

Data Science for Vaccines R&D

An Introduction to quantitative
vaccinology

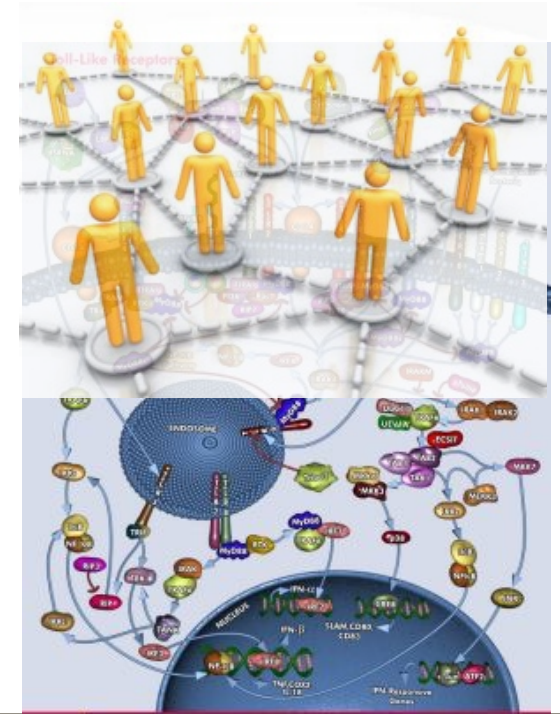
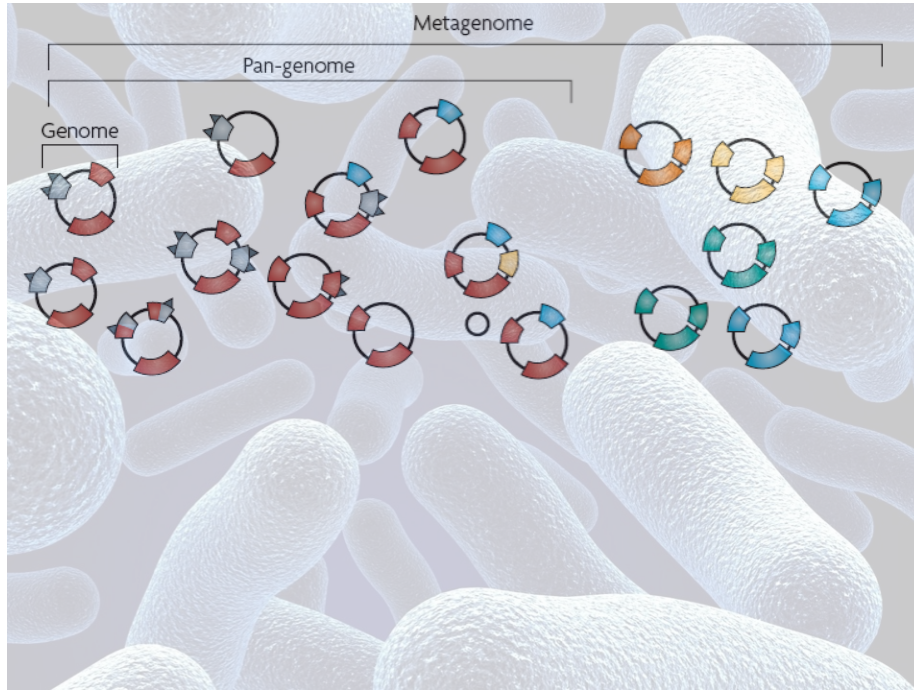
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Vaccines: perturbation of two interacting complex systems.



