The Tar Heel Certificate Program in Research Administration
Level 1 Certification
On-line Version

Introduction to Research Administration
Welcome

Welcome to the first session of The Tar Heel Certificate Program in Research Administration. This Level 1 training curriculum focuses on fundamental information needed by Research Administrators who currently perform or anticipate assuming duties and responsibilities related to the administration for research contract and grants. It will provide you with an overview of research administration along with a framework for how research administration is conducted at UNC-CH.
Program Overview

Five Modules & Associated Competency Tests

• Introduction to Research Administration
• Rules/Regulations & UNC-CH Compliance Programs
• Proposal Preparation and Submission
• Award Financial Management
• Special Monitoring Requirements & Project Close-out
Module 1: Introduction to Research Administration

• Life Cycle of an Award
• Resources for Finding Funding
• Research Defined
• Sources of Research Funding
• Types of Funding Mechanisms
• Overview of Rules and Regulations
• Trends in Research Funding
Life Cycle of an Award

- Prepare Proposal & Submit Proposal
- Negotiate Award
- Set Up Award
- Perform Work
- Monitor Project & Manage Funds
- Generate Payment Requests
- Close-out Award
- Identify Funding
- Set Up Award

Illustration of the life cycle stages of an award.
The Life Cycle Described

1. **Identify Funding**
   - Resources available through the GrantSource Library for identifying funding opportunities
   - The sources for research funding both internally through UNC-CH and externally through federal agencies, foundations, state and local government, not-for-profit and for-profit organizations
   - The different types of funding mechanisms Principal Investigators (PI) apply and compete for
   - The characteristics and complexities of each type of funding mechanism

2. **Prepare Proposal & Submit Proposal**
   - The typical steps in preparing a proposal to a funding agency with emphasis on budget preparation
   - The steps required when submitting a proposal through UNC-CH with emphasis on UNC-CH electronic Internal Processing Form (eIPF) preparation and approval process

3. **Negotiate Award**
   - OSR’s responsibilities for negotiating award terms and conditions
   - OSR’s responsibilities for award acceptance
The Life Cycle Described

4. Set Up Award

• The steps involved in establishing an account that includes potential pre-award spending, the actual award set up in the University’s financial system and research administration system

• The steps involved in establishing and an award at the departmental level including document review, personnel set-up and project monitoring systems

5. Perform Work

• Looking at this topic from a research administrators perspective – how are the dollars being spent

• Close attention to award terms and conditions, A-21 guidelines for direct costs vs indirect costs

• Identify the typical types of transactions and the forms to use for spending and budgeting

6. Monitor Project and Manage Funds

• From a departmental perspective, what documents are important and the functions available through RAMSeS Award Dashboard

• Tools to assist the department in tracking financials including FRS, e-print of FBM 090/091 and other financial systems available through UNC-CH
7. Generate Payment Requests

- A function performed by OSR’s Financial Reporting and Cash Management team with expenditure data in FRS as reported from the department
- Important for department to closely monitor budget to actual spending so payment requests accurately reflect progression of award

8. Close-out Award

- The close-out process is important to consider throughout the life cycle of an award, even from the initial step of identifying funding since problematic close-out issues can affect final close-out
- In this step, the types of reports required and responsibilities for report preparation will be identified stressing the importance of the preparation of the Notice of Termination Reply used to prepare the final financial report to the funding agency
- Additional situations may arise after an award is terminated such as, post-term charges, account overdrafts or deficits, and unallowable costs. The materials will identify what to do in these situations and the steps to follow to assure that an award is brought to zero
- Record retention is required by the department as well as OSR
Resources for Finding Funding

• Research Tool Kit – *Identifying Funding Opportunities*
  research.unc.edu/osr/funding/index.php

• GrantSource Library – *Finding Funding 101*
  research.unc.edu/grantsource/finding_funding.php
UNC-CH GrantSource Library

- Funding and expertise databases via the Web
- Individual consultations on funding searches and funding alerts
- Customized group demonstrations on request
- Individual instruction in the best use of electronic and print materials
- Proposal development resources and information
- Library of funding-related materials

research.unc.edu/grantsource/index.php
Research Defined

Research is the diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, or applications.

