

# Preparing to Teach: Teaching focused career opportunities

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# Some Institution Types

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- **Community Colleges**

- Emphasis on student instruction, support, and success

- **Small Liberal Arts Colleges**

- Emphasis on student instruction, support, and success

- **Teaching (Comprehensive) Universities**

- Emphasis on student instruction, support, and success

- **Research Institutions**

- Emphasis on research and student instruction, support and success

# Home Departments

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- The larger the institution, the more likely your position is within a Statistics/Data Science department
- Alternatives are Mathematics, Computer Science Departments, Business School/College, occasionally in Engineering (particularly for data science positions)

# Research Institutions

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- **Professor**
  - Regular faculty position,
  - Research focus on Statistics/Data Science education
- **Professor of the Practice, Professor of Teaching**
  - Longer-term (3 to 5 yrs), tenure-track
  - Emphasis on teaching, no research requirement
  - Service related to the pedagogical mission of the University

# Research Institutions

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Current opportunities:

- More sparse for Professor with sole research emphasis on Statistics Education
- Growing for Professor of the Practice, Professor of Teaching

# Professor of the Practice/Teaching

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- Mostly introductory statistics/data science classes
- Mostly larger class sizes
- Teaching load up to 4 classes a semester
- Active in professional societies, advance teaching mission of the institution for advancement
- Graduate student mentoring

# Application Process

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- Cover Letter
- Teaching Statement (Teaching Philosophy)
- Diversity Statement
- Teaching Demonstration
- Research Seminar

# Teaching Philosophy, Statement

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“Strictly speaking, your teaching philosophy is a written description of your values, goals, and beliefs regarding both teaching and learning. By contrast, your teaching statement **develops from your teaching philosophy** and uses evidence from your teaching to make the case that you have excelled as a teacher.”

Source:

<https://ctl.iupui.edu/Resources/Documenting-Your-Teaching/Tips-for-Writing-a-Statement-of-Teaching-Philosophy>



# Community (Two Year) Colleges

- Huge growth in teaching of intro stats
- Many (most?) institutions now developing data science programs (see <https://www.amstat.org/ASA/Education/Two-Year-College-Data-Science-Summit.aspx>)
- Opportunities for curricular and program development



# Small Liberal Arts Colleges

- Typical model is for “teacher-scholar”
- Typical environment has more intensive interactions with students in classes and co-curricular experiences (e.g., summer research, thesis projects)
- Typically no graduate students, instructor undertakes more aspects of teaching
- Course loads and preps vary considerably

# Comprehensive Institutions

e.g., Cal Poly San Luis Obispo, Winona State University (MN)

Typically combine many of the attributes of larger research institutions and smaller schools

Rare to have PhD students, some MA/MS programs

# What is it like?

Some thoughts from Nick and Ulrike's list

Pros:

- Human interaction with students and colleagues
- Constantly moving and learn new things
- Ability to mentor and positively affect students' trajectories
- Independence
- REWARDING



# What is it like?

## Ulrike's list

### Less of a Pro:

- Initially daunting
  - Can I identify good research topics?
  - Can I write and publish papers?
  - Can I obtain grant money?
  - Will I find collaborators?
- BUSY, BUSY, BUSY, ... you have to find your own balance

# Career success factors

- Professional development (e.g., USCOTS, eCOTS, JSM)
- Pedagogical research (e.g., TISE, JSDSE, SERJ, Teaching Statistics)
- Mentoring



# Where to Look for Jobs?

- Mailing list: [Section on Statistics and Data Science Education](#)
- <https://jobs.amstat.org/jobs>
- <https://forms.stat.ufl.edu/statistics-jobs/>
- <https://www.mathjobs.org/jobs>