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ABRomics - a digital platform on antimicrobial resistance to store, integrate, analyze and share multi-omics data

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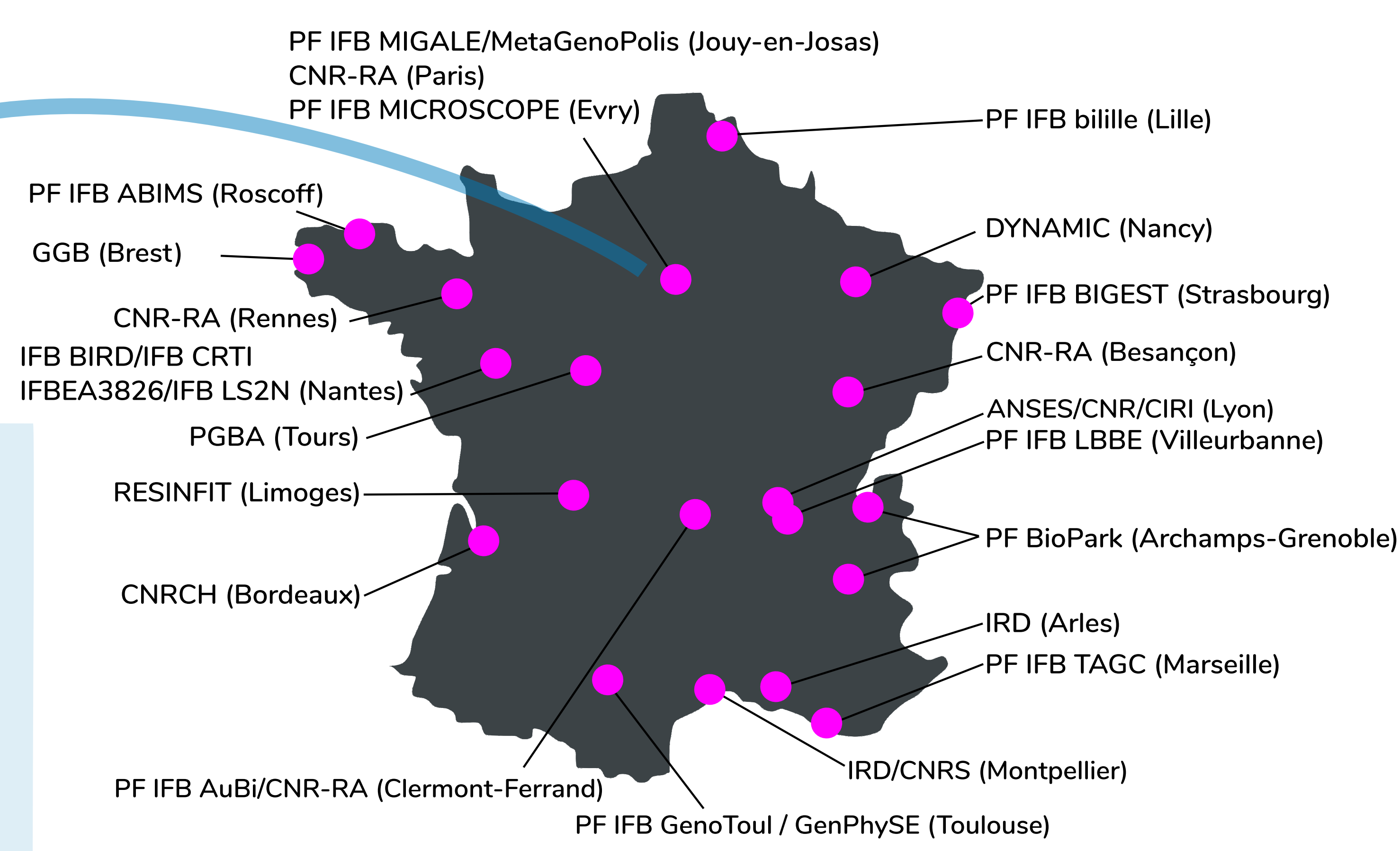
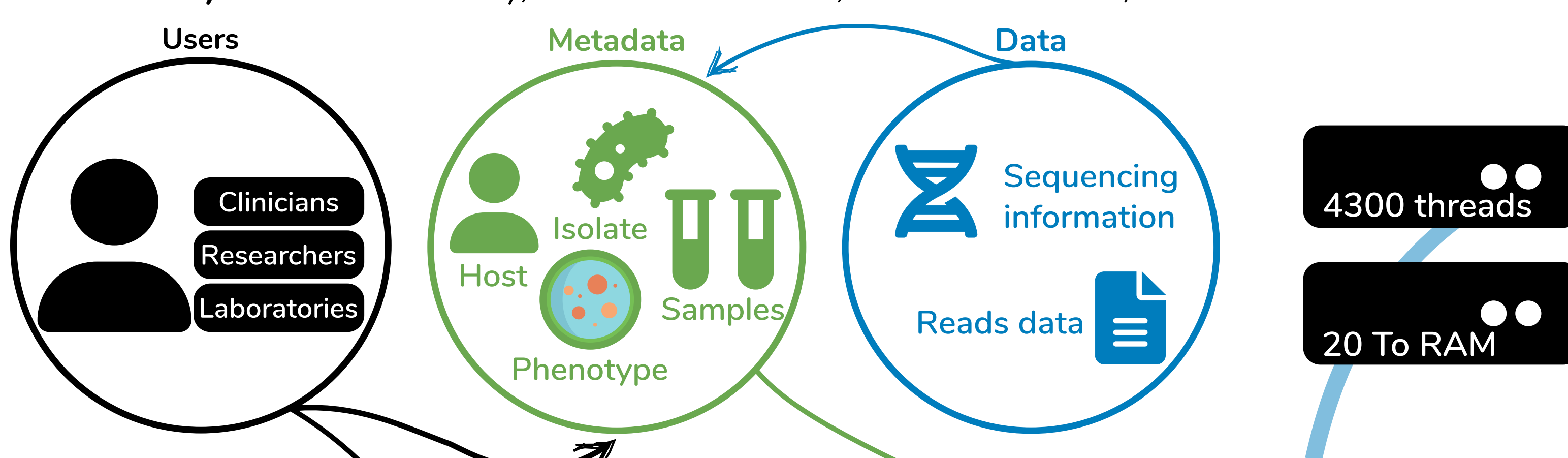
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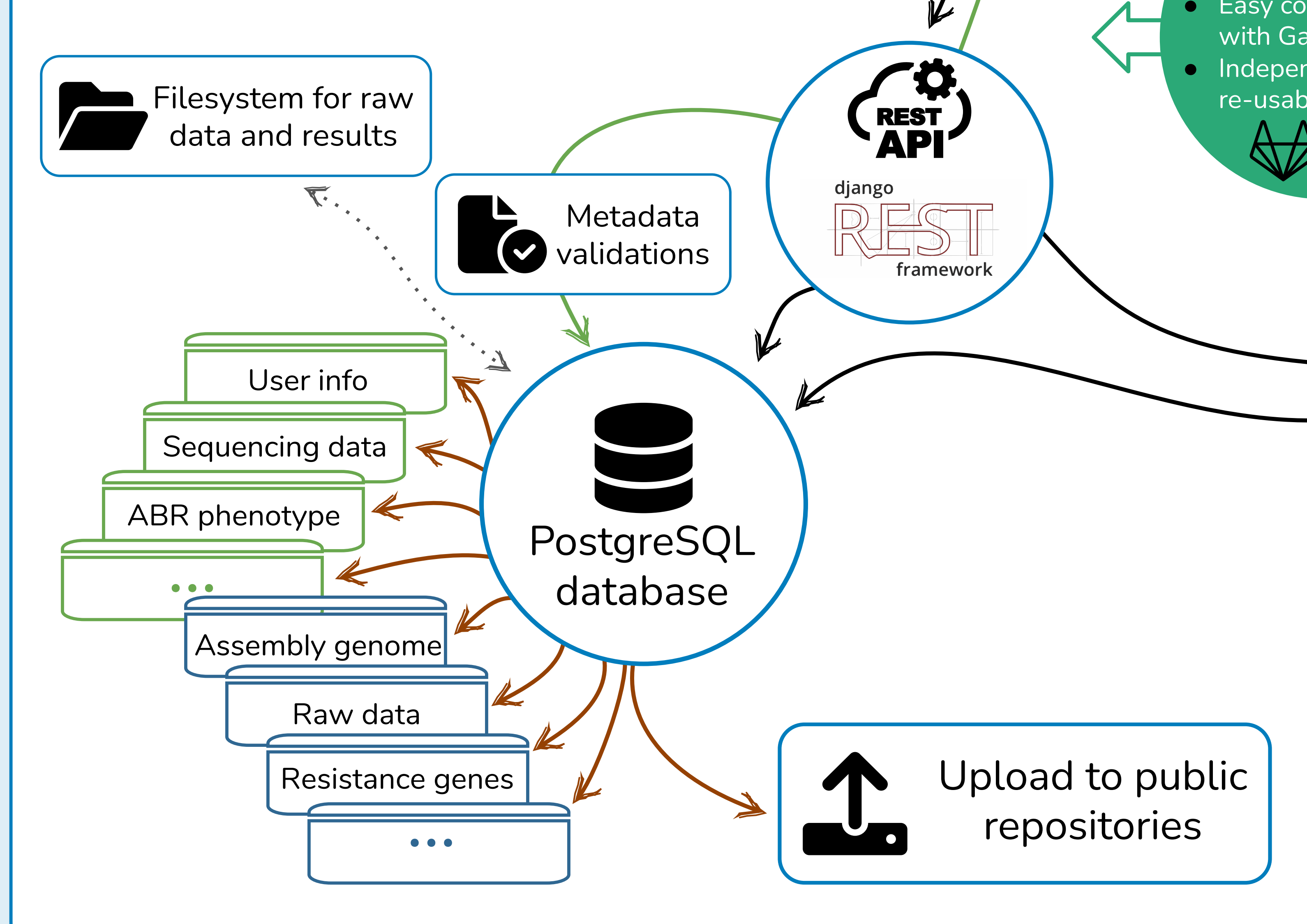
