Australian Academy of Science

2024 ELECTION ROUND
Last updated 14 July 2023

INFORMATION TO COMPLETE AN ONLINE FELLOWSHIP NOMINATION

For Ordinary Election and Corresponding Membership

This document is to assist Fellows gather information to nominate a candidate (prior to logging into the online nomination system) and may be sent to candidates. The information required to complete each section of the online form is outlined, and changes approved by Council since the previous round are identified in green text throughout this document (to assist with updating continuing nominations).

The nomination system is only accessible by Fellows and is available via the Fellows area on the website https://www.science.org.au/user/login The system will be available from mid-July 2023 and all Fellows will be notified by email when the system is open. All Fellows are able to 'create' new nominations (and save them to complete at a later date) and also 'update' their existing nominations.

FOR NOTING:

- ALL continuing nominations must be updated and resubmitted to be considered in the 2024 round.
- There will be no Specially Elected Fellows considered in the 2024 round, pending a review.
- Fellows serving on a Sectional Committee or on Council should not nominate candidates, nor agree to be a referee for a candidate under consideration in the committee in which they are serving. Membership for the 2024 round is available here: https://www.science.org.au/fellowship/elections/sectional-committee
- Council members should not nominate any candidates, nor agree to be a referee for any candidate. Council memberships is available here: https://www.science.org.au/about-us/governance/council

KEY DATES:

- **New candidates must be 'registered' by 31 July 2023**. To 'register' a new candidate please enter and save the following information into the online nomination system:
    - Section A: full name, date of birth, gender, and email address of candidate; and their completed consent to nomination form (the link to the form is in the nomination system);
    - Section D: suggested sectional committee and;
    - Section E: name of proposer, seconder and supporters.
- All nominations must be submitted by 31 August 2023, including updates to continuing nominations.

ELIGIBILITY FOR ELECTION:

1. Candidates for Ordinary Election **must be Australian citizens or permanent residents in Australia** and have an attachment to an Australian research organisation. For recent arrivals to Australia, who are not Australian citizens, candidates should be a resident for two years (by the date of the election meeting in early February) and contributing to Australian science.
2. Candidates for Corresponding Membership shall be persons, not normally resident in Australia, who are eminent in some branch of naturalknowledge.

FURTHER INFORMATION is available here: https://www.science.org.au/fellowship/election-to-the-academy

Enquiries regarding the nomination process (including the eligibility of a candidate or suitability of a referee) may be directed by email to fellowship@science.org.au or by phone on 02 6201 9404. Enquiries will be referred to the relevant Secretary, where necessary:

Professor Malcolm Sambridge FAA
Secretary Physical Sciences (A-side)

Professor Bob Graham AO FAA
Secretary Biological Sciences (B-side)

A. CANDIDATE DETAILS (AND FORMS)

- Title, given name/s and last name;
- Gender* (man; woman; non-binary; I use a different term (please specify); prefer not to answer);
- Contact details: residential address; email address; phone/mobile number;
- Date of birth; country of birth; nationality;
- Post-nominals (including qualifications and any other academy memberships);
- Current job title/position; institution/organisation;
- Year awarded PhD or highest academic qualification.

*Gender includes anyone who identifies as cisgender (personal gender identity corresponds with sex assigned at birth), transgender (personal gender identity does not correspond with sex assigned at birth). We also recognise that there are individuals who experience discrimination because of gender or sexual identity who do not identify either fully or partially as a woman or a man e.g. intersex and non-binary individuals, who we also welcome to be considered for Fellowship of the Academy.

FORMS – 2024 ROUND

- **ALL** candidates **must** complete a **new Consent to Nomination Form – 2024 Round**.
- ALL candidates must also complete a **new Candidate Declaration of Open Disclosure Form - 2024 Round**. (This includes candidates for Corresponding Membership).
- ALL proposers of candidates for **Ordinary Election** must complete a **new Proposer Declaration of Open Disclosure Form - 2024 Round.**

These forms are available within the nomination system https://www.science.org.au/user/login

For continuing candidates, new forms will need to be completed due to changes made for the 2024 round and to provide the candidate with the opportunity to update their responses. (Please note that the Statutory Declarations required from candidates in the 2023 round, are no longer required).

