

2024 Current Fiscal Year Report: Bioengineering Sciences & Technologies Integrated Review Group

Report Run Date: 04/20/2024 03:33:41 AM

1. Department or Agency

Department of Health and Human Services

2. Fiscal Year

2024

3. Committee or Subcommittee

Bioengineering Sciences & Technologies
Integrated Review Group

3b. GSA

Committee

No.

1862

4. Is this New During Fiscal Year?

No

5. Current Charter

01/03/1994

6. Expected Renewal Date

7. Expected Term Date

8a. Was Terminated During Fiscal Year?

No

8b. Specific Termination Authority

8c. Actual Term Date

9. Agency

Recommendation for Next Fiscal Year

Continue

10a. Legislation Req to Terminate?

Not Applicable

10b.

Legislation Pending?

Not Applicable

11. Establishment Authority Authorized by Law

12. Specific Establishment Authority

42 U.S.C. 282 (b)(16)

13. Effective Date

11/20/1985

14. Committee Type

Continuing

14c. Presidential?

No

15. Description of Committee Grant Review Committee

16a. Total

Number of Reports

No Reports for
this Fiscal Year

17a.

Open

0

17b. Closed0

17c. Partially Closed0

Other Activities0

17d. Total0

Meetings and Dates

No Meetings

Current Next

FY

FY

18a(1). Personnel Pmts to Non-Federal Members	\$0.00 \$0.00
18a(2). Personnel Pmts to Federal Members	\$0.00 \$0.00
18a(3). Personnel Pmts to Federal Staff	\$0.00 \$0.00
18a(4). Personnel Pmts to Non-Member Consultants	\$0.00 \$0.00
18b(1). Travel and Per Diem to Non-Federal Members	\$0.00 \$0.00
18b(2). Travel and Per Diem to Federal Members	\$0.00 \$0.00
18b(3). Travel and Per Diem to Federal Staff	\$0.00 \$0.00
18b(4). Travel and Per Diem to Non-member Consultants	\$0.00 \$0.00
18c. Other(rents,user charges, graphics, printing, mail, etc.)	\$0.00 \$0.00
18d. Total	\$0.00 \$0.00
19. Federal Staff Support Years (FTE)	0.00 0.00

20a. How does the Committee accomplish its purpose?

Section 492 of the PHS Act states that The Secretary...shall by regulation require appropriate technical and scientific peer review of -- (A) applications...; and (B) biomedical and behavioral research and development contracts. This committee is composed of recognized biomedical and behavioral research authorities who represent the forefront of research and technical knowledge and who provide first-level merit review of funding applications and proposals, including but not limited to grant and cooperative agreement applications and contract proposals for research projects and for research and training activities in areas relevant to gene and drug delivery systems, imaging principles for molecules and cells,

modeling of biological systems, bioinformatics, statistics and data management, instrumentation, chips and microarrays, biosensors, and biomaterials. During this reporting period the committee reviewed 1343 applications requesting \$1,993,510,949.00.

20b. How does the Committee balance its membership?

The members of this committee are authorities knowledgeable in various disciplines and fields relating to gene and drug delivery systems, imaging principles for molecules and cells, modeling of biological systems, bioinformatics, statistics and data management, instrumentation, chips and microarrays, biosensors, and biomaterials.

20c. How frequent and relevant are the Committee Meetings?

The Bioengineering Sciences and Technologies Integrated Review Group held 18 meetings during this reporting period.

20d. Why can't the advice or information this committee provides be obtained elsewhere?

This committee is composed of recognized biomedical and/or behavioral research authorities who represent the forefront of research and technical knowledge and who provide first-level merit review of funding applications and proposals, including but not limited to grant and cooperative agreement applications and contract proposals for research projects and for research and training activities. These evaluations and recommendations cannot be obtained from other sources because the specialized, complex nature of the applications and proposals requires a unique balance and breadth of expertise not

available on the NIH staff or from other established sources.

20e. Why is it necessary to close and/or partially closed committee meetings?

