

**NATIONAL INSTITUTE OF
ENVIRONMENTAL HEALTH SCIENCES**

DIVISION OF INTRAMURAL RESEARCH

**BOARD OF SCIENTIFIC COUNSELORS
REVIEW GUIDE**

CONTENTS

Overview of BSC Review Process

Outline of BSC Review Process

Responsibilities of Lab Chief

Guidelines for BSC Report

Suggested Areas of Discussion at
Evening Session of BSC

Appeals

Tenure-track Investigators and BSC Process

Overview of BSC Review Process

- Each Laboratory and Branch of the Division of Intramural Research will be subjected to a rigorous external scientific review at least once every four years. The review will include an evaluation of both the Laboratory/Branch leadership and the research of individual scientists who are independent investigators or staff scientists who conduct program-initiated research.
- The BSC Peer Review evaluates Intramural scientists primarily on the basis of accomplishments since their last peer review, although careful consideration is also given to future plans.
- The review will evaluate the research programs for their goals and long-term objectives, accomplishments, innovation, relevance to the NIEHS mission, and overall quality and impact.
- The BSC Peer Review will evaluate candidates for tenure, as well as scientists occupying tenure-track positions at the midpoint of their appointments (see guidelines on Tenure-track Investigators and the BSC Process).

The BSC will evaluate the Laboratory/Branch as a unit and provide the Scientific Director with advice on:

- overall scientific direction of the research program of the Laboratory/Branch under review and new directions that could be considered
- interactions and synergism of research within the Laboratory and the Institute
- relevance of research to mission of NIEHS
- administration of the program
- allocation of resources
- tenure actions under consideration

BSC evaluations of individual investigators will address:

- quality of the research project(s), past accomplishments, productivity, and future directions
- significance of research and relevance to NIEHS mission

- research innovation
- collaborations/interactions with other NIEHS scientists
- level of resources (i.e., space, budget, and personnel) supplied to the investigator
- mentoring and training of fellows

To address these issues in a systematic manner, the NIH has proposed the following evaluation criteria:

Significance

Have the investigator's studies addressed important problems? Are the aims of the project(s) being achieved? Is scientific knowledge being advanced, and are the projects affecting the concepts or methods that drive this field?

Approach

In general are the approaches well conceived? When problem areas arose, were reasonable alternative tactics used?

Innovation

Do the projects use novel concepts, approaches, or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?

Environment

Is the investigator taking advantage of the special features of the NIEHS/NIH Intramural scientific environment or employing useful collaborative arrangements?

Support

Is the support the investigator received appropriate?

Investigator Training

Is the investigator appropriately trained and well suited to carry out the projects being pursued? Is the work proposed appropriate to the experience level of the principal investigator and other researchers (if any)?

Productivity

Considering the investigator's other responsibilities (e.g., service or administrative), how would you rate his/her overall research productivity?

Mentoring

Is the investigator providing appropriate training and mentoring for more junior investigators?

Recommendations about resources should be as explicit as possible, with a clear indication of which resources (budget, space, personnel) should remain the same, be increased, or be decreased.

Outline of BSC Review Process

1. The Scientific Director determines the schedule of lab reviews that allows each lab to be reviewed at least every four years. The exact date of the review is set approximately six months in advance. Review dates are determined by the Chair of the BSC based upon availability of the Laboratory Chief, Scientific Director, and Director.
2. Four to six months in advance, information on the individuals to be reviewed (i.e., individual staff profiles) is provided by the Laboratory Chief to the Office of the Scientific Director. This information is then sent to the Board Chair, who determines the need for ad hoc reviewers and proposes the names of candidate reviewers to the Scientific Director. The Office of the Scientific Director determines the availability and solicits the participation of the ad hocs on behalf of the Board Chair.
3. The BSC is provided the following information:
 - a. A Laboratory/Branch Review book that contains an overview of the Laboratory/Branch, research project summaries of the individuals under review, and their CVs. (Provided to the Board one month in advance.)
 - b. Confidential summaries of research resources. (Provided two weeks in advance.)
 - c. Copies of last BSC review. (Provided two weeks in advance through the OSD.)
4. The BSC review consists of:
 - a. An evening session prior to the review with the BSC, the Laboratory Chief, the Program Director, and the Scientific Director.
 - b. A formal presentation of an overview to the BSC by the Laboratory/Branch Chief.
 - c. A presentation by each independent investigator and appropriate staff scientist of his/her research.
 - d. A poster session where junior staff (fellows, IRTAs, students) can present their research.
 - e. A closed session with the BSC and the Scientific Director and the Director to give a preliminary summary of the BSC review and evaluation.
 - f. A written summary by the BSC, which is provided within two months after the review. The written summary gives an evaluation of the overall

laboratory and of each investigator. (Each investigator receives a copy of the report dealing with the overall laboratory and their individual research.)

