Understanding Funding and Budgeting Finances

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MATC Scholars Program
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OUTLINE

• Introduction
• Learning Objectives
• Learning Outcomes
• Session Presentation
• Conclusion
LEARNING OBJECTIVES

• Present Funding Sources

• Present Budgeting Basics

• Present strategies for maintaining and increasing funding opportunities
LEARNING OUTCOMES

• Students will know what funding sources are available

• Students will have a strategy for managing their funds

• Students will know how to work with faculty to support research
WHY FUNDING IS IMPORTANT?

• Reduces student loan debt

• Limited ability to get loans

• Funding is prestigious and looks good on a resume

• Connection to faculty mentors and advisors
  • Critical faculty advising project engagement
Policy Brief: New America Education Policy Program: The Graduate Student Debt Review
March, 2014

All figures are in 2012 dollars.

2004
- 90th Pct: $118,442
- 75th Pct: $70,907
- Median: $40,209

2008
- 90th Pct: $112,493
- 75th Pct: $72,887
- Median: $43,966

2012
- Median: $57,600
- 90th Pct: $153,000
- 75th Pct: $99,614

COMBINED 2012 UNDERGRADUATE/GRADUATE DEBT

90TH PERCENTILE DEBT: $153,000
(One in ten borrowers owe this amount or more)

75TH PERCENTILE DEBT: $99,614
(One in four borrowers owe this amount or more)

MEDIAN DEBT: $57,600
(Amount owed by the typical borrower)
Student Loan Disbursements

Federal Student Loan Disbursements: AY 2012 - 2013
Data: Department of Education

- Undergraduate Subsidized Stafford: 28%
- Undergraduate Stafford: 29%
- Graduate Stafford: 26%
- Parent Plus: 10%
- Graduate Plus: 7%
Overall Debt by billions for Graduate Education

Figure 1. Graduate and Professional Student Loans by Source, 2010-11 (in billions)

- Private Loans: $1.10
- State/Institution Loans: $0.25
- Other Federal Loans: $0.09
- Federal Grad PLUS Loans: $6.70
- Federal Unsubsidized Stafford Loans: $15.80
- Federal Subsidized Stafford Loans: $11.30
- Federal Perkins Loans: $0.19

Source: The College Board, 2011
GRADUATE STUDENT DEBT

Percentage of Graduate Students with Loans by Level and Race/Ethnicity, 2007-08

- White: Doctoral 38%, Master's 41%
- Hispanic/Latino: Doctoral 41%, Master's 58%
- Black/African American: Doctoral 62%, Master's 68%
- Asian: Doctoral 19%, Master's 35%

Source: 2007-08 National Postsecondary Student Aid Study

http://www.cgsnet.org/portals/0/pdf/CGSFederalRelationsBriefing_1_27_10.pdf
GRADUATE DEBT BURDEN

Master's Graduates, 2007-08

- No graduate debt: 42%
- $20,000 to $39,999: 21%
- $40,000 to $59,999: 11%
- $60,000 to $79,999: 11%
- $80,000 or more: 2%

Source: Trends in Student Aid, 2009

Doctoral Recipients, 2007-08

- No graduate debt: 45%
- $20,000 to $39,999: 13%
- $40,000 to $59,999: 12%
- $60,000 to $79,999: 11%
- $80,000 or more: 9%

10%
Graduate Debt Burden

Figure 2. Education-related Debt of Doctorate Recipients, 2009-10

Source: National Science Foundation, 2011
WHAT ARE SOME TYPES OF FUNDING?

• Research and Training Grants

• Scholarships

• Fellowships
  – Recruitment
  – Special Needs
  – Faculty Associated

• Teaching Assistantships

• Research Assistantships
• Research and Training Grants are gifts that you do not need to repay.

• Students may receive grants from the government or through private sources of funding.

• Grants may require students to maintain a specific GPA throughout their academic career.

• In graduate school, grants can be used towards, travel, research, experiments, or projects.
SCHOLARSHIPS

• Scholarships are awards given to students based on academic excellence and/or talent.

