IV. PREPARING A SPONSORED PROJECT PROPOSAL

A. Introduction

The submission of a proposal is the usual means of approaching potential sponsors for support of research and other projects. The faculty member who will be designated as the PI will be primarily responsible for developing the proposal and preparing the necessary documentation. The PI is often assisted in this process by his/her DA.

As a preliminary matter, the scope, methods and objectives of the proposed project must be evaluated by the PI before a decision is made to respond to a RFP or submit a grant application. Personnel, equipment, facility and other support requirements must be estimated and discussed with the department chair to assure consistency with departmental objectives and availability of resources. If the project is interdisciplinary, discussions must also take into account faculty and chairs of other departments.

B. Funding Through Columbia

Please note that the University administers all sponsored project proposals and awards for which faculty serve as PIs. Therefore, faculty may not prepare or submit proposals for outside funding through an institution other than Columbia without first obtaining permission from the Provost. Any faculty member with a joint appointment at Columbia and NYSPI should consult with his/her DA to determine which institution should submit the proposal and administer the award.

C. PI Eligibility

For each sponsored project, one investigator is typically designated as the PI. The PI bears ultimate responsibility for academic decisions as well as for financial, administrative and compliance matters of the project. Other individuals with significant involvement may be listed as "Co-Principal Investigator" or "Co-Investigator".

Federal agencies permit more than one PI on a project. This presents an important opportunity for investigators seeking support for projects or activities that clearly require a "team science" approach. As the rules differ from agency to agency, for more information about the multiple PI model, please refer to the website for the particular agency to which you are interested in submitting a grant application.

In order to maintain academic standards and in recognition of the University’s assumption of liabilities under sponsored projects, the University limits the eligibility of persons who may serve as PIs.

A PI normally must have a full-time appointment and must be an:

- Officer of Instruction in the rank of:
o Professor
o Associate Professor
o Assistant Professor
o Instructor

or an

- Officer of Research in the rank of
  o Senior Research Scientist/Scholar
  o Research Scientist/Scholar
  o Lamont Research Professor
  o Lamont Associate Research Professor
  o Lamont Assistant Research Professor

Persons with appointments carrying other titles, including those in a visiting or adjunct grade, may act as co-PIs with officers in one of the instructional or research grades cited above. However, individuals who do not meet the above criteria may not serve as the sole PI without the approval of their department chair or director and dean or vice president, as well as the Provost.

The Provost has delegated the authority to make such exceptions as follows:

- For those holding appointments at CUMC, the Executive Vice President for Health and Biomedical Sciences;
- For those holding appointments at the Lamont-Doherty Earth Observatory (Lamont), the Director; and
- For those holding appointments elsewhere in the University, the EVPR.

Officers seeking an exception to this policy should submit a request through SPA, the CTO or CTV, as applicable. Approval may be requested on a project-by-project basis or for all projects of the officer. The request must be countersigned by the appropriate chair or director and dean or vice president in order to acknowledge the financial responsibility of the department and school for the proposed project or projects. In addition, the request must include the individual’s curriculum vitae and, if it relates to a specific project, an abstract of the project.

D. Types of Proposals

Proposals are generally classified in two ways:

1. By Function

Research
Most Columbia projects involve basic research that fits within the mission of the funding agency. Sometimes applied, demonstration or clinical research is performed.

**Basic research** involves the acquisition of fundamental knowledge and is “…undertaken primarily to acquire new knowledge without any particular application or use in mind” (NSF, Higher Education Research and Development Survey, FY 2010 (NSF 2010 Survey)).

**Applied research** is the application of fundamental knowledge to a specific problem or to “gain the knowledge or understanding to meet a specific, recognized need” (NSF 2010 Survey).

**Demonstration research** undertakes to provide a working prototype of the applied research and involves the “….systematic use of the knowledge or understanding gained from research directed towards the production of useful materials, devices, systems or methods, including the design and development of prototypes and processes” (NSF 2010 Survey).

**Clinical research** is, broadly defined, research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) and can include epidemiological, behavioral, outcomes and other types of research involving human subjects. For a more detailed definition of Clinical Research, see Introduction: Primary University Offices Involved in Sponsored Research – Office of Research Administration (ORA) (Chapter I, Section E(1)).

**Training**

A training project involves training students in a special manner or for a specific purpose that is approved by a funding agency. Funding is provided to Columbia to support an organized course of training and Columbia selects students to participate based on the guidelines and policies of the sponsor and the University. Training grants can support trainees at all levels, including undergraduates, graduate students, postdocs and, at times, junior or mid-level faculty through “career development” awards.

**Fellowship**

A fellowship provides support for a named individual, usually a graduate or a professional student, who is selected by the sponsor and not by Columbia. Fellowships may be awarded directly to the student or awarded to Columbia for support of a specific student. Fellowships are also awarded to postdocs and to faculty members.

**Public Service**

These are projects involving research or instructional activities that benefit a community outside Columbia.
2. By Status

New Proposal

An original request for funding from an agency for projects that have not been funded by that sponsor previously.

Competitive Renewal

A request for continued funding for existing sponsored projects, beyond the term of the current award, that require competitive peer review and sponsor action to continue beyond the current competitive segment.

Non-Competing Continuation

A request for continued support for a funded grant for a subsequent budget period based on sponsor review of progress reports, rather than peer review.

Supplement

A request for additional funds during a current project period for an existing sponsored project, typically for a particular item of equipment or subproject not anticipated in the original proposal. All additional costs must be within the scope of the approved project. Supplements rarely extend the period of performance.

Revision

A request for significant changes to a project that can be either a major change in the budget or a change in the scope of work, or both. Minor budget changes do not require separate approval. More significant changes can often be made without permission from the sponsor, under the “expanded authorities” granted to Columbia by certain federal agencies. Changes in the scope of work ordinarily require sponsor approval. See also Programmatic Management of a Sponsored Project: Post-Award Activities That Typically Require Prior Sponsor Approval (Chapter IX, Section C).

No cost extension

A request to extend the period of performance of an award without additional money from the sponsor. See also Financial Management of a Sponsored Project: Monitoring a Sponsored Project – No Cost Extensions (Chapter VIII, Section F(8)).

Resubmission

A grant application that was not funded, revised to reflect feedback from the initial peer review and resubmitted to the sponsor.
E. University Offices That Can Assist with Proposal Development and Submission and Other Agreements

SPA, the CTO and CTV, collectively, assist investigators in proposal preparation, contract negotiation, budget preparation and negotiation and submissions to sponsors. These Offices have been charged with ensuring that proposals, agreements and awards comply with University and sponsor policies and have been generally described in Introduction: Primary University Offices Involved in Sponsored Projects (Chapter I, Section E) and Other University Offices Involved in Sponsored Research (Chapter I, Section F). The following sets forth the types of proposals and other agreements that each Office processes. Please note that all sponsored research proposals and agreements must be signed on behalf of the University by certain officers designated by the Trustees in SPA, the CTO or CTV, as applicable.

1. SPA

SPA processes all sponsored proposals other than those specifically handled by the CTO or CTV. See Introduction: Primary University Offices Involved in Sponsored Research – Office of Research Administration (ORA) (Chapter I, Section E). Research proposals initiated by investigators at NYSPR are generally administered by the Research Foundation for Mental Hygiene (RFMH). However, the Department of Psychiatry will submit a research proposal in the University’s own name when space or resources are to be used, or when other relevant considerations, make it reasonable for Columbia to have primary responsibility for conducting the research. All proposals submitted through Columbia are processed by SPA or the CTO.

2. CTO

The CTO reviews, negotiates and processes all proposals for industry sponsored clinical trials and clinical research at the University and for non-industry sponsored clinical trials that are submitted by PIs holding appointments at P&S. Clinical research projects from the other schools at CUMC are processed by SPA. See Introduction: Primary University Offices That Are Involved in Sponsored Research – Office of Research Administration (ORA) (Chapter I, Section E).

3. CTV

CTV shares responsibility with SPA for the negotiation of SRAs. Although all SRAs are routed to SPA for review, CTV acts as the administrative office responsible for the negotiation and execution of certain SRAs. In addition, CTV develops and negotiates the terms of subawards under SRAs that they have negotiated and executed. See Introduction: Primary University Offices That Are Involved in Sponsored Research – Columbia Technology Ventures (CTV) (Chapter I, Section E).
In addition to the agreements for which it is primarily responsible, CTV is the responsible office for negotiating or providing guidance on intellectual property terms. SPA and the CTO collaborate with CTV regularly on intellectual property matters.

4. Summary of Processing Responsibilities

The following chart summarizes the processing responsibilities of each Office:
<table>
<thead>
<tr>
<th>Processing Office</th>
<th>Type of Sponsored Project</th>
<th>Office Responsible for Proposal Review and Submission/Contract Review, Negotiation and Execution</th>
<th>Office Responsible for Award Receipt/Account Setup</th>
<th>Office Responsible for Issuing Subawards</th>
</tr>
</thead>
</table>
| SPA               | • All government, foundation and non-profit studies that are not P&S clinical trials  
• Industry sponsored non-clinical research agreements that SPA and CTV have agreed should be processed by SPA. | SPA                                                                                           | SPA                                              | SPA                                    |
| CTO               | • Industry sponsored clinical trials and clinical research  
• Government, foundation and non-profit P&S clinical trials | CTO                                                                                           | CTO                                              | CTO                                    |
| CTV               | • Industry sponsored non-clinical research agreements that SPA and CTV have agreed should be processed by CTV. | CTV                                                                                           | SPA                                              | SPA                                    |

*Updated June 2014*

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The following chart summarizes which office is responsible for other miscellaneous agreements and documents:
ALLOCATION OF RESPONSIBILITIES FOR MISCELLANEOUS RESEARCH AGREEMENTS

<table>
<thead>
<tr>
<th>Type of Agreement</th>
<th>Responsible Unit</th>
<th>Comments</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance Identification/IRB Certification/Declaration of Exemption</td>
<td>IRB review and signature</td>
<td>Formerly Optional Form 310</td>
<td>CUMC: <a href="mailto:irboffice@columbia.edu">irboffice@columbia.edu</a> MS: <a href="mailto:askirb@columbia.edu">askirb@columbia.edu</a></td>
</tr>
<tr>
<td>Certificate of Confidentiality Application</td>
<td>IRB review and signature</td>
<td></td>
<td>CUMIC: <a href="mailto:irboffice@columbia.edu">irboffice@columbia.edu</a> MS: <a href="mailto:askirb@columbia.edu">askirb@columbia.edu</a></td>
</tr>
<tr>
<td>Charter Party Agreement</td>
<td>Send to SPA; OGC and Risk Management review</td>
<td>SPA signature</td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>Collaboration Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clinical research</td>
<td>CTO review and signature</td>
<td></td>
<td>cto@<a href="mailto:submission@columbia.edu">submission@columbia.edu</a></td>
</tr>
<tr>
<td>• Non-clinical research</td>
<td>SPA review and signature</td>
<td></td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>Computer Facilities Agreement</td>
<td>Send to SPA; OGC review; SPA signature</td>
<td></td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>Confidential Disclosure Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clinical research</td>
<td>CTO review and signature</td>
<td></td>
<td>cto@<a href="mailto:submission@columbia.edu">submission@columbia.edu</a></td>
</tr>
<tr>
<td>• Non-clinical research</td>
<td>CTV review and signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consulting Agreement - Individual</td>
<td>OGC review; individual signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consulting Agreement - Institutional</td>
<td>Procurement review; Department signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Use Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CUMC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clinical data</td>
<td>CTO review and signature</td>
<td></td>
<td>cto@<a href="mailto:submission@columbia.edu">submission@columbia.edu</a></td>
</tr>
<tr>
<td>• Non-clinical data</td>
<td>SPA review and signature</td>
<td></td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>• Non-CUMC</td>
<td>SPA review and signature</td>
<td></td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>• HIPAA limited data set</td>
<td>Privacy Officer review; SPA signature</td>
<td></td>
<td>CUMIC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a> MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
</tbody>
</table>

Updated June 2014

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<table>
<thead>
<tr>
<th>Type of Agreement</th>
<th>Responsible Unit</th>
<th>Comments</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Use by Non-CU Investigator</td>
<td>School review and signature</td>
<td></td>
<td>CUMC: <a href="mailto:grants-office@columbia.edu">grants-office@columbia.edu</a></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>MS: <a href="mailto:ms-grants-office@columbia.edu">ms-grants-office@columbia.edu</a></td>
</tr>
<tr>
<td>Foreign Government Agreement or Award</td>
<td>Send to SPA; OGC review, SPA signature</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MS: <a href="mailto:nkiib@columbia.edu">nkiib@columbia.edu</a></td>
</tr>
<tr>
<td>Individual Investigator Agreement</td>
<td>IRB review and signature</td>
<td></td>
<td>CUMC: <a href="mailto:ihboffice@columbia.edu">ihboffice@columbia.edu</a></td>
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<tr>
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<tr>
<td>IRB Authorization Agreement</td>
<td>IRB review and ID signature</td>
<td></td>
<td>CUMC: <a href="mailto:ihboffice@columbia.edu">ihboffice@columbia.edu</a></td>
</tr>
<tr>
<td></td>
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<td></td>
<td>MS: <a href="mailto:nkiib@columbia.edu">nkiib@columbia.edu</a></td>
</tr>
<tr>
<td>Material Transfer Agreement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CUMC</td>
<td>If specimens will be used to validate a medical device, additional IRB review</td>
<td>cts@ <a href="mailto:submission@columbia.edu">submission@columbia.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:nkiib@columbia.edu">nkiib@columbia.edu</a></td>
</tr>
<tr>
<td></td>
<td>Human or human-derived material</td>
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</tr>
<tr>
<td></td>
<td>Human or non-human derived material</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Non-CUMC</td>
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<td></td>
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<tr>
<td></td>
<td>CTV review and signature</td>
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<td></td>
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<tr>
<td>Service Agreement</td>
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<tr>
<td></td>
<td>Non-CUMC</td>
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<td></td>
<td>SPA review and signature</td>
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</tbody>
</table>

Clinical Research: patient oriented research, including epidemiologic and behavioral studies, outcomes research and health sciences research. Patient-oriented research is research conducted with human subjects (or on material of human origin such as tissues, specimens, and cognitive phenomena) in which a researcher directly interacts with human subjects. It includes research on mechanisms of human disease, therapeutic interventions, clinical trials and development of new technologies, but does not include in vitro studies using human tissues not linked to a living individual.

Studies falling under 45 CFR 46.101(b)(4) are not considered clinical research for purposes of this definition. 45 CFR 46.101(b)(4) studies are defined as “research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.”

