

## Academic Career Pathways (Research and Teaching) School of the Biological Sciences

### Indicators of Excellence for promotion and progression

This document contains example indicators of excellence relevant to the School of the Biological Sciences, developed and approved by the Council of the School. It is intended for use alongside the main ACP (Research and Teaching) guidance, which can be found here: [Academic Career Pathways \(Research and Teaching\) | \(cam.ac.uk\)](#).

#### Promotion and progression criteria: Academic Career Pathway (ACP) scheme

Each application will be considered and assessed on its own merit against the relevant criteria for the level, taking into equal account evidence of both inputs and outputs according to the published ACP guidance. A fair and consistent approach is taken in evaluating the excellence and impact of the applicant's research, teaching and service to the University. Using objective evidence and expert evaluators, applications are assessed against the progression/promotion criteria taking into account any contextual factors and Covid-19 impact statement.

In making their assessments, promotion/progression committees are mindful of the limitations in applying certain metrics, such as student feedback, bibliometrics or when there is a low participation rate and/or a gender bias (further University guidance on the use of metrics can be found on the [University Responsible Metrics webpage](#)). As a signatory of the the San Francisco Declaration on Research Assessment (DORA), the University is committed to eliminating the use of all journal-based metrics and publication venue as a proxy measure for research quality when considering the research output of individuals for promotion. Committees should, therefore, ensure that their judgments on research excellence are not based on journal-level metrics, such as impact factors or the particular journal in which an output is published, but rather on assessment of the intellectual content of the research outputs. School guidance on the appropriate use of metrics is available here: [SBS SCM DORA Guidance Oct 2021 \(cam.ac.uk\)](#).

Research quality in its broadest sense can be judged by a range of different outputs beyond standard research publications. These include, but are not limited to, datasets, software, curation of collections and qualitative indicators of research impact such as influence on policy or disciplinary practices. In line with the University commitment to Open Research, evaluations will also consider a track record of engaging in open research practices such as making manuscripts, source data and protocols openly available, contributing to reproducibility initiatives, etc.

Promotion/progression committees must be aware of unconscious bias, both in themselves and others, and how these might affect their assessments and objective decision-making. Committee members should constructively challenge any potential implicit or explicit biases that they observe in the assessment process to ensure fairness and promote inclusion.

This document sets out the promotion criteria for the ACP (Research and Teaching) scheme.

**Note that these examples are suggestive in nature and non-exhaustive; not all the indicators will be relevant to all applicants.**

### Criteria for the assessment of research: Professor (G12)

Promotion to Professor (G12) requires **outstanding achievement in research and research leadership assessed by reference to international levels of excellence**. This includes both individual and collaborative contributions to research, as well as contributions to leading an excellent institutional research culture.

There are two criteria and outstanding achievement is normally required in both:

<b>CRITERION 1: Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field whilst ensuring the highest standards of research integrity are promoted and maintained.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• A substantial portfolio of high-quality research outputs that are internationally recognised as world-class in terms of their originality, significance and rigour. The University acknowledges that the intellectual content of a paper is much more important than publication metrics or the identity of the journal in which it was published.</li> <li>• Makes a significant contribution to the advancement of knowledge in their research discipline.</li> <li>• Produces and disseminates research outputs that have an impact, for example in the REF or informs national or international policy development.</li> </ul>	<ul style="list-style-type: none"> <li>• Frequently invited to present work at major national and international conferences and institutions.</li> <li>• A significant track record of winning competitive research funding.</li> <li>• In receipt of prizes and honours for research.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Supports and widely encourages Diversity and Inclusion in all their activities.</li> </ul>	<ul style="list-style-type: none"> <li>• A track record of engaging in open research practices such as making manuscripts, source data and protocols openly available.</li> <li>• Contributing to reproducibility initiatives.</li> <li>• Curatorial activity including innovative use of collections in research.</li> <li>• Commitment and innovation in maintaining and improving collections.</li> </ul>
<b>CRITERION 2: Consistently provides high-quality research leadership, strategically planning for the future and supporting an inclusive and productive research culture.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Leads and contributes to collaborative research projects.</li> <li>• Elected/appointed to research-related leadership roles.</li> <li>• Creates and manages large research groups.</li> <li>• Convenes and leads major research conferences and seminar programmes.</li> <li>• Provides intellectual thought leadership which informs and contributes to setting the international research agenda in an individual's area.</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in high-quality public, industrial and/or policy engagement activities linked to research.</li> <li>• Edits major academic journals.</li> <li>• Promotes collaboration and develops cross-disciplinary research activities.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Creates and manages significant research groups in a manner that is inclusive, supportive and principled.</li> <li>• Provides strategic leadership for research themes and/or networks or initiatives within or beyond the School.</li> </ul>	<ul style="list-style-type: none"> <li>• A track record of creating and managing a successful research group(s) that promotes and develops the careers of early stage researchers.</li> <li>• Promoting the careers and interests of junior researchers (e.g. running DTPs).</li> </ul>

