



Report to the Dean of Faculty on the Research Advisory Committee, 2021-2022

The Research Advisory Committee (RAC) is the Faculty Senate committee that provides advice to the Vice President for Research and Innovation on issues relating to the University research enterprise. During Fiscal Year 2022 (July 1, 2021–June 30, 2022), the RAC contributed to Cornell’s research excellence by reviewing and advising on the top nominees for limited submission grant and award programs (see **Table 1**).

During FY2022, the Office of Sponsored Programs and Research Development (OSP) continued utilizing the InfoReady Review (IRR) online application system, which allows RAC reviewers access to all applications requiring their review and to submit reviews easily online. IRR has continued to greatly streamline the review process and communications for the RAC.

Table 1: Summary of RAC productivity for FYs 2020, 2021 and 2022

Fiscal Year	<i>Number of competitions advertised</i>	<i>Number of competitions receiving applications</i>	<i>Number of competitions requiring review by RAC</i>
2020	102	45	16
2021	115	54	24
2022	106	38	16

The attached Excel file documents limited submission competitions from 2016 to present, including applicant data, review outcomes, and sponsor outcomes. In FY2022, several competitions that no longer aligned with the interests of Cornell’s faculty were removed, and a few others were discontinued by funders. Several new competitions were added to the list as well.

The work required for the RAC to perform the internal proposal reviews is significant. The RAC’s workload is spread throughout the year, with November through May being very busy for committee members (there are fewer reviews during the summer months). The heavy workload has made it difficult to recruit and retain committee members. The Limited Submissions Manager provides a list of suggested new RAC members to the Vice President for Research and Innovation (VPRI) each year, and the VPRI invites faculty to join the RAC via email. **Suggestions and additional support for the successful recruitment of RAC members would be welcomed.**

Each RAC member is expected to read and provide feedback on all submissions (unless there is a conflict of interest that precludes it), independent of area of research. The broad expertise represented on the RAC helps make certain that the most competitive proposals are selected to advance in a competition. Committee members may often be associated with internal applicants for various programs evaluated by the RAC. Members declare conflicts of interest (COI) they might have and where there is COI the member does not formally review the application. They may provide comments and be asked for their expertise during a RAC meeting, but do not vote on outcomes. It is recognized that often those conflicted with an applicant/proposal may be in the best position to review the technical aspects.

This past year, the RAC had fruitful discussions about the internal review process, including considerations of diversity, equity, and inclusion and workload. Based on members’ recommendations the internal review process



was revised. Previously, the RAC assigned numbered rankings to applications and provided general comments. Starting in FY2022 (and moving forward), RAC reviewers are instead asked to: 1) rate the competitiveness of an application, based on the sponsor's program guidelines, funding goals, and selection criteria; 2) indicate their own level of expertise in an applicant's research area; and 3) provide more specific written feedback about the application. This new process is more equitable and yields more robust feedback for all the applicants and stronger candidates overall.

There are a number of Foundation limited submission programs in which the sponsor considers Cornell Ithaca and Weill Cornell Medicine (WCM) to submit as one institution. These funders include, but are not limited to, the Packard, Pew, Searle, Rita Allen, Keck and Hartwell Foundations. Ithaca and WCM have a cooperative process for reviewing internal proposals for these shared programs, which varies depending on the program. Occasionally, if one institution has a very small applicant pool, the RAC from the other institution might review all the applications together. Otherwise, separate internal competitions are completed and the winners from each are discussed by the two RAC Chairs to determine the strongest candidate(s). Coordination between Ithaca's Limited Submissions Manager and WCM's coordinator (Florencia Marcucci), who meet weekly to discuss upcoming competitions, has resulted in streamlined processes and aligned focus, timing, and outcomes.

Noteworthy winners from limited submission programs:

Professor Margaret Frank (Plant Biology) was the recipient of a **New Innovation in Food and Agriculture Research Award** from the Foundation for Food and Agriculture Research (FFAR). This program supports highly creative and promising new scientists who bring innovative, ground-breaking research initiatives and thinking to bear on problems facing food and agriculture.

Professor Elizabeth Johnson (Nutritional Sciences) was selected to be a member of the 2022 class of **Pew Biomedical Scholars**, which supports young investigators of outstanding promise in basic and clinical sciences relevant to human health.

Professor Peter McMahon (Applied & Engineering Physics) was awarded a **Packard Fellowship for Science and Engineering**, which supports highly creative and innovative early career faculty who are engaged in research in the natural and physical sciences and engineering.

Professor Atieh Moridi (Mechanical & Aerospace Engineering) received a **Johnson & Johnson WiSTEM²D Scholars Award** in the Manufacturing category. This program funds the research of female, assistant professors within the following disciplines: Science, Technology, Engineering, Math, Manufacturing, and Design.

