
Proposal Basics:

Preparing Applications for Research Funding

Laura Sheehan
Manager of Research Administration, Dept. of Family Medicine

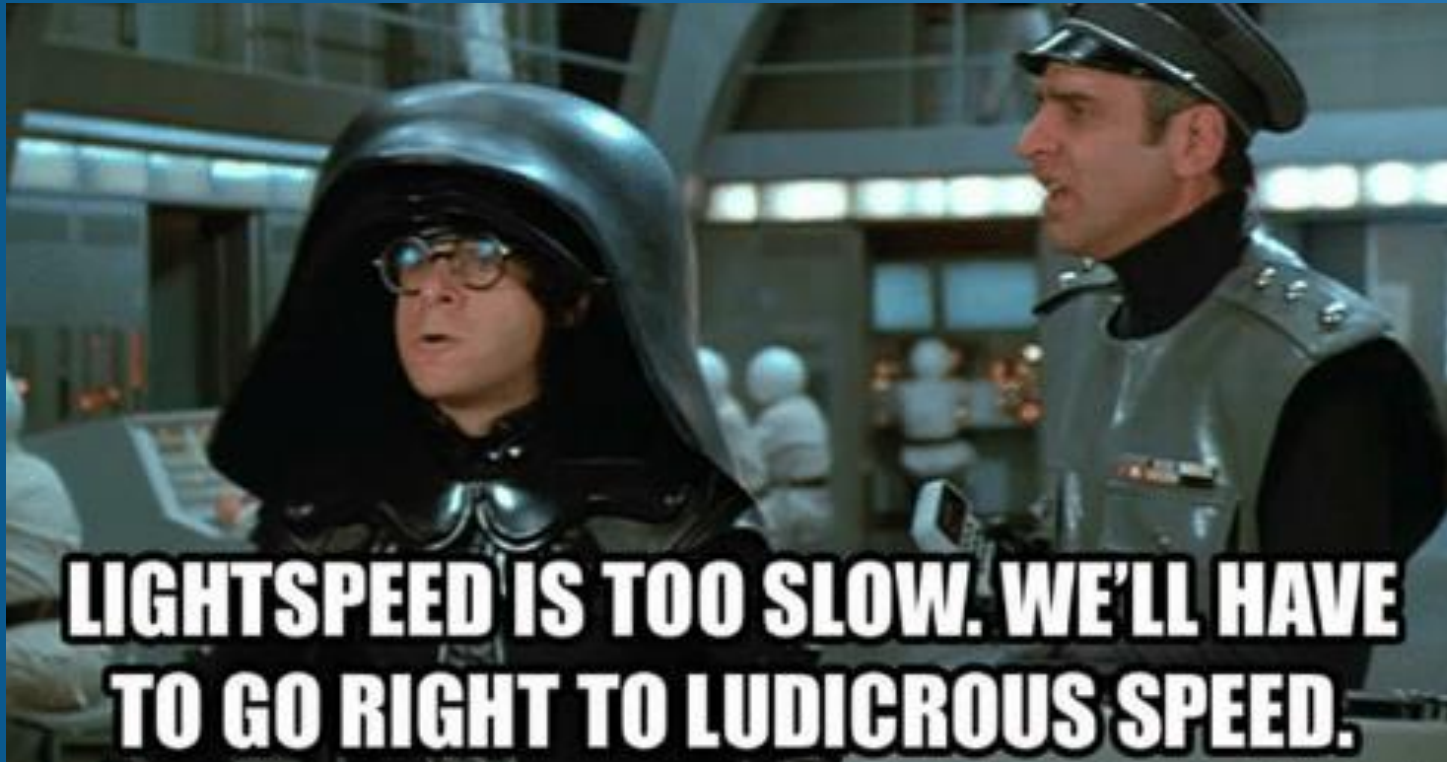
Laura Sheehan



- Manager of Research Administration, Department of Family Medicine, David Geffen School of Medicine at UCLA
- 22 years in academic research administration
 - 3 years in Civil/Environmental Engineering research administration at University of Southern California (USC)
 - 10 years in Pediatric Infectious Diseases research and fellowship administration, and divisional financial management at UCLA
 - 9 years in Family Medicine research administration and financial management at UCLA
- Management of approximately \$10M in contract and grant funding annually
- Department consistently ranks in top 10 nationwide for federal funding among all Family Medicine Departments

