Agenda – Day Two

- Data Security
- Northwestern University Research Administration Professionals (NURAP)
- Office of Export Controls Compliance (OECC)
- Cost Studies Office/Federal Costing Principles for Universities
- Facilities & Administrative Rate
- Cost Sharing
- Cost Transfers
- Program Income/Service Centers
- Core Facilities
Data Security

Carl Cammarata, Senior Director-Chief Information Security Officer
&
David Kovarik, Director-IT Information & Systems Security/Compliance
Enabling Research Securely – Data Security Plans

- New policy announced by Dean Nielson on May 5, 2015.
- All NU IRB protocols for clinical research studies with principal investigator appointments at FSM now require a documented data security plan.
  - Plans are required for all new clinical research studies
  - Plans are required for existing studies at continuing review/renewal
- Plan will be submitted through the RSS of the IRB/RSS system.
- All plans submitted to audit and verification.
- The plan will guard against accidental disclosure of personal data, which could harm not only study participants, but also the university’s research efforts. The plan will also help investigators comply with university, state, and federal regulations.
- Increases awareness of security requirements.
- Policy, template and examples: http://www.feinberg.northwestern.edu/it/standards-policies/information-security/index.html
- Questions & support, FSMIT-policy@northwestern.edu
Enabling Research Securely – Data Security Plans

- 13 questions – checklist or short answer covering the following areas
- Data sensitivity
- Data flow & transmission
- Data storage
- Data access
- Data backup & recovery
- Data retention (archiving)
Enabling Research Securely – NM Enterprise Data Warehouse

• New policy announced by Dean Nielson on May 5, 2015.
• Data recorded in Northwestern Medicine electronic medical records systems (e.g., EPIC, Cerner) for clinical care and desired to be used for research must be obtained from the Northwestern Medicine Enterprise Data Warehouse.
• Chart abstraction for research purposes or chart abstraction for clinical care purposes then later repurposed for research purposes is prohibited.
• Data not recorded in Northwestern Medicine electronic medical records system (e.g., EPIC, Cerner) but collected for research purposes such as patient reported outcomes and patient/family interview results conducted in a non-clinical care research setting are not in scope of this policy.
• Policy:  
  [http://www.feinberg.northwestern.edu/it/standards-policies/research-use-of-edw-data.html](http://www.feinberg.northwestern.edu/it/standards-policies/research-use-of-edw-data.html)
• Questions & support, nmedwresearch@northwestern.edu
Enabling Research Securely

“How can we improve, reduce risk?”

- Encrypt devices
- Use NU/FSM approved storage
- Manage and secure servers/devices
- Know where data is and backup it up
- Maintain hardware and software to maintenance and patching standards
- Increase awareness
- Security is a shared responsibility
- Work collaboratively with FSM IT
- “Not knowing” is not OK
- “Not wanting to” is not OK
Enabling Research Securely

“Current State of Information Security”
- Encryption compliance
- Migration of servers, desktops & laptops to a secure environment
- Investing in secure storage, backup, archives; no direct Internet access
- Knowing where data located: mapped to an approved study
- Security evolves, is never “done”

“The enormity of FSM”
- Diverse, complex, breadth & volume of research
- Huge volume of research data
- Technology investments
Information = Asset

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgets</td>
<td>Invoices, receipts, payments, planning, forecasting</td>
</tr>
<tr>
<td>HR Data</td>
<td>Compensation, pension, benefits, performance</td>
</tr>
<tr>
<td>Contracts</td>
<td>Terms &amp; conditions, nondisclosure, service agreements</td>
</tr>
<tr>
<td>Research</td>
<td>IP, patents, consent agreements, patient records</td>
</tr>
<tr>
<td>Personal</td>
<td>SSNs, credit cards, DoB, medical/health records, certificates</td>
</tr>
<tr>
<td>Professional</td>
<td>Accomplishments, CV, degrees, awards, reputation</td>
</tr>
</tbody>
</table>

“If it’s worth collecting, it’s worth protecting”
## Threat Landscape – Higher Education

<table>
<thead>
<tr>
<th>Mon/Year</th>
<th>Entity</th>
<th>Cause: Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2015</td>
<td>University of Connecticut</td>
<td>Breach/Malware: Unknown</td>
</tr>
<tr>
<td>Oct 2015</td>
<td>University of Oklahoma</td>
<td>Stolen laptop: 7693 ePHI</td>
</tr>
<tr>
<td>Sep 2015</td>
<td>Louisiana State Med School</td>
<td>Stolen laptop: 5000 ePHI</td>
</tr>
<tr>
<td>Sep 2015</td>
<td>UCLA Health System</td>
<td>Stolen laptop: 1200 ePHI</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>University of Virginia</td>
<td>Breach (China): Unknown</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>UCLA Health System</td>
<td>Breach: 4.5 million ePHI</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>Harvard University (8 colleges)</td>
<td>Breach: Unknown</td>
</tr>
</tbody>
</table>

[https://www.privacyrights.org/data-breach](https://www.privacyrights.org/data-breach)


Data Security
## Threat Landscape - Northwestern

<table>
<thead>
<tr>
<th>Mon/Year</th>
<th>Entity</th>
<th>Cause: Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2015</td>
<td>Northwestern IT</td>
<td>Misconfigured server: Spamming</td>
</tr>
<tr>
<td>Nov 2015</td>
<td>FSM IT</td>
<td>Open access list: 44 SSNs (no exposure)</td>
</tr>
<tr>
<td>Sep 2015</td>
<td>WCAS</td>
<td>Misconfigured server: No PII or L/CR</td>
</tr>
<tr>
<td>Aug 2015</td>
<td>MEAS</td>
<td>2 stolen laptops: No PII or L/CR</td>
</tr>
<tr>
<td>Jul 2015</td>
<td>Ford Building</td>
<td>Stolen server: No PII or L/CR</td>
</tr>
<tr>
<td>Oct 2014</td>
<td>FSM</td>
<td>Stolen laptop: No PII or L/CR</td>
</tr>
<tr>
<td>Jun 2014</td>
<td>FSM</td>
<td>Misconfigured server: 400 ePHI, notification</td>
</tr>
<tr>
<td>Mar 2014</td>
<td>Travel</td>
<td>Credit card fraud: $18000</td>
</tr>
</tbody>
</table>
Threat Landscape

