University of Maryland
School of Nursing
Office of Research & Scholarship
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INVESTIGATOR'S GUIDE TO

PRE AND POST AWARD

GRANT MANAGEMENT

Rev. 4/13/16

INTRODUCTION

The purpose of this booklet is to allow investigators to successfully manage the Pre & Post Award process while adhering to UMB and SON regulations. There is no way to anticipate every situation but we will provide procedures and policies that cover many commonly encountered issues related to preparing and managing your grants.

PRINCIPAL INVESTIGATOR'S RESPONSIBILITIES

Principal Investigators (PIs) are ultimately responsible for all aspects of their sponsored projects, including scholarly activity and proper stewardship of awards. This guide addresses a number of key PI responsibilities for oversight and management of sponsored projects.

Sponsored Projects Principal Investigator Responsibility:
http://www.umaryland.edu/ord/resources-for-investigators/principal-investigator-quick-reference/

Proposal Development and Submission
The PI should:
- ➢ Work with the unit administrative manager to develop proposals with sufficient time for review and approval
- ➢ Meet unit school and sponsor due dates
- ➢ Determine that the level of effort required for a proposed project can be met relative to other effort commitments
- ➢ Recognize that the PI's electronic signature in Kuali Coeus and the signature on submitted proposal documents demonstrates that the PI will accept responsibility for project performance and reports if the award is made
- ➢ Disclose to the Office of Research Integrity any Conflict of Interest (COI) and pursue review and management of the COI
- ➢ Disclose international collaborations and sub-recipients information early so that the office of Sponsored Programs Administration (SPA) can review all pertinent information and/or sources.
- ➢ Discuss domestic sub-recipients with the unit administrative manager to ensure required documents from each proposed sub-recipient are received such as the statement of work (SOW), Budget/Budget Justification, along with a signed Sub-recipient Commitment Form. Other potential problems may arise if the sub-recipients information is not in Kuali Coeus, so communication is very important during the development state.

Award Documentation
The PI should:
- ➢ Recognize that the PI shares responsibility with the unit's administrative staff for ongoing administrative management of sponsored projects
- ➢ Review the award terms and conditions to confirm project deliverables and reports as well as any restrictions on expenditures or project changes
- ➢ Identify significant dates and activities, such as report due dates, timeline for completion of milestones, and requirements for award renewal
- ➢ Not sign an award or agreement except where PI acknowledgment is required. SPA officers will sign as authorized officials for UMB

Project Management
The PI should:
- ➢ Oversee conduct of the project, including work of collaborators, MPIs, and sub-recipients

- ➢ Ensure that project staff has training and certification required by the university, by Federal, and State regulations, and by the sponsor
- ➢ Seek and maintain approvals for human subjects, animal use, pathogens, select agents, rDNA or other research requiring committee and/or other approvals
- ➢ Maintain program-related records
- ➢ Submit all required program reports
- ➢ Prepare and submit results for presentation and publication
- ➢ Acknowledge funding sources in publication
- ➢ Conduct activities in adherence to applicable SON guidelines and policies
- ➢ Report inventions to the Office of Technology Transfer (OTT)

Account Management PI
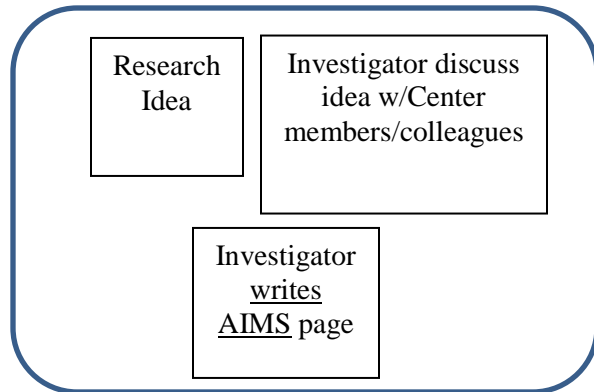
The PI's responsibilities:
- ➢ Coordinate with the unit's administrative manager to ensure that personnel and other expenditure records are maintained
- ➢ Determine that any expenditure charged to an award, whether for personnel, supplies, equipment, travel, or other types of expenses, is allocable to the project as well as allowable and reasonable
- ➢ Certify effort quarterly, and when required, certify effort of project personnel quarterly
- ➢ Monitor effort commitments to ensure that the PI and key personnel are meeting the effort commitments agreed to when the award was accepted, and update effort distribution as changes become known
- ➢ Review award expenditures regularly (best practice = monthly) to ensure that expenditures are correct and appropriate
- ➢ Review and approve sub-recipient agreement requests
- ➢ Review and approve sub-recipient invoices for payment
- ➢ Review and approve other project changes, some of which may require sponsor approval (such as a change to the scope of work, or significant change in a PI's effort on the project)