Objectives

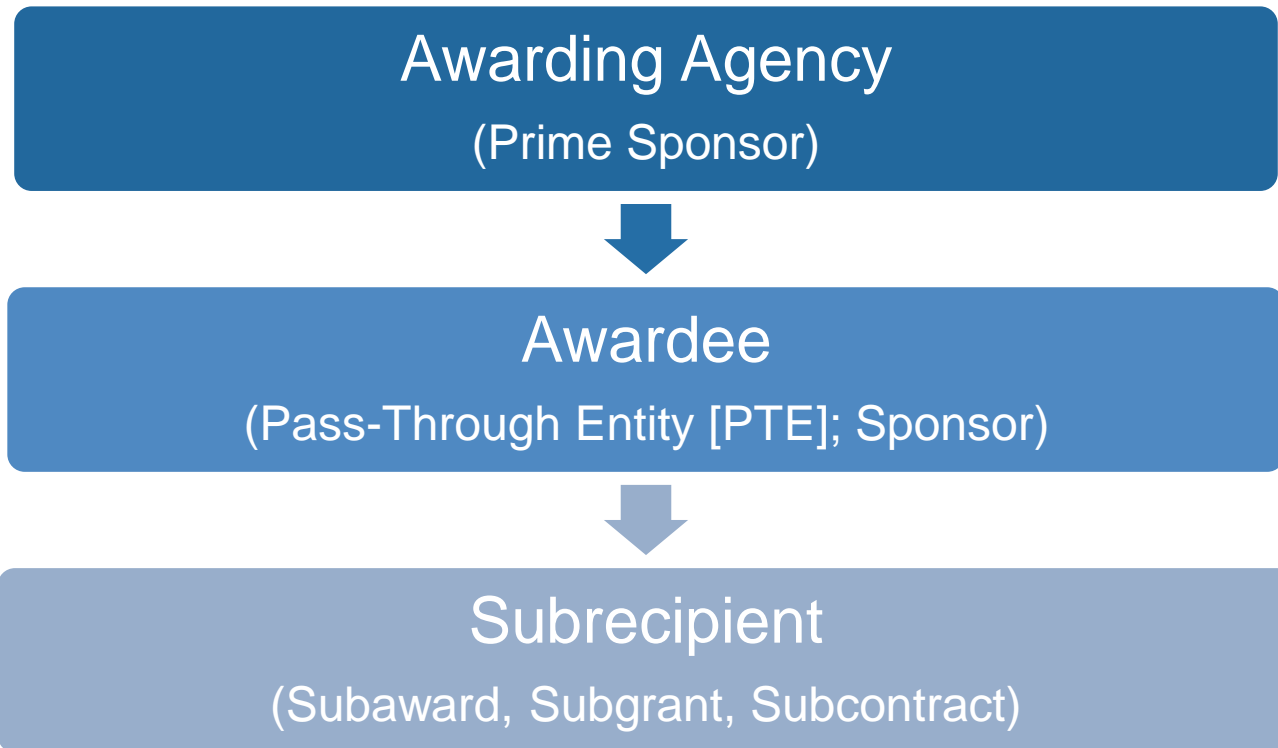
- Provide a basic overview of the research funding process, including identifying appropriate funding opportunities, exploring different kinds of sponsors, and understanding typical proposal components.
- Develop an understanding of the lifespan of a research project from development to close-out.
- Discuss the fundamentals of preparing a research proposal, including tailoring research plans to specific opportunities, creating a budget, organizing your team, building a timeline for submission, and how to avoid common mistakes.



