

## **INFORMATION TO COMPLETE AN ONLINE FELLOWSHIP NOMINATION**

For Ordinary Election, Special Election and  
Corresponding Membership

This document is to assist Fellows to gather the information required to nominate a candidate, prior to logging into the online system, and may be sent to candidates. The nomination system may only be accessed by Fellows, via the Fellows area on the Academy's website.

Changes since the previous round are highlighted in red throughout this document. **All continuing candidate nominations will need to be updated for the 2021 round and all candidates are required to complete the Consent to Nomination Form and this should also be updated by the candidate each year.**

### **KEY DATES:**

- **New candidates must be 'registered' by 31 July 2020.** To 'register' a new candidate please complete the following sections: candidate's details (Section A); suggested sectional committee (Section D); and name of proposer, seconder and supporters (Section E).
- **All nominations must be submitted by 31 August 2020, including updates to existing nominations.**

The information required for the different types of election is similar, however, please also refer to the Corresponding Member and Special Election sections at the end of this document, for specific information relating to those types of election (for Section C, F, and J of the nomination).

### **ELIGIBILITY FOR ELECTION**

1. Candidates for Ordinary and Special 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 Australianscience.
2. Candidates for Corresponding Membership shall be persons, not normally resident in Australia, who are eminent in some branch of natural knowledge.

**ENQUIRIES** regarding the nomination process (including the eligibility of a candidate or suitability of a referee) may be directed to the Fellowship Director, Karen Holt, by email to [fellowship@science.org.au](mailto: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 Helene Marsh FAA FTSE  
**Secretary Biological Sciences (B-side)**

## A. CANDIDATE'S DETAILS

- Title, given name/s and surname
- Gender
- Contact details: residential address; email address; phone/mobile number
- Date of birth; place of birth; nationality
- Post-nominals (including qualifications and any other academy memberships)
- Current job title/position; Institution/organisation
- Year awarded PhD

### ➤ **Additional Personal Information and Consent to Nomination Form:**

On the 'consent to nomination form', the candidate is asked:

- To provide us with any personal information they wish to disclose, such as (but not limited to) cultural background, Indigenous heritage or any other diversity information. (word limit: 200) The proposer may also provide additional comments. (up to 50 words)
- Whether they have been convicted of any offence or if they are currently under investigation for anything? If yes, details are requested. (word limit: 200)
- If they have any retracted papers, and if yes, to list the reason for the retraction and provide any additional comments. (word limit: 200)

All candidates must fill in and sign the Consent to Nomination form. There is a link to the online form in the nomination system. The proposer is asked to email the link to the candidate, and once completed, the form is automatically emailed to the proposer for uploading into the nomination system.

## 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.

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 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, carers' 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

1. Suggest the primary Sectional Committees to consider this candidate.
  - A. For candidates that **do not** meet the 'definition' for Interdisciplinary\* (see pg5) but cross two Sectional Committees within A-Side (Physical Sciences) or B-Side (Biological Sciences), select a 'primary' Sectional Committee and then select the Sectional Committee they 'overlap' with.
  - B. For candidates that cross A-Side and B-Side, or otherwise meet the 'definition' for Interdisciplinary, select 'SC14: Interdisciplinary'.
2. Please copy and paste (from the discipline descriptors listed below) the most relevant discipline area/s within the Sectional Committee you have selected. This will assist The Secretaries to identify further committee members that cover the expertise of the candidates, where this is possible.

#### Sectional Committees and Discipline Areas (2021 Round)

There is currently a review of Sectional Committees. There have been no changes to the committees for this round, however, discipline areas have been added to assist proposers to identify the most appropriate committee to evaluate their candidate/s.