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F. University IT Systems Used in Proposal Development and Submission

The University has two information technology (IT) systems that are involved in proposal development and submission: Rascal and InfoEd.

1. Rascal

Rascal is a web-based suite of IT modules that has been developed internally at the University to simplify the University’s research compliance and administration processes. You may access Rascal at: https://www.rascal.columbia.edu/

Currently Rascal serves as the electronic system for the following:

Training and Certifications

Rascal houses a number of training courses and tracks compliance with training requirements as follows:

- Human Subjects Protection
- HIPAA
- Responsible Conduct of Research
- Financial Conflicts of Interest and Research
- Effort Reporting
- Safety Training
  - Laboratory Safety, Chemical Hygiene and Hazardous Waste Management
  - Radiation Safety
  - Bloodborne Pathogens/Infection Control
  - Shipping Biological Materials and Genetically Modified Microorganisms
  - Shipping with Dry Ice, Exempt Specimens and Excepted Quantities of Dangerous Goods
  - Laser Safety
  - Formaldehyde/Xylene
  - Hydrofluoric Acid
  - Recombinant DNA
  - Pyrophoric Materials
  - Viral Vectors
  - Controlled Substances
  - Cyanide Safety
  - Shop Safety
- X-ray Fluoroscopic Users Credentialing
- Laboratory Animal Regulatory Training

See Training (Chapter III) for additional information on training.
Human Subjects/IRB

Rascal is used by investigators to create IRB protocols and informed consent documents and by the IRB to administer the protocol review process. See Review and Submission of a Sponsored Project Proposal: Additional Approvals and Certifications – Human Subjects (Chapter VI, Section E(3)).

Rascal also links data from other modules that are needed to obtain IRB approval of a protocol:

- Financial Conflicts of Interest
- Training Certifications
- Hazardous Materials
  - Recombinant DNA
  - Infectious Agents
  - Human Materials or Other Potentially Infectious Materials
  - Laser
  - Hazardous Chemicals or Toxins
  - Use of Radiation in Humans

Animal Research / IACUC

Rascal is used by investigators to create IACUC protocols and by the IACUC to administer the protocol review process. See Review and Submission of a Sponsored Project Proposal: Additional Approvals and Certifications – Use of Animals (Chapter VI, Section E(4)).

Rascal also links data from other modules that are needed to obtain IACUC approval of a protocol:

- Training Certifications
- Hazardous Materials
  - Recombinant DNA
  - Infectious Agents
  - Human Materials or Other Potentially Infectious Materials
  - Laser
  - Hazardous Chemicals or Toxins
  - Use of Radiation in Animals

Rascal Proposal Tracking (Rascal PT)

Rascal routes electronic approvals of proposals or contracts required by SPA or the CTO. These include PI certifications and departmental and NYP approvals. See Review and...
Submission of a Sponsored Project Proposal: Additional Approvals and Certifications (Chapter VI, Section E).

Any Columbia employee who has a Columbia UNI may use RASCAL. In addition, non-Columbia personnel who are acting as collaborators in a research project may be permitted access to RASCAL.

The first time you log into RASCAL, you should complete a user profile and fill out a conflict of interest disclosure form. See Review and Submission of a Sponsored Project Proposal: Additional Approvals and Certifications – Financial Conflicts of Interest (FCOIs) (Chapter VI, Section E(1)).

2. InfoEd

InfoEd is a web-based suite of IT modules designed to assist researchers and administrators in sponsored project development and management.

The following InfoEd modules are currently in use at the University:

- **InfoEd Proposal Tracking (InfoEd PT):** InfoEd PT is used by SPA as a central repository for all sponsored research proposals and awards at the University except P&S industry sponsored clinical trial agreements. InfoEd PT captures administrative data, records submitted budgets and maintains award information and other relevant documents during the life cycle of the grant.

- **InfoEd Proposal Development (InfoEd PD):** InfoEd PD electronically facilitates the preparation, review and submission of grant applications. While it is currently being used primarily for specific NIH proposals that are required to be submitted electronically through Grants.gov, other grant applications are being added over time and InfoEd PD now supports applications to 26 federal agencies, including DOE and DOD.

There are a number of advantages to using InfoEd PD to develop applications to the participating federal agencies:

- PD permits an investigator to prepare a proposal online and make it available for multiple users to view the proposal simultaneously, including his/her SPA Project Officer. This allows the Project Officer to assist in proposal development and review as the proposal is being generated by the PI.

- Budgeting tools are better developed than those available through the Adobe form set and permit the application of sponsor-specific guidelines automatically.

*Updated June 2014*
o Standard agency forms are pre-loaded with University, sponsor, investigator and other information to eliminate repetitive data entry tasks.

o Proposals that are ready for submission are automatically reviewed for adherence to known sponsor requirements, thereby eliminating the majority of errors experienced when applications are processed by Grants.gov. Completed applications are then uploaded directly to the Grants.gov server via a direct system-to-system interface.

Support for new users is available through SPA by contacting the Help Desk at SPA-eBiz@columbia.edu.

- **InfoEd Award Tracking and Financial Tracking (InfoEd AT&FT):** The AT&FT modules in InfoEd are used by SPA to set up accounts in ARC after an award is granted. These modules transfer budget details from PT to ARC without re-keying award data. Accounts for all sponsored projects except for P&S industry sponsored clinical trials are set up in InfoEd.

- **InfoEd Sponsored Programs Information Network (InfoEd SPIN):** SPIN is a funding opportunities database that contains thousands of federal, non-federal, private, non-profit and international sources in order to provide the latest information regarding research grants, fellowships and publication support. In addition to outlining specific program details (e.g., sponsor information, program names and deadline dates) and embedding links to sponsors’ homepages, SPIN supplies an abstract that summarizes the program’s primary objective. SPIN has an advanced search engine to permit investigators to find funding sources.

In order to get access to InfoEd, please contact the InfoEd Help Desk in SPA at (212) 305-6462 or email: SPA-eBiz@columbia.edu.

**G. Developing a Proposal**

**1. Components of a Proposal**

Most sponsors provide guidelines that specify the form and content of the proposal. Careful attention to these guidelines is essential, because lack of conformity may cause the proposal to be returned without review.

In addition to the technical description of the work to be performed, many sponsors (particularly federal agencies) require completion of specific forms. Required forms are available on the web at individual sponsor sites. Typical proposal components include:

**Cover sheet**

Sponsors usually request that applicants complete forms that provide basic administrative information, including project title; project period (start and end date); funds requested;
PI and Co-PI name, title, address, phone, fax and email; and administrative contact information. Basic cover sheet information also includes the University's corporate and legal name as well as the University's tax-exempt status number.

This information about the University can be found at http://spa.columbia.edu/proposals/institutional-information.

Representations and Certifications

All federal grant and contract applications require that an authorized University signatory sign a series of representations and certifications attesting to the institution's eligibility and willingness to receive and administer federal funds. The three most common types of representations and certifications are Debt and Debarment, Lobbying and Drug-Free Work Place. Other types of representations and certifications vary by agency. Most federal sponsors require that these forms be submitted with the application, but some do not require them until the time of award.

Abstract

Also referred to as a “project summary”, this section provides a brief (typically no more than one page) high-level description of goals of the proposed research. If the sponsor has specific requirements for the project summary, they should be followed carefully. NSF, for example, requires that the project summary explicitly address the “intellectual merit” and the “broader impact” of the proposed research and will return without review proposals that do not include this information.

Narrative

This is the scientific/technical description of the project. Many sponsors have strict guidelines regarding page length and formatting (margins, lines per inch, font size, etc.) and may reject proposals that do not meet these guidelines, so it is essential to review the program announcement carefully and adhere to such guidelines.

Budget and Budget Justification

Most research proposals, and many fellowship proposals, ask for a detailed (“line-item”) budget and explanation of the items in each budget category. Information about budget preparation can be found in Preparing a Sponsored Project Budget (Chapter V).

Curriculum Vitae (CV) and Bibliography

Normally, the CV is accompanied by a bibliography, a list of the person's publications. The CVs of the PI and other faculty members who will be working on a project should be included with the proposal. Many sponsors have specific formatting and page length restrictions. Most federal sponsors require a shortened CV and bibliography, between two (NSF) and four (NIH) pages.
Typically, the CV/bibliographies of others playing a significant role in the project are included, whether or not they are Co-PIs or Co-Investigators, and even if they are not otherwise affiliated with the University.

NIH applications, proposals and progress reports must include the PubMed Central reference number when citing publications that fall under the NIH Public Access Policy and are authored or co-authored by the investigator, or arose from the investigator's NIH award. For more information regarding the NIH Public Access Policy, see Review and Submission of a Sponsored Project Proposal: NIH Public Access Policy (Chapter VI, Section F).

Current and Pending Funding

Many sponsors request that applicants provide summaries of their current and anticipated grant and contract funding. Information requested usually includes sponsor, project title, period of performance and amount funded. Some agencies also ask for percentages of effort. To avoid cost sharing implications, the amount of effort committed to projects should not be reported unless it has been requested explicitly and the proposed effort and budget support should match each other.

2. Proposal Writing Tips

The following sites provide useful information and grant writing tips.

NIH Tips - Planning Your Application
http://grants.nih.gov/grants/planning_application.htm

NIH Tips - Writing Your Application
http://grants.nih.gov/grants/writing_application.htm

NIH Grant Writing Tip Sheets
http://grants.nih.gov/grants/grant_tips.htm

NSF Guide – How to Prepare Your Proposal
http://www.nsf.gov/funding/preparing/

3. Institutional Information

The Columbia Institutional Information Sheet provides very important information in order to complete your grant application. It contains institutional information, such as the University’s legal name, address, contact information, DUNS numbers and taxpayer ID numbers, that is usually required when completing a proposal for sponsored project support. Often this information is needed on the Proposal Face Sheet/Cover Sheet. Please note that there is different information listed for the Morningside campus and CUMC.
Besides basic institutional information, there is pertinent information on the Sheet that you will need when preparing your budget. This includes Facilities and Administrative Rates, Fringe Rates, NIH Salary Cap information, Graduate Research Assistant salary cap information and other important budgetary items. The Institutional Information Sheet can be found on the SPA website at http://spa.columbia.edu/proposals/institutional-information.

4. Sponsor Guidelines and Forms

Federal Funding

All federal funding guidelines and forms can be found on www.Grants.gov. However, you may find that it is useful to refer to some of the direct federal agency websites for more guidance:

NIH Forms and Applications:
http://grants.nih.gov/grants/forms.htm

NIH Grants Policy Statement:

Inside the NIH Review Process (full video):
http://www.drg.nih.gov/Video/Video.asp

NSF Grant Proposal Guide:

NSF Proposal and Award Policies and Procedures Guide:

Department of Energy:
http://science.energy.gov/grants/

National Endowment for the Humanities:
http://www.neh.gov/grants/index.html

Other Non-Federal Funding

The Foundation Center:
http://foundationcenter.org/findfunders/foundfinder/

New York State Funding
Department of Health: http://www.health.state.ny.us/funding/

5. Other Resources

Updated June 2014
Additional consultation and support should be sought out for any large, complex or unusual applications, including those for institutional training grants, construction projects, limited submissions, large interdisciplinary proposals and similar applications.

**Institutional Training Grants**

SPA has developed a set of resources to assist with the development of institutional training grant applications and their subsequent management. These resources can be found at on the SPA home page at [http://spa.columbia.edu/resources-administrators/training-grant-resources](http://spa.columbia.edu/resources-administrators/training-grant-resources). In addition to these materials,

- a listserv has been established to enable better communication among training grant administrators;
- regular meetings of training grant administrators are held to address specific training needs of those preparing or managing training grants; and
- SPA can assist in the development of the NIH NRSA Table 3.

Information on these and other training grant-related matters can be found at the above website.

**Limited Submissions**

ORI is responsible for administering the nomination process for limited submission funding opportunities. The sponsors of such opportunities will only accept institutional nominations and/or limit the number of applications that an institution may submit. In such cases, announcements are circulated that provide the application requirements and deadlines for the internal competition and ad hoc committees are appointed to review applications and assist in the selection of the University's nominees. To allow adequate time for a review and selection of final candidates, and to enable the nominee(s) to complete the final application, internal deadlines are set well in advance of official sponsor deadlines. For more information, see [http://researchinitiatives.columbia.edu/funding/limited-submission-funding-opportunities](http://researchinitiatives.columbia.edu/funding/limited-submission-funding-opportunities)

**Construction Grants**

Please contact your SPA Project Officer as early in the process as possible if you are considering submitting an application for funding of a construction project.

**Large Interdisciplinary or Multidisciplinary Applications**

Please contact your SPA Project Officer as early in the process as possible if you are considering submitting an application for funding of a large, interdisciplinary or multidisciplinary project. Depending on the size and scope of the proposed, coordination with other University offices may be required or advantageous.
V. PREPARING A SPONSORED PROJECT BUDGET

A. Introduction

Preparation of a budget is an important part of the proposal preparation process. The budget should be accurate, realistic and reasonable in light of the work proposed. The requested amount should not be so small as to preclude successful completion of the stated goals nor so large that the sponsor will not seriously consider funding the proposal.

Research expenses can be divided into direct costs and facilities and administrative (F&A) costs. Direct costs can be specifically identified with a particular project, program or activity or directly assigned thereto relatively easily and with a high degree of accuracy. Direct costs include such specific line items as salaries and fringe benefits, equipment and travel. F&A costs are other costs that are less readily allocable to specific individual projects, such as the administrative support and the operation and maintenance of facilities. F&A costs are paid as a fraction of direct costs, with the fraction negotiated by the University and the sponsor.

B. Direct Costs

1. Primary Concepts

The following sections set forth basic concepts relating to all direct costs: allowability, allocability, reasonableness and consistency. These concepts are applicable to all sponsored projects, whether government funded or not.

Consistent with federal regulations, expenditures charged to all sponsored projects must be allowable, allocable and reasonable. In addition, expenditures must be consistently treated under like circumstances in budgeting, charging and reporting expenses. These terms are described below.

Note that effective December 26, 2014, OMB Circulars A-21, A-110 and A-133 will be replaced by regulations promulgated under the Uniform Guidance.

Allowability

An allowable cost is a cost that meets all of the following conditions:

- It serves a University business purpose, including instruction, research and public service;
- It is permissible according to Columbia’s policies and federal regulations; and
- It is permissible according to the terms and conditions of the sponsored project.
It is important to note that not all allowable costs may be charged directly to a sponsored project; many costs that meet the above definition are normally treated as F&A costs and as such, may only be charged directly to federally sponsored awards under special conditions. Unless the special conditions apply, these costs must be paid from non-federal sources; further, many non-federal sponsors expect that the University will apply the same standard as is applied to federal projects. Accordingly, PIs and others involved in the process of assigning charges to sponsored projects must insure that charging these costs to non-federal projects is permissible in accordance with the policies of those sponsors.

