How Will I Fund My Research Program?

Melina R. Kibbe, MD, FACS, FAHA
Zack D. Owens Distinguished Professor and Chair
Department of Surgery
Professor, Department of Biomedical Engineering
The University of North Carolina (UNC) at Chapel Hill
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!
• 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)
Our Services

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
  - Specimen Processing and Storage
  - Fee Determination
  - Protocol Categorization
  - Patient Scheduling
- CTRC Orientation & Training
- Research Resources
  - Research Participants
  - CTRC FAQs

Community Academic Resources for 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
- BIRGWH 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
  - Theme-Oriented Groups
  - Building Teams
  - Education and Outreach
- Proposal Development
  - Grant Application Prep
  - Scientific/Editorial Review
  - Mock Study Section
  - Sample Applications (TraCSTAR)
  - Seminars & Training
  - Librarian Services

Metabolomics
- Collaborative Research Services

Patient and Caregiver Outcomes in Rare Disease
- PCORD 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

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

- Faculty grants
  - ACS
  - AAS
  - 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!!!
• 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
• American College of Surgeons Faculty Research Fellowships
  – $40,000/year
  – 2 years
  – Start a new & independent research program
  – Finished training
  – Fulltime faculty appt – 50% effort, but may be concurrent with other grants

• 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

http://facs.org/memberservices/acsfaculty.html
• 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

- 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
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.

Damon Runyon Clinical Investigator Award

The Damon Runyon Clinical Investigator Award supports early career physician-scientists 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: Coleen Delaney, MD, MSc; Douglas K. Graham, MD, PhD; and Catherine J. Wu, MD.

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
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!!!
Healthcare Education Grant without CME/CEU credits
To support meetings and conferences, including grand rounds and public education programs, related to disease states treated by Medtronic therapies. This type of meeting or conference may be sponsored by either a for-profit or a non-profit organization. Typical sponsors include professional societies, universities, hospitals and CME providers. Designed for events that do not issue CME/CEU credits.

Fellowship Grant
To subsidize accredited fellowship programs by funding fellows’ salaries and educational activities related to disease states treated by Medtronic therapies. The recipient, except in rare instances, should be a tax-exempt charity. Specific scholarships for fellows to attend conferences can be requested under the “Attendance for Healthcare Professionals-in-Training” grant below.

Attendance for Healthcare Professionals-in-Training Grant
Given to bona fide training institutions or conference sponsors to cover expenses for healthcare professionals-in-training — such as medical students, residents and fellows — to attend qualifying conferences. Generally, training institutions should be a tax-exempt organization, while conference sponsors may be either for-profit or tax-exempt.

Research Funding
Medtronic supports specific scientific research projects, either by way of donation to a charitable organization for basic scientific research or through monetary and/or product support for physician-sponsored research that relates to our products or therapies.

Research Board Proposal Template
Final Research Request Budget Summary Template

Product Donations
This selection is related to donations of Medtronic products for charitable mission trips and the benefit of
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
<table>
<thead>
<tr>
<th>Year</th>
<th>Applications</th>
<th>Awards</th>
<th>Success Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1,029</td>
<td>527</td>
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<td>3,340</td>
<td>1,036</td>
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<tr>
<td>2008</td>
<td>2,832</td>
<td>1,002</td>
<td>35%</td>
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<tr>
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<td>2,518</td>
<td>963</td>
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<td>2010</td>
<td>2,825</td>
<td>1,004</td>
<td>32%</td>
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<tr>
<td>2011</td>
<td>2,848</td>
<td>899</td>
<td>32%</td>
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<tr>
<td>2012</td>
<td>2,940</td>
<td>930</td>
<td>32%</td>
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<td>2013</td>
<td>3,113</td>
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<td>3,122</td>
<td>959</td>
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<td>2015</td>
<td>3,208</td>
<td>998</td>
<td>32%</td>
</tr>
<tr>
<td>2016</td>
<td></td>
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</tbody>
</table>

