# Primary Differences Between NIH and NSF Proposal Submissions
## Bioscience Research

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<td><strong>Mission</strong></td>
<td>Seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.</td>
<td>Promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense.</td>
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<td><strong>Leadership</strong></td>
<td>Office of the Director sets policy for NIH and for planning, managing, and coordinating the programs and activities of all the NIH components; provides leadership to the Institutes. Assisted by the NIH Deputy Directors including the Principal Deputy Director, who shares in the overall direction of the agency's activities.</td>
<td>The National Science Board (NSB), comprised of 24 of eminent individuals, establishes the overall policies of the foundation. The NSB oversees the Director, who is responsible for NSF staff and management; program creation and administration, merit review, budget and daily operations.</td>
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<td><strong>Organization</strong></td>
<td>Comprised of 27 separate institutes and centers, each with a specific research agenda.</td>
<td>Comprised of eight Directorates; each directorate is comprised of Divisions, each with a specific research agenda.</td>
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| **Program Mechanisms**| • Parent Announcements.  
• Three-character activity code identifies a specific category of extramural research activity (e.g., R01 [Standard]; R21 [Exploratory]; R03 [Small Grants]).  
• Standard due dates unless specified otherwise in program solicitation.  
• Multiple PD/PI projects | • Unsolicited proposals (standard due dates/submission windows).  
• Unsolicited proposals with no specified deadline, can be submitted anytime  
• Solicited Proposals (specific programs and due dates).  
• Collaborative Research (linked proposals) |
| **How it Funds Biomedicine/Biooscience/Bioengineering** | Generally funds research on the health-related application of devices, computation, instruments (e.g., testing effectiveness of imaging instrument on tissue; using computation to help solve/address a critical health issue); conducting trials on animals or human subjects. | Funds research on the basic science of health-related devices, computation, instruments (e.g., mechanical aspects of a medical device; developing a software program to process vast amounts of health data). Contact program officer to ensure proposed project is a good fit for NSF and the respective program. |
| **Review Process**    | **First-Level Review:** By a Scientific Review Group (SRG) composed primarily of non-federal scientists with expertise in relevant scientific disciplines and current research areas.  
**Second-Level Review:** By Institute and Center National Advisory Councils or Boards. Councils are composed of both scientific and public representatives chosen for their expertise, interest, or activity in matters related to health and disease. | Proposals are assigned to the appropriate NSF program. Program Officers identify experts in their particular fields to review the proposal. Usually, a proposal is reviewed by at least three external reviewers. The review may be conducted by ad hoc reviewers, a panel of experts, or a combination of both.  
**Merit Review Process:** In addition to any program-specific review criteria, reviewers evaluate all NSF proposals through two NSB-approved merit review criteria: Intellectual Merit and Broader Impacts. |
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<td>Only applications recommended for approval by BOTH the SRG and the Advisory Council may be recommended for funding.</td>
<td></td>
<td>which are based upon Merit Review Principles. Reviewers are asked to consider five elements in the review for both criteria. NSF gives careful consideration to the following in making funding decisions: – Integration of research and education – Integrating diversity into NSF projects, programs, and activities</td>
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| Review Ratings/Scores | Overall Impact Score. Reviewers will provide an overall impact/priority score (1=exceptional; 9=poor) to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following review criteria, and additional review criteria (as applicable for the project proposed). | Excellent: Outstanding proposal in all respects; deserves highest priority for support. Very Good: High-quality proposal in nearly all respects; should be supported if at all possible. Good: A quality proposal, worthy of support. Fair: Proposal lacking in one or more critical aspects; key issues need to be addressed. Poor: Proposal has serious deficiencies. |
| Scored Review Criteria. Reviewers will consider each of the review criteria below in the determination of scientific and technical merit and give a separate score for each. | | |
| - Significance | | |
| - Investigator | | |
| - Innovation | | |
| - Approach | | |
| - Environment | | |
| The final overall impact score is determined by calculating the mean score from all the eligible members' impact scores and multiplying the average by 10; the final overall impact score is reported on the summary statement. Thus, the final overall impact scores range from 10 (high impact) through 90 (low impact). Numerical impact scores are not reported for applications that are Not Discussed (ND), which may be reported as ++ on the face page of the summary statement and typically rank in the bottom half of the applications. | | |

<p>| Reviewers' Comments | Applicants receive a Summary Statement. Applications that are not discussed at the review meeting will be given the designation &quot;Not Discussed (ND)&quot; as an overall impact score, but the applicant will see the scores from the assigned reviewers and discussants for each of the scored review criteria as | Applicants will receive: (1) description of the context in which the proposal was reviewed; (2) copies of all reviews used in the decision (with any reviewer-identifying information redacted); and (3) copy of panel summary, if the proposal was reviewed by a panel at any point in the process. |</p>
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<td>additional feedback on their summary statement.</td>
<td>Reviewers do not make funding decisions. The analysis and evaluation of proposals by external reviewers provide information to NSF Program Officers in making their recommendations to award or decline a proposal. Final programmatic approval for a proposal is generally completed at the Division level.</td>
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<td>Final Funding Decisions</td>
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<td>Proposal Submission</td>
<td>Grants.gov Workspace: Proposal documents are uploaded and stored into a Web-based portal and electronically submitted by OSP.</td>
<td>Research.gov: Proposal documents are uploaded and stored into a Web-based portal and electronically submitted by OSP.</td>
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<tr>
<td>UWM OSP Review</td>
<td>Proposal released in Workspace for AOR (OSP) review; PI can continue working on proposal in Workspace. OSP will return comments as needed. When final submission is ready, release for AOR to submit.</td>
<td>Proposal released in Research.gov for SRO (OSP) review; PI can continue working on proposal in Research.gov. OSP will return comments as needed. When final submission is ready, release for SRO to submit.</td>
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| Proposal Format Requirements| • **Margins**: Minimum half-inch, all sides. No information should appear in the margins, including the PI's name and page numbers.  
