

**Summary of discussion: JBC Data Science Advisory Board Meeting 28th May 2021, 14:00-14:50
[held virtually]**

Chair: Ewan Birney

1. Previous minutes were signed off and agreed

- Board member Simon Vosper sent apologies.

2. General discussion

- The topic for the next DSAB deep-dive session, as decided by a vote, is Wastewater (Correlation of wastewater to cases across time/space).
- Board members raised the issue of the positioning of DSAB as JBC transitions to UKHSA (action 1).

3. JBC presentation: multi-model ensemble (MME) update

- The JBC presented on progress with respect to replicate the SPI-M-O processes for modelling of key epidemiological estimates (R, growth rate and incidence).
- The JBC is building a centre of excellence for epigenetics modelling to allow utilisation of models for responsive analysis of public health threats (beyond COVID-19).
- Since May, the JBC has been running models to predict several epidemiological estimates.
- JBC predictions of the historical epidemic estimates (e.g. R and growth rate) are in line with historic SPI-M-O estimates.
- An update on the Royal Statistical Society (RSS) invited paper on evaluating inter- and intra-model correlations between R and growth rate across a set of epidemiological models was provided.

4. Discussion of presentation topic

The main discussion points were as follows:

- On the topic of the RSS paper update, there was discussion on the challenges of assessing external models. It was noted that:
 - It was right to diversify model usage to ensure good epidemiological estimates, but benchmarking could cause friction with modelling groups.
 - Assessing models against each other gives an additional dimension to understanding the models and specifically the uncertainty that arises from each model.
 - JBC needs to be clear that they are not benchmarking different models to decide which is 'best'.
- It was noted that the work highlighted the importance of academic outreach for UKHSA and that appropriate data governance structures would be required to improve access to data.

5. Any other business

- Board members were invited to volunteer to take over as the next chair of DSAB. Daniela DeAngelis put her name forward and was seconded. She was elected as chair.
- JBC secretariat thanked Ewan Birney for his service as chair over the past four months.

6. Actions

- ▣ JBC to provide a statement about importance of external technical advice in UKHSA, which will allow this board to operate until the transition of JBC to UKHSA.

Attendance

Dr Ewan Birney	Deputy Director General of EMBL, Director of EMBL-EBI
Professor Andrew Morris	Director, Health Data Research UK
Dr Sylvia Richardson	Director, Chair of Biostatistics, University of Cambridge
Professor Chris Holmes	Programme Director for Health and Medical Sciences, The Alan Turing Institute
Dr Zeynep Engin	Urban Dynamics Laboratory, UCL
Professor Dame Wendy Hall	Professor, Associate Vice President (International Engagement) and Executive Director (Web Science Institute), University of Southampton
Professor Daniela De Angelis	Professor of Statistical Science for Health, University of Cambridge, Deputy Director and Programme Leader at the MRC-BSU
Professor Mark Parsons	EPCC Executive Director and Associate Dean for e-Research at Edinburgh
Dr James Hetherington	Head of UCL's Research Software Development Group (UCL) and Director of Research Engineering at the Alan Turing Institute (Turing)
Charlie Dunstan-Rice	Joint Biosecurity Centre (Secretariat)
Aine Fairbrother	Joint Biosecurity Centre (Secretariat)
Dr Jasmina Panovska-Griffiths	Joint Biosecurity Centre (Presenting)