How Not To Get Fired:
Faculty Promotion and Tenure

<http://www.owlnet.rice.edu/~meade/shpe_tenure_notes.pdf>

SHPE NTCC Graduate School Conference 2005

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My qualifications:

- I have made and can confirm every mistake you have probably been warned about.
- I am a recently promoted full professor of mechanical engineering at a top tier research university.
- I am a GEM Fellow.
- I have been a member of the University’s Appeals & Grievances Committee (equivalent to the CSI of faculty incidents).
- I have been a member of Department and University search committees for junior and senior faculty, the dean, and provost.
This is where I’m from:

Rice University is a small private research university that is ranked 16th overall in U.S. News and World Report.

Rice is similar in size to Princeton University and is in the 4th largest city in the US.

<table>
<thead>
<tr>
<th>% Minority or Women</th>
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<tr>
<td>2740 undergraduates</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>African-American</td>
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<tr>
<td>1378 Science and Engineering (S&amp;E) students</td>
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<td>Women in S&amp;E</td>
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<tr>
<td>753 Graduate students in S&amp;E</td>
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<td>Women in S&amp;E</td>
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Format of this talk:

Because of my background most of my observations are restricted to research universities.

My talk will act as an *overview* of the tenure process.

Let’s treat this as a discussion meeting.

We can all share information and experience on details and issues I am ill-equipped to answer, e.g.:

- Family/maternity matters
- Tenure at teaching universities
- Tenure at law and medical schools
Hiring of Tenure-Track Faculty

The successful applicants will have demonstrated the ability to:

- Communicate clearly and effectively the knowledge of their specialty.
- Conduct new and independent research.
- Publish peer reviewed scholarly research.
- Identify funding sources and obtain funding to support scholarly research.
- Cooperate with colleagues.

Do you really want a job in academia?

“It’s an isolated discipline, totally focused on your research, that doesn’t leave much room for a life.” [1]

“I was supposed to be a good role model and bring people to academia … They pretty much looked at my life and said, ‘No thanks.’” [1]
Do you really want a job in academia? (continued)

Faculty diversity in U.S. universities in 2002 [1]

This will not be a 9 to 5 job:

- Long days and nights of interacting with students, research colleagues, and department faculty.
- Eternal search for funding through writing research grants and constant publication of your research findings.
- Preparation or modification of class material, lecturing, question and answering, and grading of material.
- Oh, and don’t forget your spouse and family.

However, you are not alone. This is analogous to the life of a small business owner or a new lawyer or physician starting their practice.
You’ve made your decision and have been hired to a tenure-track faculty position.

Tenure-track academic ranks are:
1. Assistant professor (non-tenured 6 - 7 years)
2. Associate professor (tenured 6 - 7 years)
3. Full Professor (tenured)

Tenure provides:
1. Freedom in teaching, research, and outside activities.
2. From the University’s perspective, the security to attract and retain accomplished faculty.

What does tenure mean to you and why do you want it?

What:
Promise of lifetime employment made by your university. However, there is no guarantee of respect, money, or happiness.

Why:
1. Lifetime employment
2. Research independence - you can fully explore your field
3. Chance at making a difference in the world
4. Peer recognition
5. Lifetime of interaction with some of the brightest minds
As a faculty member, your responsibilities will include:

- Teaching, and possibly developing, courses at graduate and undergraduate levels.
- Conducting scholarly research in your field.
- Developing significant external funding.
- Collaborating effectively with other faculty members in the department.
- Service to the university and outside community.

Expect to:

- Write proposals for research, equipment, and special projects.
- Develop notes and review text books to teach your students as effectively as possible.
- Publish journal articles, reports, papers, and books.
- Keep up-to-date in your field.
- Serve on councils, boards, and committees.
- Produce qualified Masters and Ph.Ds for the nation’s workforce.

In short, produce relevant knowledge and bring prestige to the university.
When you go up for tenure you will be asked to assemble a Promotion Dossier. This will include information on:

- Your education (pedigree).
- Professional employment since you received the Ph.D.
- Grants and honors (honors, awards, fellowships, research grants).
- Publications (articles in refereed journals and books, non-refereed journals, conference proceedings, published books, abstracts, technical reports and publications in press).
- References to your articles (citations).
- Refereed presentations.
- Creative works other than publications (new courses, web page design).
- External reviews (outside reviews of your CV and publications).
- Teaching activities and effectiveness (courses, enrollment, fraction of load, student teaching evaluation scores).
- Graduate student supervision (Masters and Ph.D. graduates, post-doctoral students).
- University service (standing committees, departmental committees, administrative responsibilities).
- Professional service (technical committees, associate editorship, session chairmanship, student organization sponsorship).
- Community service (invited lectures, panel participation, and local, regional, or national advisory boards or committees).
- Recommendations (departmental vote and dean’s recommendation).
So what is of primary importance in gaining tenure?

*Favorable external reviews.*

Such reviews depend upon recognition, which comes from:

- Refereed journal publications (journals highly ranked in your field). How many and where?
- Citations. Self citations do not count!
- Research grants (peer reviewed organizations like NSF & NIH). Note that money is a means and not an end.
- Graduate Student Supervision (Ph.Ds).

You are just expected to do well in the other criteria.