• Highly automated
• Indiscriminate and targeted attacks
• 24 X 7 – never takes a vacation, never takes a holiday
• Medical records now more “valuable” than financial (e.g., credit cards)
• Hacktivist – Criminal – Insider – Espionage – Terrorism – Warfare


https://cybermap.kaspersky.com/
Simple Steps to Security

- Replace password with longer/stronger passphrase
- Use a PIN on phones & tablets
- Treat personal information like “cash”
- Control changes to your environment
- Use secure & approved storage
- Keep systems & applications current
- Use encryption, anti-malware, anti-virus
- Phishing: Be aware, don’t click on links
- Trust but verify

“It just has to be ‘good enough’…”


Security Contacts

NUIT - Information & Systems Security/Compliance
To report or make inquiries, contact the NUIT Help Desk at 847-491-4357 or 1-HELP (from on campus)
Email: security@northwestern.edu

Dave Kovarik, Director
Email: david-kovarik@northwestern.edu
Office: 847-467-5930

FSM IT
To report or make inquiries, contact the NUIT Help Desk at 847-491-4357 or 1-HELP (from on campus)
Email (end user support): fsmhelp@northwestern.edu
Email (IT Security Policy): FSMIT-policy@northwestern.edu

Carl Cammarata, Senior Director
Chief Information Security Officer
Email: carl.cammarata@northwestern.edu
Office: 312-503-2822
Northwestern University Research Administration Professionals (NURAP)

An organization to support research administration professionals
Mission

NURAP strives for a diverse membership of research administration and support professionals in departments, divisions, centers, schools and central administration units.

With an emphasis on operations and organizational management, NURAP provides an educational forum to discuss current policies, exchange best practices/ideas and network.
Grassroots Leadership

Jody K. Hirsh, President, OR, Chemistry of Life Processes Institute, EV
Nathan Youngblood, Vice President, MEAS, Research Administration, EV
Juleen Morford, Secretary, MEAS, Materials Science & Engineering, EV
Katherine Mustea, Past President, ASRSP, CH
Joseph Boes, FSM, Basic Sciences Administration, CH
Maura Cleffi, MEAS, Materials Science & Engineering, EV
Aaron DeLee, MEAS, Research Administration, EV
Susan Hall-Perdomo, OR, Center for Sleep & Circadian Biology, EV
Andrew Mark, MEAS, Research Administration, EV
Chris Moores, WCAS, Chemistry, EV
Melanie Mkrdichian, FSM, Surgery, CH
Brittany Patrick, FSM, Basic Sciences Administration, CH
Rachel Sass, FSM, Surgery, CH
Michelle Suran, OR, Chemistry of Life Processes Institute, EV
Education and Information

NURAP Newsletter (Information)
Member recognition, advice column, organizational news

NURAP Listserv (Information)
Job opportunities, event announcements, internal training

NURAP Website (Information)
Organizational information, list of previous events, membership information, resources for research administrators:
http://www.nurap.northwestern.edu/

Certified Research Administrator Exam Study Sessions (Continuing Education)

NURAP at Noon (Programming)
Informal informational sessions
FY2015 NURAP@NOON Sessions

- **Post Award Management:** Tools You Can Use to Help You Monitor Your Award
- **HR Paperwork and Procedure Changes for the ACA**
- **Subcontracts: Deciphering ESPR**
- **NU Financials:** Tips and Tricks to Help you Reconcile
- **Necessary Changes to Meet the New Federal Closeout Policies** How to prepare for the new policies and avoid pitfalls
- **The NIH Public Access Policy:** Compliance & FAQs
  - A NURAP AT NOON EVENT
January 2016 NURAP@ Noon

- January 25, 2016 – Chicago
  - Baldwin Auditorium
NURAP@ NOON
FUTURE PROGRAMMING

- Research Misconduct & Compliance: Navigating the Grey Areas
- NIH/NSF 2016 Policy Changes
- Monitoring Sponsored Project Expenses
Joining NURAP

How do you become a member of NURAP?

✓ Join the listserv by contacting steering committee member Susan Hall-Perdomo: s-hall4@northwestern.edu

✓ Membership in NURAP is free!

✓ Membership in NURAP is open to ALL members of the Northwestern University community involved in any aspect of research

Please Join us on Twitter, Facebook or LinkedIn
Questions?
Export Controls: What Are They and How Do They Impact Research?

Lane Campbell
Director, Office for Export Controls Compliance (OECC)
Overview and Background

• “Export Controls” are federal rules and regulations governing the shipment or transmission of items out of the U.S., including disclosures or transfers of technical data to foreign persons, whether in the U.S. or abroad.
Overview and Background

- Export control concerns arise due to three primary reasons:
  - The characteristics of the item itself (e.g. if it has military applications)
  - The destination of the item (both the country and the individual or entity) – See Entity List
  - The suspected end use of the item
Overview and Background

- Export controls are intended to address several concerns:
  - Protect U.S. national security
  - Implement U.S. foreign policy
  - Maintain a military and economic edge
Regulating Agencies

- Department of Commerce
- Department of State
- Department of Treasury
Restricted Parties

• The federal government publishes various lists which indicate certain parties (both individuals and companies) subject to restrictions.

