ABOUT THE
OFFICE OF RESEARCH INITIATIVES

Overview Presentation Slides
August 2019

Columbia|Research
Office of the Executive Vice President for Research
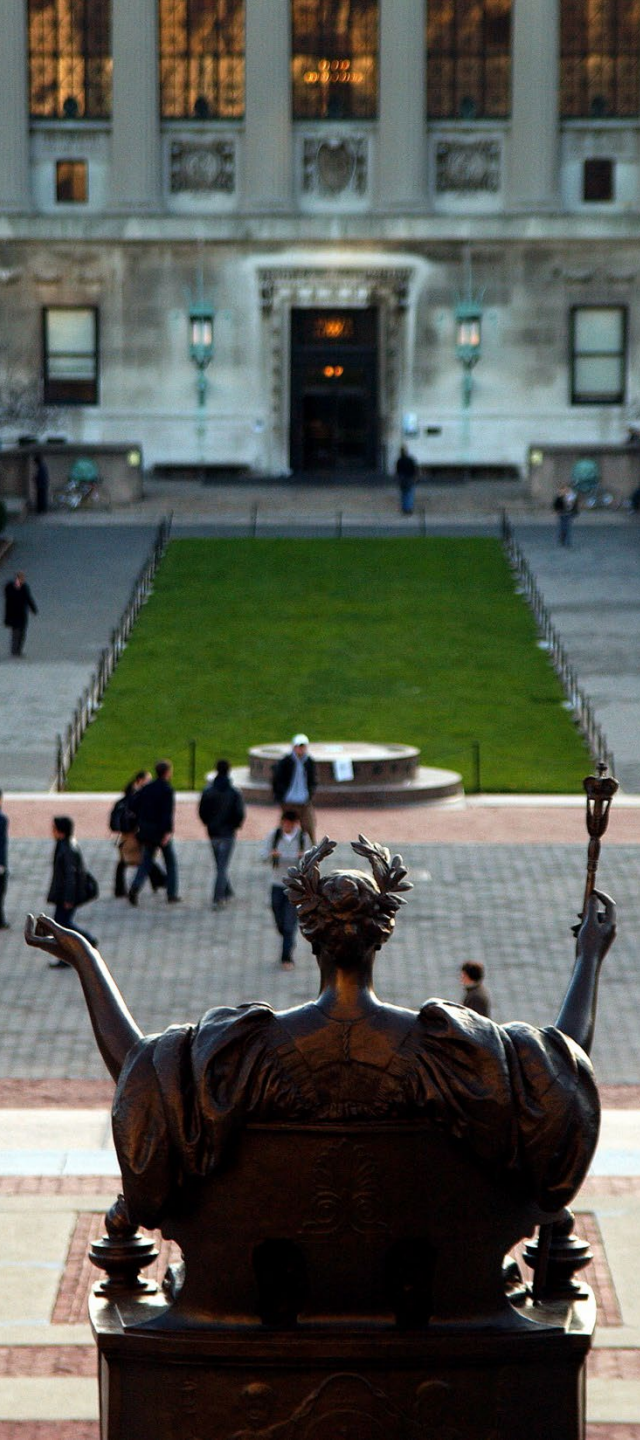
WHAT WE DO

