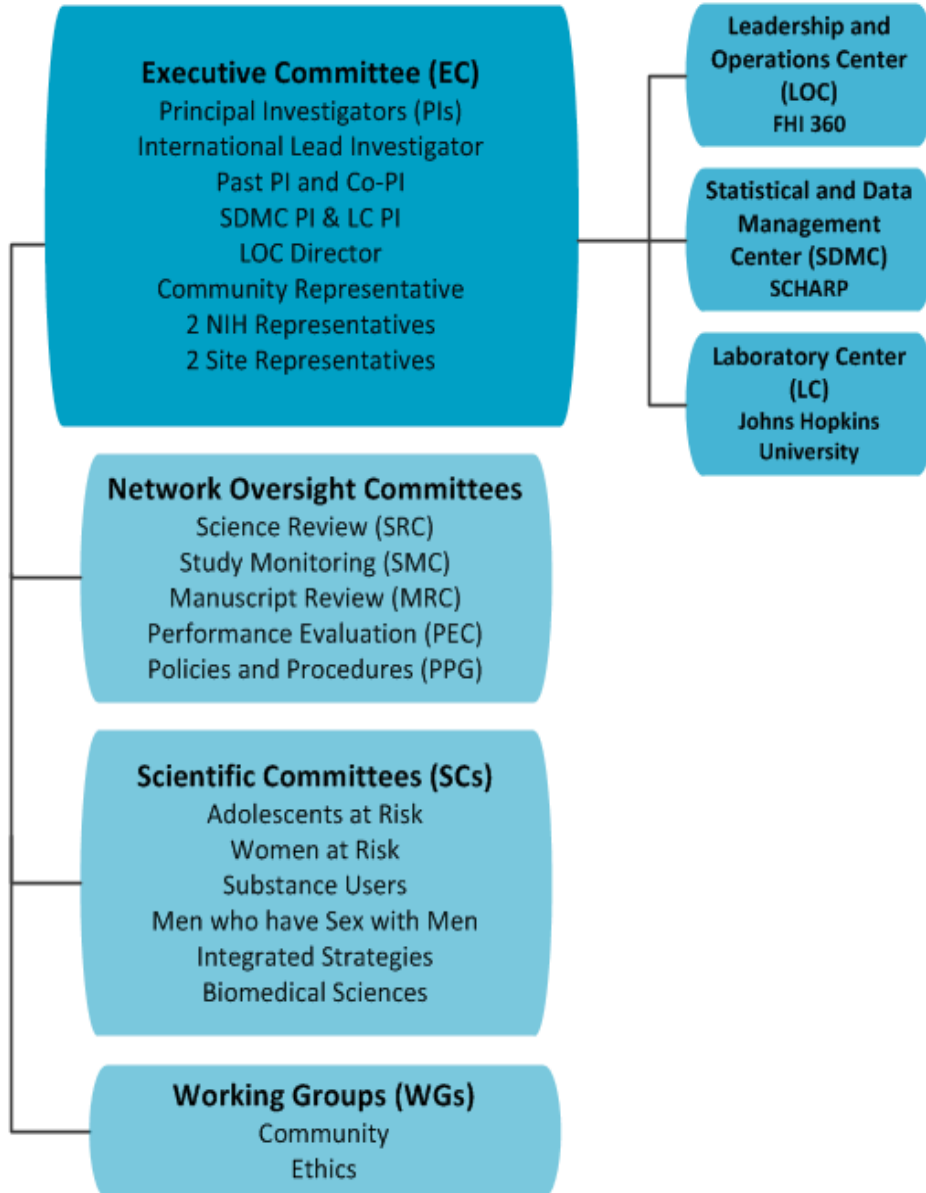


Introducing
HPTN Modelling Centre
Who? What? When? How?

Marie-Claude Boily

Who are we?

Imperial College
London



Marie-Claude Boily (Lead)
Kate Mitchell
Tim Hallett
Christophe Fraser

Statistical Center for
 HIV/AIDS Research & Prevention
SCHARP



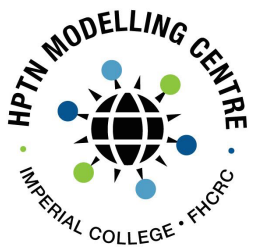
Dobromir Dimitrov

Our identity



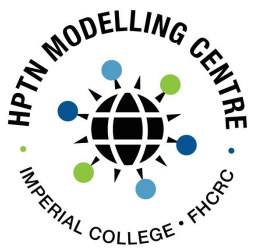
Website : <http://www.hptnmodelling.org/>²





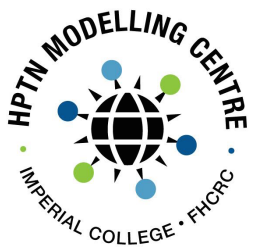
What do we do?

- Design and conduct mathematical modelling & simulation studies to **support HPTN research activities**
 - Assess the population-level impact of public health intervention programmes



What do we do?


