

May 2017

## Research News

### An Attending's Research Reflection

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During my residency program in India, research was an exciting endeavor but involved limited resources. We performed all research by going through a bunch of paper medical records and hard copies of imaging, without any electronic version.

At my first fellowship, I saw that easier methods existed for performing research. Thanks to available resources, investigators could investigate while also performing clinical practice. I had my first opportunity to perform large-scale studies and published three articles as a result (one involving a large data file on Medicare records).

At my second fellowship—at UNM Orthopaedics—I studied locking plates in treating femur fractures. Thanks to the mentorship of Drs. Thomas DeCoster and Rick Gehlert, I published a paper about the concept of damage-control orthopaedics. I also had the pleasure to work with Drs. Andrew Paterson and Antony Kallur, whose enticing ideas about spine surgery amplified my own interest.

Although it can be difficult to keep your investigation moving, dedication (and help from others!) can pay off. I am currently working on a project alongside Dr. Paterson, investigating the unclear occurrence rate of congenital abnormalities of the spine. The study had been ongoing for a time, yet we were able to re-start the process in collaboration with UNM Radiology. All data has been collected, and we are analyzing results.

Research projects help us make necessary changes in the way we do our practice. This change helps improve the quality of care provided to patients. With more resources available in our toolkit, it has become easier to perform and complete research—and thereby help initiate the process of improvement.

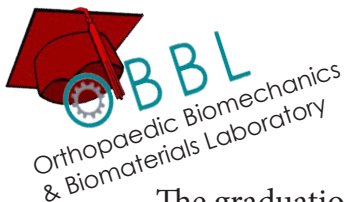


Dr. Paterson (left) and Dr. Modhia (right) in the operating room

### UNMORJ Updates

- Asking for a 1-2 week turnaround from reviewers
- Accepting submissions for 2018 on a rolling basis
- 2018 deadline is Sunday, January 7
- Instructions for authors: <https://goo.gl/snXe8d>

Please email your submissions to: [unmorj@gmail.com](mailto:unmorj@gmail.com)



The graduation march of “Pomp and Circumstance” has been this month’s OBBL theme song.

- Lauren Long will attend University of Michigan to pursue an MS in bioengineering
- Therese Martinez will attend Georgia Tech to pursue an MS in mechanical engineering
- Alexander Hamilton will start an engineering career at OpenEye in Santa Fe
- Jodie Gomez will complete her MS in mechanical engineering this summer
- Christopher Buksa will work here while pursuing an MS in mechanical engineering
- Steven Nery will work here while pursuing an MS in electrical engineering

For our summer interns, we welcome two chemical engineers: Ava Mauser and Carolina Alvarez.

Congratulations to everyone!

# Investigator Profile

## Editing Tip

Can you re-use published figures without paying permissions or enraging copyright lords? Yes! Create an “adaptation” of the image:

1. Replicate only essential parts to convey message
2. Differ from the original image in symbols, shading, labels, etc
3. Acknowledge original source in legend
4. Email journal to verify adaptation
5. Enjoy masterpiece!

Meet Lauren Long, an engineer working in the underground world known as the OBBL. We descended the stairs and met up with Lauren to get the inside scoop of her life in the lab.



### What brought you to the OBBL and what is your role?

After completing my bachelor’s degree, I wanted to take a year off and make sure biomedical engineering was the career choice for me. From my previous work with Dr. David Grow at NM Tech, I had the amazing opportunity to talk with Dr. Christina Salas about her research. From that moment on, I hoped to work in the OBBL and continue learning about biomedical engineering from a hands-on perspective. I now work full-time as a lab technician, researcher, and manager.

### Any advice to researchers who are interested in collaborating with the OBBL?

Be prepared to communicate with many different people and be open to new ideas.

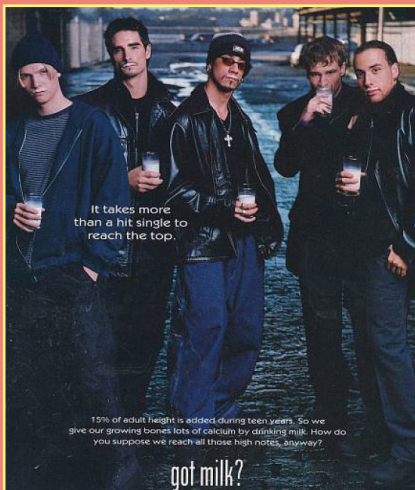
### What question in orthopaedic research do you hope to see answered?

Can we print a bone-ligament-bone biological structure and have it successfully implanted into patients with a high success rate?

### What are the next steps in your engineering career?

I will be getting my master’s degree in biomedical engineering from the University of Michigan. After that, I hope to work for Medtronic in their product development and design division, creating new and cutting-edge biomedical devices.

Lauren! Thanks for sharing your experience as an OBBL engineer. We wish you lots of luck (not that you’ll need it) in pursuing your lifelong career!



Source: <https://goo.gl/IE0H2W>

Most professions rely on experiment-related activities to transition ideas into reality. Take advertising. Remember the “got milk?” ad campaign?

Before then, the promotion of milk focused on “Milk: It Does a Body Good.” This 1980s campaign emphasized strong bone development . . . which kids didn’t really care about.

So, in 1993, advertising agents from Goodby Silverstein & Partners asked a group of young adults to avoid drinking milk for a week. Although the participants laughed at first, they returned exasperated: no cereal and milk, no cookies and milk, and no coffee and milk!

Thanks to research, everyone started asking, “got milk?”

Source: <https://goo.gl/VkK4S6>