### Criteria for the assessment of research: Professor (G11)

Promotion to Professor (G11) requires **outstanding achievement in research and research leadership assessed by reference to national levels of excellence and international recognition**. This includes both individual and collaborative contributions to research, as well as contributions to institutional research culture.

There are two criteria and outstanding achievement is normally required in both.

<b>CRITERION 1: Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field whilst ensuring the highest standards of research integrity are promoted and maintained.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• A substantial portfolio of high-quality research outputs that are internationally recognised in terms of their originality, significance and rigour. The University acknowledges that the intellectual content of a paper is much more important than publication metrics or the identity of the journal in which it was published.</li> <li>• Contributes to the advancement of knowledge in their research discipline.</li> </ul>	<ul style="list-style-type: none"> <li>• Produces research outputs that have an impact, for example in the REF.</li> <li>• A track record of winning competitive research funding.</li> <li>• Invited to present work at major national and international conferences and institutions.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Research that demonstrates prominence within the field.</li> <li>• Supports and encourages Diversity and Inclusion in all their activities.</li> </ul>	<ul style="list-style-type: none"> <li>• A track record of winning competitive research funding from sponsors.</li> <li>• A track record of engaging in open research practices such as making manuscripts, source data and protocols openly available.</li> <li>• Contributing to reproducibility initiatives.</li> <li>• Curatorial activity including innovative use of the collections in research. Commitment and innovation in maintaining and improving collections.</li> <li>• Significant involvement with or leading DTPs.</li> </ul>
<b>CRITERION 2: Contributes to high-quality research leadership and supports an inclusive and productive research culture.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Makes a significant contribution to collaborative research projects.</li> <li>• Contributes to organisation of major research conferences and seminar programmes.</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in high-quality public, industrial and/or policy engagement activities linked to research.</li> <li>• Edits major academic journals.</li> <li>• Promotes collaboration and develops cross-disciplinary research activities.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Contributes to strategic leadership for research themes and/or networks or initiatives within and beyond the School.</li> <li>• Creates and manages a research group that is inclusive, supportive, diverse, and principled.</li> </ul>	

### Criteria for the assessment of teaching and researcher development: Professor (G12 and G11)

Applicants are required to show that they have **made an effective contribution towards the University's goal of providing high-quality research-led teaching to undergraduate and postgraduate students and/or fostering the professional development of research students and early career research staff**. It is recognised that applicants may contribute in different ways at different points in their career and that effective contributions may differ between disciplines. Contributions will be assessed in the context of the relevant Institution's expectations, including the local workload model where applicable.