• Students may also receive scholarships based on factors like ethnic background, field of study, or financial need.

• Scholarships vary in their amounts and the number of years given aid.

• Like a grant, students do not need to pay back the money awarded in a scholarship.

• Scholarships can be awarded through your school or through private sources.
FELLOWSHIPS

There are generally three types of fellowships:

• Recruitment
  • 1st year funding to recruit students
  • Caution, this is only for one semester to a year

• Special Needs
  • This can be associated with a college/department/state and is also has a limited time period

• Faculty Associated – may be required that you work with the faculty member
FELLOWSHIPS

• Granted to graduate and post-graduate students and do not require repayment.

• Awarded by private organizations, institutions, or through the government.

• Given a 1- to 4-year stipend with or without a tuition waiver.

• Based on merit, need, and the institution's or faculty's grant.

• Awarded by schools to students who have been recommended by a faculty member.
TEACHING ASSISTANTSHIPS

• TA/GA offers students opportunities to learn how to teach and develop an excellent understanding of the course material.

• You can expect to receive an annual stipend between $7,500 and $20,000, as well as free tuition.

• You gain experience in and out of the classroom and have the opportunity to interact closely with faculty members.
TEACHING ASSISTANTSHIPS

- Duties of a TA vary, and you can expect to be responsible for one or more of the following:
  
  - Teaching or assisting with one or more sections of a course
  
  - Running laboratory sessions
  
  - Grading undergraduate student papers and exams
  
  - Holding regular office hours and meeting with students
  
  - Conducting study and review sessions
GRADUATE ASSISTANTS

• Why Become a Research Assistant?

• What Does a Research Assistant Do?

• How Do You Get Involved as a Research Assistant?

• Benefits for Faculty
RISKS OF LOSING FUNDING?

• Not meeting funding renewal guidelines
  • Performance (GPA, publication record, teaching reviews)

• Agency program ending

• Changing faculty researchers
  • Voluntarily and involuntarily
BUDGETING, SAVING AND INVESTING AS A HEDGE AGAINST FUNDING RISKS

- Budget Basics
- Saving for a bad semester
- Investment
- Common mistakes
BUDGET BASICS 101

• How much can you count on?

• What are your monthly expenses?

• What are your 1 time non-monthly expenses?

• Go over relevant percentages for expense categories

• Discuss zero-based budgeting

• Discuss the need for a real budget versus theoretical budget
Budget Calculator

http://gradsense.org/gradsense/budget-calculator

Creating and sticking to a budget can help you reduce your dependence on student debt. Click "Start" to see what small steps you can take today to help meet your long-term financial goals.
Step One - Identify available funds

### Total Annual Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarship/Fellowship/Traineeship</td>
<td></td>
</tr>
<tr>
<td>Research, Teaching, or Graduate Assistant or Work-Study</td>
<td></td>
</tr>
<tr>
<td>Off-Campus Job</td>
<td></td>
</tr>
<tr>
<td>Other (family, loan, savings, etc.)</td>
<td></td>
</tr>
<tr>
<td>Total Funds</td>
<td></td>
</tr>
</tbody>
</table>

[Back To: Budget Calculator] [Step Two]
Step One. Identify available funds.

Scholarship/Fellowship/Traineeship $ 
Research, Teaching, or Graduate Assistantship or Work-Study $ 
Off-Campus Job $ 
Other (family, loan, savings, etc.) $ 
Total Funds $
### Private School