Within a university setting research falls into three primary categories:

• Basic Research
• Applied Research
• Developmental Research
Basic Research

Hmmm?

Very Interesting...

“According to our Report...”

• Directed towards increasing knowledge in science where the primary aim of the PI is a fuller knowledge or understanding of the subject under study.
• The end product is usually a report.
Applied Research

What else can we find out?

Which material works best under the conditions we’ve set?

• Normally occurs after a period of ‘basic research’ as it attempts to determine and expand the potentialities of new scientific discoveries or improvements in technology, materials, processes, methods, devices, and technologies. This type of research attempts to advance the state of the art.

Eureka! We’ve discovered ways to make it better!
Developmental Research

Gas-Powered Car — Better.

Electric-Powered Car — Good.

Solar Car — Best...so far.

“Let’s take it out for a test drive.”

- Concerned with the systematic use of scientific and technical knowledge in the design, development, testing or evaluation of potential new products or services.
Sources of Research Support

Intramural Funding
- Internal funds available from the University or University units
- Nominated or limited-submission awards and other prizes from external sponsors that are administered by University units and have an internal application process

Extramural Funding
- Federal
- State
- Local Gov’t (County, City)
- Non-profit organizations
- Foundations
- For-profit corporations
Examples of Intramural

- Office of the Executive Vice Chancellor and Provost
  - Bridge Funding Program for Faculty Retention and Recruitment
- Office of the VC for Research and Economic Development
  - Seed Money for Larger-Scale, Collaborative Research Proposals
- School of Public Health
  - GlaxoSmithKline Seed Grants
- Center for Gastrointestinal Biology and Disease
  - Pilot Grants for Gastrointestinal Biology Research
- William T. Grant Foundation (administered by Office of Research Development)
  - Scholars Program
Examples of Extramural

• Federal
  – Centers for Disease Control and Prevention (CDC)
  – U.S. Department of Education (DoE)
• State
  – Department of Corrections
• Local Gov’t (County, City)
  – Wake County Public School System
• Non-profit Organizations
  – American Heart Association
• Foundations
  – Robert Wood Johnson Foundation
• For-profit Corporations
  – E.I. Dupont Dememours and Company
Types of Funding Mechanisms

- Gift
- Clinical Trial
- Grant
- Cooperative Agreement
- Contract

Involvement by Awarder (Programmatic) vs. Limiting Conditions (Terms and Conditions)
Types of Limiting Terms & Conditions

• Requirements of the Awarding Agency
  – Federal Office of Management and Budget Circulars
  – Code of Federal Regulations for Contracts
  – Federal Acquisitions Regulations (contracts)
  – Specific Federal Agency Terms and Conditions
  – State Master Agreements:
• Budget Requirements
• Reporting Requirements
  – Technical Reports - deadlines for submission
  – Financial Reports –
• Expected Deliverables
• Stated Tasks/Activities

• Award Specific Terms & Conditions
  – IRB approvals
  – IACUC approvals
  – Change in scope
  – Absence or Change in PI
  – Payment Schedule
  – Additional funding
  – Pre-award costs
  – No-cost extension
  – Carry forward funds
  – Rebudgeting
  – Health Insurance Portability and Accountability Act (HIPAA) – protection of health information or data
  – Certifications (e.g., conflict of interest, drug-free, smoke-free, etc.)
  – Cost-sharing/Matching
  – Equipment
  – Grantee Transfers
  – Contingencies based on reporting requirements
  – Publicity statement
  – Unexpended funds returned to Awarder
  – Electronic/wire transfers
The IRS defines a gift as a voluntary and irrevocable transfer of money or property made in the support of the university’s teaching, research, and service mission without expectation of direct economic benefit or other tangible compensation commensurate with the worth of the gift.

