



# Centre Overview

*Azra Ghani*

*Director, MRC Centre for Global Infectious Disease Analysis*

*WHO Collaborating Centre for Infectious Disease Modelling*

*School of Public Health  
Imperial College London*

“To be an international resource and centre of excellence for research and capacity building for the epidemiological analysis and modelling of **infectious diseases**.”

“To undertake applied collaborative work with national and international agencies to support policy planning and response operations against infectious disease threats.”



UK Health  
Security  
Agency



Department  
of Health &  
Social Care



Foreign, Commonwealth  
& Development Office



*National Institute for  
Health Research*

BILL & MELINDA  
GATES foundation



UNAIDS  
JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS

UNHCR  
UNICEF  
WFP  
UNDP  
UNFPA

UNODC  
ILO  
UNESCO  
WHO  
WORLD BANK



The Vaccine Alliance



TheGlobalFund



- Established in 2007
- >200 members – including 30 PIs, ~20 independent research fellows, ~50 PhD students
- WHO Collaborating Centre for Infectious Disease Modelling
- Host other major units :
  - NIHR Health Protection Research Unit (with LSHTM & UKHSA)
  - Jameel Institute (across School of Public Health and Business School)
  - Vaccine Impact Modelling Consortium (Gavi / BMGF)



# Potential Supervisors



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Disease Analysis

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Links below are taken from the advert – please identify at least one member of academic staff that you would be interested in working with from these teams:

[Principal Investigators | Faculty of Medicine | Imperial College London](#)

[People | Research groups | Imperial College London](#)

## **Preparedness & Response to Emerging Threats**

Modelling zoonotic emergence  
Designing cost-effective epidemic surveillance  
Understanding intervention impacts

## **Global Health Analytics**

Integrating societal and global trends to support global decision-making  
Supporting implementation at national and sub-national level  
Integrated surveillance and programme evaluation

## **Vaccines & Therapeutics**

Supporting development pipeline  
Evaluating efficacy from clinical trials  
Assess real-world impact

## **Pathogen Genomic Epidemiology**

Genomics-informed surveillance and outbreak response  
Phylogenetic and evolutionary modelling  
Pathogen genomics to support One Health

# Interdisciplinary Research Areas

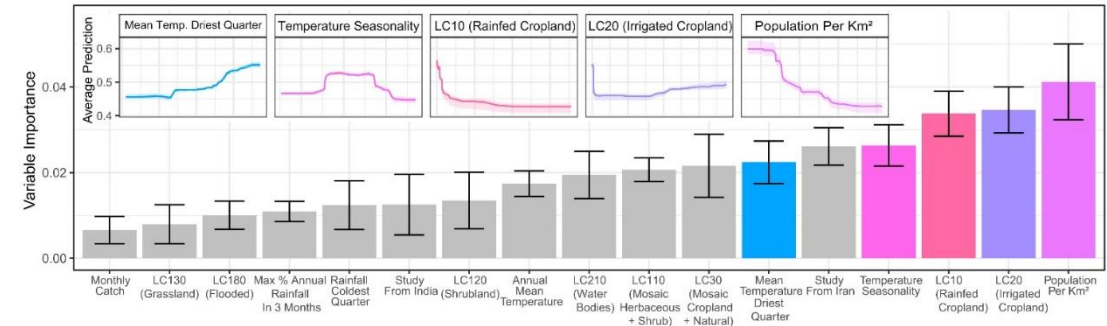


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## Climate & the Environment

- Long-term climate (e.g. temperature, rainfall)
- Extreme weather events (e.g. cyclones / flooding)
- Modifications in land-use / species invasion
- Population displacement / movement

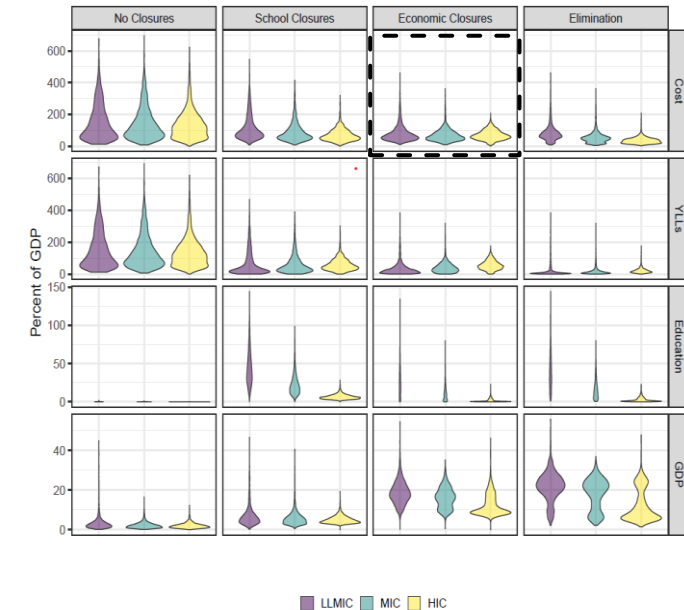


## Economics

- Integration of behavioural responses
- Micro- and macro-economic impact of interventions

## AI

- Machine-learning / data mining
- Emulator models for faster fitting & simulation
- Use of LLMs to support policy decision-making in public health



# What will we provide



- One-to-one supervision based within a large and vibrant research centre
- Additional activities
  - ❑ Weekly seminars from a range of external speakers
  - ❑ Bi-weekly internal informal seminars to present early-stage work
  - ❑ Annual away day
  - ❑ Regular training courses on core skills – software, paper/grant writing, public engagement etc.
  - ❑ Regular social events
  - ❑ Additional opportunities to connect with researchers across Imperial





# What will we provide (2)



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- Access to facilities to support research training at new White City campus
  - Desk space and computing equipment if required + associated software
  - Access to high-performance computing cluster (including training in use, and software to enable easy submission from R package)
  - Laboratory space (depending on the project)
  - Meeting spaces, informal areas and cafeterias



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- Applications are open and can be completed online until 30th November
  - Applications will be reviewed on a rolling basis and we may therefore close recruitment early if suitable candidates have been identified
  - Applicants must provide name(s) of proposed supervisor(s) from MRC GIDA and/or the Jameel Institute – you do not have to contact proposed supervisors to submit an application – they should be best fit with your research area
  - Submit:
    - How you meet the eligibility criteria
    - Two-page academic CV
    - A case for the fellowship (up to four-pages)
    - A letter of recommendation from your PhD institution