









# The experience and confidence of researchers in conducting cross-disciplinary research

---Survey findings from the IMPALA-MUDI research project

Yan Ding, Justin Pulford, Imelda Bates

Centre for Capacity Research, Liverpool School of Tropical Medicine, UK

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# Work though the talk



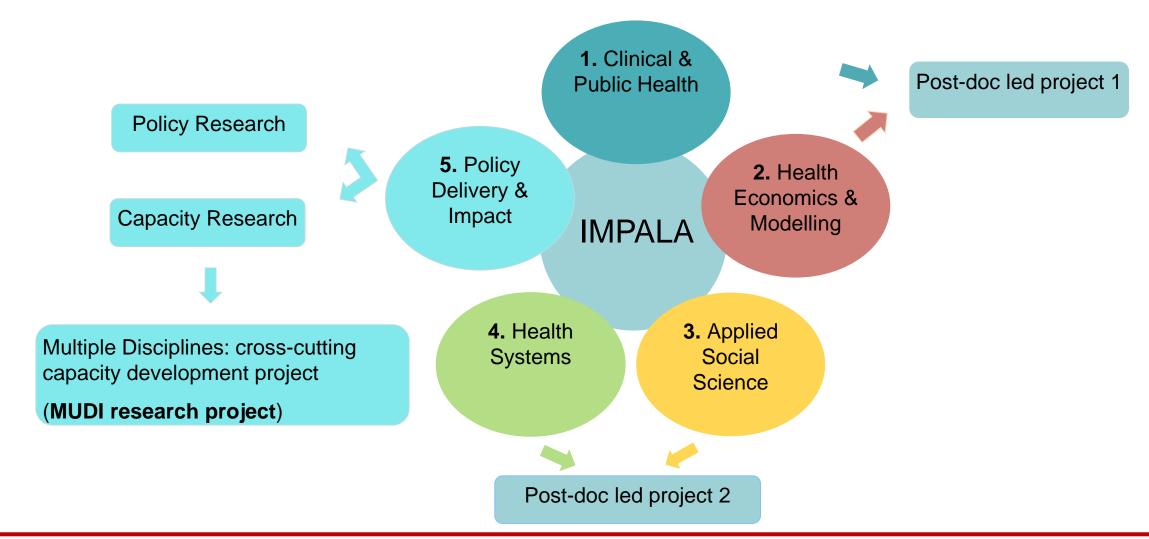
- Background
  - The IMPALA programme & MUDI research project
  - Why the survey?
- Methods
  - Survey development
  - Data analysis
- Findings
- Discussions



# **Background**

## The IMPALA Programme, MUDI research project





### Why to have the survey?



#### **Collaboration Readiness**

**Individual qualities** 

**Previous experience** in conducing cross-disciplinary research

**Confidence** in conducing cross-disciplinary research

Perspectives sharing, not research So what?

A survey on previous experience and confidence in conducting cross-disciplinary research

#### Aims to:

- 1. explore researchers' previous experience and confidence in conducting cross-disciplinary research; and
- 2. identify actions for further improvement on cross-disciplinary research experience and confidence.



# **Methods**

### **Content of the survey**



- 1. Personal information
- 2. Previous research experience
- 3. Self-assessment of confidence

in conducting cross-disciplinary research

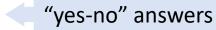
Based on required competencies from literature in conducting cross-disciplinary research

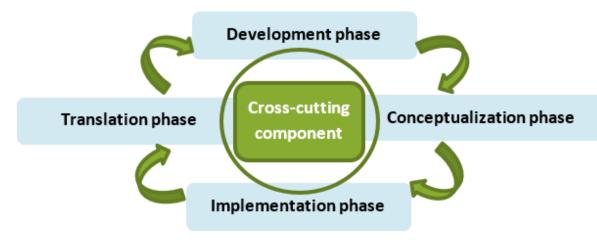
e.g.: able to seek an exchange of theories, concepts, and approaches with those from other disciplines

### Structure of the survey questions



Qs on previous research experience in conducting cross-disciplinary research





Did you have previous experience in...

#### e.g.:

creating a network for further collaborations?

#### e.g.:

modifying your own perspectives on research questions as a result of interactions with colleagues from fields other than your own?