The Academy aims to be a leader in diversity and inclusion in Australia's science sector. We are committed to supporting excellence in science, but we recognise that to achieve this we must celebrate and embrace diversity and inclusion in all its forms.

Please note that diversity dimensions within the Fellowship (including but not limited to gender, age, culture, state and region of residence, emerging disciplines, and interdisciplinary science) will be further taken into-account by Council in considering the final list of candidates.

Additional information requested from the candidate includes:

- Any personal information the candidate wishes to disclose, such as (but not limited to) cultural background, Indigenous heritage, neurodiversity or other diversity information. (Word limit: 200)
- The proposer may also provide additional comments.

B. OPPORTUNITY TO DEMONSTRATE SCIENTIFIC EXCELLENCE

Achievement will be judged relative to opportunity. An assessment of a candidate's opportunity to demonstrate scientific excellence will take into-account the factors below, based on the Research Opportunity and Performance Evidence (ROPE) guidelines of the Australian Research Council (including time since PhD).

A response to each of the points below should be provided - stating also where opportunities have been available to the candidate. (Word limit: 200)

1. Number of years post-PhD or since graduation from highest educational qualification.
2. Available time for research, averaged over career.
3. Mentoring, research support and funding available to the candidate.
4. Career interruptions, including those due to employment outside academia, unemployment, part-time employment, childbirth, parental leave, carer responsibilities, misadventure, or illness.
5. Family, medical or other circumstances.
6. Any other aspects of career or opportunities to demonstrate scientific excellence that are relevant to assessment.
7. Total number of years of career interruption/s, and an estimate of Full Time Equivalent (FTE) available for scientific pursuits.

Has the candidate's career been interrupted?

C. SHORT CITATION (Ordinary Election)

Please provide a statement on the candidate's qualifications for election, written in a way that can be understood by non-specialists in the field and that is suitable for public release. The short citation should clearly illustrate why the candidate is eminent in their field, their key discoveries and achievements, and how they have advanced the field. (Word limit: 100)

D. SUGGESTED SECTIONAL COMMITTEE (AND DISCIPLINE AREAS)

Please suggest the primary Sectional Committee that will consider your candidate and up to two discipline descriptors/discipline areas. The list of Sectional Committees and the discipline areas (under each Sectional Committee) is provided at the end of this document (**Attachment 1**) to assist proposers identify the most appropriate committee to evaluate their candidate. This will also assist The Secretaries to identify further committee members that cover the expertise of the candidates (where this is possible). Candidate placements will be reviewed and approved by The Secretaries, prior to the Sectional Committee evaluations, and candidates will be moved into a different committee by The Secretaries, should this be necessary.

A. For candidates that cross A-Side and B-Side, or otherwise meet the 'definition' for Interdisciplinary, select 'SC13: Interdisciplinary'.
B. If your candidates **does not** meet the 'definition' for Interdisciplinary (SC13) but crosses two Sectional Committees within A-Side (Physical Sciences) or B-Side (Biological Sciences), select a 'primary' Sectional Committee and then select the Sectional Committee with which they 'overlap'.

All candidate placements will be reviewed and approved by the Secretaries, prior to the Sectional Committee evaluations. Candidates will be moved into a different committee by the Secretaries, should this be necessary.

E. SIGNATURES OF PROPOSER, SECONDER AND SUPPORTERS

The signatures (or written declaration of support) of at least four Fellows, including the proposer and seconder, are necessary to render the nomination valid.

Proposers may upload, on behalf of the seconder and supporters, either an electronic signature, a document with a signature confirming support, or an email confirming support for the candidate (sent from the seconder or supporter to the proposer).

Proposers of candidates for Ordinary Election are required to submit a signed **Proposer Declaration form – 2024 Round** and upload it into the proposer upload at Section E. (This form replaces the proposer signature – for proposers of candidates for Ordinary Election - and is available within the nomination system at Section E).