Allowable costs that generally may NOT be directly charged to sponsored projects include the following:

Basic Administrative and Operations Costs

- Office supplies, pens, paper, basic software, etc. except in limited circumstances. See Major Categories of Direct Costs (Section B(2)) below.
- Local telephone, fax, telephone line and equipment charges for general office use.
- General clerical or secretarial assistance except in limited circumstances. See Major Categories of Direct Costs (Section B(2)) below.
- Postage and express mail
- Hazardous waste disposal
- Proposal preparation costs

For questions concerning these costs, contact RPIC.

Research-related Expenses

- Books and periodicals
- Dues and memberships
- Photocopying
- Conference fees

OMB Circular A-21 specifically delineates certain costs as being “unallowable”, meaning that they may never be directly charged to sponsored projects or included in the University’s calculation of its F&A rate. Unallowable costs include the following:

Miscellaneous Expenses

- Alumnae/i activities
- Commencement and convocation costs
- Organized fundraisers
- Lobbying (federal, state or local)
- Student activities
- Bad debt costs
- Selling and marketing costs
- Fines and penalties

Entertainment/Goods or Services for Personal Use

*Updated June 2014*
• Sales tax
• Alcohol
• Flowers
• Catering
• Gifts
• Space rental
• Furniture
• Construction
• Housing and personal living expenses (utilities, rent, etc.)
• First or business class travel

For full details on unallowable costs, please refer to the University’s Policy on Unallowable Costs.

It is important to note that the Policy does not preclude the incurrence of these costs when they are appropriate to the normal business activities of the University; however, the Policy precludes charging those costs to sponsored projects and requires that the costs themselves be segregated so that they are excluded by the University in the calculation of its F&A rate.

Allocability

An allocable cost is a cost that can be assigned to one or more sponsored projects or other activities in proportion to relative benefits received or on other equitable terms. Specifically, OMB Circular A-21 states that a cost is allocable to a sponsored project if it meets any of the following criteria:

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

• It benefits both the sponsored project and other work of the institution, in proportions that can be approximated through use of reasonable methods; or

• It is necessary to overall operation of the institution and, in light of the principles provided in the Circular, is deemed to be assignable in part to the sponsored project.

The Circular further provides that if a cost benefits two or more projects or activities in proportions that can be determined without undue effort or cost, the cost should be allocated to the projects based on the proportional benefit. If a cost benefits two or more projects or activities in proportions that cannot be determined because of the interrelationship of the work involved, the cost may be allocated or transferred to benefited projects on any reasonable basis. It is important to note, however, that costs allocated to a sponsored project may not be shifted to another sponsored project for such purposes as eliminating a cost overrun or utilizing unexpended funds. For a discussion of Cost Transfers, see Financial Management of a Sponsored Project: Monitoring a Sponsored Project – Cost Transfers (Chapter VIII, Section F(3)). When a cost is allocated among projects or
activities, it is important that the department be prepared to explain the basis on which the cost was so allocated, should the need to do so arise.

**Reasonableness**

A cost is considered reasonable if the goods or services acquired, and the amount involved, reflect actions that a prudent person would take under the circumstances prevailing when the decision to incur the cost was made. Factors to consider in determining reasonableness are as follows:

- Is the cost necessary for the performance of the project?
- What laws and regulations should be considered, and what are the terms and conditions of the award?
- Did all individuals act with prudence and satisfy their responsibilities to both the University and the sponsor?
- Are the actions consistent with University policies and practices?

**Consistency**

All costs must be afforded consistent accounting treatment. This means that a particular type of cost must always be treated similarly – as either a direct or F&A cost – under like circumstances. While this requirement is generally overseen by the Office of the Controller, the most common impact of this requirement on PI and support staff relates to the issue of charging administrative salaries and supplies directly to sponsored projects. Except for very limited instances, these costs may not be directly charged to federally sponsored projects. For guidance on charging administrative salaries and/or costs, please refer to the University Policy:

**Charging Office Supplies and Other Administrative Expenses (other than Salaries) to Federal Awards**

In addition to costs being consistently treated as either direct or F&A costs, there is a further requirement that the practices used in estimating costs in a proposal must be consistent with the University’s normal practices for charging costs to sponsored projects, and for reporting those expenses on financial reports submitted to project sponsors.

**2. Major Categories of Direct Costs**

**Personnel**

**General Requirements**

The PI should include in the proposal those personnel who fulfill the needs of the project with respect to experience and expertise, University title at the time of the award and
available effort. Salary requests should be based on the level of payment for current or anticipated appointments and may not exceed the rate the University is then paying for such appointments. This figure should be escalated appropriately to allow for future salary increases. A working assumption is that officers’ salaries increase 3% on an annual basis as of July 1 of each year and that union wages increase 4% on an annual basis as of October 1 of each year.

The PI or the individual developing the budget should consult with his/her DA to determine the appropriate salary base for each individual.

For more information on charging compensation to sponsored projects, please review the Policy on Charging Compensation to Sponsored Projects for Officers of Instruction.

**Salary and Effort for Faculty and Project Staff**

Personnel costs charged to sponsored projects must be based upon the “Institutional Base Salary.” Institutional Base Salary (IBS) is defined as the annual compensation paid by Columbia for an individual’s appointment, whether that individual’s time is spent on research, instruction, administration or other activities. Absent special circumstances, a researcher’s salary charged to a sponsored project must not exceed the proportionate share of the IBS for the period during which the investigator worked on the project. An individual’s IBS may not be increased solely because the individual has received sponsored project funding.

One of the key concepts in budgeting for personnel costs in sponsored projects is the effort devoted to the project by faculty and project staff. The applicable rule for federally sponsored projects is that salary charged to a project must be reasonable in relation to the effort expended on that project. The University policy is to maintain the same standard for all sponsored projects, whether or not federally funded. Sponsors generally consider estimates of effort in proposal budgets to be commitments if such proposals are subsequently awarded. The effort should be listed in accordance with the sponsor’s policy (percent of effort or person-months).

**Total University Effort**

*Effort* is the proportion of time spent on any activity, expressed as a percentage of an individual’s Total University Effort. **Total University Effort** is not based on a set number of hours or standard work week. Rather, it depends on the specific circumstances of each individual, and the activities required to fulfill his or her obligations to the University. Accordingly, for an individual who spends 60 hours a week on University activities, those 60 hours represent 100% of that individual’s Total University Effort.

Total University Effort includes not only work on sponsored projects, but also non-sponsored activities such as teaching, clinical activities, service on University committees (although the portion of proposal preparation time that relates to summarizing research results may be treated as sponsored effort). Total University Effort does not include
consulting or participation in peer review study sections, professional association activities, journal peer review and similar activities, unless the University pays for travel and expenses associated with those activities. For more information about what is and is not included in Total University Effort, see http://www.effortreporting.columbia.edu/reference_guides.html.

When proposing some proportion of effort to be devoted to a particular sponsored project, individuals must ensure that they have sufficient time available to fulfill the proposed effort commitment.

Some federal contract proposals request that professional time be converted to an hourly rate. For a professional, 100% effort equates to the number of hours per week the individual customarily works to complete his or her Total University Effort. If you are required to provide an hourly rate for a professional, calculate it based upon this number of hours per week.

**Minimum Effort Requirements**

The University’s Effort Reporting Policy requires that key personnel participating in a sponsored project commit to some level of effort on the project greater than zero. SPA can advise as to whether an exception is available for any particular project. Providing effort “as needed” is not acceptable.

Some sponsors require certain minimum effort commitments from PIs.

**Maximum Effort Commitment**

The effort proposed for each project must be consistent with the level of effort expected to be devoted to that project. Any individual’s Total University Effort may not exceed 100%.

The University has adopted special procedures for Faculty members whose sponsored project effort exceeds 90%:

- Any Officer of Instruction or Officer of Research (exclusive of Postdoctoral Fellows) (Faculty) 100% of whose effort is devoted to sponsored projects is required to provide written confirmation to his/her chair or dean that he/she has no non-sponsored responsibilities.

- A chair or dean must acknowledge awareness of and concurrence with the reasonableness of the effort certification of any Officer of Instruction or PI who is an Officer of Research who certifies that 90% or more of his/her effort was devoted to sponsored projects.

For more information, see http://www.effortreporting.columbia.edu/reference_guides.html.

**Effort Without Salary**

*Updated June 2014*
It is the University’s policy that investigators should typically request full compensation for the effort of all personnel listed in the proposal. Hence, if an individual is listed at 20% effort, 20% of the institutionally guaranteed salary must be requested in the proposal. The policy also requires the same consistency when charging compensation to grants or contracts awarded to the University.

However, certain exceptions to this policy are allowed:

- The funding agency's specific written policy requires cost sharing (e.g., NIH's salary cap (see also Salary Caps below));
- The individual is receiving a fellowship or career award (e.g., a NIH Research Career Development Award) that precludes requesting salary on other federal applications; and
- The individual is participating in a sponsored project in which his/her effort is duplicative of effort being funded by another sponsored project - for example, if two awards are supporting sections of the same project.

Program Directors and mentors are expected to contribute effort towards meeting the requirements of training grants. However, support for such effort is rarely allowable.

- If there is no specific measurable effort commitment in the application, NIH will allow for these individuals to be named as “Other Significant Contributors (OSC)” which would allow for the person to be listed in the application, but presented as ‘zero effort’ or ‘zero person months’ or ‘as needed’.
- Typically, NIH T or F awards do not provide funding to cover the effort of a trainee's mentor or project director. In some cases, the time devoted to these activities may be insignificant, and therefore can be ignored. If not, such effort is typically treated as a non-sponsored activity (and therefore cannot be charged to your research or other grant). In these cases, mentoring effort is usually seen as concurrent with other University teaching and administrative effort and is reported accordingly.
- On the other hand, if the mentor is committed to provide effort in the grant proposal, the effort should be treated as committed cost sharing.

For information about cost sharing see Cost Sharing (Section D) below.

For more information on cost sharing and effort reporting, see Financial Management of a Sponsored Project: Monitoring a Sponsored Project – Cost Sharing (Chapter VIII, Section F(4) and Financial Management of a Sponsored Project: Monitoring a Sponsored Project – Effort Reporting (Chapter VIII, Section F(6)). See also http://www.effortreporting.columbia.edu/downloads/Cost_Sharing-08_29_07_NS.pdf

**Academic Year and Summer Salary**

*Updated June 2014*
On the Morningside campus and at Lamont, Officers of Instruction are paid a salary based on a nine-month academic year (or for the School of Business, an eight-month academic year).

Subject to sponsor and University policy, Officers of Instruction may request reimbursement from sponsored projects for academic year released time, for summer salary (if the Officer’s appointment is for nine months), and/or (rarely) for academic year additional compensation. Released time is available time for which the Officer is formally excused from instructional duties (by his/her chair or dean) and, therefore, may be available for research.

Summer salary may be available to Faculty with nine-month appointments for work on sponsored projects during the summer months. Faculty who receive summer salary must expend the effort associated with the summer salary during the summer period. Effort expended during the academic year does not satisfy a commitment related to the receipt of summer salary. Although Faculty may, in addition, also work on the project during the year, Faculty who receive summer salary must provide a commensurate level of effort during the summer.

The maximum amount of summer salary permissible is three-ninths of the Faculty’s regular academic year salary. In other words, in any year, the Faculty member may receive no more than three months of summer salary. Each month of summer salary represents one month of full-time effort in the summer.

As a general policy, NSF limits salary compensation for senior project personnel to no more than two months of their regular salary in any one year. This limit includes salary compensation received from all NSF-funded grants. This effort must be documented in accordance with the applicable cost principles. If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal budget, justified in the budget justification and specifically approved by NSF in the award.

If a Faculty member has academic, administrative or non-research related responsibilities (as a journal editor, research grant reviewer etc.), and/or intends to take more than minimal vacation time away during the summer period or attend non-project related professional meetings, he/she likely will be precluded from devoting 100% effort to sponsored projects in the summer and thus from requesting three months full summer salary from external awards.

Officers of Instruction who receive sponsored summer salary and also released time for work on sponsored projects during the academic term may, with departmental approval, receive non-sponsored additional compensation during the summer for non-sponsored University activities.

For more information, see
Additional Compensation

All requests for additional compensation paid from an externally sponsored award require the prior authorization of the sponsor (coordinated by SPA or the CTO), the appropriate chair, director, dean or vice president and for Faculty at CUMC, the Executive Vice President for Health and Biomedical Sciences or in other cases, the Provost.

Under certain rare circumstances, Faculty may submit a request to a sponsor for extra compensation – that is, compensation in addition to academic year base salary. Such compensation may not ordinarily be charged for intra-University consulting or collaboration, which is understood to be part of the Faculty member’s University obligations. The principle also applies to a Faculty member who functions as a consultant or otherwise contributes to another University sponsored agreement.

However, in rare cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the consultant is of an unusual nature and is in addition to his or her regular University activities, it may be possible to request extra compensation.

For more information on charging compensation to sponsored projects, please review the University Policy on Charging Compensation to Sponsored Projects for Officers of Instruction.

CUMC Salary Issues

For clinical Faculty, the effort and commensurate salary reimbursement is calculated on the basis of the Faculty member’s base salary plus any guaranteed additional compensation (often classified as “A1” compensation) paid by the University. The amount of salary that can be compensated from sponsored project accounts may not exceed an individual's base salary.

The University recently implemented a new policy governing the proposing of effort for those investigators who possess an academic appointment at the University and an appointment at RFMH/NYSPI (Joint Appointees). Joint Appointees previously proposed their effort on Columbia projects based on a percentage of their total professional effort across the University and RFMH/NYSPI, on an integrated basis. The University has transitioned to a new model based upon the method utilized by those with joint Veterans Affairs/academic appointments.* Under the new model, Joint Appointees propose their effort on Columbia projects based on a percentage of their University effort only. However, for informational purposes, the budget justification will also indicate what the effort would be if it were calculated based on total professional effort across both institutions.

* As described in the NIH Guide for Grants and Contract, vol. 18, no. 27, August 11, 1989
Therefore, the following statement must be included in budget justification:

“Dr. Xxx (___ CM TPE, ___ CM Columbia University Effort).

The effort listed by Dr. Xxx in this submission is based upon her effort at Columbia University. If the effort were calculated based on Dr. Xxx’s total professional effort at Columbia and RFMH/NYSPI, it would be yyy calendar months effort.

