

# Panel: The Importance and Role of Teaching Track Faculty (TTF) in Ph.D. Granting Institutions

---

**Tracy Camp** (Head, Colorado School of Mines)

**Gopal Gupta** (Head, UT Dallas)

**Mats Heimdahl** (Head, U of Minnesota)

# Tracy Camp

- Professor and Head, Department of Computer Science
  - Colorado School of Mines
  - Term as Head started July 1st, 2016
  - Launched CS@Mines (and Department of EECS)
- T/TT faculty position since 1993
- Academic Leadership Examples:
  - C-MAPP (industrial partnership program)
  - DECtech (girls outreach program)
  - CS+X and X+CS programs
  - PATHS (scholarship program for low-income students)

# Gopal Gupta

- Professor and Head, CS Dept @ The Univ. of Texas at Dallas
  - Term as Head started August 15, 2009
  - T/TT faculty position since Jan, 1992
- Academic Leadership Examples:
  - Computer Science Mentor Center
  - Executive MS in Software Engg (since 2012)
  - Hired 16 T/TT and 38 TTF (currently 53 T/TT and 41 TTF)
  - K-12 Outreach/afterschool coding clubs (reaches ~3,000)
  - BS & MS in Data Science (jointly with Math Dept)

# Mats Heimdahl

- Professor and Head, Department of Computer Science & Engineering
  - University of Minnesota
  - Term started July 1st, 2015
- T/TT faculty position since 1994
- Academic Leadership Examples:
  - Founding DGS for MS in Software Engineering Program
  - Director, University of Minnesota Software Engineering Center

## A. Responsibilities (Mats)

---

- 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?

## 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?

- **Mines:**

- Teaching load: 6 courses per year; significant input on teaching assignment (what do you *want* to teach?); class sizes “small”: ~60 (or less)
- 4.5 TTF (all have PhD) & 11 T/TT faculty for 540 UGs, 80 MS+PhD; Extra compensation for summer courses and activities (if interested)

- **UT Dallas:**

- Teaching load: 7 courses/yr; teach both BS and MS; class size small: ~50
- Scale is big: 41 TTF (35 have PhD) & 50+ T/TT faculty for 2,800 UGs, 1,050 MS, 170 PhDs; Extra compensation for additional courses/activities

- **University of Minnesota:**

- Teaching load: 5 courses per year; primarily required courses; class size large: ~150+
- 13 TTF (10 have PhD) & 46 T/TT faculty for 1,700 majors (+pre), 400 MS+PhD; Extra compensation for additional courses and activities

## 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?



- Mines:

- Service is expected; significant input on service assignment (what do you *want* to do?); TTF provide significant amount of mentoring/advising; can supervise/participate in research (BS/MS/PhD) if desired (most don't)

- UT Dallas:

- Serve in UG curriculum committee; *may* supervise UG research; provide significant amount of mentoring; organize activities outside classroom (mentor center, K-12 outreach, student org advisors, organize events, industry outreach, capstone projects); given extra pay for extra work.

- University of Minnesota:

- Generally no expectation of service. Currently all on “lecturer” or “teaching specialist” tracks; not on the “faculty” track. Some serve in service roles, TA assignments, teaching assignments, student group advising, etc. and get teaching release. Moving to “Teaching Faculty” will change this picture.

## 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?

- **Mines:**

- T/TT faculty do everything that TTF do. We are all in this together.
- In reality, TTF do more advising/mentoring/outreach and T/TT faculty do more research/service to research community.

- **UT Dallas:**

- T/TT faculty do everything that TTF do, in reality much of lower division teaching done by TTF (though T/TT faculty req. to teach a UG course every 3-4 semesters or so); Most mentoring done by TTF
- Good division of labor (teaching vs research) but got to be careful

- **University of Minnesota:**

- T/TT faculty do everything that TTF do. We are all in this together.

## B. Professional Development (Gopal)

---

- 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?

## 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?

- **Mines:**

- All faculty (TTF and T/TT) participate in mentoring program. 2 mentors for Assistant level; 1 mentor for Associate level; reports to Head each Spring. University has a center for teaching and learning that organizes seminars that many faculty attend. Some TTF mentor T/TT faculty in teaching.

- **UT Dallas:**

- No formal structure, though senior TTF mentor junior ones (dept head mentors/advises, so does “SL coordinator”, a T/TT fac); University has a center for teaching and learning that organizes seminars that many faculty attend; SLs hold their own “lunch and learn” once or twice a semester

- **University of Minnesota:**

- No formal mentoring structure. Center for Educational Innovation offers continuing education for faculty. Occasional “brown bag” lunches to share best practices.

