

# How Will I Fund My Research Program?

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# Disclosure



- I have no disclosures as it pertains to the material in this presentation.
- My research has been funded by
  - Intramural grants
  - Foundation awards
  - Society awards
  - State funds
  - AHA
  - NIH
  - NSF
  - VA
  - DOD

Money is money!



# General Advice on Getting Funded

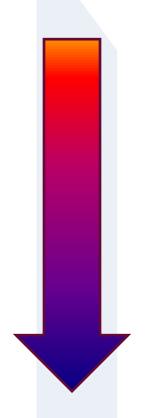


- 1. Negotiate your start up package well
- 2. Know where the money is
- 3. Be strategic!

# Starting Out....



- The progression of funding sources:
  - Intramural
  - Industry
  - Society
    - · ACS, SUS, AAS, etc.
  - Associations
    - AHA, ALA, ADA, etc.
  - Foundations
  - Career Development
    - Supplements
  - Federal Awards
    - NIH
    - DOD
    - VA



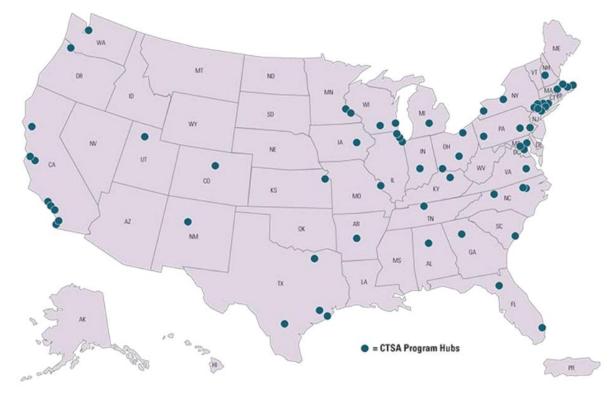


# Intramural Grants

# **Intramural Grants**



 Clinical and Translational Science Awards (CTSA)



# CTSA @ UNC

### Our Services

### Download services overview (pdf)

### Biomedical Informatics

- · Carolina Data Warehouse for Health
- i2b2
- . Epic Research Informatics
- REDCap
- . CDART 2.0 and the Dental Toolkit
- · Clinical Research Management System
- Curated Data Sets
- · Academic Programs
- User Training

### Biostatistics

- · Biostatistics Collaboration
- · Multi-site Studies
- · Short-term Consultations
- . Training & Education

### Kickstart Venture Services

(Commercialization)

- Education
- Funding
- Networking
- · Securing Space
- · Commercialization Resources

### Clinical Research Ethics

· Research Ethics Grand Rounds

### Clinical & Translational Research Center

- CTRC Operations
  - Nursing Services
  - o Specimen Processing and Storage
  - Fee Determination
  - o Protocol Categorization
  - Patient Scheduling
- . CRTC Orientation & Training
- · Research Resources
  - o Research Participants
  - CTRC FAQs

### Community Academic Resources f Engaged Scholarship (CARES)

- · Stakeholder Engagement
- · Research Methodologies
- . Community Academic Grants Administration
- . CARES Training Resources

### Comparative Effectiveness Research

- CER Resources
- . CER Centers & Programs
- Seminars & Events
- · CER Databases

### Early-Phase Drug Discovery

EPDD Services

### Education

- CTSA KL2 Program
- BIRCWH K12 Program
- · R-Writing Group
- · Translational and Clinical Research Curriculum
- · Master of Science in Clinical Research
- · Predoctoral Translational Research Training Program

### Faculty Development

- Team Science
  - o Theme-Oriented Groups
  - Building Teams
  - o Education and Outreach
- · Proposal Development
  - o Grant Application Prep
  - o Scientific/Editorial Review
  - · Mock Study Section
  - Sample Applications (TraCSTAR)
  - o Seminars & Training
- · Librarian Services

### Metabolomics

Collaborative Research Services

### Patient and Caregiver Outcomes in

CORD Services

### Pilot Program

- TraCS \$2K Grants
- . TraCS \$5K-\$50K Grants
- 4D TraCS \$5K-\$50K
- · Carolinas Collaborative
- · Translational Science Methods & Process Awards
- · 2016 NC TraCS/NC State Collaborative Pilot Grants
- CTSA Multi-Institutional Grants
- \$2K Stakeholder Engagement Voucher
- . TraCS Planning Grants
- · Commercialization Awards
- . Translational Research Ethics Grant Program | visit bioethics.unc.edu

