

Student Name (CHIP doctoral or Clinical Fellow)	Project Title	Project PI	Project Description (few sentences or keywords)
Malvika Pillai (CHIP Doctoral Student)	Validation for Drug Repurposing Candidates Using Electronic Medical Records	Di Wu	breast and oral cancers, machine learning, computational phenotyping
Malvika Pillai (CHIP Doctoral Student)	Augmenting Quality Assurance Measures with Machine Learning in Radiation Oncology	Bhishamjit Chera	quality assurance, machine learning, quality and safety
Mika Wang (CHIP Doctoral Student)	Summarizing Electronic Health Records as an Aid to the Treatment Planning of Breast Cancer Oncologists	Javed Mostafa	Electronic Health Records, Breast Cancer, Treatment Plan, Information Overload
Abhishek Bhatia (CHIP Doctoral Student)	N3C, TBD	Emily Pfaff	Computable phenotyping, Long COVID
Robert Bradford (CHIP Doctoral Student)	TBD	Ashok Krishnamurthy	Integrating patient data into knowledge graphs
Ashlyn Zebrowski (CHIP Doctoral Student)	Use of Virtual Reality in the Treatment of Cancer: A Systematic Review	Lukasz Mazur	Systematic Review of studies using Virtual Reality delivered through a head mounted display as a treatment or therapeutic treatment of direct symptoms of malignant cancer or cancer-related treatment side-effects (ex: Chemotherapy-related Nausea, procedural or surgical side-effects).
Xiaoqi Li (CHIP Doctoral Student)	Single cell HiC analysis	Yun Li	Computational method to analyze single cell HiC data efficiently
Eunsuk Chang (CHIP Doctoral Student)	Cohort identification from free-text clinical notes using SNOMED CT's hierarchical semantic structure	Javed Mostafa	Cohort identification task in which no supervised machine learning or annotated training data is used
Yujia Hou (CHIP Doctoral Student)	iPICS	Javed Mostafa	Prostate cancer, user-centered platform

Michael Adams	Quality Metrics for Hospitalized Metabolic Patients	Jonathan Berg	Queries of the Epic@UNC CLARITY database for calculation of multiple metrics related to quality of care for metabolic patients, including "door-to-dextrose" time and others
Michael Adams	"EHR Fingerprinting" for Angelman Syndrome identification	Michael Adams, Elizabeth Jalazo	1) Using signal processing of raw EEG data to identify "delta power" in Angelman syndrome 2) Using EMERSE to identify a cohort of kids at UNC with Angelman Syndrome 3) Using a combination of ICD10 codes and labs, create an ML model to predict angelman syndrome
Michael Adams	Identifying a "diagnostic odyssey" through the EHR	Jonathan Berg, Kristen Hassmiller Lich	Studying patterns of ICD10 codes and patient-level encounter data to see if they can predict the presence of a diagnostic odyssey and thereby suggest if the patient might need expedited diagnostic genetic testing.
Michael Adams	Deployment of an automated tool to calculate the Dutch Lipid Clinic Network Score for Familial Hypercholesterolemia in the EHR	Jonathan Berg	Working with the Epic Enterprise Analytics Team to deploy an automated calculator for the Dutch Lipid Clinic Network Score for Familial Hypercholesterolemia to aid in diagnostic testing for this condition in the health system
Meagan Foster (CHIP Doctoral Student)	Pre- and Post-Pandemic Comparative Analysis of Frequent Patterns in Good Catches from Radiation Oncology	Meagan Foster	This study leverages frequent pattern mining techniques to examine the prevalence of persistent patterns, new patterns, and lessening patterns in good catch data (or incident reports) since the COVID-19 pandemic emerged in March 2020.

Meagan Foster (CHIP Doctoral Student)	The Impact of Leadership WalkRounds on Culture of Patient Safety and on Outcomes: a systematic review	Meagan Foster	Understanding the cultural, operational, and clinical outcomes associated with Leadership Walkrounds or "Gemba Walks" in hospital settings
Meagan Foster (CHIP Doctoral Student)	Electronic reporting of workplace violence incidents: Improving usability, and optimizing healthcare workers' cognitive workload, and performance	Meagan Foster	Assesses the perceived usability, perceived cognitive workload, and performance of HCWs reporting WPV incidents.
Meagan Foster (CHIP Doctoral Student)	tbd	Meagan Foster	AMIA 2021 Student design challenge