

Virtual Job Fair 2021

Murali Haran, Professor and Head | Department of Statistics | Penn State University



PennState

Quick Intro to Penn State Statistics

Quick Intro to Penn State Statistics Research

- A diverse, world class research program
- A wide variety of theoretical research
- Applications and interdisciplinary research are a strength:
many connections to researchers and departments across the university
 - Huck Institute of Life Sciences + Center for Infectious Disease Dynamics
 - Institute for Computational and Data Sciences
 - Neuroscience Institute

Quick Intro to Penn State Statistics Research

Research Areas

Astrostatistics

Bayesian Statistics

Biostatistics & Bioinformatics

Causal Inference

Climate Science

Computational Statistics

Data Privacy

Ecology

Functional Data Analysis

High Dimensional Data

Imaging

Infectious Disease Modeling

Network Models

Neuroscience

Public Health

Statistical Machine Learning

Social Science

Spatio-Temporal Data

Statistics Education

This is only a partial list of course!

Penn State Statistics

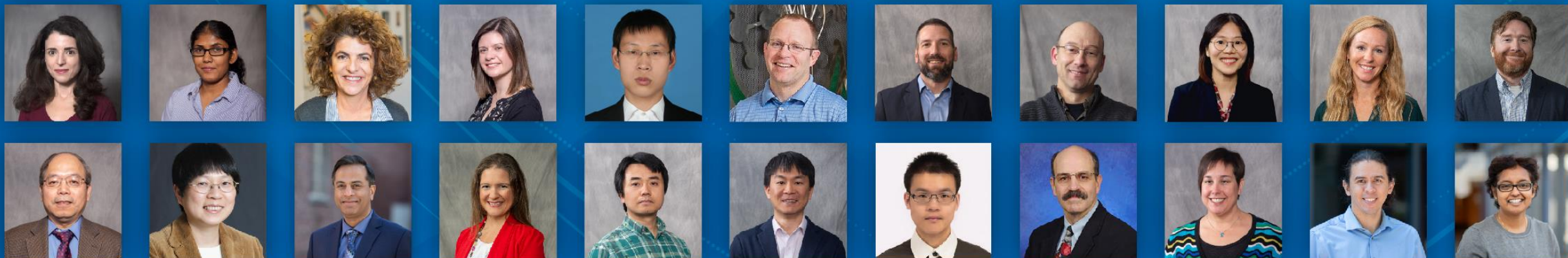
- **Great environment for faculty, especially junior faculty**
- **Closeness of a small department even though we have nearly 50 faculty**
 - ~ 24 tenure-track, 19 research and teaching faculty, 5 postdoctoral fellows/visitors
 - ~ 300 undergraduates, 80 PhD students, 19 MAS students
 - Online program (World Campus) 279 MAS, 237 graduate certificate students
 - Friendly and collaborative faculty and students (excellent students!)
 - Mentoring support
 - Excellent support from the Eberly College of Science and Penn State research institutes

Penn State Statistics

- A leading statistics department in terms of emphasis on education
 - 5 stat ed experts + numerous teaching initiatives
- The Statistical Consulting Center (SCC) is central to our research, education and service missions
- Dynamic environment with lots of hiring planned in upcoming years



~300 undergrads
~ 80 PhDs, 20 MS, 500 World Campus
~ 25 Tenure/Tenure Track faculty
~ 25 Research/Teaching faculty
~5 Postdocs



Faculty Positions in Statistics

Tenure track, teaching, and consulting positions

Multiple Open-rank Tenure-track Faculty Positions

- Hiring at all levels -- assistant, associate, and full professor
- Given the audience, I'll focus on assistant professor qualifications
 - PhD in statistics or closely related field by the time of appointment
 - Demonstrated potential for excellence in research and teaching
 - We are open to a wide variety of research areas, spanning theory, methodology, computing, and applications/interdisciplinary work

Multiple Open-rank Tenure-track Faculty Positions

The department is interested in people who will contribute beyond their papers

- Examples:
 - Build new connections across campus
 - Take an interesting in teaching, develop new courses
 - Mentor students
 - Participate in professional organizations
 - Help colleagues, contribute to a supportive environment

<https://www.mathjobs.org/jobs/list/18044>

Faculty Position in Statistical Consulting Center

Qualifications

- PhD in statistics or closely related field by the time of appointment
- Strong interest in consulting and collaborative research
- Position: potential for balance between consulting, collaborative research and methods research, and teaching

