Annotated with Resources
Edition of 09/28/2017

I. PROJECT DEVELOPMENT AND ADMINISTRATION

CLASSIC RESOURCES:

- *Science and the Endless Frontier: A Report to the President by Vannevar Bush (1945)*
- *Allocating Federal Funds for Science and Technology - National Academy of Sciences (1995)*

A. Collection and Dissemination of Information

1. Marketing - Internal and External
   - Identification of funding opportunities
     - Sample list of resources:
       - [SRA's GrantsWeb/Resources](#)
       - [Sample list of resources](#)
       - Sample list of private organizations:
       - [Private Funding](#)
       - Grant Terminology | [Grants.gov](#)
       - Sample list of RFPs: [NIH](#)
       - [Office of the Federal Register](#)
       - Sample service provider:
         - [InfoEd, PIVOT, GRANTFORWARD](#)
         - [Sample campus dissemination](#)
     - Identification of internal dissemination capabilities
       - [Sample keyword glossary](#)
       - Sample list of faculty Interests:
         - [Optical Sciences](#)

2. Resource Documents, Application Materials and Information
   - Sample agency proposal guide:
     - [National Science Foundation](#)
     - [Sample application form service](#)
     - [Sample application form download](#)
   - Sample application form download:
     - [NIH Office of Extramural Research](#)
3. Dissemination of Information/Publications
   - Sample campus newsletter:
     - Publications
4. Liaison
   - Internally
   - Funding Sources
     - Federal Agencies Directory
   - Cooperative Arrangements
     - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
     - Grant or Cooperative Agreement
     - Grants/contracts what is the difference
5. Public Relations
   - General Overview
6. Agency Structure and Practice
   - NSF at a Glance
   - NSF Update
   - NSF FAQ
   - Office of Extramural Research NIH Overview
     - NIH Frequently asked questions
   - NIH Update
B. Proposal Development
   1. Proposal Writing
      - Sample tips
      - Sample guide:
        - Art of writing proposals
        - NSF Guide for Proposal Writing
        - gpg16001 Grant Proposal Guide, January 2016 | NSF
        - Proposal writing for short guide course
        - NIH Sample
      - Sample proposal:
        - The Foundation Center
      - Agency View:
        - Rating Grant Applications at the NIH
        - Resources for Applicants
        - Frequently Asked Questions on Proposal Preparation (NIH)
        - Glossary of Funding & Policy Terms & Acronyms National Institute of Health
   2. Budget Preparation
      - Sample guide
      - Budgeting Basics
   3. Documentation to Meet Sponsor Requirements
      - Sample university policy Negotiation Techniques
   4. Internal Proposal Processing
CRA Body of Knowledge

- **Sample university policy**

5. **Negotiation Techniques**
6. **Contracting Basics**
   - An Overview of Contracting
   - Checklist: Contracts
   - Checklist: Indemnification
   - Checklist: Confidentiality
   - *Nolo Legal Glossary*

C. **Administration of Awards**
   - Overview: [COGR Good Practices Principle](Word Document)
     1. Monitoring Activity
     2. Reports on Progress and Financial Status
     3. Continuation Funding
     4. Close Out
     5. Changes in Project Status
     6. Award Instruments - *Sample university policy*

D. **Ethics and Professionalism**
   - Overview: [On Being a Scientist: Responsible Conduct in Research](National Academy Press)
   - Policy and Compliance | grants.nih.gov
   - Objectivity in Research
     1. Conflict of Interest
        - Overview: NIH Policy FAQ's
        - NSF Policy
        - PHS Policy
     2. Bioethics
        - President's Council on Bioethics
        - Bioethics Resources
     3. Human Subjects
        - Overview
        - Underlying statute: Sec. 474a. of the National Research Act, P.L. 93-348
        - Basic Regulation
        - Federal Policy for the protection of human subjects (common rule)
        - Regulations and Policy | HHS.gov
        - 45CFR Part 46
        - Exempted Research and Research That May Undergo Expedited Review
        - History: The Belmont Report -- Ethical Principals and Guidelines for the Protection of Human Subjects in Research
        - Penn State - Research Protections - Policy RP07 ... - GURU
        - Overview of human subject protection procedures:
        - Frequently Asked Questions about Human Services Protection (OPRR)
CRA Body of Knowledge

- Sample professional association principles: American Psychological Association
- Guidelines for Clinical Trials
- Clinical Trials (useful information including a glossary)
- Other FDA sites: Information Sheet Guidance, Common Rule