An effective contribution must be shown by reference to all or some of the following criteria, but **should always include an element of undergraduate teaching**:

<b>CRITERION 1: Consistently delivers excellent teaching that benefits from and engages with Cambridge's research-rich environment and is intellectually challenging.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Designs and develops new programmes.</li> <li>• Leads/makes a significant contribution to internal teaching reviews.</li> <li>• Demonstrates breadth of knowledge and teaches effectively beyond immediate research area.</li> <li>• Receives prizes for teaching.</li> <li>• Undertakes examination/acts as a course examiner.</li> <li>• Provides educational leadership and organisation including curriculum development and learning design.</li> </ul>	<ul style="list-style-type: none"> <li>• Successfully introduces innovative teaching/assessment methods or significant contribution to their enhancement.</li> <li>• Publishes major textbooks/e-learning materials adopted in courses internal or external to the University.</li> <li>• National or global press coverage of the applicant's educational ideas or activities.</li> <li>• Holding an educational leadership position within a professional body.</li> <li>• Receives excellent student feedback.</li> <li>• Demonstrates sophisticated, reflexive approach to teaching and supporting learning which enables students to develop subject knowledge and capabilities.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Receives nominations and prizes for teaching.</li> <li>• Acts as a course Senior Examiner.</li> <li>• Contributes to teaching students in College.</li> <li>• Demonstrates effective leadership and pedagogical development in positions such as Course Organiser or the postgraduate admissions process.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivers high-quality continuing professional development teaching to scientific or clinical societies and groups.</li> <li>• Receives excellent student feedback from didactic and/or clinical teaching activities.</li> <li>• Curatorial Activity: use of the collections in teaching.</li> </ul>
<b>CRITERION 2: Consistently delivers high-quality research supervision that is intellectually challenging and supportive.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Consistently high research student completion rates.</li> <li>• Award of prizes and honours for researcher development.</li> <li>• Consistently receives positive feedback from research students.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides inclusive leadership and delivers excellence through the performance of others.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Contributes significantly towards recruiting and winning support for research students.</li> <li>• Recognises and nurtures talent and demonstrates consistent engagement with researcher training and development processes.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Shows practical leadership of widening participation of under-represented groups in postgraduate research.</li> </ul>	<ul style="list-style-type: none"> <li>• Creates a positive working environment and acts as a role model in promoting the University's values relating to mutual respect.</li> </ul>
<b>CRITERION 3: Consistently ensures that early-career researchers (<i>generally taken to mean people within 10 working years of their PhD</i>) receive excellent opportunities to develop their potential and prepare them for future success.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Consistently receives positive feedback from postdoctoral researchers.</li> <li>• Enables and encourages early-career researchers to develop independent research lines and/or pursue independent publications or funding applications.</li> <li>• Mentors or coaches early-career researchers in other groups or departments.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides inclusive leadership and delivers excellence through the performance of others.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Recognises and nurtures talent and demonstrates consistent engagement with researcher training and development processes.</li> <li>• Helps early-career researchers to be creative about their futures and takes active steps to support career</li> </ul>

	pathways both in and beyond academia.
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>Shows practical leadership in promoting a positive research culture broadly across the Department and School.</li> </ul>	<ul style="list-style-type: none"> <li>Creates a positive working environment and acts as a role model in promoting the University's values relating to mutual respect.</li> </ul>

**Criteria for the assessment of service to the University and to the academic community: Professor (G11 and G12)**

Applicants are required to show an **effective service contribution**. University members are expected to demonstrate and promote collegiality by nurturing a culture of mutual respect. The University recognises that individuals may contribute in different ways at different times and that as individuals become more senior they may be asked to take on more commitments that are external to the University. Nevertheless, the University normally expects applicants to demonstrate a significant degree of service contribution that is internal to the University.