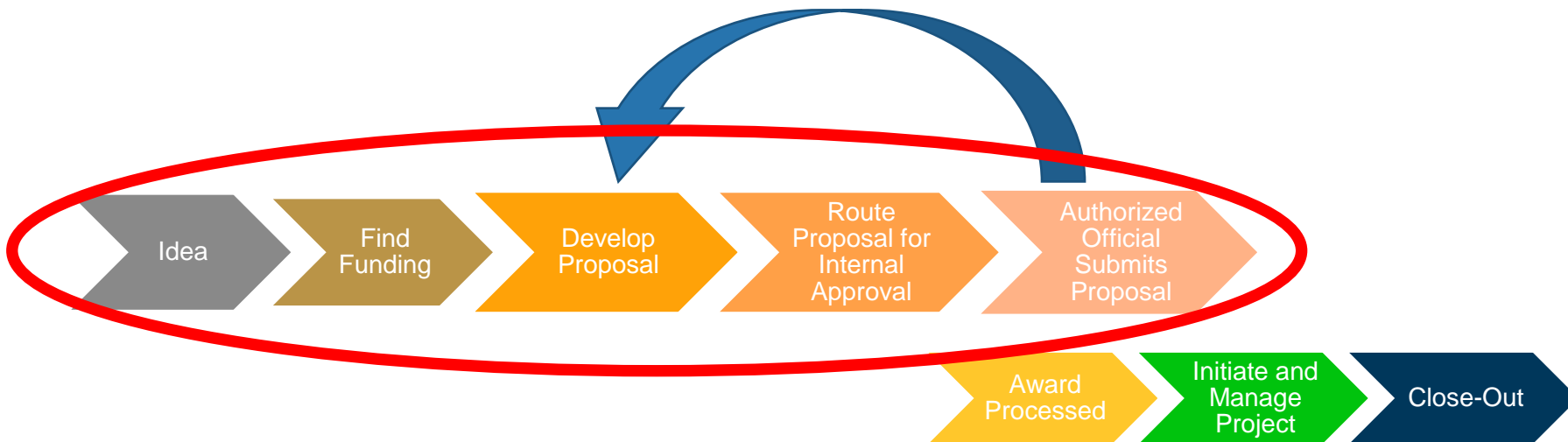
Roles and Responsibilities

Principal Investigator (PI)	Determines funding opportunity to apply for, reviews guidelines, develops proposal, prepares all documents
Research Team	Assists as needed with development of proposal KEY PERSONNEL: CONTRIBUTE TO THE SCIENTIFIC DEVELOPMENT OR EXECUTION OF A PROJECT IN A SUBSTANTIVE, MEASURABLE WAY, PAID OR NOT
Subaward Research Team	Obtains AO approval at their site, submits subaward packet to PI
Department Administrator	Works with PI, assists with budget/justif/biosketches, obtains signatures on internal forms, submits to AO
Authorized Official (AO)	Reviews proposal for compliance, signs/submits application
Sponsor	Issues guidelines, answers questions, reviews proposals, selects awardees

Subawards



Research Project Process



Idea Phase

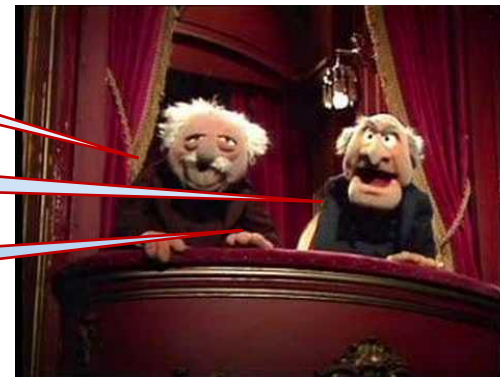
THINGS TO CONSIDER

- Significance
- Innovation
- Building your team

Why should I care?