4. Animal Care
- Underlying statute: Health Research Extension Act of 1985
- Underlying statute: Laboratory Animal Welfare Act (7 USC Chapter 54)
- OPRR: PHS Policy on Humane Care and Use of Laboratory Animals Tutorial
- Frequently Asked Questions about the Public Health Service Policy on Humane Care and Use of Laboratory Animals: 1995
- Basic regulation:
  - PHS Policy on Humane Care and Use of Laboratory Animals
- Basic Reading
  - Guide for the Care and Use of Laboratory Animals
  - ARENA Institutional Animal Care and Use of Laboratory Animals
  - Animals-AAALAC
  - Sample university policy
  - Overview of animal care procedures:
  - Use of Electronic Communications for IACUC Functions
  - OPRR - Laboratory Animal Welfare
  - Office of Laboratory Animal Welfare (OLAW) - grants.nih.gov
  - Frequently Asked Questions about the Public Health Service Policy on Humane Care and Use of Laboratory Animals

5. Professional
- Professional Conduct
- Responsible Conduct in Research
- Research Misconduct
- AAU's Framework for Institutional Policies and Procedures to Deal With Fraud in Research
- Responsibility of PHS Awardee and Applicant Institutions for Dealing With and Reporting Possible Misconduct in Science
- NIH and Research
- Model Policies: Office of Research Integrity Model Policy on Research Misconduct

E. Intellectual Property
- Overview: Intellectual Property Defined
- What is Intellectual Property
- Overview of Intellectual Property
- Technology Transfer
- Intellectual Property Rights
- Checklist
1. Patents and Trademarks
   - **US Patent - Trademark Office**
   - **Patent Law**
   - Overview of patent law: [COGR Guide to Bayh-Dole Act](#) (PDF File)
   - **Patent Information from the U.S. Patent Office**
   - **General Information Regarding Patents from the U.S. Patent & Trademark Office**
   - **Provisional Application for Patent**
   - Patent law materials: [Legal Information Institute, Cornell University Law School](#)
   - Trademark law materials: [Legal Information Institute, Cornell University Law School](#)
   - **American gov glossary of IP Terms**
   - **US Trademark Law**
   - **Basic Facts About Registering Trademarks from the U.S. Patent & Trademark Office**
   - **Guideline for Trademark Licensing**

2. Copyrights
   - Copyright law: [Copyright Law from Cornell](#)
   - Copyright basics: [Copyright Basics from the Copyright Office](#)
   - Copyright Office: [Copyright Office Web Site](#)
   - Copyright Office Circulars: [Government Publications: Office Circulars](#)
   - Copyright law material: [Legal Information Institute, Cornell University Law School](#)

3. Licensing
   - [Intellectual Property Rights](#)
     **Overview of university licensing programs**

4. Commercialization
   - **Overview of technology transfer:**
   - **Definition of right of publicity**

5. Data
   - **Overview of policy considerations**
   - **Treatment of data**

6. Proprietary Information
   - **Overview of trade secrets**
   - University-Industry Research Relationships
   - Overview: [COGR Guide](#)

F. **Electronic Research Administration**
CRA Body of Knowledge

II. LEGAL REQUIREMENTS AND SPONSOR INTERFACE

1. Regulations and Statutes
   1. Overview of Regulatory and Legislative Process
      Sample overview
   2. Governmental Relations
      • Overview: Council on Governmental Relations (COGR)
   3. Mandated Requirements

B. Compliance - Federal/Sponsors and General Management Practices

1. Representations and Certifications
   a. Federal Drug Free Workplace & Drug Free Schools
   b. Federal Debt Delinquency
   c. Federal Debarment / Suspension
   d. Lobbying
   e. Conflicts of Interest
   f. Scientific misconduct
   g. Other
      • Guidance

2. Federal Management Requirements
   a. Federal Acquisition Regulations (FAR)
   b. Federal Acquisition Regulation (FAR) | Acquisition.GOV
      • Federal Acquisition Regulations - FAC Looseleaf
      • FAR - Frequently Asked Questions
      • Federal Acquisition Regulation Supplements
      • Listing of Department of Defense FAR Supplement (DFARS) Clauses
      • Listing of NASA FAR Supplement (NFS) Clauses
      • Listing of FAR Supplement (DEAR) Clauses
      • FAR Clauses
   c. 2 CFR (Uniform Guidance and OMB Circulars)
      • OMB Circulars
      • Uniform Circular
      • OMB Circular 129
      • Federal Agency Grant Requirements
      • NIH Grants Policy Statement
      • National Science Foundation Grant Policy Guide
      • Federal Demonstration Project General Terms and Conditions
      • Other Federal Regulations
      • FedWorld's Cost Accounting Standards Index
      • U.S. Code (USC)

