STATISTICIANS' JOBS IN MERCK

Junshui Ma Oct. 13, 2021



Merck Fact Sheet

Name: Merck (US & Canada) or MSD (other regions) [Not German Merck]

Businesses: Pharmaceuticals, Vaccines, Animal Health

Headquarters: New Jersey, USA

2020 Revenue: ~ \$48B

2020 Employees: ~73K

Senior Leadership:

- Rob Davis, President & CEO
- Dean Li, Exec VP & President of Merck Research Lab (MRL)

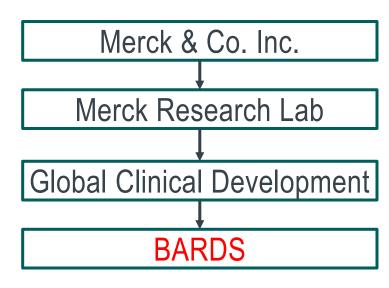


Almost All Merck Statisticians Work in BARDS

BARDS: Biostatistics and Research Decision Sciences

- 500+ employees
- Statisticians (200+), Epidemiologists, & Stat. Programmers.
- Primarily in US, but also in Switzerland, China & Belgium





Also: Zurich (Switzerland), Beijing (China), Brussels (Belgium), London (UK)



Statistical Departments in BARDS

Early Develop Stat. (EDS)

- Early-stage Clinical Develop.
- Discovery & Preclinical Research
- Translational Medicine
- Assay Development
- Safety (non-human tests)
- Others

Late Develop Stat. (LDS)

- Late-stage Clinical Develop.
- Outcome Research
- Health Economics
- Safety (clinical trials)
- Publications
- Others

Methodology Research

- Methods
- Software & Platforms



Questions to Address

- 1. Describe your current role and how your career developed.
- 2. What are the **preferred qualifications** for PhDs in your company?
- 3. What **advice** would you give to job candidates, interested in careers in Pharma?
- 4. Describe the difference between **management and technical ladders** in Pharma?
- 5. What advice would you give about how Ph.D. students or postdocs should **prepare for the future**?
- 6. Describe the **jobs available now** in your company.



My Current Role and How My Career Developed

My current role:

- ✓ Leading a group of statisticians in EDS
- ✓ Working on translational oncology
- ✓ My group's responsibilities: oncology biomarker, companion diagnosis, biomarker-focused clinical studies, biomarker-related publications, etc.

My Career:

- I obtained my Ph.D. in 2001 and joined Merck in early 2005.
- 2005-2014: Drug discovery & preclinical research projects, bio-signals for discovery & clinical applications, innovative technologies and methods, etc.
- 2014-2018: Late-stage oncology clinical studies, regulatory filing & approval
- 2018-present: Translational oncology



Preferred Qualification for Candidates

Education: Ph.D. in statistics or other related areas preferred

Experience: Related industry experience preferred for non-entry level position

Requirements:

- Knowledge of statistical principles and relevant methods
- Communication skills
- Teamwork spirit
- Computer skills, including programming
- Motivation and passion

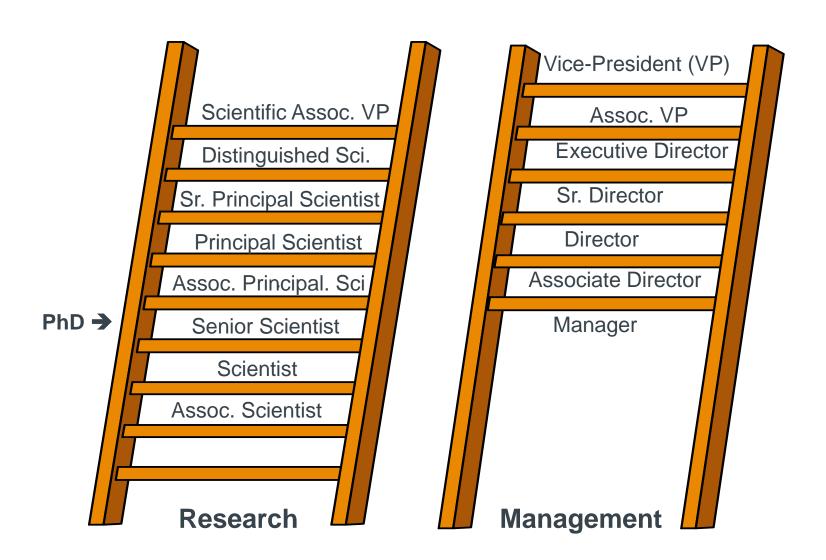


Advice for Candidates Interested in Pharma

- Solid academic foundation
- Self-learning capability
- Soft skills that cannot be overemphasized:
 - Communication skills
 - Teamwork spirit
 - Problem solving ability (a vision of the big-picture)



Research and Management Ladders in Merck





Advice for Ph.D. Students to Prepare for the Future

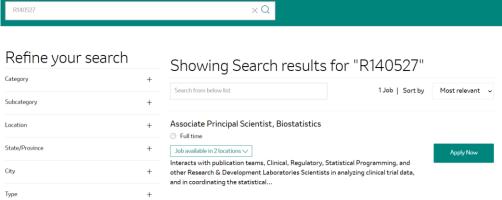
- Learn concepts from multiple angles
- Keep improving your communication and programming skills
- Maintain curiosity beyond your dissertation research
- Check for careers outside universities



Jobs Currently Available in Merck

Available Merck Jobs: https://jobs.merck.com/us/en
Jobs are available in various departments in BARDS For example,

 "Assoc. Principal Scientist, Biostatistics" (Job # R140527) in publication stat. group.



 "Sr. Scientist, Biostatistics" (Job # R137904) in late-stage clinical development

Questions?

We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we remembered that, they have never failed to appear.

- George W. Merck (1950)