*Hasn't somebody else
already done this?*

*Why on Earth would I trust
you to do this?*



Finding Funding



Sponsor Types

- **Internal**

- **Government**

- Federal
- State
- Local



NIH

- **Higher Education**

- **Private/Non-profit**

- Foundations



PCORI

- **For-Profit**

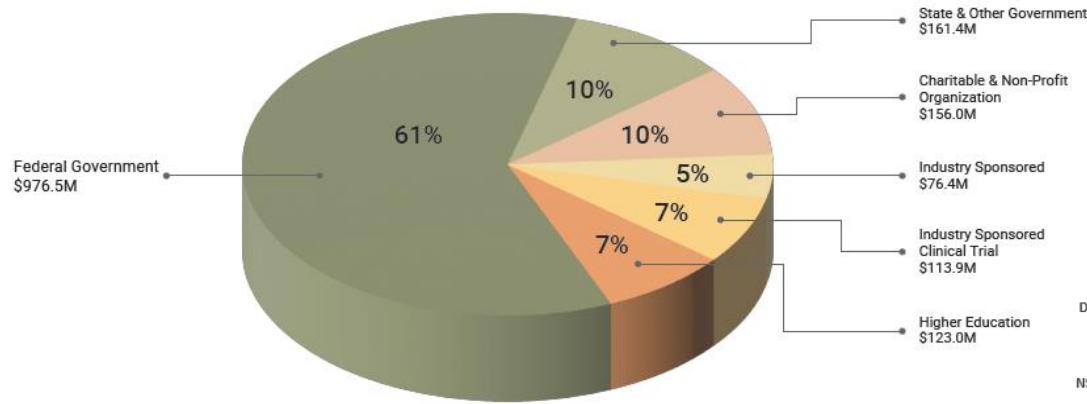
- Pharmaceutical
- Business



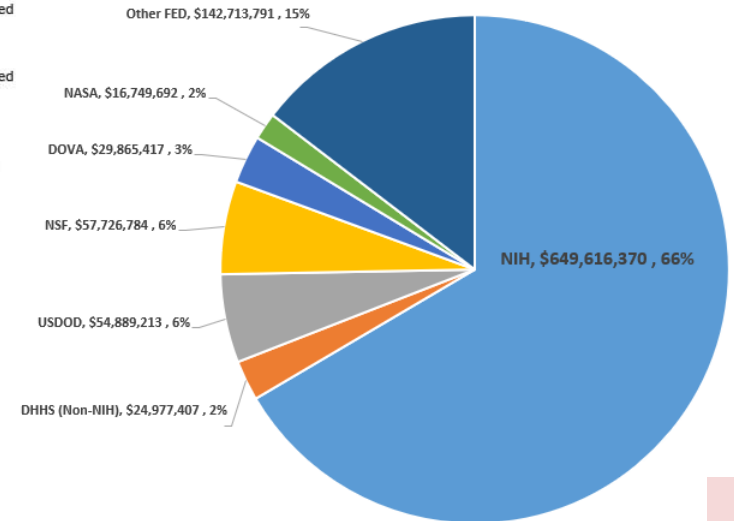
Bristol Myers Squibb

UCLA Research Awarded Dollars by Sponsor Type

FY 2021



FY 21 UCLA Research Awarded Dollars by Major Federal Agency



NIH

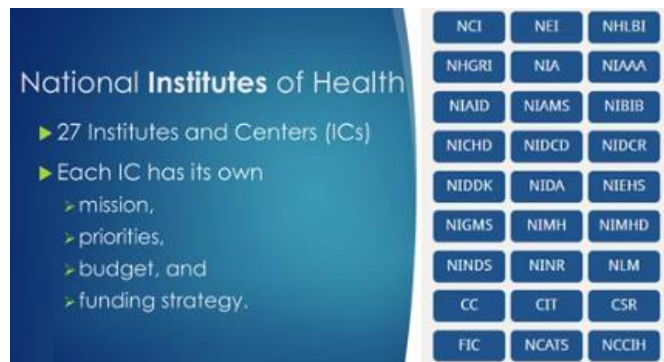


Figure from nih.gov

RePORTER : Repository of NIH-funded research projects and access publications

Matchmaker interface: Input an abstract/scientific text to find a list of the 100 most similar projects NIH is funding.

- Explore projects NIH has funded in your area of science
- Identify the appropriate IC
- Identify the Program Officials to contact that are associated with similarly funded projects
- Find experienced collaborators

Program Officer (PO)	Programmatic/scientific aspects; talk to them before submitting (as well as after)
Scientific Review Officer (SRO)	Admin aspects of scientific review group; talk to them if you have questions during review process
Grants Management Officer (GMO)	Administrative and regulatory aspects; talk to them if you need technical assistance

How to Find Funding Opportunities

- Sponsor websites
- [Grants.gov](https://www.grants.gov) (for federal opportunities)
- [Sponsored Programs Information Network \(SPIN\)](https://www.spin.gov)
- Your institutional research office
 - [UCLA Research Enhancement Office](https://www.research.ucla.edu)
- Colleague referrals
- Subscribe to newsletters