Gifts normally have the following characteristics:
- The gift allows the PI significant freedom to change emphasis within a general area of work
- No deliverables are involved
- Separate accounting procedures are not required
- The donor has no audit rights

>Note: A Gift solicitation should be coordinated with the Carolina Development staff.
Grant

A legal instrument for transferring money, property, or services to the recipient to accomplish a public purpose where the granting agency has limited involvement during the performance of the grant.

• Grants typically have these characteristics:
  • Broad Agency Announcements (BAA), Program Solicitation, Financial Assistance Award
  • Made for stated purpose, stated period of time
  • Funding may be annual, multi-year or for entire budget period
  • Made to an organization
  • No substantial programmatic or technical involvement by awarding agency
  • Minimum of limiting conditions
  • The granting agency is in the role of ‘Patron’

Note: Grants are administered through the Office of Sponsored Research
Non-Profit: American Heart Association

Grant: “Functional Genomic Analysis of Filopodia Assembly and Disassembly”
PI – Steve Rogers, Asst. Professor, UNC-CH
Department of Biology

Steve Rogers Wins AHA Award

American Heart Association

Learn and Live

January 20, 2006

CCGS/Biology faculty member Steve Rogers was recently awarded a grant from the American Heart Association to dissect the molecular mechanisms underlying cell migration. Specifically, his group will focus on the question of how cells build filopodia, the finger-like cellular protrusions assembled from the cellular network of actin. The results of these studies will contribute to a basic understanding about how cells interact with their environment during migration, and will define a "parts list" for subsequent systems-level analysis of the cellular networks involved in building actin-based structures.
Gift vs Grant

Does the funding agency expect you to provide DELIVERABLES?
- Product
- Service
- Technical or scientific report(s)
- Intellectual property rights
- Fiscal reports

Does the funding agency expect you to enter into a written agreement that is legally enforceable?
- Administrative terms and conditions for use of the funds
- Provisions for intellectual property or reporting or publication rights
- Other legal provision

Is there a specific and expected return in exchange for the funding?
Cooperative Agreement

A legal instrument for transferring money, property, or services to the recipient to accomplish a public purpose where the granting agency and university share in the programmatic and technical performance of the grant.

Cooperative Agreements are characterized by:

- Awarding agency has substantial freedom to structure the terms and conditions (T&Cs)
- Awarding agency is in the role of ‘Partner’

Note: Office of Sponsored Research negotiates and administers these types of agreements.
Contract

A mutually binding legal relationship that binds the seller to deliver certain specified goods or services (deliverables) in exchange for certain specified consideration (e.g. money)

Contracts usually have the following characteristics:

• Result from proposals submitted in response to a Request for Proposal
• Terms are usually detailed and specific
• Activities frequently dictated by sponsor (buyer)
• Less latitude to modify scope of work and line-item expenditures
• Funding may be incremental, tied to work components, final payment may be held until (acceptance) of deliverables
• Federal contracts are governed by FAR (Federal Acquisition Regulation)
• The contracting agency is in the role of ‘Purchaser’

*Note:* Proposal submission signifies acceptance of the RFP’s terms and conditions. Legally binding contract clauses are included in the RFP and MUST be reviewed and negotiated by OSR in consultation with the PI prior to submission of the proposal.
State: N.C. Governor’s Highway Safety Program
Contract: “Web Site Using N.C. Crash Data”

PI – William Hunter, Senior Research Scientist, UNC-CH Highway Safety Research Center (HSRC)

Abstract: There are many requests for NC crash data. As a result of these varied requests, HSRC is developing an interactive web site of crash data as a current project. The site will enable users to create single-variable or cross tabulations by choosing from among three orientations: (1) crash data, (2) persons involved in crashes, and (3) vehicles involved in crashes. This dynamic web application system uses various components of SAS software. The site is available to the public.
A clinical trial is generally considered to be biomedical or health-related research study in human beings that follow a pre-defined protocol. A sponsor external to the University funds the research to assess safety, efficacy and/or other outcomes of a drug, device, biologic, diagnostic, treatment or preventative measure in human subjects.

