

Professionalization Workshop

Nov 30, 2012

*Grants and the Funding of Science:
What you should know*

Today's Goal

- The goal of today's session will be to introduce you to a side of science that you may not be very familiar with, but which plays a critical role in everything we do –
Money & Funding, and the central role that these play in securing and ensuring your career in biomedical research.

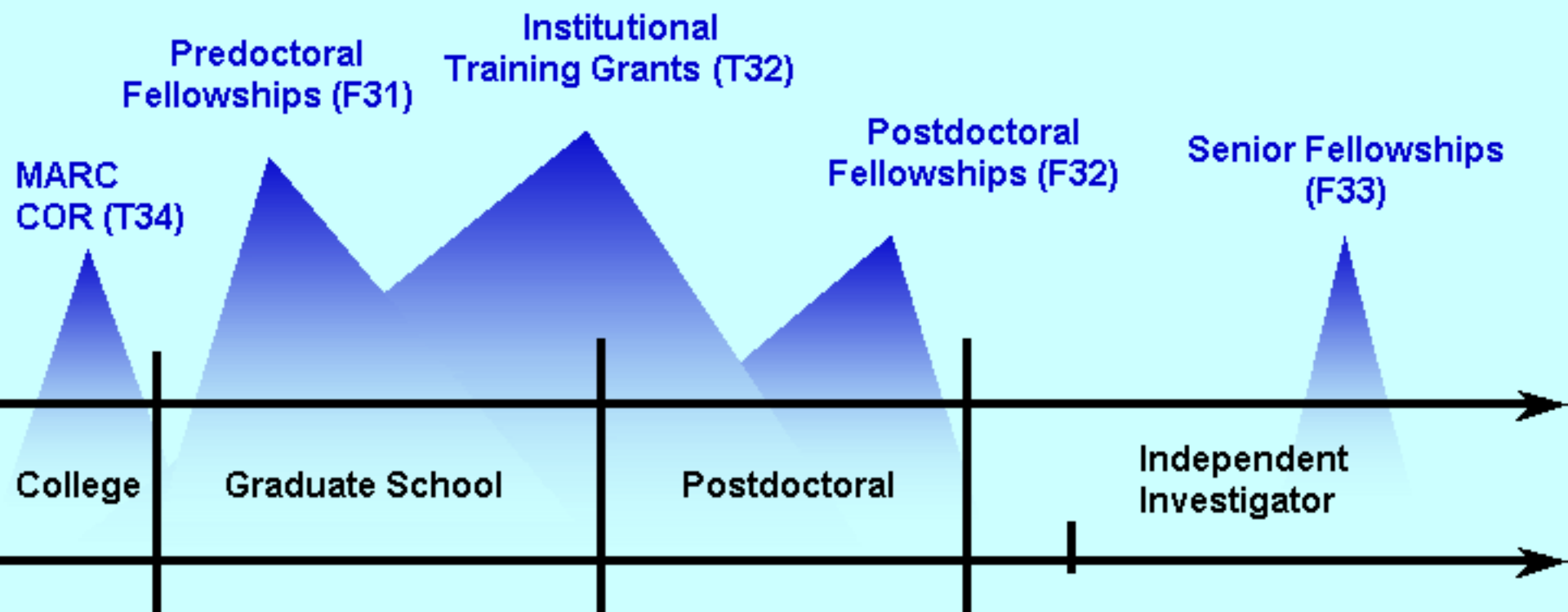
Why are grants important?

- ‘Doing’ science costs money
- ‘Soft’ vs ‘hard’ money
- Track record of success (extra- and intramural)
- Promotion and career advancement

Funding structure of biomedical research and education

- National Institutes of Health ~\$30 billion budget
 - NSF ~\$3 billion budget
 - Other smaller private agencies with considerably smaller budgets and more specialized portfolios
- 80% to extramural research ~\$24 billion
(10% intramural, 10% infrastructure and admin costs)
- Distributed in the form of grants to support research and education
- [Research Grants](#) (R series) R01, R21, R03
- [Career Development Awards](#) (K series) K99
- [Research Training and Fellowships](#) (T & F series) T32, F32, F31, F30
- [Program Project/Center Grants](#) (P series) P01

NRSA Fellowships and Training Grants (F & T Awards) for Individuals With or Earning a Research Doctorate



Predoctoral Grants from NIH

Mechanism	Program Description
Policies and Notices	NRSA Policy Issues
F30	<p>NIH: Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral MD/PhD and Other Dual Doctoral Degree Fellows (Parent F30) (PA-11-110)</p> <p>NHLBI: NHLBI Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral MD/PhD Fellows (F30) (PA-11-125)</p>
F31	<p>NIH: Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research (Parent F31 - Diversity) (PA-11-112)</p> <p>NIH: Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows (Parent F31) (PA-11-111)</p> <p>NINR: NINR Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows In Nursing Research (F31) (PAR-11-117)</p> <p>NINDS: NINDS Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows in MD-PhD programs (F31) (PAR-11-127)</p> <p>NIGMS: Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Predoctoral Fellows in PharmD/PhD Programs (F31) (PA-11-129)</p>
F32	<p>NIH: Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Postdoctoral Fellows (Parent F32) (PA-11-113)</p> <p>NIAMS: Ruth L. Kirschstein National Research Service Awards for Individual Postdoctoral Fellowships in Muscular Dystrophy Research (F32) (PA-11-075)</p>
F33	<p>NIH: Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Senior Fellows (Parent F33) (PA-11-114)</p>

Impact on Emory

- Aggregate grants to Emory through GDBBS:

~\$275 million in 'Direct Costs'
+ ~\$155 million in 'Indirect Costs'

~\$430 million

How the grant process works

- Choose grant (e.g. F31)
- Choose institute and study section at the Center for Scientific Review (CSR)
- Submission (electronic via Emory OSP)
- Grant Review – panel structure
- Scoring – “Impact Score” and “Percentile Rank”
- The all-important “Payline”
 - New Investigator vs. Established Investigator

Mid-level Granting Agencies

- **American Cancer Society**

Research Scholar Grants and Post-doc Fellowships

- **American Heart Association**

All levels; compete within region

- **March of Dimes**

- **National Science Foundation**

- **Autism Foundation**

- **Muscular Dystrophy Association**

Many, many more...

'Tips' for predoc and postdoc applications

- 1/3rd science, 1/3rd mentor, 1/3rd applicant
- “Training potential”
- Change topic and geography
- GDBBS is developing a database of past recipients – *template for success*
- BCDB Grants class = tailored to F31/F30 application
- Take advantage of higher rates of funding for F31/30
(e.g. 6% (R01) vs 25% (F30) at NCI)