- Study Recruitment Feasibility
- · Study Recruitment Strategies
- · Study Recruitment Tactics Volunteer for Clinical Trials
- Webinars & Training





# **Society Grants**

# **Society Grants**



- Faculty grants
  - ACS
  - AAS \$15-40K/yr x 1-2yr
  - SUS
  - Subspecialty societies
    - Society for Vascular Surgery
    - Thoracic Surgery Foundation
    - Society of Surgical Oncology
    - Surgical Infection Society
    - Association of Women Surgeons
    - American Society of Transplant Surgeons
    - American Society for Gastrointestinal Endoscopy
    - Society of American Gastrointestinal and Endoscopic Surgeons
    - Society for Surgery of the Alimentary Tract
    - MANY MORE!!!

# Association for Academic Surgery



- Roslyn Faculty Research Award
  - \$50,000/year x 1 year
  - Faculty within first 5
     years of appointment
     who have NOT received
     a career development
     award
  - Awarded every year



Acceptance of Award



# American College of Surgeons Foundation



633 N. Saint Clair St. ■ Chicago, IL 60611-3211 ■ 312/202-5338 ■ www.facs.org/acsfoundation

# American College of Surgeons Faculty Research **Fellowships**

- \$40,000/year
- 2 years
- Start a new & independent research program
- Finished training
- other grants

- Fulltime faculty appt - 50% effort, but may be concurrent with

### Established for:

- Franklin H. Martin Faculty Research Fellowship
- C. James Carrico Faculty Research Fellowship for Trauma & CC
- Thomas Russel Faculty Research Fellowship for research into improving surgical outcomes

# National Board of Medical Examiners



- Stemmler Medical Education Research Fund
  - Letter of intent: ~July
  - To provide support for research development of innovative assessment approaches that will enhance the evaluation of those preparing to, or continuing to, practice medicine. Expected outcomes include advances in the theory, knowledge, or practice of assessment at any point along the continuum of medical education.
  - \$150k for up to 2 years



# **Foundation Grants**

# **Foundation Grants**



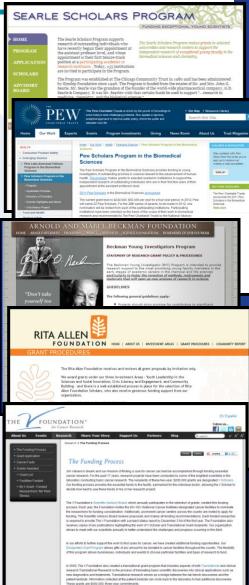
- American Heart Association
- American Cancer Society
- American Lung Association
- American Diabetes Association
- Susan G. Komen for the Cure
- JDRF

- American Kidney Fund
- National Kidney
   Foundation
- American Liver Foundation
- Crohn's and Colitis
   Foundation
- March of Dimes
- Arthritis Foundation
- Cystic Fibrosis
   Foundation

# **Foundation Grants**



- Searle Scholars Program
  - \$100,000/year for 3 years
  - http://www.searlescholars.net/
- Pew Scholars Program in Biomedical Sciences
  - \$60,000/year for 4 years
  - http://www.pewtrusts.org/our\_work\_category.aspx?id=194
- Beckman Young Investigator's Program
  - \$300,000 total for 3-year period
  - http://www.beckman-foundation.com/byi.html#
- Rita Allen Foundation Scholar Awards
  - \$110,000/yr for 5 years
  - http://www.ritaallenfoundation.org/grant.html
- The V Foundation (cancer research)
  - The V Scholar Program
  - \$200,000 total for 2 years
  - The V Foundation Grants in Translational Clinical Research
  - \$600,000 total for 3 years
  - http://www.jimmyv.org/research/the-funding-process.html



Award Overview

Application Guidelines

Fellowship Award Committee

Award Forms

**Current Projects** 

Dale F. Frey Award for Breakthrough Scientists

### **Damon Runyon Fellowship Award**



The Damon Runyon Fellowship Award supports the training of the brightest postdoctoral scientists as they embark upon their research careers. This funding enables them to be trained by established investigators in leading research laboratories across the country.