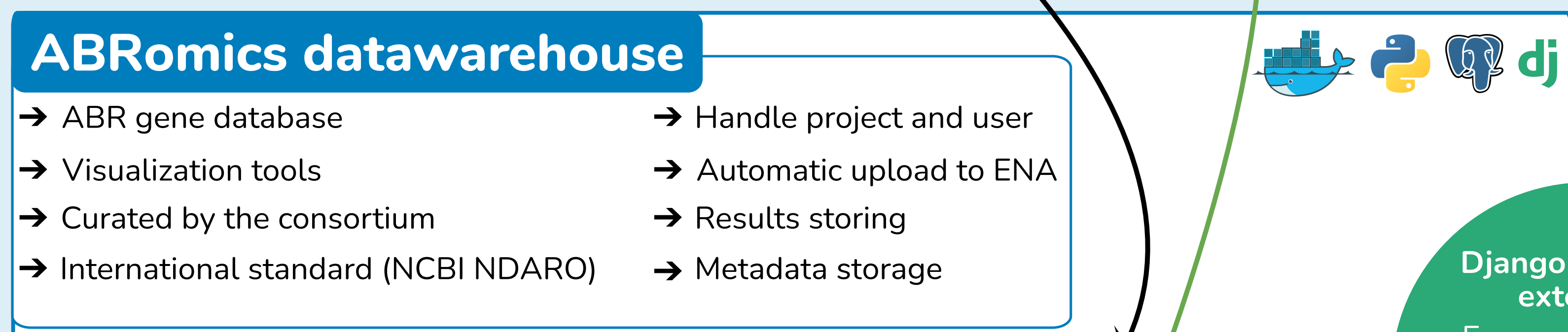
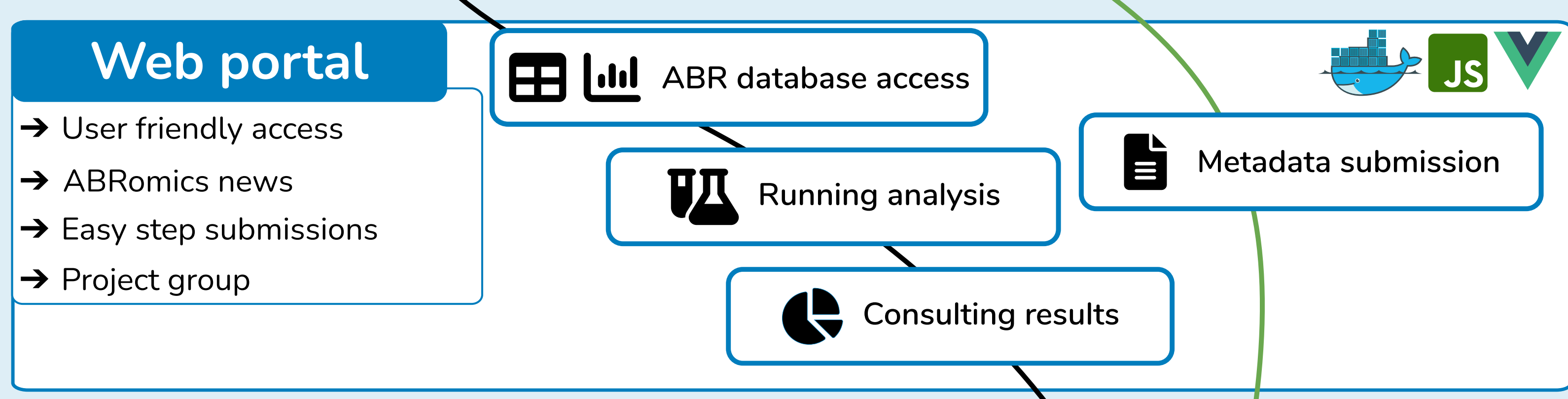
Antibiotic resistance (ABR) is a major public health issue especially regarding the emergence and the global dissemination of multidrug resistant (MDR) isolates and of antibiotic resistance genes (ARGs) carried by mobile genetic elements. Reinforcing the sharing of high-quality sequence data for diagnostic and epidemiological