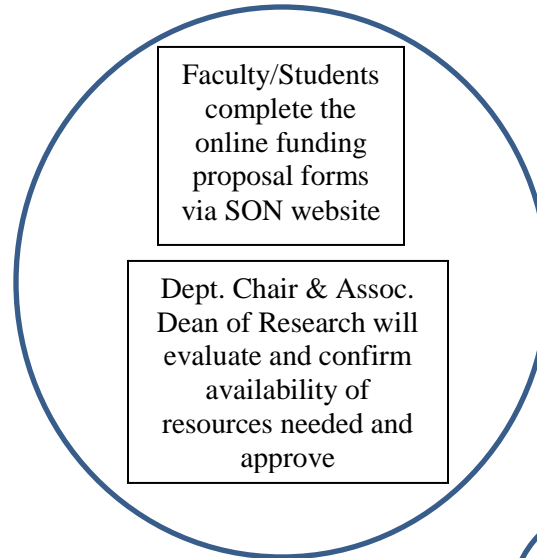When a project expires or is terminated, the PI is responsible to:
- ➢ Meet sponsor's deadline(s) for final reports
- ➢ Submit any required final project report
- ➢ Submit any required final invention report
- ➢ Review the final financial report
- ➢ Close out Institutional Review Board (IRB) and Institutional Animal Care & Use Committee (IACUC) protocols
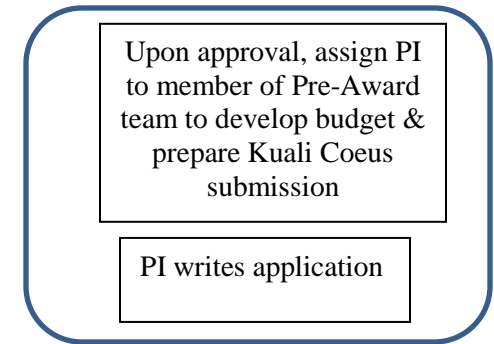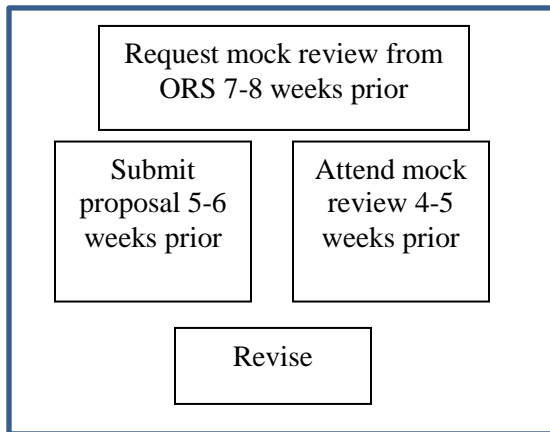
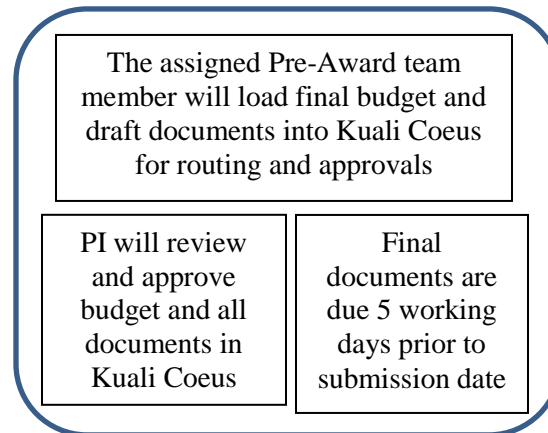# OVERVIEW OF APPLICATION PROCESS

1. IDEAS TO AIMS

Research Idea

Investigator discuss idea w/Center members/colleagues

Investigator writes AIMS page

2. APPROVAL PROCESS

Faculty/Students complete the online funding proposal forms via SON website

Dept. Chair & Assoc. Dean of Research will evaluate and confirm availability of resources needed and approve

3. DEVELOPING APPLICATION

Upon approval, assign PI to member of Pre-Award team to develop budget & prepare Kuali Coeus submission

