

NIH Fellowships



Fall semesters:

**Grant Writing
and Ethics
BMVS 5094**

**National Institutes
of Health**

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I now spend most of my days writing grants and manuscripts and teaching microbial genetics. But occasionally I get into the lab to do the various odd job.

Life Outside the Lab: spending time with my family, coaching my kid's sports teams, taking care of our black lab puppy, anything outdoors, playing basketball, watching sports, and cheering for the [Kansas Jayhawks!!!](#)



Chris Waters @WatersLabMSU · Aug 16



Compiling all of my grant applications from 10 years as faculty. During this time, I have had 64 unfunded applications! Truth is most of us could wallpaper our offices with rejections. The MOST important key to be successful in science is to don't let "NO" stop you!



33



397



1.7K





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Photos courtesy of Otto Yang and Patrick W. Miller

Straight talk with...Otto Yang and Patrick Miller

PMID: 19498360

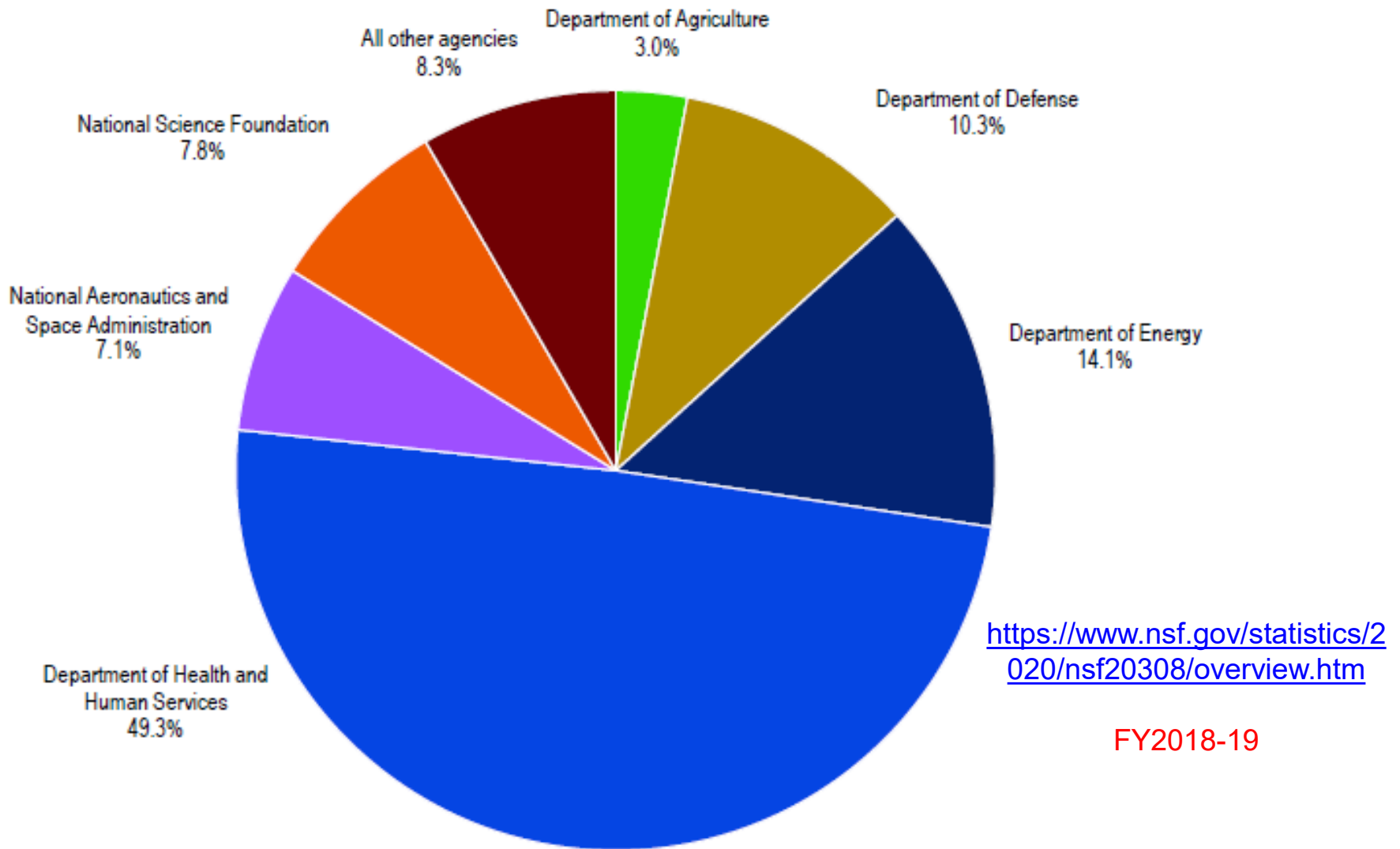
Is there a way people can improve upon their grant writing skills?

