

## PLURIDISCIPLINARITY- Moderator: Catherine Kistner

- Crossing borders of research...
- Very much focused on *challenges and problems* and *approaches and solutions*
  - Managing interdisciplinary panels and review processes
  - Panel structures and number
  - Maintaining balance and fairness
  - Maintaining quality

# Talk 1. Monique Smaihi-

## Peer review and interdisciplinary research at the ERC

### •Overview

- Frontiers research is prioritised
- Only primary panel will make funding decision although 20-30% of proposal are seen by more than one panel.
- 25 panels broken down by 3 domains (LS/PE/SH) – so awards were defined by cross panel (frequent) and cross domain (smaller in number)
- In advanced grants and starter grants SUCCESS was very similar across cross panels and cross domain- speaks for uniformity amidst single and cross-disciplinary proposals- quality?

### •Some Conclusions

- Vast majority of proposals are cross disciplinary in nature
- 30% proposal evaluated by two or more panels- Most panels have good degree of interdisciplinary capability to examine multiple areas.
- All three subject domains LS/PE/SH are fully engaged with principle of supporting interdisciplinary projects.

# Talk 2 Professor Yozo Fujino-

## Research Funding and peer review system in JSPS.

### Overview of funding

- Very significant scale. Massive review undertaking.
- Competitive total fund is 5BN and JSPS (Japan Society for Promotion of Science) is about 40% of this. Very much bottom up funding- CURIOSITY DRIVEN
- Three large categories (**HE, SCI&ENG, BIOLOGY**) WITH 300 research fields. Also other category **COMPREHENSVE AND NEW INNOVATIVE FIELDS** .

### INTERDISCIPLINARY PROPOSALS

Identified 40 areas of interdisciplinary research-JSPS Under **COMPREHENSVE AND NEW INNOVATIVE FIELDS** – INCLUDING ONGOING CALLS FOR NEW FIELDS- SO THIS IS EXPANDING

Selection of interdisciplinary proposals essentially same as used for other proposals.

- Use of panels in making assessment
- Reviewers are mixed
- Reviewers selected from wide areas
- Scores have larger variation – a common theme?

Suggests that new interdisciplinary fields should be introduced in the near future...?

## Talk 3 Prof Paulo Sergio Lacerda Beirao.

### Approaches and challenges for funding multidisciplinary research

#### Challenges with interdisciplinary proposals

- Suggested that challenge in fairly evaluating interdisciplinary proposals – gave example of bioinformatics
- In CNPq (one national agencies) 40 panels available to evaluate these and there is a risk in 'split' in how interdisciplinary proposals are reviewed. Approach may be to have fewer panels and more that are interdisciplinary.

#### MULTI-disciplinary proposals

The collective is crucial: There is a strong pressure to specialisation while problems in science are inherently NON- specialised. Therefore you need GROUPs of researchers to cover wide spectrum research activity within which super specialists would know very narrow areas in depth.

We need specialists who know enough in depth to search for new discovery but have broad enough knowledge to communicate with their peers in other specialisations.

**Therefore the same must be true of REVIEW COMMITTEES!**

Basis of merit review of multidisciplinary proposals must reflect this variation

## Talk 3 Prof Paulo Sergio Lacerda Beirao.

# Approaches and challenges for funding multidisciplinary research

## A way forward?

**LATTES platform**- researcher database, researchers, institutions and research groups.

- 22,000 RESEARCH GROUPS
- 1.6 MILLION CVs
- 8000 institutions
- Supports evaluation process for public funding proposals in S&T in Brazil
- Searching evaluators
- Provides a standard CV for Universities, reviewers and researchers and teams.
- Now helped build networks in Brazil- multi-disciplinary groups.

## Some general themes running through this session

- Shared mechanisms of evaluating, but differences as well (n=3)
- Challenges with managing fairness for interdisciplinary proposals.
- Difficulties in defining disciplines in some cases...
- **RISKS:** Quality of **proposals** and quality of **review** of interdisciplinary awards .
  - Such proposals may be *vulnerable* to vagaries of multidisciplinary panel review.
  - Context is important here- fields within a interdisciplinary proposal may be at different stages of maturity.
- How to more effectively structure and use panels to evaluate proposals crossing more than one discipline? How should they intersect? What is influence of the scientific community and panelists
  - **More panels** .....-specialised/focused disciplines ?
  - **Fewer panels** .....wider disciplines represented?
  - **Even a single panel?**
- Inter-disciplinarity versus Multi-disciplinarity- is there a difference and does that help us?
- Next steps ...How are we going to consolidate these approaches and perspectives going forward?  
(May deserve a special working group to help evolve peer review approaches?)