Good Students

Graduates and Undergraduates

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Advance Workshop 11/9/06
Practicalities: Senior Faculty

- Big name senior faculty: least risk option
  - support
    - grant money for RA
    - travel money for conferences
    - in touch with “local” money
  - connections
    - well-connected in field
    - feasible collaborations with outside groups
  - job
    - one phone call
    - (see connections above)
  - part of a big (supportive) group
Practicalities: Junior Faculty

- Junior faculty: higher risk option
  - support
    - grant money for RA (?)
    - travel money for conferences (?)
    - in touch with “local” money (?)
  - connections
    - well-connected in field (?)
    - feasible collaborations with outside groups (?)
  - job
    - one phone call (?)
    - (see connections above)
  - group (?)
More Facts/Fiction

- Junior faculty
  - more time
  - more energy
  - more academic freedom

- Senior faculty
  - less time
  - more energy elsewhere
  - part of the machine
  - research often more constrained
This is how to be a good friend. No kicking, elbowing, pushing, pinching, biting, and headbutting. No yelling at each other. No poking each other and no smacking each other because it’s not a nice thing to do to other people.

Regina, Age 6

Rewrite with adult equivalent (grad students talk)

(Physical → Emotional/Verbal)
An Alternative: The Undergrad

- Hang up free!
- Come in X-Large sizes
More about undergrads

- not looking for a career job
- flattered that you pursue them
- no “Is this really what I want to do with my life”
- highly enthusiastic ... and naively creative
- no worries about “their thesis project”
- very appreciative

**TALENT!!!!**
- how good are your grad students?
- top undergrads go to the Harvards/Princetons/etc
My undergrads

A98-S01 Brandon Bale (ACMS and Mary Gates Fellow)
S99-S01 Derek Bentsen (ACMS and Mary Gates Fellow)
S00-S01 Kristin Spaulding ♦ (ACMS and Mary Gates Fellow)
   Honors Thesis: Modelocking in an optical fiber ring lasers
A00-S02 Brandon Warner ♦ (ACMS)
W01-S02 Matthew Patterson ♦ (ACMS and Mary Gates Fellow)
   Honors Thesis: Coupled Multi-species Bose-Einstein Condensates in …
A01-Su02 Jennifer O’Neil ♦ (ACMS and Mary Gates Fellow)
   Honors Thesis: Pulse Dynamics in Actively Modelocking Fiber Optic Lasers
W02-A02 Dutch Meyer (ACMS)
A00-S03 Karen Intrachat ♦ (ACMS and Mary Gates Fellow)
W03-S03 Noel Fitzgerald (ACMS/Chemistry and Mary Gates Fellow)
   Honors Thesis: Laser-Induced Plasmas: Dynamics in Air
W03-S04 Leslie Butson ♦ (ACMS)
A03-S06 Joshua Proctor ♦ ♦ ♦ ♦ (Aeronautical and Astronautical Engineering and English and Mary Gates Fellow)
S04-Su05 Braxton Osting ♦ (Mathematics and Mary Gates Fellow)
   Honors Thesis: Stability and dynamics of transverse …
S04-S07 Kimberlee Shish ♦ (Aeronautical and Astronautical Engineering and Mary Gates Fellow)
W06-S07 Joel Nishimura ♦ (Mathematics and Mary Gates Fellow)
My undergrads

A98-S01 Brandon Bale: Honey Baked Ham → UW Applied Math (expected PhD 2008)
S99-S01 Derek Bentsen: Virginia Law → $$$
S00-S01 Kristin Spaulding: Master UW Applied Math → Lockheed Martin
A00-S02 Brandon Warner: Scientific programming jobs at Startups
W01-S02 Matthew Patterson: UW Applied Math (expected PhD 2007)
A01-Su02 Jennifer O'Neil: BU Law → $$$
W02-A02 Dutch Meyer: Microsoft → UBC CS
A00-S03 Karen Intrachat: NSA → Mitre → Masters in Finance → $$$
W03-S03 Noel Fitzgerald: UW Chemistry (PhD 2011)
W03-S04 Leslie Butson: Marriage + Kid → no $$$
A03-S06 Joshua Proctor: Princeton (expected PhD 2011)
S04-Su05 Braxton Osting: Columbia (expected PhD 2010)
S04-S07 Kimberlee Shish: high end grad school
W06-S07 Joel Nishimura: high end grad school
How to Make it Work with Undergrads

**Recruitment**
- identify talent early!
- get to know them
- be wary of those walking in off the street
- money is no object

**Making it worthwhile**
- think about 2 year commitment
- first year of work is slow: what are basic skills necessary
- don’t expect them to know the big picture!
- this isn’t necessarily their career
- **DO A PROJECT YOU WANT ARE GOING TO DO ANYWAY!!!!**
The Future ...

**Grads**
- career job
- find advisor
- revolutionary PhD
- jockey for position

**Undergrads**
- career?
- study
- no parents... sweet!
- have fun & study