Sponsor Guidelines



Sponsor Guidelines

- **Important bits**

- Eligibility (limited submission?)
- Purpose
- Due dates
- Required elements/sections (templates, forms, etc.)
- Page limits and formatting requirements
- Budget restrictions (total amount, unallowable items, etc.)
- Submission method (email, online portal, etc.)
- Restrictions (LOI required? Over \$500k?)
- Scoring/Review Process

LSO – Must obtain institutional approval to proceed. [UCLA LSO Portal](#)

Common Elements

ABSTRACT

- What will you do? Why is it significant? How is it innovative? How will it be done?
- Publically available (no proprietary info)
- Often limited to 30 lines or less
- Often written last

Common Elements

PROJECT NARRATIVE

- Typical of NIH applications
- Addresses relevance of proposed research to public health
- 2-3 sentences max
- Lay language

TIPS FROM “HOW TO WRITE A SUCCESSFUL GRANT APPLICATION”

(H. ARDEHALI, AMERICAN HEART ASSOC., 2014):

- AIMS SHOULD NOT BE DEPENDENT ON EACH OTHER
- DON'T USE PHRASES LIKE “TO STUDY...,” INSTEAD SAY “TO DETERMINE...”

SPECIFIC AIMS

- Some start with a brief background and rationale, followed by **hypothesis**, then the aims:
 - Usually 2-4 (no less than 2 unless it's a small/pilot study)
- Engage the reader, but keep it simple
- Usually 1 page or less

Common Elements

RESEARCH STRATEGY

- Length depends on sponsor (NIH is usually 6 or 12 pgs)
- Significance
 - Get passionate
 - Convince reviewer your research is essential/fascinating
- Innovation
 - Where are the gaps and how will your research fill them
- Approach
 - Design, Methods, Data Analysis, Prelim Data
 - Prove feasibility (scope/size must be achievable)
 - Strengths/Weaknesses
- Bibliography (NIH: must include PMCID, no links/urls)

Common Elements

ENVIRONMENT

- Facilities/Resources
- Equipment
- Don't re-invent the wheel

BIOSKETCHES (OR RESUMES/CVs)

- Formatting is imperative
- Typically required of all Key Personnel
- Prove to the reviewers that your team is qualified, experienced, and capable

Common Elements

HUMAN SUBJECTS / CLINICAL TRIAL INFORMATION

- Must address the “big 4”:
 - Risk to subjects
 - Adequacy of protection against these risks
 - Potential benefits of the research to subjects and others
 - Importance of the knowledge to be gained

OTHER

- Mentorship plan, Multiple PI Leadership plan, Consortium/Contractual Agreements, Letters of Support, etc.



And One
More thing...

BUDGET



Budget

Cost Principles:

- Allowable
- Allocable
- Reasonable
- Necessary
- Consistently applied (regardless of funding source)

Budget

COMMON ELEMENTS OF BUDGET

- **Personnel**

- Effort in percentages or person months
- Employees only (no consultants or subaward personnel)
- Fringe benefits (UCLA: CBR)

- **Equipment**

- Must be more than \$5k per unit

- **Travel**

- Study travel vs. conference travel
- Foreign vs. domestic vs. local
- <https://www.gsa.gov/travel/plan-book/per-diem-rates>

PI Effort: “Typical” effort varies

STTR: minimum 10%/1.2 cal mos

R series: 15%/1.8 mos

MPI: slightly less

K series: 75%/9 cal mos

Budget

- **Subawards**
 - Each site needs to have its own mini-proposal (budget, justification, scope of work, etc.)
 - Must be approved by subsite's Authorized Official
 - Often main site will give draft budget or budget maximum to subsites
 - SOW is the main thrust of the agreement with subsite

Budget

- **Other**

- **Materials and Supplies**

- Computers, recording devices, tablets
 - Supplies for the creation, organization, storage of study data
 - “Project-specific supplies”

- **Publication Costs**

- Journal publication charges, color figures, creation of posters

- **Consultants**

- Cannot be employees, not considered KP, fixed rate/sponsors may have rate limits

- **Rent**

- **Participant Incentives**

- **Required Institutional costs (UCLA: TIF, GAEL)**

Budget

- **Indirect Costs**

- Direct costs are expenses connected to a specific project, whereas indirect costs are expenses involved with maintaining and running an institution.
- Indirect costs are frequently called “overhead costs,” “facility and administrative costs” (F&A), or IDC.
- The Indirect Cost Rate is a set ratio/percentage of direct cost, it is standardized and often is required to be approved federally. (Institutions without a federally-approved IDC Rate Agreement can utilize the Federal De Minimis rate of 10%.)
- Sponsors may restrict IDC to a maximum amount or unallow them entirely (must be a published, standardized policy for all award recipients). Your institution may require approval to accept such an award.
- Reach out to your Department Admin or Authorized Official prior to creating your budget to ensure IDCs are correctly calculated.