(Adapted from Hall, K.L., et al., 2012)

Qs on self-assessment of confidence in conducting cross-disciplinary research

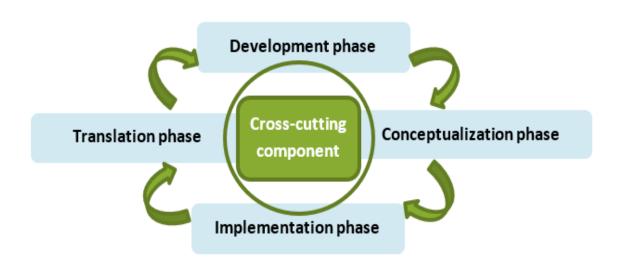
a 5-point scale ranging from extremely confident (=5) to extremely unconfident (=1)

### **Data analysis**



% of those who had previous experience in conducting cross-disciplinary research

% of those who were "extremely confident"/"confident" in conducting cross-disciplinary research



#### A. Data were stratified by academic rank:

- Professors
- Senior researchers
- Early career researchers

#### B. Data were stratified by primary academic discipline:

- Medicine/Clinical Sciences
- Humanities & Social Sciences
- Others



# **Findings**

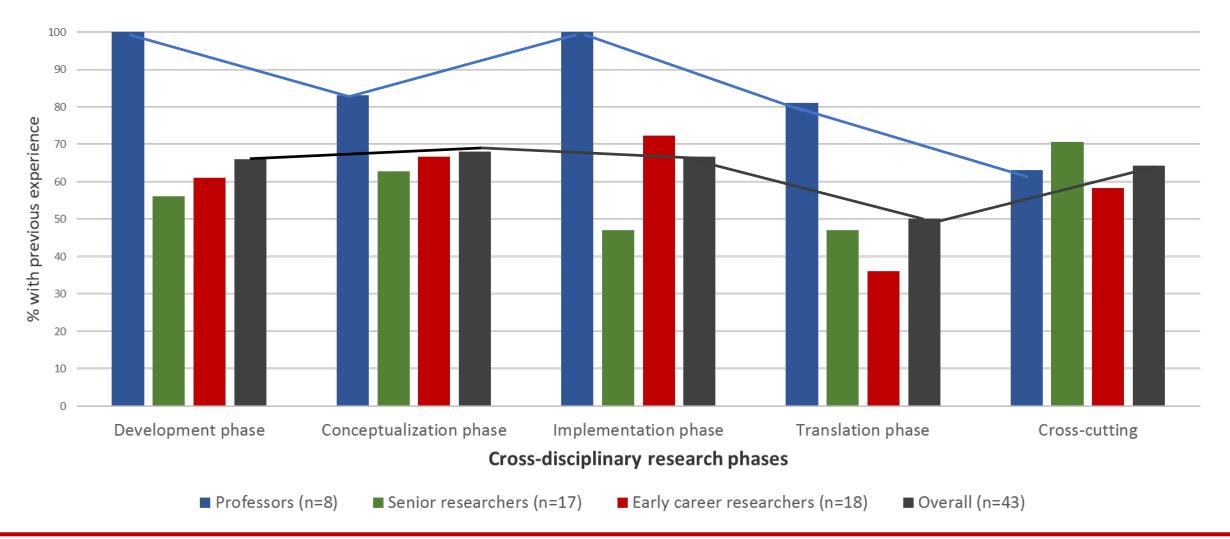




Items	Option	N=43	%
Academic Rank	Professor	8	19
	<b>Senior researchers</b> (including readers, associate professors, senior lecturers)	17	40
	Early career researchers (including assistant professors, lecturers, research	18	42
	fellows, post-docs, research assistants and PhD students)		
Primary Academic Discipline	Medicine & Clinical Sciences	28	65
	Humanities & Social Sciences	11	26
	Others	4	9
Received academic degrees in more than one discipline	Yes	24	56
	No	19	44
Self-assessed professional background	Multi-disciplinary	32	74
	Uni-disciplinary	11	26