## 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?

- **Mines:**

- Prof development encouraged: attend conferences, conduct research, take a short course, attend research talks, etc. Funds available for 1 trip/year from upper admin; more funds available in dept (if needed). Large pot of tech fee funds exist to purchase technology for courses (write proposal)

- **UT Dallas:**

- Prof dev required: 1 course release given in lieu; prof dev report required to be submitted with annual report: attend conference, conduct research, take a short course, attend research talks, etc. Funds of \$1,500 made available.

- **University of Minnesota:**

- No professional development required, but encouraged. \$1,000 made available yearly for travel, equipment, whatnot.



## 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?

- **Mines:**

- Each TTF submits annual report for past year and goals for upcoming year.
- Student course feedback is part of the evaluation; formula for success: hire good people, treat them well, and magic will happen
- Promotion process similar to T/TT faculty: Assistant, Associate, Full

- **UT Dallas:**

- Each TTF submits CV, annual report, prof dev plan each year.
- Student course feedback is part of the evaluation; formula for success: hire good people, treat them well, and magic will happen
- “TTF coordinator” attends lectures occasionally to provide feedback

- **University of Minnesota:**

- Each TTF submits annual report, prof dev plan each year.
- TTF Eval Committee provides teaching evaluation.
- Criteria the same as for T/TT --“teaching excellence”

## C. Department Expectations (Tracy)

---

- 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?

## C. Department 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?

- **Mines:**

- Do not expect TTF to publish or do research (unless interested); prof dev is a must to stay abreast of the field. Set of courses a TTF teaches is generally fixed (which is based on interest), so TTF can excel in teaching those subjects

- **UT Dallas:**

- Do not expect TTF to publish; prof dev is a must to stay abreast of the field; encouraged to be part of a T/TT fac's lab. Set of courses a TTF teaches is generally fixed, so TTF can excel in teaching those subjects

- **University of Minnesota:**

- Do not expect TTF to publish; Note again that we have “lecturers” or “teaching specialists”, expectations will change when converting to Teaching Faculty track.

## C. Department 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?

- **Mines:**

- Looking for a superb teacher who (1) connects with the students, (2) cares about the students, and (3) engages the students both inside and outside the classroom. Impact beyond the classroom.
- Looking for someone who'll join our wonderful department culture (good citizen / collegial)

- **UT Dallas:**

- Looking for a superb teacher who connects with his/her students; cares about them; engages them both inside and outside classroom; establishes a good communication channel, and delivers high quality content through it.

- **University of Minnesota:**

- Teaching excellence and collegiality.

## C. Department 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?



- **Mines:**

- Promotion criteria defined (though some TTF find it confusing, like T/TT do)
- Ranks for TTF and T/TT are the same: Assistant, Associate, and Full
- Assistant  $\Rightarrow$  Associate: documented success in teaching/service
- Associate  $\Rightarrow$  Full: excellence in teaching/pedagogy/service and leadership

- **UT Dallas:**

- If the TTF teaches well, is a good colleague and is a good citizen of the department, then promotions are automatic;
- University has policies/guidelines for promotion of TTF

- **University of Minnesota:**

- Limited promotion path for “lecturers” and “teaching specialists”; “senior” only promotion. No documented standard or procedure.
- After change to Teaching Faculty, detailed procedures and eval criteria--modified tenure code

## 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?

## 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?

- **Mines:**

- Both TTF and T/TT faculty are FACULTY (campus culture at Mines)
- TTF have a say on everything at Mines (except tenure decisions)
- We could not survive without them.

- **UT Dallas:**

- Treat them with respect and fairness (1st class citizens), pay them well, help them achieve their aspirations; don't take advantage of them; Give them opportunities to earn extra money: 41 SLs at UT Dallas CS: zero turnover.

- **University of Minnesota:**

- Make them first class citizens. Bit of a challenge with our space constraints.
- Treat with respect. Make the Teaching Faculty conversion.
- We could not survive without them.

## 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?

- **Mines:**
  - Growing enrollments
  - Enrollment challenges exist for T/TT faculty too, but more severe for TTF
- **UT Dallas:**
  - Many T/TT faculty tend to have less respect for TTFs
  - Growing enrollment (but we are hiring more)
- **University of Minnesota:**
  - Space crunch hits them hard (first to be moved). Burnout from large and challenging classes. Pay. Lack of career path.
  - Departement working hard to address it all.

## 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?

- **Mines:**

- We could not survive without our teaching faculty. TTF are involved in everything.
- Department goal:  $\sim\frac{1}{3}$  TTF and  $\sim\frac{2}{3}$  T/TT faculty
- Looking to hire!

- **UT Dallas:**

- TTF are very important component of our success (UTD has 41 of them, will hire more); UTD has a long history of relying on TTF over 30 years.
- Growth in CS enrollment continues; if we want to keep class size reasonable, we need to rely on TTF; Small class size is important for us.

- **University of Minnesota:**

- We cannot survive without our teaching faculty. They will be integral to our growth and service to the U.
- Must be fully integrated in the department and its mission.





Q&A