Budget

- **Other Considerations**
 - Multiple years
 - Restrictions
 - Round to nearest dollar unless otherwise stated

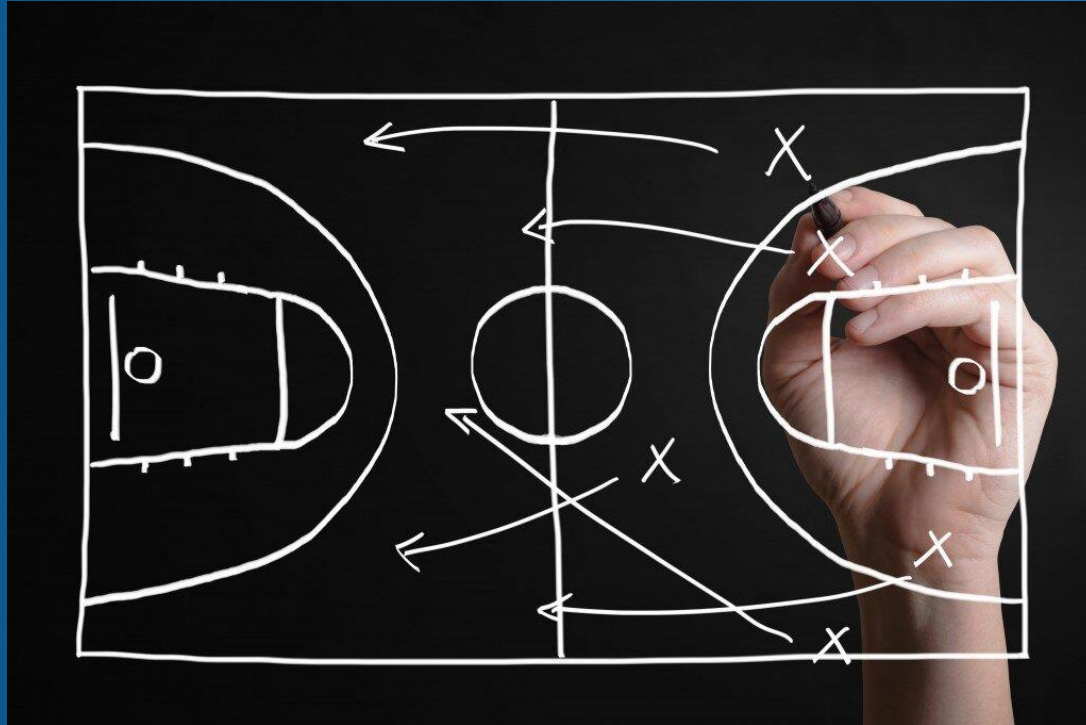
Budget Justification

- **Narrative explanation**
 - Justify how each item is necessary to achieve project aims
 - Clarify how the costs were calculated
- **Organized** in same order and with same sections as budget
- Categories less than \$1,000 can have minimal (e.g. 1 or 2 sentence) explanations
- Unusual or expensive items should be justified in detail, including cost-comparisons/alternative explored
- Make sure your figures match



Fake LA Times Cover

Gameplan



Sample Plan

Element	Responsible Party	Due Date
Performance Sites	Dept. Administrator, with input from Proj Coord/PI	Sep 12
Key Personnel	Project Coord. with input from PI	Sep 12
Budget	Dept Administrator and PI	Sep 13
Draft Subaward docs	Dept Administrator and PI/Proj Coord will send to subsite	Sep 14
▶ Biosketches	All Key Personnel create their own	Sep 20
Budget Justification	Dept Administrator and PI	Sep 26
▶ Final Subaward docs	Sub will obtain sub AO approval and return final, signed version	Sep 26
▶ Human Subjects	PI and Proj Coord	Sep 26
Research Plan	PI	Sep 26
Specific Aims	PI	Sep 26
Research Strategy	PI and Co-I's	Sep 26
Resource Sharing Plan	PI and Co-I's	Sep 26
Facilities and Resources	Dept. Administrator and Proj. Coordinator	Sep 26
Letters of Support	Proj Coord will seek LOS from all sites	Sep 1-26
Cover Page	Dept. Administrator	
Internal Forms	Dept. Administrator (will obtain signatures f	
Submission to AO	Dept. Administrator	
Submission to Sponsor	AO	