F. EXTENDED CITATION (Ordinary Election)

The Academy is committed to celebrating and supporting diversity within the Fellowship. Achievement will be judged relative to opportunity, taking into-account any breaks in, or late commencement of, career. Gender balance and diversity issues within the Fellowship will also be taken into-account.

For the 2024 Round, more flexibility in the weightings of the criteria for election (below) have been adopted for Sectional Committees and Council to better assess contributions of candidates who may not have had a full-time research career path or opportunities to undertake leadership roles.

Proposers are not to choose weightings. This information is provided for reference only. The flexibility is for Sectional Committees to adjust the weightings as they see fit given the circumstances as described in the nomination. Normally the weighting used would be: 60:20:20, and any changes used by a committee need to be commented on in the Chair's report to Council.

The weighting of criterion 1 is a minimum of 60% and a maximum of 85%, however, criteria 2 and 3 may also now be adjusted by the Sectional Committee (to range from 15 to 40% combined) with a minimum weighting of 10% for criteria 2 and 5% for criteria 3). Please refer to the exemplars (including for neurodiversity) provided at **Attachment 2** to demonstrate use of the revised weighting criteria.

Please upload a document addressing each of the three criteria below and using the word limit as guide.

Also provide an Executive Summary (Word limit: 100)

1. **Scientific achievement:** This dimension focuses on the impact of the candidate's research in the field (including the translation or applied impact of that research). Scientific excellence is based on contributions with major impact in the field. This may be either a single contribution, or multiple contributions with clear impact. For candidates whose research has been interrupted, their scientific achievement should be considered for the period in which they were active scientists plus ongoing citations.

    - Minimum 60% weighting but for singular exceptional contributions, this may be adjusted higher up to a maximum of 85%. **(Criteria 1: 60-85% weighting)**

    Indicators of impact may include but are not limited to: main publications especially the papers that best support the nomination; citation of those publications; 'textbook' science; patents; significant impact on practice or translation of the research; or other indicators relative to the standards for each discipline. (Word limit: 1,500)

For 'applied' candidates (where there is a significant impact of their applications of scientific knowledge to the invention or development of new devices, constructions, products or processes) these additional indicators of impact should also be addressed in this section and within the 1,500-word limit.

2. **National and international profile:** This dimension focuses on how others have responded to the candidate's collective achievements.

    - Normally 20% weighting but may be adjusted in line with the conditions stated further below but must not be less than 10%. **(Criteria 2: 10-35%)**

    Indicators include: invitations to speak; grants and Fellowships; journal editorships; honours, awards and prizes; membership of prestigious organisations or committees; and supportive letters from referees. (Word limit: 800)

3. **Leadership, mentorship, promotion of science and potential to advance the work of the Academy:** This dimension focuses on what the candidate has done other than their own research.

    - Normally 20% weighting but may be adjusted in line with the conditions stated further below but must not be less than 5%. **(Criteria 3: 5-30%)**

    Indicators include: executive and leadership roles in science (not just within the specific research area of the candidate); conference organisation; high-level peer review functions; science education, outreach, advocacy and/or policy development; successful mentorship of the next generation of scientists; other contributions to the discipline. (Word limit: 800)

G. CURRICULUM VITAE

Please upload the candidate's full Curriculum Vitae, including the following information:

- Full name, date of birth, citizenship, address and contact details
- Current and previous appointments/positions
- Awards and honours, including election to Fellowship of scientific societies and academies
- Academic record and qualifications; Teaching and mentoring, including research supervision; and Academic and research leadership
- Professional service including professional societies, journal refereeing, editorial boards, public lectures, national and international committees etc.
- Research grants
- Conference presentations, including plenary/keynote lectures, invited symposium lectures etc., and conference organisation.

Do not include publication lists or discussions of publications in this part of the nomination.