- Design and conduct mathematical modelling & simulation studies to **support HPTN research activities**
 - Assess the population-level impact of public health intervention programmes
 - **Inform design, conduct, final analysis of clinical trials**
 - **Before:** Expected effect size on HIV incidence (power), efforts needed to meaningfully reduce incidence, study duration
 - **During :** Predict effectiveness/impact on HIV using interim data → Monitoring/ Interim analyses
 - **Final :** Predict population level impact on HIV using final data → Interpretation & generalisation of results → Inform public health decisions, Post mortem of discontinued studies



What do we do?

- Design and conduct mathematical modelling & simulation studies to **support HPTN research activities**
 - Assess the population-level impact of public health intervention programmes
 - Inform design, conduct, final analysis of clinical trials
 - **Conduct methodological & validation work**
 - Impact of structural interventions on HIV
1. **Protocol based projects**
 2. **Non protocol based projects**

Examples

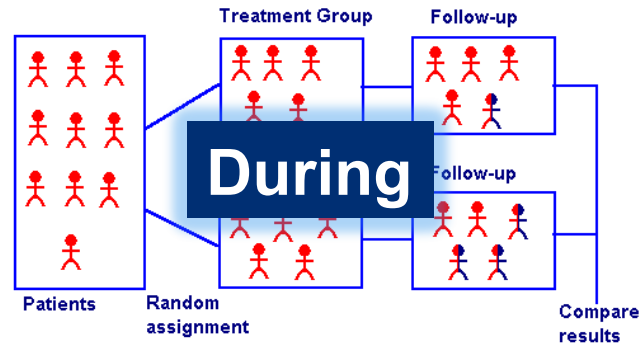
- 1. Protocol based projects** – attached to newly funded/on-going/completed HPTN studies
 - [HPTN-078](#) – Impact of ART intervention among MSM - **plenary**
 - [HPTN-067](#) - Impact of PrEP Regimens in at risk population – **plenary & poster**
 - [HVTN 703/HPTN 081](#) – Informing eligibility criteria in the AMP (antibody mediated prevention) trial
 - [HPTN 065](#) – Cost effectiveness of community strategy to improve ART cascade in the US
 - 2. Non protocol based projects** — relevant to HPTN activities and priorities and/or inform new directions
 - Impact of male circumcision among MSM worldwide ([HPTN 079](#)) - **poster**
 - Contribution of young women to the HIV epidemic in Cotonou, Benin
 - Impact of achieving UNAIDS 90-90-90 target in Ivory Coast
-  Inform and complement HPTN research agenda

When can we help?

Before

- HPTN protocol development
- Research questions
- Study objectives
- Survey instruments

HPTN -078,
HPTN- 080, 082, HPTN-081/HVTN-073
+ Non protocol based projects



During

- Preliminary analysis of efforts needed to have meaningful intervention impact at the population level

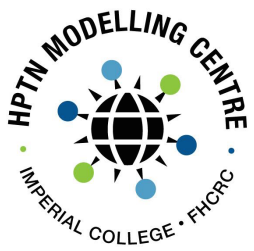
HPTN -078

After

- Population –level Impact on HIV based on final trial results

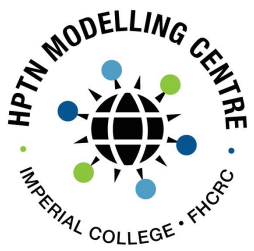
HPTN-078,

HPTN -067 , -065, -068



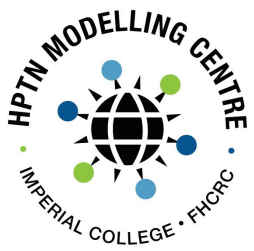
How?

- Modelling support open to HPTN investigators
 - New/recently approved protocols
 - New ideas
 - Completed studies
- Contact us
 - Marie-Claude Boily (mc.boily@imperial.ac.uk)
 - Dobromir Dimitrov (ddimitro@scharp.org)
- Process
 - Discussion of research questions & needs
 - Requests evaluated based on research questions/
timeliness, HPTN priorities & feasibility, ways forward



Plenary

- 2 talks
 - Kate Mitchell ([HPTN 078](#))
 - Dobromir Dimitrov ([HPTN 067](#))
- 2 Posters
 - Whittles L, Silhol R, Mitchell KM, Dimitrov D, Boily MC. Global Variation in the Impact of Male Circumcision in Preventing HIV among MSM ([HPTN- 079](#))
 - Mitchell KM, Dimitrov D, Hughes JP, Xia F, Donnell D, Bekker LG, Holtz TH, Mannheimer S, Grant RM, Boily MC. In What Circumstances Could Non-daily Pre-exposure Prophylaxis (PrEP) Substantially Reduce Program Costs (HPTN 067)? ([HPTN -067](#))



Thanks

Contact us

- Marie-Claude Boily (mc.boily@imperial.ac.uk)
- Dobromir Dimitrov (ddimitro@scharp.org)

Follow us & see our publications

- <http://www.hptnmodelling.org>