Making your way around the CEDAR science world

...some tips on getting the most out of an aeronomy education

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Outline

What not to do…

What you could do…

How to go about it…

Lessons learned…

...Questions
What not to do… *Undergrad*

- Party like a rock star and miss out on your education so you can’t get into grad school.
What you could do...

Travel & Get Smart

- REU
  - Arecibo
  - JRO
  - Millstone
  - NCAR-HAO
  - LASP
  - NASA

- Summer Schools
  - ISR (AMISR)
  - PASI
  - LWS
  - NCAR-HAO

Specialized Information for Undergraduate Students

The following programs provide either direct (i.e., from NSF) or indirect (i.e., from an awardee institution) funding for students at this level or identify programs that focus on educational developments for this group such as curricula development, training or retention.

- Advanced Technological Education
- Arctic Research Opportunities
- Catalyzing New International Collaborations
- Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (RISE)
- Dynamics of Coupled Natural and Human Systems
- Federal Cyber Service: Scholarship for Service
- Graduate Research Fellowship Program
- Historically Black Colleges and Universities Undergraduate Program
- Integrative Graduate Education and Research Traineeship Program
- Integrative Graduate Education and Research Traineeship Program-CIF21 Track
- National STEM Education Distributed Learning
- NSF Scholarships in Science, Technology, Engineering, and Mathematics
- Research Experiences for Undergraduates
- Research in Disabilities Education
- Research in Undergraduate Institutions
- Robert Noyce Teacher Scholarship Program
- Science, Technology, Engineering, and Mathematics Talent Expansion Program
- Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES)
What not to do... Grad Student

- Lock yourself in a basement lab until you solve the 6-sigma uncertainty in {insert research}
What you could do…

**Travel, freedom, and get paid**

- **Fellowships**
  - NSF
  - IGERT
  - Pre-doc
  - GRFP
  - NCAR-GSVP
  - NASA
  - GSRP
  - Pre-doc
  - ESS
  - US Gov.
    - Fullbright
    - State Dept.
    - NDSEG
  - ...

- **Conferences**
  - CEDAR
  - AGU
  - COLAGE
  - URSI
  - EGU
  - COSPAR
  - ISEA
  - ILRC
  - IEEE
  - ...

- **Workshops/Research**
  - PASI
  - LWS
  - ISR /
  - EAPSI
  - NCAR
  - NASA
  - JAXA
  - ...

APL
What not to do... *Post-doc*

- Focus so much on research that you don’t have time to build collaborations and mentor students.

![ Comic strip image ](www.phdcomics.com)
What you could do...
Travel and get paid...(more maybe)!

- Fellowships
  - AGS
  - OPP
  - LWS
  - NCAR
  - LASP
  - AAAS
  - NASA
  - ESA
  - JAXA
  - ...

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YOUR LIFE AMBITION - What Happened??

- Win Nobel Prize
- Revolutionize your field
- Attend that Conference in PoDunk, MN
- Get a job at a top University
- Get a job
- Hope they have Pepperoni Pizza

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A POST-DOC IS ALMOST A REQUIREMENT FOR AN ACADEMIC CAREER THESE DAYS.

EMPLOYERS WANT TO SEE HOW WELL YOU PERFORM AS AN INDEPENDENT RESEARCHER BEFORE THEY HIRE YOU.

DO I REALLY HAVE THAT MUCH INDEPENDENCE?

...BUT GIVEN HOW MUCH I'LL IGNORE YOU, YES.

IN THEORY, NO...

CAN I HAVE THAT IN WRITING?

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Piled Higher and Deeper
by Jorge Cham

www.phdcomics.com
Lessons Learned

- Don’t be afraid to ask!
- Don’t be afraid to apply!
- Lots of opportunities through networking
- Be persistent
Conclusions
What Just Happened... *Questions*

- I’ll be around all week if you’d like more information on specific programs or additional questions arise.
- Have **fun** and put forth a good bit of effort to **learn** the CEDAR science!