Suggested Strategies for Tenure:

- Write your CV in the promotion dossier format (your weaknesses become readily apparent). Be honest with yourself but patient.
- Keep everything! Make a tenure file and put any student, university, or outside organization thank you letters, certificates, best paper awards, etc. This will be your paper trail showing accomplishments and service.
- Publish journal articles immediately! You can get at least three articles from your dissertation.
- Convert conference papers to journal articles.
- Become active in your professional organizations (conferences and technical committees in IEEE, ASME, AIAA).
- Develop your management skills (multi-tasking, supervision of graduate students, communication, time management). A new tool kit is required!
- Call or visit program managers from funding organizations (tailor the proposal to the program).
- Apply for the NSF CAREER award and the ONR Young Investigator award.
- Apply for summer faculty research fellowships (ASEE sponsors summers at NASA and Navy research centers).

- Volunteer for university committees involving a manageable level of effort (better to volunteer than be drafted).
- Solicit advice from senior faculty and those recently promoted (you will be married to these people for the next 30 - 40 years).
- Avoid department politics. Choose your enemies wisely.
- Stay on mission and don’t be a local community hero (devote the majority of your efforts to gaining tenure).
The Tenure Process: What can go wrong?

- Weak tenure case
- Bias
- Communication problems

*Your field of expertise*

*Outside the scope of this presentation.*

Weak Tenure Case

Weak letters of support from your external reviewers without a bullet-proof rebuttal is always fatal. This judgment will come from your dossier.

Dossier:
- A downward sloping publication record
- Low citation count
- Poor funding record
- Ethical concerns
Bias:

Obvious targets:
- Race
- Ethnicity
- Gender
- Age
- Disability
- National origin

Bias:

Not so obvious targets:
- Multidisciplinary research
- Cooperative rather than independent investigations
- Publishing media (electronic versus paper)
- Mentoring processes (selecting mentors and means of guidance)
- Entrepreneurial efforts
- Assignment of graduate students
Bias:

Not so obvious targets: (continued)

- Allocation of financial and equipment resources.
- Committee assignments.
- Composition and representation of your tenure review committee.
- Selection of your external reviewers and dealing with the reviewers’ comments.

Bias: (continued)

- Determine if there is objective evidence of bias and document it.
- Try to communicate openly with your chair and/or dean to address the problems rationally.
- Move it up to the provost and/or the university’s grievance committee.
- If problems persist, move on to another university.
**Communication:**

- In many instances what is perceived as bias is a lack of open communication.
- In this high pressure environment, misunderstandings and minor annoyances build into suspicion and resentment and cloud your judgment.
- This job requires a set of tools different than those used in graduate school. You must concentrate on your work and keep your eyes and ears open. You must learn to work with different personalities and adapt to changing environments.

**Communication: (continued)**

- Understand your institution’s tenure process. Know the faculty handbook, departmental expectations, and informal expectations.
- Use your network of colleagues and mentors to air out problems and look honestly at your performance.
- From my time on the A&G Committee, four failed tenure cases stood out because of what I believe to be a lack of communication.

Case Files: (1) Hostility, (2) Arrogance, (3) Poor choice in priorities, and (4) Poor ethics.
Case File #1

- Outstanding academic qualifications.
- Seemed determined to be a local community hero.
- Senior faculty tried to persuade her to focus the majority of her time in peer reviewed scholarship.
- She interpreted it as hostility (bias) and interference. As a result, lines of communication withered and died.

Constructive Approach: Patience, open communication, and choose your fights wisely. She should have waited until after tenure to become a local hero.

Case File #2

- Excellent academic qualifications: 4.0 GPA through college and graduate school, NSF Fellow, and PhD from one of the top three engineering universities.
- So smart that he consistently ignored advice from senior faculty and international experts in his own field.
- He interpreted it as envy and interference. As a result, lines of communication withered and died.

Constructive Approach: Open communication and honest self-evaluation. Get over yourself.
Case File #3

- Outstanding academic qualifications.
- Sufficient peer-reviewed funding.
- Seemed more interested in winning arguments than publishing journal papers.
- Didn’t spend time sharing research with experts in the field. Communication with the greater academic community was never sufficiently developed.

Constructive Approach: Shut the heck up already, network at conferences and spend what little time you have publishing papers in journals of high visibility.

Case File #4

- Outstanding academic qualifications.
- Found by the NSF to have plagiarized work in a proposal. Put on two year probation.
- Reputation damaged beyond repair.

Constructive Approach: Ask for advice. Find summer faculty fellowship opportunities at research labs to secure future funding. Meet with funding program managers. Is this the right job for me?
Summary:

- Start the promotion dossier on your hiring date!
- Do a yearly self-evaluation.
- Keep track of all your critical dates.
- Collect supporting material. Continuously keep a file with:
  - All records
  - Letters from students and colleagues
  - Awards including nominations
  - Other successes

Summary: (continued)

- Evaluation letters
  - Students, alumni, chair, university faculty
  - Peers both inside and outside the university
- Be sincere in your self-evaluation.
- Address your strengths and weaknesses.
- Be visible to the university and research communities.
- Choose enemies wisely.
Summary: (continued)

- Pay attention to criticism and failures
  - Go over journal paper and proposal evaluations calmly and rationally.
  - Go over student evaluations calmly and rationally.
  - Make a list of approaches to address perceived weaknesses.

- Get help and use
  - Mentors, senior faculty, department chair
  - Recently promoted faculty
  - Colleagues from other universities

Conclusion:

- Stay organized.
- Stay positive.
- Play the game from the end backward. What does success look like? Work backward to insure it becomes reality.
- It can be done!

Notes available at:
http://www.owlnet.rice.edu/~meade/shpe_tenure_notes.pdf
Resources