The meetings of the committee were closed to the public for the review of grant applications. Sections 552b(c)(4) and 552b(c)(6) of the Government in the Sunshine Act permit the closing of meetings where discussion could reveal confidential trade secrets or commercial property such as patentable material and personal information, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

21. Remarks

This committee did not produce any public reports during the fiscal year. Due to the assignment of responsibilities within the Center, the roles of the committee designated federal official and committee decision maker are filled by the same individual. Members: In general, initial/integrated review group (IRG) members serve up to six years, which is documented in the Members list. The permanent membership of this IRG may be supplemented at any meeting with temporary members who have experience or expertise in the disciplines and fields related to the IRG's function and are appointed to review some or all of the applications considered at that meeting. Therefore, the Members list reflects meeting dates, not appointment start and end dates for these members. While only one meeting date is listed as an appointment start and end date, an IRG temporary member may have attended several meetings throughout the fiscal year. Meeting rosters, including members' affiliations and zip codes are available online at

<https://public.era.nih.gov/pubroster/>. Dr. Carleton Kingsford's role changed to chairperson during the fiscal year. Dr. William Hlavacek was reappointed through 6/30/2024. The following member's term ended early: Dr. George Karniadakis (01/09/2023).

Designated Federal Officer

Ray Jacobson Director, Division of Basic and Integrative Biological Sciences

Committee Members	Start	End	Occupation	Member Designation
Alabi, Christopher	07/01/2020	06/30/2026	Associate Professor	Peer Review Consultant Member
Aldridge, Bree	07/01/2022	06/30/2028	Associate Professor	Peer Review Consultant Member
Ambite, Jose-Luis	07/01/2022	06/30/2026	Research Team Leader	Peer Review Consultant Member
Badie, Behnam	07/01/2020	06/30/2024	Professor and Chief	Peer Review Consultant Member
Badu-Tawiah, Abraham	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Bandeira, Nuno	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Barocas, Victor	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Becker, Matthew	07/01/2023	06/30/2027	Hugo L. Blomquist Distinguished Professor	Peer Review Consultant Member
Boucher, Christina	07/01/2021	06/30/2027	Associate Professor	Peer Review Consultant Member
Braun, Rosemary	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Burdick, Jason	07/01/2022	06/30/2026	Bowman Endowed Professor	Peer Review Consultant Member
Bustamante, Carlos	07/23/2021	06/30/2027	Professor	Peer Review Consultant Member

Cabralles, Pedro	07/01/2023	06/30/2029	Professor	Peer Review Consultant Member
Cai, Jianfeng	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Campagnola, Paul	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Castro, Carlos	07/22/2021	06/30/2027	Associate Professor	Peer Review Consultant Member
Castro, Cesar	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member
Cha, Jennifer	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Chang, Connie	07/01/2023	06/30/2029	Associate Professor	Peer Review Consultant Member
Chen, Zhilei	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Cheng, Ke	07/01/2019	06/30/2024	Professor	Peer Review Consultant Member
Cheng, Kun	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Clark, Heather	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Corbin, Ian	07/01/2020	06/30/2025	Associate Professor	Peer Review Consultant Member
DELOUISE, LISA	07/01/2018	06/30/2024	ASSOCIATE PROFESSOR	Peer Review Consultant Member
Dai, Guohao	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Danuser, Gaudenz	07/01/2022	06/30/2028	Professor and Chair	Peer Review Consultant Member
Day, Emily	07/01/2022	06/30/2028	Associate Professor	Peer Review Consultant Member
DeVoe, Don	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Dionne, Jennifer	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member