#### A-side (Physical Sciences)

##### SC1: Mathematics

1. Pure Mathematics
2. Applied Mathematics
3. Numerical and Computational Mathematics
4. Statistics
5. Mathematical Physics

##### 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

##### 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

**SC4: Earth and Planetary Sciences**

1. Atmospheric Sciences and Meteorology
2. Geochemistry
3. Geophysics
4. Geology
5. Oceanography
6. Environmental Geosciences
7. Climate Sciences
8. Planetary Studies

**SC5: Applied Physical and Engineering Sciences**

1. Chemical Engineering
2. Civil and Structural Engineering
3. Electrical Power Engineering
4. Mechanical and Manufacturing Engineering
6. Materials Engineering
7. Resource Engineering
8. Instrumentation Technologies
9. Nanotechnology

**SC11: Information, Communication and Quantum Information Sciences**

1. Artificial Intelligence and Image Processing
2. Computer Science and Distributed Computing
3. Data Science
4. Systems Engineering
5. Photonics Technologies
6. Quantum Information and Communication Technologies
7. Information Systems
8. Electronic Engineering and Technologies
9. Communications Engineering and Technology

**B-side (Biological Sciences)**

**SC6: Plant Sciences**

1. Plant Biology
2. Cell and Molecular Biology specific to Plants
3. Genetics specific to Plants
4. Physiology specific to Plants

**SC7: Physiology, Neuroscience, Animal Behaviour and Experimental Psychology**

1. Animal Biology
2. Animal Behaviour
3. Physiology
4. Reproduction and Development
5. Neuroscience
6. Cognitive Science and Psychology

**SC8 Molecular and Cell Biology**

1. Biochemistry
2. Cell Development, Proliferation and Death
3. Cell Metabolism
4. Structural Biology (incl. Macromolecular Modelling)
5. Membrane Biology
6. Molecular Genetics
7. Synthetic Biology
8. Omics

### **SC9 Agriculture, Veterinary Science and Applied Biology**

1. Crop Sciences
2. Forestry Sciences
3. Animal Production
4. Veterinary Sciences
5. Fishery Sciences
6. Veterinary Microbiology
7. Applied Microbial Biology and Systematics
8. Nutrition
9. Human Movement and Sports Science

### **SC10 Ecology, Environmental Sciences and Evolutionary Biology**

1. Ecology
2. Biogeography
3. Conservation and Biodiversity
4. Environmental Management, Ecological Applications
5. Evolution, Macroecology and Phylogenetics
6. Palaeontology
7. Climate Change Biology
8. Systems Biology

### **SC12 Medicine and Public Health**

1. Pharmacology and Pharmaceutical Sciences
2. Clinical Medicine
3. Precision/Genomic Medicine
4. Paediatrics and Reproductive Medicine
5. Epidemiology and Public Health

### **SC13 Immunology and Microbiology**

1. Haematology
2. Immunology
3. Genetic Immunology
4. Immunotherapy
5. Medical and Clinical Microbiology
6. Bacteriology, Mycology, Virology, Parasitology, Infectious agents

### **\*SC14: Inter-disciplinary**

#### Definition:

1. The combining of two or more academic disciplines into one activity e.g. biomedical engineering, Bioinformatics; *or*
2. Significant impact (including translation) across at least two sectional committees e.g. statistical modelling applied to and with impact in several very different fields; mathematical, physical or chemical concepts applied to several distinctly different fields where there is clear impact, such as environmental science, material science, engineering, communications and medical sciences; *or*
3. Significant impact within sectional committees across the physical and biological sciences e.g. chemistry and marine biology or across two very different physical or biological disciplines e.g. ecology and neuroscience.

Notes: a small impact in a discipline (descriptor), less than 25% of the total work, does not warrant placement in SC14 and the candidate should be placed in the SC where the major impact occurs. Proposers must identify all relevant discipline descriptors for Interdisciplinary candidates.

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. SIGNATURE AND DECLARATION OF PROPOSER, SECONDER AND SUPPORTERS

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

Proposers may upload 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).

## 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.

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

Please also include an Executive Summary (word limit: 100)

1. Scientific achievement: (This dimension focuses on the candidate's research **including the translation or applied impact of that research**). Scientific excellence is based on either a single ground-breaking contribution to science, OR a cohesive body of smaller contributions with clear impact. (At least 60% weighting)
  - Indicators of impact may include but are not limited to: ground-breaking publications; 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, or to the advancement of human health, welfare or the environment) 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). (Up to 20% weighting)
  - 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). (Up to 20% weighting)
  - Indicators include: executive and leadership roles; 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 SIGNIFICANT PUBLICATIONS

Please upload a list of up to 10 of the candidate's most significant publications.

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

## 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, page numbers (full span). If publications are 'in press', include the acceptance date. Do not include publications submitted but not yet accepted, or any retracted papers.

