

# Welcome to our second informational wine and cheese!

*Today's panel:* Evan, Kirill, Zhilei, Rachael, Dan,  
and Nick, and Jeff

*Topics:* finances, department requirements, grad student life and responsibilities, international student resources, teaching, advising, and mental health

# Exams and feedback - Timeline

Keep in mind what's next for you (including upcoming reports). Consult the administration, your advisor or a fellow grad student if unsure.

Overview <http://physics-astronomy.jhu.edu/graduate/research-and-advising/>

- Diagnostic Exams - Beginning of 1st yr
  - Research Exam - End of 1st yr
  - Declare Advisor - End of 2nd yr
  - Graduate Board Oral Exam (GBO) - Fall 3rd yr
  - Thesis defense!
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- Research Rotations  
(Semesterly reports)
- Thesis Research  
(Annual Reports)  
(Annual Meeting)

# Exams and feedback - Resources

[Official exam guidelines](#)

[Grad Student Collected Questions/Solutions \(password: nocheating\)](#)

- Grad student wine and cheeses can be organized to prepare for any oral talk (including research exams, GBO, etc.)
- Plan in advance and take initiative with the exams/committees you have to schedule and organize.
  - Your advisor should be helping you, especially with your GBO and defense.
- Feedback is important. If you need more, ask for it!
  - This is part of your advisor's and examiner's jobs
  - You can (and should) request 1 on 1 feedback with your 1st/2nd year advisor and/or research advisor

# Exams and feedback - Conclusions

Try not to think of these steps purely as milestones. They're for your own growth too, make the most out of them!

# International Student Resources and Concerns

**Office of International Services** <http://ois.jhu.edu/>

- I-20 form travel signature
- CPT/OPT (sessions from OIS all year round)

Tip: Call them or walk in for help (don't email) !

## **Fellowships for non-US citizens**

- NASA earth and space science
- Gardner fellowship
- List from other institutes: [MIT](#), [Swarthmore](#)

# International Student Resources and Concerns

Have suggestions of **department activities** that will be more inclusive?

Have ideas about new strategies for **assessing English proficiency**?

Have any difficulties in **living** in a whole new country (medical, tax etc.)?

Some ideas going forward:

Try to maintain the mentor-mentee relationship more and have a first year lunch

Report discrimination: **Zhilei** (PAGS), **Kelley** (PHA), or **Rene** (JHU)

# Advisors and advising

- What are they supposed to do?
- Places to find advisors
- How to choose one
- Getting the most out of your advisor

# What are advisors supposed to do?

- **Official business -- your supervisor**
  - Paperwork
  - Committees
  - Make sure you're fulfilling official requirements
- **Research and career guidance -- your boss**
  - Advise you on your thesis project
  - Help you on your way to a post-graduate-school career
  - Letter writing
  - Having your back in case anything happens
- **Teaching and guidance -- your mentor**
  - Domain-related skills
  - General work skills
  - Having your back in case anything happens



# Where you can find an advisor or advisors

- **Official advisors**

- Faculty with appointments in the Physics and Astronomy department

- **External advisors**

- Faculty in other departments and JHU divisions (e.g. the Whiting School of Engineering)
- The equivalent of faculty at:
  - Applied Physics Laboratory
  - Goddard Space Flight Center
  - Space Telescope Science Institute
- If you have an external advisor, you also need an official advisor

# Choosing an advisor

## Things to consider:

- Do they work on a subject I'm interested in?
- Can they pay me for my work?
- Can we get along for 3+ years?
- What non-domain skills can they teach me?
- Are our communication styles compatible?
- Is my work style compatible with their expectations?
- What career goals can they help me with?
- If something in our advising arrangement isn't going well, can I talk to them about it?

# Choosing an advisor

**Talk to their current and former students and postdocs!**

## **Ask:**

- What working for them is like
- Where their students go
- How easy it is to track them down
- How long do their students take to graduate?
- Whatever else you need to know to decide if this is someone you want to work with for several stressful years!