• Primary lists include the Entity List, Specially Designated Nationals, Denied Persons, and Debarred Parties.

• Northwestern is now using screening software to conduct comprehensive and dynamic screening of restricted parties.
Embargoed Nations

• The U.S. has embargoes in place against several countries:
  
  – Cuba, Iran, the Sudan, Syria, and North Korea
  
  – Engagement with any of these countries requires a review of potential export control concerns
Export Controls Impact on Research

- “Deemed exports” involve the release of items subject to export controls to a foreign national.
  - The item is “deemed” to have been exported to the home country of the foreign national.
  - “Foreign national”: not a US citizen, a lawful permanent resident, or a “protected person.”
Fundamental Research Exclusion

Fundamental Research vs. Proprietary Research
The “Fundamental Research Exclusion” (“FRE”) was established in a memo signed by President Reagan

- NSDD-189 Memo, issued in 1985

- Characterizes “fundamental research”, “the results of which ordinarily are published and shared broadly within the scientific community.”

- “It is the policy of [the federal government] that, to the maximum extent possible, the products of fundamental research remain unrestricted.”
Fundamental Research Exclusion

• The FRE is intended to control the flow of science, technology, and engineering information produced in federally-funded fundamental research at colleges, universities, and labs.

• Has subsequently been reaffirmed by 2 additional memos issued by the Department of Defense (DOD).
Fundamental Research Exclusion

- The FRE is destroyed when:
  - Sponsor is provided with the right to approve publications
  - Foreign nationals are restricted from participating in the research
  - “Side deals” are struck, wherein the researcher agrees to cooperate in some way with the sponsor to act inconsistent with “fundamental research”
Beyond the FRE

• The FRE does not apply to all university activities, e.g.:
  – All overseas physical shipments must be in compliance with export control regulations.
  – Anything provided under a non-disclosure agreement is potentially subject to controls.
  – Restricted parties and embargoes must always be considered when evaluating export control compliance concerns.
Consequences of non-compliance

• Failure to comply with export control regulations may have many consequences

- Criminal charges
- Monetary penalties
- Damage to reputation
- Loss of export control privileges
J. Reece Roth Case

- Professor Emeritus at the University of Tennessee who illegally exported sensitive technical information to China.

- Traveled to China with his laptop, which contained sensitive information.

- Shared information with foreign nationals, despite being put on notice by his employer and by the research contract.
In the News

• UMass Lowell was recently fined $100,000 for the unlicensed export of equipment to a company in Pakistan.
  – At the time, the company was listed on the Entity List.
  – The equipment was classified “EAR99.”

• Earlier this year, a former postdoc at the University of Michigan was criminally charged with exporting equipment to his home country of Iran.
  – The defendant faces up to 20 years in prison.
  – The violation involved the shipment of humanitarian items to an embargoed country.
The Role of OECC

• Established November 2012

• Intended to provide a central resource dedicated to export controls compliance.

• Coordinates with other offices to ensure that Northwestern is in compliance with the export control regulations.

• When in doubt, contact us.
Questions and Contact Information

OECC
Office for Export Controls Compliance
Northwestern University
633 Clark Street
Rebecca Crown Center,
North Tower 2nd Floor
Evanston, Illinois 60208
http://exports.northwestern.edu

Lane G. Campbell, JD, MBA
Director
lcampbell@northwestern.edu
Phone 847-467-4063
Cost Principles for Sponsored Projects Administration

Jennifer Mitchell
Director of Cost Studies & Effort Reporting
Office of Financial Operations
Cost Studies

The Office of Cost Studies is dedicated to providing analytical, cost accounting, and effort reporting expertise to the management of Northwestern University's research enterprise and to the fulfillment of broader operational objectives. We establish and oversee conformance with University policy, procedure, and practice in matters relating to cost accounting and effort reporting for sponsored programs.

Responsibilities

- Cost Accounting Principles
- Recharge/Service Centers
- F&A Costs
- Financial Surveys
- Compensation - Effort Reporting
- Costing Analysis

http://www.northwestern.edu/coststudies
2 CFR Part 200
UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS (UNIFORM GUIDANCE)

• Effective Dec 26, 2014
• Supersedes 8 OMB circulars, including A-21, A-110, and A-133
  – A-21: Cost Principles for Institutions in Higher Education
  – A-110: Administrative Requirements
  – A-133: Audit Requirements
  – Applied to Audit: period starting Dec 26, 2014
• Download:
  http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl
## Organization of Uniform Guidance

<table>
<thead>
<tr>
<th>Title and Emphasis</th>
<th>Section No.</th>
<th>Predominant Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subpart A: Acronyms &amp; Definitions</td>
<td>200.0 to 200.99</td>
<td>New</td>
</tr>
<tr>
<td>Subpart B: General Provisions</td>
<td>200.1xx</td>
<td></td>
</tr>
<tr>
<td>Subpart C: Pre-Federal Award</td>
<td>200.2xx</td>
<td></td>
</tr>
<tr>
<td>Subpart D: Post-Federal Award - including Procurement, Standards for Financial and Program Management, and Subrecipients Monitoring</td>
<td>200.3xx</td>
<td>A-110, A-102</td>
</tr>
<tr>
<td>Subpart E: Cost Principles – including Direct &amp; Indirect (F&amp;A) Costs, and Compensation-Personal Services</td>
<td>200.4xx</td>
<td>A-21, A-87, A-122</td>
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<tr>
<td>Subpart F: Audit Requirements</td>
<td>200.5xx</td>
<td>A-133</td>
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<tr>
<td>Appendices: Combination of all 8 circulars; III – F&amp;A for Educational Institutions</td>
<td>I to XI</td>
<td></td>
</tr>
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</table>
## Risks of Non-compliance