**Salary Caps**

Some agencies impose a cap on the maximum annualized salary allowed in aggregate on grants. For example, if the annual NIH salary cap is $181,500 base salary per annum and an investigator makes $200,000 per year and is requesting 10% effort on a grant from NIH, the investigator may request only $18,150 in salary support (i.e., 10% of the salary cap). The investigator’s department is responsible for funding the remainder of the investigator’s salary.

To view the latest salary cap information, you can go to Columbia’s Institutional Information Sheet. The NIH salary cap, which charges annually, can also be found at http://grants.nih.gov/grants/policy/salcap_summary.htm.

**Administrative/Clerical Salaries**

Typically, administrative or clerical salaries are not an allowable charge to a federal grant. See Columbia’s Policy on Charging Administration and Clerical Salaries to Federal Grants and Contracts. Except for unusual circumstances, the government views administrative and clerical charges as covered by the institution’s indirect cost recovery, discussed in greater detail in *Facilities and Administrative (F&A) Costs (Section C)* below. Therefore, charges for salaries of secretaries or administrative assistants should not typically be included in proposals for federally sponsored projects. Administrative/clerical salaries may often be charged to foundation and other non-governmental grants.

However, direct charging of these costs may be appropriate where a major project or activity explicitly budgets for administrative or clerical services. The following examples are illustrative of circumstances where direct charging may be appropriate:

- Large, complex programs (e.g., Program Projects, Center Grants) and other grants and contracts that entail assembling and managing teams of investigators from a number of institutions.
- Projects that involve extensive data accumulation, analysis and entry, surveying, tabulation, cataloging, searching literature and reporting, such as epidemiological studies, clinical trials and retrospective clinical record studies;
- Projects that require making travel and meeting arrangements for large numbers of participants, such as conferences and seminars;
• Projects whose principal focus is the preparation and production of manuals and large reports, books and manuscripts;

• Projects that are geographically inaccessible to normal departmental administrative services; and

• Individual projects requiring project-specific database management, individualized graphics or manuscript preparation; human or animal protocol and/or other project-specific regulatory protocols; and multiple project-related investigator coordination and communications. An example of this would be a project manager who is directly involved in the coordination and allocation of resources across several specific sponsored projects.

These examples are not exhaustive nor are they intended to imply that direct charging would always be appropriate for the situations described above. Where direct charges for administrative and clerical salaries are made, care must be exercised to fully justify the charges in the proposal. Care also must be exercised to assure that costs incurred for the same purpose in like circumstances are consistently treated.

Part-time, Casual and Work Study

University employees who are paid by a sponsored project must be listed as "personnel" on the related proposal. University employees who will not be paid as part of a project may be listed as unpaid personnel or unpaid collaborators, or the extent of their participation may be indicated by submitting letters of collaboration.

Casual employees may be paid by sponsored projects so long as the amount of effort or time being requested does not exceed that allowed by Columbia Human Resources policies. If you have any questions, please contact Human Resources.

Federal funds may be used to pay all or part of the University share of the salary of a student in the College Work-Study Program.

Postdocs

Postdocs are supported by a wide variety of grants and fellowships. Often, the source of funding for a postdoc determines whether the individual is considered to be an employee of the University or a stipend recipient of the sponsor. Unless the terms of an award specifically require otherwise (e.g., NIH Training Grants or individual fellowships awards), stipends (i.e., compensation for which no service is required) may not be charged to a sponsored project.

Sometimes postdocs may be invited to serve as Teaching Assistants or to work part-time as Research Assistants on other projects. The policies of the University and of many federal agencies permit postdocs to engage in part-time University employment coincidental with their training program provided that this employment does not interfere with, detract from or prolong their obligations as postdocs. Indeed, several sponsors encourage giving postdocs...
teaching experience as part of their training. Compensation for assistance on a research project separate from the fellowship obligations of the postdoc, if allowed by the sponsor of the full-time fellowship, may be charged to that distinct project.

For more information on postdoc compensation and benefits, see http://www.columbia.edu/cu/postdocs/ or call OPA at (212) 854-0462.

**Graduate Research Assistants (GRAs)**

Graduate students frequently act as Research Assistants and receive compensation in the form of salary or tuition remission. Unlike fellowships and other stipend payments, GRA salaries are an appropriate charge to a research project. These salaries are not subject to the fringe benefit charge that is normally assessed on salaries.

Sponsors vary in their allowability of compensation for graduate students. Typical expenses allowed on a research proposal for a graduate student are salary, tuition remission and other training expenses. It is important to read the sponsor’s guidelines for its rules on graduate student compensation. For further information, see Tuition Remission below.

For example, NIH limits the compensation for graduate students. Current NRSA levels are posted at http://grants.nih.gov/training/nrsa.htm).

For more information regarding this NIH policy, please refer to: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-017.html

When requesting graduate student compensation on a budget, the specific school where the student is matriculating should be consulted for current tuition rates.

Graduate student and postdoctoral fellows have unique budgetary considerations on NIH NRSA training grants. See Special Budget Guidelines – NIH Training Grants (Section F(2)) below for specific instructions.

**Other Professionals**

Technicians, programmers and laboratory assistants may be paid for their work on sponsored projects, depending upon the sponsor’s guidelines.

**Severance Costs**

Severance costs incurred due to the termination of a sponsored project are generally a permissible charge. However they should be discussed with your SPA or CTO Project Officer in advance of their incurrence in order to insure that any necessary agency approval is obtained.

**Fringe Benefits**
Fringe benefit charges are assessed to cover costs such as retirement benefits, health insurance, FICA and Medicare taxes and unemployment compensation. Fringe benefits (referred to in some contracts as "labor overhead") are calculated by multiplying the salary requested for each individual by the fringe benefit rate. Fringe benefit rates are set each year, and the rates charged are automatically updated, so that no action on the part of the PI or his/her staff is required.

The rate is a composite rate (averaged for all employees). Thus any given employee may not be entitled to all of the specific fringe benefits that make up that rate. SPA or the CTO should be contacted for information concerning the appropriate fringe benefit rates to use in each year of the proposal. The full fringe benefit rate should be included as part of the budget request for all employees, including "casual" employees who are not Columbia, Barnard or Teachers College students. Casual employees who are Columbia, Barnard or Teachers College students are charged at a reduced fringe benefit rate. Salaries for GRAs are not charged for benefits on grants. Fellowship applications should include a charge for fringe benefits if it is an allowable cost and does not decrease the fellow's stipend.

Government grants and contracts are assessed fringe benefit charges based on a rate that is formally established with the federal government. This rate is also applied to awards received from non-government agencies that represent a pass-through of government funds (i.e., a subcontract made where the prime award is from a governmental agency). Federal rules prohibit the inclusion of certain fringe benefit costs such as dependent tuition and accordingly the fringe benefit rate applied to sponsored projects awarded by governmental agencies excludes those costs.

Sponsored projects awarded by non-governmental agencies are subject to a higher rate, which includes both the costs incorporated in the federally negotiated rate as well as other benefit costs such as dependent tuition that are excluded from the federal rate.

For current fringe rates, please refer to the Institutional Information Sheet.

**Non-personnel Costs/Other Than Personnel Costs (OTPS)**

OTPS costs are usually specified in a budget in the following categories: equipment, supplies, travel, consultant costs, publication costs, tuition remission and other direct costs. Training costs have additional categories such as trainee stipends, tuition and fees, and trainee travel.

Note that the University's procurement policies, including requirements for competitive bids, must be followed whenever they are applicable in acquiring goods and services. These policies can be found in the in the Administrative Policy Library at: http://policylibrary.columbia.edu/

In addition to disbursements made to outside vendors, sponsored projects may be charged by certain internal providers of services. These centers are "licensed" by the University to
charge users and the costs charged and the manner in which their unit costs are determined are covered by the University's Policy on Service Centers and Recharge Centers. 

Sponsored projects may not be charged for internal operations other than those licensed as centers without the approval of SPF.

**Permanent Equipment**

Equipment is defined as an item having a unit value of at least $5,000 as well as a useful life of two or more years. It is important to adhere to this definition when preparing sponsored project budgets. Many agencies, including all federal government agencies, do not allow F&A costs to be charged on equipment. Items costing between $500 and $4,999 are considered "supplies" or “minor equipment” and F&A costs will be charged against them for budget purposes.

Computers, including laptops, are ordinarily considered general office equipment (i.e., their use is not exclusively for the project being considered for funding). Therefore, if funds for computers are requested in a budget, a justification explaining the use of the equipment vis-à-vis the specific research to be carried out must be included. The justification must also assure the agency that the computer equipment will be used exclusively for the research. Federal sponsors sometimes require further justification, in the form of a letter requesting an exception, for computer and software purchases. Because these exceptions are rarely granted, you should get specific written approval from your grants management official or contracting officer at the federal agency before purchasing computers with federal funds.

Equipment is further categorized as special purpose or general purpose. Special purpose equipment is usually considered to be items that only can be used for research. General purpose equipment has utility that is not limited to research. The distinctions between these two categories, which varies from agency to agency, becomes important when discussing rebudgeting authorizations.

It is important that each item of equipment being requested is clearly identified and priced (including shipping and installation) in the proposal. (If possible, specific manufacturers and model numbers should be used.)

Care must be taken to include all of the cost items associated with the acquisition of equipment, such as shipping and installation costs. These latter costs may be substantial on larger, more specialized equipment items, where special power, insulation, shielding, water and/or cooling requirements must be met. Contact Facilities Management to have these costs assessed.

SPA or CTO approval is required if rebudgeting from other categories is involved in the purchasing of capital equipment. This is necessary to determine if the rebudgeting has significant programmatic impact, if prior approval from the sponsor is required, and to reallocate F&A costs.
In addition, CUMC requires approval from SPA or the CTO on requisitions on federally sponsored projects totaling more than $10,000 and for all non-governmental sponsored project capital equipment requisitions prior to submitting the requisition to Procurement.

For more information, please refer to the University's Policy on Acquisition of Moveable Capital Equipment.

**Supplies**

Materials and supplies include freestanding equipment with a value up to $4,999 and consumable items such as chemicals, laboratory ware and small component parts (if not part of an equipment fabrication). For non-federal grants where indirect costs are not reimbursed at the full federal rate, office supplies clearly allocable to the project may be included as materials and supplies. Office supplies are considered to be part of the F&A costs of conducting a project, so they should not be charged as a direct cost on a federal award. There are, however, two major exceptions to this policy:

- If the purchase of these and similar products relate specifically to the technical substance of the project; or
- If the nature of the work performed under a particular project requires an unusually high level of such costs.

For more information on these restrictions, please refer to the University's Policy on Charging Office Supplies and Other Administrative Expenses (Other Than Salaries) to Federal Awards

**Travel**

The costs of travel related to the sponsored project, for the PI as well as project staff, are allowable expenses. Since travel is often one of the first budget line items to be cut by the sponsor, it is important to be as specific as possible about what travel is planned and why it will benefit the project. Domestic and foreign travel should be budgeted as separate line items.

Domestic travel includes all travel within and between any of the 50 states of the United States and its possessions and territories. Travel between the United States and Canada and within Canada is also considered domestic travel. Foreign travel is any travel not defined as domestic travel. On government sponsored projects, U.S. carriers must be used to the maximum extent possible when commercial air transportation is the means of travel between the United States and a foreign country or between foreign countries, as required by the Fly America Act. Convenience or expense is not considered an appropriate reason for not using a U.S. carrier. Funds can be requested for travel to scientific meetings, to collaborating laboratories, and for consultation with the funding agency or with colleagues concerning project research. The federal government generally limits airfare reimbursement to the customary standard commercial airfare (i.e., coach or equivalent).
The basic policy governing travel expense reimbursement at Columbia is that an individual traveling on University business should be reimbursed for the actual cost of such travel. Unless specifically stated otherwise by the agency, University policy prevails. (For example, some government contracts only allow reimbursement at government rates.)

It is suggested that each trip requested in the budget should be specifically identified as to location and length of stay. All travel expenses (transportation, hotels, registration fees, etc.) should be itemized based on expected costs. Trips approved as part of the awarded budget normally do not require further approval from the sponsor or the University. For sponsors that require additional approvals (e.g., for foreign travel), please contact your SPA Project Officer.

For further information, see the University’s Travel Expense Policy and the Fly America Act.

Consultants

It is University policy to contract for consultant services when factors such as timing, costs, qualifications or the nature of the service to be rendered make it beneficial for such services to be acquired outside of the University than performed by employees. A consultant is defined as a firm or individual with whom the University enters into a Service Provider Agreement for a specialized type of service. The Agreement contains a scope of work that clearly defines the goods or services being procured and addresses the needs of the user. This can be done either through performance specifications or through a description of the tasks to be performed. Honoraria (for example, for Advisory Board participation) and human subject reimbursement are exempt and not considered consultant costs.

The circumstances under which services are to be rendered determine an individual's classification as either an independent contractor or employee. However, there is no precise definition for either of these terms in the federal tax code or IRS guidelines. A set of questions has been developed and is available from Procurement to help determine whether an individual should be considered an employee or consultant. When it is not clear into which category an individual falls, assistance will be provided by Procurement. See http://www.columbia.edu/cu/purchasing.

It is important to determine whether an individual is to be considered an employee or a consultant prior to listing him/her on a proposal. Compensation for employees must include fringe benefits. Consultants, not being employees of the University, do not receive fringe benefits from the institution. In order to prepare a budget correctly, the contract cost of the consultant should be included.

The University does not have a standard consultant or honoraria rate. An individual may be paid according to the customary scale for a particular field and level of expertise. In some cases, notably the NSF, consultants may not be paid more than the daily rate for a GS-18 federal employee. If an individual is paid an honoraria and is exempt from the consultant
policy, the budget should contain, if appropriate, the itemized daily fee, per diem allowance and travel expenses. The number of trips and the length of stay should also be discussed.

All consulting arrangements must conform to established University requirements, which may be seen at:

Additional guidance on the use of consultants can be found at:
http://finance.columbia.edu/procurement/lifecycle/purchasing/consultants

**Tuition Remission**

In addition to salary, GRAs are also provided with tuition remission, which is an allowable charge to federal and most other research grants as a direct cost. Unless further limited by specific agency policy, the University has set the maximum tuition chargeable to sponsored projects at 50% of the University’s full resident tuition rate for graduate students as published for the Graduate School of Arts and Sciences. The current tuition remission rate is available from SPA. See http://spa.columbia.edu/proposals/institutional-information#GRA.info.