Mission

To foster interdisciplinary research collaborations across schools, departments, institutes, centers, and campuses.
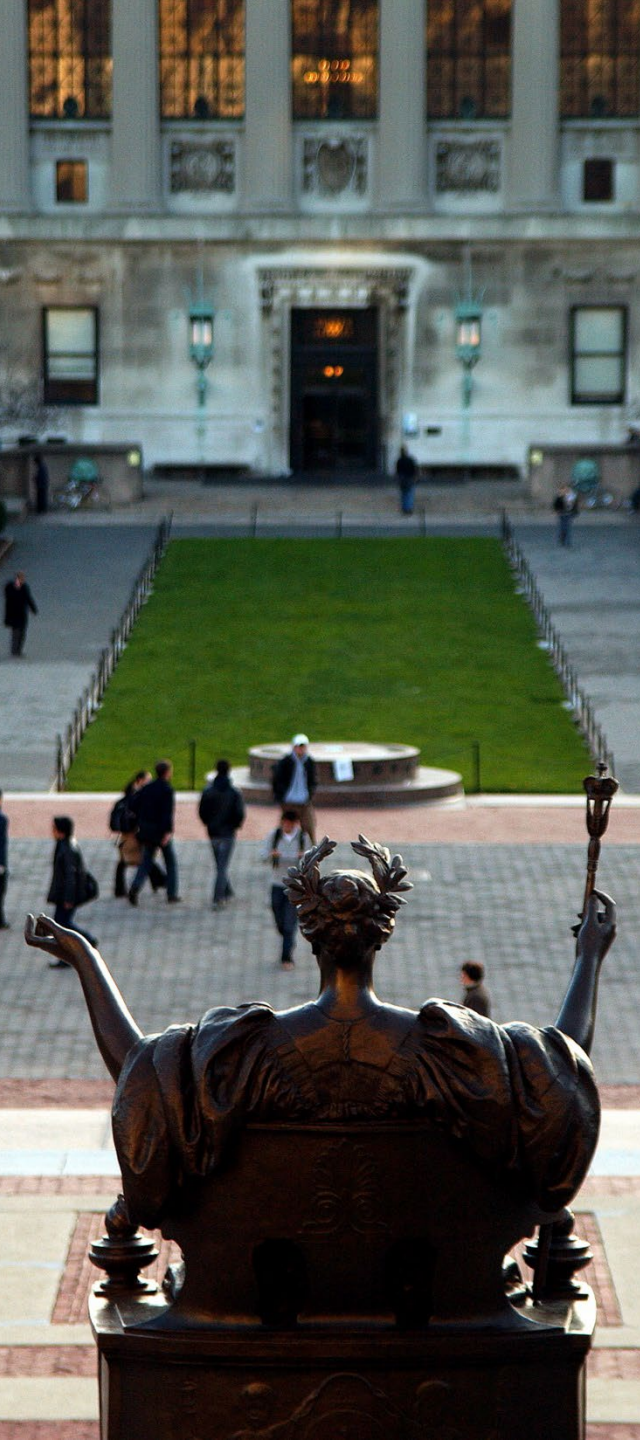
Research Advancement

- Limited submission internal competitions
- *Research Initiatives in Science & Engineering (RISE)*
- Major grant proposal support

Special Projects and Events

Research Computing

- High-performance computing
- *Foundations for Research Computing*

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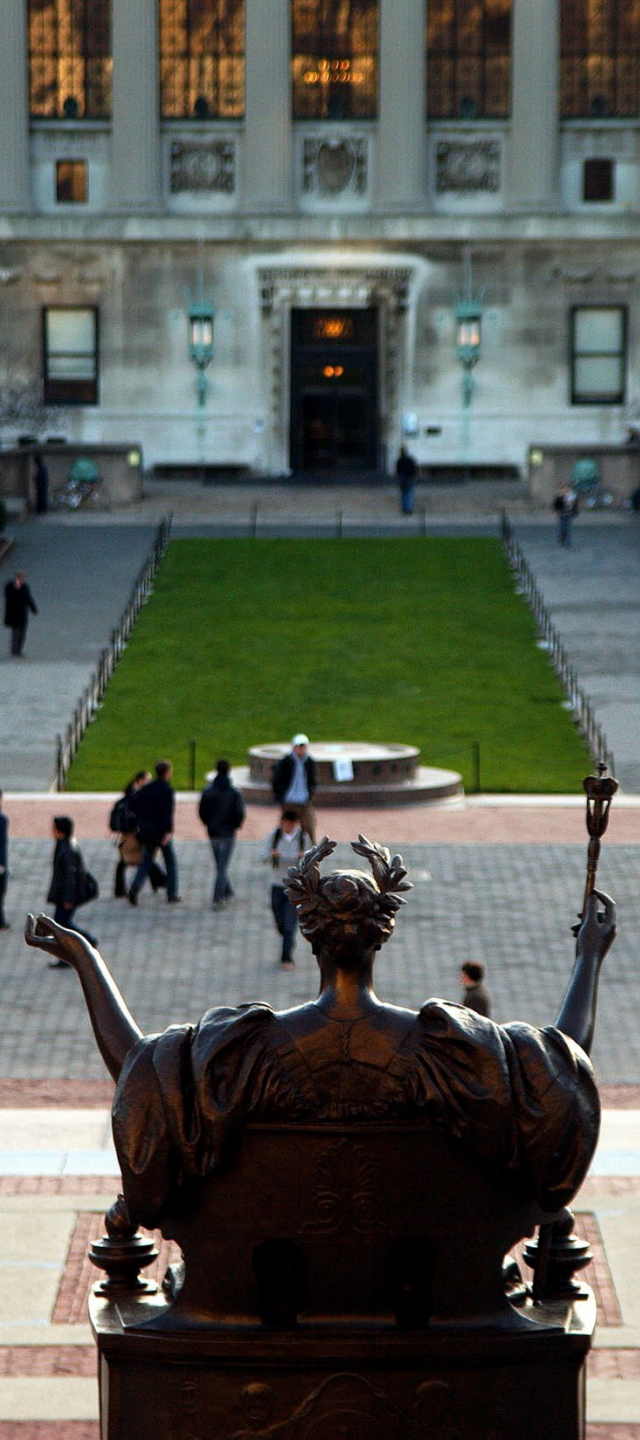Office of the Executive Vice President for Research