Characteristics of a Clinical Trial include:

- The sponsoring agency contracts with a research organization who then identifies sites for conducting a trial
- IRB approval
- Confidentiality Disclosure Agreement (CDA)
- Clinical Trial Agreement (CTA) – defines scope of work required by the protocol

**Note:** Office of Clinical Trials negotiates agreements involving safety and efficacy, pharmacokinetic, natural history of disease and quality of life studies; Office of Sponsored Research negotiates agreements involving bench science, training and education, preclinical studies, animal studies and behavioral studies.
Why are there so many rules and who makes up the rules anyway?
The Logic of Research Funding...

**IF** you want funding to conduct research on a great idea  
**THEN** you must abide by the funding agency’s regulations
Overview of Rules and Regulations

- Federal –
  - Office of Management & Budget (OMB) Circulars
  - Federal Acquisitions Regulations
- Non-Federal Sponsors
- State
- University
Office of Management & Budget (OMB)

• Provides direction/rules to Federal Agencies and sub-recipients (that’s us) on costs and systems required to accommodate federal funds

• Federal Agencies pass these rules down to their sub-recipients of federal funds through the issuance of grants and agreements
Federal: The OMB Circulars

- A-21 – Cost Principles for Institutions of Higher Education
- A-110 – Uniform Administrative Requirements for Grants & Cooperative Agreements with Institutions of Higher Education and other Non-Profit Organizations
- A-133 – Audits of Institutions of Higher Education and Other Non-Profit Institutions
A-21 Purpose

- Applies to grants and cooperative agreements
- Establishes principles for determining costs applicable to sponsored agreements
- UNC-CH applies A-21 standards to all awards unless the sponsor specifies certain terms and conditions
- Defines Direct Costs and Facilities & Administrative (F&A) costs

*These regulations will be covered in detail in our next class when we discuss Proposal Preparation and Submission*
Uniform Administrative Requirements for Federal Grants and Cooperative Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations

http://whitehouse.gov/omb/circulars/a110/a110.html
A-110
Administrative / Management Guidelines

• Sets standards for institutions for consistency and uniformity
• Applies to all Federal Agencies
  – Grants and Cooperative Agreements
  – Does NOT apply to Contracts
• Subparts:
  A: General Information & Definitions
  B: Pre-Award Requirements
  C: Post-Award Requirements
  D: After-the-Award Requirements
A-110 Highlights

1. Financial Management Systems
2. Program Income
3. Budget and Program Revisions
4. Expanded Authority
5. Equipment
6. Intangible Property
7. Procurement Standards
8. Reports and Records (performance and financial)
9. Cost Sharing
10. Closeout
11. Termination

- Award may be terminated for one of the following:
  - By agency if recipient materially fails to comply with terms and conditions of award
  - By agency with consent of recipient, if both agree on termination conditions
  - By recipient with written notification to agency indicating the reasons and effective date

12. Enforcement

- If recipient materially fails to comply with terms and conditions, agency may:
  - Temporarily withhold cash payments
  - Disallow all or part of cost of an activity
  - Suspend or terminate award
  - Withhold further awards
Noncompliance Consequences

• UNC-CH compliance is continuously monitored and enforced
• Federal Government addresses noncompliance through:
  – disallowance
  – reduction in award amounts
  – withholding of payments
  – ineligibility for letter of credit
  – suspension and debarment
  – prosecution under the False Claims Act
Non-Compliance Settlements

- Univ. Of Chicago (0.65 M – mischarging Fed. Grants)
- Univ. Of Connecticut ($1.3 M training grant issues)
- Med. College of Georgia (10M theft of research funds related to clinical trials) 2 PIs with jail time
- Univ. of MN ($32M: program income/clinical trial violations)
- Stanford ($3.1 M – unallowable costs)
- New York Univ. Med. Ctr ($15M – cost sharing/unallowable costs)
- Univ. of Wisconsin (Fraudulent application) PI jail time
Federal Acquisition Regulations (FAR)

• Provides instructions to federal contracting officers/procurement staff
• Applicable to contracts only
• Each federal agency has its own FAR requirements
Puts us in the **Audit** business