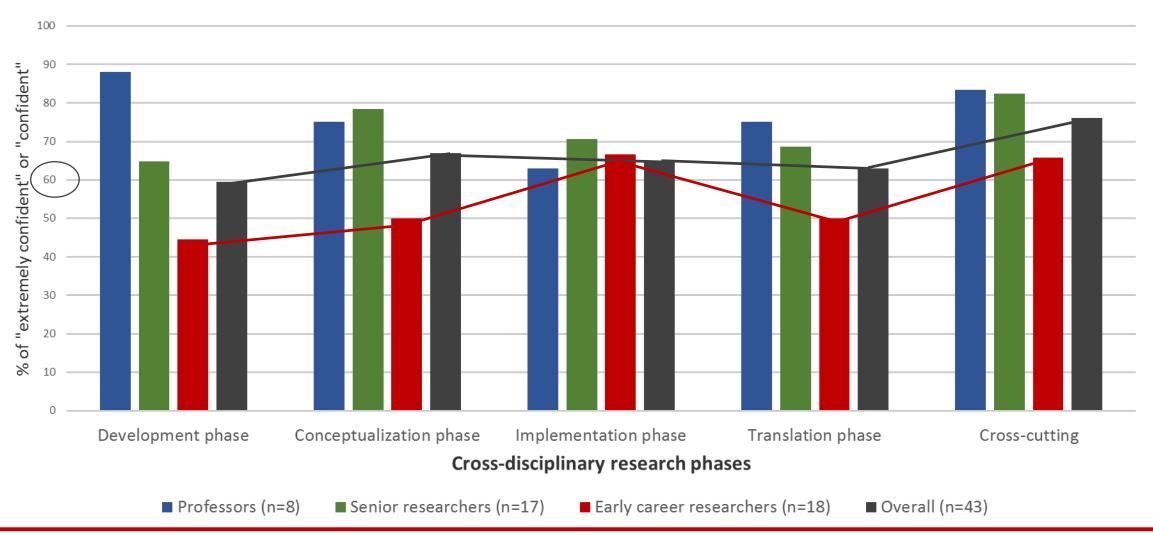
# Researchers' previous experience by academic rank





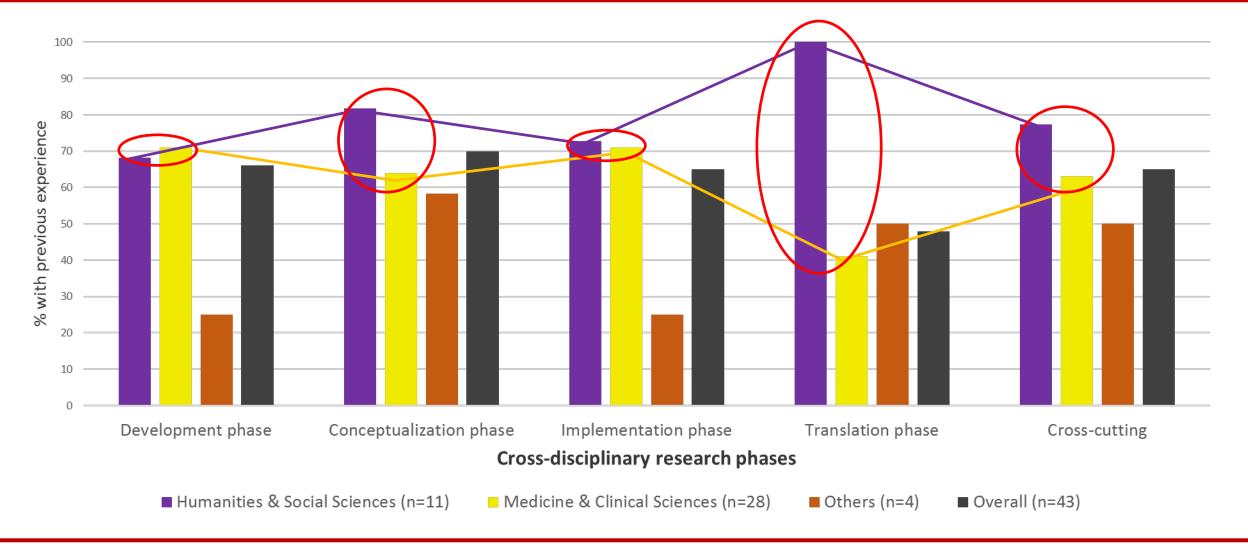
# Researchers' confidence by academic rank