applications, together with interoperable and curated metadata, which can be integrated with other omics data, is a key requirement for understanding the complexity of spatiotemporal patterns of pathogen and ARGs transmission between humans, animals and the environment.

The **ABRomics** project aims to develop a secure One Health, online platform to make bacterial (meta)genomics data and their associated clinical and epidemiological metadata accessible to a meta-network of researchers including epidemiologists, clinical microbiologists and the wider research community. It should provide the diverse communities with a user-friendly platform to store, share and analyze genomic information together with their metadata. It will also serve as a data brokering hub to ease the submission of data sequences to international repositories.

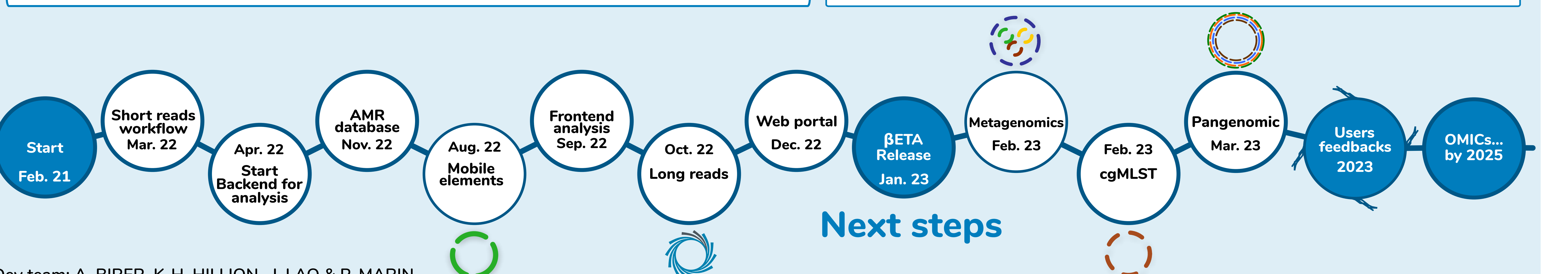
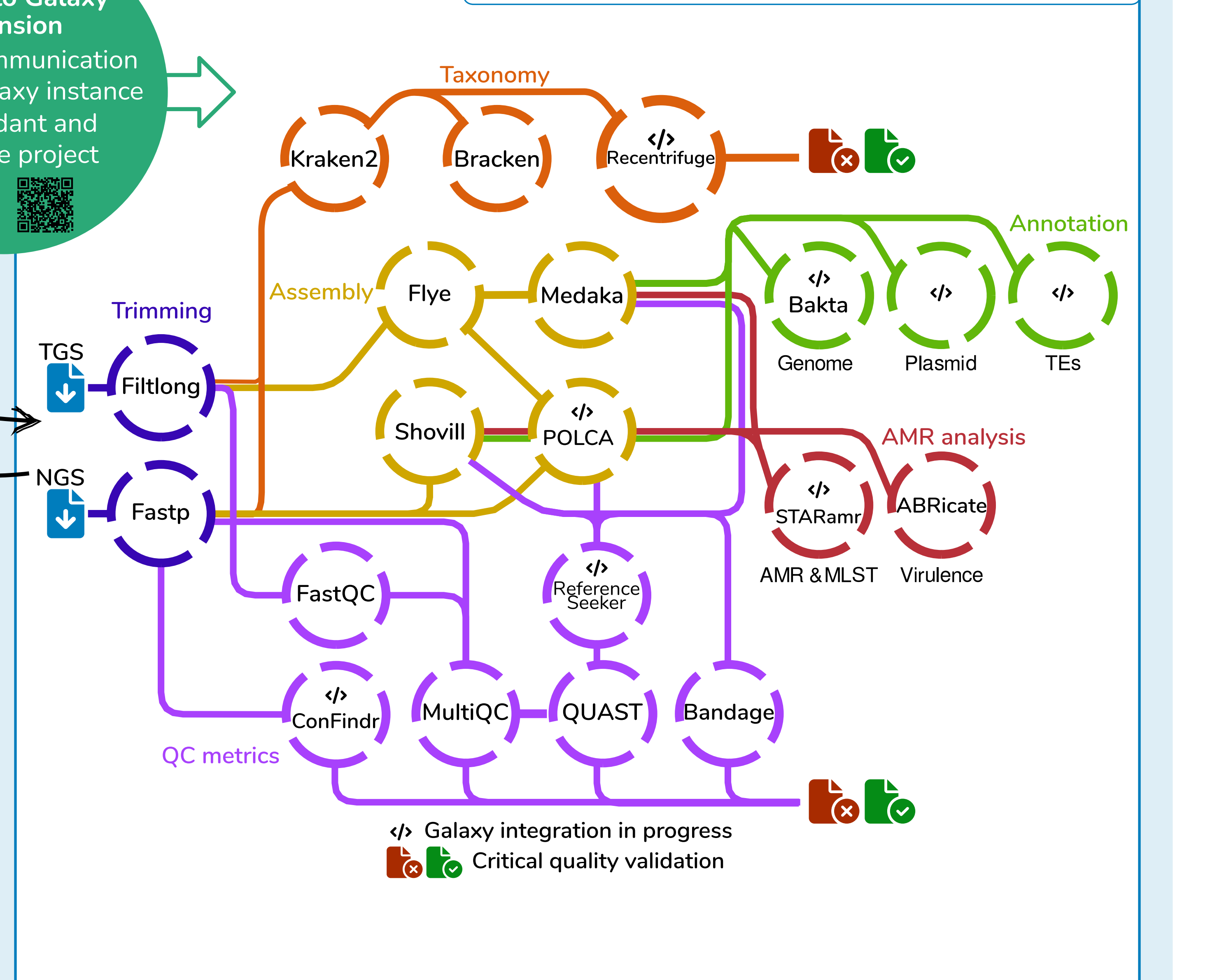
ABRomics keywords: user friendly, antibiotic resistance, curated database, automatic database submission, public health



ABRomics platform: a complete ecosystem for antimicrobial resistance analysis



Bioinformatic workflows



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