It’s never a question of **IF**.
It’s always a question of **WHEN**.

http://whitehouse.gov/omb/circulars/a133/a133.html
A-133 Highlights

• Specifies audit requirements for organizations, and defines the federal responsibilities for implementing and monitoring those requirements
• Applies when >$500K per year in Federal Funding
• Promotes consistency and uniformity
• Examine how we used research dollars and how we allocated costs to specific projects
• Review financial transactions, payroll, effort reporting
# Types of Audits

<table>
<thead>
<tr>
<th>Type of Audit</th>
<th>Auditor</th>
</tr>
</thead>
<tbody>
<tr>
<td>* A-133</td>
<td>N.C. Office of State Auditors</td>
</tr>
<tr>
<td>Pre-Award</td>
<td>Sponsor Agency</td>
</tr>
<tr>
<td>F&amp;A</td>
<td>Department of Health &amp; Human Services</td>
</tr>
<tr>
<td>Grant/Contract</td>
<td>Sponsor Agency</td>
</tr>
<tr>
<td>Contract Closeout</td>
<td>Sponsor Agency or Cognizant Audit Agency</td>
</tr>
<tr>
<td>* System</td>
<td>UNC-CH Internal Audit, N.C. Office of State Auditors, Cognizant Audit Agency</td>
</tr>
</tbody>
</table>

* Most common types
Rules & Regulations

Non-Federal Sponsors
State University
Non-Federal Sponsor Regulations

• Foundations
  – Usually prior approval when modifying line items in a budget
  – Different F&A rates
  – Cost sharing requirements
  – Allowable/unallowable budget categories
  – Invoicing is often very detailed
  – Direct/Total cost caps
  – Charges not allowable on Federal proposals may be allowable on private foundation proposals (however, the reverse may also be true)
Non-Federal Sponsor Regulations

• Private Non-Profits
  – Problematic terms/conditions
    • Indemnification
    • Intellectual Property
  – More restrictive regarding prior approval/ PI authority
  – Capped F & A
  – Increase use of online processes
  – Carefully read terms/conditions

• Private For-Profits
  – Problematic terms/conditions
    • Indemnification
    • Intellectual property
    • Ownership of records
  – Every contract is unique – no standard terms and conditions
  – Full F&A recovered (no waivers)
  – No cost sharing
Non-Federal Sponsor Regulations

• State and Local Governments
  – For the State, funding is commonly awarded per FY (7/1 – 6/30) (often results in delays in receiving an award)
  – May require sole source approval
  – Often operate on a request for approval spending basis which limits expenditures (e.g. no subaward expenditures)
  – Invoicing instructions may require a complete documentation of expenses
  – Carryforward is not routinely allowed
  – Unexpended balances must be explained if carryforward is requested
  – Must strictly adhere to budget
  – Tend to have the most restrictions
State of North Carolina Regulations

• Constitution, Legal Codes, Statutes
• Health & Safety, Business & Professions
• Administrative Manual and Contracting Manual
• Statewide policies, procedures, regulations and information
State of North Carolina Policies

http://www.ncosc.net/sigdocs/sig_docs/documentation/policies_procedures/sigGrants_Policy.html

Forms & Policies

Grants Policy

Authority:
- General Statutes 143B-426.39
- GASB Statement No. 24 (GASB 24)
- GASB Statement 33

Effective Date:
7/1/2000

References:

Policy:
UNC General Administration
& UNC-CH Regulations

• UNC General Administration
  www.northcarolina.edu/content.php/aa/research/index.htm
    – Policy Manual Chapter 500: Sponsored Programs, Research and Intellectual Property
    – Policy Manual Chapter 600: Financial Matters, Real Property, Endowment and Trust Funds

• UNC-CH
  www.unc.edu/campus/policies.html
    – University Policies and Guidelines related to research
      research.unc.edu/services/policies.php
    – University Business Manual
      www.unc.edu/finance/busman/
GA & University Policies

The UNC Policy Manual

Documents in the PDF format require the use of Adobe's Acrobat Reader. This application may be downloaded for free from their site.