<table>
<thead>
<tr>
<th>Institution</th>
<th>Date Settled/Agency</th>
<th>Issues</th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke University</td>
<td>Jan 2009 / NIH</td>
<td>Direct charging of administrative and clerical costs</td>
<td>Final settlement &lt; recommended $ by the auditor</td>
</tr>
<tr>
<td>Yale University</td>
<td>Dec 2008 / multiple agencies</td>
<td>Cost transfers, summer salary charges, effort reporting</td>
<td>$7.6 million</td>
</tr>
<tr>
<td>St. Louis University</td>
<td>Jul 2008 / NIH, CDC, HUD</td>
<td>Supplemental compensation, Effort reporting</td>
<td>$1 million</td>
</tr>
<tr>
<td>The Mayo Clinic</td>
<td>May 2005/NIH, others</td>
<td>Cost allocation, cost transfers, inadequate accounting system</td>
<td>$6.5 million</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>Apr 2005/NIH</td>
<td>Research work overstated; Medicare billed for research</td>
<td>$3.9 million</td>
</tr>
<tr>
<td>Harvard University</td>
<td>Jul 2004/NIH</td>
<td>Government billed for salaries &amp; expenses unrelated to federal grants; self reported</td>
<td>$3.3 million</td>
</tr>
<tr>
<td>Johns Hopkins Univ</td>
<td>Feb 2004/ NIH</td>
<td>Faculty time &amp; effort overstated</td>
<td>$2.6 million</td>
</tr>
<tr>
<td>Florida International U.</td>
<td>Feb 2005/Dept of Energy</td>
<td>Effort reporting, cost transfers, payroll dist.</td>
<td>$11.5 million</td>
</tr>
<tr>
<td>Northwestern</td>
<td>2004/NIH</td>
<td>Institutional Base Salary; K award; Certifier Assignment</td>
<td>$5.5 million</td>
</tr>
</tbody>
</table>
Roles and Responsibilities

• Are you involved in managing these funds?
  *Fund 610 to 650 (Sponsored) & 191 to 193 (Cost Share)*
  – Research administration include providing stewardship to appropriately manage grants and contracts *at All Levels*

• Internal Controls (Section 200.303)
  • **Must** maintain effective internal control over the federal award that provides reasonable assurance…
  • **Must** comply, evaluate and monitor compliance with federal statutes, regulations and the terms and conditions of the federal awards
  • **Must** take prompt action when non-compliance is identified
Sponsored project costs are comprised of allowable direct costs plus the allocable portion of allowable indirect costs.
Direct vs. Indirect (F&A) Costs

Direct Costs
- PI Salary
- Equipment
- Fringe Benefits

Indirect Costs
- Admin Salary
- Office Computer
- Building
- Fringe Benefits
Guiding Principles for Charging Costs

- Reasonable
- Allocable
- Allowable
Guiding Principles: Allowability (200.403)

- Be necessary and reasonable for the performance of the award and be allocable thereto under these principles.
- Be consistent with policies and procedures that apply uniformly to both federally-financed and other activities.
- Be accorded consistent treatment. A cost is either direct or indirect cost when for the same purpose in like circumstances.
- Not included as a cost or cost sharing on another award
- Be adequately documented
Unallowable Costs Examples

- **Uniform Guidance:**
  - 200.423 Alcoholic beverages
  - 200.424 Alumni/ae activities
  - 200.429 Commencement costs
  - 200.438 Entertainment costs
  - 200.441 Fines, penalties and settlements
  - 200.442 Fund raising
  - 200.445 Goods or services for personal use
  - 200.450 Lobbying
  - 200.469 Student Activity Costs (including athletics)

- **Agency-specific policy** (e.g., NIH salary limitation)
- **University policy** (e.g., Employee morale costs)
- **Award-specific terms & conditions** (e.g., Some grants prohibit foreign travel)
Guiding Principles: Reasonable Costs (200.404)

- is determined by the prudent person test. i.e., are the nature and charge amount not excessive and within the bounds of common sense?
- Generally recognized as ordinary and necessary.
Can the charge pass the “Test of Reasonableness”?

- Common sense – will another prudent person make the same decision?
- How would it look if published in the Tribune?
- Is it consistent with ethical business practices and applicable laws?
Guiding Principles: Allocable Costs (200.405)

A cost is allocable to a sponsored agreement if:

• It is incurred solely to advance the work under the sponsored agreement;

• The cost is charged in accordance with relative benefits received or other equitable relationship.
Allocability

An appropriate method should be used to allocate the costs of bulk purchases to individual project (see below)

Allocate based on a reasonable estimate of actual consumption

Allocate based on the number of grants in the department
Questions?
Can I Charge this Cost to an Award?

1. Reasonable? Allowable? Allocable?
   - Yes → Direct or F&A? (consistency)
   - Direct → Charge the cost to the award using the appropriate expense object Account Code
   - No → Charge to a non-sponsored account
   - F&A

2. If F&A, then:
   - Charge to a non-sponsored account

Cost Studies
Check Your Knowledge
Facilities & Administrative Rate

Jennifer Mitchell
Director of Cost Studies & Effort Reporting
Office of Financial Operations
Higher Education: 4 Major Functions

- Instruction
- Organized Research
- Other Sponsored Activities
- Other Institutional Activities
F&A Rates

• All research and development activities of an institution Facilities and Administrative Cost - also known as Indirect Cost, Overhead Cost

• F&A Rates are Calculated per Major Function once every 3 or 4 years by the Office of Cost Studies

• F&A Rates of Instruction, Organized Research, and Other Sponsored Activities are then Negotiated with the Federal government