Starting with the Class of 2010, the Board of Directors has approved an increase in stipend for the Damon Runyon Postdoctoral Fellowship Award to \$50,000 per year for three years for Level I funding and \$60,000 per year for three years for Level II funding.

Association for Academic Surgery

PhDs \$52K/yr

x 3 yrs

MDs \$62K/yr

x B yr

### Damon Runy Investigator

Award Ove

Clinical Inv

Award For

Current Pr

Continuation

Damon Rung

Award Ove

Application

### Innovation Award Committee

Award Forms

**Current Projects** 

To accelerate breakthroughs, the Damon Runyon Foundation provides today's best young

scien



Damon Runyon 5K at Yankee Stadium



Broadway Tickets Service Best Seats, Great Cause!

### Damon Runyon Clinical Investigator Award



The Damon Runyon Clinical Investigator Award supports early career physicianscientists conducting patient-oriented research. The goal of this innovative program is to increase the number of physicians capable of moving seamlessly between the laboratory and the patient's bedside in search of breakthrough treatments.

Damon Runyon Clinical Investigators are eligible to apply for Continuation Grants in the final year of their award.

At the April 2010 meeting of the Clinical Investigator Award Committee, three Clinical Investigators were selected to receive Continuation Grants- Colleen Delaney, MD, MSc; Douglas K. Graham, MD, PhD; and Catherine J. Wu, MD.

Award Overview

### Damon Runyon-Rachleff Innovation Award



The Damon Runyon-Rachleff Innovation Award supports the next generation of exceptionally creative thinkers with "high-risk/high-reward" ideas that have the potential to significantly impact our understanding of and/or approaches to the prevention, diagnosis or treatment of cancer but lack sufficient preliminary data to obtain traditional funding.

- Award Overview
- Application Guidelines
- · Damon Runyon Rachleff Innovation Award Committee
- Award Forms
- Current Projects

\$450,000 total for 3 yrs

\$450,000 total for 3



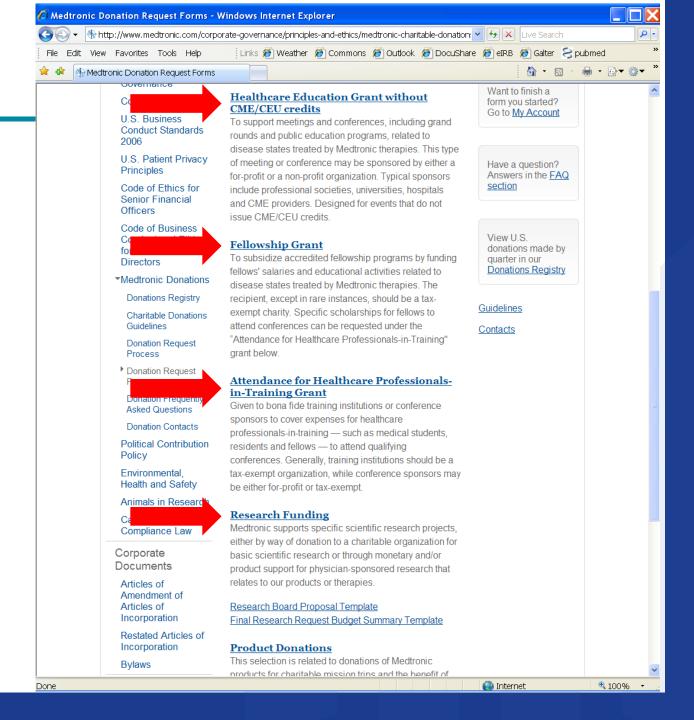
# **Industry Grants**

# **Industry Grants**



- Clinical or basic science or translational
- Many companies have links on their websites
- If all else fails, ask your local rep for information
- Try to obtain unrestricted grants
- Protect your IP FIRST!!!