Updates since January 2005 and the transmittal letters communicating them may be found in the Updates Section.

Chapter 100 - The Code and Policies of the University
Chapter 200 - Board of Governors Affairs
Chapter 300 - Personnel Policies
Chapter 400 - Academic Programs
Chapter 500 - Sponsored Programs, Research, and Intellectual Property
Chapter 600 - Financial Matters, Real Property, Endowment and Trust Funds
Chapter 700 - Admissions, Matriculation, and Other Student Matters
Chapter 800 - Financial Aid
Chapter 900 - Residence Classification
Chapter 1000 - Tuition and Fees
Chapter 1100 - Athletics
Chapter 1200 - Affiliated Entities
Chapter 1300 - Matters of University-Wide Significance
Chapter 1400 - Information Technology

Research at Carolina

Policies and Guidelines

- University Policies
- University Guidelines
- Federal Regulations and Guidelines
- Federal Regulatory Offices
- Clinical Trials Policies
- Human Subjects Policies
- Sponsored Research Policies
- Technology Transfer Policies
OSR Policies and Procedures

• Policy Sections under development
  – Section 100 - Overview of Sponsored Research
  – Section 200 - General OSR Policies
  – Section 300 - Proposal Development & Submission
  – Section 400 - Award Acceptance & Establishment
  – Section 500 - Award Management
  – Section 600 - Reporting
  – Section 700 - Award Close-out
  – Section 800 - Audits
  – Section 900 - Research Service Centers

Trends in Research Funding

To provide an overview of research from a funding standpoint, now we will look at trends from a national and international perspective.

Then we will look at funding from a UNC-CH perspective: historically, presently and projecting into the future.
R&D at Colleges and Universities by Source of Funds
in billions of constant FY 2007 dollars, FY 1953-2006

OCT. '07 © 2007 AAAS
Trends in Research by Agency, FY 1976-2008 *
in billions of constant FY 2007 dollars

Source: AAAS analyses of R&D in annual AAAS R&D reports.
* FY 2008 figures are President's request. 2007 figures are latest AAAS estimates of research in 2007 appropriations. Research includes basic research and applied research. 1976-1994 figures are NSF data on obligations in the Federal Funds survey. MARCH '07 REVISED © 2007 AAAS
Trends in Federal R&D, FY 1995-2008*
selected agencies in constant dollars, FY 1995=100

Source: AAAS analyses of R&D in AAAS Reports VIII-XXXII.
* FY 2008 figures are President's request. FY 2007 figures
are latest AAAS estimates of FY 2007 appropriations.
R&D includes conduct of R&D and R&D facilities.
APRIL '07 REVISED © 2007 AAAS
Trends in Federal ACADEMIC Research by Discipline, FY 1973-2006
obligations in billions of constant FY 2007 dollars

FEB. '07 © 2007 AAAS
Shares of Total World* R&D, 2005

Total World* R&D = U.S. $893 billion**

US 34%
Japan 13%
Germany 7%
France 5%
U.K. 4%
Other EU 10%
Korea 4%
All other OECD 4%
Other non-OECD members 6%

* World = OECD members plus Argentina, China, Romania, Israel, Russia, Singapore, Slovenia, South Africa, Taiwan
**- calculated using purchasing power parities.

Source: OECD, Main Science and Technology Indicators, 2006. 2005 data or latest year available.

MAY ’07 © 2007 AAAS
Shares of Total World R&D, 2007

- U.S.: 30%
- Germany: 6%
- France: 4%
- United Kingdom: 4%
- Japan: 13%
- China: 16%
- India: 4%
- Other EU: 9%
- All Other: 11%

Total World R&D = U.S. $1,124 billion**

 Shares of World* S&E Researchers, 2005

Total World * S&E Researchers (FTEs) = 5.1 million **

Source: OECD, Main Science and Technology Indicators, 2006. 2005 data or latest year available.
* *- calculated using full-time equivalents.
MAY '07 © 2007 AAAS
An Update on the Federal budget

