

OFFICE OF THE VICE PRESIDENT FOR RESEARCH

**Self-Help Tools for
Proposal Preparation**

Management Plan Self-Assessment

Who needs a management plan?

Most proposed centers and multidisciplinary research programs submitting to a funding agency in response to a funding solicitation.

What should your plan include?

It depends on the requirements of the solicitation, size of team, and complexity of the proposed research, education, and outreach components. This document suggests considering eight typical elements:

- an organizational chart
- team composition, roles, expertise
- use of advisory boards
- corporate or external partners programs
- communication strategy and logistics
- physical location of headquarters
- center meetings
- risk management and decision-making processes

How do I use this self-assessment tool?

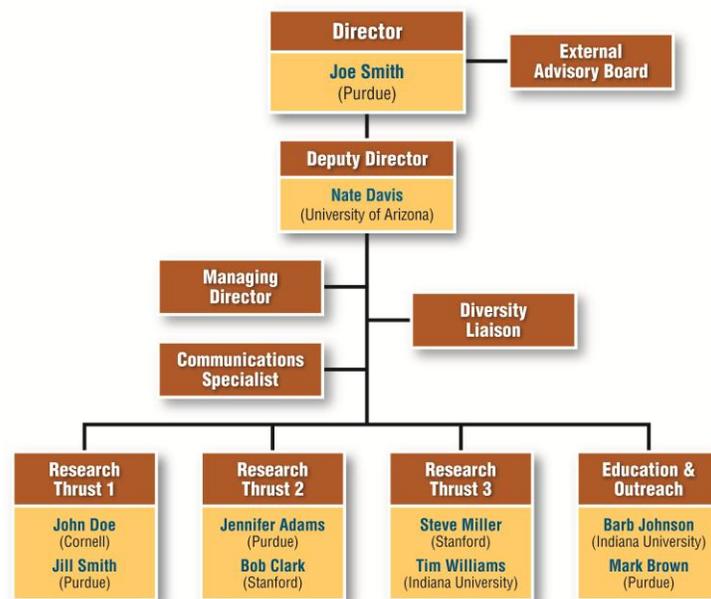
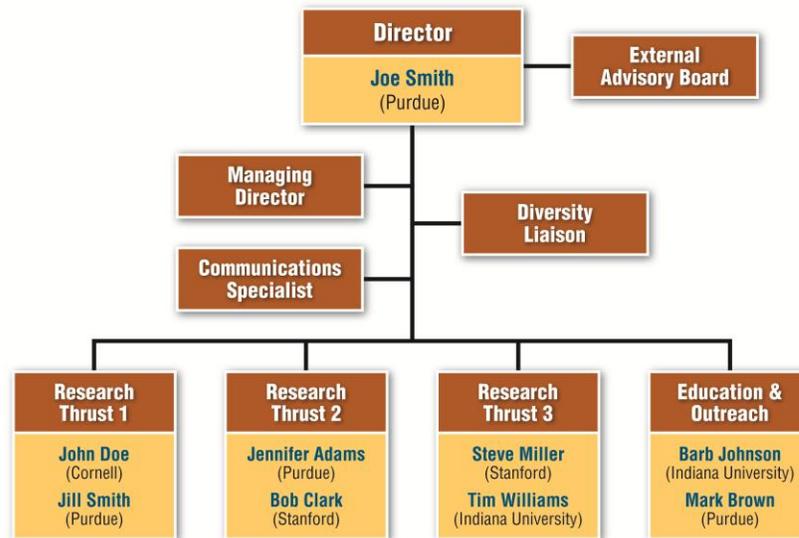
Follow check-off questions in each of the eight sections. Not all sections will apply to your proposal, but you should review each question for applicability.

