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Research Overview

Building on a decade and a half of experience in clinical and public health informatics, my research focuses on responsible, human-centered artificial intelligence (AI) and the development of systematic, scalable, data-driven approaches to improve human health and well-being. My work usually examines and applies methods such as machine learning, natural language processing, and spatio-temporal analysis in addition to traditional biostatistics and epidemiology. I am particularly interested in using and interrogating multimodal data sources and the vast toolbox that computational learning offers to better understand, improve, and facilitate the study of health in populations and communities. Generally, my research can be grouped into four primary domains: (i) enabling learning health systems and precision health; (ii) improving health data capture and curation of new knowledge bases; (iii) elucidating heterogeneity in health outcomes and developing tools to facilitate further discovery; and (iv) ethical considerations in AI, clinical practice, and digital health.

Education

- Columbia University in the City of New York, New York, NY
  Doctor of Philosophy in Biomedical Informatics, conferred February 2025
  Dissertation: Leveraging Computational Methods to Advance Health Equity Science Through Evidence Synthesis, Strategic Monitoring, and Precision Public Health
  Master of Philosophy in Biomedical Informatics, 2023
  Master of Arts in Biomedical Informatics, 2021 (GPA: 4.0)
  Dissertation Committee: Noémie Elhadad (doctoral advisor), Suzanne Bakken, Karthik Natarajan, Jason Zucker, Li Zhou (Harvard Medical School)
  Coursework included: Machine Learning for Healthcare, Symbolic AI in Healthcare, Data Science, Natural Language Processing, Computer Applications in Health Care, Intelligent Decision Systems

- Beijing Language and Culture University, Beijing, China
  Visiting Student, Intensive Mandarin, 2019

- Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
  Master of Applied Science in Spatial Analysis for Public Health, 2019
  Coursework included: Biostatistics, Spatial Statistics, Epidemiology, Spatial Data Technologies

- Harvard T.H. Chan School of Public Health, Boston, MA
  Special Student, International and Population Health, 2009-2011
  Coursework included: Immunology, Tuberculosis, Reproductive Health Issues, Survey Research Methods, Planning and Evaluation of Health Programs, Financing Health Care in Developing Countries

- Yale University, New Haven, CT
  Bachelor of Arts in Sociology and History, 2005
  Coursework included: Elements of Computing, Current Issues in Biological Sciences, General Chemistry, Social Policy Analysis, Portuguese for Spanish Speakers, Elementary Yoruba

Postgraduate Training

04/2025-present	Postdoctoral Research Scientist	Medicine Infectious Diseases	Columbia University Irving Medical Center, New York, NY
09/2022-08/2024	National Library of Medicine/National Institute of Allergy and Infectious Diseases T15 Predoctoral Research Training Fellow	Biomedical Informatics	Columbia University Irving Medical Center, New York, NY
09/2019-08/2022	National Library of Medicine T15 Predoctoral Research Training Fellow	Biomedical Informatics	Columbia University Irving Medical Center, New York, NY
08/2013-10/2023	Visiting Postgraduate Research Fellow	Medicine	Harvard Medical School, Boston, MA
08/2013-08/2019	Predoctoral Research Fellow	General Medicine and Primary Care	Brigham and Women's Hospital (BWH), Boston, MA

Other Professional Positions

2025	Staff Associate	Department of Biomedical Informatics, Columbia University Irving Medical Center
2012-2019	Research Manager	Division of General Internal Medicine and Primary Care, BWH
2010-2012	Data Quality Assurance Manager	Harvard University/U.S. President's Emergency Plan for AIDS Relief (PEPFAR)
2008-2010	Data, Training, and Education Coordinator	Harvard University/U.S. President's Emergency Plan for AIDS Relief (PEPFAR)
2007-2008	Research Assistant	Division of General Internal Medicine and Primary Care, BWH
2006-2007	Emergency Medical Technician	Tufts Emergency Medical Services
2005–2006	Teacher, English-as-a-Second-Language	New York City Board of Education/New York City Teaching Fellows
2004-2005	Client Outreach Officer	Advanced Strategies for Healthcare Access
2004	Research Assistant	Department of Sociology, Yale University
2003-2004	Editorial Assistant/Contributor	Yale Medicine Magazine
2003	Paralegal	Raymond B. Schwartzberg & Associates
2001-2002	Client Advocate	Student Health Outreach (SHOut)
2000-2001	Program Assistant	Yale International Affairs Council

Major Administrative Leadership Positions

Local

2012-2019	Network Manager, Brigham and Women's Primary Care Practice-Based Research Network	Brigham Health

National

2024–present	Planning Committee Member, Annual New England Science Symposium	Biomedical Science Careers Program
2024	Co-organizer, Using Artificial Intelligence to Better Understand Menopause Workshop	National Science Foundation (NSF)/ National Institutes of Health (NIH)

| 2018 | Co-organizer, Queer Health Hackathon | Tegan and Sara Foundation |

International

| 2026 | Co-organizer/Registration Chair, Conference on Fairness, Accountability, and Transparency (FAccT) | Association for Computing Machinery (ACM) |
| 2023 | Co-organizer/Author Mentorship Program Sub-Chair, Machine Learning for Health (ML4H) Symposium | Association for Health Learning and Inference (AHLI) |

Committee Service

2025–present	AI at VP&S Governance and Oversight Working Group	Columbia University
	2025–present	Member
2025–present	AI at VP&S Community Working Group	Columbia University
	2025–present	Member
2021–2023	Department of Biomedical Informatics Diversity, Equity, and Inclusion Working Group	Columbia University
	2021–2023	Founding Member
2021–2022	Toward Diversity, Equity, and Inclusion in Informatics, Health Care, and Society Seminar Series & Planning Committee	Columbia University
	2021–2022	Founding Member
2020–2022	Biomedical Informatics Departmental Seminar Series Planning Committee	Columbia University
	2020–2022	Member
2019–2021	Electronic Health Record Phenotyping Working Group	Columbia University
	2019–2021	Member
2015–2018	Sexual Orientation and Gender Identity Working Group	Partners Healthcare
	2015–2018	Founding Member
2015–2016	Equity and Diversity Council	Brigham Health
	2015–2016	Founding Member
	2015–2016	Co-Chair, Data Working Group
2013–2015	Partners eCare Research Working Group	Partners Healthcare
	2013–2015	Member
2013–2015	Partners eCare Sexual Orientation and Gender Identity Working Group	Partners Healthcare
	2013–2015	Founding Member
2013–2014	Partners Human Research Committee, Insight Usability Working Group	Partners Healthcare
	2013–2014	Member
2013–2014	Partners Enterprise Research Portal Working Group	Partners Healthcare
	2013–2014	Member

