A bit about me...

• Emily Sassano

• From Florida

• Came to UCF in 2002

• Always had a passion for science but never knew what I wanted to do ... Med school, chemistry, biology, forensic science, meth lab...

• Majored in Molecular Microbiology and Biology with a minor in Chemistry

• Started working in the field at a biotech company called VaxDesign in 2006

• Undergraduate thesis project on T regulatory cells

• Graduated in 2007 with honors from UCF
And a little more...

• Continued to work at VaxDesign / Sanofi Pasteur

• 2009 became interested in computer science and took an introduction class to C programming

• 2009-2011 took all required CS courses to apply for PhD program
  • Computer Architecture
  • Programming Languages
  • Operating Systems
  • Discrete Computational Structures

• 2011 started at UCF in the Computer Science PhD program

• 2011 thanks to Prof Jha, I applied for the NSF fellowship
As you can see nothing happens overnight

Take your time and always focus on what you are passionate about.
NSF Application

- Transcripts
- Letters of recommendation
- CV
- List of publications
- Essays
  - Personal statement
  - Past research experience
  - Future research plans
Transcripts

• Keep your GPA as high as possible

• Take a balanced semester of class

• Plan ahead. Classes can fill up or may not be offered every semester or even every year

• Don't procrastinate (well try not to do it too much...)

http://xkcd.com/
Letters of Recommendation

• Ask those who know you personally in your academic career.

• You want them to be able to address items you have commented on in your essays and/or shown in your CV. Making your application more cohesive.

• Good to have at least a rough draft of one or more of your essays for them to read while they write your letter.

• Give ample time for them to write your letter. You are not going to get a strong letter if they are rushing and use a generic letter for your application.
Now the hard parts...  
the Essays!!!

• Past research experience

• Future research

• Personal statement

• Focus on intellectual merit and broader impacts.
<table>
<thead>
<tr>
<th>Intellectual Merits</th>
<th>Broader impacts</th>
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<tr>
<td>• How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields?</td>
<td>• How well does the activity advance discovery and understanding while promoting teaching, training, and learning?</td>
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<td>• How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.)</td>
<td>• How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?</td>
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<td>• To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?</td>
<td>• To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?</td>
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<td>• How well conceived and organized is the proposed activity?</td>
<td>• Will the results be disseminated broadly to enhance scientific and technological understanding?</td>
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<td>• Is there sufficient access to resources?</td>
<td>• What may be the benefits of the proposed activity to society?</td>
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[http://www.nsfgrfp.org/how_to_apply/review_criteria](http://www.nsfgrfp.org/how_to_apply/review_criteria)
Past research experience

• Think about including any research from your past. Not just what would be directly related to your future research.

• What you did that makes you capable of conducting your future research.

• Link past research to publications.
Future Research

• Work with your advisor or professor you are doing research with.

• This does not have to end up being your thesis project.

• Make sure that it is something that you have the capability and knowledge from past classes and research to accomplish.
Personal Essay

- Make a list of everything awesome you have ever done!
- Does not and should not only be academic
- Volunteer work
- Tutoring/ teaching
- Personal experiences that lead you to science
- ...
Help getting started go online

- Go to the NSF GRP site and understand the program solicitation
  - www.fastlane.nsf.gov/grfp/
- Google "NSF GRFP essay"
- Tons of useful information
  - Essay outlines to follow
  - Examples of NSF GRFP selected essays
  - Blogs about people's experiences