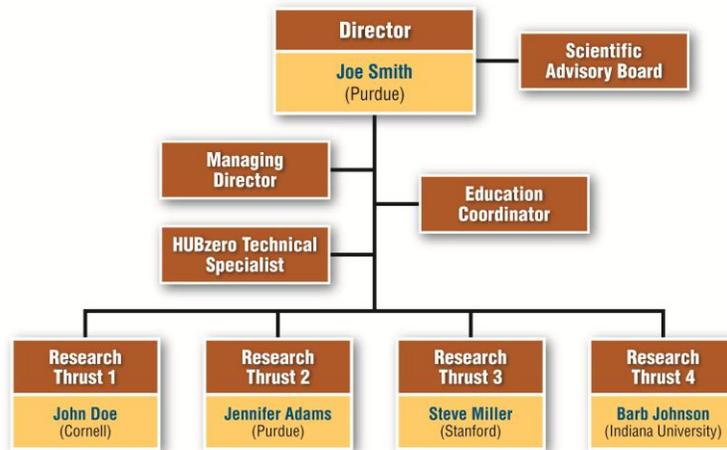
1 Organizational Chart Development

It helps to first create an organizational chart showing the “skeleton” that supports your team, clarifies hierarchies in the chain of command, and gives a sense of the decision-making scope and order.

Smaller teams probably will not include this chart in their actual proposal narrative, but you will still benefit from creating one as a tool to think through team structure.

Sample Organizational Charts





Will you need a director (or equivalent title) or a director and deputy director?

Consider...

- size of center or project
- need to reflect multi-institutional, multi-disciplinary nature of team
- *co-directors* are different than director/deputy director. Funding agencies tend to prefer single point of contact and rather than two equal leaders.
- providing rationale if PI is not the director



Do you need to show who your director and the center (program) report to institutionally?

Consider...

- if this a higher profile center that requires you to ensure accountability
- whether you need to make a case for having accessibility to campus leaders such as the dean, provost, president, or vice president for research who can provide institutional resources and support



Do you need a managing director position?

Consider...

- size of center or project
- freeing director from overseeing day-to-day operations
- part-time vs. full-time. If full-time, this project is sole activity and budgeted at 100%.
- using a project manager instead of managing director for smaller proposed efforts



Do you need a communications specialist?

Consider...

- dissemination requirements
- funding agency mission for public scientific literacy
- part-time vs. full-time
- including a student science writing/communication internship in the education plan

**If you are using the HUBzero® or similar cyberinfrastructure for your center/project, do you need a technical specialist?***Consider...*

- part-time vs. full-time
- reporting to managing director vs. director

**How does your research leadership need to be represented on the org chart?***Consider...*

- organizing by the same thrust areas, thematic areas, or goals of your narrative
- identifying leaders by name
- having leaders report to the director rather than managing director
- identifying co-leaders by name also if solicitation emphasizes interdisciplinarity or diversity
- identifying institutions of leaders and co-leaders in order to emphasize partnerships

**Will you have a director/leader and/or coordinator for education?***Consider...*

- making parallel hierarchy of education and research to show integration commitment
- education coordinator is a staff position with more of an administrative function while director/leader is a faculty member who provides strategic oversight of an educational research component
- larger centers may have both the faculty leader and the staff coordinator

**Do you have extensive diversity initiatives?***Consider...*

- if you need a liaison, leader, or coordinator
- having liaison/leader/coordinator report to director but not at same hierarchy as research and education unless a very large center

**Will you have an advisory board?***Consider...*

- type of advice your center or program needs
- external vs. internal. External is typical, but large centers may have both.
- types of stakeholders for your project, such industry, education, non-profits, other funding agency initiatives (e.g. NSF LSAMP and NSF IGERT), or student populations (e.g. a Student Advisory Committee).
- an advisory board completely focused on technical and scientific oversight, such as a Scientific Advisory Board

2 Team Composition, Roles, Expertise

Follow your organizational chart and systematically write text that identifies team members, states what they will do and with whom, and summarizes qualifications.



What are the specific solicitation instructions for personnel information?

Consider...

- using tables with column headings responsive to the solicitation instructions, particularly if you have a large team, e.g.:

Name	Institution	Role	Expertise

- including only PI, co-PI, and senior personnel and not support staff
- describing communication methods and frequencies either in the context of roles and responsibilities or else in a communications summary paragraph (Section 5)
- highlighting team history of working together so as to differentiate from teams coalescing merely to pursue funding opportunity
- using paragraphs rather than table if solicitation requires extensive description of expertise. Bold first mention of team member names in the paragraphs.



