



Award #2041339: INTRODUCING PATIENT-SPECIFIC THERAPY PROFILES IN ELECTRONIC HEALTH RECORDS FOR GUIDING TREATMENT SELECTION IN THE ERA OF GENOMIC MEDICINE

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Goal: Provide clinicians (workers) a machine learning driven patient-specific profile of responses to drug-therapy in the electronic health records (EHR – the human-technology frontier) that seamlessly enables delivery of individualize patient care (work) in the hospital or clinic (workplace).

• KEY ACCOMPLISHMENTS

- Nation-wide (urban and rural) clinician engagement for usability study
- FDA application for AI-based EHR alerts with ~82% predictive accuracies
- Expansion to digital care capabilities for mental health

• BROADER IMPACTS

- **Teaching:** New 12-week hands-on AI curriculum for clinicians has led to NIH K-level awards (equivalent to NSF Career)
- **Education:** 4 PhD students enrolled, 9 summer undergraduate fellowships, 3 high-school/K12 students
- **Dissemination:** 8 peer-reviewed publications, 5 keynote presentations and 4 student recognitions from scientific communities