2011–2019	LGBTQ and Allies Employee Resource Group	Brigham Health
	2014–2016	Co-Chair
	2011–2019	Member
2007–2008	Association of Multicultural Members of Partners Healthcare	Partners Healthcare
	2007–2008	Member
	2007–2008	Vice-Chair, BWH Chapter

Professional Societies

2023-present	Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)	
2022–present	Association for Computational Linguistics (ACL)	
2022–present	Association for the Advancement of Artificial Intelligence (AAAI)	
2022–present	Machine Learning for Healthcare (MLHC)	
2020–present	Latinx in AI	
2019–present	Observational Health Data Science and Informatics (OHDSI) Collaborative	
	2024–present	Co-lead, Early-Stage Researchers Workgroup
2019–present	New York Academy of Sciences	
2017–present	Association for Computing Machinery (ACM)	
2014–present	American Medical Informatics Association (AMIA)	
2012–2014	American Public Health Association (APHA)	
2012–2014	AcademyHealth	
2008–present	Biomedical Science Careers Program (BSCP)	
	2023–present	Member, Educational Relief Fund Review Committee

Grant Review Activities

2026	Pathways to Enable Open-Source Ecosystems (POSE) program, Phase I/II	NSF

Editorial Activities

Ad hoc Reviewer

American Psychologist	Journal of Biomedical Informatics
Annals of Internal Medicine	Journal of General Internal Medicine
Applied Clinical Informatics	Journal of Medical Internet Research
Clinical Infectious Disease	Journal of the American Medical Informatics Association
Frontiers in Digital Health	Journal of the International AIDS Society
Frontiers in Medicine	Medical Care
Frontiers in Reproductive Health	Natural Language Processing
Health Informatics Journal	npj Women's Health
Health Services Research	Open Forum Infectious Diseases
JAMA Network Open	The Joint Commission Journal on Quality and Patient Safety
JAMIA Open	The Journal of Infectious Diseases
	Transactions of the Royal Society of Tropical Medicine & Hygiene

Other Editorial Roles

2021–2023	Journal of the American Medical Informatics Association (JAMIA)
	2022–2023, JAMIA Journal Club Manager
	2021–2023, Student Editorial Board Member

Honors and Prizes

2025	STAT Wunderkind (Top-30 Early Career Researchers in North America)	STAT, Boston Globe Media	Research
2025	Distinguished Poster Award	American Medical Informatics Association (AMIA)	Research
2025	OHDSI Titan Award Nominee	Observational Health Data Science and Informatics (OHDSI) Collaborative	Leadership
2024–2025	AInet Fellow for Safety and Security in Artificial Intelligence	Deutscher Akademischer Austauschdienst (DAAD) German Academic Exchange Service, Federal Ministry of Education and Research	Research
2022–2024	T15 Predoctoral Research Training Fellowship	National Library of Medicine/ National Institute of Allergy and Infectious Diseases	
2021–2025	Computational and Data Science Fellowship	Association for Computing Machinery (ACM) Special Interest Group in High Performance Computing (SIGHPC)	Academic
2021–2023	Hope Scholarship	Biomedical Science Careers Program	
2021–2022	HSF Scholarship	Hispanic Scholarship Fund (HSF)	
2019–2022	T15 Predoctoral Research Training Fellowship	National Library of Medicine	
2019–2020	Dean's Fellowship	Columbia University Vagelos College of Physicians and Surgeons	Academic
2018	Ford Foundation Predoctoral Fellowship, Honorable Mention	National Academies of Sciences, Engineering, and Medicine	Academic
2018	Partners in Excellence Award for Leadership and Innovation	Partners HealthCare	
2018	Ruth and William Silen MD Award, Third Prize	New England Science Symposium	Research
2017	The Open Gate Travel Grant	Harvard Gender & Sexuality Caucus	Research
2016	LGBTQ Leadership Award	Brigham Health	
2015	Brigham Way honoree	Brigham and Women's Hospital	Leadership
2015	Travel Scholarship	North American Primary Care Research Group	
2014	Partners in Excellence Award for Quality Treatment and Service	Partners HealthCare	
2014	Outstanding Quality & Patient Safety Oral Presentation	Society of General Internal Medicine	Research
2012	Partners in Excellence Award for Leadership and Innovation	Partners HealthCare	
2004	Mellon Forum Undergraduate Thesis Research Award	Yale University	

Report of Funded Projects

Funding Information

Current

2025-2026   Symposium on Responsible Artificial Intelligence and Informatics for the Prevention and
Control of Sexually Transmitted Infections
Small Project Assistance Award
American Sexually Transmitted Diseases Association
Principal Investigator
Aim: To convene AI researchers, clinicians, epidemiologists, public health specialists,
bioethicists, and trainees for a one-day symposium at Columbia University Irving
Medical Center to explore emerging responsible AI and informatics applications in
diagnosis, surveillance, treatment, and prevention of sexually transmitted infections.

2025-2026   Spatiotemporal Mental Health-related Investigations to Foster Thriving among LGBTQ+,
Black, and/or Latinx Youth in the United States (SHIFTS)
Early Career Research Grant
Hopelab
Co-Principal Investigator
Aim: To conduct population-level examinations of mental health outcomes and their
associated factors in American LGBTQ+ and/or racially minoritized youth across 2018,
2021, and 2024 Hopelab National Surveys.

2024-2026   Development and Evaluation of an Informatics-Based Approach to Reducing Disparities
in Kidney Transplant Evaluation Completion in a Learning Health System
Learning Health System and Health Justice Research and Training Award
EQUIP Center for Learning Health Systems/Dalio Center for Health Justice
Co-Investigator (PI: H. Fernandez)
Aim: To identify patients at high risk for delayed kidney pre-transplant clinical
evaluation using machine learning, target them for enhanced monitoring and
engagement, and provide direct support to mitigate roadblocks contributing to delays.