H. MOST SIGNIFCANT PUBLICATIONS

Please upload a list of **up to 10** of the candidate's most significant publications that have changed the field. These may not always be the most highly-cited publications, rather they should be publications that have contributed most to the candidate's scientific achievements, and which demonstrate how the candidate has advanced their field of research.

If significant impact is across more than one field and the candidate is being considered by more than one Sectional Committee (a primary and a secondary committee) or by the Interdisciplinary Committee, then more than 10 papers (up to 20) would be allowable.

Use standard bibliographic form and for each publication, please include:

1. All authors (in the order listed on the publication), year of publication, title, name of journal, volume, page numbers (full span); and

2. A short description of up to 50 words explaining:
   - why the publication is important;
   - the candidate's specific role in the research; and
   - the percentage of the candidate's contribution to the research.

If publications are 'in press', please include the acceptance date. Do not include publications submitted but not yet accepted, or any retracted papers (in this list).

I. PUBLICATION LIST

Please upload a comprehensive list of all publications (from most recent) divided into the following sections:

1. Books
2. Scholarly book chapters
3. Refereed journal articles
4. Refereed conference proceedings
5. Patents

Use standard bibliographic form and include: all authors (in the order listed on the publication): year of publication: title: name of journal; volume; and page numbers (full span). If publications are 'in press', include the acceptance date. Do not include publications submitted but not yet accepted.

Retracted papers (and papers with corrections) must be included in the Publication List, clearly marked as such and with explanatory notes. These must also be outlined in the Candidate's Declaration of Open Disclosure. The Academy recognises that some retractions and corrections are to be commended, and where there are multiple authors, they might not necessarily all bear equal responsibility.

On the Declaration of Open Disclosure form (to be uploaded into Section A) candidates are asked to disclose (with other matters) any retracted papers, papers with corrections, or papers where concerns have been raised, and to append further details with their full list of publications.

J. REFEREES

For **Ordinary Election**, please identify:

- **six** eminent referees (proposer referees), at least four of whom are based overseas.
- **None of the referees are to have a direct conflict of interest with the candidate** and **at least three referees must be independent** and not associated with the candidate either in a professional or personal manner.

For **Corresponding Membership**, proposers should identify:

- **four** eminent referees who do not have any direct conflicts with the candidate.
- **None of the referees are to have a direct conflict of interest with the candidate** and **at least two referees must be independent** and not associated with the candidate either in a professional or personal manner.

For **Ordinary Election and Corresponding Membership**, referees should include scientists who are acknowledged leaders in the candidate's field of research, and who have the ability to provide an assessment of the wider impact of the candidate's work on his/her scientific discipline. Referees who can identify and substantiate the candidate's contributions and role in collaborative efforts will strengthen the candidate's case.

ADDITIONAL NOTES ON REFEREES - (FOR ALL TYPYES OF ELECTION)

All referees should preferably (but not necessarily) be Fellows of a National Academy (or their country's equivalent). Referees from Australia should normally be Fellows of this Academy, however, exceptions to this may be approved by The Secretaries.

Prior to entering a non-FAA Australian based referee, please email the Fellowship Director at fellowship@science.org.au for approval and to check that the referee is not a candidate. The proposer, seconder and supporters for the nomination must not be used as referees.

All referees should be informally contacted by the proposer (and not by the candidate) before they are included in the nomination, thereby reducing the number of declines due to ill health, lack of time and lack of knowledge of the candidate.

Please note that emails will be automatically sent to referees requesting their report as soon as the nomination is submitted by the proposer.

Reports are due within three weeks from the date that the request is sent to the referee. Referees will have access to the following information to assist them to prepare their evaluation: short citation; extended citation; curriculum vitae; most significant publications; publication list; and the criteria for election.

Please note that 'additional' independent referees (Chair referees) will be identified and contacted by the Sectional Committee Chair for all short-listed candidates, to ensure that each of candidate receives at least three 'independent' evaluations.

There is an opportunity in this section for up to two non-preferred referees to be specified for the Chair's attention (by including the full name, institution and email address in the section provided for non-preferred referees). These are individuals that the candidate does not wish to be contacted in relation to their nomination.