Research Initiatives in Science and Engineering (RISE)

- Seed funding for discovery/basic research
- Strong preference for inter-school/cross-disciplinary research
- High-risk and -impact research collaborations
- Supports projects too preliminary or unusual for conventional sponsorship
- Up to **$80k** in Year 1, possible $80k in Year 2
- Extensive internal peer review (90+ reviewers across two stages)

Annual Submission Deadline: Early-October

Questions?

- rise@columbia.edu

- (212) 854-7836

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Major Grant Proposal Support

- Supports research grant proposal strategy and logistics

Potential Services

- Project and timeline management
- Drafting non-technical content (e.g. management or outreach plans)
- Forging new partnerships, gathering support/collaboration letters
- Identifying and recruiting Co-PIs and consultants
- Liaising with submitting department and SPA
- Editing drafts; arranging internal "red team" reviews

Recent NSF Proposals

- Engineering Research Centers ($26M/5 years)
- Materials Innovation Platforms ($25M/ 5 years)
- Science and Technology Centers ($25M/ 5 years)
- National Research Traineeship ($3M/ 5 years)

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Special Projects and Events

Supporting Large Research Endeavors

- *Center Stimulus Grant* pilot
  - International symposia
  - Lecture series
  - Training workshops

Forging Institutional Partnerships

- Sponsor campus visits (DARPA, DOD, NSF)
- Pre-award site visits
- Industry and community relationship formation

Launching New Initiatives

- *Stem Cell Initiative*
- *Foundations for Research Computing*
- *Quantum Initiative* (forthcoming)

Research Computing

**Shared Research Computing Policy Advisory Committee**
- Faculty committee co-administered by EVPR and CUIT
- Faculty Chair: Dr. Chris Marianetti, APAM
- Reports to Research Computing Executive Committee

Current Cluster: *Terremoto*
- Fourth cluster, launched December 2018
- 24 research groups; 262 individual users
- 110 nodes
  - 92 standard nodes
  - 10 high-memory nodes
  - 8 GPU nodes
- 2,640 cores
- Buy-ins every Spring

