



# MSE Alumni Chapter

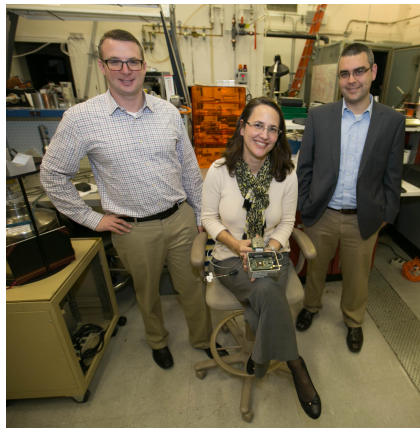
## Career story time

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In this edition (the first one!) we are hosting:

### **Dr. John Murphy**

Research and Development Engineer at Lawrence Livermore National Laboratory



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**John (pictured here on the right) graduated in 2014 and almost didn't go to his interview at LLNL but thanks to Dr. Gnade's advice he went there and got two offers, one for him, and one for his wife. Read the full story below.**

In my final year at grad school I was primarily looking to go into industry. **Of all the places I applied for I only got two interviews.** The first was at Triquint (now Qorvo) for a night-shift back end of the line process engineer, which I was actually really hoping to get, as it was close by in Richardson, so we wouldn't have had to uproot ourselves and move across the country (when I graduated my (future-)wife and I had two children and a house in Richardson).

The second was at LLNL in Livermore, California for a postdoc position. I **honestly contemplated not even flying out to California for the interview**, because I didn't think there was any way we could afford to move out there, but my advisor, Bruce Gnade, convinced me that it would be

worthwhile to at least go get a tour of the lab since they were paying for everything. I was interviewing with a group that also worked on solid-state/semiconductor based neutron detectors, and because there are only about three or four groups in the country that work in this field I was very familiar with their work and they seemed interested in my own dissertation research.

During the interview with the representative from **the HR department, she asked me if there was any reason I wouldn't take the position if they made an offer**, and I said something like, "My wife doesn't have a job in California so it would be difficult for us to make the move financially." She asked what my wife did, and I told her she worked in compensation in HR. She said, "Oh, well we just so happen to have an opening for a compensation person in HR," and they kind of fast tracked her interview process so that by the time they made me a formal offer, my wife Laura was fairly certain they would make her an offer as well.

**I have now recently "graduated" from a three-year long postdoc position into a research and development engineer** position within the materials engineering division in the center for micro and nano technology. My responsibilities are varied depending on the project I am working on, but I do some design and simulation work as well as device processing and testing.

The environment and culture is quite different from a university, **although there is still something of an academic environment, but there is a much greater emphasis on safety and security**. The primary mission of LLNL is related to nuclear weapon stockpile stewardship, and we also do a lot of different work on other aspects of national security, so there is a very strong culture around information management and security, as well as safety from doing research on explosives and radioactive materials. As far as work-life balance it is generally very good - I usually actually work about 40 hours a week, and **I haven't actually worked weekends (besides traveling)** no more than four or five times in three and a half years.

**My immediate plans, ~5 years or so, are to remain at the lab**. The potential for growth is certainly there within reason. No one is going to get rich working for the government, but there are multiple pathways to grow into a senior scientist type position, lab management/leadership, or as someone who interfaces with Washington DC. **Eventually I think I would like to do some teaching**, but I don't think I really want to be a full professor at a university. I am

thinking maybe in a few years I can try to teach some night courses or something at local community colleges or universities

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Awesome story! and if you hear of any teaching opportunities somewhere near Livermore, CA be sure to contact John Murphy.

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## **NOTES FOR GRADUATE STUDENTS:**

1. Never miss the interview, particularly a free one
2. Be honest with HR, it may get you what you want
3. Bring on the cleanroom talk! People develop a liking for people speaking their same language. Here is a note on this from John:

**"I think the cleanroom experience certainly helped me get interviews** both at Triquint and LLNL, since we get experience doing photolithography and running a variety of typical cleanroom tools"

Last but not least, if you would like to contact John Murphy send me a message or find him on LinkedIn.

### **Share this story around**

Invite your graduated friends from UTD to join the MSE Alumni Chapter.

**Don't be shy, be featured in the second edition. Interested?**  
**Send me an e-mail at [mirelesmarce@gmail.com](mailto:mirelesmarce@gmail.com)**

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