A green light to greatness.

UNT UNIVERSITY OF NORTH TEXAS
Securing Academic Positions at Two and Four Year Institutions

Postdoc and Faculty Session B:
From Landing a Postdoc to Thriving as a Faculty Member

Brian Ayre, Associate Professor, Dept. of Biological Sciences
What is a “faculty” position

The term “faculty” is and broad varies substantially between countries and even between institutes.

At UNT, Professors, Librarians, Instructors, Lecturers, Clinical Faculty and Adjunct Faculty are all considered “Faculty”.

“Faculty” can then be subdivided in Tenure-system appointments (generally Professors) and non-tenure system appointments (generally everything else).
What is a “professor”

*Professor* derives from Latin as a "person who professes”

The title is broad and varies substantially between countries.

In USA/Canada, most tenure-system appointment faculty will hold the rank of Assistant, Associate, or Full Professor.

In Europe and many other countries, “Professor” is reserved for the very highest academic ranks, frequently a distinguished individual who oversees a group of junior faculty (e.g., Reader or Lecturer).
What does a “professor” do*

**Teaching:** The educational function of a university requires excellent teaching and the support of student success. The scope of faculty teaching is broader than conventional classroom instruction.

**Scholarship:** Academic scholarship requires sophisticated levels of research, scholarly activities, engagement, and creative and performing arts. This scholarship contributes to discovery, knowledge, understanding, and application in diverse forms including but not limited to publications, digital/web-based works, presentations, projects, exhibits, performance, and instruction.

**Service and Engagement:** The service and engagement function and operation of the University require active participation by faculty members in a variety of external and internal activities.

Different Institutes and Departments will emphasize in different ratios

*From the UNT policy manual*
The responsibilities and duties of faculty/professors vary substantially by field and by the type of institute

At a research-intensive medical school, teaching\(^1\) load will be minimal, but the research expectations (publications and grants\(^2\)) are very high.

At four-year institutes, teaching and research is balanced relative to departmental expectations: Biology (30:60:10), Math (45:45:10); workload distribution determines expectations for pubs and funding\(^2\).

At two-year institutes, teaching expectations are high and research load is minimal; grant funding is likely not expected.

\(^1\) State of Texas defines one 3 SCH course as a 10% load
\(^2\) External funding for scholarly activities is an expectation, ranging from very high (and including faculty member’s salary), to an expectation of legitimate effort only.
\(^3\) Internal funding for research is very limited
Achieving Career Goals

It is important to have career objectives and to target those objectives.

But, competition for positions in fierce, and flexibility in career path needs to be maintained.

What does it take to be prepared for the “next step”?
Landing a Postdoctoral Position

A postdoctoral position should be viewed as apprenticeship training: an opportunity to master skills for the future and develop as an independent scientist (or other professional).

A postdoctoral position is, in many ways, what you make of it (independence!).

The postdoctoral position sought should have the following characteristics:
- Embrace experiences consistent with future goals
- Strive for **independence** (but, the prof is there for both your and his/her success, so don’t be too independent!)
- **Write papers** with your mentor and by yourself to show scholarly productivity. Good writing is a critical but hard-won skill, only achieved with practice.
- **Write grants** with your mentor. Writing good grants will be critical as a faculty member; it is a skill different from writing papers (and it is very competitive).
- As a postdoc, your job is research, but you will teach as a faculty member. Get some lecturing experience if possible
- Mentor junior colleagues. As a faculty member, you will not do much research yourself. You will need skills in recruitment and training junior colleagues to achieve productivity
- **Run the lab:** a professor is a lab manager. You need people skills, budgeting skills, how and where to order reagents, even how to wash the glassware
- Participate in governance and service, but not too much. You will do service as a faculty member, and some experience could tip the scale in your favor
Finding positions


Note: they are looking for international-caliber candidates
Applying for positions

The cover letter: Highlight strengths relative to the position, 1 – 1.5 pages, longer and committee members will stop reading attentively.

The CV: Focus on relevant material, sell yourself but be professional. Do not pad with trivial or unrelated information. Clearly separate scholarship that is “in preparation” or “submitted” and what has gone through peer review (put up front).

Statement of research objectives: Not too specific, but not too vague; emphasize the importance of your field; target it to the position, but stay within your credentials.