CONFLICTS OF INTEREST FOR REFEREES

None of the referees are to have a direct conflict of interest with the candidate and also none of the independent referees should have an indirect conflict with the candidate.

A **direct conflict** can occur for a number of reasons including, but not limited to, if the referee and the candidate:

1. have or have had a close personal relationship (including enmity)
2. have a professional research relationship, including:
    a) are negotiating/hold/have held within the past two years a research proposal conjointly. (In proposals with a very large number of investigators, such as large centres or infrastructure grants, this may not be a direct conflict unless there is close collaboration)
    b) have been a collaborator or co-author on a research output within the past four years. (In fields with very large numbers of co-authors, co-authorship may not be a direct conflict unless there is close collaboration)
    c) have **ever** been an academic supervisor of the candidate
    d) have been an employment supervisor (or the candidate is/was a direct report) within the past five years.
3. have been in the same division/department/section of the organisation employing the candidate, or the same research centre as the candidate, **and** in the same research field, or a closely related research field, as the candidate during the past two years.

Referees may be deemed to have an **indirect conflict** with a candidate if any of the following apply:

1. they have ever had any of the professional research relationships listed in '2' above at any time in the past (except 'c' 'academic supervisor' in which case this is a direct conflict)
2. they have been in the same division, department, section or centre as the candidate (but are not in the same research field or a related research field as the candidate), or
3. they have been a co-editor with the candidate of a book, journal, compendium, or conference proceedings within the past two years.

REFEREE: INFORMATION REQUIRED

The Following information is required to enter each referee into the online system:

- Title, first name and last name;
- Email: (check email address, or the referee will not receive the request);
- Institution or organisation;
- Country of residence;
- Academy membership/s (or equivalent).

Please contact your referee prior to entering them into the nomination system to confirm their email address, that they do not have any direct conflicts of interest with the candidate, and that they are available and willing to provide a report. You may copy and send the information above (on conflicts of interest, and information required) to your referee. We will provide your referee with the criteria for election and access to the candidate's CV, list of publications and extended citation.

CORRESPONDING MEMBERSHIP – ADDITIONAL INFORMATION

Candidates for Corresponding Membership must be persons of eminence in the field/s of their endeavors. The primary criterion for Corresponding Membership is scientific excellence at the highest level. It is expected that candidates for Corresponding Membership would unquestionably be elected to the Fellowship by Ordinary Election if they were resident and active in Australia.

It is also expected that candidates have a high international profile and are Fellows/members of Academies or bodies in their country of residence, equivalent in standing to the Academy.

The strength of the connection of the candidate with Australian science shall be viewed as important in the evaluation process. This connection should be more extensive than conducting a collaborative research project or sharing supervision of one or two research students and may be broader than research activity. Corresponding Members are expected to be able to advance the work of the Academy in science education, advocacy, policy or international engagement.

On the nomination form, select Corresponding Member for type of election, and then complete sections A, B, E, G, H, I and J as per 'Ordinary election', and as outlined in the referee section above please note that for Corresponding Membership, proposers should identify **four** eminent referees who do not have any direct conflicts with the candidate. None of the referees are to have a direct conflict of interest with the candidate and at least two referees must be independent and not associated with the candidate either in a professional or personal manner.

Please note that candidates for Corresponding Membership (and proposers) are **not required** to fill in the Declaration of Open Disclosure form.

For Section D, please select the Corresponding Member and Special Election Sectional Committee. Please refer to the notes (below) for Sections C and F which are specific to nominations for Corresponding Membership.

C. SHORT CITATION (Corresponding Member)

Please provide a statement on the candidate's qualifications for Corresponding Membership, written in a way that can be understood by non-specialists in the field and that is suitable for public release. The short citation should clearly illustrate why the candidate is eminent in their field, their key discoveries and achievements, and how they have advanced the field. (Word limit: 100)

F. EXTENDED CITATION (Corresponding Member)

The **primary selection criterion is scientific excellence**, based on the indicators of merit below.