Who will be on your leadership team/steering committee/executive committee?

Consider...

- identifying the core decision makers from across the organizational chart
- including at least director, deputy director, thrust/theme leaders, education leader



What is the role of your leadership team/steering committee/ executive committee?

Consider...

- integrating scientific/technical efforts across thrust areas
- ensuring integration of research and education
- evaluating progress toward goals and objectives
- facilitating access to resources and expertise

**What is the role of your director?***Consider...*

- serves as representative of the center/program
- provides fiscal oversight
- interfaces with advisory boards and corporate partners
- builds team and collaborative partnerships
- reviews progress toward milestones
- redirects technical and/or educational programming based on evaluations

**What is the role of your managing director?***Consider...*

- stating how they will oversee fiscal execution, hire and manage staff, track progress toward project milestones, coordinate agency reporting, manage site visits and technical reviews, and provide day-to-day coordination of tasks and communications
- identifying the management and technical expertise needed by managing director
- referring to Purdue Discovery Park managing director model of center operations
- referring to Purdue's model for business office support and managing director's role in interacting with business office personnel
- including text on Purdue's novel Launch Manager resource (available upon notice of award. For details contact Dave Kotterman, managing director for Launching Centers and Institutes: dkotter@purdue.edu)

3 Advisory Boards

Once you have decided if you need an advisory board(s) targeted to particular requirements of your proposed center or program (Section 1), you will need to describe how they will function and who will be members. Your budget should include travel funds for advisory board members to attend annual meetings but no honorarium.

**What role do you want your advisory board(s) to perform?***Consider...*

- evaluating center progress and identifying areas for improvement
- serving as an avenue to increase collaborative ties, build partnerships, and increase student participation
- facilitating risk management
- assisting with seed funding reviews

**Will you give specific names or just representative categories of board members?***Consider...*

- whether the solicitation allows advisory board members to be named. Sometimes for the sake of the reviewer pool, a funding agency may forbid board member invitations until notice of award.
- if names are allowed by the solicitation, you must have letters of commitment from each advisory board member specifically identified. Never include someone's name if you do not have a letter verifying agreement.
- if you should list representative membership categories instead of names, include categories either within the advisory board box on the organizational chart or in the management plan narrative.
- if your advisory board composition is extensive, consider using a table format, e.g.

Advisory Board Member	Title/Institution	Expertise

**Who will interface with the advisory board?***Consider...*

- identifying director as primary contact
- showing the advisory board on the organizational chart
- identifying liaison to the advisory board if board responsibilities are extensive

**How long do you want each board member to serve?***Consider...*

- whether members will serve entire project period or rotate off board
- having a rotating chair of the advisory board if board responsibilities are extensive

4 Corporate or External Partners Program

You will want to have conversations with your corporate relations office in your particular college in order to leverage their expertise and also ensure your compliance with specific rules.

**Do you have strong interest from industry and need a formal corporate or external partners program?***Consider...*

- whether increased visibility will be significant for your project
- need for an additional funding source
- need for unique expertise, instrumentation, and test beds available at corporations

- whether you have a mechanism for incorporating insights on consumer issues and industry challenges
- working with university corporate relations personnel for recruiting members and following Purdue policies
- clearly defining advisory board vs. corporate/external partner roles



What text do you need to include regarding a corporate or external partners program?

Consider...

- outlining financial arrangements of a minimum number of partners at \$X
- following the standard corporate partnership membership and intellectual property agreements of the PI's college
- including initial list of partners, even if recruiting is not complete, but you must have letters of commitments from any identified partners.
- describing benefits provided to corporate partners, including:
 - opportunities for internships and graduate employment
 - avenue for input into research directions in light of corporate issues
 - terminology that does not imply paying for taxable services, e.g. use words such as "typically interactions include..." or "activities may include..."
- not defining your partners as sponsors



Who will interact with the corporate or external partners?

Consider...

