

Pursuing Research As A Cummins Undergrad

Michelle Davies Thalakottur

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- This is a general discussion about research.
- I will discuss privilege wherever relevant and aim to be as transparent as I can.

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- Share my experience. There weren't any seniors who publicly talked about research to me and I wish there had been.
- Hope that you will carry this forward.

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I've been thinking about what it means to do research and research for around two years now.

Part I

What is Research?

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- For me, it is innovation and learning at its purest.
- Spectrum of research: Incremental \leftrightarrow Fundamental

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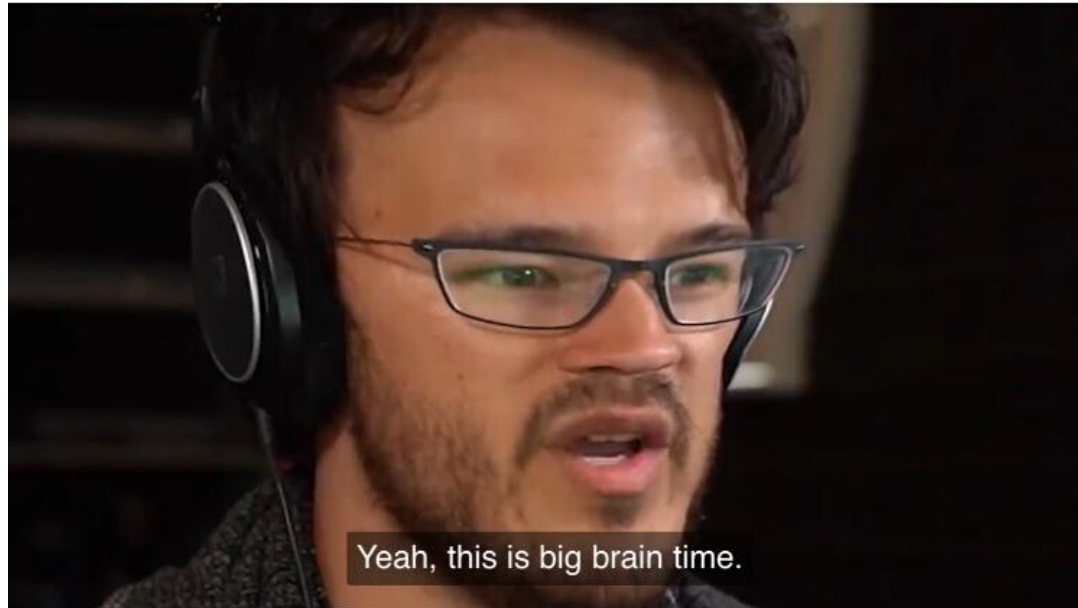
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- Personally, it is very fun and intellectually rewarding and stimulating.
You might even end up considering making a career out of it.

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You are what you tell yourself. Don't hold yourself back.

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Enter: Research internships! A good way for you to try out research.

Part II

How do you 'do' a Research Internship

A. Before applying

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Either can be a field that interests you. If your interest is due to how impressive a field sounds, realise that that isn't sustainable.

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- What you should *not* expect: Spoonfeeding, personal lectures
Learn how to learn by yourself.

B. Applying

Common advice

- Cold email professors! They're dying to get students involved in research.
- Keep up a good CGPA and professors will ask you to work for them.
- Getting a research internship is a meritocracy.

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- Higher success rate and they might be more invested in your doing well than a random stranger (hopefully).

Ask your seniors to recommend professors to work with and refer you (if they can).

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P.S. You might need LORs from them in the future and if you speak to them, they can write more about you than a DWIC LOR.

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Research programs

- IIT's have research programs that you can apply to. Look online for more program web-pages. Most applications begin in January.
- IISc's [SRFP](#) program and [INAE](#)'s summer program would (hopefully) be worth your time and effort. Some applications end in November.
- Foreign internships:

Exorbitant fees may not be worth it.

Charpak, CERN, TIFR, etc. *I had sent an email about this. Please refer to it for more links and information.*

- Unofficial way.

Good luck!

C. After Applying & During the internship

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- If you apply early, ask to start working as soon as possible. Spend time BEFORE the internship to build up domain knowledge so that you can spend 2/3 months onsite doing real work.
- Once there, fight for good work if necessary. Believe in yourself and the work you can do and if you are unhappy with a situation, ask for a change.
- The impact you have is a function of time you put in so if you find a professor and an opportunity where you can really do good, if not great work, realise how rare and lucky that is and give it everything you have. Do NOT waste ANY opportunity. Build a relation with that professor.

Part III

My experience, briefly

Privilege

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- My parents support and encourage my decisions. That can be rare, quite unfortunately.

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- Choosing to go for opportunities where you aren't paid is also weird.

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- I love learning. It fills me with a lot of joy to learn and think about these research problems, which is why I love it so much and think its this much fun.
- If you're like me, you might just find it as fulfilling as I do.

AMA: Ask me Anything!

You can read about the specifics
of my internship at IIT Patna [here](#)

Connect with me

[LinkedIn](#)

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