Contact with questions:

- Maggie Niu: xiaoyue@psu.edu
- Murali Haran: muh10@psu.edu

Multiple Teaching Faculty Positions

Qualifications

- PhD in statistics or closely related field by the time of appointment
 - *In special cases we may consider an MS in statistics or closely related fields*
- Strong interest in statistics curriculum, developing new courses or innovative methods for existing courses

Contact with questions:

- Scott Roths: sar320@psu.edu
- Murali Haran: muh10@psu.edu

Ideas for Academic Job Market Preparation

Getting ready for your job search

Ideas for Academic Job Market Preparation

Do interesting research

- Work that you find interesting (otherwise not worth pursuing it!)
- Work that is of interest in academia today: for this you will need to talk to mentors, attend talks/conferences, read or skim journals regularly

Ideas for Academic Job Market Preparation

Work towards having some publications before going on the job market

- Shouldn't be the only goal of course
- Deeper/interesting work is more valuable than the number of publications

Ideas for Academic Job Market Preparation

Work on your communication skills

- Communicate clearly in talks to many different audiences (faculty, undergrads, grads, scientists from other fields, non-academics)
- Write well: useful for papers, grants, research statements, cover letters...
- These skills are valuable regardless of your career choice

Ideas for Academic Job Market Preparation

Develop strong computing skills: crucial for modern statistics

Ideas for Academic Job Market Preparation

Develop depth in your research area(s) + general knowledge in other areas

- Learn from classmates, faculty, seminars, reading
- Go to conferences, workshops, big and small
- Be open to helping others, discussing research (helpful for most of the above!)

The Academic Job Search

Searching for a job and getting an interview

A Few Tips for an Academic Job Search

Main steps to finding a job

1. Get an interview based on your application
2. (New) Get an onsite interview based on phone/Zoom interview
3. Get an offer based on the onsite interview

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Application strategy

- When in doubt, apply to both faculty positions and postdocs
- If you are unsure about a place, apply. There are more good places than you (and even your adviser) might know about
- If you are pretty sure you don't want to go to a place, do not apply

Step 1. Get an Interview Invitation

1. Do interesting research, have publications, good letters
2. Write a thoughtful, clear, and concise research statement
 - Include both current and future research goals
3. Write a good cover letter
 - be concise
 - find connections to the specific department if possible
 - respond to specific initiatives/strengths of the department, be aware of position details
4. Provide other clear and concise statements as requested, e.g.
 - Teaching statement
 - Diversity statement
5. Obtain feedback on your statements, especially from faculty who have served on hiring committees

Step 2. Get Onsite Invitation from Zoom/Phone Interview

1. Prepare for the interview

- Be aware of the position details
- Learn basics about faculty/research profiles from the website
- Make sure you have a thoughtful question or two for the interviewer, maybe generic and perhaps also one specific to the department

2. Pay close attention to the questions, when in doubt confirm that you have understood and answered the question adequately

3. Be prepared to (very briefly, say ~ 2 minutes) describe your main research accomplishments and interests

4. Be prepared to explain your particular interest in the department

5. Different places will have different formats; prepare accordingly

Step 3. Get An Offer Based on Onsite Interview

1. Same preparations as for the phone/Zoom interview

2. Your job talk is important. People often say, "Sell yourself".

I prefer to say communicate very clearly:

- What you've done and future research plans
- Why your work is important and interesting (why did you do this work?)
- Why your research is challenging/deep
- What *your* contributions to this research area are
- This is the best place to convince people you will be a good teacher and collaborator – make sure people understand you well

3. During conversations with faculty (individual/mealtimes)

- Make sure you answer questions clearly and concisely
- Make an effort to learn about their research and/or their department
- You don't have to be a brilliant conversationalist but it is good to make people feel comfortable and sense you would be a good colleague

In closing...

Parting Thoughts

The job search may not always turn out as you'd like

- Do not despair
- As a statistician you typically have lots of other wonderful job opportunities
- If you can take a visiting position or a postdoc, you could try again –there's luck involved in terms of timing and many factors are not in your control, such as whether and when you get publications, the state of the economy, hiring initiatives in particular areas

If you are fortunate and have multiple academic job offers

- Discuss with trusted mentors how and whether to negotiate and how to choose between offers

Finally...