Limited Submissions
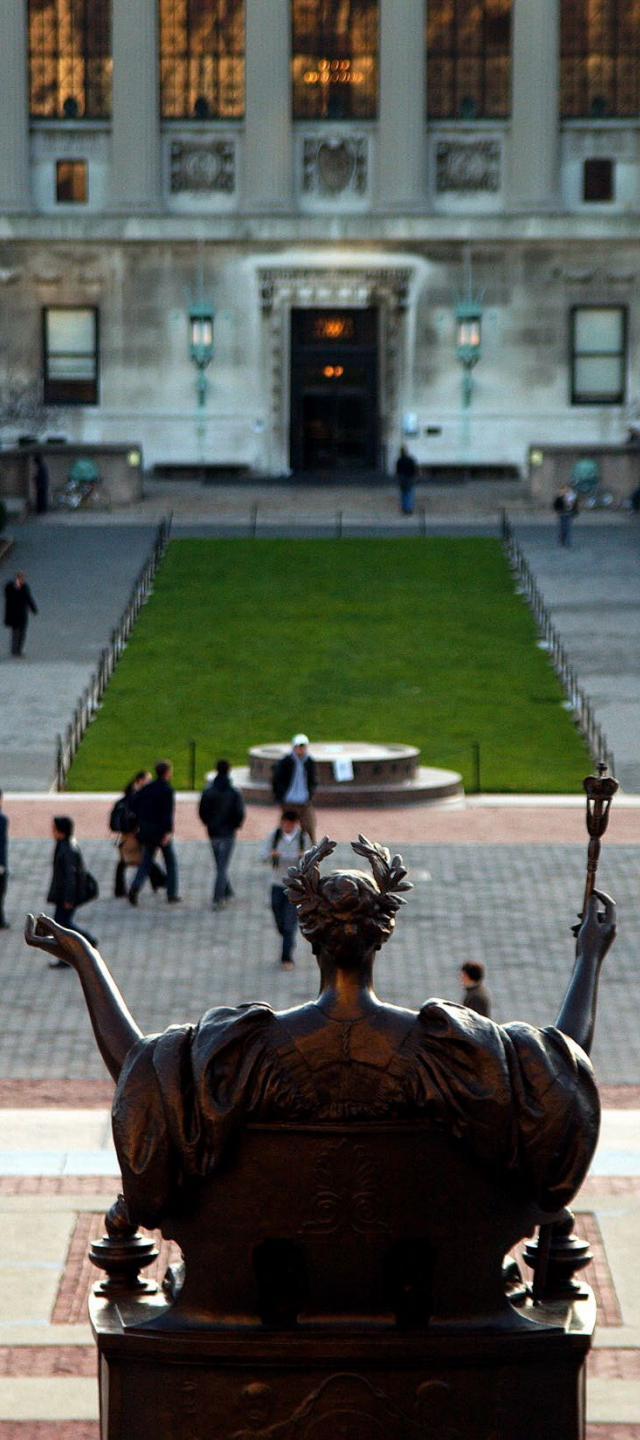
About Limited Submissions

Sponsor "**limits**" the number of applications that institutions can submit per competition

Common RFP phrase: "*Each invited institution may submit one application*"

Sponsors can be government agencies (federal, state, or city) or private foundations

Columbia must select nominees from internal candidates
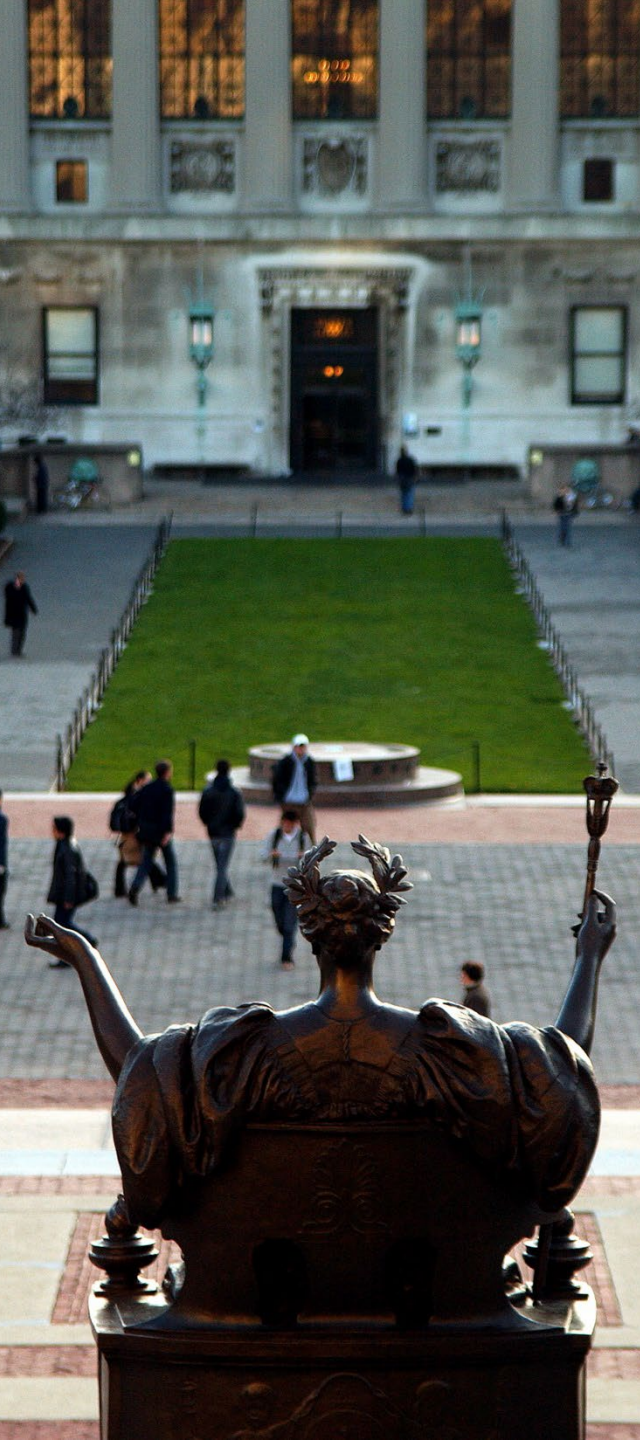
At a Glance