Tuition charges are assigned to research grants and other funding sources in proportion to the GRA’s salary allocation during the nine-month academic year. For example, if during the period September through May, a GRA’s salary is funded 25% by grant A and 75% by grant B, the GRA’s tuition remission is assigned to those funding sources in the same percentage as the GRA’s salary.

With respect to GRAs funded in whole or in part by NIH, that agency has established a funding cap that limits the amount it awards for a combination of GRA salary and tuition remission. In the past, the cap has increased from year to year, and the cap in effect at the time the proposal is submitted applies to the entire life of the competitive segment of the project (i.e., there is no escalation factor in the proposal budget for increases in this cost category over the life of the competitive segment). Similarly, the tuition amounts charged to NIH grants are based on the cap in effect at the time the award is made.

While most agencies permit tuition remission charges, some agencies or particular awards may have restrictions that limit or preclude charging their grants for these costs. For example, the American Cancer Society does not permit charging any tuition remission to its awards.

**Subawards**

Proposals may include work to be done at one or more other institutions. In these cases, the other participating institutions will be subrecipients under the University’s (prime) award. If the Columbia PI plans to apportion the work in this way, appropriate documentation is needed at the time the proposal is submitted to confirm the proposed subrecipient’s
eligibility and willingness to participate. When a subaward has been prepared as part of a larger proposal, the total yearly cost for the subaward is included as a line item in the Columbia budget. The subrecipient may include his/her institution’s F&A costs in the subaward, but the University does not currently assess any of its own F&A costs on the amount of the subaward in excess of the first $25,000 during the competing project period.

Please note that the administration of some subawards may entail additional costs that must be included as part of Columbia’s direct cost project budget. Such costs could include audit-related expenses, especially if subawards are proposed to institutions that are deemed to have a higher than normal risk associated with them as a result of the University’s subaward risk assessment process. Allowability of such costs should be discussed with your SPA or CTO Project Officer.

For additional information, see Review and Submission of a Sponsored Project Proposal: Additional Approvals and Certifications – Subawards (Chapter VI, Section E(10)) and the University’s Policy on Sponsored Project Subawards.

Participant Support Costs

Participant support costs are direct costs, such as stipends or subsistence allowances, travel allowances and registration fees paid to (or on behalf of) participants or trainees (but not employees) in connection with meetings, conferences, symposia and workshops, where there is a category for participant support costs in the award budget. These costs should not be confused with general travel costs that may be incurred by PIs and others as those costs relate to individual research and other projects.

Participant support costs are generally awarded on specific projects sponsored by NSF and DOE and are subject to special sponsor regulations. For example, NSF does not permit participant support funds to be used by grantees for other categories of expense without the specific prior written approval of the cognizant NSF project office. Therefore, participant support costs must be accounted for separately. In addition, participant support allowances may not be paid to trainees who are receiving direct or indirect compensation from other federal sources. F&A charges are generally not applied to participant support costs.

When a sponsored project includes participant support costs, the PI and his/her administrative support personnel are required to be familiar with the specific requirements as set forth by the sponsor, and to insure that those requirements are complied with.

For further information, see the University’s Participant Support Costs Policy.

Patient Care Costs

See Special Budget Guidelines – Clinical Research (Section F(4)) below for a reference to a chapter in the Clinical Research Handbook that describes research and standard of care costs relating to patients.
Other Direct Costs

This category is used to delineate costs not specified in any other category. Examples would be animal care costs, specialized tests, central computer charges, shop charges, core facility charges, publication costs, copying and telephone charges (if not for general office activity), maintenance contracts, service agreements, payments to volunteers or patients, patient travel, student tuition charges, student health and computer fees, seminar costs and typing services. In certain circumstances, space rental, the rental of equipment and the purchase of insurance are also allowable. Costs associated with radioactive waste, chemical and biohazardous materials disposal are currently not treated as direct costs. These costs are recovered as part of the University’s F&A costs.

In determining other direct costs, it is best to itemize each cost. However, the degree of detail is set by the sponsor requirements and individual investigator. Since many of these costs are incurred in the general operation of a laboratory, it should be kept in mind that only that proportion of the total cost that is related to the specific proposal should be included.

C. Facilities and Administration (F&A) Costs

Facilities and administrative (F&A) costs (which are commonly referred to at the University as IC or ICR) are real costs that are associated with carrying out sponsored projects, but are difficult to quantify with respect to any given project. For example, electricity, heat, maintenance, building depreciation, administrative expenses and library use are all F&A costs. Funds received as F&A costs are reimbursement for funds expended for central and departmental administration, buildings and grounds and library costs.

F&A costs are recovered on sponsored project proposals by multiplying the appropriate direct cost base by the sponsor’s F&A cost rate and including that figure in the total cost of the budget. Depending upon the sponsor, the direct cost base may be either the simple total of all direct costs in the budget (Total Direct Costs or TDC), or the “modified” total direct costs (MTDC), i.e., TDC minus the total of certain items in the budget. Federal sponsors use MTDC. Some federal agencies, such as DOD, have specific F&A cost restrictions. For more information, contact your SPA or CTO Project Officer.

On budgets for federal sponsors, the following line items are subtracted from the direct cost base to arrive at MTDC:

- Equipment
- Capital expenditures
- Charges for patient care
- Subcontract costs in excess of the first $25,000 during the competing project period
- Tuition remission
- Rental costs of off-site facilities
- Scholarships and fellowships
• Participant costs

In addition, MTDC on training grants and fellowships exclude tuition, fees and health insurance. Non-federal sponsors may require F&A costs to be computed on a different base.

The University has a policy of recovering full F&A costs on all sponsored projects where specific written agency policy does not preclude it. The University will agree to an agency's F&A cost policy that is less than the federal negotiated rate provided that it is part of the agency’s written policy and is applied uniformly to all institutions funded in that particular program area.

Federal F&A cost rates are negotiated with the federal government and vary by campus and whether research or other sponsored projects are conducted on or off campus. The University’s Rate Agreement with the government provides that if a project is partially on-campus and partially off-campus, the F&A rate for that project is based upon the location(s) where 50% or more of the program or budget is located. Exceptions to this rule would only occur in rare circumstances where there are very significant costs incurred both on and off campus. Examples of the latter include the International Center for AIDS Care and Treatment Programs (ICAP) and the Multi-country Columbia Antiviral Program (MCAP) where a large component of the study is conducted on campus with a significant part also being in the field outside the United States. A complete list of rates is available at http://spa.columbia.edu/proposals/institutional-information.

For public service agreements and non-government sponsored clinical trials, the F&A rate can be less than the federal rate. If you have any questions concerning the appropriate rate to use for any government or non-government sponsored projects or are unsure how to correctly calculate these costs, contact your SPA or CTO Project Officer.

The University will grant a waiver of its F&A cost policy due to either extenuating circumstances or in cases of extreme hardship. To request a waiver, the investigator must first obtain the approval of his/her chair or director and, in the case of P&S investigators, the Vice Dean for Administration at P&S. The investigator should provide his/her SPA or CTO Project Officer with an explanation of the reason for the waiver request, stating what rate reduction is being requested for what budget period and confirming the school/department/institute/center’s approval and, if applicable, contribution.

A special policy exists for sponsored projects being transferred from another institution whose F&A cost rate is lower than the University's. If the sponsor is unwilling to provide additional funds to compensate for the higher F&A rate during the first budget period or all remaining non-competitive period(s), the University will accept the lower rate until the next competing continuation or renewal phase of the project is awarded.

To locate the appropriate F&A rate for your proposal, please refer to the Institutional Information Sheet.
D. Cost Sharing

When the University bears a portion of the costs of a sponsored project (e.g., by purchasing equipment or supplies for the project from University resources, by committing faculty or staff effort to project at no cost to the sponsor or by waiving all or a portion of F&A costs), it is considered to be cost sharing. Cost sharing can be classified in the following ways:

- **Mandatory Cost Sharing**: Cost sharing that is required by the sponsor as a condition of the award. Such requirements are typically noted in the sponsor’s program announcement, request for proposals, etc.

- **Voluntary Cost Sharing**: Cost sharing that is not required by the sponsor, but is included in the proposal.

Any type of cost sharing that is included in a proposal is considered a commitment on the part of the University and must be honored should the proposal be awarded. Cost sharing has programmatic, administrative and financial consequences for the University and, as a general rule, is strongly discouraged unless it is required by the sponsor. Cost sharing commitments:

- are auditable, requiring that additional attention be paid to these expenses throughout the life of the award. For example, if cost sharing includes effort, the individual’s effort certification must document that the effort that was committed was in fact provided; and

- have an adverse effect on the University’s recovery of F&A costs as these costs are included with other direct charges in the research base (the denominator of the fraction used to calculate the University’s federal F&A rate).

As a result, beyond the actual funds committed, cost sharing both increases the administrative cost to the University for these awards and reduces the potential amount of F&A costs that can be recovered from other sponsored projects.

For proposals that require cost sharing, please note:

- Mandatory cost sharing requirements are often specified as a fraction of the total project costs. Should such an award be funded at less than the amount requested in the proposal budget, the cost sharing commitment should be reduced proportionately. Such reductions should be evaluated throughout the life of the project whenever the sponsor reduces the amount of the anticipated award.

- Should a sponsor require cost sharing and cap F&A costs at a rate below the full federal rate, the proposal should include the difference between maximum F&A costs allowed by the sponsor and the full federal rate in satisfying the cost sharing requirement.
• On any federal award including cost sharing, federal funds from a different source may not be used to meet the cost sharing requirement unless approved by the sponsor.

For more information, see the University’s Policy on Cost Sharing and Financial Management of a Sponsored Project: Monitoring a Sponsored Project – Cost Sharing (Chapter VIII, Section F(4)).

E. Budget Justification

The Budget Justification is the narrative in a proposal that provides additional detail on line items in the budget. Sections should be included for Personnel, Equipment, Travel and any other budget categories that may require explanation. If the budget includes costs of normally unallowable items, these must be justified, although a justification (or the award itself) does not, in and of itself, make the costs allowable without explicit sponsor approval. Equipment expenses also require careful delineation, since the sponsor approves individual line items in this category.

F. Special Budget Guidelines

1. NIH Modular Grants

To help streamline the proposal review and award process, NIH requires that proposals requesting $250,000 or less in direct costs per year be submitted as modular grants. Funds are requested in $25,000 increments, or modules, based on a locally-generated detailed budget that is not sent to the funding agency. Ordinarily the same number of modules should be requested in each year of the award period. Additional restrictions and guidelines are outlined at http://grants.nih.gov/grants/funding/modular/modular_features.htm. Key points include:

• The budget narrative must include all personnel by position, role and level of effort. This include consultants, personnel on any consortium/contractual arrangements and any “to be appointed” positions.

• Any variation in the number of modules requested must be explained in the budget justification. Equipment costs should not be explained unless they result in a variation in the number of modules being requested.

• The inclusion of a subaward does not preclude using the modular submission format. In such cases the proposal should include a statement of intent to establish a consortium between the participating institutions. The subawardee should provide the PI sufficiently detailed (non-modular) budget information so that the cost of the consortium agreement (which includes the subawardee’s associated F&A costs) can be estimated to the nearest $1,000.
Please note that SPA and the CTO require a detailed budget to be prepared for modular grants, even though a detailed budget is not required by NIH, in order to confirm that F&A cost calculations are correct.

For a full description of which grants are eligible for the modular format, with instructions on how to complete a modular application, please refer to: http://grants.nih.gov/grants/funding/modular/modular.htm

2. NIH Training Grants

NIH Institutional Training Grants have unique budget instructions and considerations. When preparing a training grant, you must consider the number of predoctoral students and postdocs, their level of experience (in relation to the dollar amount NIH sets forth for stipends), tuition and fees, travel and training related expenses. Applicants should pay special attention to the specific instructions for Institutional Training Grant Applications using the SF424 (R+R) Application.

For a full description of NIH Training Grants, with instructions, please refer to: http://grants.nih.gov/training/T_Table.htm.

3. Unsolicited NIH Grant Applications with Direct Costs Exceeding $500,000

For unsolicited (i.e., not responding to a specific RFA or other announcement) NIH grant applications requesting $500,000 or more in direct costs (excluding consortium and F&A costs) in any individual grant year, prior approval to submit the application from NIH is required to be included as part of the application submission. This approval must be obtained six weeks before submission of the application. Your SPA Project Officer can assist you with the details on how to request this approval. Additional information can be found in the NIH Grants Policy Statement http://grants.nih.gov/grants/policy/nihgps_2013/.

4. Clinical Research

Clinical research requires special budgetary considerations. A full discussion of budgeting for clinical research can be found in Preparing for a Study: Project Feasibility and Study Documents: Budgets (Chapter IV, Section E) in the Clinical Research Handbook.
VI. REVIEW AND SUBMISSION OF A SPONSORED PROJECT PROPOSAL

A. Introduction

Once a proposal is completed, it is required to be reviewed by the appropriate University administrative office to ensure that all of the sponsor’s requirements have been met and that the proposal complies with all governmental laws and regulations and University policies. In addition, the budget is thoroughly reviewed for accuracy, allowability and completeness.

For a description of which proposals are reviewed by SPA, the CTO or CTV, see Preparing a Sponsored Project Proposal: University Offices That Can Assist with Proposal Development and Submission (Chapter IV, Section E).

B. Review Process

1. Non-Industry Sponsored Research

Rascal PT

The review process for non-industry sponsored research studies is initiated by entering information about the research proposal into Rascal PT. To enter such information:

- Go to the Rascal website at www.rascal.columbia.edu
- Select “Grants and Contracts”
- Log in with your UNI and password
- Select “Create a Proposal”
- Complete, at a minimum, the following fields:
  - Primary responsible department number
  - Submitting to (which campus office)
  - Deadline date
  - Deadline type
  - Title
  - Abbreviated title
  - Answers to questions about involvement of Select Agents, Hazardous Materials, Recombinant DNA and Human Gene Transfer
  - PI’s Name (on Personnel Page)
  - Agency/Sponsor name (on Sponsor page)
- Obtain a Rascal “Proposal Tracking ID Number”

Receipt of a Rascal Proposal Tracking ID Number means that the proposal has been registered in Rascal.
Note that a proposal will not be reviewed by SPA or the CTO unless the proposal has been registered in Rascal.

