

# From Intent to Implementation: Public Involvement in Life Sciences Research

## Introduction

- Public involvement is key to closing the gap between research production & research use
- It is the only way to achieving ultimate transparency in science and is a cornerstone of responsible research & innovation.
- There has been an increase in public involvement activities including citizen science, public and patient involvement, and stakeholder engagement ; however these are most commonly practices by public-facing disciplines.
- The majority of life science research is not public-facing, but is funded by the public and impacts the community.

## Methods

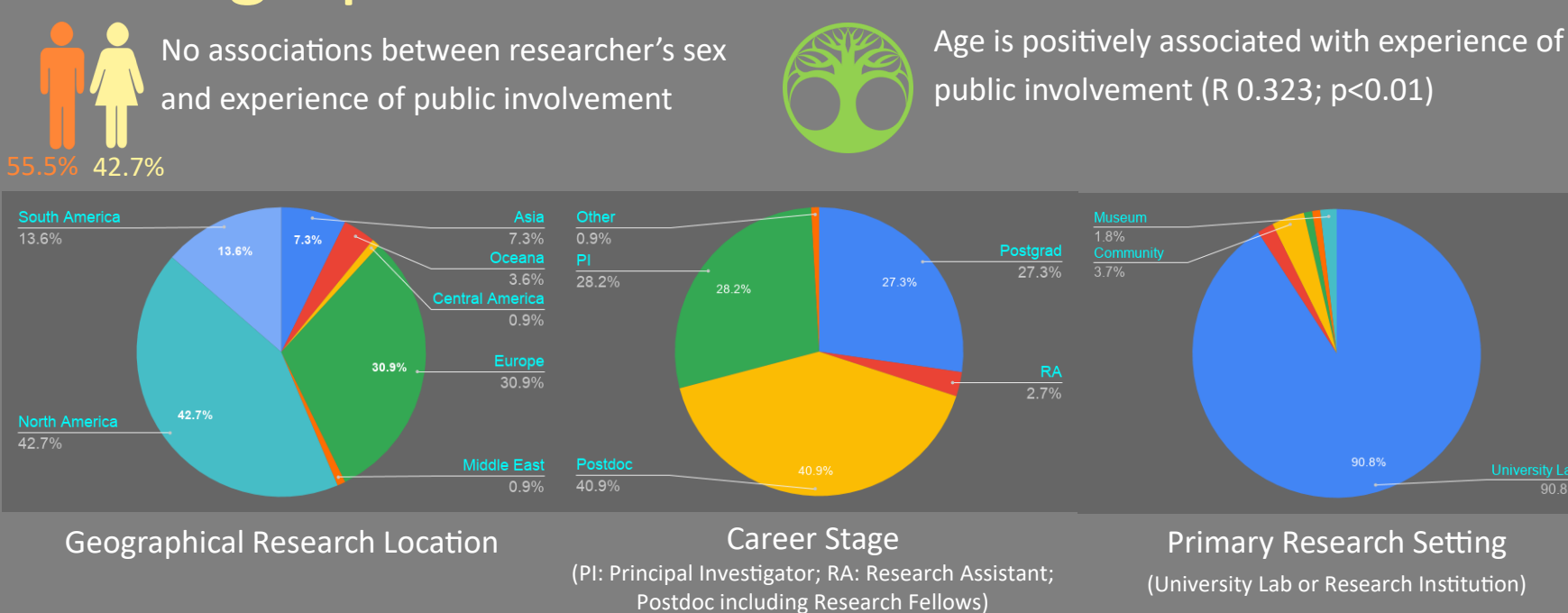
- A survey of researchers within the life sciences to better understand their views and perceived challenges to involving the public in their research.
- Convenience sampling was used. Of 122 responses, 117 self-reported as life scientists; A further five did not consent to the use of their data, and two were under the age of 18, resulting in a valid response cohort of n=110.
- Mixed methods approach . Nominal variables analysed using Pearson's Chi-squared test or Fisher's exact test. Significance testing related to public involvement experience used 1-tailed tests. Free text answers underwent qualitative inductive thematic analysis .

## Results & Discussion

### Key Finding

*The decision to involve the public is based on whether public involvement has sufficient potential value as to warrant the investment in terms of time, energy and potential or perceived career consequences. Policy makers & institutions need to create an environment supportive of responsible research practices if public involvement is to become more than a marginal curiosity or tokenistic effort in laboratory-based research*

### Demographics



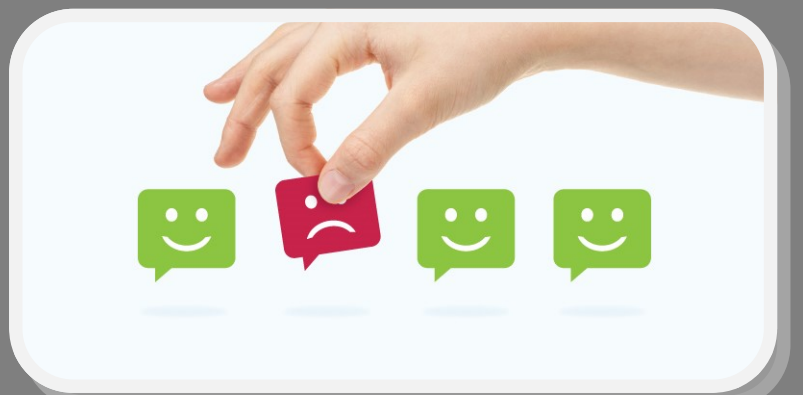
"The extremely competitive science system preclude me to really consider it"

### Academic Career Track

- Increasingly high bar to earn job stability or tenure
- Promotion focus on academic productivity at the expense of academic activities that grow or improve research
- Pragmatism, limited time & energy necessitates focus on tenure track & promotion variables
- Age positively correlated with experience of public involvement (R=0.323, p=0.006)

### Fear of Misrepresentation

- Involving the public may leave you or your research vulnerable to misrepresentation resulting in negative personal or professional consequences
- Complicating the issue is the reach of misinformation in the digital age. This makes researchers wary of opening their in-progress research to the public, even if they recognise the potential benefits of doing so
- Current politicized environments & fear of potential personal backlash is a major barrier to public involvement



"There is always a fear that your words might be taken out of context to push an agenda that you don't agree with. Also, putting yourself out there may make you vulnerable to verbal or even physical attacks on you"



"The main barrier is time - being involved [...] takes precious time away from research activities, getting grants and publications."

### Time

- Time is a precious resource in the life sciences and burnout is common
- Even when researchers acknowledged the potential benefit of involvement to their research, they felt the resources were not in place such that benefit would outweigh costs in terms of time

### Institutional Policies Improve Uptake of Public Involvement

- The largest fraction of variance in our data (22.9%) was explained by whether a researcher had applied for funding or had ethics submissions where there was a specific question on public involvement in research.
- Having been asked this question positively correlated (R=0.437) with experience of public involvement (p<0.000); attributed to a linear relationship between the variables (linear by linear association statistic 15.038; p=0.000).