Per Year

100+ programs announced

~55 full internal competitions

~400 internal proposals evaluated

120+ faculty peer reviewers

THE PROCESS

RFP Published

Internal Announcement

If Interest Exceeds Limit > Internal Competition

Confidential Internal Peer Review Committee

Notify Applicants

Refer Nominee to Sponsored Projects Administration

Internal Announcement

Limited Submission

Packard Fellowships for Science and Engineering

Internal Proposal Deadline – 9:00 a.m. on Monday, February 18, 2019

What: The Packard Fellowships for Science and Engineering provide support for unusually creative assistant professors early in their careers to pursue their science and engineering research with few funding restrictions and limited paperwork requirements. Faculty members who are well established and well-funded are less likely to receive the award. It is further the intent of the Foundation to emphasize support for innovative individual research that involves the Fellows, their students, and junior colleagues, rather than extensions or components of large-scale, ongoing research programs. Packard Fellowships are directed towards fields of research that are not generously supported. In 2019, eighteen recipients will receive individual grants of $875,000 distributed over five years. Of the $175,000 paid each year, $17,500 is available to the university as compensation for administrative costs.

Program Emphasis: Disciplines that will be considered include physics, chemistry, mathematics, biology, astronomy, computer science, earth science, ocean science, and all branches of engineering. Packard Fellowships are directed to fields of research that are not generously supported. Candidates engaged in research in the social sciences, or clinical sciences will not be considered.