Proposal and Budget Review

At least five business days prior to the sponsor’s submission deadline, the following documents should be submitted to your Project Officer in SPA or the CTO in final form:

- Grant application, proposal or contract.
- Budget and budget justification.
- FCOI disclosure forms. Annual, up-to-date FCOI disclosure forms must be completed in Rascal by all individuals who will conduct the proposed research, including the PI and each other person identified in the proposal. For more information on FCOIs, see Additional Approvals and Certifications – Financial Conflicts of Interest (FCOIs) (Section E(1)) below.
- Finalized Rascal PT Record which includes:
  - All of the fields required to register a proposal in Rascal (see Rascal PT above)
  - Subdepartment number (if none, use default of 000000)
  - Agency/Sponsor address
  - Line 1 Budget
  - Begin and end date of budget
  - Building and space information (building, floor, room)
  - Evidence that all approvals and certifications required prior to submission have been obtained.
- Subawards. If the proposal includes subawards, a statement of work, budget, budget justification, FCOI certifications and face sheet signed by each subrecipient’s institutional official. For more information on subawards, see Additional Approvals and Certifications - Subawards (Section E(10)) below.

Note that a proposal will not be submitted to a sponsor unless a fully completed Rascal PT Record has been entered and signed in Rascal.

2. Industry Sponsored Clinical Research


3. Industry Sponsored Non-Clinical Research
As with non-industry sponsored research and industry sponsored clinical research, the review process for industry sponsored non-clinical research is initiated by entering the research proposed into Rascal PT. See Review Process: Non-Industry Sponsored Research (Section B(1)) above.

Industry sponsors vary in their requirements for SRAs. In general, the SRA takes the place of a proposal and only in rare cases is a formal proposal required by the sponsor. SPA should be contacted as soon as an investigator thinks that he/she may receive funding from an industry sponsor. The following items are required by SPA in order to review, negotiate and sign an SRA:

- Budget
- Written research plan
- Description of who is working on the project with their roles and responsibilities
- Proposed agreement from the sponsor, if available (if the sponsor has not provided a form of agreement, SPA can provide a sample agreement from which to begin negotiations)
- Finalized Rascal PT Record (see Review Process: Non-Industry Sponsored Research (Section B(1)) above)

C. Deadlines for Non-Industry Sponsored Research

In order to ensure adequate time for review, notification of corrections that need to be made and institutional sign-offs, all proposals for non-industry sponsored research projects should be submitted to SPA or the CTO in final form with a finalized Rascal PT Record at least five business days prior to a sponsor’s designated deadline. To be in final form, a proposal must have the scientific and technical portions completed, the budget finalized and departmental approvals obtained. This deadline applies to all proposals, but it is particularly important for those proposals that are being submitted electronically.

Proposals will be processed in order of receipt. It is the responsibility of the PI to ensure that a proposal reaches the sponsor in time to meet the established deadline.

D. PI Certification and Departmental and School Approvals

PI certifications and departmental approvals are obtained through Rascal.

1. PI Certification

The University must secure and retain a written assurance from the PI prior to submitting any new or continuing application (whether or not competing), which is completed using Rascal. This assurance includes the certifications set forth in Annex C.
When multiple PIs are proposed in an application, this assurance must be obtained for all named PIs.

2. Departmental and School Approvals

In addition to SPA or CTV, the PI must obtain the approval of the relevant department chair, dean or other authorized official of the school before submitting any proposal to a sponsor. In addition, appropriate chair, dean or other authorized official approval from a department or school with whom you are collaborating must also be obtained and be evidenced in Rascal. Such review involves the following considerations:

- commitments of faculty and staff time and the possible effects on the teaching and other obligations of the personnel involved;
- salary arrangements (e.g., reimbursement of appropriate academic year salaries and provision for summer support);
- requirements for space and facilities;
- the budget, especially a verification that all costs, including F&A costs, are provided for, that all needs are realistically estimated and stated, that items included are not contrary to the policies of the University or the sponsor, and that the funds are available when a University cost sharing commitment is included in the application; and
- the identification of special conditions requiring further review, such as use of human subjects, animals, biohazards, radioactive materials, radioactive drugs or intellectual property concerns.

Approval by the chair, dean or other authorized official of the school constitutes an endorsement attesting to the academic purposes of the proposed research or other sponsored activity, its departmental compatibility, its appropriateness in the context of budget, the time available to the faculty member to carry out the project and the availability of space and research equipment and any cost sharing commitments.

E. Additional Approvals and Certifications

In addition to the approvals described above, investigators must obtain other approvals or make other certifications for their research to proceed. Some of these requirements apply to all research projects. Others apply only to particular types of research. These steps are described below and are summarized in a table in Additional Approvals and Certifications: Special Approval Summary Chart (Section E(13)) below that also provides links to websites where more detailed information can be obtained.

1. Financial Conflicts of Interest (FCOIs)

The PI and all personnel who conduct University research must disclose any potential FCOIs that may relate to the proposed research prior to a proposal being submitted to a
sponsor. As defined in the University's Policy on Financial Conflicts of Interest and Research, Conducting Research includes, but is not limited to, the design, performance and/or reporting of research. Disclosure forms must be completed in Rascal on an annual basis and must be updated throughout the year as appropriate. A complete annual disclosure form must be filed once per year; updates can be filed on "amendment" forms during the year. Unless current annual financial interest reports are on file in Rascal, new proposals for funding may not be submitted to a sponsor.

In addition, if the proposed project involves human subjects, an additional "protocol specific" financial interest report must be completed in Rascal and a proposal may not be approved by the IRB unless all financial interest reports have been completed in Rascal.

All disclosures concerning significant financial interests relating to research are reviewed by RCT, which refers potential research FCOI to the Committee on Financial Conflicts of Interest and Research for review. The Committee has two subcommittees, one for CUMC research and one for non-CUMC research. Cross-campus collaborative research conflicts may be reviewed by the full Committee. The Committee will determine whether a conflict exists and if so, whether it can be reduced, managed or eliminated. If the research involves human subjects, and the Committee finds that a FCOI exists, the protocol may not be approved by the IRB until the Committee has resolved how to reduce, manage or eliminate the FCOI.

Additional disclosure and training requirements apply to investigators involved in research funded by the U.S. Public Health Service (PHS). The current PHS regulation on FCOI (Responsibility of Applicants for Promoting Objectivity in Research for which Public Health Service Funding is Sought and Responsible Prospective Contractors) governs research sponsored by NIH, CDC, AHRQ and other PHS agencies. The regulation took effect on August 24, 2012, and applies to all investigators on new awards, new proposals, non-competing renewals and no cost extensions received or submitted on or after that date. The new regulation requires that PHS researchers complete training in Financial Conflicts of Interest and Research. See also Training: Mandatory Training: Financial Conflicts of Interest and Research for PHS Researchers (Chapter III, Section C(3)). For complete text of the regulation, visit http://grants.nih.gov/grants/policy/coi/fcoi_final_rule.pdf.

One additional requirement of the PHS regulation is that covered investigators must disclose all sponsored or reimbursed travel that relates to their institutional responsibilities. Such information may be disclosed in the annual disclosure form or by emailing TravelUpdate@columbia.edu. More information about travel disclosures is available at http://www.columbia.edu/cu/compliance/docs/conflict_interest/PHS_COI/PHS_Travel.html.

Additional information about PHS FCOI requirements is available at http://www.columbia.edu/cu/compliance/docs/conflict_interest/PHS_COI/index.html

Additional information about Columbia's Policy can be found at Policy on Financial Conflict of Interest and Research.
2. Effort Reporting

Each Faculty member who receives any of his/her salary from a sponsored project, or otherwise provides committed effort on a sponsored project, must (a) complete the effort reporting training described in Training: Mandatory Training – Effort Reporting (Chapter III, Section C(7)) and (b) monitor his/her effort at least quarterly, self-certify his/her effort annually and, if a PI, monitor quarterly and certify annually the effort of his/her researchers. All quarterly monitoring and annual certifications are done through ECRT, the University’s online effort reporting tool. For any proposal to be submitted to a sponsor, the PI of the project and each other self-certifier who is listed on the application must complete the training and the most recent annual certification. For additional information, see Financial Management of a Sponsored Project: Monitoring a Sponsored Project – Effort Reporting (Chapter VIII, Section F(6)).

3. Human Subjects

The term human subjects includes not only individuals who participate in research studies, but also other living persons from or about whom information is collected and whom the investigator can identify individually. Research involving the use of human subjects requires prospective review and approval by one of the five IRBs or the Administrative Review Committee at CUMC or the IRB at the Morningside campus.

Most sponsors allow proposals to be submitted with IRB review “pending”, but some will not make a funding decision until IRB approval is granted, and neither the sponsor nor the University will allow research involving human subjects to proceed without IRB approval or certification of exemption.

The Columbia IRB also acts as the Privacy Board under the Privacy Rule of HIPAA that governs the use of data involving protected health information in research studies. See the IRB Policy on Research and the HIPAA Privacy Rule and related procedures at http://www.cumc.columbia.edu/dept/irb/policies/index.html#institutional.

Training requirements for personnel conducting human subjects research are summarized in Training: Mandatory Training – Human Subjects (Chapter III, Section C(1)).

The IRB approval process and informed consent, as well as HIPAA, are discussed more fully in Preparing for a Study: IRB Approval (Chapter V) and Working with Study Subjects: Informed Consent (Chapter IX) in the Clinical Research Handbook.

4. Use of Animals

The responsible care and use of animals in research is a matter of considerable interest to the public, and is of the utmost importance to Columbia. The University’s animal facilities are managed by veterinarians who are Board certified specialists in animal care. The policies and procedures for animal care are reviewed regularly by internal committees, by state and federal regulators (the Office of Laboratory Animal Welfare and

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Chapter VI – Review and Submission of a Sponsored Project Proposal
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the U.S. Department of Agriculture) and by an independent outside accrediting agency. If a project requires the use of vertebrate animals, approval must be obtained from the IACUC. IACUC approval is given only when (a) the information to be gained from the research is important for medical purposes; (b) such information cannot be gained in any other way and (c) the research is performed humanely and in accord with all applicable laws and regulations. Most funding agencies will accept evidence that IACUC review is pending. However, research that involves animals may not proceed (and animals may not be ordered from a supplier) until the IACUC has approved the protocol.

Training requirements for personnel conducting animal research are summarized in Training: Mandatory Training – Research with Animals (Chapter III, Section C(2)).

For further information on IACUC review and approval of protocols, see Preparing for a Study: IACUC Approval (Chapter IV) in the Animal Research Handbook.

5. Environmental Health and Safety

Training

Columbia has a number of EH&S training courses that must be completed in order to work on research projects using hazardous materials. These training requirements are summarized in Training: Mandatory Training – Environmental Health and Safety (Chapter III, Section C(4)).

Biosafety

All research involving the use of hazardous biological materials in research, such as potentially infectious tissues or bodily samples and research involving recombinant RNA or gene therapy requires approval of the University's Institutional Biosafety Committee (IBC). NIH also provides oversight for Human Gene Transfer (HGT) activities. In addition to IBC approval, HGT activities also require IRB approval. See Preparing for a Study: Review and Finalization of Proposals and Contracts: Approval Process – Additional Approvals and Certifications (Chapter VI, Section D(2)) in the Clinical Research Handbook.

Controlled Substances

The use of controlled substances in research activities is regulated by both federal and state law. In addition, the University has adopted the Columbia University Policy for the Acquisition, Use and Disposal of Controlled Substances in Research (the Controlled Substance Policy), which covers in vitro and animal studies. A controlled substance is a drug or other substance, or immediate precursor, listed in any of the Schedules I-IV of the federal Controlled Substances Act (21 USC 801-971) or the New York State Controlled Substances Act (NY Public Health Law, Article 33).
The University does not hold an institutional license for the use of controlled substances in research. Instead, any person who uses controlled substances must (a) be licensed with the New York State Department of Health (DOH) and registered with the federal Drug Enforcement Administration (DEA) in the Department of Justice or (b) authorized under the license of licensed individual. Typically the PI is the individual who is licensed and he/she can authorize members of his/her research staff as needed.

All purchase requisitions for controlled substances must be processed through the University’s Procurement Department. Purchase orders for controlled substances must be accompanied by the purchaser’s DOH license, DEA registration and a copy of his/her Rascal training certificate evidencing completion of TC0502: Controlled Substance Use and Management in Research. See Training: Mandatory Training – Environmental Health and Safety (Chapter III, Section C(5)) for further information on this course.

Certificate of Environmental Compliance

A number of granting agencies require specific documentation of compliance with federal, state and local environmental and occupational health and safety regulations. EH&L will approve compliance statements (e.g., Certificates of Environmental Compliance) after confirming that a PI’s laboratory is operating in accordance with such regulations and University policies. See http://www.ehs.columbia.edu/grantsredux.html for additional information on submitting a Certificate of Environmental Compliance for approval.

6. Radiation Safety

All research involving the use of radioactive material (RAM) or sources of radiation (such as x rays, CT scans, etc.) must be approved by the RSO and, if the research involves human subjects at CUMC, NYU or NYSPH, the Human Use Subcommittee of the Joint Radiation Safety Committee or in certain cases, the Radioactive Drug Research Committee. Application forms for the non-human, non-animal use of RAM or radiation sources can be accessed at www.ehs.columbia.edu/RadiationFormsMC.html. Application forms for the use of radiation in animal studies and for the use of radiation in humans can be accessed in Rascal at https://www.rascal.columbia.edu/. A description of the application and the application review process can be found in Preparation of Applications (Chapter V) in the Research Radiation Safety Handbook.

Radiation safety training requirements are outlined in Training: Mandatory Training – Radiation Safety (Chapter III, Section C(6)). See also Preparing for a Study: Review and Finalization of Proposals and Contracts: Approval Process – Additional Approvals and Certifications (Chapter VI, Section D(2)) in the Clinical Research Handbook.

7. Human Embryos and Embryonic Stem Cells
There are limitations on the use of federal funds for research involving human embryos or human embryonic stem cells (hESC). Since 1996, the so-called Dickey Amendment has prohibited the use of federal funds for (a) the creation of a human embryo for research purposes or (b) research in which a human embryo is destroyed, discarded or knowingly subject to greater than minimal risk.

In 1991, President Bush restricted the use of federal funds for all research involving hESC other than hESC belonging to a small number of approved cell lines. This prohibition was somewhat relaxed by President Obama in Executive Order 13505 (March 9, 2009), which was implemented in 2009 through new NIH Guidelines for Human Stem Cell Research. Under these Guidelines, research involving hESC may be conducted with federal support if such cells are derived from cell lines that are listed on a NIH Registry or approved by the NIH pursuant to the Guidelines. Lines that are registered can only be obtained from discarded embryos that have been donated for research following strict disclosure requirements.

