scientist A stopped attending the annual workshop

From ISI database
Travel …
Professional Meetings and Recognition

• Present your research as often as possible: go to meetings, accept invitations for talks, offer to give presentations, run special sessions
  – People exposed to your ideas, you become known
  – Vets your research
    • Feedback => honed ideas and presentation, confidence
  – Alerted to potential competitors and any urgency in publication
  – Accrue citations in first year
  – “Invited presentations” => external recognition

• Speak with leaders in your field, collaborators, peers
  – Builds professional social capital, invited to participate in committees, builds letter writers
Publications: One Long, Two Short … ?

• Some long, authoritative publications are important – demonstrates depth
  – Women tend to try to make their publications bullet-proof and complete
    • Natural reaction to greater criticism than men
    • Don’t polish until perfect! -- delays publication and makes rejection/revisions harder to handle

• Some short ones are also important
  – Gets the main idea out in a timely way
  – Easy to get buy in from co-authors
  – Easy to revise
Review/Synthesis Papers?

Figure 3. Impact Factors and Journal Type

Impact Factor window

Time after publication (Years)

Citations

Review
Letter
Full Paper

M. Amin & M. Mabe October 2000 Impact Factors: Use & Abuse, Perspectives in Publishing, No. 1
Citation Index: 
Academic “Credit Report”

• Use same format for your name
  – Culligan PJ vs. Culligan P (Culligan P*)
• Publish in journals indexed by ISI
  – Don’t “over publish” in books/conference proceedings --
    while peer reviewed many are not indexed
  – Books result in confused citations …
• Publish in journals with easy full text access
• Use key words in title and abstract
  – Increase accessibility/searchability of your work
  – Emerge in “top cited” under this topic
Meet (and Host) Eminent Scholars

• Identify 20 top-cited researchers in your field
  – Read their top cited and most recent papers
  – Download their picture and short bio
  – Go to their presentations at meetings
• If, and when, you can identify a research connection
  – Make direct contact
    • At meetings
    • By email
  – Ask your group to bring them to your Institute to give a presentation
    • Offer to be the local host
    • Show them your lab, discuss your research

Be Your Own Mentor

- Check out who cites you
- If someone cites your paper once, they probably will more than once
  - Read their papers
  - Connect at meetings, discuss your latest project
  - Consult pre-pub, list them as a reviewer
  - Consider co-authoring and co-proposing
  - Referee list for promotion

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### Potential...
- Anselme, B 2
- Belikov, SE 2
- Borga, K 5
- Colony, R 2
- Cooper, LW 3
- Dethleff, D 2
- Gabrielsen, GW 5
- Garner, GW 2
- Granskog, MA 3
- Grebmeier, JM 3
- Gulliksen, B 2
- Harms, IH 2
- Howland, RJM 2
- Johansen, S 4
- Johnson-Pyrtle, A 3
- Kelley, JM 2
- Kravitz, IH 2
- Macdonald, RW 5
- Pfirman, SL 5
- Rigor, I 4
- Ritterhoff, J 4
- Savinov, VM 3
- Skaare, JU 6
- Wania, F 4
- Zueke, GP 4

### Reconstructing...
- Colony, R 2
- Darby, DA 2
- Dethleff, D 3
- Eicken, H 5
- Harms, IH 3
- Johansen, S 3
- Karcher, MJ 3
- Kassens, H 2
- Knies, J 2
- Kolatschek, J 2
- Korones, R 2
- Mamonne, K 2
- Martin, T 2
- Muller, C 2
- Nies, H 2
- Pavlova, O 3
- Pisia, N 2
- Rigor, I 2
- Rothrock, DA 2
- Stein, R 2
- Swift, JH 2
- Viscosi-Shirley, C 2
- Vogt, C 2

From ISI database
Alignment and Conservation of Energy

- Creativity
  - When are you most creative, most productive? Protect that time
- Work on what you want to publish
  - And publish whatever you work on
- Make sure that everything you do counts
  - And is counted, e.g. ISI indexed, full-text, journals …
- Consider publishing more than once with the same authors on a related topic
  - The second one requires much lower overhead
- Make sure that you are visible
  - That people know who you are and what you are working on
Identifying Positions