• Federal fiscal year (FY2008) signed December 20, 2007
• Probably another continuing resolution for FY 2009 budget that starts October 1, 2008
• The President’s budget request – increases in DOE, NSF, NOAA, and NASA
  – Flat for NIH
FY 2009 R&D Request (without earmarks)
Percent Change from FY 2008 excluding '08 earmarks

- DOE Science +21%
- NSF +16%
- DOT
- DHS
- DOD weapons
- DOE energy
- NOAA
- DOD "S&T"
- NASA
- NIST
- DOE defense
- NIH
- EPA
- VA
- USDA
- USGS

Source: AAAS, based on OMB R&D data and agency estimates for FY 2009.
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.
DOD weapons = DOD R&D in "6.4" and higher categories. R&D earmarks as tabulated by AAAS from final 2008 appropriations in December 2007 analyses. MARCH '08 REVISED © 2008 AAAS
Conclusions – U.S. Research Funding

• Funding increased significantly over the last 50 years
• A dramatic increase in health and life sciences research brought on by the NIH doubling
• Flat to decreasing over the next few years
Present Research & Funding at Carolina

- Currently (June 2008) $651 million in award dollars
- Awards in Fiscal Year ’07 increased almost 3% from Fiscal Year ‘06
- 73% Federal – we remain heavily dependent
Awards in Millions at UNC-CH

From $7.5 million in 1960 to over $600 million in FY 2007. We did not go over $100 million in awards until 1987. Significant growth in the last 15 years: $211 million in 1992. FY07 Awards - $610,669,824.
Sampling from 1971-72

$38.8 million in Awards

• Arts & Sciences $4.5 million
  – City & Regional Planning
  – Chemistry
  – Botany department

• School of Medicine $11 million
  – Medicine
  – Biochemistry
  – Psychiatry

• Health Sciences $19 million
  – School of Public Health
  – Population Center
  – Child Development Institute

• 5 centers and 4 institutes
The percent of federal funding is trending down. Remember ‘71-'72 at 90%. Still a significant proportion at 73%.
Sponsored awards vs state appropriations at UNC-CH

(in Millions)

- State Appropriations
- Sponsored Research Awards
Funding by Source

Sources of Academic R&D Nationally

- Industry: 9%
- University: 20%
- All Other: 10%
- Federal: 61%

Sources of Academic R&D UNC-CH

- Industry: 4%
- State of North Carolina: 5%
- Foundations: 7%
- Other Non-Profit: 8%
- Other Government: 3%
- Federal: 73%
2007 Funding by School

- School of Medicine: 47%
- School of Dentistry: 2%
- College of Arts & Sciences: 16%
- School of Social Work: 3%
- School of Public Health: 19%
- School of Pharmacy: 2%
- School of Nursing: 2%
- Unaffiliated to School: 7%
61 Carolina Centers