PI writes application

4. MOCK REVIEW PROCESS (Optional)

Request mock review from ORS 7-8 weeks prior

Submit proposal 5-6 weeks prior

Attend mock review 4-5 weeks prior

Revise

5. ROUTING & SUBMISSION

The assigned Pre-Award team member will load final budget and draft documents into Kuali Coeus for routing and approvals

PI will review and approve budget and all documents in Kuali Coeus

Final documents are due 5 working days prior to submission date

6. POST AWARD PROCESS

SPA initiates creation of an active account after they receive notice of award

SPAC creates project id to track expenditures over the life of the award

Director of Sponsored Programs assigns each project to a member of Post Award team

After award is received, PI meets w/assigned manager to discuss budget details and how funds will be utilized

SPA- Sponsored Programs Administration
SPAC - Sponsored Projects Accounting and Compliance
ORS - Office of Research and Scholarship

1. **IDEAS TO AIMS**
   The investigator brings his/her research idea to Center members/colleagues. The Investigator writes AIMS page. After feedback and revision, the investigator determines what resources will be needed for the project.

   Investigators will begin their application process by presenting their ideas/aims to the leadership and members of the Centers and/or external colleagues/reviewers as appropriate. After the specific aims are written they will be reviewed by the Centers who will approve or recommend additional revisions prior to submitting to the Pre-Award division.

   A. **Biology and Behavior Across the Lifespan (BBAL)**
      Leadership: Eun-Shim Nahm and Barbara Resnick

      UMSON's **Center for Biology and Behavior Across the Lifespan** (BBAL) promotes the conduct of interdisciplinary research related to the influence of biology and behavior on health and health outcomes across the lifespan. BBAL strives to serve as a center for shared thinking—within UMSON and across the UMB campus—aimed at the development of pioneering research ideas and interventions to promote and sustain health in all people, from infancy to old age. The center provides a core for the pooling of resources and sharing of data across a wide variety of projects related to biological and behavioral outcomes. Its members provide leadership within UMSON to guide research related to biology and behavior across the lifespan.

   B. **Center for Health Outcomes Research (CHOR)**
      Leadership: Mary Regan and Carla Storr

      UMSON's **Center for Health Outcomes Research** (CHOR) provides a mechanism to support its multidisciplinary membership with mentorship, training and service in order to promote discovery focused on improving health outcomes of people and systems of care. The members have strengths in a broad array of health outcomes topics and research methods needed to facilitate knowledge about the complex causal influences that effect health and safety outcomes and patient preferences for treatments. The overarching goal is to build a new generation of scientist to expand knowledge generation on this critical topic. Findings from CHOR members' research are essential to optimize policy and practice.

   C. **Center to Advance Chronic Pain Research (CACPR)**
      Leadership: Susan G. Dorsey and Joel Greenspan

      UMSON's **Center to Advance Chronic Pain Research** (CACPR) is a multidisciplinary center comprised of nationally and internationally renowned clinical and preclinical translational scientists whose principle research focus is on the physiological, genetic, and psychosocial underpinnings of the development and persistence of debilitating chronic pain conditions. Members of the CACPR come from the Schools of Nursing, Dentistry, Medicine, Pharmacy, Social Work, and Law. CACPR seeks to promote cutting edge basic, translational, and clinical biomedical research that will advance our understanding and treatment of chronic pain. The members of the CACPR bring together a unique collection of skills to create an exciting research environment.

2. **<u>FUNDING APPROVAL PROCESS</u>**
    A Pre-Application form is used to start the application process. It is used to inform your Department Chair, Associate Dean of Research, and the Director of Sponsored Programs that you are planning on submitting a grant. The questions are designed to help us help you identify resources you will need to complete your proposal and make sure that they are available or can be obtained. It is recommended that you submit the form as soon as you know you will be applying for a grant, and depending upon complexity of grant, preferred 4 weeks in advance of the grant due date. Shorter periods can be considered based upon complexity. The form is completed at:
    http://www.nursing.umaryland.edu/research/preaward/funding-proposal/

    If you need assistance, instructions are located at:
    http://www.nursing.umaryland.edu/media/son/research/Instructions-for-completing-the-Pre-Award-Form_Jan-2015.pdf

3. **<u>DEVELOPING THE APPLICATION</u> (including biosketch)**
    After the investigator receives the necessary approvals (see next page), the Director, Contracts and Grants in the Office of Administrative Services will assign a staff member to work with the investigator to review the requirements for the specific submission, develop their budget, and set a timeline for submitting the files necessary to complete the application. If during that time period, you decide not to submit an application, please notify the Director, Contracts and Grants as well as your Department Chair so the staff member can move onto another project.