EITHER a single ground-breaking contribution to science, OR a cohesive body of smaller contributions with clear impact, as indicated by but not limited to:

- ground-breaking publications, citation of those publications, 'textbook' science, patents, improved policy or practice, or other indicators relative to the standards for each discipline; (50%)
- extremely high international research profile, including supportive letters of reference from eminent referees. (30%)
- strength of connection or strategic value to Australian science including potential to advance the work of the Academy in science education, advocacy or policy. (20%)

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Please upload a .pdf addressing each of the sections below and using the word limit as a guide:

1. **Executive summary** (word limit: 100)
2. **Contributions to science** (word limit: 1,500)
3. **International research profile** (word limit: 800)
4. **Strength of connection or strategic value to Australian science** (word limit: 600)

Karen Holt
Fellowship Director
28 June 2023

ATTACHMENT 1

A-side Sectional Committees (x6) and discipline descriptors

SC1: Mathematics

1. Pure mathematics
2. Applied mathematics
3. Numerical and computational mathematics
4. Statistical science
5. Mathematical physics

SC 1 Notes:

a) Where mathematical/statistical effort is clearly applied in a particular discipline, the candidate should be considered in that discipline.
b) Candidates who focus on developing new statistical science should be considered here, but where the focus is on applying standard statistical methods in other fields, the candidate should be assessed in the SC where their work has had most impact or in SC13 if the impact has been across several fields.
c) Candidates whose work clearly aligns with the more mathematical aspects of data science should be considered in SC1, while those with a more application focus should be in SC6. Chairs will liaise on placement of candidates.
d) Bioinformatics should be considered in SC13 if there is significant contribution to both development of the methodology and its application.
e) The Chairs of SC1 And SC6 should jointly consider candidates in the Statistical and Data Sciences to maximise the likelihood of placement in the most appropriate Sectional Committee.

SC2: Physics and astronomy

1. Astronomical and space sciences
2. Atomic, molecular, nuclear, particle and plasma physics
3. Classical physics
4. Condensed matter physics
5. Optical physics and photonics
6. Quantum physics
7. Applied physics

SC2 Notes:

a) Nanophysics is included in SC2.
b) Nanotechnology that has user/industry impact is considered in SC5 or SC13 (for biomedical).
c) Photonics or quantum physics where the focus is applied to (quantum) communications or information technology is considered in SC6.
d) Where the focus of condensed matter physics research is more in the applications of materials, SC5 (materials engineering) is appropriate if there is clear user/industry impact but otherwise applied condensed matter should be considered in SC2 under applied physics.

SC3: Chemistry

1. Analytical chemistry
2. Inorganic chemistry
3. Macromolecular and materials chemistry
4. Biomolecular chemistry
5. Organic chemistry
6. Physical and structural chemistry
7. Theoretical and computational chemistry
8. Applied chemistry

SC3 Notes:

a) Nanochemistry is included in SC3.
b) Nanotechnology that has user/industry impact is considered in SC5 or SC13 (for biomedical).
c) Nanomedicine is considered in SC3 if the focus is chemistry, otherwise in the SC where the major impact occurs.
d) Biochemistry is considered in SC9.
e) If the major outcome of the work is biomedical then consider in SC9.
f) If the major outcome of work in biomolecular chemistry is in chemistry, consider in SC3.

SC4: Earth and planetary sciences

1. Atmospheric sciences and meteorology
2. Geochemistry
3. Geophysics
4. Geology
5. Oceanography
6. Hydrology
7. Environmental geosciences
8. Planetary sciences

SC4 Notes:

a) Physical aspects of climate science are considered to span descriptors 1, 5, 6 and 7 as appropriate.
b) Palaeontology is considered in SC8 with reference to SC4 if candidate overlaps these two SCs.
c) Planetary sciences includes characterisation of the properties of planetary bodies (including meteorites) and satellite remote sensing.
d) Environmental geosciences includes the physical aspects of environmental and water sciences.