Often heard quote: “We never hire from an advertisement…”
If your name is “out there” you are more likely to be hired
Let people know that you are looking…
Advertisements

Don’t apply for jobs outside your area of expertise
If in doubt, contact the Chair of the Search Committee about the suitability of your qualifications for the position
Before applying to a position, discuss the position with your mentor
The Application Package

A Cover Letter
A Resume
A Research Statement
A Teaching Statement
A List of Referees

See:
If you email your application, also send a hard copy in the mail

Send some of your best publications, even if you are not requested to

Tell your referees that you have applied for the position - and provide them with some information about it (copy of advertisement, etc.) and why you are a strong candidate....
The Interview

You have to do your homework! Know the Department, School and Institute
Know why you want the position and how you will contribute, both in research and teaching
Have a reasonable idea of the resources that you will need to be a success
Practice your talk in advance
(Politely) ask for the interview schedule in advance
Prepare a set of questions that you will ask at the interview in advance
Dress appropriately….
The Talk

See:
http://www.earthinstitute.columbia.edu/advance/res_reports.html

Depth is better than breadth.....You have to convince your audience of your academic ability

Stay on time!
Individual Interviews

Not a bad idea to take notes - or appear to be taking notes - during an interview…

Prepare to answer questions such as:

- Why do you want this position?
- What can you contribute to the Department?
- Who can you collaborate with?
- What resources do you need?
- What are the “hot” topics in your area?
- What are your likely funding sources?
- Where is your field heading/ what is its future?
- What can you teach?
- Do you have any questions?
Post-Interview Follow-Up

Send a “thank-you” email to the Search Committee Chair - offer to provide further information if needed

If you don’t get the position, it is perfectly fine to schedule a phone conversation with the Chair to ask why
Negotiating a Package

Try to be aware of salaries at competitor universities

Generate a list of items you will need to “start-up” - equipment, summer salary, student support, technician support, travel funds, space, renovations, etc.

Negotiate a reduced teaching load for the first year or two
Have a clear understanding of the time to tenure, and any policies that can “stop the clock”

Have a clear understanding of “service expectations”

Get everything in writing!
Unique Program Facets

Based in The Earth Institute at Columbia University - Interdisciplinary Institute Promoting Sustainable Development

Specifically Targets Endowed Research Scientists
ADVANCE Accomplishments

Transformed Recruitment from a Passive Process to an Active Process

Institutionalized Professional Development for Scientists and Engineers

Intellectually Engaging Scientists and Engineers by Placing Diversity in a Research Context
<table>
<thead>
<tr>
<th>#</th>
<th>Objective</th>
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<tbody>
<tr>
<td>1</td>
<td>Change the demographics of the science and engineering faculty and research staff at Columbia University;</td>
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<tr>
<td>2</td>
<td>Cultivate an environment that attracts, fosters and promotes women leaders in science and engineering;</td>
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<tr>
<td>3</td>
<td>Stimulate an institutional culture shift using social and behavioral science research around issues related to gender and race</td>
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## Simplified Columbia Organizational Chart

<table>
<thead>
<tr>
<th>President</th>
<th>Provost</th>
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<tbody>
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<td>Art &amp; Sciences</td>
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<td>Applied Physics &amp; Math</td>
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<tr>
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Logic Model for Institutionalizing ADVANCE

Identify Leader of Diversity and Professional Development within Target Functional Units
Provide Support to Enable Effective Implementation of Programs within Unit

Examples:
- Culligan/Palm Engineering
- Purdy/Laird LDEO
Program Highlights

Hiring Resources
  Hiring Dinners, “Face-Books”, diversification of seminar speakers, Marie Tharp Fellows

Professional Development
  Incoming Faculty Orientation, Junior Faculty Workshops and Networking events, Defined “pre-tenure review process”, Workshop Support, Transition Support, “Chair School”
Science of Diversity

Annual “Science of Diversity” symposium and lecture series,
Symposium on “Interdisciplinarity”,
Research on Career Cycles and
Research Productivity