• Organized Research accounts for the largest reimbursement of the F&A Cost and is today’s focus
Organized Research

• All research and development activities of an institution are separately budgeted and accounted for including:

1. **Sponsored Research**: All research and development activities that are sponsored by Federal and non-Federal agencies and organizations

2. **University Research**: All research and development activities that are separately budgeted and accounted for by the institution under an internal application of institutional funds
F&A Rate Calculation

- The rate is based on a periodic calculation and submission of a rate proposal, which is then negotiated with Northwestern’s cognizant agency (DHHS)

\[
\text{Indirect Costs} \quad \frac{\text{Supporting Organized Research}}{\text{Direct Costs of Organized Research}} = 54.5\%
\]
F&A Rate Development Methodology

- Indirect Cost Assignment & Allocation
  - Instruction
  - Organized Research
  - Other Sponsored Activities
  - Other Institutional Activities

Direct Cost Buckets
The F&A Ratio

The “Pools”
- Facilities costs
- Administrative costs
- Based on allocations of actual costs

Indirect Cost “Pools” = 54.5%

Direct Cost “Base”

The Base
- Based on actual costs charged to research projects
- Typically expressed as MTDC but can be TDC or salary & wages
Facilities & Administrative Costs

Facilities Related Costs
• Building Depreciation/ Use Allowance
• Equipment Depreciation/ Use Allowance
• Interest
• Operations & Maintenance
• Library

Administrative Related Costs
• General Administration (GA)*
• Department Administration (DA)*
• Sponsored Projects Administration (SPA)*
• Student Services
F&A Rate Calculation

1. Assign expenditures to pools and bases by function code
2. Remove unallowable costs from pools*
3. Allocate allowable pool costs to major functions
4. Divide: F&A Costs allocated to OR/MTDC* of OR
Step 3: Allocate Allowable Pool Costs to Major Functions

<table>
<thead>
<tr>
<th>Indirect Cost Pool</th>
<th>Allocation Basis</th>
<th>Allocation Basis Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>Square Feet</td>
<td>• Allocation Statistic is equal to Sq. Ft used for each Major Function divided by Total Assignable Sq. Ft</td>
</tr>
<tr>
<td>Admin</td>
<td>Modified Total Cost of each major function</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Function</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Administration</td>
<td>University-wide MTC</td>
</tr>
<tr>
<td>Department Administration</td>
<td>School/ Department MTC</td>
</tr>
<tr>
<td>Sponsored Projects Administration</td>
<td>Sponsored project MTC</td>
</tr>
<tr>
<td>Student Services</td>
<td>Allocated 100% to Instruction</td>
</tr>
</tbody>
</table>
How F&A Costs are Distributed

Allowable Facilities Related Indirect Costs $150M

Space Allocations

$32M $22.5M $52.5M $20.0M $22.5M $1.25M $45M $6.25M

Organized Research $100M MTDC

Instruction $200M MTDC

Other Sponsored Activities $10M MTDC

Other Institutional Activities $90M MTDC

Allowable Administrative Indirect Costs $50M

MTC & Other Allocations
Organized Research – F&A Rate

- Allowable Facilities Related Indirect Costs: $150M
- Allowable Administrative Indirect Costs: $50M

Space Allocations: 25% to Research
- $32M

MTC & Other Allocations: 45% to Research
- $22.5M

$54.5M F&A

Organized Research $100M MTDC

= 54.5% Research F&A Cost Rate
Space Survey

Why is it Important?
- Cost allocation for building and equipment depreciation/interest
- Operations and maintenance
- Rate is uncapped

How Can You Help?
- Key for F&A rate calculation*
- Offices will be calculated based on salary distribution by the Office of Cost Studies*
- For labs, account for who worked in the lab
  - Understand the funding per lab
  - Training grants vs. research grants
  - Recharge
Maximizing F&A Recovery

• F&A recovery is a critical part of the University’s budget and necessary to support a sustained investment in the research enterprise

• Negotiated rate is almost always less than the actual calculated rate*

• Accessing the F&A rate represents recovery of costs already incurred by the University, which benefited the sponsors
F&A Rate Calculation: How Can You Help?

Conduct the following activities *Timely and Appropriately*:

- Effort reporting (working with Cost Studies)
- Space survey (working with Facility Management and Cost Studies)
- Equipment inventory (working with Account Services and Cost Studies)
Questions?
Cost Sharing

Josh Richards
Assistant Grants Officer-Evanston Campus
Office for Sponsored Research
What is Cost Sharing?

• The portion of total project or program costs (direct and indirect) not borne by the sponsor.
  – The University or a third party (such as a subcontractor or an unfunded collaborator) bears the cost
  – Normally in the form of a direct costs, e.g. salary, and unrecovered F&A associated with these direct costs
  – With sponsor approval, may take the form of F&A costs where reimbursement is waived or reduced
Cost Sharing

• “Cost Sharing = “Cost Matching”
  – Terms can be (and often are) used interchangeably; however, terms “cost matching” often refers to cost sharing agreements in which the amount of sponsor funding is based on an equal or proportionate commitment (e.g., 1:1) from the University.
Cost Sharing

- Appropriate Sources for Cash Funds
  - Gifts
  - Endowments
  - Unrestricted discretionary funds
- Common Types of In-Kind Cost Share
  - Faculty Effort
  - Unrecovered F&A
  - Graduate Student Fellowships
Impacts of Cost Sharing

• Positive
  – Helps Northwestern be eligible for certain programs
  – Makes Northwestern more competitive for certain programs
  – Helps Northwestern allocate resources to areas of strategic national importance
Impacts of Cost Sharing

• Negative
  – Financial
  – Administrative
  – Compliance
  – Investigator
  – F&A Rate Decrease
Institutional Position on Cost Share