An Information Sheet is available with additional information about the award history and attributes of ideal applicants at: https://research.columbia.edu/content/info-sheet-packard-fellowships-science-and-engineering. Potential applicants are strongly encouraged to review this information prior to submitting an internal proposal.
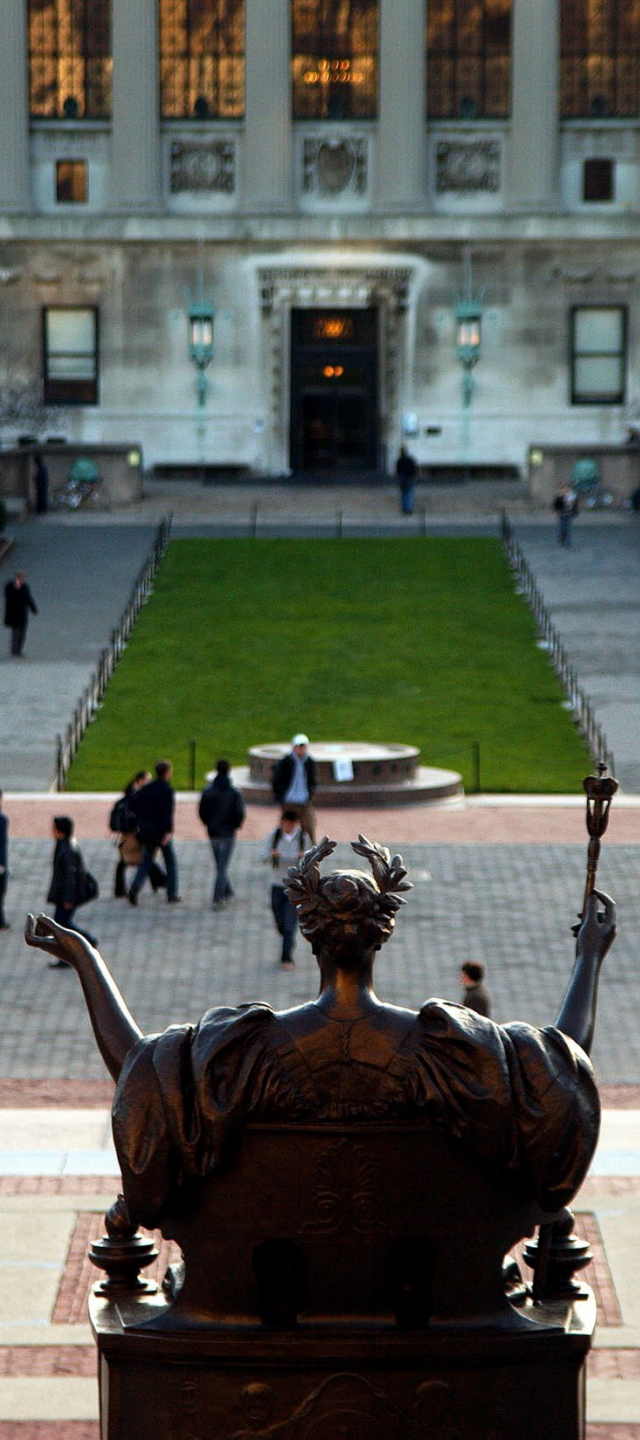
Who: The following eligibility terms apply.

1. Candidates must hold the rank of assistant professor, and be in the first three years of their independent faculty careers. Only those who started their first faculty appointment after May 31, 2016, and before May 31, 2019 are eligible – no exceptions.
2. Researchers employed in labs of senior researchers, or those conducting work that is an extension of a senior researcher's work are not eligible.

When: Internal Proposal – 9:00 a.m. on Monday, February 18, 2019
     Final Proposal – March 15, 2019

How: For more information, please view the internal announcement webpage. https://research.columbia.edu/packard-fellowships-science-and-engineering

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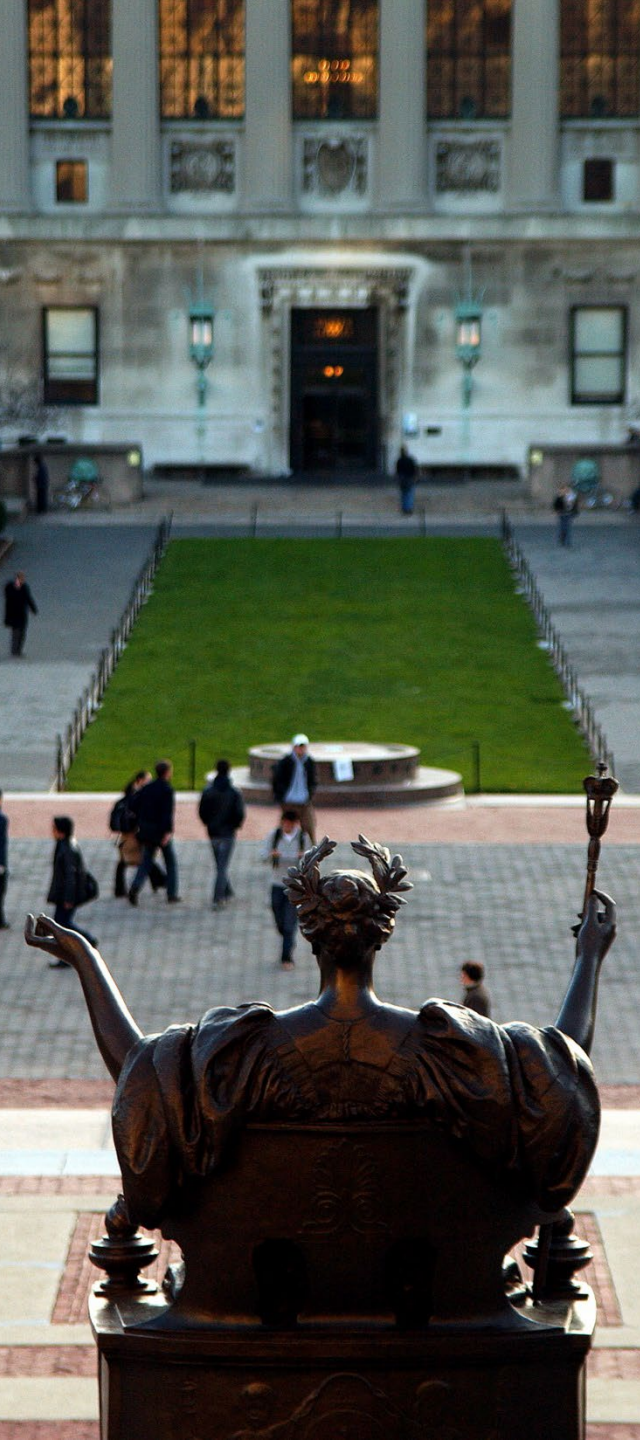Office of the Executive Vice President for Research