# Getting the most out of your advisor

**Talk to your advisor whenever you need to**

**Evaluate how things are going, frequently**

**Have more than one mentor**

# Grad Student Rights and Grad Life

Officer of Academic Affairs: **Renee Eastwood** ([rseitz@jhu.edu](mailto:rseitz@jhu.edu))

GRO: <http://studentaffairs.jhu.edu/gro/>

GRO Advocacy chairs **Damini Agarwa** and **Vijay Sadashivaiah** can be reached at [advocacy.gro@gmail.com](mailto:advocacy.gro@gmail.com)

Kelley Key (our P&A Academic Program Administrator) and Renee Eastwood are good people to go to if you have a conflict

Get to know the P&A office staff - they're friendly and really helpful!!

# Grad Student Rights and Grad Life

Academic Affairs: <http://homewoodgrad.jhu.edu/>

- <http://homewoodgrad.jhu.edu/academics/policies/>
  - Rights and responsibilities
  - Procedure for kicking you out
  - What happens if you misbehave
  - What happens if others misbehave
  - Leave policy (you get 10 weekdays + university holidays) + sick leave
  - Supposed to have a once a year written review of your progress
  - Grade changing and retaking a course
  - You must have health insurance
- <http://homewoodgrad.jhu.edu/academics/graduate-board/policies-and-forms/>
  - You can take up to four semesters of leave and come back

# Grad Student Rights and Grad Life

Academic Affairs: <http://homewoodgrad.jhu.edu/>

- <http://homewoodgrad.jhu.edu/student-services/>
  - Resources: health center, counseling center, Office of Institutional Equity (for disabilities/special requirements or if you have a complaint), rec center, campus ministries
  - Things you have a right to know (ie statistics and data on JHU)
  - Sexual assault resources
  - Disability resources
  - Travel resources
- <http://homewoodgrad.jhu.edu/professional-development/>
  - Professional development resources
  - FAQ about advising
  - List of TA resources

# Grad Student Rights and Grad Life

Academic Affairs: <http://homewoodgrad.jhu.edu/>

- <http://homewoodgrad.jhu.edu/life-at-hopkins/>
  - Info on Bmore
  - Housing resources
  - Family resources and policies
  - Diversity fellows program
  - International student resources + bridge program
  - Grad student organizations - GRO
  - Community engagement program



# P&A Diversity Group

- We meet to discuss diversity issues
- Hold occasional women in physics events - considering more women in physics events, minorities in STEM events, LGBTQ in STEM events
- Mentor program
  - Be a mentor:  
[https://docs.google.com/spreadsheets/d/1lgqW3K4FPrF\\_Y7au-s\\_cFiIkf82acMrKRr56iGTuQZ8/edit#gid=0](https://docs.google.com/spreadsheets/d/1lgqW3K4FPrF_Y7au-s_cFiIkf82acMrKRr56iGTuQZ8/edit#gid=0)
  - Find a mentor:  
[https://docs.google.com/forms/d/1X6l4Edd0LRcWtnPvg\\_MY3hb2EimqF1jHQrw0SUy3A2k/viewform](https://docs.google.com/forms/d/1X6l4Edd0LRcWtnPvg_MY3hb2EimqF1jHQrw0SUy3A2k/viewform)
- Also check out the Hopkins-wide diversity organization: Diversity Leadership Council: <http://web.jhu.edu/dlc>

# Responsibilities and Academic Advice

**Thesis Advisory Committee** - required (after GBO) & extremely useful!

*Your TAC will help steer you towards your post-graduate career.*

## **What to look for in your committee:**

- People who are available - you'll get the best help from people who understand your goals
- Diversity in research - A reasonably removed outsider can provide helpful perspective
- Diversity in seniority - at least one person who has seen people graduate here. At least one person who knows what the current job search looks like
- Do you want to be mentored or want advice from someone who is more of a scientific peer?
- Look for people with qualities and skill sets you would like to develop (work-life balance, time management, writing).
  - Seeking mentors who excel in areas you feel weak in can be rewarding in the long run.

# Advice: Schedule & Time Management

## Make a schedule that works for you

- **Broad/long-term goals & a short-term to-do list**
- **Figure out your format**
  - Electronic vs. Paper vs. White Board. Just be sure you have short & long term goals
- **Write a CV that is easy to update and edit**
  - It is how you keep track of your progress and goals
  - Each day: Work to turn your *to-do's* into *CV items*

*Don't panic! Making a plan can feel daunting but having one makes life much less stressful.*

## Setting Goals

- **Set tentative goals**
  - (Vague is OK. Research is hard and goals will change.)
- **Ask advisor/students/employer for guidance on CV**
  - Google folks who are where you want to go next. Use their CV as a guide.
- **Protect your time!**
  - “Are my activities progressing my personal & professional goals?”
  - A plan for professional development frees up mental energy to enjoy your personal life!

