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Victoria 3010

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For the detailed terms of reference of the review, which include various aspects of mathematical sciences research, research training, higher education, advanced mathematical sciences service provision and consulting, and for other relevant material, see the review web site at the URL http://www.review.ms.unimelb.edu.au.

Questionnaires for the review are provided at the above URL in both Microsoft Word (.doc) format and Adobe Acrobat (.pdf) form.

The closing date for all submissions to the review, including this questionnaire, is Friday 19 May 2006. Submissions received by Friday 27 January 2006 will be able to be made available to the international reviewers before their arrival in Australia.

This questionnaire has many questions in common with a questionnaire used for the 1995 national review of mathematical sciences. If your association submitted a questionnaire in 1995, you may find it helpful to refer to your answers to that questionnaire when completing this one.

Questionnaire for Mathematical Sciences Departments

1. Name of University:

2. Name of School or Department:

3. Mailing address
Background information

These questions will help the Working Party to understand the structure of your department or school. To help indicate the level of detail required, answers that might be appropriate for the relevant University of Melbourne department are given in italics.

4. Please briefly describe the present situation of your department or school and any structural changes that have occurred since the end of 1995. If the mathematical sciences have lost budgeting autonomy been subsumed within a larger budgeting unit that embraces other disciplines, please address this.

Sample answer: The Department of Mathematics and Statistics is a department of the Faculty of Science, created at the start of 1997 by the amalgamation of the formerly separate Department of Mathematics and Department of Statistics.

5. Please list any research or consulting centres wholly contained within your department and briefly indicate their size and principal activities.

Sample answer: We have a Statistical Consulting Centre, with a full-time director (Level D appointment), an additional academic at Level C, three consultants and an administrative officer. The Centre runs in-house courses in statistical methods for research workers and other topics, provided assistance to postgraduate students from all faculties, and offers consulting services within and beyond the university.
6. Please list any centres or institutes in which your department is a formal participant.

Sample answer: (a) The department is a full member of the Australian Mathematical Sciences Institute. (b) The department is a partner in the ARC Centre of Excellence for Mathematics and Statistics of Complex Systems (MASCOS), jointly with ANU, UNSW, Latrobe, Queensland (c) The department is a partner in the Particulate Fluids Processing Centre (ARC Special Research Centre, jointly with the School of Chemistry and the Department of Chemical and Biomolecular Engineering). (d) The department provides four out of six staff for an operations research consulting centre (Melbourne Operations Research).
Academic staffing tables

These questions will help the Working Party to understand your current staffing and changes to staffing that have occurred in recent years.

Please complete the following academic staffing tables. If you do not have convenient department records, entries from your university's 1995 handbook can be used for the 1995 data. For 2005 staffing, please count all staff employed for at least part of December 2005. Include part-time employees by their service fraction (e.g., 2 full time positions and one half-time position is recorded as 2.5). If your department has resulted from an amalgamation of separate departments, give the total for all departments in 1995 in the table and please list the 1995 figures for each of the former departments separately after the table under “Comments”. Please also list by level and gender which of your current staff in Questions 7 to 9 identify themselves as mathematicians or statisticians if your department or school includes other disciplines such as physics, computing or engineering.

7. “Teaching and Research” staff [other categories of academic staff are to be included elsewhere: record only those staff classified as being both teaching and research staff in the traditional sense here].

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Comments:
8. “Teaching Only” staff if any [other categories of academic staff are to be included elsewhere: record only those staff classified as being teaching only]. Do not include sessional (casual) teaching staff.

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Comments

9. “Research only” staff if any [other categories of academic staff are to be included elsewhere: record only those staff classified as being teaching only]. Please include postdoctoral fellows and research assistant or associates with full or fractional full time positions. Do not include casual research assistants, vacation scholars or graduate students.

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Comments
Support staffing tables

Please complete the following support staffing tables. If you do not have convenient department records, entries from your university's 1995 handbook can be used for the 1995 data. For 2005 staffing, please count all staff employed for at least part of December 2005. Include part-time employees by their service fraction (e.g., 2 full-time positions and one half-time position is recorded as 2.5). If your department has resulted from an amalgamation of separate departments, give the total for all departments in 1995 in the table and please list the 1995 figures for each of the former departments separately after the table under “Comments”.

10. Technical staff (computer programmers or technicians and other full-time or fractional full-time staff who provide technical assistance). Do not count administrative staff, or casual staff.

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Comments

11. Administrative staff. Do not count technical staff, or casual staff.

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Comments
The evolution of your mathematical sciences staffing profile

Questions 12 to 15 refer only to staff whom you would classify as pure or applied mathematicians, statisticians or operations research professionals.