SC5: Engineering sciences

1. Chemical engineering
2. Civil and structural engineering
3. Electrical power engineering
4. Mechanical and manufacturing engineering
5. Materials engineering
6. Resource engineering
7. Instrumentation technologies
8. Nanotechnology

SC5 Notes:

a) All the above descriptors focus on engineering science rather than engineering per se.
b) Structural engineering refers to moderate to large scale structures that are deployable and excludes small structures such as artificial body parts and nanostructures, which go under other descriptors.
c) Biomedical engineering is considered interdisciplinary and is considered in SC13.
d) Electrical power engineering excludes photonics/information/communications technology, which is considered in SC6.
e) Nanotechnology requires some non-biomedical applied user/industry impact, otherwise a focus on nanoscience should be considered in SC2 or SC3.
f) All electronic engineering belongs in SC6.

SC6: Information and communication sciences

1. Artificial intelligence
2. Computer science and distributed computing
3. Data science
4. Systems and control engineering
5. Photonic technologies
6. Quantum information technologies
7. Information systems
8. Electronic engineering and technologies
9. Communications engineering and technology

SC6 Notes:

a) All the above descriptors focus on the scientific aspects of the discipline.
b) Candidates focusing on the generic applications of data science should be considered under SC6.
c) Photonics technologies considered in SC6 should relate to information and communications, otherwise should be considered in SC2.
d) Pure and applied quantum science not involving information and communication technologies is considered in SC2.
e) Candidates with a mathematical focus on data science should be considered in SC1.
f) Bioinformatics should be considered in SC13 if there is significant contribution to both development of the methodology and its application.

B-side Sectional Committees (x6) and discipline descriptors

SC7: Plant and animal sciences

1. Non-biomedical genetics
2. Non-biomedical physiology
3. Non-biomedical pathology
4. Non-medical microbiology
5. Non-biomedical reproduction, development and endocrinology
6. Crop and forestry sciences
7. Animal production and veterinary sciences
8. Fisheries sciences
9. Non-medical plant and animal sciences not otherwise identified

SC7 Notes:

a) Animal behaviour is included in SC7.
b) Taxonomy and ecophysiology are considered in SC8.
c) Biomedical physiology is considered in SC11.
d) Applied microbiology is considered under SC8.
e) Experts who have focused in particular species or species groups should be placed in SC7.

SC8: Ecology, environment and evolution

1. Ecology
2. Ecophysiology
3. Biogeography
4. Conservation and biodiversity including taxonomy
5. Environmental management, ecological applications
6. Evolution, macroecology and phylogenetics
7. Palaeontology
8. Climate change biology
9. Environmental systems biology
10. Applied microbial biology and systematics

SC 8 Notes:

a) Non-applied microbiology is considered under SC7.

SC9: Molecular and cell biology, and human genetics

1. Biochemistry
2. Developmental biology
3. Cell development, proliferation and death
4. Cell metabolism
5. Structural biology (including macromolecular modelling)
6. Membrane biology
7. Molecular systems biology
8. Synthetic biology
9. Proteomics in biological systems
10. Molecular genetics
11. Human genetics (including human population genetics)

SC9 Notes:

a) Molecular genetics includes epigenomics, transcriptomics, biomedical metagenomics, and molecular genetics of cancer.
b) Human genetics includes genetic epidemiology, statistical genetics and complex disease genetics.

SC10: Immunology, microbiology and haematology

1. Immunology
2. Immunotherapy
3. Medical and clinical microbiology
4. Veterinary microbiology
5. Bacteriology/Mycology/Virology/Parasitology/Infectious agents
6. Haematology

SC10 Notes:

a) Immunogenetics, immune regulation and cytokine biology are included in SC10.

SC11: Physiology and neuroscience

1. Neuroscience
2. Cognitive science
3. Psychology
4. Medical physiology and endocrinology
5. Medical (or human) reproduction and development

SC11 Notes:

a) Clinical psychology is included in SC11.
b) Non-biomedical physiology and endocrinology is considered in SC7.