The following research may not be conducted with federal support, but may be conducted with non-federal funding:

- Research in which hESCs (even if derived from embryos donated in accordance with the Guidelines) or human induced pluripotent stem cells are introduced into non-human primate blastocysts
- Research involving the breeding of animals where the introduction of hESCs (even if derived from embryos donated in accordance with the Guidelines) or human induced pluripotent stem cells may contribute to the germ line
- Research involving the derivation of hESC from human embryos
- Research using hESCs derived from other sources, including somatic cell nuclear transfer, pathogenesis and/or IVF embryos created for research purposes.

In addition to any requirement for IRB review, the University requires that all proposals that involve the derivation or use of human embryos or hESC be approved by the University’s Human Embryo and Human Embryonic Stem Cell Research Committee (the Stem Cell Committee) prior to the commencement of such research. The Committee reviews both ethical and regulatory considerations and requires submission of an abstract describing the research.

For further information, see the University’s Policy on Research Involving Human Embryos and Human Embryonic Stem Cells.

8. International Research and Export Controls

The University supports and encourages international research and service and is committed to helping investigators address and manage the special requirements and risks involved in international projects. These projects are governed by the laws of both
the United States and the country in which the activities will take place, and may be regulated by a variety of U.S. and internationally-based government agencies, such as the Departments of State, Commerce and Treasury. Managing these requirements may add unexpected costs to the project and may take specialized knowledge.

To help researchers plan for risks and requirements that may be associated with international projects, the University has established International Research and Service Projects: Risk Management Procedures. In addition to enabling the project team and the University to identify and manage risks, the Procedures assist the University in developing databases and other resources for the University community, including a central repository of information relating to international projects.

International projects often involve additional costs, including the cost of retaining local counsel, fees associated with obtaining necessary permissions, filing local reports, and fulfilling other requirements. SPA, SPF and the Office of the General Counsel (OGC) may be able to help with anticipating and estimating such costs for budget preparation.

Below is a summary of some key laws and regulations that may apply to the conduct of international research or collaborations with non-U.S. researchers. Penalties for violation of these regulations are severe, and can include civil and criminal penalties for both the University and individuals. Additional information is available on the RCT website, http://www.columbia.edu/cu/compliance/docs/international_research/index.html.

**U.S. Sanctioned Countries and Specially Designated Nationals**

The Treasury Department’s Office of Foreign Asset Control (OFAC) administers and enforces economic sanctions imposed by the United States against foreign countries. These sanctions may require obtaining OFAC approval before conducting research or other activities in or involving the sanctioned country. Some sanctioned regimes are more restrictive than others, and apply to the whole country, while other regimes are more targeted against certain individuals or entities in a country. Currently, sanctioned countries include the following (most restrictive sanctions regimes are in bold):

- Balkans
- Belarus
- Burma
- Central African Republic
- Cote D’Ivoire (Ivory Coast)
- Cuba
- Democratic Republic of Congo
- Iran
- Iraq
- Lebanon
- Liberia (Former Liberian Regime of Charles Taylor)
- Libya
- North Korea
- Somalia
- Sudan (North)
- Sudan (South)
- Syria
- Ukraine
- Yemen
- Zimbabwe

The list of sanctioned countries is updated periodically and is available at [http://www.treasury.gov/offices/enforcement/ofac/programs/index.shtml](http://www.treasury.gov/offices/enforcement/ofac/programs/index.shtml). Any project involving activities in an OFAC-sanctioned country must be reviewed by the University’s International Research Committee.

OFAC can also designate persons and entities (including persons and entities in the United States) as Specially Designated Nationals or SDNs. OFAC designates persons and entities as SDNs for narcotics trafficking, weapons proliferation and other reasons. The University, its personnel and U.S. persons are prohibited from engaging in transactions with SDNs, and property of SDNs must be “blocked.”

The SDN list appears on OFAC’s website at [www.treasury.gov/offices/enforcement/ofac/sdn/](http://www.treasury.gov/offices/enforcement/ofac/sdn/) and is updated regularly. When entering into discussions with a proposed collaborator, it is critical to check the SDN list for the name of the person or entity with whom or which you are dealing. OGC and RCT can provide guidance on how to complete such checks.

**U.S. Export Controls on Transferring Technology, Commodities and Software**

The Departments of State and Commerce each administer its own export control regulations. Export control regulations determine the conditions under which certain technology, commodities and software can be transmitted overseas to individuals, including U.S. citizens, or to a foreign national on U.S. soil. The Department of Commerce regulations are entitled the Export Administration Regulations (EAR); the Department of State regulations are entitled the International Traffic in Arms Regulations (ITAR). The ITAR apply to transfers of military or defense related commodities, software and technology, while the EAR apply to transfers of commercial or “dual use” commodities, software and technology.

Under the EAR and/or the ITAR, if research involves specified technologies, the University may be required to obtain prior federal approval before allowing foreign nationals to participate in the research, partnering with a foreign entity or sharing research results in any manner (including by publication or presentation at conferences) with persons who are not U.S. citizens or legal permanent residents. Export controls may also limit the ability to transport equipment needed for experiments or research conducted...
abroad. If anyone at Columbia receives information identified by a third party as “export controlled,” the information should not be disclosed to any non-U.S. persons, including international students, without prior review by RCT.

Export regulations apply whether or not the research is funded by a federal or non-federal grant, contract or other agreement, and apply whether or not the EAR or ITAR are cited in the award document. If a researcher accepts export-controlled technology or information from a government agency or from industry, the researcher is subject to ITAR or EAR regulations.

The data and information generated by many University research activities may be excluded from export controls because of a general exception for “fundamental research” under the export control regulations. By not accepting any restrictions on publication or participation of foreign nationals in its research grants, Columbia protects the fundamental research exemption. Consequently, faculty members who wish to make their research available worldwide should decline public and private sector funding conditioned on prepublication approval by the sponsor, restrictions on the citizenship of those who work on the research project and/or nondisclosure restrictions/agreements.

RCT, SPA and OGC will assist you in complying with export control laws, but the primary responsibility rests with the PI.

**International Boycotts not Supported by the United States Government**

U.S. federal regulations also prohibit the University or its personnel from agreeing to participate in any international boycott not supported by the U.S. government, such as the Arab League boycott of Israel. Violation of these regulations could result in fines being imposed by the U.S. government.

These regulations are broad and complex, regulating for example: (a) agreeing not to do business with a distributor with Jewish employees; (b) agreeing to stamp an invoice with the statement “We certify that goods are not of Israeli origin;” and (c) approving a letter of credit with the notation that “the goods cannot be shipped on a vessel that calls at Israeli ports.”

Under certain circumstances even the receipt of a request to cooperate in a boycott must be reported to the U.S. government. Boycott-related requests involving any of these activities may be oral or written, and may appear as provisions in a proposed bid invitation, contract, purchase order, letter of credit, research or other agreement that calls for boycott-related information or action.

If Columbia personnel receive a boycott related request, immediately contact OGC before responding further to the request. OGC will advise you on how to proceed, and assist in filing any required reports with the Department of Commerce.
In addition, the Internal Revenue Service (IRS) maintains a separate set of boycott rules and regulations that require annual reporting of operations in or related to boycotting countries, as well as receipt of, and action in response to, boycott requests. These laws deny some foreign tax benefits to persons who cooperate with certain boycott requests. It also requires annual reporting by Columbia (not the individual Columbia employee) of business activities in boycotting countries. The Treasury Department publishes a list of these countries in the Federal Register each quarter. This list currently includes:

- Iraq
- Kuwait
- Lebanon
- Libya
- Qatar
- Saudi Arabia
- Syria
- United Arab Emirates
- Yemen

If Columbia personnel are engaging in any operations in or related to boycotting countries, report such operations to the Tax Director of the Controller’s Office. The IRS defines “operations” broadly to include purchasing, leasing, financing, extracting, constructing, transporting, contract negotiating, site selecting and other activities. Operations must be reported even if no boycott requests are received.

**The Foreign Corrupt Practices Act (FCPA)**

U.S. law also contains provisions related to anti-corruption, including rules for handling transactions and rules related to keeping of accounts and records. For example, the FCPA makes it unlawful to offer something of value to foreign government officials in order to obtain or retain business, direct business to a particular party or otherwise obtain an unfair advantage. The business to be obtained or retained need not be with a foreign government or foreign government instrumentality, but may be private.

Columbia personnel may not offer or make payments to a foreign official with the intent of:

- influencing the individual’s acts or decisions;
- inducing the individual to violate his or her lawful duty;
- obtaining any improper advantage; or
- inducing the foreign official to use his or her influence improperly.

The prohibited payments need not only be monetary, but may consist of *anything of value* (including, for example, meals or other gifts).
A “Resource Guide to the FCPA” is available on the Department of Justice website at http://www.justice.gov/criminal/fraud/fcpa/guidance. If you have questions about the FCPA, and particularly about whether a payment falls within the exception, you should consult with OGC.

Other Laws and Regulations

In addition to the laws and regulations outlined above, a number of other laws could also apply, including U.S. laws, host country laws and international treaties. RCT, SPA and OGC can help with navigating these complex areas.

9. New York-Presbyterian Hospital

In addition to any other approvals required by the University, any sponsored project proposal that involves hospital resources must be approved by an authorized signatory at NYP through Rascal PT.

10. Subawards

As the recipient of an award for a sponsored research project, the University may award financial assistance to a subrecipient to facilitate performance of, and payment for, specific work to be conducted for the sponsored project. A subaward may be made by the University as the recipient of a primary award or as the subrecipient of another institution’s primary award. Subawaards are governed by the University’s Policy on Sponsored Project Subawards (the Subaward Policy).

Subawards are awards of financial assistance only and do not include the following:

- technical assistance that provides services rather than money;
- loans, loan guarantees, interest subsidies or insurance;
- direct payments of any kind to individuals; or
- contracts that are required to be entered and administered under procurement laws or regulations.

It is University policy that subawards are funded for a maximum of one year, renewable for additional periods as appropriate. All modifications to existing subawards must be negotiated with the subrecipient and are dependent on the continuation of the primary award to Columbia.

In accordance with federal regulations, it is University policy that the University awardee must perform a substantive role in carrying out the activities of a project and not merely serve as a conduit for an award to another party. It is expected that the aggregate amount payable under all subawards issued under a prime award to the University should not exceed 50% of the total award amount.
As a condition of its acceptance of funding from a sponsor, the University is obligated in its role as primary recipient to undertake certain stewardship activities and to ensure compliance with the restrictions placed upon the primary award by the sponsor. In addition, the University remains responsible to the sponsor for managing funds and meeting performance goals.

The University’s stewardship activities include the following:

- Prior to granting a subaward, the University will assess the potential subrecipient’s organizational and financial status and internal controls as well as the terms of the proposed subaward agreement and will establish conditions for the subaward consistent with the level of risk perceived.

- The University will advise the subrecipient of all appropriate flow-down provisions from the primary award, all relevant University policies and, if such subrecipient is a non-U.S. entity, all applicable U.S. laws and regulations.

- The University will, on an ongoing basis throughout the life of the award, monitor the activities of a subrecipient under the subaward in accordance with the subaward agreement to ensure that awarded funds are used for authorized purposes and that performance goals are achieved.

SPA is responsible for processing all subawards resulting from sponsored projects other than P&S clinical trial subawards, which are processed by the CTO, and subawards under SRAs negotiated and executed by CTV, which are processed by CTV.

In general, a subrecipient must have its own policy on FCOI and research. For projects funded by PHS, the subrecipient’s policy must comply with the PHS regulations. More information about FCOI requirements for PHS subrecipients is available at: http://www.columbia.edu/cu/compliance/pdfs/FCOI_FAQs.pdf.

**Before Proposal Submission**

Prior to the submission of a proposal for a sponsored project that has subawards (or, if the subaward is not known at the time of the submission, prior to the execution of the subaward agreement), the PI is required to provide his/her SPA or CTO Project Officer or CTV Officer with certain information and/or documentation about the proposed award. This information and documentation include:

- Statement of work

- Budget and budget justification meeting the requirements of the sponsor and the University, together with a copy of the subrecipient’s negotiated rate agreement or a PHS check list page; and

- Face Page (e.g., PHS 398), Subaward Proposal Face sheet or letter of commitment/letter of intent signed by an authorized institutional official of the
subrecipient certifying as to the statement of work, the accuracy of the budget and institutional compliance with any applicable regulations and agency-specific requirements.

Establishment of Subaward

Following the receipt of a notice of award, SPA, the CTO or CTV is required to take certain actions prior to a subaward being issued. Such actions are described in the Subaward Policy.

Before executing a subaward agreement with respect to Risk Assessment Subawards described below, SPA, the CTO or CTV will review information and documentation provided by the PI and/or DA on the potential subrecipient’s organization, financial condition and management processes and controls and will conduct an assessment of the risks relating to the subaward and the subrecipient.

A Risk Assessment Subaward is required for any subaward of at least $500,000 per project period with a subrecipient (a) with which the University has had no prior work experience or a poor work experience (e.g., a subrecipient that has not performed adequately on prior subawards or has a history of non-compliance) or (b) that is either (i) a non-U.S. entity or (ii) a for-profit entity.

The Subaward Policy provides guidance as to what information and documentation is required in connection with a risk assessment and the steps involved in such assessment.

11. NSF Postdoc Mentoring Requirements

All NSF grant applications that include funding support for postdocs are required to include a mentoring plan for postdocs. Examples of mentoring activities include: career counseling; training in preparation of grant proposals publications and presentations; guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplines; and training in responsible professional practices. Proposals that do not include a separate section on mentoring activities within the grant proposal will not be reviewed by the NSF.

For further information, including web links, on how to prepare a mentoring plan, see the Memorandum, dated December 2008, on NSF Postdoc Mentoring Requirement that is available on the OPA website (http://postdocs.columbia.edu).

12. Model Organisms

All NIH applications that plan to produce new, genetically modified variants of model organisms and related resources are expected to include a concise plan addressing the timely distribution of organisms and resources or an explanation as to why sharing is not possible. The term model organism includes mammalian models, such as mice and rats, and non-mammalian models, such as budding yeast, social amoebae, roundworms,
Arabidopsis, fruit flies, zebrafish and frogs. Genetically modified organisms are those in which mutations have been induced by chemicals, irradiation, transposons or transgenesis (e.g., knockouts), those in which spontaneous mutations have occurred and congenic or consomic strains.


