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THE ROLE OF FUNDERS IN
SUPPORTING INTERDISCIPLINARY
RESEARCH: IMPLICATIONS FOR PEER REVIEW AND
ACADEMIC CAREERS



DECISIONS THAT FUNDERS MAKE ...
HAVE A MAJOR IMPACT ON HOW
INTERDISCIPLINARY RESEARCH IS
SHAPED ... AND ULTIMATELY ITS
EFFECTIVENESS

Lyall et al. 2013



KEY ROLES FOR FUNDING AGENCIES

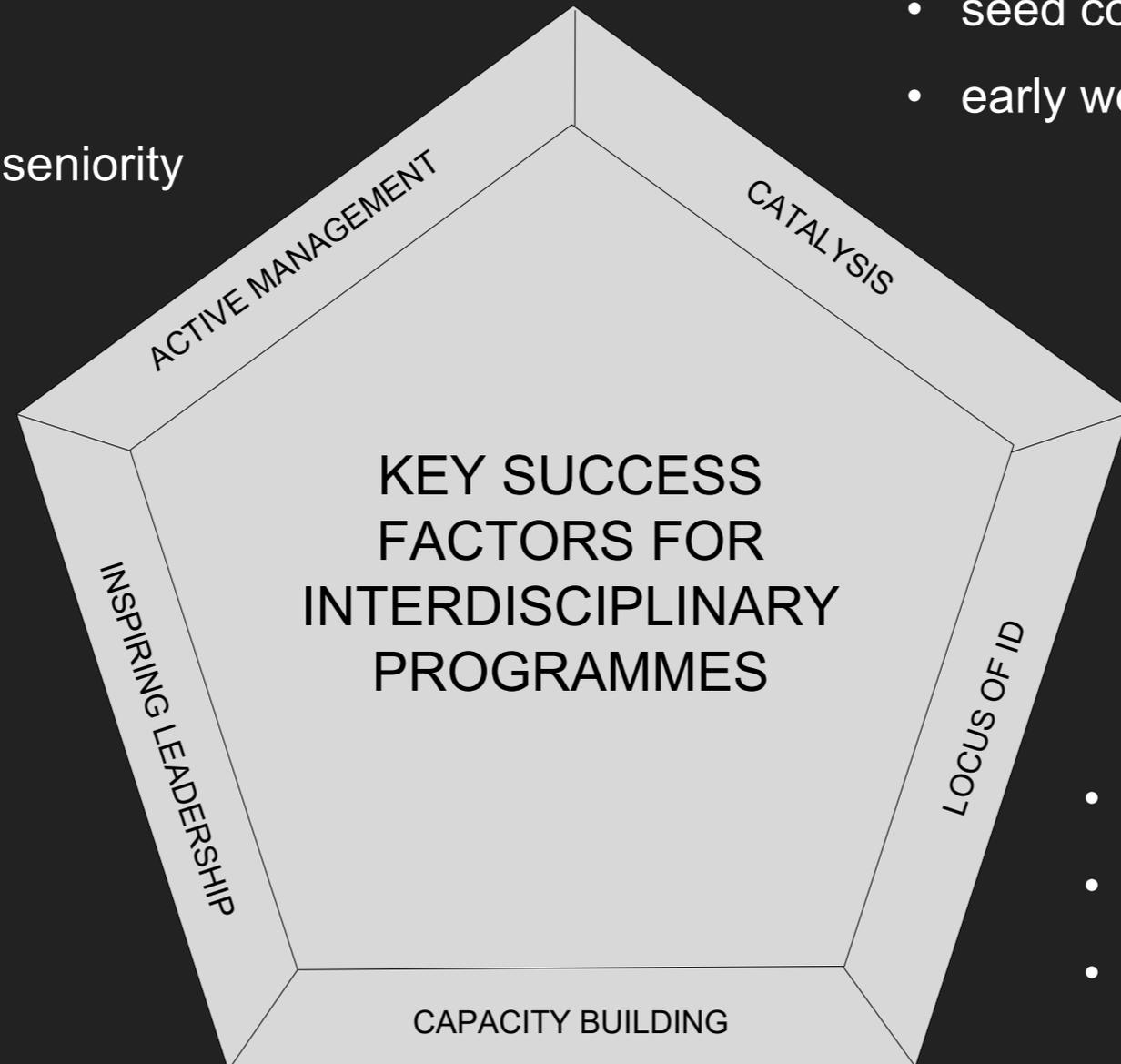
- ▶ Shaping interdisciplinary research initiatives
- ▶ Reviewing and evaluating interdisciplinary research appropriately
- ▶ Building interdisciplinary capacity
- ▶ Supporting sustainability of interdisciplinary research

How will integration be managed?

- by one person
- by a team
- at what level of seniority

Importance of 'warm up' activities

- seed corn funding
- early workshops



Who provides the intellectual leadership?

- the funders
- director

At what level does ID integration take place?