Some people make the mistake of writing the grant in a way that assumes that the reviewer is omniscient and that he or she can organize all of the information for them.
—Otto Yang

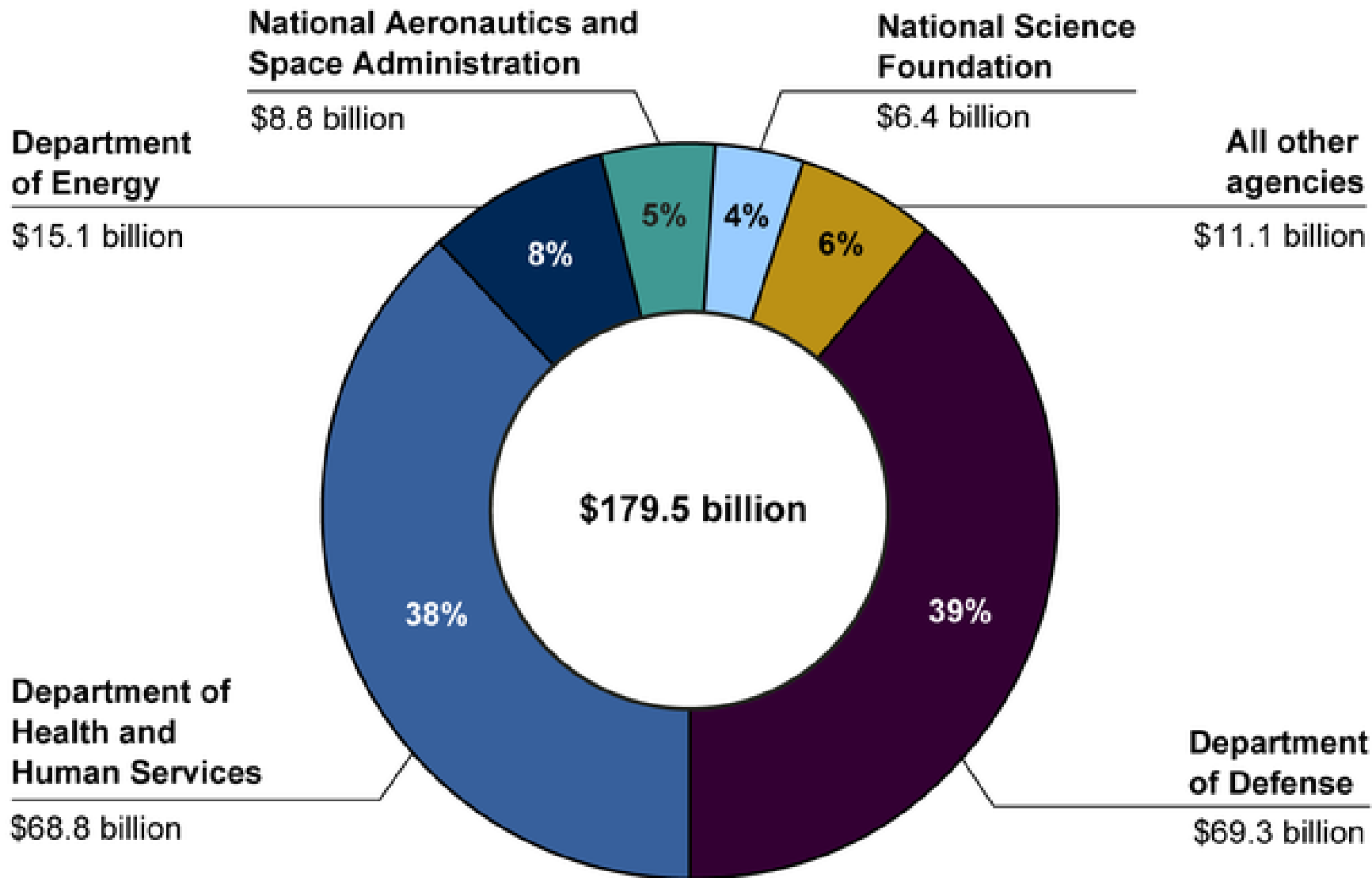
What is the most important thing to keep in mind while writing a grant application?

OY: I would say the most important thing is the audience that you're writing to, because if they do not understand or appreciate your points, then they won't like it.

Funding Agencies: Know the mission



Do you ask RFK Jr. for money to fund a vaccine development project?