# Advice: Professional Development

Writing up and presenting our research is crucial in our profession! There are many free resources available to help with both!

- **Professional Development Modules**

- Center for Leadership Education: <http://engineering.jhu.edu/cle/>
- Some topics: Financial management, Grant writing, poster/slide making, job interview training
- All modules meet once a week for ~7 weeks
- Many have no homework and you can use work you are already doing

- **Writing Center**

- <http://krieger.jhu.edu/writingcenter/writing-resources/>

# Advice: Professional Development

Writing up and presenting our research is crucial in our profession! There are many free resources available to help with both!

## Speaking & Presenting

- **Participate in journal clubs/ give chalk-talks**
  - It's a great way to learn new topics after courses are done.
  - Giving chalk talks is good practice for your GBO, thesis defense, and Job Interviews.
- **Apply to *any* local conference, workshop, short-course, or school**
  - Present posters or give talks (or both!)
  - You do not need to be an expert to attend a school or workshop. (no one expects you to be). They are a great way to learn, network, and diversify your skills/research interests.
  - Speak to older grad students about options (e.g. Penn state local astro meeting, APS meetings)
  - Apply for travel grants & fellowships. Many conferences offer financial support for students!
    - GRO funding, CAS occasionally has funding, speak to your advisor

# Teaching

## Tips for being a TA:

- Time management is a difficult skill to learn but improves with practice-- your advisor should recognize, especially when you are still taking classes, that you have a lot on your plate
- \*Try\* not to spend more time than you are paid for
- Can you restrict the hours you TA by starting assignments only a few hours in advance?
- You can tell students to come back later if they appear unprepared
- **Remember that all the TAs in your class are part of a team. Be considerate of the other TAs on your team.**
- Nick Eminizer is the current PAGES TA advocate -- bring him your concerns!

# Teaching

New procedure for the beginning of the semester

- Kelley will send out an email 3 weeks in advance of the start of the semester with her list of TAs
- It is then your job to discuss with your advisor if you will be a TA or RA that semester
- Let Kelley know ASAP if you will NOT be a TA that semester
- Hopefully this will allow the department to confirm the TA pool earlier so no one ends up with a larger-than-expected burden

# Teaching

Where to get help improving your teaching skillz:

- Hopkins Center for Educational Resources <http://www.cer.jhu.edu/>
- Center for the Integration of Research, Teaching and Learning <http://www.cirtl.net/>
  - Get on their mailing list!!!
  - Hopkins Summer Teaching Institute
  - MOOC: Evidence-Based Undergraduate STEM Teaching <http://stemteachingcourse.org/>
- Preparing Future Faculty certificate program
  - <http://www.cer.jhu.edu/teaching-academy/pff/>



# Teaching

Teaching opportunities outside of being a TA

- Teach an intersession class! For more information talk to Alex Greenbaum, Alice Cocoros
- You can teach a regular class. Need to coordinate with professor in advance.
- The Center for Talented Youth (CTY) often needs summer instructors  
<http://cty.jhu.edu/>
- Dean's Teaching Fellowship (<http://krieger.jhu.edu/teachingfellowship/>) FYI: a lot of work

# Mental Health

YOU BELONG HERE! (Imposter syndrome)

- You are your hardest critic!
- Most of us tend to feel we don't belong, sometimes for a long time
- You are a scientist. By definition, scientists lead lives like yours.
- Use the mentor program - it exists for everyone!
- Talk to older grad students - they may have very similar experiences.
- You should be here because you want to be and it makes you happy

# Mental Health Resources

## Campus Resources

- Individual counseling services
  - Individual therapy
  - Psychiatric referrals
- Group counseling
  - A number of groups each year
  - Eating disorder support group
  - LGBTQ+ student support group
  - Conflict mediation
- On-site psychiatric support
- There is **always** someone on call

# Mental Health

## Work-Life Balance

- Remember: you're an adult, and life is about more than your work
- Get involved in the community: Baltimore is unique!
- Intramural & city social sports
- Religious and political orgs
- Meet people on the Internet (meetup.com, etc.)
- Follow local venues/art spaces on social media (showspace.tumblr.com)
- Define boundaries (push them when you have no choice, but don't make this a regular habit)
- Leave work at work. Grad school is the first job you have in your academic career. You've already "made it".