13. Special Approval Summary Chart

The following chart summarizes the special approvals and provides links to websites where more detailed information can be obtained.
<table>
<thead>
<tr>
<th>Type of Research</th>
<th>Requirement</th>
<th>Timing</th>
<th>Mechanism</th>
<th>More Information</th>
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</thead>
<tbody>
<tr>
<td>All Research</td>
<td>FCOI report filed by all individuals who are in a position to influence the design, conduct or reporting of the research.</td>
<td>Up-to-date report must be filed before a proposal is submitted.</td>
<td>File Annual FCOI Reports in Rascal. <a href="https://www.rascal.columbia.edu/coi/login.html">https://www.rascal.columbia.edu/coi/login.html</a></td>
<td>Office of Research Compliance and Training – Conflict of Interest <a href="http://www.columbia.edu/cu/compliance/docs/conflict_interest/index.html">http://www.columbia.edu/cu/compliance/docs/conflict_interest/index.html</a></td>
</tr>
<tr>
<td>All Research</td>
<td>FCOI resolution</td>
<td>Before research begins; before any award money is spent.</td>
<td>Conflict of Interest Committee review of potential conflicts; compliance with Committee determinations.</td>
<td>Office of Research Compliance and Training – Conflict of Interest <a href="http://www.columbia.edu/cu/compliance/docs/conflict_interest/index.html">http://www.columbia.edu/cu/compliance/docs/conflict_interest/index.html</a></td>
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<tr>
<th>Type of Research</th>
<th>Requirement</th>
<th>Timing</th>
<th>Mechanism</th>
<th>More Information</th>
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<tbody>
<tr>
<td>Research Involving rDNA, rRNA, potentially infectious tissues, gene transfer</td>
<td>Approval by the IBC</td>
<td>Before research begins. For NIH, around “just in time” notification.</td>
<td>Contact Biological Safety Officer in EH&amp;S at (212) 305-6780</td>
<td>Office of Environmental Health &amp; Safety</td>
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<td><a href="http://ehs.columbia.edu/recombdna.html">http://ehs.columbia.edu/recombdna.html</a></td>
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<tr>
<td>Research Involving Radioactive Materials</td>
<td>Approval by the RSC (Morningside) or the JRSC or RDRC (CUMC)</td>
<td>Before research begins</td>
<td>At CUMC: Contact Radiation Safety Office at (212) 305-0303</td>
<td>At CUMC: Radiation Safety Office</td>
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<td>At other campuses: Contact Radiation Safety Office at (212) 854-8749</td>
<td><a href="http://www.ehs.columbia.edu/rs.html">http://www.ehs.columbia.edu/rs.html</a></td>
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<td>At other campuses: Radiation Safety Office</td>
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<td><a href="http://www.ehs.columbia.edu/rs.html">http://www.ehs.columbia.edu/rs.html</a></td>
</tr>
<tr>
<td>Research with Human Embryos and Human Embryonic Stem Cells</td>
<td>Approval by the Stem Cell Committee</td>
<td>Before research begins.</td>
<td>Submit abstract and protocol to the Office of the EVPR.</td>
<td>Policy on the Conduct of Research with Human Embryos and Human Embryonic Stem Cells</td>
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<td><a href="http://evpr.columbia.edu/content/selected-policies">http://evpr.columbia.edu/content/selected-policies</a></td>
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<td>Type of Research</td>
<td>Requirement</td>
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<tr>
<td>International Research</td>
<td>For research meeting certain criteria, approval by International Research Committee</td>
<td>Before proposal is submitted; further analysis post-award.</td>
<td>Provide information to SPA to CTO project officers.</td>
<td>Office of Research Compliance and Training – International Research</td>
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<td><a href="http://www.columbia.edu/cu/compliance/docs/international_research/index.html">http://www.columbia.edu/cu/compliance/docs/international_research/index.html</a></td>
</tr>
<tr>
<td>Research Using NYP Resources</td>
<td>Approval by NYP.</td>
<td>Before proposal is submitted.</td>
<td>Route protocol through Rascal PT.</td>
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<tr>
<td>All Research</td>
<td>Key personnel must complete effort reporting requirements, including annual effort certification.</td>
<td>Before proposal is submitted.</td>
<td>Complete annual effort certification at <a href="https://ecrt.columbia.edu">https://ecrt.columbia.edu</a></td>
<td>Office of Research Compliance and Training-Effort Reporting</td>
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<td><a href="http://www.effortreporting.columbia.edu">www.effortreporting.columbia.edu</a></td>
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<tr>
<td>NSF Research Using Postdocs</td>
<td>Mentoring plan</td>
<td>Before proposal is submitted</td>
<td>Include in proposal</td>
<td>Office of Postdoctoral Affairs</td>
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<td><a href="http://postdocs.columbia.edu">http://postdocs.columbia.edu</a></td>
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F. NIH Public Access Policy

The NIH Public Access Policy ensures that the public has access to the published results of NIH funded research. This Policy applies to the final manuscript of any peer-reviewed publications, such as journal articles, research reports and reviews that result from NIH funding, regardless of the amount. To determine manuscript applicability, go to http://publicaccess.nih.gov/determine_applicability.htm.

Under the Policy, any investigator publishing a peer-reviewed article that results from NIH funding must:

- Upon submission of the article, notify the publisher that it is subject to the NIH Public Access Policy
- Upon acceptance of the article, ensure that the publication agreement reserves the right to send the manuscript to PubMed Central
- Upon publication of the article, submit the final manuscript to PubMed Central
- Upon the investigator’s next proposal submission to NIH, include the PubMed Central identification number (called a PMCID) for previous NIH-funded articles, demonstrating compliance with the Policy
- Applicants citing articles in NIH applications, proposals and progress reports that fall under the Policy, were authored or co-authored by the applicant and arose from NIH support must include the PMCID or NIH Manuscript Submission System Identification Number (NIHMSID). The NIHMSID may be used to indicate compliance with the Policy in applications and progress reports for up to three months after a paper is published. After that period, the PMCID must be provided to demonstrate compliance.
- Investigators must use My NCBI (National Center for Biotechnology Information) to manage all citations to be included in progress reports. See www.ncbi.nlm.nih.gov/myncbi/

The investigator submitting the article and signing the publication agreement will need to ensure compliance with the Policy, but the PI has overall responsibility for this and all other requirements of sponsored projects, whether or not the PI is an author on the publication in question.

The CUMC Health Science Library and SPA have developed the expertise to address questions relating to Public Access (http://library.cumc.columbia.edu/nih-public-access-policy-compliance and http://spa.columbia.edu/nih-public-access-policy).

NIH will delay processing of a Notice of Grant Award if publications arising from the award are not in compliance with the Public Access Policy. See [http://grants.nih.gov/grants/guide/notices-files/NOT-OD-13-042.html](http://grants.nih.gov/grants/guide/notices-files/NOT-OD-13-042.html). To avoid delays, it is important to communicate with the publisher the need to comply with the policy at the time of manuscript submission. Refer to the NIH Public Access Policy Tips Sheet at [http://spa.columbia.edu/nih-public-access-policy](http://spa.columbia.edu/nih-public-access-policy) to avoid award delays.

**G. Submitting a Proposal**

Proposals are submitted to the sponsor either in paper format or electronically. Each sponsor has its own requirements for how proposals should be submitted; SPA and CTO Project Officers can assist PIs and DAs in making sure the correct procedures are followed. All proposals, whether to be submitted in paper format or electronically, must be submitted to SPA or the CTO five business days before the sponsor’s deadline. See [Deadlines for Non-Industry Sponsored Research (Section C)](http://spa.columbia.edu/nih-public-access-policy) above.

See Review Process (Section B) above for the items that are required to be submitted to SPA or the CTO prior to the submission of a proposal to the sponsor.

**1. Paper Submissions**

SPA or CTO Project Officers review proposals against the sponsor’s guidelines. In addition to a thorough review of the budget for accuracy and allowability of costs, the reviewer checks for page limitations, font size and margins, and ensures that all required forms are included in the application.

Once a proposal has been reviewed and signed by the appropriate Authorized Signatory in SPA or the CTO, the Project Officer notifies the PI or DA that the proposal is ready for mailing; it is the responsibility of the PI or DA to mail the proposal. Note that some sponsors have specific requirements with respect to the number of copies sent and how attachments are included.

A copy of the signed proposal is maintained in SPA or the CTO until the proposal is no longer pending (generally, two years after the submission date).

**2. Electronic Submissions**

A number of sponsors, both governmental and non-governmental, require electronic submission of proposals. These electronic proposal submission processes can be demanding, particularly the first time a PI uses them. Prior to the first submission of a proposal using any form of electronic proposal submission, the PI is strongly encouraged to contact his/her SPA or CTO Project Officer for assistance. In addition, the PI may
need to have Adobe Acrobat and pdf capability on his or her computer or a first time investigator may need to register with the site prior to submission. SPA or CTO Project Officers can assist with this.

Note that, for every electronic submission of a non-industry sponsored proposal, SPA or the CTO needs a finalized approved Rascal PT Record, just as would be needed for a paper proposal.

There can be major problems getting access to an agency's server on the day of a deadline. SPA or the CTO must approve the proposal before it can be submitted, so allow time for its review and approval. SPA and the CTO review a very large volume of applications at deadline dates. Therefore it is strongly suggested that applications be submitted well, and no later than five business days, before the deadline to allow for sufficient review. Failure to do so may jeopardize the timely submission of the application.

Grants.gov

Grants.gov is a web-portal used to submit applications for opportunities offered by 25 federal grant-making agencies. To prepare a grant, there are several electronic options as described in later sections (i.e., InfoEd, Adobe Forms, etc.). Applications submitted by your SPA or CTO Project Officer through the Grants.gov portal are validated and then forwarded on to the respective funding agency (i.e., NIH, DOD, etc.). Currently, most NIH, AHRQ and HRSA applications are required to be submitted through Grants.gov. New opportunities and mechanisms are added frequently, so it is important to read the sponsor’s RFA or RFP very carefully for application submission instructions.

Note that Columbia is considered the applicant and is the registered entity with Grants.gov. There is no need for an individual PI to register with Grants.gov. Contact your SPA or CTO Project Officer with any questions. For more information on Grants.gov, go to www.Grants.gov

InfoEd Proposal Development (PD)

InfoEd PD electronically facilitates the preparation, review and submission of grant applications. While it is currently being used primarily for specific NIH proposals that are required to be submitted electronically through Grants.gov, other grant applications are being added over time and InfoEd PD now supports applications to a variety of federal agencies including DOE, DOD, AHRQ and HRSA. Please check with the InfoEd Help Desk (212-851-4368 or SPA-eBiz@columbia.edu) if you have any questions about using InfoEd PD.

Adobe Forms
If you are not using InfoEd PD to submit your application for federal funding via Grants.gov, you will need to use Adobe software to prepare your application. You are encouraged to check the requirements of your specific funding announcement to ensure that you are using the format and most recently revised forms required for your specific application.

Information on supported software and download instructions can be found at http://www.grants.gov/help/download_software.jsp.

Additional instructions on how to download and use the Adobe forms can be found at http://www.grants.gov/applicants/apply_for_grants.jsp.

If you have any questions, please contact your SPA or CTO Project Officer for assistance.

**NSF FastLane**

FastLane is web-based system used for information exchange and business transactions between NSF and its client community of investigators and administrators. Through FastLane, the NSF community can apply for grants, review proposals and perform administrative functions related to awards and proposals. For the vast majority of its opportunities, NSF offers applicants the choice of Grants.gov or FastLane for submitting applications. In addition, any proposal involving more than one organization must use FastLane. Read your program announcement carefully to ensure you are using the correct submission mechanism.

PIs and co-PIs must be registered through Columbia and have a password to access FastLane. To request an account, visit the SPA website, http://spa.columbia.edu/electronic-systems/nsf-fastlane and register for an account.

For more information on NSF FastLane, go to https://www.fastlane.nsfgov/fastlane.jsp. If you are unsure how to proceed, contact your SPA Project Officer.

**proposaLCENTRAL**

There are a number of sponsors who require the use of proposaLCENTRAL for grant submissions, such as the American Cancer Society and the Burroughs Wellcome Fund. It is an e-grant making website shared by many government, non-profit and private grant-making organizations.

If you are working on an application that requires the use of proposaLCENTRAL, contact your SPA or CTO Project Officer to ensure that you are registered.

For more information on proposaLCENTRAL, go to: https://proposalcental.altum.com/

**H. Just in Time/Additional Information Requested**

*Updated June 2014*
Many sponsors, including NIH, DOD and Centers for Disease Control, no longer require that all approved compliance materials be submitted with the proposal. These materials, along with revised budgets and/or other items, are now requested just prior to the anticipated awarding of the funding, or “Just in Time” (JIT) for funding. Applicants may not submit JIT materials directly to the sponsor, nor can they submit the JIT items until such time as they are requested by the sponsor. Typically, items requested include:

- Updated information on other support. Note that “other support” includes all financial resources, whether federal, non-federal, commercial or institutional, available in direct support of an individual’s research, including grants, cooperative agreements, contracts and institutional awards, but excluding training awards, prizes or gifts.
- If human subjects are involved, IRB approval date and assurance number.
- If vertebrate animals are involved, IACUC approval date and assurance number.
- If human subjects are involved, a certification that all individuals listed as Key Personnel in the grant application have completed an educational program on the protection of human subjects.
- If requested, a revised budget.

NIH JIT materials are uploaded to the eRA Commons by the PI and, once they have been reviewed by the SPA or CTO Project Officer, he/she will provide the institutional endorsement required by the sponsor.

Note that JIT notification is not a guarantee that an award will be made and only indicates that your application is being considered for funding.

Keep in mind when submitting other support information that the sponsor will review such information before an award is made to ensure the following:

- Sufficient and appropriate levels of effort are committed to the project.
- There is no scientific, budgetary or commitment overlap.
  - Scientific overlap occurs when (a) substantially the same research is proposed in more than one application or is submitted to two or more funding sources for review and funding consideration or (b) a specific research objective and the research design for accomplishing the objective are the same or closely related in two or more applications or awards, regardless of the funding source.
  - Budgetary overlap occurs when duplicate or equivalent budgetary items (e.g., equipment, salaries) are requested in an application, but are already provided by another source.
  - Commitment overlap occurs when an individual’s time commitment exceeds 100%, whether or not salary support is requested in the application.
• Overlap, whether scientific or budgetary, or commitment of an individual’s effort greater than 100%, is not permitted. Any overlap will be resolved by the sponsor with the applicant and the PI at the time of award.

• Only funds necessary to the approved project are included in the award.

For more information about JIT procedures using eRA Commons, see: http://era.nih.gov/services_for_applicants/application_tracking_and_award/just_in_time.cfm.

Please note that a PI remains responsible for notifying the sponsor of any substantive changes to previously submitted JIT information up to the time of award. This includes items such as other support changes that could lead to budgetary overlap, scientific overlap or commitment of effort greater than 12 person-months for the PI or any changes in the use or approval of vertebrate animal or human subjects.