

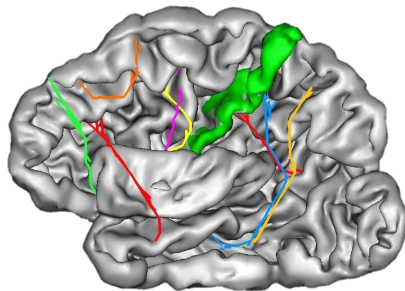
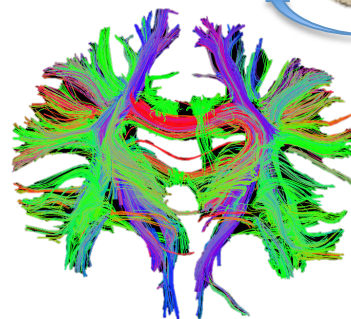
A Cloud-based Image Analysis Gateway for Traumatic Brain Injury Research

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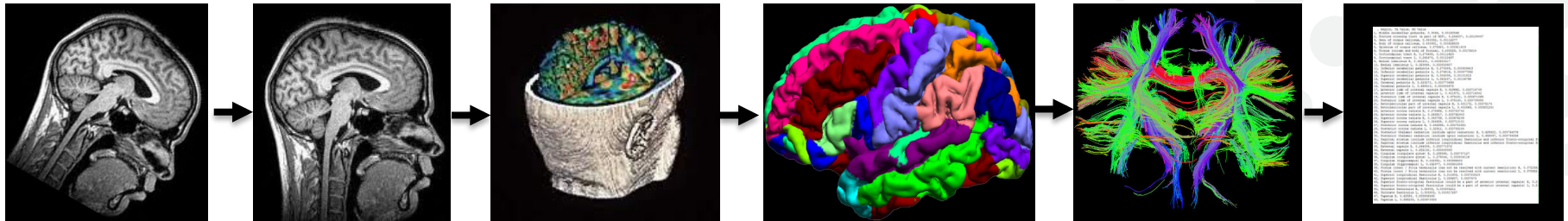
Diffusion Tensor Imaging (DTI) for Traumatic Brain Injury (TBI)



Obtain reliable and reproducible biomarkers to establish clinical viability

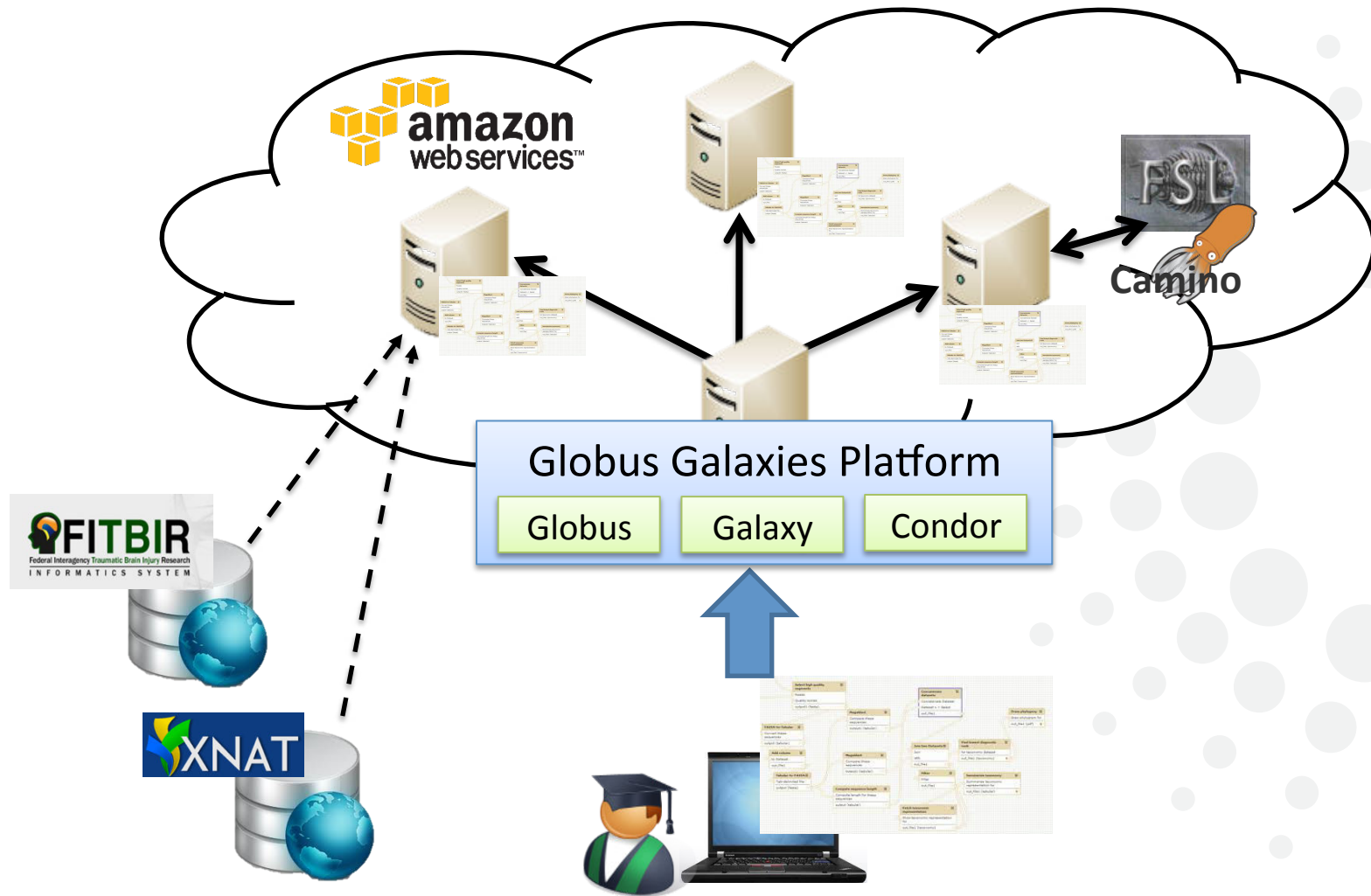


- DTI image analysis use many tools
 - Collectively analyses take several hours
- Constructing analyses is challenging
 - Data & tool discovery, selection, installation, orchestration, data transfer, efficient parallel execution, security, ..



- Motivation
 - Reduce the barriers that exist between data providers, tool developers, researchers, and clinicians
- DTI Analysis Gateway
 - Hosted as a service for the community
 - Structured pipelines to simplify creation, execution and sharing of complex analyses
 - Transfer capabilities to move large datasets
 - Uses cloud resources to reduce overhead and costs
 - Previously we took weeks to process ~100 scan
 - Using this approach < 5 cents a subject (\$5 for 1 hour)

DTI Analysis Gateway





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