• **Fonts**: Arial, Helvetica, Palatino Linotype, or Georgia typeface in 11pt or larger. | • **Margins**: Minimum one inch, all sides.  
• **Fonts**: Arial, Courier New, or Palatino Linotype at a font size of 10 points or larger; Times New Roman 11pts or larger; or Computer Modern family of fonts at 11pts or larger.  
• **Line Spacing**: No more than six lines of text within a vertical space of one inch.  
• **URLs**: Not allowed in the Project Summary or Project Narrative  
• **References**: Must include names of all authors, cannot use “et al.” |
| Nomenclature Differences    | • Specific Aims  
• Principal Investigator/Project Director (PI/PD)  
• Co-Investigator (Co-I) (do not use “Co-PI” in proposals) | • Objectives (do not use “Specific Aims” in proposals)  
• Principal Investigator (PI)  
• Co-Principal Investigator (Co-PI) |
| Proposal Budgets            | • **Modular budget** for projects $250,000 or less in direct costs per year.  
• **Detailed budget** for projects >$250,001 in direct costs  
• Requests of $500,000 or more in direct costs require prior approval.  
• Budget limits usually exclude indirect costs, including subaward indirects; indirects are paid on top of the direct costs (unless specified otherwise). | • Same budget format for all NSF programs (unless specified otherwise)  
• Budget limits usually include indirect costs (unless specified otherwise). |
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| Salary Support | • Capped at $221,900 per year  
  • Salary request must match level of effort (e.g., 2 summer months)  
  • No limit on number of months | • Maximum two months of salary support; can be used in summer or during academic year. No dollar cap. |
| Required Proposal Sections | • Project Summary/Abstract  
  • Project Narrative  
  • Specific Aims  
  • Research Strategy (which must include these subsections)  
    − Significance  
    − Investigator  
    − Innovation  
    − Approach  
    − Environment  
  • Equipment  
  • Facilities & Other Resources  
  • Biosketch (use SciENcv)  
  • Budget  
  • Budget Justification (level of detail depends on budget type and activity code)  
  • Bibliography & References Cited  
  • Data Management & Sharing Plan | • Project Summary  
  • Project Narrative (which must include these subsections)  
    − Broader Impacts  
    − Results of Prior NSF Support  
  • Biosketch (use SciENcv)  
  • Collaborators & Affiliations Template  
  • Current/Pending Support (use SciENcv)  
  • Data Management Plan  
  • References  
  • Equipment, Facilities & Other Resources  
  • Budget  
  • Budget Justification |
| Optional/As-Needed Proposal Sections/Items | • Human subjects  
  • Animals  
  • Letters of support/collaboration  
  • Institutional letters of commitment from subawardees  
  • Plan for Enhancing Diverse Perspectives | • Graduate Student/Post-doc Mentoring Plan  
  • Safe and Inclusive Work Environment Plan  
  • Letters of Collaboration  
  • Institutional letters of commitment from subawardees  
  • Human subjects/animals |
| Required Forms | Included in Grants.gov Package:  
  • SF-424 (R&R)  
  • PHS 398 Research Plan  
  • PHS 398 Cover Page Supplement  
  • Research & Related Senior/Key Person Profile  
  • Research & Related Other Project Information  
  • Project/Performance Site Location(s)  
  • Modular or Research & Related Budget Form | None, unless specified otherwise in the program solicitation. |
| Proposal Resubmissions | • Limited to one resubmission per proposal | • No limit on resubmissions unless specified otherwise. |