Past

2024   Deep probabilistic predictive models for stroke and coronary heart disease
NHLBI R01HL148248
Graduate Research Student (Site PI: Elhadad)
Aim: To construct and evaluate deep learning methods for coronary heart disease
and stroke risk assessment from electronic health records and develop techniques to
incorporate clinical text, handle missing data, and evaluate fairness of deep learning for
cardiovascular risk scores.

2023-2024   Clinical and Translational Science Award
National Center for Advancing Translational Sciences (NCATS) 3UL1TR001873-08S1
Graduate Research Student (PI: Reilly)
Aim: To investigate justice, equity, diversity and inclusion (JEDI) in ethical frameworks
applied to research on artificial intelligence in digital health and create educational case
studies for identifying ethical issues related to JEDI and discussing potential approaches
to integrate JEDI goals.

2018–2019   A Multicenter Randomized Controlled Trial of Pharmacist-Directed Transitional Care to Reduce Post-Hospitalization Utilization
National Institute on Aging (NIA) R01 AG 058911-01
Project Manager (Site PI: Schnipper)
Aim: To measure the impact of pharmacist-led discharge (PHARM-DC) interventions on post-discharge utilization within 30 days and identify patient sub-populations most likely to benefit from PHARM-DC.

2017–2018   Novel electronic health record phenotyping of LGBTQ intersectional identities and associated health disparities using natural language processing and machine learning
Harvard Catalyst
Co-Investigator (PI: Zhou)
Aim: To develop methods using machine learning and natural language processing to identify sexual and gender minority (SGM) populations from electronic health records and characterize potential healthcare disparities associated with different segments of SGM populations.

2016–2018   Electronic Medication Adherence Reporting and Feedback During Care Transitions (Smart Pillbox)
Agency for Healthcare Research and Quality (AHRQ) R21 HS 024587-01
Project Manager/Statistical Programmer (PI: Schnipper)
Aim: To implement a smart pillbox intervention for patients discharged from the hospital to the community and evaluate the effects of the intervention on post-discharge medication discrepancies, medication adherence, and chronic disease management.

2015–2018   Implementation of a Medication Reconciliation Protocol to Improve Patient Safety
Agency for Healthcare Research and Quality (AHRQ) R18 HS 023757-01A1
Project Manager/Statistical Programmer (PI: Schnipper)
Aim: To widely disseminate, implement, and evaluate sustainable medication reconciliation interventions that improve patient safety during care transitions.

2015–2017   Clinician-Patient Relationships: Boundaries, Barriers, Breakdowns
Gold Foundation/Lucian Leape Family Foundation
Project Director (PI: Schiff)
Aim: To examine physician attitudes and practices related to caring acts that have been questioned as "inappropriate" or "unethical" crossing of professional boundaries.

2014–2016   Understanding and Preventing Diagnostic Pitfalls
Risk Management Foundations of the Harvard Medical Institutions (CRICO)
Project Director (PI: Schiff)
Aim: To identify leading diagnostic pitfalls that pose safety and malpractice risks, then design and test the accuracy of electronic screens for these pitfalls in the electronic health record.

2014–2016   Evaluating Variation in Overactive Bladder Medication Use and Other Treatments
Astellas Pharma US, Inc.
Statistical Programmer (PI: Loughlin)
Aim: To develop an electronic phenotype for overactive bladder, then characterize overactive bladder treatment, medication adherence, and outcomes.

2014–2015   Are Physicians and Patients Adhering to the Published Guidelines for Fasting during Ramadan?
Martin P. Solomon Award for Primary Care Scholarship, BWH
Co-Investigator (PI: Ali)
Aim: To measure differences in rates of health care utilization for Muslim patients just prior to, during, and after Ramadan.

2014   First Annual BWH DGIM Research Day
              BRI/ORC Microgrant Pilot Program
              Principal Investigator
              Aim: To develop a BWH Division of General Internal Medicine and Primary Care retreat
              to showcase contributions of research assistants and promote their career development.

2013–2015   Patient Outcomes Associated with Year-End Departure of Resident Primary Care
              Physicians
              Support for Excellence in Educational Development (SEED) Grant, BWH
              Co-Investigator (PI: Solomon)
              Aim: To investigate whether acute care utilization is increased disproportionately among
              patients of graduating resident physicians compared to non-graduating residents.

2013–2014   Acute Respiratory Infection Telephone Management Service
              Brigham and Women's Physicians Organization Care Redesign Incubator and Startup
              Program – Round 1 and Round 2
              Data Manager (PI: Linder)
              Aim: To develop, implement, and evaluate an acute respiratory infection telephone
              management service at one of the Brigham and Women's Primary Care Practices.

2012–2014   Use of Behavioral Economics to Improve Treatment of Acute Respiratory Infections
              National Institutes of Health/University of Southern California 1RC4AG039115-01
              Data Manager/Statistical Programmer (Site PI: Linder)
              Aim: To evaluate the use of behavioral economic concepts such as enhanced defaults,
              alternative options, and social norms to reduce inappropriate antibiotic prescribing for
              acute respiratory infections.

2012–2014   Medical Malpractice and Patient Safety Protocol (PROMISES)
              Agency for Healthcare Research and Quality (AHRQ) 1R18HS019508-01
              Project Manager (PI: Schiff)
              Aim: To test the impact of quality improvement techniques to improve 3 high risk
              ambulatory malpractice areas: 1) medication management, 2) test ordering and results
              management 3) follow-up and referral management.

2008–2012   President's Emergency Plan for AIDS Relief (PEPFAR)
              Health Resources and Services Administration (HRSA) U51HA02522
              Data Quality Assurance Manager / Data, Training, & Education Coordinator (PI: Kanki)
              A $362 million grant to train health care workers, develop monitoring and evaluation
              systems, strengthen health care infrastructures, and collaborate with local hospitals and
              clinics in Nigeria, Botswana, and Tanzania that provide treatment for people living with
              HIV/AIDS.

2007–2008   Pharmacist Intervention to Decrease Medication Errors in Heart Disease Patients
              National Heart, Lung, and Blood Institute (NHLBI), R01HL089755
              Research Assistant (Site PI: Schnipper)
              Aim: To evaluate a literacy-focused program that provides pharmacist-led educational
              assistance at the time of hospital discharge to patients with heart disease.