• Northwestern only engages in cost sharing when it is in the best overall interest of the University
  – Mandated by sponsor solicitation or policy
  – Deemed appropriate in light of specific circumstances
Requesting Institutional (OR) Support

- Large-Scale, Interdisciplinary Proposals
  - DoD, DoE, NSF
  - NIH Program Project Grants or Center Grants (P Series)
- Instrumentation Proposals
  - NSF Major Research Instrumentation (MRI)
  - NIH Shared & High-End Instrumentation (S10/HEI)
- OR does not consider requests for “cap gap” cost sharing
Types of Cost Sharing

- Mandatory Cost Share (MCS)
- Voluntary Committed Cost Share (VCCS)
- Voluntary Uncommitted Cost Share (VUCS)
## Required Cost Share Fund Codes

<table>
<thead>
<tr>
<th>Type</th>
<th>Fund</th>
<th>Cost Share Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory Cost Share</td>
<td>191</td>
<td>Required by sponsors as a matter of statute, regulation or policy, or is indicated in individual solicitations</td>
</tr>
<tr>
<td>Over the Cap Commitment</td>
<td>192</td>
<td>Difference between actual salary and sponsor imposed salary cap (e.g. NIH)</td>
</tr>
<tr>
<td>Voluntary Committed Cost Share</td>
<td>193</td>
<td>Not required by the sponsor as a condition of award but provided at the proposal stage at the discretion of the institution.</td>
</tr>
</tbody>
</table>
Cost Sharing Requirements

- Verifiable from the recipient’s records

- Not included as contributions for any other Federally-assisted project or program

- Necessary and reasonable

- Allowable

- Not paid by the Federal Government under another award

- Provided for in the approved budget when required by the Federal awarding agency
Unacceptable Forms of Cost Sharing

- Costs funded by other sponsored projects
- Costs pledged as cost sharing for another funded project
- Unfunded salary for effort beyond the contractual appointment period*
- Costs reimbursed through the F&A rate*
- Salary dollars above the regulatory cap*
- Costs not deemed to be necessary and reasonable*
Cost Sharing Best Practices

• MCS, VCCS and Salary-over-the-cap cost must be tracked and reported in F&A proposals and Effort Certification

• Work with OSR to ensure the appropriate cost share chart strings are open upon award notification

• Fund the CS chartstring by a non-sponsored source
Accounting for Cost Sharing

• Ensures NU can provide verification that MCS and VCCS obligations have been met

• Ensures proper classification of costs in F&A rate calculation*

• Provides valuable management information in the form of accurate financial accounting*
Questions?
Cost Transfers

Jennifer Mitchell
Director of Cost Studies & Effort Reporting
Office of Financial Operations
What is a Cost Transfer (Journal)?

The act of moving a charge from one project/account to another

- Cost transfers can occur:
  - Between two sponsored accounts
  - From a non-sponsored account to a sponsored account
  - From a sponsored account to a non-sponsored account, or
  - Between two non-sponsored accounts
Why are Cost Transfers Problematic?

• A cost that is originally placed on an account is certified for allowability, allocability tests and direct benefit to a project
• A cost transfer invalidates that original certification
## Risk of Non-Compliance…

<table>
<thead>
<tr>
<th>Institution</th>
<th>Settlement Date/ Agency</th>
<th>Alleged Misconduct Issues</th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yale University</td>
<td>2007</td>
<td><strong>Cost transfers</strong>; summer salary charges</td>
<td>$7.6 million</td>
</tr>
<tr>
<td>University of Massachusetts Medical School</td>
<td>NIH</td>
<td><strong>Cost transfer; unsupported labor charges</strong></td>
<td>$24K; triggered Yale &amp; Roger Williams Hospital audits</td>
</tr>
<tr>
<td>California Institute of Technology</td>
<td>2006 pending NSF review/</td>
<td>Timeliness; NSF grants</td>
<td>N/A</td>
</tr>
<tr>
<td>Howard University</td>
<td>2006</td>
<td>Cost sharing on NSF grants</td>
<td>N/A</td>
</tr>
<tr>
<td>University of Pennsylvania</td>
<td>2006/ NSF</td>
<td><strong>Timeliness; cost transfers</strong></td>
<td>$3.3 million</td>
</tr>
<tr>
<td>University of Alabama at Birmingham</td>
<td>2005</td>
<td>Research work overstated; Medicare billed for research</td>
<td>$3.4 million</td>
</tr>
<tr>
<td>Harvard University</td>
<td>2004</td>
<td>Government billed for salaries &amp; expenses unrelated to federal grants</td>
<td>$2.4 million</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>2004/ NIH</td>
<td>Faculty time &amp; effort overstated</td>
<td>$2.6 million</td>
</tr>
<tr>
<td>Florida International U.</td>
<td>2004</td>
<td><strong>Cost transfers</strong> and direct costs</td>
<td>$11.5 million</td>
</tr>
</tbody>
</table>
Cost Transfer Guiding Principles

• Are for **correcting errors**
• Must **not** be used as a means of managing available cash balances
• Project funds are not interchangeable; the integrity of each grant account must be maintained
• Reasonableness, allowability, allocability, and consistency must be established: the need for a cost transfer must reflect adherence to federal cost principles and must be **well-documented**
• Costs applicable to several projects **cannot** be charged solely to a single project
• Costs not allocable to a project **cannot** be charged to that project (even temporarily)
NIH and Northwestern Standards

Cost Transfers Standards:
- Must be made within 90 days of the original charge.
- Transfers of salary charges should take place before certifying effort.
- 90 day exception letter needed for transfers made after 90 days.*
- Cost transfers greater than 12 months after the date of occurrence.*
- Must be made 90 days after error is discovered.

