



THE UNIVERSITY *of* EDINBURGH

Interdisciplinarity and Team Research in Promotion Procedures Additional guidance

Contents

1	Introduction.....	2
2	Recognising Challenges and Achievements of Interdisciplinary and Team-Based Researchers.....	2
2.1	Recognition.....	2
2.2	Publications.....	3
2.3	Other outputs.....	3
3	History and Review.....	4

1 Introduction

The University has clear, balanced Grade Profiles for Academic staff that match individuals' activities and achievements to UoE grades 6-10, with respect to teaching, research and leadership/management. Reward processes have, historically, recognised contributions in these three areas.

Colleagues who work in a group undertaking interdisciplinary research or as a key member of a large team, which may or may not be interdisciplinary, can sometimes find it challenging to demonstrate their individual contributions because reward processes have traditionally been predicated on discipline-based structures with a single leader. It is important to note that interdisciplinarity is not synonymous with teamwork nor is it restricted to 'Team Science'¹ and in this document we will use the term 'Team Research'.

The current Strategic Plan talks of the importance of the University's culture of strong interdisciplinary collaboration and the role of Interdisciplinarity in the strategic themes of Leadership in Research, and Digital Transformation and Data.

This document provides additional guidance to users of the existing grade profiles. It aims to assist both colleagues preparing a case for promotion/reward and those evaluating such cases as members of promotion panels. This document outlines ways in which levels of quality can be assessed appropriately and fairly; it does not imply that quality standards are altered for researchers working in interdisciplinary or other teams.

2 Recognising Challenges and Achievements of Interdisciplinary and Team-Based Researchers

We highlight here some of the characteristics and acknowledged challenges of assessing individual contributions to research activity when individuals are working across traditional discipline boundaries and where delivery of the outputs depend upon contributions from many individuals and describe briefly how these might be manifested within the promotion process. We encourage reviewers to consider these issues when making their assessments. We encourage candidates to use the additional narrative option in the recommended CV template to explain and justify their interdisciplinary approach and contributions where appropriate. In particular, positive indicators of achievement can be evidenced by:

- joint publications, research collaborations and in reviewing requests from a wide-range of funding bodies and journals
- interdisciplinary/team leadership might be further evidenced by instigating collaborative working across two or more disciplines either in an academic or user/stakeholder context
- management of staff with diverse backgrounds and skills so that they achieve their full potential

2.1 Recognition

- The way an academic is viewed professionally is reflected by their peer network but a researcher pursuing multiple interests may have multiple – and shifting – peer networks.
- Academic recognition (e.g. in the form of prizes or membership of professional bodies) normally comes from established disciplines. Thus, indicators of recognition achieved by interdisciplinary individuals among their peers may be significant but not publicly acknowledged. There are also fewer honours and awards given by professional societies for interdisciplinary research than for disciplinary research.
- Nominations, even in multidisciplinary societies such as the Royal Society of Edinburgh, are usually initiated in disciplinary committees, so interdisciplinary researchers often obtain fellowship status later than disciplinary researchers with comparable achievements
- Leadership will usually mandate sharing of credit in publications, grants, etc. which means that the team-based nature of the research may require increased recognition of co-investigators' roles and research activities

¹ A recent report by the Academy of Medical Sciences [<http://www.acmedsci.ac.uk/policy/policy-projects/team-science>] defined Team Science as 'output focused research involving two or more groups'. The purpose of the project which generated this report was 'to understand the current incentives and disincentives for researchers participating – or considering participation – in 'team science'.

2.2 Publications

- An interdisciplinary researcher's publication record may appear to be less cohesive than that of colleagues whose work is firmly located within one discipline. They may publish in a wider variety of journals, possibly in newer journals or those not considered 'mainstream'
- Different disciplines exhibit very different traditions regarding publication: single-author monographs or journal articles are a sign of prestige in the arts, humanities and social sciences in contrast to the multiple, multi-author papers produced by many other disciplines. It is important to consider how the published outputs from scholars working across disciplines may differ and how they might be affected by working across these traditions
- Researchers who typically act as a specialist within a larger team may have a portfolio of publications where it is difficult to interpret the importance of their contribution because of the larger than usual number of contributors. In disciplines where emphasis is placed on 'first/senior' authorship as a surrogate for contribution they may be disadvantaged.
- The quantity of outputs may vary: depending on the nature of the research and the role that the individual has played in collaborative efforts, this could be manifested as more publications than usual (if they have provided specialist expertise in many different applications) or rather fewer if they have been engaged in novel, complex, interdisciplinary interactions that have taken time to come to fruition

2.3 Other outputs

- Interdisciplinary and large 'team' based projects can often take longer to deliver their outcomes. This may mean that the candidate's CV may include fewer, longer grant-funded projects. Conversely, if the individual often provides specialist expertise to multiple group/interdisciplinary collaborations, this may result in them being named on a wider variety of projects, giving the impression of a less cohesive career trajectory.
- Interdisciplinary research is typically collaborative and researchers often need more time to develop effective networks and research strategies. It may take extra time to learn new methods, languages, and research cultures. Discipline hopping and, in some cases retraining, may mean that the individual appears to have had periods when they have been less research active and this may have an impact on their level of outputs in relation to their academic 'age'.
- If the member of staff spends the majority of their time acting as key specialist contributing to large scale 'team' based projects it may be difficult to quantify the importance of their role in delivering the project objectives especially if they are not involved throughout the life-time of the project.
- The contribution of an interdisciplinary researcher may be questioned by schools or sub-groups where collaborative work is not the norm. In this case, the research done by the candidate may not be valued sufficiently to compensate for a (perceived) lower output of disciplinary research
- Interdisciplinary teaching, across Schools and Colleges, may generate considerable student interest but involve activities – including academic leadership and management – that are not recognised or rewarded by the 'home' department
- Interdisciplinary researchers often tackle complex challenges of importance to technology, the economy and society so their work may particularly lend itself to knowledge exchange
- Researchers who have highly specialised skills essential for delivery of complex long life team based projects may play a crucial role in training staff and students.

2.4 Referencing

The University Guidance Notes on Referees and Assessors in the Academic Promotions process makes provision for internal assessors where candidates work in a team science context.

Information on these provisions can be found here:

[Reference Request Form](#)

3 History and Review

This document was produced by a working group comprising.

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In 2017 the document was reviewed to incorporate additional guidance for assessment of Team Researchers who may or may not be working in Interdisciplinary Teams – the review was conducted by:

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It is intended that the document will evolve and grow in light of experience.

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