12 For “teaching and research” mathematical sciences staff (do not include teaching only or research only staff)

Number aged 61 or more at 31/12/2005

Number aged 31 to 60 inclusive at 31/12/2005

Number aged 30 or less at 31/12/05

14. Please list by name and destination (if known) departing “teaching and research” staff who left your department in the five years 2001-2005. In each case, indicate whether the departing person has been replaced.

To retirement

To another academic department in Australia

To private industry in Australia

To a government department or government funded institute or centre in Australia

To employment overseas

Destination unknown
12 For “research only” mathematical sciences staff (do not include teaching only or research only staff)

Number aged 61 or more at 31/12/2005

Number aged 31 to 60 inclusive at 31/12/2005

Number aged 30 or less at 31/12/05

13. Please list by name and destination (if known) departing “research only” staff who left your department in the five years 2001-2005.

To retirement

To another academic department in Australia

To private industry in Australia

To a government department or government funded institute or centre in Australia

To employment overseas

Destination unknown
14. Please describe changes in your total staffing, staff profile, age or gender distribution (or other staffing related matters), or in your department's budgetary circumstances, that have influenced (for better or worse) your department's ability to
(a) teach mathematical sciences at third year level and offer a genuine mathematics, statistics or mathematical sciences major to undergraduate students;
(b) provide an appropriate honours program;
(c) provide research higher degree supervision.
Teaching profile and teaching revenue streams

15. Please list your total “other than research higher degree” EFTSU in 2005 in the following categories for mathematical sciences (defined as mathematics, statistics and operations research) subjects and for all subjects if your department or school contains other disciplines. (Add the totals for each semester at the census dates.)

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<th>Subject level</th>
<th>Math Sci</th>
<th>All</th>
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<td>Masters by course work</td>
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16. Please list your total “research higher degree” EFTSU in 2005 in the following categories for mathematical sciences (defined as mathematics, statistics and operations research) subjects and for all subjects if your department or school contains other disciplines. (Add the totals for each semester at the census dates.)

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<th>Subject level</th>
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<td>PhD</td>
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17. To what extent is your department dependent on
(a) income derived from teaching international students;
(b) income derived from full fee paying Australian students;
(c) service teaching - list your client faculties, distinguishing between
-- commerce or related disciplines;
-- engineering, surveying
-- computer science, information systems
-- other (please specify).
18. If possible, please give the amount of money per EFTSU that your department receives for teaching undergraduate students in Commonwealth supported places. Discuss any recent changes.

19. If possible, please give the amount of money per EFTSU that your department receives for teaching full fee paying international undergraduate students.

**Research and research training capacity**

20. Discuss your department's ability to support internationally competitive research in the mathematical sciences or their applications. Refer as appropriate to staff numbers, staff profile, workloads, finance and infrastructure.

21. Please discuss your department's ability to recruit PhD students, addressing availability of suitable students and availability of scholarship support.
22. Please describe any changes for the better in your department's circumstances and capacity for research and research training in the past decade.

23. Please describe any changes for the worse in your department's circumstances and capacity for research and research training in the past decade.

24. Please list specific activities in teaching or research which you would like your department to be involved in but are constrained due to lack of funding.

25. Are there areas of research and training in mathematics and statistics which you feel are vital but are not adequately represented in Australia.
**Links**

26. Please describe your department's research links with overseas institutions.

27. Please describe your department's interaction with commerce and industry. Include consulting, student projects, joint appointments or guest teaching positions, and careers for your students.

28. Please briefly describe your department’s activities in public relations for or promotion of the mathematical sciences, in careers promotion, and in links with the secondary school sector.
General questions

29. Please make any other comments that you feel may be appropriate to the review's terms of reference or to the health of mathematical sciences research, research training, advanced education and service provision.

30. Do you have any comments on the terms of reference, which you can read at http://www.review.ms.unimelb.edu.au?

31. Do you anticipate making a submission in addition to this questionnaire?
Confidentiality requirements

32. Please indicate if there are any specific information or comments that you have provided that may not be used in the final report of the review, which will become a public document.
Details of person completing the questionnaire

33. Name of person filling in this questionnaire:

34. Your details for follow-up correspondence
   phone
   fax
   e-mail

35. Your office or role in the department or school (e.g. Head, Deputy Head)

(Signature)   (Date)

This is the end of the questionnaire.

Thank you for completing it. Please forward it at your earliest convenience to

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If you have completed the questionnaire electronically, please e-mail your response and also post or fax a signed paper copy.