# Being a responsible adult

*“Being an adult is realizing that \$5000.00 is a lot of money to owe, but not that much to have.”*

It doesn't matter how much we joke that grad school isn't real life, we need to start paying attention to our own financial situations. These include, but are not limited to

- Budgeting
- Savings
- Taxes
- Loan Repayment
- Credit
- Planning your future

# Being a responsible adult: Budgeting

“Live like a student while you’re a student, not for thirty years afterward.”

“50/30/20” rule can be a helpful starting point

- 50% (Needs) Housing, Utilities, Transportation, Groceries
- 30% (Wants) Eating out, entertainment, etc.
- 20% (Should/Must) Personal Savings, Retirement Savings, Loan Repayment

It’s OK to tweak these numbers, and some things fall across categories e.g.

Paying more than average rent (Needs) in order to have a single room/live in a certain neighborhood/with certain features (Wants)

# Being a responsible adult: Savings

Multiple kinds with different uses

- Personal Savings: “Rainy Day Fund”
  - 3 months of expenses
  - Should be easily accessible in times of need, e.g. medical expenses
- Retirement Savings: Special tax benefits associated.
  - Roth IRA vs Traditional IRA
  - Start early, contribute often
- Goal Savings: Particular upcoming expense
  - Holiday gifts
  - Planned travel
- Certificates
  - Similar to regular personal savings
  - Trade freedom of access for higher interest rates

# Being a responsible adult: Taxes

“In this world nothing can be said to be certain, except for death and taxes.”

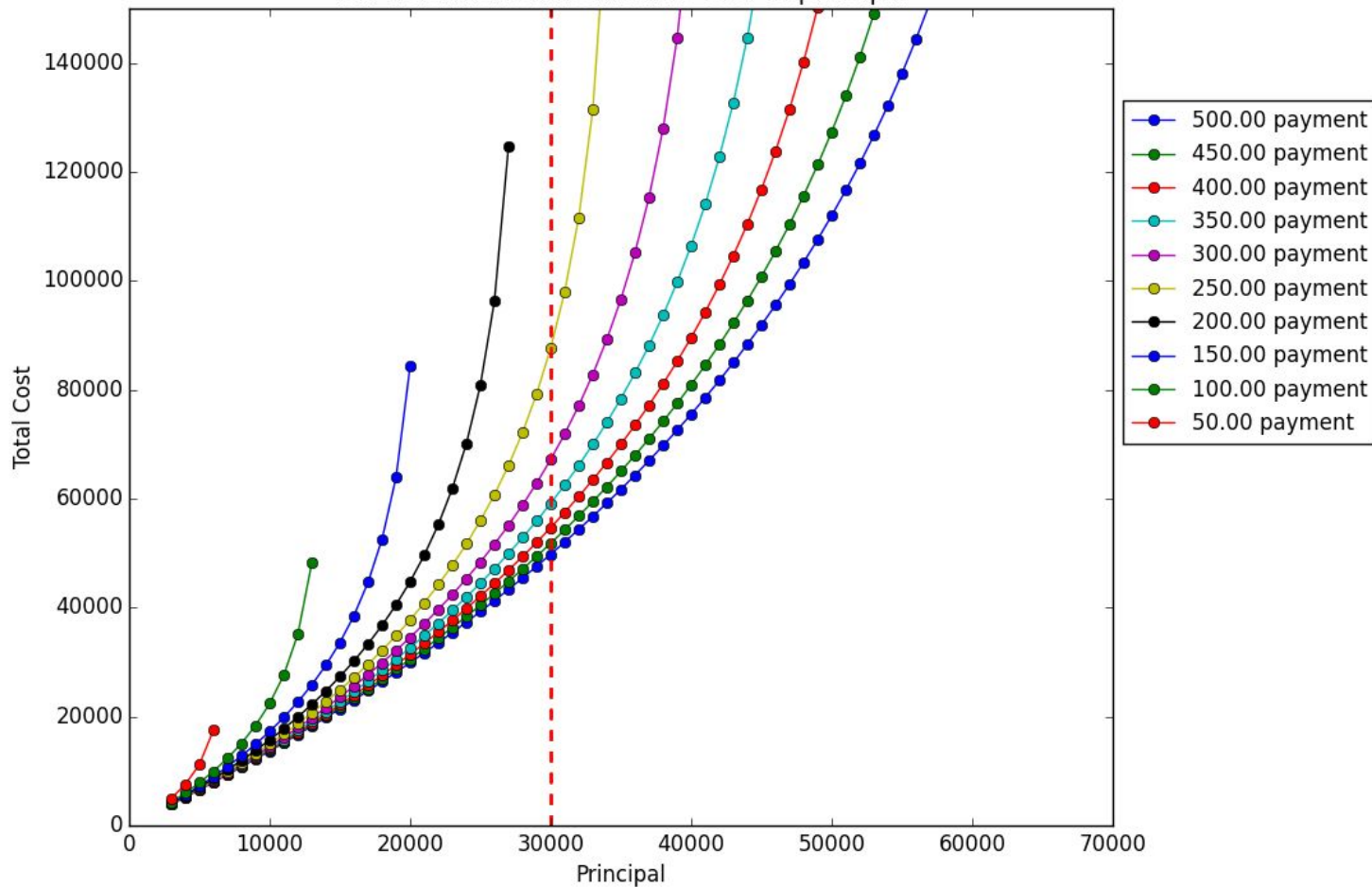
- Extremely situation dependent
- Be wary when “IRS” gets thrown around
  - The IRS does not work any differently with tax preparers than with private citizens. If you are promised special deals then it is a lie.
  - The IRS will always contact you via USPS
- Be aware of your official residence, some states claim tax on income earned out of state.
- The most cautious thing to do is have the maximum withholding.
- Our income bracket means there are many free online preparation software options. <https://www.irs.gov/filing/e-file-options>
- IRS website has multiple tools to help answer tax questions.