3. Institution Committees
   a. Institutional Review Board
      • 45CFR Part 46
   b. Institutional Animal Care and Use Committee
      • PHS Policy on Human Care and Use of Laboratory Animals
      • Guide for the Care and Use of Laboratory Animals
CRA Body of Knowledge

c. **Other**

4. **Federal Disclosure Requirements**
   - Family Education Rights and Privacy Act (FERPA)

5. Institutional and Sponsor Publication Requirements
   - First amendment law materials
   - Sample university policy
   - Federal Labor Standards
   - Fair labor standards

6. **HIPAA Health**

7. **International Traffic in Arms Control (ITAR)**
   - Export Administration Regulations (EAR)

C. **Federal/Sponsor Appeal Procedures**
   - Appeal procedures under HHS awards: DHHS Web Server
   - Appeal procedures
   - Legal Authority
   - Delegations of Authority
   - Authorized Organizational Representative
     Sample university policy

### III. FINANCIAL MANAGEMENT

A. **Budgeting/Accounting**
   1. Proposal Development
   2. Accounting Management
      - Overview of fiscal administration:
      - Accounting Systems
      - Determining allowability of costs
      - Sample university policy
      - Allocating costs
      - Sample university policy, PI responsibilities
      - Comparison of Cost Principles

1. Accounting systems/management information systems
   1. Sponsor documents
      - NSF Grant Policy Guide
      - NSF Proposal & Award Policies & Procedures Guide
      - NASA Grant and Cooperative Agreement Handbook
      - Education Department General Administrative Regulations (EDGAR)

2. Internal documents
   - Sample university policy
   - Sample Reporting

2. Accounting Processes
   1. Effort reporting
   2. Service centers
CRA Body of Knowledge

3. Program income
4. Internal Controls
   - Gifts Vs. Grants
   - Internal controls
   - Sample university policy
   - Gifts vs. grants
   - Sample university policy

3. Cost transfers
3. Rebudgeting

B. Costs
1. Direct Costs
2. Indirect Costs
   - Sample university policy
   - Facilities & Administrative Costs (Indirect costs rates)
   - Sample university policy
   - Sample university policy
3. Indirect cost rates
   a. Development
   b. Negotiation

4. Cost Sharing
   - Sample university policy

A. Sponsor Financial Reporting
B. Audit
   Overview of audits
   Self-Assessment
   OMB Circulars (2CFR)
   NIH Requirements
   NEA Guidelines for OMB Circular 133 Audits
1. Types
   - Uniform guide for initial review of 133 audit Reports
2. Internal and External Requirements
   - Best Practices
   - 133 Audit property Guidance
3. Allowable Costs

IV. GENERAL MANAGEMENT

A. Facility Management
   - Overview of property management
1. Specialized Facilities
   - Overview of Specialized Facilities
   - Lab Type Definitions
2. Property Utility and Equipment Management
   a. Inventory control
      - Sample university policy
b. Sale/disposal of equipment and property
   - Sample university policy

c. Lease vs. purchase
   - Sample university policy

d. Capital expenditures

e. Sharing/pooling

f. Central services

3. Safety and Health Requirements and Procedures
   - Overview of safety and health procedures
   - Sample university policy

4. Hazardous and Nonhazardous Materials

5. Security
   - Sample university policy

6. Renovation and Construction

7. Biohazards

8. Other

B. Contracts and Purchasing
   Overview of procurement

1. Basic Legal Concepts
   - Overview of U.S. contract law
   - Title 41 U.S. Code, Public Contracts

2. Management of Contracts and Purchasing
   - General
   - Sample university policy
   - Consulting Agreements
   - Sample university policy

3. Termination and Appeals
   - Discussion of contract term, termination, & extension issues
   - Appeal procedures under HHS awards
   - Appeal procedures under GSA contracts

C. Records Management
   Overview
   Sample university policy

D. Human Resource Management
   Overview

1. Employee / Labor Relations
2. Career Development Training
3. Staffing Performance, Accountability and Human Resources
   - Sample policy
   - Employment discrimination law materials
   - Department of Labor affirmative act
5. Compensation
CRA Body of Knowledge

Glossary of Research Terms and Other Helpful Resources:

- **Glossary of Funding & Policy Terms & Acronyms National Institute of Allergy & Infectious Diseases (NIAID)**
- **OMB Intergovernmental Review (EO 12372)**
- **DHHS GrantsNet – contains several useful urls**
- **Grant reform OMB PL 106-107**
- **US Government Agencies & Organizations**