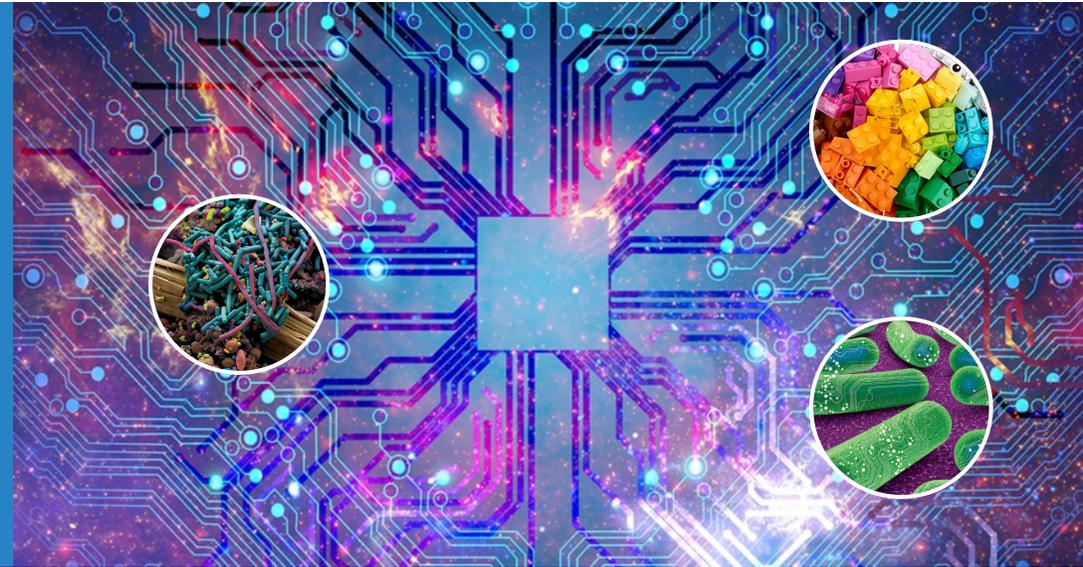


AI-enabled workflows for pandemic response

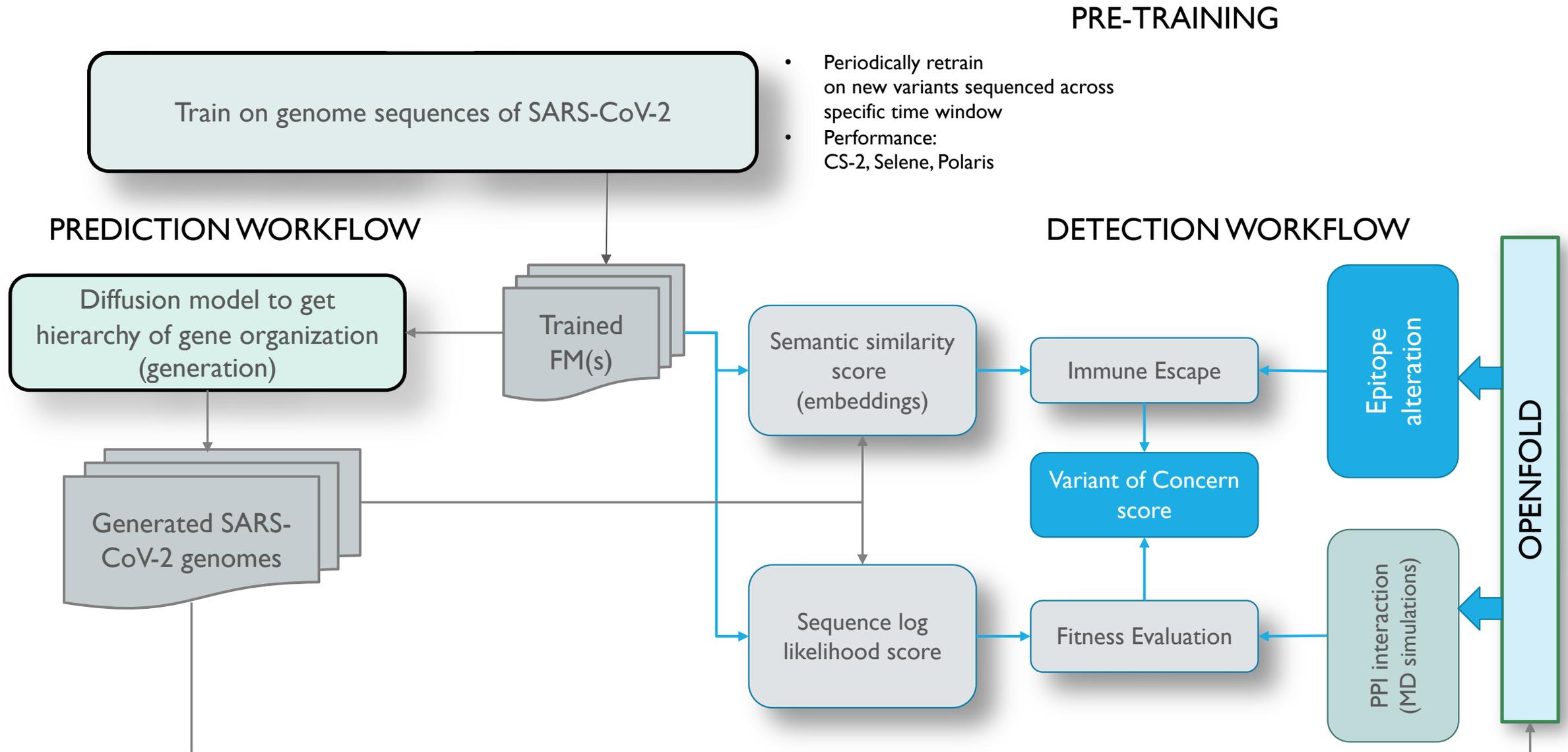


Arvind Ramanathan

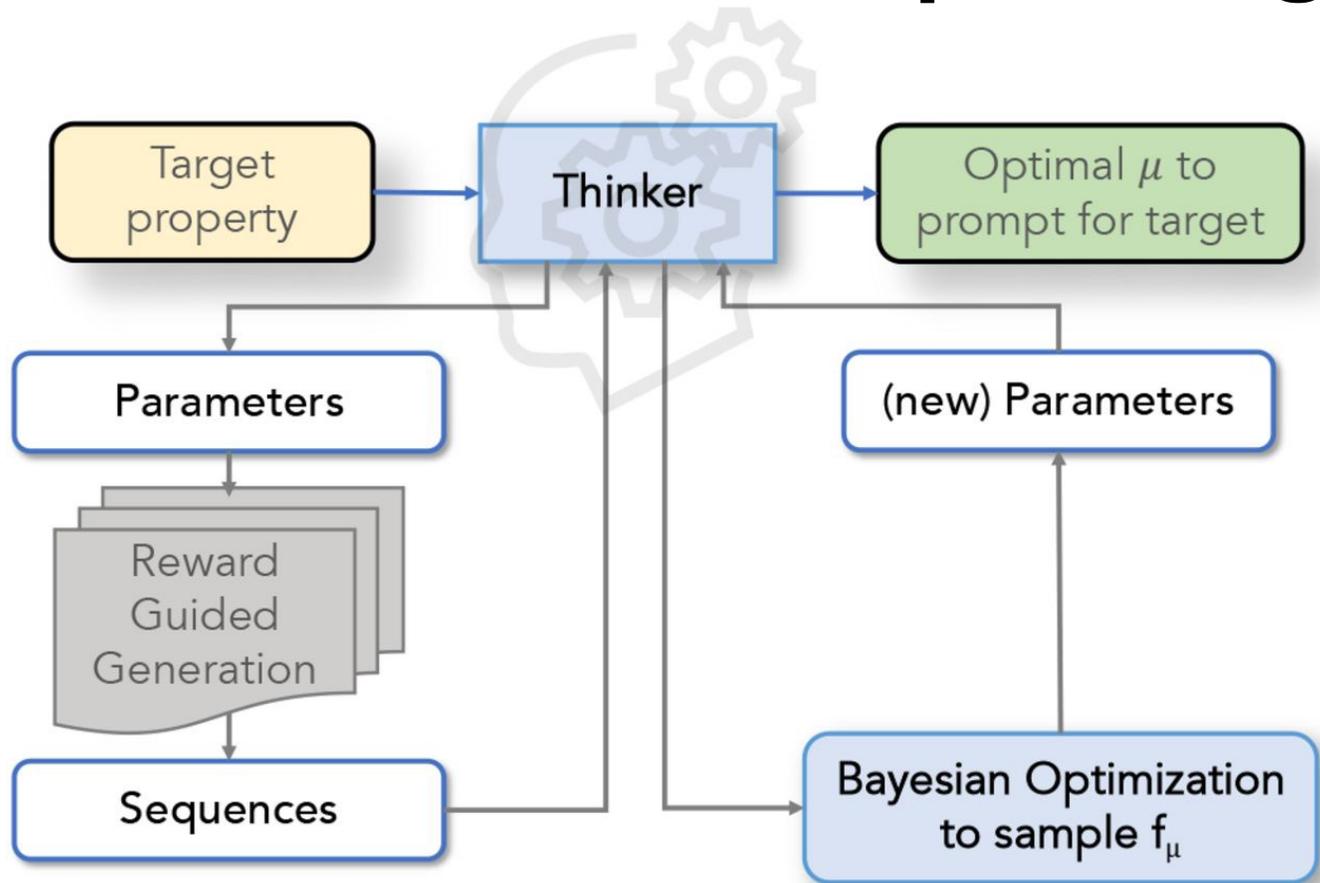
Argonne National Laboratory/ University of Chicago Consortium for Advanced Science and Engineering (CASE)

Northwestern-Argonne Institute for Science and Engineering (NAISE)

Using foundation models to predict SARS-CoV-2 evolution



A workflow that allows for continuous update of rewards for new sequences generated



- To learn more visit us at the Gordon Bell Award talk for COVID-19 research
 - C142-145 Wed, Nov 16, 10.30 AM
- The workflow has many aspects that are unique to biological data analyses
- Implemented with Colmena which also executes across multiple sites
- Scaling out across sites and across multiple architectures can be challenging
- Not limited to one learning approach but can potentially exploit multi-modal, multi-view learning from data
- Smart and AI-enabled optimization of workload resources