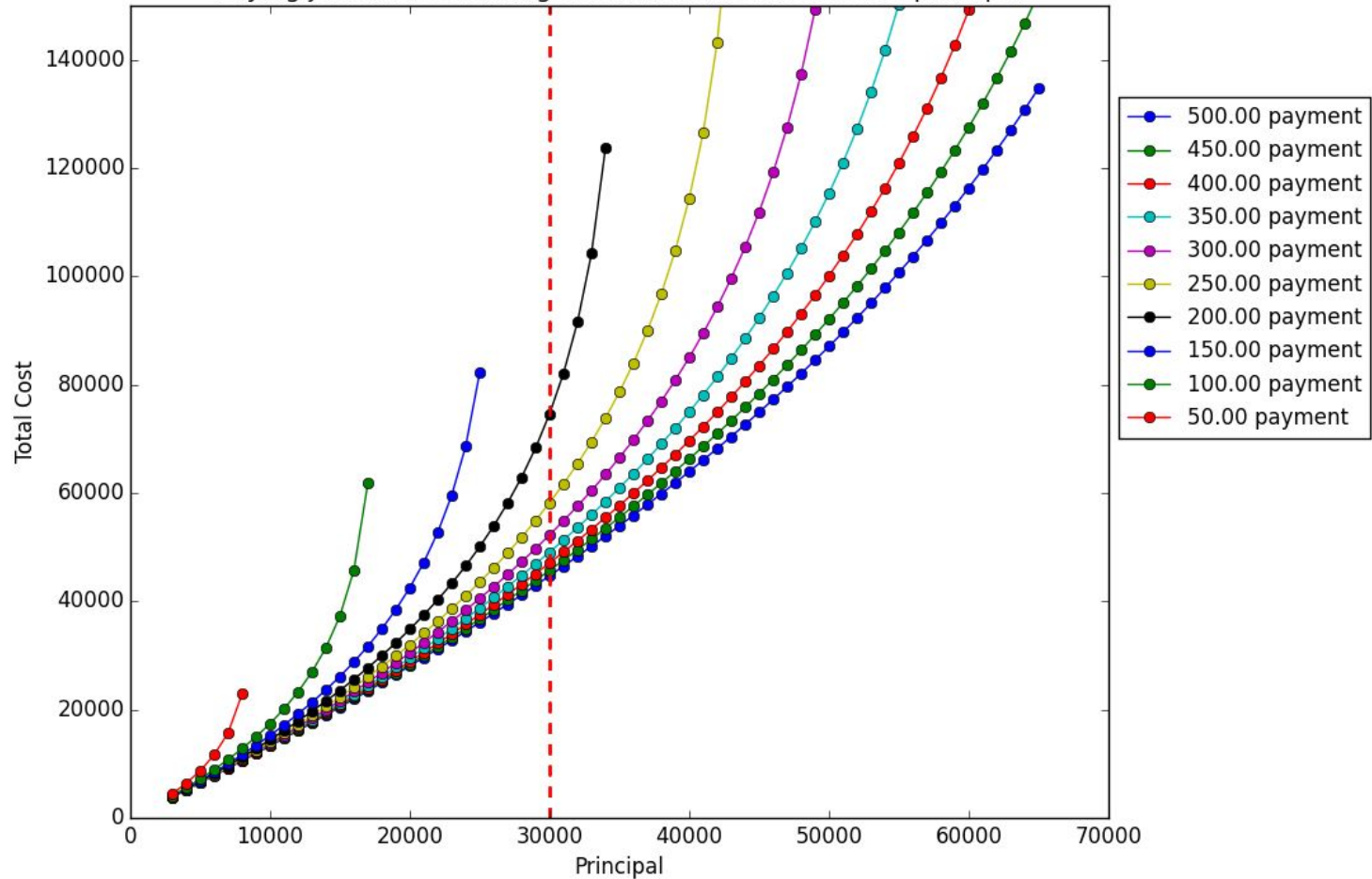
# Being a responsible adult: Loans and repayment