2007   Influenza in the Partners Primary Care Practice-Based Research Network
              Roche Laboratories, RLI 06001207
              Research Assistant (PI: Linder)
              Aim: To measure and evaluate the appropriateness of antiviral and antibiotic prescribing
              for patients being treated for influenza in primary care clinics.

Report of Local Teaching and Training

Teaching of Students in Courses

2022	BINF G4008 Interrogating Ethics and Justice in Digital Health Teaching Assistant Master's and PhD students	Columbia University Graduate School of Arts and Sciences 2-hr sessions per week for 13 weeks
2021, 2022	INTC M7210 Mechanisms and Practice Preceptor in Clinical Informatics 2nd year medical students	Columbia Vagelos College of Physicians and Surgeons Two 2-hr sessions per week for 2 weeks
2020	BINF G4011 Acculturation to Medicine & Clinical Informatics Teaching Assistant Master's and PhD students	Columbia University Graduate School of Arts and Sciences 2-hr sessions per week for 13 weeks
2016, 2017	HPM 299 Research with Large Databases Teaching Fellow Master's and PhD students	Harvard T.H. Chan School of Public Health Five 1.5-hr sessions per week for 3 weeks

Mentored Trainees

2025–2026	Cameron Marsh, Master of Public Health Candidate Second Reader, Thesis Committee, Columbia Mailman School of Public Health
2024	Kemka Ihemelandu, Undergraduate at Georgetown University Summer Mentor, Summer Program for Undergraduate Rising Stars (SPURS)

Local Invited Presentations

No presentations below were sponsored by 3rd parties/outside entities.

2025	Foundation Models Across Scales: From Cells to Health Systems / Workshop Moderator AI at Vagelos College of Physicians and Surgeons (AI@VP&S) Initiative, New York, NY
2024	The Promise and Perils of Artificial Intelligence for Health Equity / Invited Presentation Artificial Intelligence Summer Course, Columbia University Double Discovery Program.
2024	Elucidating Health Inequities and Research Gaps in HIV and Other Sexually Transmitted Infections Using Data Mining and a Large Language Model: A Computational Scoping Review / Invited Presentation HIV Prevention Research Working Group, NYPH, New York, NY.
2023	Development and Validation of Multimodal Deep Learning Models to Identify Human Monkeypox in the Electronic Health Record / Invited Presentation HIV Prevention Research Working Group, NYPH, New York, NY.
2023	Health Information Exchange Enables Enhanced STI Surveillance Using Electronic Health Record Data / Invited Presentation HIV Prevention Research Working Group, NYPH, New York, NY.
2023	Enabling a Learning Public Health System: Enhanced Surveillance of Sexually Transmitted Infections / Invited Presentation Division of Infectious Diseases, NewYork-Presbyterian Hospital (NYPH), New York, NY.

2022 Mining the Health Disparities and Minority Health Bibliome / Invited Presentation
Biomedical Informatics Seminar Series, Department of Biomedical Informatics, Columbia University

2019 LGBTQ Health - Diversity, Culture, and Inclusion Series / Invited Presentation
Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital

2018 Documentation of Sexual Orientation and Gender Identity in the Electronic Health Record / Invited Presentation
Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital

2017 Improving and Leveraging Sexual Orientation and Gender Identity Demographics in Epic / Invited Presentation
Sexual Orientation and Gender Identity Working Group, Partners HealthCare

2017 Algorithmic Bias and Health Disparities / Invited Presentation
Machine Learning Working Group, Partners HealthCare

2014 The LGBTQ Data Collection Gap: Sexual Orientation and Gender Identity in the EHR / Invited Presentation
LGBTQ and Allies Employee Resource Group, Brigham Health

2014 Designing and Building Clinical Research Databases / Invited Presentation
Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital

2014 SQL-based Data Management and Manipulation / Invited Presentation
Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital

2013 How Busy Clinicians Can Improve Care and Pursue Scholarship / Invited Workshop
Division of General Internal Medicine and Primary Care, Brigham and Women's Hospital

Report of Regional, National, and International Invited Teaching and Presentations

No presentations below were sponsored by 3rd parties/outside entities.

Regional

2023 Getting into Graduate School and Succeeding/ Invited Panelist
New England Science Symposium, Biomedical Science Careers Program
Boston, MA

2022 Mining the Health Disparities and Minority Health Bibliome / Invited Presentation
Biomedical Informatics Colloquium, New York City College of Technology (City Tech)
New York, NY

2018 High physician and clinic-level variation in documentation of sexual orientation and gender identity in the electronic health record / Plenary Session
New England Science Symposium
Boston, MA
Received the Ruth and William Silen Award, Third Prize

2016   Identifying and Understanding Malpractice-Prone Diagnostic Pitfalls / Invited Presentation
        Risk Management Foundation of the Harvard Medical Institutions Incorporated (RMF)
        CRICO Research Day
        Boston, MA

National

2026   Building a Learning Public Health System: Responsible AI and Informatics for Infectious
        Disease Prevention and Control (Invited Presentation)
        University of Pittsburgh, Department of Biomedical Informatics Colloquium
        Pittsburgh, PA

2026   Toward Precision Population Health for Infectious Disease Prevention and Control in a Learning
        Health System (Invited Presentation)
        University of Minnesota, Center for Learning Health System Sciences (CLHSS) iMpact Seminar
        Series
        Minneapolis, MN

2023   Enabling a Learning Public Health System: Enhanced Surveillance of Sexually Transmitted
        Infections (Selected Oral Abstract)
        American Medical Informatics Association Annual Symposium
        New Orleans, LA

2023   Challenges, Opportunities, and Considerations: Promoting Inclusive Research in the Era of Big
        Data / Invited Presentation and Panelist
        American Medical Informatics Association Annual Symposium
        New Orleans, LA

2022   Mining the Health Disparities and Minority Health Bibliome: A Computational Scoping Review
        (Selected Oral Abstract)
        American Medical Informatics Association Annual Symposium
        Washington, DC
        **Spotlighted by AMIA for "demonstrating best practices in promoting diversity, equity, and
        inclusion through scholarly communications in biomedical informatics."**

2021   Differential Presentation and Delays in Treatment for Acute Myocardial Infarction Associated
        with Sex, Race, Ethnicity (Selected Oral Abstract)
        American Medical Informatics Association Annual Symposium
        San Diego, CA