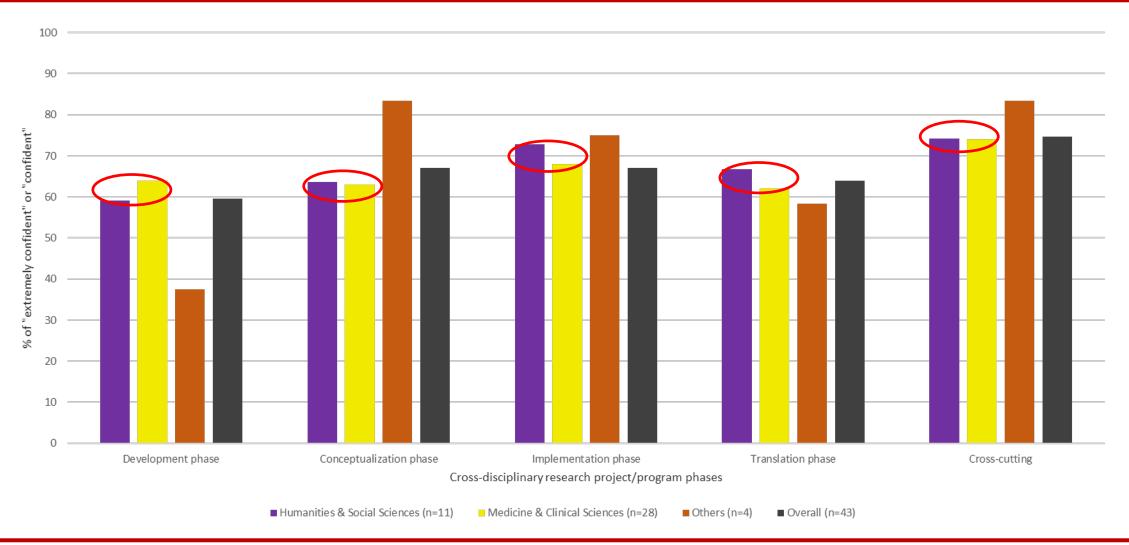
# Researchers' previous experience by primary academic field





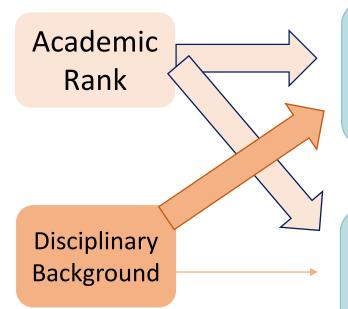
# Researchers' confidence by primary academic field





#### To summarize

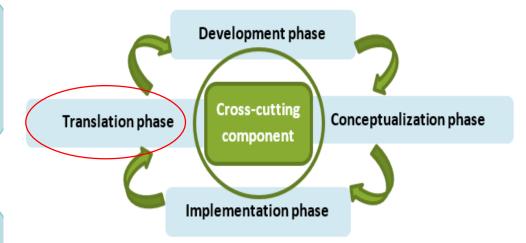




**Experience** in conducting cross-disciplinary research

Confidence in conducting cross-disciplinary research

# **Experience** by research phases





# **Discussion points**

survey objectives

 $\longleftrightarrow$ 

main findings

# 1. Early career researchers' experience and confidence in conducting cross-disciplinary research



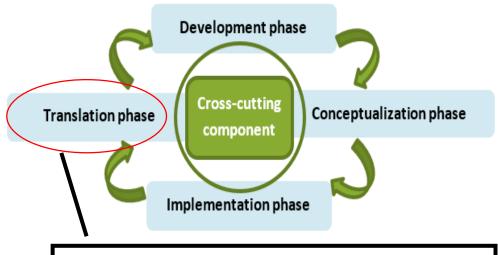
Academic Rank

Disciplinary
Background

**Experience** in conducting cross-disciplinary research

Confidence in conducting cross-disciplinary research

Experience at each research phase



3. Translational research experience

2. Identify disciplinary strong points & cross-fertilization

# Suggested actions for the improvement of IMPALA programme



• Increase IMPALA researchers' translational skills such as writing-up technical outputs/publications from multidisciplinary research projects and disseminating multidisciplinary research results to peers, practitioners, the public and policy makers.

• Create opportunities for networking and cross-fertilization among IMPALA researchers, especially for early career researchers.









Thank you very much for your time.

Feel free to contact me regarding fostering cross-disciplinary research (yan.ding@lstmed.ac.uk).