Summary of Recommendations

The relevance, quality of performance and impact of Bioscience Research at the ANU and its contribution to the discipline at the national and international level – across individual researchers, research teams and higher organisational units.

1. A College of Life Sciences is formed.
2. An international scientific advisory board is established.
3. That strategic planning occur across the entire breadth of Biosciences to identify the big issues for Australia in pure and applied research.
4. That the University capitalise on existing research strengths by lowering barriers between academic units and through the provision of greater incentives for collaboration among disciplines at ANU.
5. JCSMR needs to be ever more ruthless in pursuit of research quality and should be bringing in considerably more external funding and actively recruiting more post graduate students.
6. RSBS needs to dramatically increase both external funding and the number of graduate students. All staff should be applying for the maximum number of external competitive grants for which they are eligible.
7. Whilst the quality and impact of research in BOZO is first class, it could be performing on a larger scale by more researchers to address some of the issues of global change, to develop even better use of modern molecular methods, to interact across the University, and to secure its standing nationally as the leading group in molecular ecology and evolution.
8. The impact of BaMBI’s research and teaching could be improved by a more strategic integration with other areas of research and teaching in biosciences.
9. The Fenner School should be encouraged to continue with its strategic role, preferably with an enhanced interaction with other areas of the university.
The appropriateness, and relative balance, of the current combination of research themes as the foundation for a future that includes long-term strategic research and related education in Bioscience.

10. Larger frameworks need to be created that will provide the flexibility to position the ANU as a leader in national and international programs.

11. ANU bioscientists should develop no more than two big-picture themes or “frameworks” which extend across multiple areas of research strengths - for example:
   - Global Change Biology
   - Integrative Biomedical Research/Integrative Molecular Biology

12. Plant Sciences - the Review Panel endorses the emerging focus on adaptation to climate change.

13. Ecology, Evolution and Environment - a unique opportunity exists in the EEE theme using genomic and molecular technologies to research the evolutionary impacts of climate change on the Australian biota.


15. Molecular Biosciences is too broad as a theme, and consideration should be given to identifying more specific areas of strength. E.g. developmental evolutionary genetics.

16. Neuroscience – the Review Panel recognises that the strength in this theme lies in visual neuroscience and this should be the predominant focus for the university in this area.

17. There is a need for Bioscience at the ANU to cross disciplinary borders to address more challenging and important biological questions.

18. Strategic research planning should address thematic areas that are not considered part of the current research strengths, but which can successfully enhance these strengths.
Whether there is an appropriate level of integration within the Biosciences, particularly with regards to those aspects which are considered to be ANU’s strengths and distinctive advantage

21. The establishment of a College of Life Sciences, which combines JCSMR, RSBS, BoZo, BaMBi and the Fenner School.

22. Continue the process of strengthening the integrations between RSBS, BoZo and BaMBi in both education and research, by combining these units into a “named” school within the College of Life Sciences.

23. Develop more efficient interactions in both teaching and research between the Biosciences and the computational, mathematical and statistical disciplines.

24. Continue to strengthen the integrations between Biosciences and the social sciences following the model of the Fenner School after the merger of the School of Resources, Environment & Society with the Centre for Resource & Environmental Studies.

25. The development of better interactions at different levels within the Biosciences for strategic decisions in recruitment of new staff and building of infrastructure (equipment, facilities, laboratories and support staff).

26. The establishment of a joint committee for strategic planning with the CSIRO to capitalise on the combined research and research training strengths present in the ACT.

27. The formation of a centralised research office for the entire University to maximise coordination and avoid duplication between academic units.

28. That greater consideration is given to the operations of the Office of Commercialisation by the Bioscience community to ensure an optimal capture of innovation.
The effectiveness of the discipline’s engagement with, and contribution to, educational programs and research training, particularly with regards to the distinctiveness in the quality and content of the programs and the extent to which they are linked to research strengths.

29. Regardless of departmental or discipline affiliation, every academic member of staff should be given the opportunity and encouraged to contribute to teaching undergraduate and/or graduate students, and that budgets for teaching activities should be distributed accordingly.

30. As a priority, ANU researchers MUST find a way to grow PhD student enrolments across the Biosciences so that there are, on average, at least 3 PhD students per academic member of staff.

31. ANU researchers should expand their current programs to place more undergraduate students into research environments.

32. That increased efforts are made to strengthen the links between research and education at all levels.
Whether the provision of and planning for infrastructure is adequate to support the long-term future of Bioscience at the ANU

33. A College-wide strategy should be developed by the new Dean of Life Sciences and the Directors of the individual Schools to prioritise the acquisition of major equipment and new technologies. This should include broader consultation with other Colleges.

34. Major user groups should be represented on facilities oversight committees to ensure efficient operation and equal access to equipment irrespective of school affiliations.

35. Core facilities for major equipment should be maintained at the cutting edge through applications for funding from external sources. This should be a high priority for all major equipment acquisitions. In addition, a portion of the block grant could be used as matching funding to ensure best outcomes and appropriate academic and technical support.
Whether the IAS Block Grants for research training are being strategically applied in Bioscience at the ANU, such that the University derives maximum competitive advantage from its use.

36. A strategic plan for the investment of block grant funds is critical if ANU is to remain Australia's leading university.

37. The Block Grant funding must be wisely utilised for creative, challenging, paradigm-shifting research, facilities, and other inducements to break throughs in Bioscience.

38. The processes by which IAS Block Grant monies are distributed should be based on merit, rather than on an historical basis.

39. To preserve strategic flexibility, consideration must be given to reducing the number of continuing positions funded by the block grant. This should include the movement of senior academic staff onto externally funded fellowships, or into other roles, as appropriate in light of their performance.

40. Provide start-up packages to attract internationally outstanding staff to the ANU.

41. A portion of the block grant should be allocated to core facilities, PhD scholarships to attract top quality students, and funding to attract/retain high flyers to initiate and grow strategic research areas.

42. The College of Life Sciences should play an active role in developing bold and forward-looking initiatives so as to enable the Vice-Chancellor to make a strong and compelling case to the Australian Government that the IAS Block Grant be continued at least at its current level, preferably with an appropriate level of indexation.