2015   Advocacy and Implementation: Gathering SOGI Demographics in the Clinical Setting
        (Selected Oral Abstract)
        Gay and Lesbian Medical Association Annual Conference
        Portland, OR

2014   Comparing Clinicians' Perception of Their Own and Their Peers' Antibiotic Prescribing to
        Actual Antibiotic Prescribing for Acute Respiratory Infections in Primary Care (Selected Oral
        Abstract)
        Society of General Internal Medicine Annual Meeting
        San Diego, CA
        Received the Outstanding Quality and Patient Safety Oral Presentation Award

International

2025   Research Roundtable on Population Health and Survival Analysis / Senior Chair
Machine Learning for Health (ML4H) Symposium
San Diego, CA, USA

2025   Plenary Session Lightning Talks / Moderator
OHDSI Global Symposium
New Brunswick, NJ, USA

2023   Health Information Exchange Enables Enhanced STI Surveillance Using Electronic Health
Record Data (Selected Oral Abstract)
STI & HIV 2023 World Congress
Chicago, IL, USA

2015   Gathering Sexual Orientation and Gender Identity Demographics in the Clinical Setting /
Selected Workshop
North American Primary Care Research Group Practice-Based Research Network Conference
Bethesda, MD, USA

2014   PBRN Organization and Governance to Promote Practice, Clinician, Researcher, and Patient
Engagement / Selected Workshop
North American Primary Care Research Group Practice-Based Research Network Conference
Bethesda, MD, USA

2011   Programming: Creating a Utility and Basics of Scripting/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Programming and Trouble-shooting Databases/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Cohort Analyses II: Using EHR Data/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Cohort Analyses I: Using EHR Data/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Monitoring data and Trouble-shooting/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Introduction to Data Management/ Invited Seminar
AIDS Prevention Initiative Nigeria Plus (APIN Plus)
Abuja, Nigeria

2011   Critical Elements in Database Cleaning, a Checklist/ Invited Seminar
        AIDS Prevention Initiative Nigeria Plus (APIN Plus)
        Abuja, Nigeria

2011   Basics of Programming and Scripting/ Invited Seminar
        AIDS Prevention Initiative Nigeria Plus (APIN Plus)
        Abuja, Nigeria

2009   Improving Understanding and Medication Adherence/ Invited Plenary Presentation
        HIV Training, AIDS Prevention Initiative Nigeria Plus (APIN Plus)
        Abuja, Nigeria

Report of Clinical Activities and Innovations

Past and Current Licensure and Board Certification

2006   Certification, New York State Emergency Medical Technician (EMT-D)

Report of Teaching and Education Innovations

Creation of a JEDI-AI Case Study Series (2023-2024)	Co-developed educational case studies focused on justice, ethics, diversity, and inclusion (JEDI) in the development and use of artificial intelligence (AI) approaches in digital health.

Report of Technological and Other Scientific Innovations

HDMH Monitor (2022)	HDMH Monitor is an online article repository and interactive dashboard that leverages natural language processing and machine learning methods to support scientific discovery via automated archive, search, information synthesis, and data visualization of articles concerning health disparities and minority health (HDMH). `https://hdmhmonitor.dbmi.columbia.edu/`
C-REACT: Contextualized Race and Ethnicity Annotations for Clinical Text (2022)	As a member of the Elhadad lab, my colleagues and I curated the C-REACT dataset, a large publicly-available corpus of sentences from clinical notes manually annotated for information related to race and ethnicity (RE) This corpus contains two sets of gold-standard annotations for RE data. The first set contains granular RE-information such as patient country of origin. The second set of annotations contains RE labels manually assigned by clinicians. `https://physionet.org/content/race-ethnicity-clinical-text/`

Health Equity Research Assessment (HERA) (2021)	As a member of the Elhadad lab, I supported the Health Equity Research Assessment (HERA), a large-scale characterization conducted across Observational Health Data Science Informatics (OHDSI) sites with heterogeneous populations and insurance coverage, allowing for identification of persistent and generalizable trends in diagnosis differences. The HERA dashboard and visualizations can be used to download study data, further investigate health differences, and generate novel hypotheses. `https://data.ohdsi.org/HERACharacterization/`
CovidWatcher (2020)	As part of a department-wide effort, my colleagues and I developed CovidWatcher, an `app` and `online portal` that surveyed users about COVID-19 exposure, symptoms, access to medical care, and impact on daily life. Data collected was used to track spread of COVID-19, giving citizens real-time information about hot spots and enabling health care officials to deploy resources where needed. `https://www.dbmi.columbia.edu/covidwatcher/`
EHR pediatric quality improvement tool (2011)	Co-developed and evaluated a utility to extract information from data warehouse and generate measures based on 23 pediatric quality of care indicators at 33 Harvard PEPFAR sites in Nigeria. Programmed module to review continuity of care, drug therapy initiation, medication adherence, loss to follow-up, laboratory monitoring, disease screening based on clinical symptoms assessment or diagnostic evaluation, treatment failure, toxicity management, nutritional assessment, and treatment response.
EHR data quality assessment tool, version 2.0 (2011)	Instituted major modifications to and evaluated a pre-existing EHR utility to incorporate expanded data quality indicators at 33 Harvard PEPFAR sites in Nigeria. With this utility, central and site-level data managers are able to better monitor and improve data completeness, validity, accuracy, and currency.
Electronic health record (EHR) adult quality improvement tool (2010)	Co-developed and evaluated a utility to extract information from data warehouse and generate measures based on 15 adult quality of care indicators at 33 Harvard PEPFAR sites in Nigeria. Module reviews continuity of care, drug therapy initiation, loss to follow-up, laboratory monitoring, disease screening based on clinical symptoms assessment, treatment failure, and treatment response.

Report of Education of Patients and Service to the Community

Activities

2020-present	De La Salle Academy/Proctor
	Proctor annual entrance exam for only private, independent middle school in New York City for academically talented students from economically less advantaged families.

2019   High School Scholars Program, American Medical Informatics Association/Mentor
Supported high school students with research projects; reviewed their work and helped them practice scientific presentations; offered career advice and encouragement.

2013-2016   Human Rights Commission, City of Cambridge/Commissioner, Vice Chair
Adjudicated complaints of discrimination occurring in Cambridge, MA related to housing, employment, education, and public accommodation. Lobbied the state legislature on important policies such as pay equity, protections relative to domestic violence, and anti-discrimination legislation for sexual and gender minorities. Facilitated conciliations among parties. Conducted information sessions on civil rights.

