

OHSU School of Medicine  
Graduate Student Message – 6/4/12  
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Thank you professor Fryer. I am honored to be here today to provide the Graduate Student Address to the class of 2012. I've decided against providing you with inspirational quotes from famous philosophers since so many of us students struggle to relate to non-scientists and all our families can barely even relate to us. Basically we are all terribly confused as to what each of us is even doing. For example, if you ask my mom what I'm getting my PhD in, she'll say "something with mice." I'm always like really? Out of all the times I've explained my thesis project into viral gene targeting and liver repopulation in rare pediatric metabolic diseases, all the detail I gave you, all you remembered was mice? The people she meets in the grocery store must think our family is insane since they sent their only daughter off to get a doctorate in mouse studies.

But ironically, our degrees have an even more humbling meaning. Let me explain. It has been said that science is what you know, and philosophy is what you don't know. So really, a doctor of philosophy is a degree in not knowing anything. Which, those of us who had to endure a thesis defense, know is entirely true. Earning and defending a doctorate is a humbling experience. We all know SO much, and yet with each new nugget of knowledge we uncover, 10 new questions present themselves and you quickly realize just how much you don't know at all.

Despite the fact that I was given no prior permission to do so, I'd like to give everyone in the audience today an honorary degree in meteorology. Here are the reasons why: I know that you can recall the date, severity, time of day, where you were, and how long you were out of power for every winter weather event for the last five years. I also know that each of you knows the difference between a mist, a drizzle, a sprinkle, a shower, a flurry, rain, pouring rain, flooding rains, torrential rain and downright monsoon rains. Given this detailed and extensive knowledge, I feel capable and honored to bestow upon each of you an honorary degree in meteorology. Feel free to ask for a raise from your next boss. Don't be surprised when you don't get it.

And now I have 5 pieces of advice for you as you enter into the next step of your scientific career:

-First: Present your data in public as often as people will let you. Because although you were trained as a bench scientist, you will be outwardly judged on your writing and speaking skills, so they will need to be perfect.

-Second: stop using the word "prove". Now. Immediately. Banish it from your vocabulary. Unless you are a mathematician, you can't prove anything. Evidence can only be provided for or against a hypothesis. Knowledge that was certain just decades ago is now out of date because they didn't know then what we know now. And most if not all our closely guarded beliefs in science right at this moment, all that data you toiled so long and hard on for your thesis, will likely be shown to be incorrect or irrelevant in the future. So I urge you to roll with punches, be willing to change your mind as new data emerges, and stop saying you proved anything.

-Third: Network. Science is a business and political arena. You need to network. No matter how shy and introspective a person you are, you need to get out there and socialize and brainstorm with other people. People need to know who you are without your professor's name attached. Your name must stand alone.

-Fourth: Stay humble. No matter how knowledgeable and famous you become, I urge you to continue to respect everyone no matter his or her position in life. There is always someone smarter than you at something.

-Fifth: Don't neglect your loved ones. Family and friends are the key to staying sane in the often insane arena of science. No one here has time, so you will just have to make time.

And with that I am done with advice. I simply ask that as you leave here today in your silver Subaru covered in dog hair from your black lab with the Thule racks you bought second hand from Rack Attack, to go buy lunch from a food co-op, where you compost your own waste, where you'll leave to get a henna tattoo of your intramural kickball teams mascot, don't ever forget that Portland sculpted you. You are a different breed of scientist because you were trained in Portland.

As Albert Einstein once said: It is a miracle that curiosity survives formal education. Remember, imagination is more important than knowledge. So please stay curious, stay skeptical, stay imaginative. Thank you.