- Student Loans can be for life, but they don't have to be
  - This debt is often nondischargeable in bankruptcy, i.e. you have to repay it no matter what
  - Make a plan for repayment now.
  - Indicate to your loan holder what repayment plan you intend to follow.
  - If you want tools or help, email me at [eplunke2@jhu.edu](mailto:eplunke2@jhu.edu)
- Deferment
  - Some loans have their interest paid while others don't. Most student loans have non compounding interest during deferment. And yes, that means
- **During Deferment loan balances grow linearly instead of exponentially**
  - Paying aggressively now can save you a lot of money down the line.
- Tax benefits
  - Money that goes towards paying interest on student loans can be deducted from your taxable income, up to \$2400.00
- Other kinds of loans (auto for example) will have negotiated payment schedules from the beginning. Follow those schedules.

Full deferment time lifetime cost vs principal



Paying just interest during deferral lifetime cost vs principal



# Being a responsible adult: Credit, reports and scores

- <https://www.consumer.ftc.gov/articles/0155-free-credit-reports>
- Different kinds of credit
  - Installment
    - Fixed amount
    - Repay according to a scheme established at the time of lending
  - Mortgage
    - Special case of Installment
  - Revolving
    - Lines of credit. Amount of debt varies, available credit has a maximum (credit limit)
    - Have minimum payments
- Important factors
  - Low utilization ratio. Balance/credit limit  $\in [0.01,0.10]$
  - Good history of repayment for installment, i.e. DON'T MISS PAYMENTS
  - Don't payoff too frequently on revolving
  - Hard vs. Soft credit checks, keep the number low

# Being a responsible adult: Looking toward the future

Lots of things you should consider seriously in the next few years

- Insurance Policies (Life, Disability, etc.)
- Down Payment savings
  - For mortgages and auto loans, the more you can put down the better the terms of the loan (usually)
  - 20% of cost is a very typical amount for a down payment
  - If you want a house at the end of a post-doc, you need  $\sim \$250,000.00 \times 0.2 = \mathbf{\$50,000.00}$ .  
 $\sim \$7,000.00/\text{year}$  if you start now
- As income increases, there are lots of more nuanced things to take advantage of
  - Premium credit cards with reward programs (and yearly fees)
  - Participation in the Stock Market either directly or through a brokerage.
  - As the marginal tax rate increases, one needs to be aware of how that changes consideration of ones financial position e.g. Roth IRA

# Things you should do now (if you haven't already)

1. Get a checking and savings account that you can access money from within 1 hour.
2. Move your official residence to Maryland.
3. Ensure that your tax withholding is adequate
4. Make a monthly budget and stick to it
5. Make a plan to save at least 3 months of expenses

After you've done those things start paying attention to loans, your credit utilization, and longer term savings for retirement.