2007   Timmy Global Health, Dominican Republic/Medical Relief Volunteer
Helped establish temporary medical clinics along Haiti-Dominican Republic border; triaged patients, managed pharmacy, translated proper drug use and application.

2006-2016   Boston Medical Reserve Corps/Emergency Medical Technician
The Boston Medical Reserve Corps is a group of volunteers who are ready to respond should there be a public health emergency in Boston.

2001-2005   Latino Youth Enrichment Team (LYET), New Haven, CT/Co-Director
Managed community center mentorship program and developed instructional methods for Latino youth ranging in age from 6 through 13.

Educational Material for Patients and the Lay Community

Books, monographs, articles and presentations in other media

2012	Harvard School of Public Health/AIDS Prevention Initiative in Nigeria: Reducing the Burden of AIDS U.S. President's Emergency Plan for AIDS Relief	Co-author	Harvard PEPFAR Nigeria Program Report
2012	Harvard School of Public Health/Management and Development for Health: Reducing the Burden of AIDS in Tanzania U.S. President's Emergency Plan for AIDS Relief	Co-author	Harvard PEPFAR Tanzania Program Report
2012	Botswana-Harvard AIDS Institute Partnership: Reducing the Burden of AIDS U.S. President's Emergency Plan for AIDS Relief	Co-author	Harvard PEPFAR Botswana Program Report

Recognition

2025	Feature article "Harry Reyes Nieva: Human-Centered AI for Health Care" discussing my background and research	CUIMC News
2025	Interviewed as a 2025 STAT Wunderkind, one of the top 30 early career scientists in North America	STAT News
2019	Spotlighted in the article "On the Margins" about research using natural language processing to study LGBTQ health	Harvard Medicine Magazine
2019	Interviewed for "Machine Learning and Health Equity" episode to discuss leveraging AI in health equity research	ThinkResearch Podcast
2015	Publicity for successful advocacy leading to routine collection of sexual orientation and gender identity demographics in the Mass General Brigham (formerly Partners Healthcare) EHR	Boston Magazine

Report of Scholarship

Peer reviewed publications in print or other media

Research Investigations

1. Juniu S, Castor D, **Reyes Nieva H**, Charon R, Amesty S. Generative Artificial Intelligence in Medical Education and Participatory Research for Social Action: A Qualitative Comparative Analysis. *New Trends in Qualitative Research*. Forthcoming.

2. **Reyes Nieva H**, Zucker J, Tucker EG, McLean J, DeLaurentis C, Gunaratne S, Elhadad N. Development of Machine Learning-Based Mpox Surveillance Models in a Learning Health System. *Sexually Transmitted Infections*. 2025 Oct 16;101(7):456-460. `doi:10.1136/sextrans-2024-056382`.

3. Ketenci M, Jeanselme V, **Reyes Nieva H**, Joshi S, Elhadad N. ADHAM: Additive Deep Hazard Analysis Mixtures for Interpretable Survival Regression. *Machine Learning for Healthcare* (MLHC); 15 Aug 2025. `doi: 10.48550/arXiv.2509.07108`.

4. **Reyes Nieva H**, Zucker J, Tucker EG, Castor D, Yin M, Gordon P, Elhadad N. Enhanced Surveillance of Sexually Transmitted Infections to Foster a Learning Public Health System. *JAMA Netw Open*. 2025 Jun 2;8(6):e2514308. PMID: 40526386. `doi:10.1001/jamanetworkopen.2025.14308`.

5. Bear Don't Walk OJ IV, Pichon A, **Reyes Nieva H**, Sun T, Li J, Joseph J, Kinberg S, Richter LR, Crusco S, Kulas K, Ahmed SA, Snyder D, Rahbari A, Ranard BL, Juneja P, Demner-Fushman D, Elhadad N. Contextualized race and ethnicity annotations for clinical text from MIMIC-III. *Scientific Data*. 2024 Dec 5;11(1):1332. PMID:39638783. `doi:10.1038/s41597-024-04183-2`.

6. **Reyes Nieva H**, Bakken S, Elhadad N. Mining the Health Disparities and Minority Health Bibliome: A Computational Scoping Review and Gap Analysis of 200,000+ Articles. *Science Advances*. 2024 Jan 26;10(4):eadf9033. PMID:38266089; PMCID:PMC10807818. `doi:10.1126/sciadv.adf9033`.

7. Bear Don't Walk IV OJ, Pichon A, **Reyes Nieva H**, Sun T, Altosaar J, Natarajan K, Perotte A, Tarczy-Hornoch P, Demner-Fushman D, Elhadad N. Auditing Learned Associations in Deep Learning Approaches to Extract Race and Ethnicity from Clinical Text. *AMIA Annu Symp Proc*. 2024 Jan 11;2023:289-298. PMID:38222422; PMCID:PMC10785932.

8. Tucker EG, **Reyes Nieva H**, Schiffer K, Yin MT, Castor D, Gordon P, Elhadad N, Zucker J. Using a Health Information Exchange to Characterize Changes in HIV Viral Load Suppression and Disparities During the COVID-19 Pandemic in NYC. *Open Forum Infectious Diseases.* 2023 Nov 29;10(12):ofad584. `PMID:38156044; PMCID:PMC10754646. doi:10.1093/ofid/ofad584.`

9. Spotnitz M, Acharya N, Cimino JJ, Murphy S, Namjou B, Crimmins N, Walunas T, Liu C, Crosslin D, Benoit B, Rosenthal E, Pacheco J, Ostropolets A, **Reyes Nieva H**, Patterson JS, Richter LR, Callahan TJ, Elhussein A, Pang C, Kiryluk K, Nestor J, Khan A, Mohan S, Minty E, Chung W, Wei WQ, Natarajan K, Weng C. A metadata framework for electronic phenotypes. *JAMIA Open.* 2023 Jul; 6(2):ooad032. `PMID:37181728; PMCID:PMC10168627. doi:10.1093/jamiaopen/ooad032.`