**2014-15 GRADUATE STUDENT BUDGETS - FALL, WINTER AND SPRING TERMS**

<table>
<thead>
<tr>
<th></th>
<th>On-Campus</th>
<th>Off-Campus</th>
<th>Commuter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$13,200</td>
<td>$13,200</td>
<td>$13,200</td>
</tr>
<tr>
<td>Room and Board</td>
<td>$16,530</td>
<td>$16,530</td>
<td>$4,520</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>$1,515</td>
<td>$1,515</td>
<td>$1,515</td>
</tr>
<tr>
<td>Transportation</td>
<td>$1,053</td>
<td>$1,053</td>
<td>$1,053</td>
</tr>
<tr>
<td>Personal Expenses</td>
<td>$2,847</td>
<td>$2,847</td>
<td>$2,847</td>
</tr>
<tr>
<td>Campus Health Insurance*</td>
<td>$3,099</td>
<td>$3,099</td>
<td>$3,099</td>
</tr>
<tr>
<td><strong>Total California Resident Budget</strong></td>
<td><strong>$39,504</strong></td>
<td><strong>$39,504</strong></td>
<td><strong>$27,294</strong></td>
</tr>
<tr>
<td><strong>Non-Resident Tuition</strong></td>
<td><strong>$15,102</strong></td>
<td><strong>$15,102</strong></td>
<td><strong>$15,102</strong></td>
</tr>
<tr>
<td><strong>Total Non-California Resident Budget</strong></td>
<td><strong>$54,606</strong></td>
<td><strong>$54,606</strong></td>
<td><strong>$42,396</strong></td>
</tr>
</tbody>
</table>

### Public School

<table>
<thead>
<tr>
<th></th>
<th>Resident</th>
<th>Nonresident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Required Fees:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition per credit hour</td>
<td>$290.00</td>
<td>$2,010.00</td>
</tr>
<tr>
<td>Technology Fee per credit hour</td>
<td>$11.00</td>
<td>$198.00</td>
</tr>
<tr>
<td>Registration Fee per semester</td>
<td>$20.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>University Program &amp; Facilities Fees per semester</td>
<td>$598.00</td>
<td>$1,196.00</td>
</tr>
<tr>
<td>Course Fees per semester estimate</td>
<td>$25.00</td>
<td>$25.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$3,888.00</strong></td>
<td><strong>$6,776.00</strong></td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>$8,155.00</td>
<td>$10,310.00</td>
</tr>
<tr>
<td><strong>Estimated Totals</strong></td>
<td>$8,543.00</td>
<td>$17,086.00</td>
</tr>
</tbody>
</table>

*Room & Board charges listed are for a traditional double room, 7 day meal plan. NOTE: Cost per semester is not equally split as is shown here. See Housing for a breakdown by specific term.
# Step Two - List your monthly expenses

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Monthly Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing (e.g., rent, mortgage)</td>
<td>$</td>
</tr>
<tr>
<td>Utilities (e.g., gas, electric, water, telephone, internet)</td>
<td>$</td>
</tr>
<tr>
<td>Groceries/Personal (e.g., laundry, food, clothes)</td>
<td>$</td>
</tr>
<tr>
<td>Transportation (e.g., car payment, public transit)</td>
<td>$</td>
</tr>
<tr>
<td>Entertainment (e.g., movies, eating out)</td>
<td>$</td>
</tr>
<tr>
<td>Childcare/Dependent Care</td>
<td>$</td>
</tr>
<tr>
<td>Debt Payments (e.g., student loans, auto loan, credit cards)</td>
<td>$</td>
</tr>
<tr>
<td>Savings/Emergency Fund</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td>Total Monthly Expenses</td>
<td>$</td>
</tr>
</tbody>
</table>
**Step Two. List your monthly expenses.**

- Housing (e.g., rent, mortgage) $
- Utilities (e.g., gas, electric, water, telephone, internet) $
- Groceries/Personal (e.g., laundry, food, clothes) $
- Transportation (e.g., car payment, public transit) $
- Entertainment (e.g., movies, eating out) $
- Childcare/Dependent Care $
- Debt Payments (e.g., student loans, auto loan, credit cards) $
- Savings/Emergency Fund $
- Other $