- project
- theme
- programme/initiative

Provision for capacity building

- career development for ECRs
- organisational learning



DESPITE YEARS OF INTERDISCIPLINARY RHETORIC, IT IS STILL DIFFICULT TO FIND PEOPLE WHO ARE ABLE TO MOVE EASILY BETWEEN SOCIAL AND ENVIRONMENTAL SCIENCES

Living with Environmental Change
2012



INTERDISCIPLINARY RESEARCH ALSO
DEPENDS UPON A SUPPORTIVE
INSTITUTIONAL CONTEXT. UNFORTUNATELY,
IN THE MAIN, SCIENTIFIC INSTITUTIONS ARE
POORLY SET-UP FOR ENABLING
INTERDISCIPLINARY RESEARCH

Lowe et al. 2013



RESEARCH COUNCILS LOOK FOR
THE SINGLE DISCIPLINARY
WEAKNESS RATHER THAN THE
INTERDISCIPLINARY STRENGTH

One of my research collaborators

Multidisciplinary research 'career suicide' for junior academics

However, director of the Oxford Martin School says 'disciplinary silos' were one factor contributing to 2008 financial crisis

May 3, 2016

By [Ellie Bothwell](#) Twitter: [@elliebothwell](#)





THE RISKS OF INTERDISCIPLINARITY AREN'T WHAT THEY USED TO BE

Callard and Fitzgerald 2015



THE LOUD AND SOFT VOICES OF INTERDISCIPLINARITY

“loud and performative voice” of interdisciplinarity
that is present at strategic, institutional levels

versus

the “quiet and productive voice” of those engaged in
its daily practice

Lindvig 2017



CONFLICTING RHETORICS

- ▶ Misalignments between loud and soft voices:
 - ▶ Promotion prospects
 - ▶ Top down vs. bottom up initiatives
 - ▶ Timing of ID careers
 - ▶ Evaluation/REF

Lyall (in preparation) *New Logics of Interdisciplinarity: How institutions shape academic careers*



IF YOU GET JUDGED BY SOMEBODY WHO IS VERY THEORETICAL, VERY UNI-DISCIPLINARY THEY ARE NOT GOING TO LIKE WHAT YOU WRITE. I THINK THE REF DOES WORRY ME BUT WHAT CAN YOU DO, I'M INTERDISCIPLINARY AT HEART

Iona



ERC ... FORCES YOU TO NOMINATE
ASSESSMENT PANELS ... I ENDED UP
GOING THROUGH A BIOLOGY PANEL ...
ONE OF THE QUESTIONS I GOT ... WAS
– “ARE YOU ONE OF US”?

Reuben



THEY'RE INFLUENCED BY WHERE THEY CAN GET THE MONEY FROM, IT'S NOT NECESSARILY A BELIEF IN THE GOOD THAT INTERDISCIPLINARY RESEARCH CAN DO

Gina



THE “PARADOX OF INTERDISCIPLINARITY”

Interdisciplinary research is often encouraged at policy level but poorly rewarded by funding instruments and academic structures

Weingart 2000

The greater the degree of interdisciplinarity, the lower the probability of being funded

Nature June 2016

Data from Australian Research Council



➤ What is the role for funders in supporting interdisciplinary academic careers?



IDR REQUIRES LEADERSHIP FROM FUNDERS

- ▶ Fairness in review processes (Lyall & King 2013)
 - ▶ Composition of the panel
 - ▶ Selection of external reviewers
 - ▶ Design of the review process
- ▶ Greater recognition of career implications
 - ▶ ID funding throughout academic life course



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ELEMENTS OF GOOD PRACTICE (1)

- Go beyond simply assessing scientific excellence to ascertain quality of integration
- Additional questions to complement – but not replace – criteria to assess research proposals
- Key tension in the evaluation of IDR:
 - recognise that IDR requires special treatment
 - but avoid creating additional hurdles



ELEMENTS OF GOOD PRACTICE (2)

- Requires greater *partnership* between funders and researchers
- Challenges of balancing flexibility with parity and cost efficiency
- Transparency of any additional requirements



A “BLUEPRINT” FOR IDR PEER REVIEW?

- ▶ IDR takes many forms:
 - ▶ academically-oriented vs. problem-focused (Lyall et al. 2011)
 - ▶ individual vs. team-based
- ▶ Different goals lead to:
 - ▶ different research designs
 - ▶ different evaluation criteria
- Key to understanding what we are assessing
- Impossible to offer single IDR peer review model?



CHECKLIST FOR REVIEWERS

WHAT DOES A SUCCESSFUL INTERDISCIPLINARY PROPOSAL LOOK LIKE?

1. Does the proposal describe clear **goals**, adequate preparation, appropriate method, significant results, effective presentation, reflective critique?
2. How was the **problem** formulated?
3. How diverse are the disciplines, methods and researchers and how suitable is the **combination of disciplines**?
4. Is there a clear **justification** for the choice of disciplines based on the needs of the research questions?
5. Is the study sufficiently anchored in **relevant literature**?
6. What is the relationship with the **methodology**?
7. How will **communication** be tackled?
8. Does it describe how the disciplines involved will be **integrated** (in the design and conduct of the research as well as in subsequent publications) and how this relates to the type of interdisciplinarity involved; does it demonstrate how the quality of integration will be assured?



CHECKLIST CONT.

9. How is the collaboration organised – is there an understanding of the challenges of interdisciplinary integration, including methodological integration, and the ‘human’ side of fostering interactions and communication, and an effective strategy to achieve this?
10. Is the leadership role and management strategy to deliver the desired outcomes clearly articulated?
11. Do the researchers involved have demonstrable interdisciplinary skills and experience?
12. In particular, is there evidence of interdisciplinary leadership?
13. Is there an appropriate plan for stakeholder/user engagement from the outset of the project?
14. Does the proposal budget for, and justify, the additional resources needed?
15. Is it clear how interdisciplinarity will be reflected in the project outputs and outcomes?

(Compiled from Öberg, 2009; Wickson et al., 2006; Pohl et al. 2011; Lyall et al. 2011)