10. Schnipper JL, **Reyes Nieva H**, Yoon C, Mallouk M, Mixon AS, Rennke S, Chu ES, Mueller SK, Smith GR, Williams MV, Wetterneck TB, Stein JM, Dalal A, Labonville S, Sridharan A, Stolldorf D, Orav J, Levin B, Gresham M, Goldstein J, Platt S, Nyenpan C, Howell E, Kripalani S, and MARQUIS2 Site Leaders for the MARQUIS2 Study Group. What Works in Medication Reconciliation: An On-Treatment and Site Analysis of the MARQUIS2 Study. *BMJ Qual Saf.* 2023 Aug;32(8):457-469. `PMID:36948542. doi:10.1136/bmjqs-2022-014806.`
    Selected as #1 among the "Top Articles of 2023" by BMJ Quality and Safety

11. Chaplin B, Agbaji O, **Reyes Nieva H**, Olatunde B, Chang C, Mitruka K, Sule H, Dajel T, Zee A, Ahmed ML, Ahmed I, Okonkwo P, Rawizza H, Kanki P. The Timeliness of Point of Care Viral Load Results Improves HIV Monitoring in Nigeria. *Clin. Infect. Dis.* 2023 Feb 8;76(3):e671-e680. `PMID:35872644. doi:10.1093/cid/ciac609.`

12. Schnipper JL, **Reyes Nieva H**, Mallouk M, Mixon AS, Rennke S, Chu ES, Mueller SK, Smith GR, Williams MV, Wetterneck TB, Stein JM, Dalal A, Labonville S, Sridharan A, Stolldorf D, Orav J, Levin B, Gresham M, Yoon C, Goldstein J, Platt S, Nyenpan C, Howell E, Kripalani S, and MARQUIS2 Site Leaders for the MARQUIS2 Study Group. Effects of a Refined Evidence-based Toolkit and Mentored Implementation on Medication Reconciliation Quality and Safety at Eighteen Hospitals: Results of the MARQUIS2 Quality Improvement Study. *BMJ Qual Saf.* 2022 Apr;31(4):278-286. `PMID:33927025.` `doi:10.1136/bmjqs-2020-012709.`

13. Groisser A, **Reyes Nieva H**, Wright A, Ruan E, Schiff GD. Terminations in Primary Care: A Retrospective Observational Study of 16 Primary Care Clinics. *J Gen Intern Med.* 2022;37(3):548-555. `PMID:33948801;` `PMCID:PMC8858375. doi:10.1007/s11606-021-06793-7.`

14. Schiff GD, Volodarskaya M, Ruan E, Lim A, Wright A, Singh H, **Reyes Nieva H**. Characteristics of Disease-Specific and Generic Diagnostic Pitfalls: A Qualitative Study. *JAMA Netw Open.* 2022;5(1):e2144531. `PMID:35061037; PMCID:PMC8783262. doi:10.1001/jamanetworkopen.2021.44531.`

15. Bear Don't Walk OJ IV, **Reyes Nieva H**, Lee SSJ, Elhadad N. A Scoping Review of Ethics Considerations in Clinical Natural Language Processing. *JAMIA Open.* 2022;5(2):ooac039. `PMID:35663112;` `PMCID:PMC9154253. doi:10.1093/jamiaopen/ooac039.`

16. Shahani A, **Reyes Nieva H**, Czado K, Shannon E, Gaetani R, Gresham M, Cruz Garcia J, Ganesan H, Cerciello E, Dave J, Jain R, Schnipper JL. An Electronic Pillbox Intervention Designed to Improve Medication Safety During Care Transitions: Challenges and Lessons Learned regarding Implementation and Evaluation. *BMC Health Serv. Res.* 2022;22(1):1304. `PMID:36309744; PMCID:PMC9618185.` `doi:10.1186/s12913-022-08702-y.`

17. Yeh GY, Litrownik D, Wayne PM, Beach D, Klings ES, **Reyes Nieva H**, Pinheiro A, Davis RB, Moy ML. The BEAM Study (Breathing, Education, Awareness, Movement): a Randomized Controlled Feasibility Trial of Tai Chi Exercise in Patients with COPD. *BMJ Open Respiratory Research.* 2021;18(3):288-298. `PMID:33219007; PMCID:PMC7682460. doi:10.1136/bmjresp-2020-000697.`

18. Kraemer KM, Litrownik D, Moy ML, Wayne PM, Beach D, Klings ES, **Reyes Nieva H**, Pinheiro A, Davis RB, Yeh GY. Exploring tai chi exercise and mind-body breathing in patients with COPD in a randomized controlled feasibility trial. *COPD.* 2021;18(3):288-298. `PMID:34106027`; `PMCID:PMC8283813`. `doi:10.1080/15412555.2021.1928037`.

19. Linder JA, Weissman JS, **Reyes Nieva H**, Lipsitz S, Haring RS, DeAngelis J, Kristy RM, Loughlin KR. Overactive bladder in an integrated delivery system: a longitudinal cohort study. *BMC Health Serv Res.* 2020;20(1):447. `PMID:32434511`; `PMCID:PMC7238545`. `doi:10.1186/s12913-020-05315-1`.

20. **Reyes Nieva H**, Ruan E, Schiff G. Professional-Patient Boundaries: a National Survey of Primary Care Physicians' Attitudes and Practices. *J Gen Intern Med.* 2020;35(2):457–464. `PMID:31755012`; `PMCID:PMC7018879`. `doi:10.1007/s11606-019-05543-0`.

21. Sun TY, Bear Don't Walk OJ IV, Chen J, **Reyes Nieva H**, Elhadad N. Exploring Gender Disparities in Time to Diagnosis. Machine Learning for Health (ML4H) at NeurIPS 2020; 12/2020. `arXiv:2011.06100`.

22. Mixon AS, Smith GR, Mallouk M, **Reyes Nieva H**, Kripalani S, Rennke S, Chu E, Sridharan A, Dalal A, Mueller S, Williams M, Wetterneck T, Stein JM, Stolldorf D, Howell E, Orav J, Labonville S, Levin B, Yoon C, Gresham M, Goldstein J, Platt S, Nyenpan C, Schnipper JL. Design of MARQUIS2: study protocol for a mentored implementation study of an evidence-based toolkit to improve patient safety through medication reconciliation. *BMC Health Serv Res.* 2019 Sep 11; 19(1):659. `PMID:31511070`. `PMCID:PMC6737715` `doi:10.1186/s12913-019-4491-5`.

