



2nd Summer School Implementation of Personalised Medicine KCB Leadership Center, Nairobi , Kenya 21 - 23 May 2024

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Institutions Name and web site: <https://www.wits.ac.za/research/sbimb/>

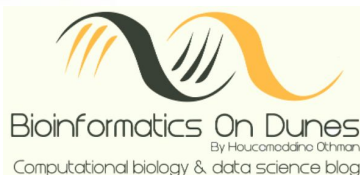


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A.L.T.A.GENE
Experts In Genomics & Bioinformatics

Nairobi, 21-23 May, 2024

Trainer

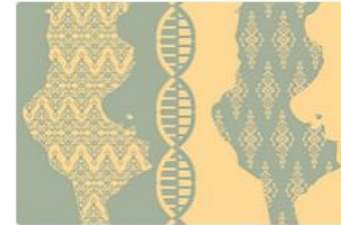
- Bioinformatics
- Reproducible research
- Scientific data storytelling



Blogging

Genetics and ethnic identity of Tunisia: Nationalism's wrong tool for the wrong purpose

Summary



The evil behind being a wannabe scientist

A perspective on why many scientists engage in social media more than doing actual science, and why we must avoid the ego-validation trap



Institutions Description Activity

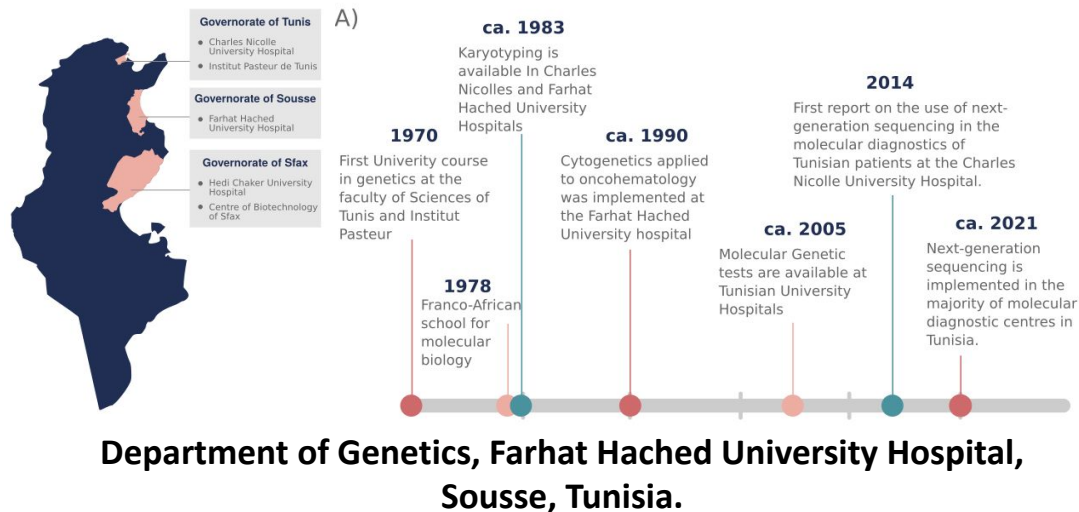


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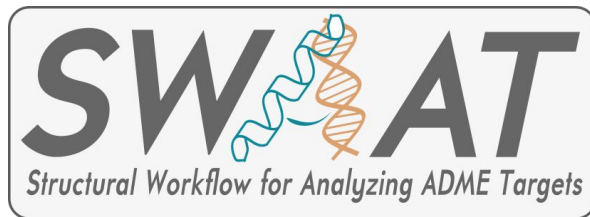


Sydney Brenner Institute For Molecular Biosciences

Cuscus



Research Team



- Pharmacogenomics in Africa (H3Africa/GSK ADME and AGORA-TM)
- Developing bioinformatics tools
- Providing Bioinformatics support for molecular diagnosis
- Functional annotation of genetic variants using multiscale modeling
- Assessment of AlphaFold algorithm
- In silico drug discovery (docking and virtual screening)

Editorial

Advancing pharmacogenetics research in Africa: the “Project Africa GRADIENT” initiative