<u>APPLICATION/NIH SF424 APPLICATION GUIDELINES</u>
 (Note: Link with Instructions for Form C & D is below-
Form C –Instructions for due dates on and between January 25, 2016 and May 24, 2016
Form D – Instructions for due dates on or after May 25, 2016
http://grants.nih.gov/grants/how-to-apply-application-guide.htm

<u>BUDGET DEVELOPMENT</u>
Some helpful resources pertaining to budgets listed below: (adapted from the Office of Research and Scholarship)

Allowable cost
https://www.umaryland.edu/spa/budgets-and-expenses/allowable-costs/

Budget development
https://www.umaryland.edu/media/umb/ord/documents/cct/ClinicalResearchBillingModule_2_101212.pdf

Consultants
https://www.umaryland.edu/spa/budgets-and-expenses/guidelines-by-budget-category/consultants/

F & A cost rate
https://www.umaryland.edu/spa/budgets-and-expenses/fa-cost-rates/

Indirect costs
https://www.umaryland.edu/spa/budgets-and-expenses/fa-cost-rates/

Patient care costs
https://www.umaryland.edu/spa/budgets-and-expenses/guidelines-by-budget-category/research-patient-care-costs/
Participant support costs
https://www.umaryland.edu/spa/budgets-and-expenses/guidelines-by-budget-category/participant-support-costs/

Salary caps
https://www.umaryland.edu/spa/budgets-and-expenses/cost-sharing-and-over-salary-cap/salary-caps/

Travel rates
https://www.umaryland.edu/financialservices/disbursements/travel/per-diem-and-mileage-rates/

Vendor vs. sub-recipients
https://www.umaryland.edu/spa/collaborations-and-subrecipients/vendor-vs-subrecipient/

4. **MOCK REVIEW PROCESS (Optional)**
   Mock Reviews are recommended for all applications. The goal of the Mock Review process is to increase the likelihood of a favorable score and funding for all SON grant submissions.

MOCK REVIEW CRITERIA

POLICY
Proposal mock review is voluntary and can be arranged by contacting the Office of Research and Scholarship (research@son.umaryland.edu). Proposals should be reviewed no later than 6 weeks in advance of the application due date. Proposals that are scheduled to be reviewed should be submitted to the Office of Research and Scholarship 1 week before the scheduled review.

External reviewers can be recommended by the researcher and paid a small honorarium (currently $200) for reviewing proposals.

CRITERIA
The following documents are requested to thoroughly review your research proposal.
Specific Aims
Research Strategy
Bibliography and References
Budget Justification
Bio-sketches for Key Personnel
Environment and Resources
Animals (If applicable)
Prior Critique (If a resubmission)
Intro to Application (If a resubmission)
Abstract

PROCESS
The reviewers will receive the proposal and score it according to NIH or grant specific criteria. A grant review meeting will be held. The PI and associated investigators will be invited to attend and hear the comments of the reviewers. The PI and associated investigators will then have an opportunity to discuss the committee's comments and obtain suggestions for revisions.

Scoring System and Procedure (adapted from the NIH instructions for reviewers).The NIH scoring system is used for mock reviews to encourage reliable scoring of applications.

Summary

- The NIH grant application scoring system uses a 9-point scale
- A score of 1 indicates an exceptionally strong application with essentially no weaknesses. A score of 9 indicates an application with serious and substantive weaknesses with very few strengths; 5 is considered an average score
- Ratings are in whole numbers only (no decimal ratings)
- This scale is used by all mock review panel members to provide an overall impact score and for assigned reviewers to score (at least) five individual criteria (e.g., Significance, Investigator(s), Innovation, Approach, Environment)
- For the impact score, strengths and weaknesses across all of the review criteria should be considered
- The impact score for an application is based on each individual reviewer's assessment based on the scored criteria plus additional criteria regarding the protection and inclusion of human subjects; vertebrate animal care and welfare; biohazards, and criteria specific to the application
- For each criterion rating, the strengths and weaknesses within that review criterion should be considered
- Reviewers should consider not only the relative number of strengths and weaknesses noted, but also the importance of these strengths and weaknesses to the criteria or to the overall impact when determining a score
- An application does not need to be strong in all categories to be judged likely to have major impact, e.g., a project that by its nature is not innovative may be essential to advance a field, (e.g., a major strength may outweigh many minor and correctable weaknesses
- We expect scores of 1 or 9 to be used less frequently than the other scores
- Preliminary Scores

