

Becoming a Tenured Professor

- How to develop an independent research plan
 - review literature with an eye for problem, approach, solution, new ideas
 - review objectives of funding programs & awards made
 - choose an ambitious, but feasible issue that builds on your tools/skill set
 - work in between disciplines (answers may be in another field)
 - understand complementary skills sets you need, make a plan to get them (collaborations)
- Strategies to make one's research visible
- Strategies to distinguish independent research from graduate and postdoc advisors

Becoming a Tenured Professor

- FIND FUNDING. Use database of past awards, look at acknowledgment sections of papers (who funds the work in your area), *contact program officer* to get an idea if your work fits in the program
- Development workshops (CAREER grant writing)
 - first 5 years of a 30 year career (visionary)
 - compelling figures
 - illustrations for major points
 - summarize program pieces
 - what will data look like & how analyzed
 - use new ‘tools’ and techniques
 - collaborators commitment statements
 - ‘funnel’ from big picture to details
 - convince external people in your field that you know what you are talking about
 - those less familiar with the field need to know how your work advances knowledge in your field
 - exceptional ‘broader impact’ plan
 - contact partners and include letters of support (pledge to participate)
 - NSBE & MRS (ugrad facilitators), CCMR (teachers, outreach expertise), SRI (evaluation), CU Associate Dean for Diversity (funds for recruiting URM)
 - statements on significance of each piece proposed

Becoming a Tenured Professor

- What helped me?
 - collaborative grants with colleagues
 - your part is <2-3 pages of entire grant proposal but proposal funds a student for you (NSF MRI, IRG MRSEC, NSEC)
 - sitting in on *the class* you will teach
 - learn to motivate lectures
 - organize presentation of material
 - sit in with respected teachers in your department
 - go over materials & your approach with teaching mentor
 - build course website for handouts etc. or make course pack
 - use Center for Excellence in Teaching
 - checklist for evaluating a lecture class
 - how to prepare detailed syllabus
 - video feedback on classes
 - *document changes & improvements over time*
 - NETI (National Effective Teaching Institute) conference at ASEE

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- set goals for yourself (use mentors to review)
 - papers each year (3-4)
 - publication strategy (weigh impact versus time to publication)
 - group management strategy (how will students learn literature, progress checks, level of independence)
 - how to use undergraduates in group
 - major grant submissions each year (2-3)
 - conferences (which ones, you and/or students present)
 - meet letter writers
 - teaching development activity
 - applying for junior faculty awards in your area
 - engaging with industry (trips, grants: Dupont, 3M)

Becoming a Tenured Professor

- What is good service? (refer to tenure guidelines)
 - Ask to look at successful dossiers and focus on ***impact of activities***
 - editorial board of journal, reviewer, invited contributor, guest editor
 - organize meeting, organize session, preside, present
 - referee research proposals
 - high visibility contributions, strategic value to you, intellectual or scientific component allows you to learn from others
- Organize seminar series for your department or create one in your area of expertise
 - Meet selected experts in your field who will know you & your work
 - tenure letter writers need to know you as a scholar BEFORE asked to submit a letter
 - send your papers as they come out to colleagues who may be interested
 - May get you invited talks, invitations to organize symposia for your professional society, etc.
 - establish network that recognizes **national influence** of work (ACS, MRS, GRC)

Becoming a Tenured Professor

- Pay attention to department culture
 - lunch, doors open etc. (manage presence in department)
 - brand yourself for colleagues (how will your contribution be defined at tenure)
 - seek out mentors; get multiple opinions on advice
- Value of a good postdoc experience
 - Opportunity to learn at least one part of the academic job very well before you start
 - management
 - grant writing/ fundraising (develop research vision)
 - teaching
 - build network with colleagues who should know you
 - Top 10 group in your field
 - skills in your area or adjacent area
 - combine with dissertation work toward ‘independence as a PI’

Becoming a Tenured Professor

- Tips on compiling statements for dossier
 - know what ‘counts’ and what is expected
 - annual review with chair should lead to evolving file
 - ask for informal comments from 3 year review
 - look at several successful tenure files
 - how to write convincing contributions to teaching, research, service document
 - Write for different constituencies
 - your department, your college colleagues, FACTA (provost level), external letter writers
 - Prepare statements and CV far enough in advance to have people from within and outside your field to review it
 - Remember tenure shows that your institution believes in the promise of your future productivity:
map out a productive path...what will you bring to the discipline & institution in the future?