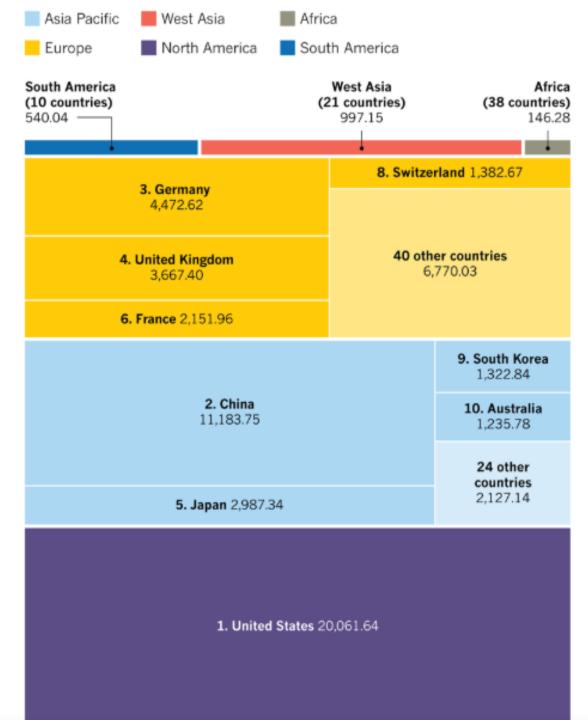


### Global Research Networks

Systems Analysis and Africa 3 December 2019, Pretoria

Raya Muttarak World Population Program IIASA

# The top 10 countries in research collaboration (Nature Index 2019)



### Tunisia USA 2.8% UK 2.1% Algeria Egypt France 32.6% Italy 2.7% USA 9.6% USA 2.6% Spain 2.5% 4.0% 2.3% UK UK 42.0% Saudi Arabia 6.0% France Germany 2.6% 5.2% Italy 2.6% Japan 3.7% Spain Kenya Nigeria USA 32.0% USA 7.4% UK 23.6% 5.9% Germany UK 6.8% 2.9% Germany Netherlands 5.8% 1.8% Belgium Italy 4.8% 1.5% China South Africa USA 15.1% UK 11.7%

Germany

Australia

France

5.7%

4.5%

3.9%

Most frequent intercontinental research collaborations for six key African research economies

Source: Adams et al. 2014. *Scientometrics*.

### Women collaborate less than men at an international level

SCHOLARLY OUTPUT RESULTING FROM INTERNATIONAL COLLABORATION AS A SHARE OF TOTAL SCHOLARLY OUTPUT

# Highly interdisciplinary research represents a slightly larger share of women's scholarly output than men's





### Keys to successful international and multiand interdisciplinary collaborations

- Ensuring opportunities to do cutting-edge science
- Not involving researchers from other countries just to gain access to samples or to fulfil funding requirements
- Bridge cultural, intellectual, and practical differences
- Communications
- Opportunities for discussion and disagreement
- Effective leadership
- Sharing of data, new methods or techniques, software, media outputs



# Research environments enabling successful collaborations

- Funding that span several disciplines
- e.g. under a common key research question
- Evaluation committees need to be equipped to deal with multidisciplinary proposals
- High quality journals that bridges highly divergent disciplines
- Academic institutions/departments that recognise and give merit to multidisciplinary research
- Infrastructure for efficient communications



## Thank you

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