



Graduate Studies in the Sciences and Engineering: Opportunities in the United States

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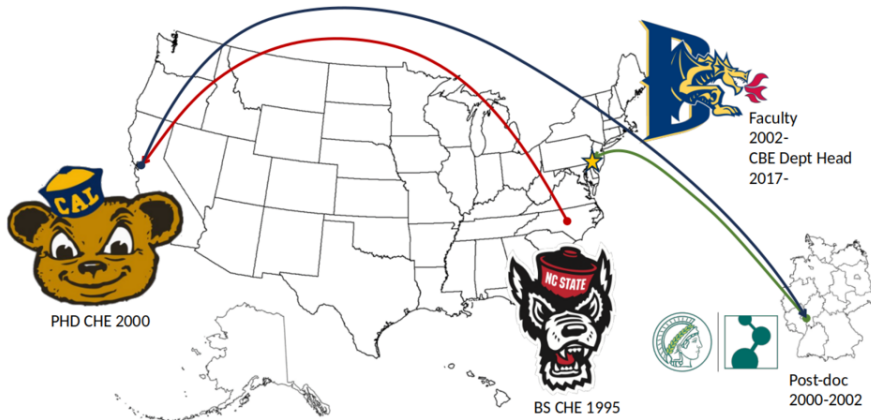
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About me



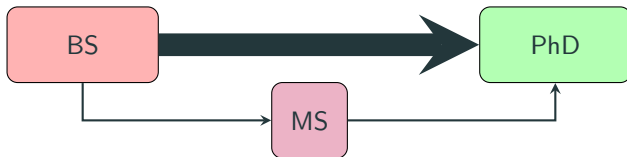
Some terminology

- **STEM**: Science, technology, engineering, mathematics
- **BS**: Bachelor of Science degree
- **MS**: Master of Science degree
- **PhD**: Doctor of Philosophy degree
- **ScD**: Doctor of Science degree (uncommon)

Why am I talking to you?

- Humanity needs more STEM PhDs (excepting computer science)
- Hundreds of STEM PhD programs in the US depend on a steady supply of well-prepared and talented students
- STEM graduates from Latin America are usually exceptionally well-trained and qualified for graduate school
- Latin Americans are underrepresented among non-US PhD student in the US (and they are mostly Brazilians)
- We would love to see more applicants to US PhD programs from Argentina

Typical STEM Degree Pathways in the US



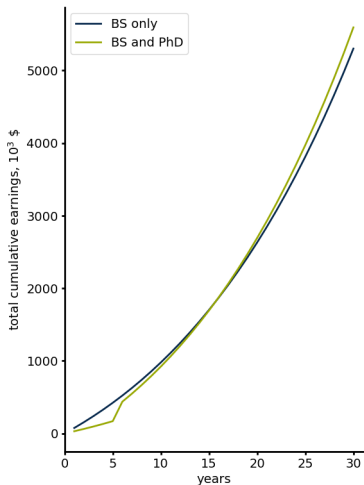
MS vs PhD: An Incomplete Comparative Analysis

	MS (w/o thesis)	MS (w/thesis)	PhD
Duration	1-2 y	1-3 y	4-6 y
Who pays who?	You pay institution	You pay institution	Institution pays you
What are you trained for?	Not much	Help w/ existing research project	Conduct your own independent research
Why do it?	A bit more pay	Try research (& more pay)	Advance humanity's knowledge

Should you go for a PhD? Ask yourself:

- Do I like doing research? (Maybe you are already doing it as an undergraduate!)
- Do I want to be a professional scientist?
- Do I like the idea of solving humanity's problems?
- Do I enjoy challenging myself by learning cutting-edge stuff?
- Am I creative and imaginative?
- Do I like teaching others difficult stuff?
- Am I persistent in the face of repeated setbacks?
- Am I willing to defer a STEM professional salary for a few years?

Why earn a PhD? It is NOT all about the money



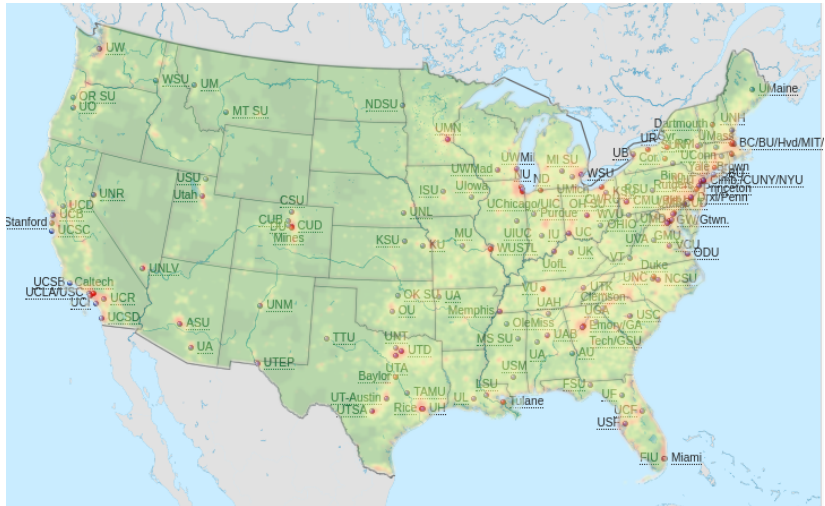
Assumptions

- BS starting salary \$75,000
- PhD starting salary \$100,000
- PhD stipend \$30,000
- Average interest rate 3%
- 30 y career

The 4 W's of Starting a PhD

- What research will I do?
- Where will I go?
- When do I apply?
- Who will mentor me?

Where? 146 “R1” Doctoral Universities – Very High Research Activity



wikipedia

Google “list of us research universities”