Columbia's Approach

Benefits

- Evaluates the research quality, impact, and novelty
- Increases success rate compared to the 'simplest solution'
- Democratic: Faculty experts select nominees

Challenges

- Protracted
- Feedback not always available
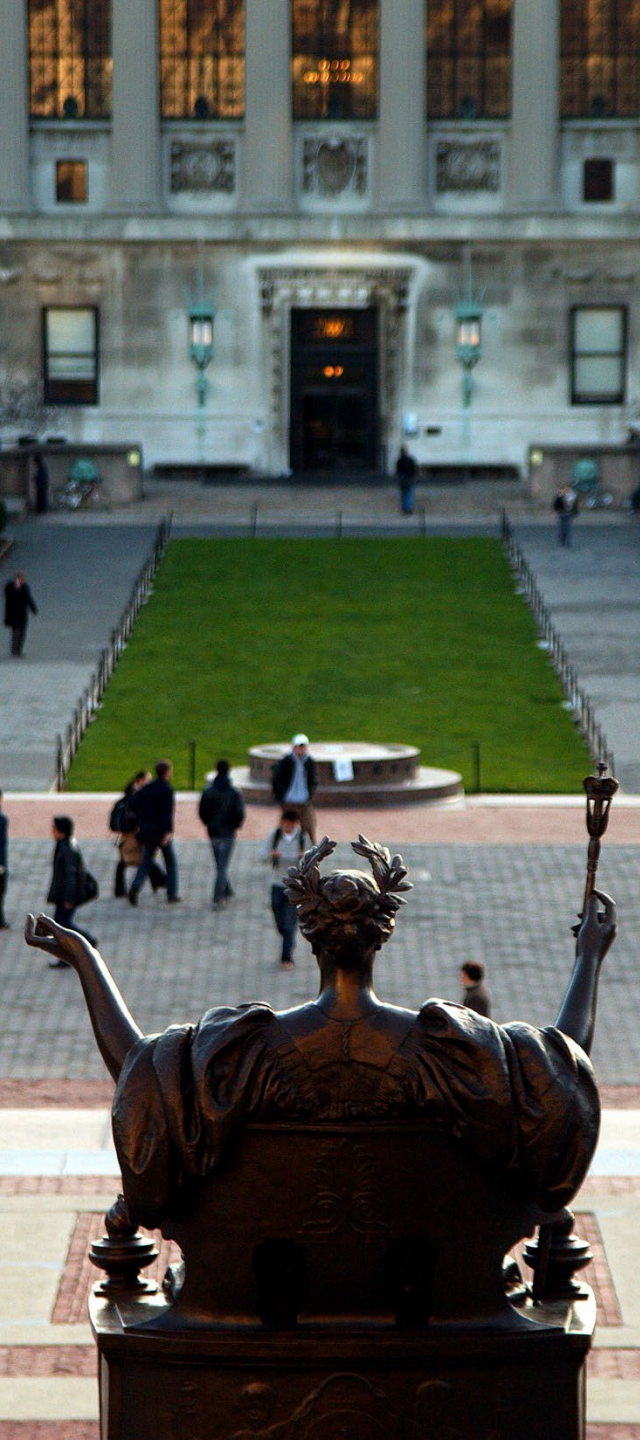- Confidentiality policy limits transparency