Journal of
*Personalized
Medicine*

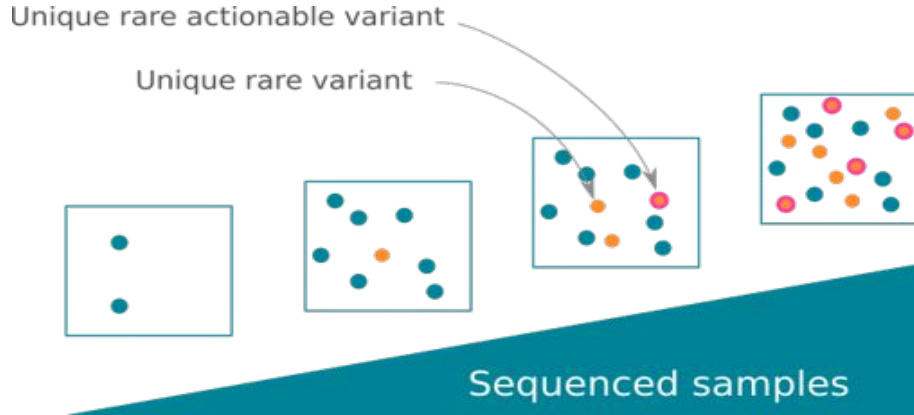


Article

African Genomic Medicine Portal: A Web Portal for Biomedical Applications

Houcemeddine Othman ¹, Lyndon Zass ², Jorge E. B. da Rocha ^{1,3}, Fouzia Radouani ⁴, Chaimae Samtal ⁵, Ichrak Benamri ^{4,6}, Judit Kumuthini ⁷, Yasmina J. Fakim ⁸, Yosr Hamdi ^{9,10}, Nessrine Mezzi ^{9,11}, Maroua Boujemaa ⁹, Chiamaka Jessica Okeke ¹², Maureen B. Tendwa ¹², Kholoud Sanak ⁴, Melek Chaouch ¹³, Sumir Panji ², Rym Kefi ⁹, Reem M. Sallam ^{14,15}, Anisah W. Ghoorah ¹⁶, Lilia Romdhane ^{9,11}, Anmol Kiran ^{17,18}, Ayton P. Meintjes ², Perceval Maturure ², Haifa Jmel ³, Ayoub Ksouri ¹⁹, Maryame Azzouzi ⁴, Mohammed A. Farahat ²⁰, Samah Ahmed ²¹, Rania Sibira ²¹, Michael E. E. Turkson ²², Alfred Ssekagiri ²³, Ziyaad Parker ², Faisal M. Fadlelmola ²¹, Kais Ghedira ¹³, Nicola Mulder ^{2,†} and Samar Kamal Kassim ^{15,24,*}

How do you perceive the concept of research in Personalized Medicine?



Lack of metadata
Random annotation
Missing functional data
Poor FAIRness
(Findability, Accessibility,
Interoperability,
Reusability)



High depth, high
coverage costly NGS

Bottleneck of personalized Medicine in Africa:

- We are blocked at the exploratory phase
- Ethical challenges due to the granularity of actionable variants
- Overlooking functional studies
- Overrating the input from NGS sequencing

Interests in Personalized Medicine

- Topic of interest: Implementation of PM practices into challenging Healthcare systems such as LMICs
- Project idea and / or expertise to be exploited under the topic:
 - Determining the minimum required resources to run reliable and affordable tailored medical actions.
 - Performing cost-effectiveness studies in LMICs about the implementation of genomic approaches.
 - Engaging in traineeships focused on data collection, management, and curation serves as a vital activity to support the adoption of personalized medicine.



Is Tunisia Ready for Precision Medicine?
Challenges of Medical Genomics within a LMIC
Healthcare System

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Hamza Chouk^{2,5}, Haïfa El Mabrouk^{2,5}, Marwa Mahdouani^{2,5},
Moez Gribaa^{1,2,3}, Ali Saad^{1,2,3}, Dorra H'mida^{1,2,3*}



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