# Medtronic





# Career Development Grants

# Career Development Grants



- Institutional faculty development grants
  - K12 or KL2
- NIH
  - K programs (K01, K08, K22, K23, K99/R00, etc.)
- VA
  - CDA-1
  - CDA-2
- AHA
  - Scientist Development Grant

# K Applications, Awards, and Success Rates



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Applications	1,029	1,082	1,464	1,921	1,783	2,009	2,147	2,642	2,962	2,712	3,340	2,832	2,518	2,825	2,848	2,940	2,900	3,113	3,122	3,208
K01	233	266	277	383	376	422	503	563	645	654	578	443	395	465	441	522	483	569	598	62
K02	117	111	90	98	116	106	100	114	112	93	67	72	73	65	64	54	48	35	31	2
K07	51	88	37	75	61	72	76	154	169	144	88	84	54	72	75	68	83	72	75	6
K08	557	536	479	496	515	560	592	669	676	635	524	509	466	480	425	371	346	393	430	42
K12	15	42	53	78	23	124	52	106	126	70	106	36	42	43	76	105	75	27	79	6
K22		8	55	111	87	117	143	146	171	173	149	115	111	124	88	103	172	214	227	20
K23		1	203	394	399	421	505	635	679	666	650	574	517	558	599	555	555	524	589	57
K24			185	172	128	108	89	120	149	127	133	97	87	105	87	111	104	88	94	9
K25				19	41	42	48	80	113	99	78	50	41	69	82	75	59	59	53	5
K99										1	893	795	703	778	832	911	926	1,114	932	1,00
All Other Ks	56	30	85	95	37	37	39	55	122	50	74	57	29	66	79	65	49	18	14	7
Awards	527	544	673	835	829	928	938	938	1,046	829	1,036	1,002	963	1,004	899	930	850	932	959	99
K01	82	90	107	137	160	179	216	179	198	180	183	172	144	185	151	168	160	195	201	20
K02	62	63	64	53	65	49	48	54	42	33	28	27	26	19	24	14	11	14	6	
K07	25	39	16	31	22	28	27	31	37	35	23	29	21	16	19	5	22	13	19	
K08	306	311	249	250	255	293	280	267	266	215	189	222	221	211	177	157	124	158	170	16
K12	15	19	19	19	10	44	24	33	35	24	48	19	22	21	24	49	34	7	35	2
K22		0	5	21	33	47	47	47	50	50	40	26	29	31	26	25	34	33	52	Ę
K23		1	86	192	184	196	214	226	232	180	217	216	227	211	203	203	178	201	206	20
K24			81	77	58	48	40	50	76	56	62	49	41	64	39	51	41	43	45	
K25				8	23	22	20	24	37	31	27	24	9	21	19	19	17	16	12	
K99										1	183	180	204	194	180	212	203	246	208	23
All Other Ks	37	21	46	47	19	22	22	27	73	24	36	38	19	31	37	27	26	6	5	3
Success Rates	51%	50%	46%	43%	46%	46%	44%	36%	35%	31%	31%	35%	38%	36%	32%	32%	29%	30%	31%	31
K01	35%	34%	39%	36%	43%	42%	43%	32%	31%	28%	32%	39%	36%	40%	34%	32%	33%	34%	34%	32
K02	53%	57%	71%	54%	56%	46%	48%	47%	38%	35%	42%	38%	36%	29%	38%	26%	23%	40%	19%	22
K07	49%	44%	43%	41%	36%	39%	36%	20%	22%	24%	26%	34%	39%	22%	25%	7%	27%	18%	25%	27
K08	55%	58%	52%	50%	50%	52%	47%	40%	39%	34%	36%	44%	47%	44%	42%	42%	36%	40%	40%	38
K12	100%	45%	36%	24%	43%	35%	46%	31%	28%	34%	45%	53%	52%	49%	32%	47%	45%	26%	44%	45
K22		0%	9%	19%	38%	40%	33%	32%	29%	29%	27%	23%	26%	25%	30%	24%	20%	15%	23%	24
K23		100%	42%	49%	46%	47%	42%	36%	34%	27%	33%	38%	44%	38%	34%	37%	32%	38%	35%	36
K24			44%	45%	45%	44%	45%	42%	51%	44%	47%	50%	47%	61%	45%	46%	39%	49%	48%	51
K25				42%	56%	52%	42%	30%	33%	31%	35%	48%	22%	30%	23%	25%	29%	27%	23%	25
K99										100%	20%	23%	29%	25%	22%	23%	22%	22%	22%	23
All Other Ks	66%	70%	54%	49%	51%	59%	56%	49%	60%	48%	49%	67%	66%	47%	47%	42%	53%	33%	36%	44

# Career Development Award Supplements



- ACS K Supplement Awards
  - ACS/Society for Vascular Surgery
  - ACS/Triological Society (\$80,000/yr x 5 yr)