Challenges

Governance

- Equal treatment of all researchers
- Comparing disciplines

Logistics

- Timing (between RFP and external deadline)
- Recruitment of non-conflicted reviewers

Evaluation Criteria

- Quality, impact, and novelty of the research

- Demonstrated need for funding

- Investigator's productivity and achievements

- Synergy of research with sponsor's program goals and award history

- Likelihood of success: For every selection, the goal is to **win**
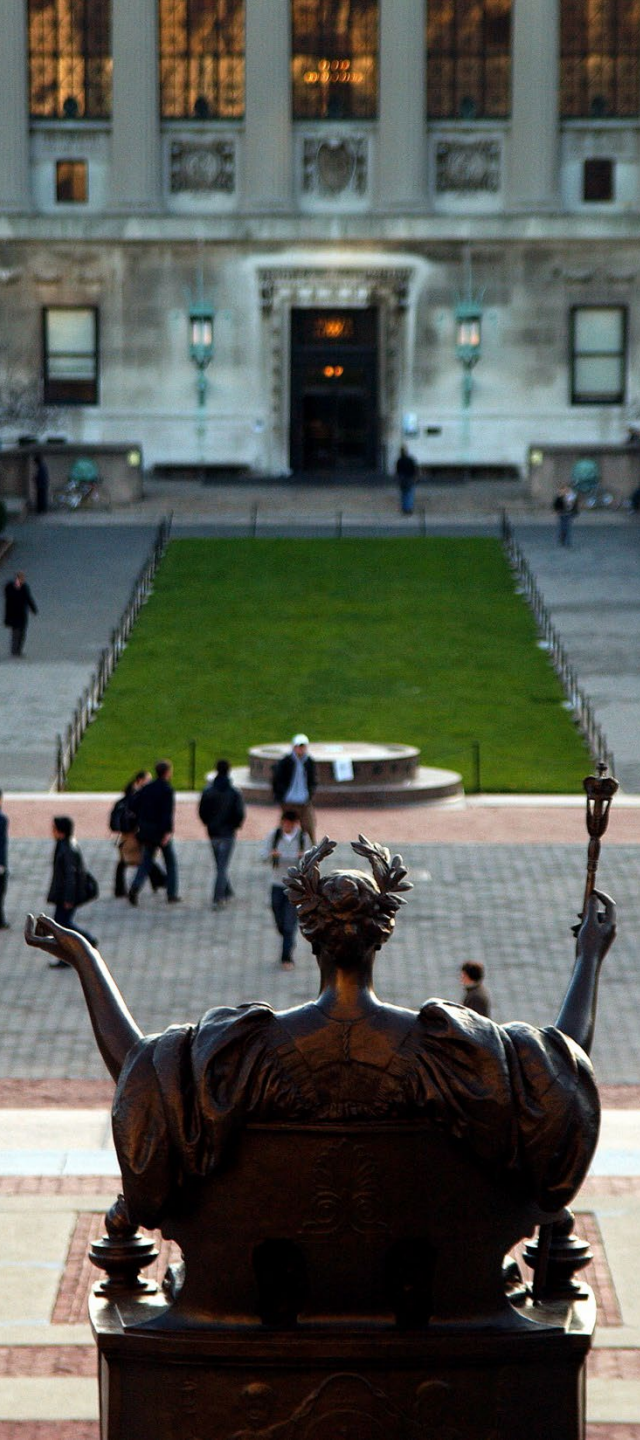
Words of Wisdom

Know your Audience

- Significance, need, and impact must be accessible

- Square pegs don't fit in round holes

- Review historic award activities

Seek input from colleagues in related fields

Questions?

- limitedsubmissions@columbia.edu

- (212) 854-6285

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Contact Us

Website:

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Who We Are

Victoria Hamilton, Executive Director

Greg Culler, Associate Director

Marley Bauce, Manager

Michael Shelter, Coordinator

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