Pay close attention to your quality of life when making decisions:

- Would you rather have a more collaborative or competitive environment?
- Where would you have more money and time for doing things you enjoy?
- How can you continue to do things outside of work that make sure you have a balanced perspective on research/tenure, and also so that you enjoy life (all aspects of it)?

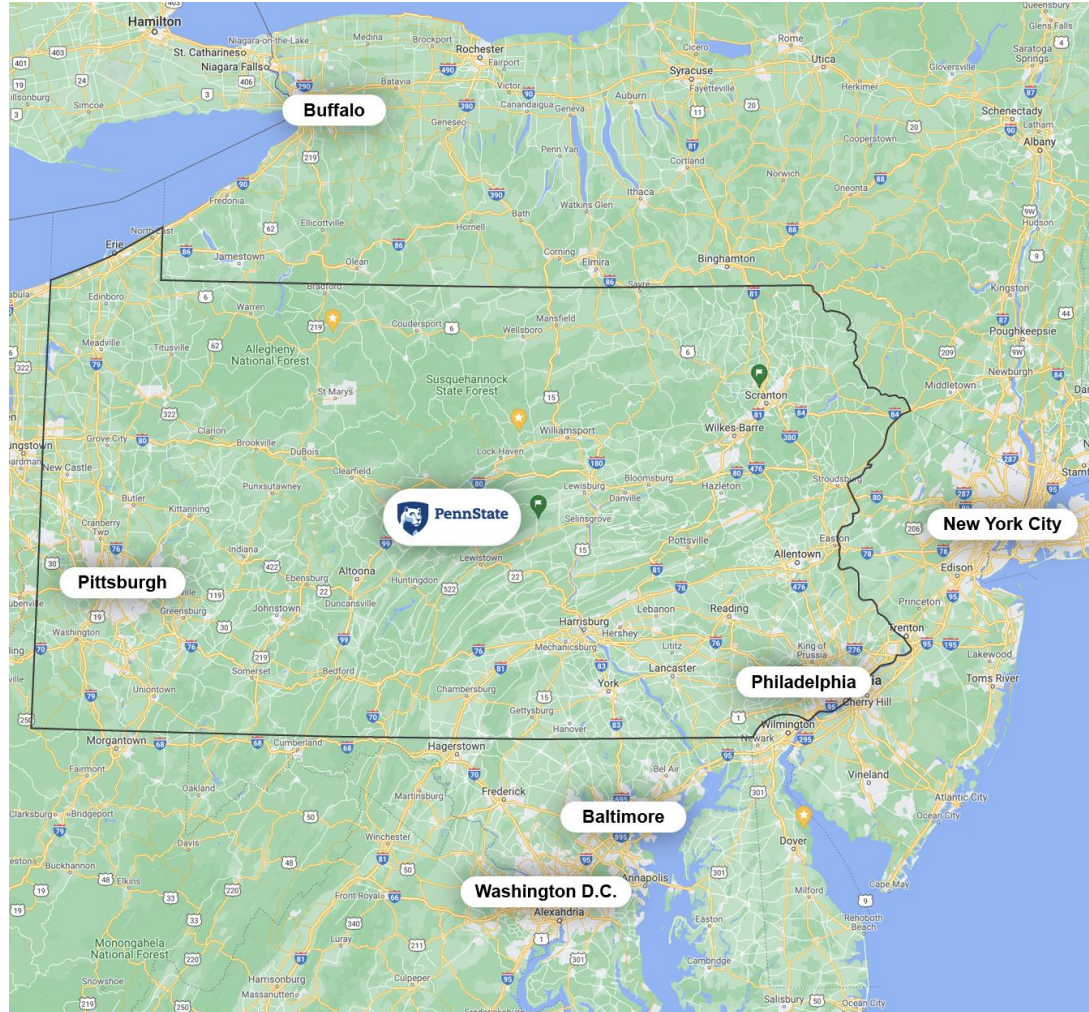
University Park and Central Pennsylvania



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- Lively college town
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- Outdoor activities are plentiful, with numerous lakes, hiking and bicycling trails, and skiing

Penn State Statistics has world class researchers and educators, and offers a very supportive environment and great quality of life

- If you have questions: muh10@psu.edu

Good luck!