- g. A written response by the Scientific Director to the recommendations in the f BSC report. Any individual scientist may submit his/her own response to the Board's review directly to the Scientific Director. The Scientific Director may or may not include any submitted responses with the formal response to the Board.

Note: At no time prior to the review date or prior to the Board's completion of the written report should the Investigators under review or anyone in their laboratory contact any member of the BSC or ad hoc reviewers. Questions about the review process should be addressed only to the Scientific Director.

Responsibilities of Laboratory/Branch Under Review

- Four to six months prior to a given review, the Chief of the Laboratory/Branch provides the Office of the Scientific Director with a list of each scientist who will be making a presentation at the review, a copy of their web site staff profiles, and a draft review agenda indicating the order and title of staff presentations. This information is used to select ad hoc reviewers.
- One month prior to the review, review books are sent to all Board members and ad hoc reviewers. (See section on review package format for a discussion of the package contents.)
- Eight additional copies of the review packages are delivered to the Scientific Director one month before the review.
- Six weeks prior to the review, the Laboratory/Branch Chief meets with the DIR Budget Officer to discuss the preparation of the confidential resources package that is sent from the OSD to reviewers two weeks before the meeting.
- Three weeks prior to the review, the Laboratory/Branch contacts NIEHS Office Services to reserve poster boards for the Poster Display portion of the review and arranges to have the boards delivered to the Building 101 Conference Room or other agreed upon site so that staff can put their posters together before COB Friday preceding the review.
- Posters announcing the Board Review are prepared and distributed by the Laboratory/Branch.

Guidelines for BSC Report

Review books consist of:

- cover
- roster of attending Board members and ad hoc reviewers
- meeting agenda
- summary of the organization of the Lab/Branch being reviewed, including its various sections
- list of personnel, including their scientific specialty or area of expertise and type of appointment
- brief description of the Laboratory/Branch, including its mission and focus, accomplishments since its last BSC review, and future directions

For each scientist being reviewed:

- a progress report since the last BSC review (for each major research project) containing
 - a brief background discussion
 - the hypothesis tested or problem addressed
 - approaches employed
 - results and their significance (including relevance to the NIEHS mission)
 - future directions/plans and justifications
- current CV and bibliography
- copies of three to five most important publications since the last review (may include “in press” articles)
- a summary of mentorship activities, including:
 - names of mentor’s three most recent trainees having completed training at the NIEHS and their current positions and
 - names of three other trainees and their current positions (if applicable)

Suggested Areas of Discussion by Laboratory/Branch Chief at Evening Session of BSC

1. What is the purpose of the Laboratory/Branch?
2. How does the Laboratory/Branch contribute to the mission of the NIEHS?
3. How does the Laboratory/Branch encourage interactions within the Laboratory and the Institute?
4. How does the Laboratory/Branch support training and mentoring?
5. What are the impediments to research in the Laboratory/Institute/NIH?
6. Other issues that the Laboratory/Branch Chief wishes to raise.

Appeals

The BSC is advisory to the Scientific Director and action taken following the BSC review can be appealed only to the Scientific Director. A written appeal through the Laboratory/Branch Chief may be sent to the Scientific Director.

Tenure-track Investigators and the BSC Process

- A formal review of each tenure-track investigator is conducted by the BSC approximately three years after the investigator's original appointment.
- The BSC can recommend that the candidate be continued in the tenure-track, removed from the track, or considered for early evaluation for tenure.
- The BSC also identifies particular areas of strength and weakness of the candidate and suggests steps necessary to improve a candidate's research.
- Recent (no more than two years old) BSC reviews that include a specific recommendation on tenure are required as part of the package considered by the NIEHS Committee on Promotions and Tenure at the time of tenure deliberations.