Source: GAO analysis of data from NSF's *Survey of Federal Funds for Research and Development*. | GAO-23-105396

<https://www.gao.gov/products/gao-23-105396>

FY2021

National Institutes of Health (NIH)

National Cancer Institute (NCI)

National Eye Institute (NEI)

National Heart, Lung, and Blood Institute (NHLBI)

National Human Genome Research Institute (NHGRI)

National Institute on Aging (NIA)

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

National Institute of Allergy and Infectious Diseases (NIAID)

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

National Institute on Deafness and Other Communication Disorders (NIDCD)

National Institute of Dental and Craniofacial Research (NIDCR)

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

National Institute on Drug Abuse (NIDA)

National Institute of Environmental Health Sciences (NIEHS)

National Institute of General Medical Sciences (NIGMS)

National Institute of Mental Health (NIMH)

National Institute of Neurological Disorders and Stroke (NINDS)

National Institute of Nursing Research (NINR)

National Institute on Minority Health and Health Disparities (NIMHD)

National Library of Medicine (NLM)

National Center for Complementary and Integrative Health (NCCIH)

Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP)

Website: <https://www.nih.gov/>

NIH Fellowship Information

- eRA Commons: <https://public.era.nih.gov>
- Fellowships:
<https://researchtraining.nih.gov/programs/fellowships>
- Fellowship page limits:
<https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide/page-limits>

How does an NIH grant get reviewed and funded?

The second level of review (Council review) is performed by IC National Advisory Councils or Boards. Councils make recommendations on priority areas of research, pending policy, and funding of particular applications. They are composed of both scientific members and public representatives chosen for their expertise, interest, or activity in matters related to health and disease. Appointed members usually serve a four-year term (or usually six-year terms in NCI), and require approval by the Secretary, DHHS or in some cases the President of the United States.

How is the final score determined?

Overall Impact or Criterion Strength	Score	Descriptor
High	1	Exceptional
	2	Outstanding
	3	Excellent
Medium	4	Very Good
	5	Good
	6	Satisfactory
Low	7	Fair
	8	Marginal
	9	Poor
Other Designations for Final Outcome		
AB	Abstention	
CF	Conflict of Interest	
DF	Deferred	
ND	Not Discussed	
NP	Not Present	
NR	Not Recommended for Further Consideration	

- Primary Reviewer
- Secondary Reviewer
- Everyone on panel gives a final score.
- Average and multiple by 10.
- This is the Impact Score

NOT an average of criteria scores!

CRITIQUE 1

Significance: 1

Investigator(s): 4

Innovation: 2

Approach: 5

Environment: 3

CRITIQUE 2

Significance: 3

Investigator(s): 2

Innovation: 3

Approach: 3

Environment: 2

SRG Action: Impact Score:25

Next Steps: Visit https://grants.nih.gov/grants/next_steps.htm

Human Subjects: 10-No human subjects involved

Animal Subjects: 30-Vertebrate animals involved - no **SRG** concerns noted

What is a fundable score?



Notice of Award
ACADEMIC RESEARCH ENHANCEMENT AWARDS Federal Award Date: 09/17/2015
Department of Health and Human Services
National Institutes of Health
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES



<https://www.niaid.nih.gov/grants-contracts/niaid-paylines>

How is a fellowship scored?

Five Regulatory Criteria Reorganized into Three Review Criteria

The revised fellowship peer review criteria reorganize the five current scored review criteria headings into three, each scored 1-9:

For due dates before Jan. 25, 2025

Introduction

1. Fellowship Applicant
2. Sponsors, Collaborators, and Consultants
3. Research Training Plan
4. Training Potential
5. Institutional environment and Commitment to Training.

For due dates on or after Jan. 25, 2025

Introduction

1. Candidate's Preparedness and Potential
2. Research Training Plan
3. Commitment to Candidate

Candidate's Preparedness and Potential

- Discuss the candidate's preparedness for the proposed research training plan. Consider the context, for example, the candidate's stage of training and the opportunities available.
- Assess whether the candidate and sponsor statements as well as the referee letters provide convincing evidence that the candidate possesses qualities (such as scientific understanding, creativity, curiosity, resourcefulness, and drive) that will improve the likelihood of a successful research training outcome.
- Consider the candidate's potential to benefit from the fellowship research training plan and to transition to the next career stage in the biomedical research workforce.

Research Training Plan

- Assess the rigor and feasibility of the research training project and how completion of the project will contribute to the development of the candidate as a research scientist.
- Evaluate the goals of the overall research training plan and the extent to which the plan will facilitate the attainment of the goals.
- Discuss whether the research training plan identifies areas of needed development and contains appropriate, realistic activities and milestones to address those needs.
- Consider whether the sponsor(s), scientific environment, facilities, and resources are adequate and appropriate for the proposed research training plan.

Commitment to Candidate

- Assess whether the sponsor(s) presents a strong mentoring plan appropriate to the needs and goals of the candidate.
- Evaluate the extent to which the sponsor(s) and organizational commitment is appropriate, sufficient, and in alignment with the candidate's research training plan.
- Consider whether the level of commitment provided will contribute to the successful completion of the proposed plan and allow the candidate to advance to a productive career in the biomedical research workforce.

Questions?

Comments on grantsmanship