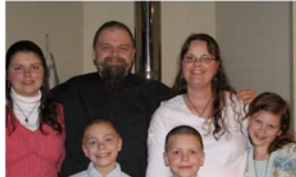


James Ferrenberg Molecular Diagnostics Researcher

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Place of Employment:
University of Washington
Molecular Diagnostics Lab
Virology Division

Type of Work:
**Develop tests to diagnose
different types of viral infections**

Discovery is really exciting and there is nothing cooler (in my job) than designing an assay and finding it works great and generates important data.

Careers in the Spotlight:
Molecular Diagnostics Researcher

What do they do?
Develop tests and methods to identify a disease or the predisposition for a disease by analyzing the DNA or RNA of an infectious organism (virus, bacteria, or parasite).

What kind of training is involved?
Associate's Degree and/or Bachelor's Degree

What is a typical salary for a Molecular Diagnostics Researcher?
Starting: \$35,000-\$45,000/year (\$17.50-\$22.00/hour)
Up to: \$55,000-\$65,000/year (\$26.00-\$31.00/hour)

Source: Genome Technology Salary Survey 2010

1. Where did you grow up?

Mostly Southern California, but I've learned to hate it there. I moved to the greater Seattle area in 1989 to attend college.

2. What do you do (i.e. what career or field are you in, what is the title of your position)?

My title is "Research Consultant" with the University of Washington, but I've been working in the same lab now for 15 years and have held many titles. Basically, I do research and development for the Molecular Diagnostics lab in the Virology Division.

3. How did you choose your career? When did you first know this is the career you wanted?

Tough question. I like science and I wanted to try and do something that would be of benefit to others in the grander scheme of things. I suppose I chose this path back in the mid 90's when I decided to enroll in the Biotech Program through the Seattle Community Colleges.

4. Did your family support your decision to pursue your career?

Yes. My wife and I worked very hard together.

5. What is the highest level of education you have?

I have a Bachelor's degree

6. What is the highest level of education reached by other members of your family?

My Dad has a PhD.

7. What is the salary range for a person in your position?

I'd say my position is pretty unique, but given my experience I'd say \$55,000-65,000/year (\$26-\$31/hour).

8. What do you like most about your job?

Compiling data/results and being able to see a picture of what the data means...or might mean. Discovery is really exciting and there is nothing cooler (in my job) than designing an assay and finding it works great and generates important data.

9. What do you like least about your job?

Sometimes it can be very repetitive.

10. What's an abbreviated day-in-the-life of your job?

At any given time I can be found reading papers, going to meetings, doing research online (PubMed, BLAST, etc.), planning experiments, running experiments, interpreting data, and reporting data both informally and more formally in presentations. I also do some ordering and other general instrument/lab maintenance.

11. How would you describe how you use bioinformatics in your work? If you don't use bioinformatics directly in your work, how has bioinformatics impacted your career field?

I would say one of the biggest area in which we use bioinformatics is in the alignment of DNA sequences found online via Pubmed.gov resources. We frequently do this in order to find primers/probes for viruses which will match the widest array of strains.

12. Do you have any recommendations for students who are interested in entering your field?

Enjoy your time in labs at school. If you don't enjoy it, find a different career.

13. What are your favorite hobbies?

Home brewing, farming, and fishing.

Resources:

- University of Washington Department of Medicine, Molecular Diagnostics Testing: <http://depts.washington.edu/labweb/Divisions/Viro/MolPCR.htm>
- To learn about **job prospects** and **salary information for careers in Scientific Research and Development Services** visit the US Bureau of Labor Statistics: <http://www.bls.gov/oco/cg/cgs053.htm>
- Laboratory Sciences Career Overview from the Mayo Clinic: <http://www.mayo.edu/mshs/lab-career.html>