



UNIVERSITÀ DI PAVIA
Dipartimento di
Biologia e Biotecnologie
"Lazzaro Spallanzani"



Laboratory of Computational Genomics

Creating a standard for somatic variants: bioinformatic challenges and clinical impact

Gavin MacKenzie

Visiting Ph.D. Student

University of Glasgow
National Institute of Biological Standards and Control
Medicines and Healthcare products Regulatory Agency, UK

Lunch Seminar

6th April 2022 - 13:00

Aula Jucci

The accurate detection and quantification of somatic variants is imperative for cancer genomics, its therapies, and survival. Appropriate standards are essential for the correct measurement and calibration of these variants. Gavin's Ph.D. project aims at releasing a genome-wide primary standard and providing both the biological material and its digital fingerprint. To make that possible, he's made major contributions to a community-recognised bioinformatic pipeline and designed an appropriate laboratory validation. This seminar will outline his work, and its major impact on clinical applications.

Gavin MacKenzie is a Ph.D. student in a joint programme between the University of Glasgow and MHRA, National Institute of Biological Standards and Control in UK. He is supervised by an interdisciplinary team who includes Prof. Lescai. He has a M.Sc. in Bioinformatics and B.Sc. in Molecular Biology, both from the University of Glasgow. Gavin has previously developed *Varia*, a bioinformatic tool for predicting the genetic sequence of *var* genes in *Plasmodium falciparum* based on the Dbla tag.