<b>CRITERION: Consistently makes an effective contribution of service to the University and to the academic community beyond the University. Promotes collegiality and engenders a culture of mutual respect.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Departmental/Faculty/University academic leadership roles.</li> <li>• Sits on Departmental/Faculty/University committees and bodies.</li> <li>• Provides active mentoring and support for colleagues.</li> <li>• Promotes and demonstrates effective use of the Staff Review and Development Scheme.</li> <li>• Significant and sustained contributions to equality, diversity and inclusion activities.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Promotes cross-disciplinary collaboration and knowledge sharing.</li> <li>• Contributes to leadership, administration and student support within Colleges.</li> <li>• Significant and sustained contribution to widening participation activity.</li> </ul>	<ul style="list-style-type: none"> <li>• Engages significantly in peer review activity.</li> <li>• Advises government and parliamentary bodies.</li> <li>• Sits on public review bodies.</li> <li>• Significant and sustained contributions to fostering strategic partnerships (e.g., industry, trusts and foundations, philanthropic donors).</li> <li>• Supports the work of other HEIs (e.g., significant external examining; participation in research/teaching and learning reviews).</li> <li>• Significant and sustained public engagement activities.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Creates a positive working environment and acts as a role model in promoting the University's values relating to mutual respect.</li> <li>• International clinical excellence as evidenced by specialty clinical credentials, demonstrated service and leadership within a clinical specialty, and mentorship of clinical trainees.</li> </ul>	<ul style="list-style-type: none"> <li>• Curatorial activity, devising exhibitions and installations, digitization or citizen science projects that make collections more widely accessible, strategic use of the collections in national and international partnerships.</li> </ul>

### Criteria for the assessment of research: Associate Professor (G10)

An applicant is required to demonstrate **achievement in research assessed by reference to national levels of excellence**. This may include individual and/or collaborative contributions to research.

<b><i>CRITERION: Consistently conducts rigorous research addressing significant questions, contributing new ideas and advancing the boundaries of the field, whilst ensuring the highest standards of research integrity are promoted and maintained.</i></b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• A portfolio of high-quality research outputs that are nationally recognised as excellent. The University acknowledges that the intellectual content of a paper is much more important than publication metrics or the identity of the journal in which it was published.</li> <li>• Invitations to present work externally.</li> </ul>	<ul style="list-style-type: none"> <li>• Invitations to join research consortia.</li> <li>• A track record of engaging in open research practices such as making manuscripts, source data and protocols openly available.</li> <li>• Contributing to reproducibility initiatives</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
	<ul style="list-style-type: none"> <li>• Commitment and innovation in maintaining, organizing, and improving collections.</li> </ul>

### Criteria for the assessment of teaching and researcher development: Associate Professor (G10)

An applicant seeking progression to Associate Professor (Grade 10) via the ACP R&T Progression/Promotion Scheme A is required to show consistent and sustained excellence in **providing high-quality undergraduate and postgraduate education that benefits from and engages with Cambridge's research-rich environment and/or nurturing the professional and personal development of research students and early-career research staff**. It is recognised that effective contributions may differ between disciplines and that an applicant's contribution is therefore to be assessed in the context of their Institution's expectations, including the local workload model where applicable. Sustained excellence must be shown by reference to all or some of the following criteria:

**In Biological Sciences 2/3 of teaching must come from Undergraduate or MPhil teaching:**

<b>CRITERION 1: Consistently delivers excellent teaching that benefits from and engages with Cambridge's research-rich environment and is intellectually challenging.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Designs and develops new programmes.</li> <li>• Contributes to internal teaching reviews.</li> <li>• Undertakes examination / acts as a course examiner.</li> <li>• Provides educational leadership and organisation, including curriculum development and learning design.</li> <li>• Demonstrates sophisticated, reflexive approach to teaching and supporting learning, which enables students to develop subject knowledge and capabilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Successfully introduces innovative teaching/assessment methods or significant contribution to their enhancement.</li> <li>• Publishes materials adopted in courses internal or external to the University.</li> <li>• National or global press coverage of the candidate's educational ideas or activities.</li> <li>• Receives excellent student feedback.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Contributes to the design and developments of new and existing programmes.</li> </ul>	<ul style="list-style-type: none"> <li>• Leads substantive Undergraduate teaching programmes.</li> <li>• Delivers substantive Undergraduate teaching programmes. Contributes to College teaching to a high standard.</li> </ul>
<b>CRITERION 2: Consistently delivers high-quality research supervision that is intellectually challenging and supportive.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Supervises research students effectively.</li> <li>• Consistently receives positive feedback from research students.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides inclusive leadership and delivers excellence through the performance of others.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Contributes towards recruiting and winning support for research students.</li> <li>• Recognises and nurtures talent and engages with researcher training and development processes.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Consistently high research student completion rates.</li> </ul>	<ul style="list-style-type: none"> <li>• Creates a positive working environment and acts as a role model in promoting the University's values relating to mutual respect.</li> <li>• Supervision of trainee clinical specialists.</li> <li>• Curatorial activity: Innovative use of the collections in teaching.</li> </ul>
<b>CRITERION 3: Consistently ensures that early-career researchers (<u>generally taken to mean people within 10 working years of their PhD</u>) receive excellent opportunities to develop their potential and prepare them for future success.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Consistently receives positive feedback from postdoctoral researchers.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides inclusive leadership and delivers excellence through the performance of others.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Recognises and nurtures talent and engages with researcher training and development processes.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
	<ul style="list-style-type: none"> <li>• Creates a positive working environment and acts as a</li> </ul>