Downing, Timothy	07/01/2021	06/30/2025	Assistant Professor	Peer Review Consultant Member
Dunlop, Mary	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
ElMallah, Mai	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Estrada, Carlos	07/01/2019	06/30/2025	Associate Professor of Surgery	Peer Review Consultant Member
Exner, Agata	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Fertig, Elana	07/01/2023	06/30/2029	Professor	Peer Review Consultant Member
Figueiredo, Marxa	07/01/2019	06/30/2025	Professor	Peer Review Consultant Member
Finley, Stacey	07/01/2019	06/30/2025	Professor	Peer Review Consultant Member
Ford Versypt, Ashlee	07/01/2022	06/30/2028	Associate Professor	Peer Review Consultant Member
Gallego-Perez, Daniel	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member
Garmire, Lana	07/01/2021	06/30/2027	Associate Professor	Peer Review Consultant Member
Golding, Ido	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Gomez, Shawn	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Gonzalez Hernandez, Graciela	07/01/2019	06/30/2025	Associate Professor	Peer Review Consultant Member
Gonzalez-Juarrero, Mercedes	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Green, Jordan	07/01/2019	06/30/2025	Professor	Peer Review Consultant Member
Greene, Casey	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Grimm, Jan	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member

Guan, Jianjun	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Gurkan, Umut	07/01/2021	06/30/2025	Warren E. Rupp Associate Professor	Peer Review Consultant Member
Harley, Brendan	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Heilshorn, Sarah	07/01/2020	06/30/2026	Associate Professor	Peer Review Consultant Member
Henry, Charles	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Hindle, Michael	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Hlavacek, William	07/01/2020	06/30/2024	Scientist 4	Peer Review Consultant Member
Huang, Kun	07/01/2021	06/30/2024	Professor and Assistant Dean	Peer Review Consultant Member
Irimia, Daniel	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Jacobson, Stephen	07/01/2020	06/30/2026	Professor	Peer Review Consultant Member
Jia, Xinqiao	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Kingsford, Carleton	07/01/2021	06/30/2025	Herbert A. Simon Professor	Peer Review Consultant Member
Krishnan, Sunil	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Landry, Markita	07/01/2020	06/30/2026	Assistant Professor	Peer Review Consultant Member
Langmead, Benjamin	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member
Lanza, Gregory	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Lanzas, Cristina	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Leal, Cecilia	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member

Lee, Kibum	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Lee, Su-In	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Lele, Tanmay	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Lewis, Jamal	07/01/2021	06/30/2027	Assistant Professor	Peer Review Consultant Member
Li, Wen	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Linnes, Jacqueline	07/01/2021	06/30/2027	Assistant Professor	Peer Review Consultant Member
Lipke, Elizabeth	07/01/2023	06/30/2027	Professor	Peer Review Consultant Member
Liu, Yang	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
MACKAY, JOHN	07/01/2018	06/30/2024	GAVIN HERBERT ASSOCIATE PROFESSOR	Peer Review Consultant Member
Mahadevan-Jansen, Anita	07/01/2021	06/30/2027	Orrin H. Ingram Professor	Peer Review Consultant Member
Marques, Claudia	07/01/2022	06/30/2028	Associate Professor	Peer Review Consultant Member
Mazumder, Raja	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Mertz, Jerome	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Milosavljevic, Aleksandar	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Nakai, Hiroyuki	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Nguyen, Juliane	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Nguyen, Thanh	07/01/2023	06/30/2026	Associate Professor	Peer Review Consultant Member
Olivares-Navarrete, Rene	07/01/2021	06/30/2027	Associate Professor	Peer Review Consultant Member

Panyam, Jayanth	07/01/2019	06/30/2024	Professor	Peer Review Consultant Member
Patel, Robin	07/01/2022	06/30/2026	Professor and Chair	Peer Review Consultant Member
Paten, Benedict	07/01/2020	06/30/2024	Assistant Professor	Peer Review Consultant Member
Pellegrini, Matteo	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Phillippi, Julie	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Pierre, Valerie	07/19/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Posner, Jonathan	07/01/2023	06/30/2027	Professor	Peer Review Consultant Member
Purvis, Jeremy	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Rabadan, Raul	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Robles, Francisco	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Romero Uribe, Gabriela	07/01/2022	06/30/2026	Assistant Professor	Peer Review Consultant Member
Roy, Sushmita	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Sahay, Gaurav	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member
San Miguel, Adriana	07/01/2022	06/30/2028	Assistant Professor	Peer Review Consultant Member
Sarkar, Casim	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Schmidt, Holger	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Schwartz, Russell	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Schwendeman, Anna	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member