Impact	Score	Descriptor	Additional Guidance on Strengths/ Weaknesses
High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

Additional Information for Scoring Guidance Table

> Minor Weaknesses: An easily addressable weakness that does not substantially lessen impact
> Moderate Weakness: A weakness that lessens impact
> Major Weakness: A weakness that severely limits impact

CRITIQUE FORM

RPG Review Critique: grants.nih.gov/grants/peer/critiques/rpg_critique_template.doc

5. ROUTING & SUBMISSION/KUALI COEUS SUBMISSION

The UMSON **Office of Research & Scholarship** (ORS) wants your grant submission to be successful so the following guidelines regarding due dates have been established:

At least 10 business days prior to the grant submission date, a draft proposal (with text, not blank pages) including narratives and other attachments should be provided to the staff member assigned to your proposal for upload into KUALI COEUS. The application will be routed to Sponsored Programs Administration (SPA) for preliminary review.

NOTE: Proposals requiring external partnerships, including subcontracts, will need longer processing time. You may continue to work on finalizing your proposal.

At least 5 business days prior to the grant submission due date, Principal Investigators are highly encouraged to submit their final documents. Final changes need to be submitted 48 hours prior to the due date to allow for a successful submission. This will also provide time for any error corrections.

Investigators should meet with the assigned staff member to sign attestation 2 days prior to submission.

Once the sponsor has made you aware of your scores and/or funding please pass along the information to Associate Dean of Research, and the Director, Contracts and Grants.

6. POST AWARD

Once **Sponsored Programs Administration** (SPA) receives a notice of award, they initiate creation of an active account in KUALI COEUS Award Module by linking it to the previously routed proposal.

Sponsored Projects Accounting and Compliance (SPAC) then create an accounting chart string, also known as a project identification number that will be used to track expenditures over the life of the award.

The Director, Contracts and Grants will assign each project to a member of the Post Award team in Administrative Services.

After the award is received, the principal investigator will meet their assigned manager and discuss the budget awarded and how it will be utilized.

The manager will prepare a shadow budget that will be used to track expenditures for personnel and operating costs.

Funding profiles will be updated on the commitment accounting form for all faculty staff involved on the project. If faculty and staff outside of SON are involved then Administrators will be notified of the funding and prepare MOCs.

At the earliest possible time from award, the manager will submit eSURF requests for any subcontractors and will also confirm if POs are needed for consultants.

By the 15th of each month, the previous month is reconciled in the shadow account against RAVEN expenditures and this is noted next to the month completed in the spreadsheet.   An email will be sent to the faculty member letting them know the project is reconciled and if any issues were found. The faculty member may request a meeting to discuss issues and resolutions at any time.

Using Gant Viewer function, we will monitor SPAC's invoicing and send a reminder email to SPAC if this has not been done. This will be noted in the shadow account.

At the end of the project period, the manager will assist with closing out the finances and other reports required by the sponsor.

LINKS TO UMB PURCHASING GUIDE AND FORMS

Procurement Services Purchasing Guide:

https://www.umaryland.edu/media/umb/af/procurement/PurchasingGuide.pdf

Working Fund Policy:

https://www.umaryland.edu/media/umb/af/fs/policies/workingf.pdf

Working Fund Form:

https://www.umaryland.edu/media/umb/af/fs/forms/FSF-181.pdf

Payments to Study Participants Policy:

http://cf.umaryland.edu/umpolicies/usmpolicyInfo.cfm?polid=391

Parking and Commuter Services Forms:

http://www.umaryland.edu/parking/parking-forms/

EZ Payment Request Form:

https://www.umaryland.edu/media/umb/af/fs/forms/FSF-101.pdf

Billing to UMMS Journal Entry Form:

https://www.umaryland.edu/media/umb/af/fs/forms/FSF-300.pdf

Billing from UMMS Journal Entry Form:

https://www.umaryland.edu/media/umb/af/fs/forms/FSF-301.pdf

Approved by UMSON Governance Council, March 2, 2016

Review: Annually/Substantive Changes to Governance Council

Responsible Administrator: Associate Dean of Research
                                Office of Research and Scholarship

                                _____
                                Jane Kirschling, PhD, RN, FAAN
                                Dean and Professor