Professor Robert Shepherd (Mechanical & Aerospace Engineering) was named a Finalist for the **Blavatnik National Awards for Young Scientists** in the Physical Sciences & Engineering category. (The three Laureates will be announced later this summer.) These awards recognize the United States' most promising faculty-rank researchers in Life Sciences, Physical Sciences & Engineering, and Chemistry.

Four faculty members are members of the 2022 class of **Sloan Research Fellows**: *Pamela Change (Chemistry)*, *Antonio Fernandez-Ruiz (Neuroscience)*, *Daniel Halpern-Leistner (Mathematics)*, and *Peter McMahon (Physics)*. Awarded annually since 1955, this program is one of the oldest of its kind and supports



early career researchers in recognition of distinguished performance and a unique potential to make substantial contributions to their field. The competition is managed at the college department level.

Cornell was one of only seven institutions across the U.S. to receive an **NIH FIRST (Faculty Institutional Recruitment for Sustainable Transformation)** grant. *Vice Provost Avery August* is the PI for this \$16 million grant that will support the hiring and retention of 10 new assistant professor over the next five years in the areas of quantitative biomedical sciences, infection biology, and health equity.

Table 2: RAC Members for FY2022

Name	Department	College	LS/PS/SS*	Term End Date	Net ID
Perrine Pepiot (Chair)	MAE	COE	PS	2022	pp427
Renata Ivanek	Pop Med	CVM	LS	2022	ri25
Cedric Feschotte	MBG	CALS	LS	2022	cf458
Kyle Lancaster	CCB	CAS	PS	2022	kml236
Sylvia Lee	MBG	CAS	LS	2022	ssl29
Praveen Sethupathy	Biomedical Sciences	CVM	LS	2022	pr46
Maureen Hanson	MBG	CALS	LS	2023	mrh5
Alexander Vladimirovsky	Mathematics	CAS	PS	2023	abv8
Maria Fitzpatrick	Policy Admin & Mgmt	CHE	SS	2023	mdf98
Jane Wang	Physics	CAS	PS	2023	zw24
Kade Keranen	EAS	COE	PS	2024	kmk299
Haym Hirsh	Computer Science	CIS	PS	2024	hbh46
* LS = Life Sciences PS = Physical Sciences/Engineering SS = Social Sciences					
<ul style="list-style-type: none"> ▪ Terms for RAC members begin on July 1. ▪ Ex officio non-voting members: Emmanuel Giannelis, Carmel Lee, Mary-Margaret Klempa ▪ Limited Submissions Manager: Liz Diaz 					

Review Process:

- The RAC is categorized into three disciplinary groups: **LS**, **SS** and **PS**. Limited submissions can typically be categorized as: Life science, Physical science/engineering, Social Science or Multidisciplinary.
- All RAC members reserve every Monday from 3-4pm on their calendars for possible RAC meetings, which are canceled as needed. The RAC Chair, in consultation with the Director of Research Development, decides if a meeting is necessary.
- RAC members are typically given approximately 2-3 weeks to complete a review unless there is an urgent need due to tight sponsor deadlines. In the latter case, an expedited review process is in place which requires a 72-hour to one-week internal submission timeline, followed by 72-hours to one-week of review time. For this expedited process, RAC reviews are typically discussed via email without a meeting.
- For each competition, reviews are compiled into one spreadsheet and serve as the basis for larger RAC discussions. The RAC Chair runs the meetings, with input on specific programs from the Director of Research Development and Limited Submissions Manager. For sponsors where the University Foundation Relations & Corporate Philanthropy (UFRCP) office is Cornell’s liaison, UFRCP staff provide input as well. The Chair solicits comments about the applications from RAC members and after discussion a vote is called.



- RAC decisions are communicated to all internal applicants in a timely manner and include a summary of constructive reviewer feedback (based on written review and committee discussion). Applicants who are selected to be Cornell's candidates are also provided with detailed next steps for full submission to the funder and are offered Research Development support.
- The Limited Submissions Manager coordinates all administrative aspects of the RAC and internal reviews, including maintaining the review schedule, communicating requests for reviews and setting up online reviews in IRR, compiling the reviews for the RAC ahead of a meeting, keeping meeting notes, and collating feedback into a summary for applicants (in consultation with the RAC Chair and Director of Research Development). The Limited Submissions Manager also notifies applicants of competition outcomes and next steps for submission to funders. Additionally, the Limited Submissions Manager prepares a "competition synopsis" for Foundation programs, a resource for RAC reviewers outlining a sponsor's program, funding preferences, and key selection criteria, and previous awardees (including any Cornell recipients). The synopsis is shared with all committee members as part of the reviewer materials.