Shen, Keyue	07/01/2023	06/30/2029	Associate Professor	Peer Review Consultant Member
Sia, Samuel	07/01/2019	06/30/2024	Professor	Peer Review Consultant Member
Squarize, Cristiane	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Stabenfeldt, Sarah	07/01/2021	06/30/2027	Associate Professor	Peer Review Consultant Member
Sumer, Baran	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member
Tang, Sindy	07/01/2022	06/30/2028	Associate Professor	Peer Review Consultant Member
Thomas, Susan	07/01/2020	06/30/2026	Associate Professor	Peer Review Consultant Member
Tomei, Alice	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Uhler, Caroline	07/01/2023	06/30/2029	Professor	Peer Review Consultant Member
Valdez-Jasso, Daniela	07/01/2022	06/30/2026	Assistant Professor	Peer Review Consultant Member
Venturelli, Ophelia	07/01/2020	06/30/2026	Assistant Professor	Peer Review Consultant Member
Vivero-Escoto, Juan	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Wang, Ping	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Wei, Guowei	07/01/2022	06/30/2026	Abraham and Mildred Goldstein Professor	Peer Review Consultant Member
Wu, Mei	07/01/2021	06/30/2025	Associate Professor	Peer Review Consultant Member
Xu, Qiaobing	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Xu, Rong	07/01/2022	06/30/2026	Professor	Peer Review Consultant Member
Yeo, Yoon	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member

Yu, Haiyuan	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
Yu, S.	07/01/2021	06/30/2025	Professor	Peer Review Consultant Member
ZHANG, LIANGFANG	07/01/2018	06/30/2024	PROFESSOR	Peer Review Consultant Member
Zeng, Yong	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Zhao, Yize	07/01/2023	06/30/2027	Associate Professor	Peer Review Consultant Member
Zheng, Siyang	07/01/2020	06/30/2024	Associate Professor	Peer Review Consultant Member
Zhou, Jiangbing	07/01/2022	06/30/2026	Associate Professor	Peer Review Consultant Member
del Alamo, Juan Carlos	07/01/2020	06/30/2024	Professor	Peer Review Consultant Member

Number of Committee Members Listed: 128

Narrative Description

NIH's mission is to 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. NIH works toward that mission by supporting the research of non-Federal scientists in universities, medical schools, hospitals, and research institutions throughout the country and abroad. Section 492 of the PHS Act states that The Secretary ...shall by regulation require appropriate technical and scientific peer review of - (A) applications...; and (B) biomedical and behavioral research and development contracts...

What are the most significant program outcomes associated with this committee?

Checked if
Applies

Improvements to health or safety



Trust in government



Major policy changes



- | | |
|---|-------------------------------------|
| Advance in scientific research | <input checked="" type="checkbox"/> |
| Effective grant making | <input checked="" type="checkbox"/> |
| Improved service delivery | <input type="checkbox"/> |
| Increased customer satisfaction | <input type="checkbox"/> |
| Implementation of laws or regulatory requirements | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |

Outcome Comments

NA

What are the cost savings associated with this committee?

Checked if Applies

- | | |
|----------------------------|-------------------------------------|
| None | <input type="checkbox"/> |
| Unable to Determine | <input checked="" type="checkbox"/> |
| Under \$100,000 | <input type="checkbox"/> |
| \$100,000 - \$500,000 | <input type="checkbox"/> |
| \$500,001 - \$1,000,000 | <input type="checkbox"/> |
| \$1,000,001 - \$5,000,000 | <input type="checkbox"/> |
| \$5,000,001 - \$10,000,000 | <input type="checkbox"/> |
| Over \$10,000,000 | <input type="checkbox"/> |
| Cost Savings Other | <input type="checkbox"/> |

Cost Savings Comments

NIH supported basic and clinical research accomplishments often take many years to unfold into new diagnostic tests and new ways to treat and prevent disease.