On the 'consent to nomination form', the candidate is asked whether they have any retracted papers, and if yes, to list the reason for the retraction and provide any additional comments. (word limit: 200)

## J. REFEREES

For **Ordinary Election**, please identify six eminent referees, at least four of whom are based overseas. At least three referees must be independent and not associated with the candidate either in a professional or personal manner.

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.

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

**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.** (Please refer to definition of 'Conflicts of Interest' at the end of this section).

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](mailto:fellowship@science.org.au) for approval and to check that the referee is not a candidate. The proposer, seconder and supporters to 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.

**CONFLICTS OF INTEREST:** Adapted from the [ARC's Conflict of Interest and Confidentiality Policy](#)

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 been a supervisor of the candidate 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;
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); or
3. they have been a co-editor with the candidate of a book, journal, compendium, or conference proceedings within the past two years.

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/organisation:
- Country:
- Academy membership/s (or equivalent):

### **CORRESPONDING MEMBERSHIP**

Candidates for Corresponding Membership must be persons of eminence in the field/s of their endeavours. 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. Sections A, B, E, G, H and I are as per 'Ordinary election'. For Section D, please select the Corresponding Member and Special Election Sectional Committee. Please also refer to these notes for Sections C, F and J, 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%)

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)

## J. REFEREES (Corresponding Member)

Proposers should select four eminent referees who do not have any direct conflicts with the candidate. For Corresponding Member referees, ‘direct conflict’ can occur if the referee and the candidate have or have had a close personal relationship (including enmity). **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.

Referees should include scientists who are acknowledged leaders in the candidate’s field of research, and who can provide an assessment of the wider impact of the candidate’s work. 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](mailto:fellowship@science.org.au) for approval and to check that the referee is not a candidate. The proposer, seconder and supporters to the nomination must also 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.

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 of the request 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.

## SPECIAL ELECTION

Each year the Council may deem it desirable that the Academy elect to Fellowship up to four persons, whose election would expand the diversity of the Fellowship and be of signal benefit to the Academy and to the advancement of science. Specially elected Fellows will have:

- rendered conspicuous service to the cause of science, OR
- demonstrated outstanding innovation or entrepreneurial spirit through the translation of the results of scientific research that have led to global impact.

It is expected that candidates for Special Election have a high national and/or international profile and potential to advance the work of the Academy in science education, advocacy or policy. They may also have a strong record of science achievement, usually early in their career.

On the nomination form, select Special Election for type of election. Sections A, B, E, G, H and I are as per 'Ordinary election'. For Section D, please select the Corresponding Member and Special Election Sectional Committee. Please also refer to these notes for Sections C, F and J, which are specific to Special Election:

### C. SHORT CITATION (Special Election)

Please provide a statement on the candidate's qualifications for Special 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 the candidate's contribution to science and science leadership and/or to the translation of the results of scientific research that have led to global impact. It should also indicate how their election would be of benefit to the Academy and to the advancement of science. (word limit: 100)

### F. EXTENDED CITATION (Special Election)

Special election candidates will be assessed using the following indicators of merit:

1. Evidence of sustained service to the cause of science and science leadership, including mentorship, at the highest level and/or evidence of innovation or entrepreneurial spirit through the translation of the results of scientific research that have led to global impact. (50%)
2. Evidence of very high national and/or international profile, including supportive letters of reference from eminent referees. (30%)
3. Potential to advance the work of the Academy in science education, advocacy, policy or international engagement. (20%)

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. **Service to the cause of science and/or evidence of innovation or entrepreneurial spirit** (word limit: 1,500)
3. **National and/or international profile and leadership** (word limit: 800)
4. **Potential to advance the work of the Academy** in science education, advocacy or policy (word limit: 600)

## J. REFEREES (Special Election)

Proposers should select four eminent referees who do not have any direct conflicts with the candidate. For Special Election, 'direct conflict' can occur if the referee and the candidate have or have had a close personal relationship (including enmity). **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.

Referees should have the ability to provide an assessment of the wider impact of the candidate's work. Referees who can identify and substantiate the candidate's contributions and role will strengthen the candidate's case. 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](mailto:fellowship@science.org.au) for approval and to check that the referee is not a candidate. The proposer, seconder and supporters to the nomination must not be used as referees.

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