

Novel Analytical Methods and Models for Enhanced Food Safety

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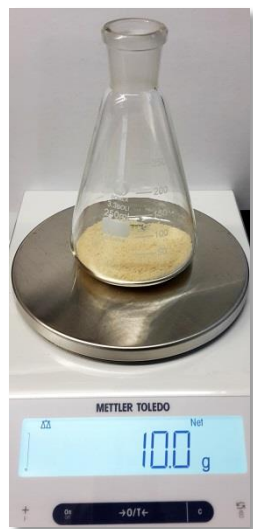
The First FAO/WHO/AU International Food Safety Conference
Addis Ababa, 12-13 February 2019

Trends – Food Analytics

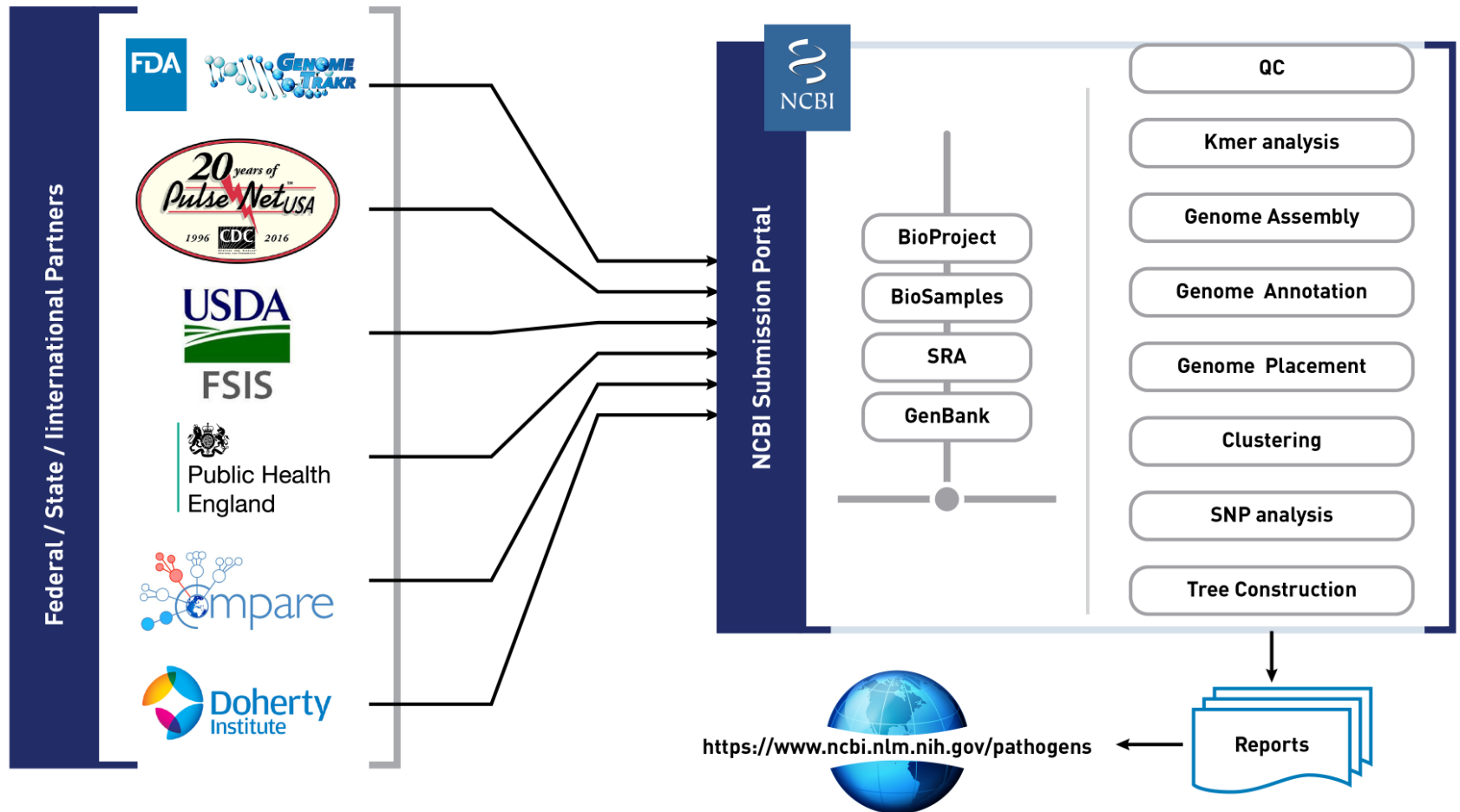
- ✓ Infrastructure
 - ✓ People
 - ✓ Utilities
 - ✓ Communications
 - ✓ Computing
 - ✓ Shared global databases
- ✓ Costs
 - ✓ Low cost tests
 - ✓ “Simple” instruments
 - ✓ High cost data analysis and reagents
 - ✓ Specialized personnel
- ✓ Results
 - ✓ Fast screening vs high specificity
 - ✓ Risks – false positive and false negative

Arsenic in Rice Field Test

1. Boil rice in dilute muriatic acid
2. Form AsH_3 gas from iAs
3. Detect iAs with HgBr_2 paper
4. Quantify iAs using portable digital color comparator (precalibrated)



NCBI Pathogen Detection Pipeline Submissions and Analysis



<https://www.fda.gov/Food/FoodScienceResearch/WholeGenomeSequencingProgramWGS/ucm363134.htm>

Thank you