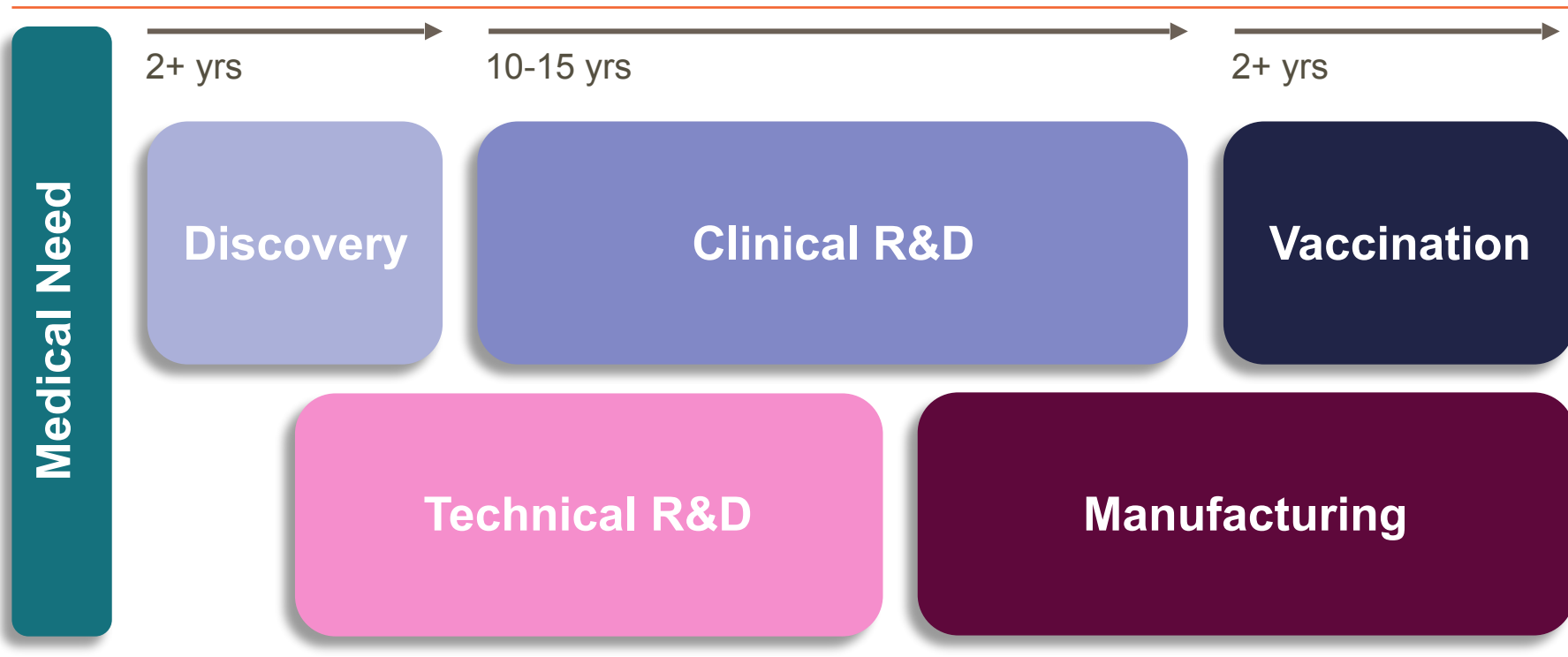
A Data-reach problem



Vaccine R&D pipeline from medical need to vaccination



Data Science is transforming each phase

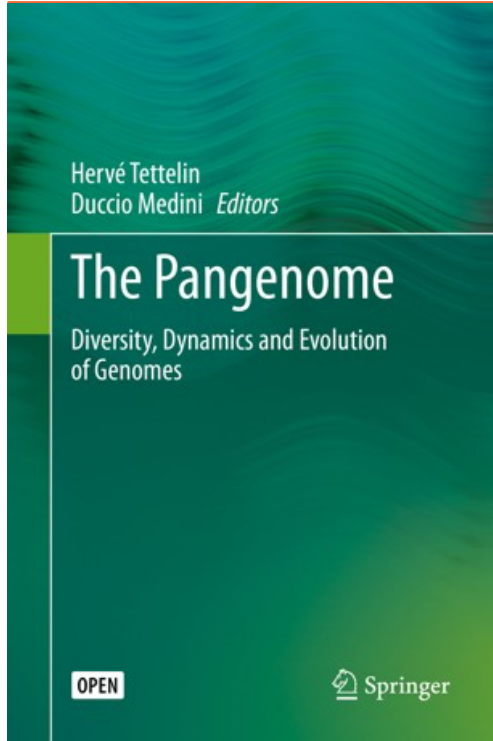


Summer reading



Open Access 😊

<https://link.springer.com/book/10.1007%2F978-3-030-38281-0>



[The Pangenome](#) pp 3-20 | [Cite as](#)

The Pangenome: A Data-Driven Discovery in Biology

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2.6k
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Abstract

An early example of Big data in biology: how a mathematical model, developed to address a practical question in vaccinology, transformed established concepts, opening biology to the “unbounded.”