

# **Guidelines for 2016 Program Reviews of the Research Institutes and Centers in the Division of Life Sciences, Academia Sinica**

Approved by the President of Academia Sinica, September 1, 2015

1. Academia Sinica is committed to strengthen its basic scientific research to become one of the best research institutions in the world. To achieve this objective, it undertakes in-depth reviews of the research accomplishments and future developmental plan of all its research institutes and centers every five years with aims to:
  - a. encourage its researchers to pursue excellence in their self-chosen research topics as it recognizes the importance of individual contribution to innovation and discovery in basic research,
  - b. facilitate integration among institutes/centers to enhance cross-disciplinary collaborations to tackle important interdisciplinary research problems, and
  - c. within the boundary condition of limited resources (budget, space, personnel), define important and strategic areas to invest and the weak areas to be phased out, for each institute/center and for the Division of Life Sciences.
  
2. In order to conduct a comprehensive and balanced assessment of the research performance of each program, five items should be considered:
  - a. Number of publications and its impact and citations;
  - b. Distinguished international and national honors and awards received by researchers;
  - c. Intellectual property generated from the research and its values derived;
  - d. Quality of doctoral students and researchers trained and nurtured;
  - e. Impact of researchers and research results to society.
  
3. At the administrative level, several factors strongly influence the performance of each institute or center. Aside from the research funding, salary level, rules and regulations dictated by the government, there are three areas worthy of consideration in the assessment of performance of the organization:
  - a. Quality of research infrastructure -- including morale of faculty/staff, leadership, administrative and technical support, major equipment and shared facilities, libraries, etc.
  - b. Recruitment and retention of talents -- including researchers, doctoral students and postdoctoral fellows, etc.
  - c. Degree of internationalization -- including collaborative projects, visitors, staff, and students, etc.

4. Based on the items discussed above, the following criteria are to be considered in the Program Review:
  - a. Research progress of ongoing research projects, overall significance and impact of the work accomplished, evidence of major research achievements, and visibility of the Institute and its international standing;
  - b. Specific research areas in which the institute or its research teams have already achieved or have the potential to achieve international recognition and competitive ranking in the near future;
  - c. Assessment of recent recruitments and staff renewals, and overall quality of faculty/research staff based on the work of researchers, including innovation, intellectual content, scholarship, distinguished awards received, and overall significance;
  - d. Adequacy of research funding from both intramural and extramural sources;
  - e. Quality of research infrastructure, including core facilities, library resources, quantity and quality of postdoctoral fellows, graduate students, administrative and other technical support;
  - f. Institute leadership and overall faculty/staff morale;
  - g. Areas with strong overlap between institutes
  - h. Appropriateness of the goals chosen in the institutional development plan for the next five years and the strategy adopted to reach its goals.
  
5. Establishment of the Program Review Committee:
  - a. The Central Academic Advisory Committee will consult with the institute or center to be reviewed to determine the goals for the review, the appropriate format and process, the relevant materials to be prepared for the review, and the schedule and dates of the review.
  - b. The Central Academic Advisory Committee will ask for nominations of reviewers from the institutes and centers, and then establish two Program Review Committees. One committee will review the group of Institute of Biomedical Sciences (IBMS), Institute of Molecular Biology (IMB), Institute of Biological Chemistry (IBC) and Genomic Research Center (GRC), the second committee will review the group of Institute of Cellular and Organismic Biology (ICOB), Institute of Plant and Microbial Biology (IPMB), Agricultural Biotechnology Research Center (ABRC) and Biodiversity Research Center (BRC). Each committee will consist of eight to ten members.
  - c. Members of the Program Review Committees are selected according to their overall expertise in the areas of major research focus within the research institutes and centers, as well as their professional qualifications and reputation within their own specialties.
  - d. Members of this committee will be appointed by the President of Academia Sinica. The Program Review Committee should be established six months prior to the

beginning of the review process.

6. The Review process:

a. To match with the review criteria listed in Article 4 above, the participating research institute and center should submit the following review materials to the Central Academic Advisory Committee by April 29, 2016. Please provide the information in pdf files.

- (i) A brief report summarizing the principal research accomplishments within the last five years;
- (ii) A brief introduction about the current status of the Institute or Center which includes the budget, human resources, space, facilities, etc.;
- (iii) Self assessment of the strength and weakness of the Institute or Center;
- (iv) Approaches taken to assess the individual researchers and their research work and to encourage research of high significance and impact (may include the reports of institutional research retreat or SAB report during the past years);
- (v) Please describe and evaluate the institutional core facilities and any campus-wide core facilities hosted by the institute/center;
- (vi) Middle-and long-term research and development plans;
- (vii) A statement highlighting the areas of research concentration, intellectual thrusts, and any newly developed research initiatives within the institute, general progress, unanticipated breakthroughs, and any difficulties encountered in the implementation of the research plans. **Please also discuss strategies to re-allocate the limited resources to promote these research foci;**

Please also provide the following supporting information:

1. CV from each PI, including (a) a list of publications in peer-reviewed journals in recent 5 years, (b) honors, awards and international recognition (e.g. journal editorial board, invited lectures), (c) grants in recent 5 years, (d) students and postdocs trained, (e) intellectual property generated and impact of research to society.

2. An institute brochure outlining every PI's research interest and publication (if available).

3. Other supporting information as necessary.

b. The Central Academic Advisory Committee of Academia Sinica will send the above-mentioned materials to members of the Program Review Committee. If necessary, the Committee may request any additional supporting materials from the participating research institute/center before the Program Review Committee convenes.

c. During the Program Review, the Committee Chair will oversee the series of activities below, all intended to ensure the success of the review process:

- (i) Briefing by the Deputy Executive Secretary of the Central Academic Advisory

Committee and/or one of the Vice Presidents;

- (ii) A preliminary meeting of the Program Review Committee on the review process;
- (iii) Report by the institute or center, including discussion with PIs;
- (iv) General discussion of the committee;
- (v) Drafting of the report on the Program Review, general discussion, and revision on the draft report;
- (vi) Exit interviews with the President of Academia Sinica and/or one of the Vice Presidents.

d. A formal written report summarizing the findings, observations, and recommendations will be provided by the Chairperson of the Program Review Committee to the Chair of the Central Academic Advisory Committee of Academia Sinica within one month following the completion of the review process.

7. These guidelines will take effect once they have been approved by the President of Academia Sinica.