Workshop: Professional Development for Teaching Faculty

Panel: The Importance and Role of Teaching Track Faculty in PhD Granting Institutions

Tom Cortina, Carnegie Mellon University
Dilma Da Silva, Texas A&M
Thu D. Nguyen, Rutgers University

Tom Cortina, CMU

- Teaching Professor, Computer Science Dept. Assistant Dean for Undergrad. Ed.,
  School of Comp Sci. (SCS), Carnegie Mellon University

- Lecturer/Teaching track for 30 years at Polytechnic U. (NYU), Stony Brook U. (SUNY), and Carnegie Mellon
  - At Poly and Stony Brook, no promotion available then At CMU, started in 2004 as Assistant TT, promoted to Associate in 2009, Full in 2016

- Named Assistant Dean in SCS in 2012 for 5 years. Renewed in 2017 for an additional 5 years.
  - oversee the Computer Science major and minor
  - assist with oversight/mgmt. of all undergrad pgms in SCS

Dilma Da Silva, Texas A&M

- Professor & Department Head
  Department of Computer Science and Engineering
  Texas A&M University

- Term as Head started 8/24/2014
  - Management positions
    IBM Research (2000-2012)
    Qualcomm Research (2012-2014)
  - University of Sao Paulo, Brazil (1995-2000)

Thu Nguyen, Rutgers

- Professor and Chair
  Department of Computer Science
  Rutgers University

- Term as Chair started July 1, 2017

- Associate Chair 2012-2017
  - Responsible for hiring, managing, and development of Teaching-Focused Faculty (TFF)
  - Responsible for class scheduling and coordination of teaching assignments

A. Responsibilities

- What is the typical course load? Teaching what type of courses?

- What are committee responsibilities of a Teaching Track Faculty? Any supervisory responsibilities?

- What are some examples of tasks that teaching track faculty do that a tenured/tenure track faculty does not do?

Course Load/Course Types

- CMU: 1 large or 2 small per semester, generally intro/core, some teach upper-level/graduate, pairing with co-instructors in very large classes

- Rutgers: 3 per semester (6 per year), adjusted to 5 per year for CS due to rapid change in field, multiple sections of same course to reduce load, teach at all levels, coordinator for intro courses. Reductions allowed for coordinating large courses and curriculum development activities

- Texas A&M: Similar to Rutgers

Committees/Supervising

- CMU: serve on most committees but mainly for curriculum, Teaching Track hiring, advising, TA training, MS admission

- Rutgers: no formal policy, serve on committees that affect undergrad curriculum, hiring, MS admission

- Texas A&M: Similar to Rutgers and CMU

Tasks Not Done by Tenure Track

- CMU: academic advising, university admissions/family events, TA observation/review

- Rutgers: curriculum alignment, advising

- Texas A&M: tenure-track and teaching-focused both participate in all activities listed above

B. Professional Development

- What mentoring is available to TTF? What should be available?

- What professional development is available/encouraged? (departmental or institutional level)

- What is the format and criteria of annual performance evaluation? How is teaching assessed?

Mentoring

- CMU: 2 mentors for each: 1 tenured, 1 teaching track, availability of teaching center

- Rutgers: in the process of creating mentorship program for teaching track, teaching center rarely used

- Texas A&M: 1 mentor for each, teaching center used effectively

Professional Development

- CMU: funds to go to conferences or obtain equipment to improve teaching/courses ($2K/year), advising training/tips,

- Rutgers: similar to CMU, financial support at discretion of the chair, in the process of creating a research group on CS education

- Texas A&M: similar to CMU, financial support at discretion of the chair, in the process of making additional funds available for proposed new initiatives

Evaluation/Assessment

- CMU: faculty course evaluations by students, informal review each year, reappointment or promotion every 3 or 5 years depending on rank, reviewed by entire faculty

- Rutgers: start with 1 year contracts, increase to 2-year and 3-year, based on student evaluation and breadth of teaching

- Texas A&M: annual evaluations by committee that includes teaching-track faculty; based on course evaluations and adding starting peer-review this year; 3-year contracts reviewed by faculty subset

C. Departmental Expectations

- What scholarship is expected from teaching track faculty?

- What is the department looking for in a successful teaching track faculty member?

- Regarding promotion: What is expected from assistant to associate? From associate to full?

Scholarship

- CMU: none expected, but if research is done, it must meet CMU standards, educational studies/outreach are encouraged

- Rutgers: none expected, encouraging teaching track to participate in research group on CS education, outreach encouraged

- Texas A&M: for Instructional Professor track, expectation of innovation and scholarship in computer science education

Success

- CMU: impact on students, working with tenure track well, impact beyond the classroom (outreach, research, curriculum development, advising, committees), required for promotion

- Rutgers: similar, also required for promotion

- Texas A&M: similar, also required for promotion

Promotion

- CMU: Assistant→Associate: university impact, Associate→Full: national/int'l impact

- Rutgers: Not well-defined but similar to CMU, national/int'l impact not necessary

- Texas A&M: Excellence in teaching and additional impact; new committee recently established to define criteria for Associate→Full promotion.

D. Perspectives and Advice

- How does the department ensure that teaching track faculty are effectively integrated in the department?

- What is the biggest challenge facing teaching track faculty?

- How do teaching track faculty fit into expected future needs and strategic plan of the department?

Integration

- CMU: Expectation to attend faculty meetings, can now vote on reappointment/ promotion of tenure track and teaching track (departmental rule)

- Rutgers: Expectation to attend faculty meetings. No voting rights for personnel issues, can vote on other issues

- Texas A&M: Expectation to attend faculty meetings; representation on departmental advisory committee and promotion & tenure committee (for teaching track cases)

Biggest Challenges, Advice

- CMU: Heavier workload, expected to fill in for tasks not desired by tenured faculty, teaching track in demand so speak up

- Rutgers: Salaries not on par with tenure track, hard to compete with industry positions for teaching track faculty

- Texas A&M: challenge: large classes and heavy workload make it difficult to focus on innovation in CS education; advice: teaching track in demand, so speak up about what you need

Strategic/Future Needs

- CMU: Need for more teaching track for growing demand (majors and nonmajors), advising, helping with curriculum, looking to hire!

- Rutgers: Looking to hire also, similar demands

- Texas A&M: Looking to hire also, similar demands

Q&A