Statement of teaching philosophy: Not too specific, but not too vague; include philosophies on individual mentorship, classroom instruction, laboratory (hands-on) instruction, distance (on-line) learning, ‘flipping’ the class room, etc.

Important: Get an experienced individual to critique your dossier; each application needs to be customized for the position.
What does a selection committee look for?
Part I – Two and four year colleges

**Teaching experience:** Lecturing and individual mentorship; TA laboratory instruction and coordinator roles (i.e., leadership in instructing the instructors). Teaching experience is hard to get as postdoc (it's not your job) so work toward these experiences during your graduate degree.

**Pedigree:** Prestigious institutes, labs, and journals attract the eye.

**Potential for independent research:** How many papers does the candidate have? Where is the candidate in the author list?

**Letters of Reference:** refer back to pedigree – big names and/or high ranking positions (make sure they will support you!!)

Is the candidate a “good fit” for the position and Department
What does a selection committee look for?

Part II – Four-year and research intensive institutes

Independent research leadership: How many papers does the candidate have? Where is the candidate in the author list?

Potential to attract funding: Is the candidate pursuing important subjects? Are they using cutting-edge approaches? Do they have grant-writing experience?

Will the candidate be a leader in their chosen field?

Pedigree: Prestigious institutes, labs, and journals attract the eye

Teaching experience: lectures and individual mentorship; what subjects?

Is the candidate a “good fit” for the position and Department

Letters of reference: refer back to pedigree – big names and/or high-ranking positions (make sure they will actually support you!!)

Note: Employers want demonstrated productivity. “Skills” or “Experience” has little value on an application for an upper-level position. Your skill should be evident in your papers. If you claim a skill, you better really have an in-depth knowledge of it and an ability to apply it.
You have a position!! Now what??

Achieving tenure is stressful, a few will breeze through, most will have to strive and sacrifice.

Anticipate that it will interfere (i.e., destroy) your life/work balance.

Know the expectation within the department and be prepared to meet those expectations, even if you have to modify your objectives*

Quantity and Quality will be weighted: one does not substitute for the other.

* As an example, if publications from your own lab are expected in the first year or two (and they probably are), design experiments that can be done quickly. Avoid investing all your time and energy in a large endeavor that will take several years to initiate, and not start returning results until your third or fourth year.
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<th>10</th>
<th>9</th>
<th>8</th>
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<tr>
<td>Biology scoring</td>
<td>1</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>Biology descriptor</td>
<td>Recognized leadership and long-standing graduate program of excellence.</td>
<td>Performance well above regular teaching, research and service expectations.</td>
<td>Typical quality teaching, research and service expectations.</td>
<td>Consistent below-average teaching, no graduate program, no funding or efforts to obtain, no attempts to publish good science, no participation in professional meetings, serves grudgingly.</td>
<td>(no descriptor: performance requires post-tenure review)</td>
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**RESEARCH TRACK CRITERIA (3 year window)**

- 6 courses (ug and grad)
- Teaching scores: <=2.0
  - 1=excellent
  - 2=above average
  - 3=average
  - 4=below average
  - 5=poor
- Extramural funded grant
- 6 full length peer reviewed publications
- Trains grad students
- Professional development
- Serves on 2 committees/yr (1 univ/3yr)
- Participates in seminar series
- 6 courses (ug and grad)
- Teaching scores: <=2.3
  - 1=excellent
  - 2=above average
  - 3=average
  - 4=below average
  - 5=poor
- Funded grant
- 4 full length peer reviewed publications
- Trains grad students
- Professional participation
- Serves on 2 committees/yr
- Participates in seminar series
- 6 courses
- Teaching scores: <=2.6
  - 1=excellent
  - 2=above average
  - 3=average
  - 4=below average
  - 5=poor
- 2 grant applications
- 2 full length peer reviewed publications
- Trains grad students
- Professional membership
- Serves on 2 committees/yr
- Participates in seminar series
- 6 courses
- Teaching scores: <=3.0
  - 1=excellent
  - 2=above average
  - 3=average
  - 4=below average
  - 5=poor
- 1 grant application
- 1 full length peer reviewed publication
- Professional membership
- Participation on committees
- Does not meet minimum criteria in research, teaching and service.