	role model in promoting the University's values relating to mutual respect.
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**Criteria for the assessment of service to the University and to the academic community: Associate Professor (G10)**

An applicant is required to show an **effective service contribution**. University members are expected to demonstrate and promote collegiality by nurturing a culture of mutual respect. The University recognises that people may contribute in different ways at different times and that as individuals become more senior they may be asked to take on more commitments that are external to the University. Nevertheless, the University normally expects applicants to demonstrate some degree of service contribution that is internal to the University.

<b>CRITERION: Consistently makes an effective contribution of service to the University and to the academic community beyond the University. Promotes collegiality and engenders a culture of mutual respect.</b>	
<b>University examples of indicators of excellence</b>	<b>University examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Departmental/Faculty/University academic leadership roles.</li> <li>• Sits on Departmental/Faculty/University committees and bodies.</li> <li>• Provides active mentoring and support for colleagues.</li> <li>• Promotes and demonstrates effective use of the Staff Review and Development Scheme.</li> <li>• Significant and sustained contributions to equality, diversity and inclusion activities.</li> <li>• Creates a positive working environment and acts as a role model in promoting inclusion and mutual respect.</li> <li>• Promotes cross-disciplinary collaboration and knowledge sharing.</li> </ul>	<ul style="list-style-type: none"> <li>• Contributes to leadership, administration and student support within Colleges.</li> <li>• Significant and sustained contribution to widening participation activity.</li> <li>• Engages significantly in peer review activity.</li> <li>• Advises government and parliamentary bodies.</li> <li>• Sits on public review bodies.</li> <li>• Significant and sustained contributions to fostering strategic partnerships (e.g. industry, trusts and foundations, philanthropic donors).</li> <li>• Supports the work of other HEIs (e.g. significant external examining; participation in research/teaching and learning reviews).</li> <li>• Significant and sustained public engagement activity.</li> </ul>
<b>School examples of indicators of excellence</b>	<b>School examples of indicators of impact</b>
<ul style="list-style-type: none"> <li>• Creates a positive working environment and acts as a role model in promoting the University's values relating to mutual respect.</li> </ul>	<ul style="list-style-type: none"> <li>• National Clinical excellence.</li> <li>• Curatorial Activity, devising exhibitions or new installations; sustained and novel contribution to public engagement; digitization or citizen science projects that make collaborations more widely accessible, strategic use of the collections in national and international partnerships.</li> </ul>

### Additional contribution increments for Associate Professors (G10)

The option for an Associate Professor (G10) to apply for contribution increments above the service points is retained. The assessment of contribution should be clearly related to the institution's strategic plans and should recognise achievement in teaching and general service which is likely to contribute to the future academic success of the University.

Please see the main ACP (Research and Teaching) guidance for detail.

### Exclusions

The University aims to be a leader in driving a culture of mutual respect and in promoting a positive working environment for all in its community. High standards of conduct are therefore expected from all staff; particularly those in leadership positions who are expected to role model these values.

Formal sanctions may be taken into account when assessing the applicant's suitability for promotion; those with a live disciplinary warning on file may be excluded from applying for promotion.