Build in extra time for review and feedback
Don't forget to allow for holidays
Assume people will be late



Internal forms

- **Proposal Intake Form**
 - Department-specific; due to Dept Admin at the start of pre-proposal process
 - Gathers basic data for planning purposes
- **Central Office Extramural Proposal Approval Form (UCLA [EPASS](#))**
 - Submitted by Dept Admin to Central Office, gathers info to ensure proper approvals/certifications are in place
 - Used for institution-wide tracking and record-keeping
 - Requires sign-off by PI and Chair/Dean
- **Conflict of Interest Forms** (must be signed by all Key Personnel at your site)
 - Federal PHS Sponsor/Prime: PHS Disclosures are required (UCLA: [eDGE](#))
 - Federal non-PHS, CIRM, or UC RGPO/UCOP Sponsor/Prime: [740 and Suppl 740 Form](#)
 - Non-Government Sponsor/Prime: [700U and 700u Addendum](#)
 - Exemptions: non-profit, tax-exempt educational institutions and [Exempt Organizations](#)

Submission

You are **NEVER** authorized to submit a proposal without approval from an Authorized Official



Submission

Department Administrator (DA) obtains signatures on all internal forms and submits to one of the offices below **at least 5 business days prior to the sponsor deadline**.

Sponsor Type	Contracts	Grants	Clinical Trials
Non-Profit/Government	OCGA	OCGA	OCGA
For-Profit/Industry	TDG	TDG	CTC&SR

OCGA: [Office of Contract & Grant Administration](#)

TDG: [Technology Development Group](#)

CTC&SR: [Clinical Trials Contracts and & Strategic Relations](#)

The Authorized Official will review and send back to DA for corrections as needed. They will then sign off and either submit directly, or give the DA/PI permission to submit.

Submission Formats

- Email/PDF attachment
- Centralized proposal submission software/website
 - grants.gov/Cayuse (NIH, CDC, HRSA, AHRQ, etc.)
 - ASSIST (NIH multi-component awards, P/U series)
 - SmartSimple (UCOP, Research Grants Program Office)
- Sponsor-specific website/submission portal (e.g. myRWJF)
- Other

After Submission

- Timeline
 - Check guidelines/website
 - Varies by sponsor
 - Private/Non-Profit: tend to be quicker
 - NIH/Federal: 2-7 months scientific merit review; 7-10 months final decision

After Submission

- Next steps
 - **If funded**
 - Supplementary information (JIT): Other Support, Training Certifications, Updates
 - IRB or other certifications/training
 - Prepare to hire (Job Descriptions and posting)
 - **If not funded**
 - Review feedback, determine if re-submission is doable
 - Seek alternate funding if re-submission is not feasible
 - Be like Dory



Tips and Takeaways

- **READ THE GUIDELINES**
- Make it pleasant to review
- Collaborative work: Communication is key; timeline, have specific action items assigned to specific people with a specific due date
- Ensure you have enough time

Resources

- [UCLA Office of Research Administration \(ORA\) Training Programs](#) — links to training and professional development resources
- UCLA Clinical and Translational Science Institute (CTSI) [Funding Search Tools & Grant-Writing Tips](#) – tips on how to write K & R grant proposals
- National Institute of Health (NIH) [Grants & Funding: Developing Your Budget](#)
- NIH Grants Basics: https://grants.nih.gov/grants/grant_basics.htm
- NIH Grants Process Overview: https://grants.nih.gov/grants/grants_process.htm
- UCLA OCGA FAQs: <https://ocga.research.ucla.edu/faq/#proposal-preparation>

Thank You

Special thanks to Spaceballs, the Muppets, Jerry Maguire, Spongebob, that kid drinking from a fire hose, Dory, and the CHIPTS Team