What is the approximate Number of recommendations produced by this committee for the life of the committee?

26,644

Number of Recommendations Comments

Grant Review

What is the approximate Percentage of these recommendations that have been or will be Fully implemented by the agency?

0%

% of Recommendations Fully Implemented Comments

The mission of the Center for Scientific Review is to provide the funding Institutes and Centers of NIH with the scientific and technical merit of research grant applications submitted to the NIH. It is these Institutes or Centers and their advisory councils that make funding decisions. NIH Peer Review Committees are involved in the initial review of research grant applications. The NIH dual peer review system is mandated by statute in accordance with section 492 of the Public Health Service Act. The charge to this committee is to determine scientific and technical merit of the individual grants or contracts. These recommendations are forwarded to Federal officials who generally accept the committee's recommendations and favorable applications are then forwarded for the second level of review performed by Institute and Center (IC) National Advisory Councils or Boards. Only applications that are favorably recommended by both the initial peer review committee and the Advisory Council may be funded.

What is the approximate Percentage of these recommendations that have been or will be Partially implemented by the agency?

0%

% of Recommendations Partially Implemented Comments

The mission of the Center for Scientific Review is to provide the funding Institutes and Centers of NIH with the scientific and technical merit of research grant applications submitted to the NIH. It is these Institutes or Centers and their advisory councils that make funding decisions. NIH Peer Review Committees are involved in the initial review of research grant applications. The NIH dual peer review system is mandated by statute in accordance with section 492 of the Public Health Service Act. The charge to this committee is to determine scientific and technical merit of the individual grants or contracts. These recommendations are forwarded to Federal officials who generally accept the committee's recommendations and favorable applications are then forwarded for the second level of review performed by Institute and Center (IC) National Advisory Councils or Boards. Only applications that are favorably recommended by both the initial peer review committee and the Advisory Council may be funded.

Does the agency provide the committee with feedback regarding actions taken to implement recommendations or advice offered?

Yes ☒ No ☐ Not Applicable ☐

Agency Feedback Comments

Information resulting from closed initial peer review meetings is subject to the Freedom of Information Act. The public can view information on research projects funded by NIH on

the RePORT (Research Portfolio Online Reporting Tool) website located at <http://report.nih.gov>.

What other actions has the agency taken as a result of the committee's advice or recommendation?

Checked if Applies

Reorganized Priorities	<input type="checkbox"/>
Reallocated resources	<input type="checkbox"/>
Issued new regulation	<input type="checkbox"/>
Proposed legislation	<input type="checkbox"/>
Approved grants or other payments	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Action Comments

An action of “approved” or “recommended” for grants receiving initial peer review by this committee does not infer that the grant will be or has been funded. Research grant applications submitted to NIH must go through a two-step review process that includes the initial peer review for scientific and technical merit and a second step of review and approval by a National Advisory Council for program relevance. In addition, prior to an award or funding being made, NIH staff must conduct an administrative review for a number of other considerations. These include alignment with NIH’s funding principles, review of the project budget, assessment of the applicant’s management systems, determination of applicant eligibility, and compliance with public policy requirements. After all these steps have been completed, NIH officials make funding decisions on individual grant applications.

Is the Committee engaged in the review of applications for grants?

Yes

What is the estimated Number of grants reviewed for approval

What is the estimated Number of grants recommended for approval 1,343
1,343

What is the estimated Dollar Value of grants recommended for approval
\$1,993,510,949

Grant Review Comments

Grant Review

How is access provided to the information for the Committee's documentation?

Checked if Applies

Contact DFO	<input checked="" type="checkbox"/>
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Online Agency Web Site
Online Committee Web Site
Online GSA FACA Web Site
Publications
Other



Access Comments

N/A