

Jannick Rolland, PhD, 1990



What influenced your decision to attend graduate school at OSC?

The culture of a close-knit faculty/student group, and the advanced education OSC offered.

What do you wish you would have known your first day of graduate school? Was there anything you wish you had done to prepare more for graduate school?

As a native French speaker, I wished I could have held a conversation in English on my first day of graduate school, but I learned to listen and smile until someone paused—which clearly indicated that they had just asked me a question—at which time I would ask them ‘please can you repeat?’ This somewhat challenging scenario put me on a steep motivated slope to learn the language, which I did by purchasing my first and only TV ever, black and white, \$20, so I could listen to 20 minutes of news daily and speak back to the TV as my trainer!

Perhaps, it would have been nice knowing that graduate school is a journey and each journey is truly unique. Going to graduate school is like going on an adventure that is almost certain to take us out of our comfort zone sooner or later. We can quickly then define our ‘new normal.’

Which classes did you find most enjoyable? Which ones did you find most difficult?

For me, learning is enjoyable so any class that supported learning—which they all seemed to do—was enjoyable in spite of the stress associated with exams.

Was there an individual (professor, advisor, staff, friend, family member) who played a particularly important role in your education?

Professor Bernhard Seraphin gave me key encouragement at a time I needed it the most to stick to the PhD program. Professor Roland Shack was, forever, a most inspiring teacher, and further deepened my love for aberration theory. Professor Harry Barrett, my PhD advisor, was the most inspiring role model I could hope for as a PhD student doing research. His work ethic and excellence permeated his students’ subconscious. I am so grateful for his patience in mentoring us towards excellence in research and in writing papers.

What was your research while attending OSC?

I first worked in the Mirror Lab doing IR interferometry with Dr. Chris Koliopoulos, who soon left OSC to start his own corporate venture. At that time, I launched my PhD research in medical imaging with Harry Barrett. Our common ground was ‘image quality assessment.’ How do we quantify? I developed the mathematics to describe the ‘lumpy background’ noise that plagues medical images, which gave rise to a widely-adopted method to assess image quality in diagnostic instruments.

What was the cost of rent in Tucson while you were in school?

Around \$200/month.

If you owned a car during graduate school, what year and model was it?

Following an internship at PerkinElmer in Connecticut during summer 1985, I bought a 1980 used Jeep, which I enjoyed for off-road adventures in Tucson.

What was your favorite restaurant/student hangout near campus?

Bentleys for coffee with cream and honey; Pinnacle Peak for special events; and El Charro for Mexican food.

What did you do for fun during your time in graduate school?

Hiking early morning (and back by 10 am) in the summer to avoid the heat; drumming and sweat lodge circles at the full moon, following Native American culture; and studying and practicing Buddhism as a life philosophy.

What was most memorable about your commencement ceremony?

I skipped my own commencement since I had no family in town. The first commencement I attended was as a professor in Florida. I have attended many since. I celebrated my graduation, instead, by negotiating one full month of unpaid vacation after the first month of my new job to visit my parents in France. I had to borrow money to pay for the flight, but it all

worked out, and was 100% worth it.

At the time of your graduation, what were the most sought-after jobs/most popular industries/most popular companies?

Companies in optical system design were looking to employ. I declined a couple of opportunities in industry, as it seemed that they wanted to me to specialize in designing let's say "microscope objectives" and for me, lens design was already specialized, so there is no way I would have signed up for that. But finding a job was no struggle. As OSC graduates, we were in high demand in all types of organizations.

What was your first job after graduation?

I landed my first job as a postdoc in academia without looking. I was approached by my former employer, following having met at my first conference a couple of years earlier where I gave a talk (was a NATO conference in Portugal). This professor visited Prof. Barrett's lab and, upon hearing I could do lens design and was going to graduate in eight months, he asked me to come for an interview in North Carolina.

I interviewed for two academic postdoc jobs in the same town in fact, and I picked the one I thought was less conventional, completely different from my PhD, but with connections to my skills. I was to design head-worn displays for virtual and augmented reality for medical visualization. Perfect marriage. It was believed to be an impossible job, and I was guaranteed to fail (or so I was told by experts in this field). I decided to take on this challenge, as I had nothing to lose, only much to learn at a very high speed. It was a chance for me to unlock my creativity—the perfect balance of the two things I enjoy most, learning and creating.

What was the most significant world event during your time in graduate school. How were you affected by this event?

President Reagan's 'Star Wars' defense program (not the movies, the real thing) and the ongoing war in Guatemala. In the early 1980s, the killings were considered to be on the scale of genocide—leading to protests on campus over U.S. positioning. The Star Wars program, combined with my awareness of the war in Guatemala, made me reflect upon how I wanted to direct my energy towards contributing to creating our collective future.

Was there a campus or community event in Tucson that was especially important to you?

I became interested in the Native American culture, which resonated well with my love for nature. This interest has stayed with me.

What advice would you give to this year's graduating class?

Every challenge is also a call for opportunity and for unleashing your creativity, which everyone possesses. Learn to 'surf the chaos' so you can continue on a steady path to achieve your goals. Do not worry too much about the stones and holes in the ground against which you may stumble; most importantly keep an eye on the distant horizon, and advance step-by-step, being grateful for all that supports you along the way.