Northwestern:
- Must be made 90 days after error is discovered.

NIH:
- Must be made 90 days after error is discovered.
Cost Transfer Documentation

Provide a reason for the transfer

Explain the purpose of the transfer

Draw a correlation between the initial charge and the account to which it is being transferred

Document and maintain all relevant information to the transfer

Salaries/wages cost transfers (journals) must be supported by certified effort report if the reporting period has been open in the Effort Reporting System (ERS)

- Links to 90-day cost transfer memo and related references: [http://www.northwestern.edu/coststudies/salary-cost-transfers.html](http://www.northwestern.edu/coststudies/salary-cost-transfers.html)
Cost Transfer Red Flags

- Transfers made in excess of 90 days after the original charge
- Transfers without a full explanation or “cookie cutter” explanations (e.g., “to correct error”)
- High volume of transfers (especially during the last month of the award)
- Patterns in timing (i.e., near end of project period) and “route” (mostly onto, and rarely off of sponsored projects) of transfers
- Transfers among “closely related” projects
- Grant to Grant transfer
How to Prevent *Unnecessary* Cost Transfers

- Establishing pre-award chartstrings, when appropriate, can prevent future cost transfers
  - Pre-award spending allows the PI to begin work and record charges against the proper chartstring related to a project before the start of the award
  - Keep in mind that costs are incurred at the institution’s or department’s risk
  - To establish a pre-award chartstring, submit the request via ESPR explaining the need and supplying budget details
- Establishing a financial plan that enables you to proactively charge expenses to the correct chartstrings from the onset
- Communicating with Payroll, recharges centers and other staff that process expenses to the grant
Timeliness and Closeouts

- Submitting cost transfer in time for reporting is a major consideration as the government tightens its closeout processes (e.g., Payment Management System).
- Deadlines for reporting expenses have changed significantly.
- What do these new rules mean...
  - Grant expense need to be reconciled by the end date of the grant, not after the grant end date.
  - Cost transfers submitted after the grant end date may not make the report and could be denied.
    - Department may lose funding if they have not charged expenses timely.
Questions?
Recharge Centers (Service Centers) and Program Income

Jennifer Mitchell
Director of Cost Studies & Effort Reporting
Office of Financial Operations
What is a Service (Recharge) Center?

A Service Center is an Operating Unit that has the expertise to provide specialized services/goods to internal (NU) customers on a recurring basis and needs to recover the costs of providing the goods/services

- Costs of providing the good/service are recovered through fees to users, primarily Northwestern faculty, staff, and students
- Service Centers aka. Recharge Centers
Why Do We Need Service (Recharge) Centers?

- Good and/or service may not be otherwise available
- Increase procurement efficiency or convenience

Examples:
Use of a MRI machine, Cleanroom, Machine shop, etc.
Categories of Service Centers

- **Specialized Service Facility**
  - (Direct + Indirect = Fully loaded costs)
  - e.g., CCM (Animal Facility), Telecommunication

- **Core Facilities**
  - (Shared resources with a research aim)
  - e.g., Genomics, IMSERC

- **University-wide Service/Recharge Center**
  - (Managed by Central – e.g., Facility Management)

- **Department Recharge Center**
  - (Operated by a department)
  - e.g., Machine shop
When is a Recharge Center Needed?

• Examples
  – **Recurring Use** of an instrument by other researchers and need to recover the labor, maintenance, and/or applicable equipment depreciation cost
  – **Recurring Services** to provide goods or expertise to users and need to recover the operating costs

Contact us! A cost study of the recharge rates should be performed to ensure the charges are based on actual costs and **no profit is built into the rates for internal usage**.
SETTING THE RECHARGE RATES - COST BASED APPROACH

The Basic Equation:

\[
\begin{align*}
\text{Direct Operating Costs: Labor} & \quad (\text{Salary + Fringe}) \\
\text{Direct Operating Costs: Non-Labor Costs} & \quad (\text{supplies, maintenance contracts, etc.}) \\
\text{Annual Equipment Depreciation (if utilized*)} & \\
\text{Subsidies} & \\
\text{Prior -year balance} & \\
\end{align*}
\]

\[+\text{ Projected # of Goods or Services Sold}\]

= "Calculated" Rate per Unit

(may not be the same as the Actual Recharge Rate)

*Special attention to utilizing equipment depreciation (see later slides)
Examples of Measurable Units for Goods or Services

- Labor hour
- Machine hour
- CPU unit
- Per Rack Unit
- Daily rate
- Test
- Slide
- Page
- Cup
Recharge Rates & Subsidy Consideration

- Most recharge centers are supported (subsidized) by the university, school or department

- Charges to users must be equitable so no Federally sponsored user subsidizes another user
  - If a lower rate is provided to certain users only, subsidy/support from another allowable source should be provided to account for the difference

- Recharge rates are cost-based; the revenue from the recharge center cannot be treated as profit and used to purchase capital equipment or fund department deficits

- Recharge rates should be reviewed and approved by Cost Studies on an annual basis
  - Use the annually approved rates to charge users
What is the treatment of revenue when a recharge center supported by federal grant(s) generates a net surplus during the award period?
Program Income

• Program income is gross income—earned by a grantee, a consortium participant, or a contractor under a grant—that was directly generated by the grant-supported activity or earned as a result of the award.

• Any costs associated with the generation of the gross amount of program income that are not charged to the grant should be deducted from the gross program income earned, and the net program income should be the amount reported.