**K Applications, Awards, and Success Rates**

**Notes:**
- The last three rows are highlighted to indicate a specific pattern or trend in the data.
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

http://grants.nih.gov/grants/funding/r03.htm
• **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

http://grants.nih.gov/grants/funding/funding_program.htm#RSeries
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 pending:
- Defense Health Program

Synopsis of Current Program Announcements
Program Announcement Archives
Frequently Asked Questions
Funding Related Links
# Fiscal Year 2011 Department of Defense Breast Cancer Research Program

## Reference Table of Award Mechanisms and Submission Requirements

<table>
<thead>
<tr>
<th>Award Mechanism</th>
<th>Eligibility</th>
<th>Key Mechanism Elements</th>
<th>Funding</th>
<th>Submission Deadlines</th>
</tr>
</thead>
</table>
| Idea Award               | Investigators at any academic level (or equivalent).                         | • Supports research that has extraordinary potential to yield highly impactful data and lead to critical discoveries or major advancements in breast cancer.  
                            |                                                                              | • Impact is the most important review criterion. Innovation is encouraged, but not required.  
                            |                                                                              | • Preliminary data is allowed, but not required.  
                            |                                                                              | • Partnering PI Option supports combining expertise of two PIs to more effectively address a research question.  
                            |                                                                              | • Preproposal is required; limit of 1 preproposal per individual; application submission is by invitation only. | 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 | 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 |

Go to:  
- Program Announcement  
- Application Instructions  

Grants.gov Funding Opportunity Number: W81XWH-11-BCRP-IDEA  
Grants.gov Funding Opportunity Number: W81XWH-11-BCRP-TVA
<table>
<thead>
<tr>
<th>Award Mechanism</th>
<th>Eligibility</th>
<th>Key Mechanism Elements</th>
<th>Funding</th>
<th>Submission Deadlines</th>
</tr>
</thead>
</table>
| **Clinical Translational Research Award** | 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**             | 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 |

[Grants.gov Funding Opportunity Numbers: W81XWH-11-BCRP-CTR for the Clinical Translational Research Award and W81XWH-11-BCRP-IMPT for the Impact Award]
Veterans Affairs

Research Programs

- Biomedical Laboratory Research and Development Service (BLR&D)
- Clinical Science Research and Development Service (CSRD)
- Health Services Research and Development Service (HSR&D)
- Rehabilitation Research and Development Service (RR&D)

BLR&D

The Biomedical Laboratory Research and Development Service conducts research that explores basic biological or physiological principles in humans or animals but does not involve intact human beings. For example, it includes research on animal models and investigations of tissues, blood or other biological specimens from humans.

CSRD and CSP

The Clinical Science Research and Development Service conducts research that focuses on intact human beings as the unit of examination. Examples include interventional and effectiveness studies, clinical, epidemiological and technological studies.

The VA Cooperative Studies Program is the Division of VA Research and Development that is responsible for the planning and conduct of large multicenter clinical trials in the Department of Veterans Affairs.

HSR&D and QUERI

The Health Services Research and Development Service pursues research at the interface of health care systems, patients and health care outcomes. HSR&D underscores all aspects of VA health care; specifically quality, access, patient outcomes and health care costs.

VA/HSR&D's Quality Enhancement Research Initiative (QUERI) works to improve the quality of healthcare for veterans by implementing research findings into routine clinical practice.

RR&D

The Rehabilitation Research and Development Service is dedicated to the well-being of America's veterans through a full spectrum of research from approved rehabilitation research projects, through evaluation and technology transfer to final clinical application.

http://www.research.va.gov/funding/default.cfm
Biomedical Laboratory Research and Development

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.

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

- Merit Review Program
- Career Development Program
- Centers and Research Enhancement Award Programs (REAP)
- Off-site Research
- Shared Equipment Evaluation Program (SheEP)
- Special Solicitations
- Contacts
- Research Awards Program

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

Updated: Oct 22, 2009
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 5/8th 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