- African Studies Center
- American Indian Center
- Ancient World Mapping Center
- Biostatistics Survey Research Unit
- Bowles Center for Alcohol Studies
- Carolina Asia Center
- Carolina Cardiovascular Biology Center
- Carolina Center for Genome Sciences
- Carolina Center for Jewish Studies
- Carolina Center for the Study of Middle East and Muslim Civilizations
- Carolina Center of Cancer Nanotechnology Excellence
- Carolina Population Center
- Cecil G. Sheps Center for Health Services Research
- Center for Aging and Diversity
- Center for AIDS Research
- Center for Community Capitalism
- Center for Developmental Science
- Center for Environmental Health and Susceptibility
- Center for Environmental Medicine, Asthma, and Lung Biology
- Center for Environmentally Responsible Solvents and Processes (NSFSTC)
- Center for European Studies
- Center for Functional GI & Motility Disorders
- Center for Gastrointestinal Biology and Disease
- Center for Global Initiatives
- Center for Health Promotion and Disease Prevention
- Center for Health Statistics Research
- Center for Infectious Diseases
- Center for Innovation in Health Disparities Research
- Center for International Business Education and Research
- Center for Maternal and Infant Health
- Center for Neurosensory Disorders
- Center for Pharmaceutical Outcomes and Policy
- Center for Research on Chronic Illness
- Center for Slavic, Eurasian, and East European Studies
- Center for the Study of the American South
- Center for Urban and Regional Studies
- Center for Women’s Health Research
- Clinical Center for the Study of Development and Learning
- Clinical Nutrition Research Center
- Collaborative Studies Coordinating Center
- Comprehensive Center for Inflammatory Disorders
- Dental Research Center
- Ethnicity, Culture, and Health Outcomes
- Gene Therapy Center
- General Clinical Research Center
- Highway Safety Research Center
- Injury Prevention Research Center
- Kenan Center for the Utilization of CO2 in Manufacturing
- Lineberger Comprehensive Cancer Center
- Mutant Mouse Regional Resource Center
- National Center for Catastrophic Sport Injury Research
- National Research Center on Rural Education Support
- Neurodevelopmental Disorders Research Center
- Neuroscience Center
- North Carolina Center for Nanoscale Materials
- North Carolina Institute for Public Health
- Parr Center for Ethics
- The Superfund Basic Research Program
- Thurston Arthritis Research Center
- Tissue Culture Facility
15 Carolina Institutes

- FPG Child Development Institute
- Howard W. Odum Institute for Research in Social Science (IRSS)
- Institute for Disaster Studies
- Institute for the Arts and Humanities
- Institute for the Environment
- Institute for the Study of the Americas
- Institute of African-American Research
- Institute of Marine Sciences
- Institute of Outdoor Drama
- Institute on Aging
- Kenan Institute of Private Enterprise
- North Carolina Institute for Public Health
- Nutrition Research Institute
- Triangle Institute for Security Studies
- UNC Roadmap
## Top 10 Centers & Departments in 2007 at UNC-CH

1. Lineberger Comprehensive Cancer Center \( $56,625,568 \)
2. Carolina Population Center \( 45,627,581 \)
3. FPG Child Development Institute \( 23,074,290 \)
4. Biostatistics \( 18,457,246 \)
5. Cystic Fibrosis/Pulmonary Research \( 16,606,036 \)
6. Gastroenterology Biology & Disease Center \( 15,480,669 \)
7. Psychiatry \( 14,914,593 \)
8. Pathology & Lab Medicine \( 14,528,529 \)
9. Epidemiology \( 14,350,381 \)
10. Pharmacology \( 14,346,288 \)
Conclusions:

• Funding increased significantly over last 50 years
• Health funding increased
• NIH increasing
• Flattening in next 5 years ?
What’s in our Future?

• Is history predictive of the future?
  – Funding leveling off or decreasing especially Feds
  – Carolina becomes even more decentralized

• Are there things on the Horizon?
  – New Cancer Center – from State $25 million this year, $50 million next year
  – Genetic Medicine building in Bell Tower parking lot
  – Different Funding Sources – Kanapolis and Carolina North will help expand into different funding sources

• Chancellor’s Goal $1 Billion in 2015
  – Different Funding Sources
  – Larger Grants
  – More Faculty
Research Dollars vs Staffing at UNC-CH

- Research Dollars (in Millions)
  - 1997: $300
  - 1998: $350
  - 1999: $400
  - 2000: $450
  - 2001: $500
  - 2002: $550
  - 2003: $600
  - 2004: $650
  - 2005: $700
  - 2006: $750
  - 2007: $800

- OSR Staffing
  - 1997: 60
  - 1998: 65
  - 1999: 70
  - 2000: 75
  - 2001: 80
  - 2002: 85
  - 2003: 90
  - 2004: 95
  - 2005: 100
  - 2006: 105
  - 2007: 110
Do we need each other?

- Even more than in the past
- A true partnership to keep Carolina moving forward
- We will need to push more and more out to the schools and departments and that is why we have started this Level II Training Certification
Module 1 Competency Test

• Go to the following web site to complete the Competency Test for Module 1

https://apps.research.unc.edu//THCP_Mod1/THCP_Mod1.htm