• Must be reported to the agency.
Examples of Program Income

- **Fees for services performed**
- Money from the use, sale, or rental of equipment purchased with project funds
- Sale of supplies or equipment purchased or fabricated with project funds
- Sale of software, tapes or publications
- Sale of research materials, such as animal models, vectors, or reagents
- Fees from participants at conferences or symposia
# Use of Program Income

<table>
<thead>
<tr>
<th>Program Income Alternative</th>
<th>Use of Program Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive</td>
<td>Added to funds committed to the project or program and used to further eligible project or program objectives.</td>
</tr>
<tr>
<td>Deductive</td>
<td>Deducted from total allowable costs of the project or program to determine the net allowable costs on which the Federal share of costs will be based.</td>
</tr>
<tr>
<td>Combination</td>
<td>Uses all program income up to (and including) $25,000 as specified under the additive alternative and any amount of program income exceeding $25,000 under the deductive alternative.</td>
</tr>
<tr>
<td>Matching</td>
<td>Used to satisfy all or part of the non-Federal share of a project or program.</td>
</tr>
</tbody>
</table>
Roles and Responsibilities

Service Center Director/Mgr
• Manages routine operations
• Prepares rates
• Adhere to the approved rates when charging customers
• Tracks financial performance
• Administers billing and collection activities

Office of Cost Studies
• Assists in development
• Reconciles capital equipment information
• Reviews and approves rate calculation
• Helps correct non-compliant practices
• Establishes/monitors adherence to policy

For more information:
http://www.northwestern.edu/coststudies/recharge.html
Questions?
Core Facilities Administration

Aaron Rosen
Financial Administrator
Office for Research
aaron-rosen@northwestern.edu
What are Core Facilities?

- **Core Facilities** are “Recharge Centers” operating under a fee-for-service model, with the mission of enabling research at Northwestern
  - **Department Core Facilities** serve researchers in a single department, earning revenue less than $30K/year
  - **University Core Facilities** serve researchers in multiple departments, earning revenue greater than $30K/year
  - **Clinical Core Facilities** serve the research needs of researchers/clinicians engaged in clinical research studies
What do Core Facilities do?

• **Cores are centralized research laboratories with state-of-the-art (expensive) equipment:**
  – Electron and confocal microscopes (hard/soft mat.)
  – Mass spectroscopy/NMR facilities (chem, drug discovery)
  – Functional MRI facilities (human, animal)
  – Cleanrooms for micro/nano-fabrication

• **Cores provide centralized services to researchers:**
  – Genomics/Proteomics/Animal Model services
  – Synthesis and characterization of biomolecules (small molecules, peptides, proteins)

Note: Office for Research maintains a website listing University cores: [http://www.facilities.research.northwestern.edu/](http://www.facilities.research.northwestern.edu/)
How are Core Facilities Supported?

• **Central Oversight of University Core Facilities**
  • Administrative and Financial Services (NUcore)
  • Rigorous Evaluation of Annual Reports (Awards)
  • Policies and Regulations (federal, university)
  • Marketing and UI Partnerships
  • Professional Development Opportunities

• **Annual Financial Support**
  • OR (approx. $2M/yr)
  • Centers, Schools, Departments (approx. $2M/yr)

• **Construction and Improvements of Space for Core Facilities**
How are Core Facilities Supported (cont’d)?

- **Office for Research Equipment Grants**: two competitive rounds per year, support equipment purchases up to $100K, ReLODE loan program
- **Office for Research Operating Support**: requested via the Annual Report, supports expenses not allowable on recharge, facility growth, unexpected expenses
- **FSM Dean’s Office Support**: competitive, single round per year, provides subsidies for cores serving FSM researchers
- **Voucher Program**: when a PI donates new equipment to a core facility, they are eligible for a voucher to use the equipment
Financial Services Support by OR

- NUcore Software
- NU Financials Tracking
- Cost Studies/Pricing
- UBI Reporting

- Research Administrators can be added as “Business Administrators” on their portfolio of chart strings in NUCore
- “Business Administrators” can review transactions, dispute charges, and manage access to their portfolio of chart strings across all core facilities
- Advantages of active management: avoid overspending and unauthorized spending with active review, ensuring that researchers are selecting the correct chart string for purchases, have appropriate access, and are not overspending increasingly tight grant and non-grant budgets!
Additional Support of Core Facilities

• Schools and Depts provide operating subsidies and/or annual deficit coverage to core facilities
• Core-specific grants reduce the operating costs (NIH RHLCCC grant and other P30’s, NSF MRSEC grant)
• External users charged a higher rates - especially commercial users that can help a core facility balance its budget (some transactions may be taxable!)
How can I learn more about Core Facilities?

• Internal Opportunities
  – Core Facility Listserv (email Sasha for access)
  – Quarterly Brown Bags (notes available on website)
  – Kellogg Course: Leadership and Management in Core Facilities (annual 4-day mini-MBA focusing on core facilities)
  – Quarterly NUCore Tech Talks (session recordings on website)

• External Opportunities
  – National: ABRF (Association Biomolecular Resource Facilities)
  – Regional: MWACD (Midwest chapter of ABRF)
Who can I contact with questions?

• **Phil Hockberger**
  – Executive Director of Research Facilities (OR)

• **Aaron Rosen**
  – Financial Administrator (OR)

• **Aleksandra (Sasha) Mechentner**
  – Administrative Assistant (OR)

• **Jeff Weiss**
  – Director for Research Core Planning (FSM)

• **Todd Shamaly**
  – Senior Application Support Specialist (FSM/OR)
Day 2 is Complete!

Thank you for attending day 2 of the Research Administration Training Seminar!

I will be emailing a brief survey regarding day 2 of this training. Please take a few minutes to fill it out as we are always looking for suggestions for improvement!

The next session is on Tuesday, 1/26 at 1pm in McGaw Pavilion, Daniel Hale Williams Auditorium. If you have any questions or concerns, please do not hesitate to contact me.