K Award + Supplemental Award = More \$\$\$



# Federal Grants

# Federal Grants



- NIH
  - R03
  - R21
  - R01
  - High risk, interdisciplinary research awards:
    - Director's New Innovator Award
    - Director's Pioneer Award
    - Transformative R01 Program

Hypothesis-driven AND technology development

# NIH Research Grants



- R03 Small Grant Program
  - \$50,000/yr x 2 yr
  - Investigator-initiated
  - No preliminary data required
  - 6 pages
  - Types of projects
    - Pilot or feasibility studies
    - Secondary analysis of existing data
    - Small, self-contained research projects
    - Development of research methodology
    - Development of new research technology
  - Deadline: February, June, or October

# NIH Research Grants



# R21 - Exploratory/Developmental Research Grant

- To encourage exploratory/developmental research by providing support for the early and conceptual stages of project development
- \$275,000 for 2 yr period (not more than \$200,000 in any year)
- Not renewable
- No preliminary data required
- 6 pages
- Scope
  - Exploratory, novel studies that break new ground or extend previous discoveries toward new directions or applications.
  - High risk high reward studies that may lead to a breakthrough in a particular area, or result in novel techniques, agents, methodologies, models or applications that will impact biomedical, behavioral, or clinical research.
  - Projects should be distinct from those supported through the traditional R01 mechanism.
- Deadline: February, June, or October

# NIH Research Grants



# R01 – Research Project Grant Program

- NIH's most commonly used grant program
- Used to support a discrete, specified, circumscribed research project
- No specific dollar limit unless specified in FOA
- Modular budget up to 250K/yr, detailed budget for >250K/yr
- Advance permission required for >\$500,000/yr
- Generally awarded for 3 -5 years
- 12 pages
- Can respond to a Program Announcement (PA)
- Can respond to an Research Funding Announcement (RFA)
- Deadline: February, June, or October



Home > Funding Opportunities

### **FUNDING OPPORTUNITIES**



MEDIA CENTER



### Pre-Announcements:

- Psychological Health/Traumatic Brain Injury
- Program Announcements:

Funding Opportunities now available:

- Amyotrophic Lateral Sclerosis
- Autism
- Bone Marrow Failure
- Breast Cancer
- Defense Medical Research and Development Program
- Duchenne Muscular Dystrophy
- Gulf War Illness
- Lung Cancer
- Multiple Sclerosis
- Neurofibromatosis
- Ovarian Cancer
- Peer Reviewed Cancer
- Peer Reviewed Medical
- Peer Reviewed Orthopaedic
- Prostate Cancer
- Psychological Health/Traumatic Brain Injury
- Spinal Cord Injury
- Tuberous Sclerosis Complex
- · Program Announcements are pending:
- Defense Health Program
- Synopsis of Current Program Announcements
- Program Announcement Archives
- Frequently Asked Questions
- Funding Related Links

### News

DOD CDMRP Research Funding for 2011

SEARCH

**ABOUT US** 

The Fiscal Year 2011 Appropriation Acts includes funding for the following programs managed by the CDMRP:

- Amyotrophic Lateral Sclérosis Research Program (\$8M)
- Autism Research Program (\$6.4M)
- Bone Marrow Failure Research Program (\$4M)
- Breast Cancer Research Program (\$150M)
- Gulf War Illness Research Program (\$8M)
- Lung Cancer Research Program (\$12.8M)
- Multiple Sclerosis

# Department of Defense



### Fiscal Year 2011 Department of Defense Breast Cancer Research Program Reference Table of Award Mechanisms and Submission Requirements

Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadlines	
Idea Award Go to:  • Program Announcement • Application Instructions Grants.gov Funding Opportunity Number: W81XWH-11-BCRP-IDEA	Investigators at any academic level (or equivalent).	<ul> <li>Supports research that has extraordinary potential to yield highly impactful data and lead to critical discoveries or major advancements in breast cancer.</li> <li>Impact is the most important review criterion. Innovation is encouraged, but not required.</li> <li>Preliminary data is allowed, but not required.</li> <li>Partnering PI Option supports combining expertise of two PIs to more effectively address a research question.</li> <li>Preproposal is required; limit of 1 preproposal per individual; application submission is by invitation only.</li> </ul>	Maximum funding of \$500K for direct costs (plus indirect costs).  Period of performance not to exceed 2 years.	Pre-application (Preproposal): May 31, 2011 5:00 p.m. ET Application: August 25, 2011 11:59 p.m. ET	
Transformative Vision Award  Go to:  • Program Announcement • Application Instructions  Grants.gov Funding Opportunity Number:  W81XWH-11-BCRP-TVA	Assistant Professor or above (or equivalent).	Supports a coordinated translational research effort, led by an experienced PI, to achieve a vision for dramatically affecting breast cancer prevention or treatment as quickly as possible.  Team must include consumer advocates who will be integrated into the planning and implementation of the research project.  Team is expected to have consistent, intensive interactions to engage team members in all aspects of the research project.  Preproposal is required; application submission is by invitation only.	Maximum funding of \$12M for direct costs (plus indirect costs). Period of performance not to exceed 5 years.	Pre-application (Preproposal): May 31, 2011 5:00 p.m. ET Application: August 25, 2011 11:59 p.m. ET	



Award Mechanism	Eligibility	Key Mechanism Elements	Funding	Submission Deadlines
Clinical Translational Research Award  Go to:  Program Announcement Application Instructions Grants.gov Funding Opportunity Number: W81XWH-11-BCRP-CTR	Assistant Professor or above (or equivalent).	Supports the acceleration of research with a high potential for direct clinical translation that will result in significant improvements over current approaches to breast cancer prevention and/or therapy.      Applications will be supported in two phases. Phase I will enable completion of preclinical translational studies and FDA approvals (if needed). Phase II will initiate and execute the clinical trial.      Preliminary data is required.      Preproposal is required; application submission is by invitation only.	Maximum funding of \$12M for direct costs (plus indirect costs).  Period of performance not to exceed 5 years.	Pre-application (Preproposal): September 20, 2011 5:00 p.m. ET Application: December 22,, 2011 11:59 p.m. ET
Impact Award  Go to:  Program Announcement  Application Instructions  Grants.gov Funding Opportunity Number:  W81XWH-11-BCRP-IMPT	Assistant Professor or above (or equivalent).	Supports unique research projects that focus on scientific and clinical breast cancer issues, which, if successfully addressed, could ultimately revolutionize the understanding, prevention, and/or treatment of breast cancer.      Applications that focus on less explored or poorly understood areas that are of critical significance in breast cancer are strongly encouraged.      Preproposal is required; application submission is by invitation only.	Maximum funding of \$2M for direct costs (plus indirect costs).  Period of performance not to exceed 5 years.	Pre-application (Preproposal): September 20, 2011 5:00 p.m. ET Application: December 22, 2011 11:59 p.m. ET

# nttp://www.research.va.gov/funding/default.cfm

# **Veterans Affairs**





# UNITED STATES DEPARTMENT OF VETERANS AFFAIRS





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# Development Biomedical Laboratory Research and Development

R&D Home

About R&D →

Biomedical Laboratory Research and Development (BLR&D) supports research exploring biological or physiological principles in humans or animals. For example, BLR&D research includes pre-clinical models and investigations of tissues, blood or other biologic specimens from humans.

Programs

BLR&D was created through a reorganization of the former Medical Research Service and is headed by <u>Acting Director</u> Ronald Przygodzki, MD.

Training

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Research Currents

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See also Clinical Science Research and Development (CSR&D)

Updated: Oct 22, 2009

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# **Veterans Affairs**



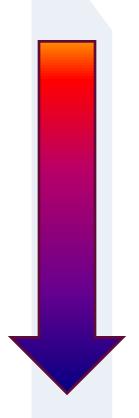
### Merit Award

- \$150,000/yr x 4 yr (3 yr for first grant application)
- Must have 5/8 appointment for duration of award
- Do not need to have 5/8<sup>th</sup> at time of application
- Deadlines: September and March

# Summary



- The progression of funding sources:
  - Intramural
  - Industry
  - Society
    - · ACS, SUS, AAS, etc.
  - Associations
    - AHA, ALA, ADA, etc.
  - Foundation
  - Career Development
    - Supplements
  - Federal Awards
    - NIH
    - DOD
    - VA



# Conclusion



- Seek guidance
- Know what is out there
- Understand who has the money and how it is given out



# Thank You