- university corporate relations office in the PI's college
- director or deputy director's capacity for relationship building

5 Communications



How much of your communication will be in person vs. distance?

Consider...

- how often research thrusts need to communicate to best integrate efforts. Weekly or biweekly is typical.
- how often the leadership team needs to meet to coordinate project. Monthly or bimonthly typical.
- how often the managing director/director will communicate with the advisory board. Quarterly reports are typical.



How will you use technology (beyond normal email) to facilitate communications?

Consider...

- Adobe Connect
- HUBzero® technology
- Skype
- teleconference

**Do you need specific communication mechanisms to recruit for postdoctoral fellows and graduate students?***Consider...*

- travel to conferences
- booth presence at minority conferences
- social media, wikis

**How will you communicate the status of the center/program to the sponsoring agency in terms of productiveness and health?***Consider...*

- frequency of status reports (quarterly, semi-annually, annually)
- format of reports and who will write them
- financial health and “burn rate” (mention center’s strong business office support)
- for a larger center, the funding agency may require a strategic plan before dispersing award monies

**How will you request and compile information for periodic reports?***Consider...*

- frequency of requests
- who will make requests and who will compile
- types of information needed
- measures to minimize burdens on the faculty but still satisfy funding agency requirements

6 Physical Location

**Is the center virtual or does it have a physical location for its headquarters?***Consider...*

- if there will be physical space dedicated to administrating the center/program
- identifying building location and general footage of headquarter space
- must have formal commitment from campus leadership for campus space before including specifics in narrative or in letters of commitment

7 Center Meetings

**How frequently will you have center-wide meetings?***Consider...*

- meeting in conjunction with other well-attended professional meetings
- rotating meetings at partner institutions

**How frequently will you have graduate-student-only meetings?***Consider...*

- stating a case for graduate-student-only meetings to support interdisciplinary aspect of center/program research in an informal setting. Show your awareness that significant research integration occurs at the graduate-student level.
- describing informal mechanisms such as meals to encourage research conversation and mutual exchange of ideas among graduate students while faculty are absent
- formalizing a Student Leadership Council or Student Advisory Committee if you are a large center

**Types of center meetings?***Consider...*

- annual meeting
- internal workshops
- weekly or monthly seminar series or symposia
- leadership retreats

**Who needs to attend center-wide meetings?***Consider...*

- having your advisory board attend as its annual commitment
- inviting corporate/external partners
- putting money in the budget for graduate student attendance

**What is your agenda for center-wide meetings?***Consider...*

- advisory board members meeting with leadership team to provide recommendations
- reports and presentations from thrust and education leaders
- research poster sessions by graduate students

8 Risk Management and Decision Making

**How will you ensure high-reward through risk management?***Consider...*

- addressing being flexible to rapidly respond to high-impact research
- encouraging creativity
- including go/no-go decision flow chart or stage-gate diagram
- providing incremental funding based on milestone accomplishments
- using advisory board and leadership team/steering committee to monitor research portfolio for realignment with center mission, balance risk, and watch for potential synergies of developing ideas

**Will you need a mechanism for seed funding?***Consider...*

- using advisory boards and leadership team/steering committee to

help review seed funding proposals

- providing initial outlay of seed funding while remaining funds are contingent on meeting agreed upon research milestones
- describing how you will solicit seed funding proposals



Will you have a research incubator concept?

Consider...

- using incubator as pre-seed funding to facilitate collaboration for breakthrough ideas
- creating avenues to submit and critique ideas



What is your process for how center leadership will evaluate progress?

Consider...

- identifying process for setting and reviewing metrics for success
- identifying process for reallocating funding if subprojects do not meet appropriate milestones
- outlining how to incorporate external evaluation formative and summative results. Read solicitation for a requirement to engage evaluators for education program. Usually funding agencies expressly require an external and not internal evaluator when a program/center has extensive educational initiatives.



Particularly if your center is large, do you need a process for conflict resolution?

Consider...

- director should have primary responsibility
- role of advisory board
- role of institutional leadership, e.g. person on the organizational chart to whom the director reports