**Total Monthly Expenses** $
## Step Three - Identify One-time/Non-monthly Expenses

<table>
<thead>
<tr>
<th>Expense</th>
<th>Total One-time/Non-monthly Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car Registration</td>
<td>$</td>
</tr>
<tr>
<td>Insurance (e.g., health, car, rental, life)</td>
<td>$</td>
</tr>
<tr>
<td>Moving Expenses</td>
<td>$</td>
</tr>
<tr>
<td>Lab/Research Expenses</td>
<td>$</td>
</tr>
<tr>
<td>Professional Association/Licensing Fees/Test Fees</td>
<td>$</td>
</tr>
<tr>
<td>Federal &amp; State Income Taxes</td>
<td>$</td>
</tr>
<tr>
<td>Net Tuition &amp; Fees (i.e., what you pay)</td>
<td>$</td>
</tr>
<tr>
<td>Travel to Conferences</td>
<td>$</td>
</tr>
<tr>
<td>Vacations</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td>Total Non-monthly Expenses</td>
<td>$</td>
</tr>
</tbody>
</table>
**Step Three. Identify One-time/Non-monthly Expenses**

<table>
<thead>
<tr>
<th>Expense</th>
<th>Amount</th>
</tr>
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<tr>
<td>Books/Supplies</td>
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<td>Car Registration</td>
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<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Non-monthly Expenses</strong></td>
<td>$</td>
</tr>
</tbody>
</table>
### Step Four - Determine if the available funds will cover your expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Funding</td>
<td>$0</td>
</tr>
<tr>
<td>Total Monthly Expenses (in a 12 month period)</td>
<td>$0</td>
</tr>
<tr>
<td>Total Non-monthly Expenses</td>
<td>$0</td>
</tr>
<tr>
<td>Total Annual Expenses</td>
<td>$0</td>
</tr>
<tr>
<td>Balance</td>
<td>$0</td>
</tr>
</tbody>
</table>

Good News! Your expenses are lower than your total available funding. Consider making contributions to one or more of the following: (1) savings account, (2) retirement account, and/or (3) reducing student loan debt (if applicable).
Step Four. Determine if the available funds will cover your expenses.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Funding</td>
<td>$ 0</td>
</tr>
<tr>
<td>Total Monthly Expenses</td>
<td>$ 0</td>
</tr>
<tr>
<td>Total Non-monthly Expenses</td>
<td>$ 0</td>
</tr>
<tr>
<td>Total Annual Expenses</td>
<td>$ 0</td>
</tr>
<tr>
<td>Balance</td>
<td>$ 0</td>
</tr>
</tbody>
</table>
SAVING FOR A BAD SEMESTER

• A common budgeting mistake for graduate students
  
  – **Not planning on losing funding**
    • Loss of stipend
    • 1 year stipend or fellowship ends
    • Loss of parental support
    • Unplanned expenses – car accidents
    • Life happens
SAVING FOR A BAD SEMESTER

YOU MUST SAVE!!!

- Rule of thumb- one semester of funding

  – Example: Stipend amount =$1500/mo. x 5 months =$7500

  WAIT! That’s a lot of $$$

- Generally you can live off ½ of what you bring home in an emergency, but that’s still $3250
SAVING FOR A BAD SEMESTER

Some strategies for saving include

- Budget with your assistantships and save your 1 year fellowships, scholarships, and other short-term funds

- Put 10% of your funding into a savings account

- Understand your tax situation and estimate your tax refund, adjust withholding accordingly
INVESTMENT

• Pay off all debt before investing
  – Best investment is reducing credit card interest

• Investments (stock market, gold, etc.) can be lost. You can lose your money.

• Best strategy is to put $$ into savings

• Investment strategies
  – 25% into savings
  – Generally long-term investment strategies won’t work (day-trading and short-term strategies work best for semester-by-semester investments
COMMON MISTAKES

• No savings for emergencies
• Invest and lose all your money
• Incurring a lot of school debt
• Not knowing the difference between funding sources
• Changing or not changing advisors without considering funding
CONCLUSION

• Weigh the benefits of different types of funding

• For PhD students you will need a link to Research faculty

• Stack your funding
  – Applying to multiple sources
  • Be aware of conflicts

• Graduate with minimal debt
ACKNOWLEDGEMENTS

- Alfred P. Sloan Foundation
- Minority Graduate Fellowship Foundations
- Dr. Erick C. Jones, PE, CSSBB, Professor, University of Texas-Arlington, Department of Industrial and Manufacturing Engineering, Arlington, Texas