SC12: Medicine, dentistry and health sciences

1. Clinical medicine
2. Clinical dentistry
3. Pharmacology and pharmaceutical sciences
4. Precision therapies
5. Allied health
6. Epidemiology and public health

SC12 Notes:

a) Clinical medicine includes nursing.
b) Allied health includes: physiotherapy; occupational therapy; human movement and sports science; dietetics and human nutrition; optometry and audiology.

SC13 INTERDISCIPLINARY

Definition of Interdisciplinary:

1. The combining of two or more academic disciplines into one activity e.g., biomedical engineering, bioinformatics (if significant work had been undertaken in both the methodological aspects and their application, otherwise see SC1 or SC6), soil science (soil chemistry, physics, microbiology).
2. Significant impact (including translation) within significantly different disciplines (descriptors) across at least two SCs e.g., statistical modelling applied to and with impact in several different fields.
3. mathematical, physical or chemical concepts applied to several fields in each of which there is clear impact, such as environmental, material science, engineering, communications and medical sciences.
4. Significant Impact in more than one SC across the physical and biological sciences e.g., chemistry and marine biology or across two very different physical or biological disciplines e.g., zoology and epidemiology.

SC13 Notes:

a) A small impact in a discipline (descriptor), such as less than 25% of the total work, does not warrant placement in SC13 and the candidate should be placed in the SC where the major impact occurs.
b) When interdisciplinary research has impact in one discipline, the candidate should be placed in the SC where the impact occurs.
c) The placement of bioinformatics candidates will be reconsidered annually.

ATTACHMENT 2

Exemplars to demonstrate use of the revised weighting criteria

Proposers are not to choose weightings. This information is provided for reference only. The flexibility is for Sectional Committees to adjust the weightings as they see fit given the circumstances as described in the nomination. Normally the weighting used would be: 60:20:20.

Exemplar 1:

Candidate X made a major breakthrough in the treatment of a disease that kills thousands of children each year in developing countries, and received several prestigious Australian and international prizes for their work including the Prime Minister's Award for Research in the Life Sciences. The candidate is in increasing demand as a speaker at international meetings, however, due to accepting a series of short-term contracts, they have had very limited opportunity to undertake activities relevant to Criterion 3.

The Sectional Committee could apply the following weightings for the three Selection Criteria: Criterion 1: 75%; Criterion 2: 20%; Criterion 3: 5%. If this were done it would need to be advised in the Chair's report to Council.

Exemplar 2:

Candidate Y made a major discovery that led to the development of a new chemical process that became transformative across academe and industry, leading to widespread impact. They have received several prestigious Australian and international prizes for their work including the Prime Minister's Award for Research in the Physical Sciences. The candidate receives numerous invitations to speak at international meetings but can accept relatively few because their research career has been interrupted by successive appointments over the last 15 years, first as Dean, Graduate Research at the university at which they conducted their ground-breaking research and then as DVC-R at two universities, each in a different city. The candidate has demonstrably improved the research standing of each of these institutions through innovative reforms but has not had the opportunity to re-establish a laboratory. Their research continues to be highly cited.

The Sectional Committee might apply the following weightings for the three Selection Criteria: Criterion 1: 60%; Criterion 2: 10%; Criterion 3: 30%. If this were done it would need to be advised in the Chair's report to Council.

Exemplar 3:

Candidate Z has made major discoveries, establishing a paradigm shift in understanding the real world, that is inspirational to the scientific community, and indeed the wider community. The candidate is neurodiverse, and dealing with social engagement is challenging having been overlooked in leadership roles and/or finding it difficult to take on such roles, and has received limited invitations to conferences. The candidate has moved university on a number of occasions to escape local social issues, but has always managed to establish productive research groups. The candidate's work is highly innovative but not super highly cited because of the paradigm shift focus on the research, with very few researchers in the field.

The Sectional Committee might apply the following weightings for the three Selection Criteria: Criterion 1: 85%; Criterion 2: 10%; Criterion 3: 5%. If this were done it would need to be advised in the Chair's report to Council.