23. Ali NB, **Reyes Nieva H**, Percac-Lima S, Shields HM, Linder JA, Yusuf Osman N. Health Care Utilization by Muslim Patients During Ramadan. *J Health Care Poor Underserved.* 2019;30(4):1360-1372. `PMID:31680102`. `doi:10.1353/hpu.2019.0099`.

24. Schiff GD, **Reyes Nieva H**, Griswold P, Leydon N, Ling J, Federico F, Keohane C, Ellis BR, Foskett C, Orav EJ, Yoon C, Goldmann D, Weissman JS, Bates DW, Biondolillo M, Singer SJ. Randomized Trial of Reducing Ambulatory Malpractice and Safety Risk: Results of the Massachusetts PROMISES Project. *Med Care.* 2017 08; 55(8):797-805. `PMID:28650922`; `doi:10.1097/MLR.0000000000000759`.

25. Schiff GD, **Reyes Nieva H**, Griswold P, Leydon N, Ling J, Biondolillo M, Singer SJ. Addressing Ambulatory Safety and Malpractice: The Massachusetts PROMISES Project. *Health Serv Res.* 2016 12; 51 Suppl 3:2634-2641. `PMID:27892623`; `PMCID:PMC5134349`. `doi:10.1111/1475-6773.12621`.

26. Kroll DS, **Reyes Nieva H**, Barsky AJ, Linder JA. Benzodiazepines are Prescribed More Frequently to Patients Already at Risk for Benzodiazepine-Related Adverse Events in Primary Care. *J Gen Intern Med.* 2016 09; 31(9):1027-34. `PMID:27177914`; `PMCID:PMC4978684`. `doi:10.1007/s11606-016-3740-0`.

27. Solomon SR, Gooding HC, **Reyes Nieva H**, Linder JA. Acute Care Utilization by Patients After Graduation of Their Resident Primary Care Physicians. *J Gen Intern Med.* 2015 Nov; 30(11):1611-7. `PMID:25896089`. `PMCID:PMC4617921`. `doi:10.1007/s11606-015-3305-7`.

28. Singer SJ, **Reyes Nieva H**, Brede N, Ling J, Leydon N, Weissman JS, Goldmann D, Griswold P, Yoon C, Orav EJ, Bates DW, Biondolillo M, Schiff GD. Evaluating ambulatory practice safety: the PROMISES project administrators and practice staff surveys. *Med Care.* 2015 Feb; 53(2):141-52. `PMID:25464161`. `doi:10.1097/MLR.0000000000000269`.

29. Chaplin B, Meloni S, Eisen G, Jolayemi T, Banigbe B, Adeola J, Wen C, **Reyes Nieva H**, Chang C, Okonkwo P, Kanki P. Scale-up of networked HIV treatment in Nigeria: creation of an integrated electronic medical records system. *Int J Med Inform.* 2015 Jan; 84(1):58-68. `PMID:25301692`. `doi:10.1016/j.ijmedinf.2014.09.006`.

30. Linder JA, Doctor JN, Friedberg MW, **Reyes Nieva H**, Birks C, Meeker D, Fox CR. Time of day and the decision to prescribe antibiotics. *JAMA Intern Med.* 2014 Dec; 174(12):2029-31. `PMID:25286067;` `PMCID:PMC4648561.` `doi:10.1001/jamainternmed.2014.5225.`

31. Schiff G, Griswold P, Ellis BR, Puopolo AL, Brede N, **Reyes Nieva H**, Federico F, Leydon N, Ling J, Wachenheim D, Leape LL, Biondolillo M. Doing right by our patients when things go wrong in the ambulatory setting. *Jt Comm J Qual Patient Saf.* 2014 Feb; 40(2):91-6. `PMID:24716332.` `doi:10.1016/s1553-7250(14)40011-4.`

32. Linder JA, **Reyes Nieva H**, Blumentals WA. Antiviral and antibiotic prescribing for influenza in primary care. *J Gen Intern Med.* 2009 Apr; 24(4):504-10. `PMID:19225847; PMCID:PMC2659164.` `doi:10.1007/s11606-009-0933-9.`

Manuscripts Submitted to Preprint Servers and/or Under Review

1. **Reyes Nieva H**, Kashyap A, Voss EA, Ostropolets A, Anand A, Ketenci M, DeFalco FJ, Choi YS, Li Y, Allen MN, Guang SA, Natarajan K, Ryan P, Elhadad N. The Impact of Evolving Endometriosis Guidelines on Diagnosis and Observational Health Studies. medRxiv. `doi:10.1101/2024.12.13.24319010.`

2. Tucker E, **Reyes Nieva H**, Castor D, Yin MT, Gordon P, Elhadad N, Zucker J. Trends in Triple-Site Testing for Chlamydia and Gonorrhea in New York City: A Cross-sectional Study Using Health Information Exchange Data.

3. Sun TY, Hardin J, **Reyes Nieva H**, Natarajan K, Cheng RJ, Ryan PB, Elhadad N. Large-scale characterization of gender differences in diagnosis prevalence and time to diagnosis. medRxiv. `PMID:37873224;` `PMCID:PMC10592987.` `doi:10.1101/2023.10.12.23296976.`

4. Heck CJ, Quigee D, Ganesan K, Wallach S, Mitchell SL, Farley SM, **Reyes Nieva H**, Howard A, Zucker J, Sobieszczyk M, Wiant S, Justman J, El-Sadr W, Castor D. HIV testing and treatment gaps in subgroups of men with HIV: Pooled findings from seven population-based surveys in eastern and southern Africa.

5. Zucker J, Huang S, Schrillkrut D, Flanagan M, Li J, Ramirez J, Perez E, Theodore DA, **Reyes Nieva H**, Heck CJ, Carnevale C, Meyers K, Borrell L, Uhlemann A, Sobieszczyk ME, Castor D. User Patterns and Determinants of Doxycycline-PEP Use in Real World Settings: Early Insights from the Doxy4STICare Study.

6. Heck CJ, Quigee D, Wallach S, Zucker J, Ganesan K, Mitchell S, Farley S, Sobieszczyk ME, Howard A, **Reyes Nieva H**, Wiant S, Justman J, El-Sadr W, Castor D. HIV prevalence and recency among subgroups of women with overlapping characteristics in eastern and southern Africa: Findings from seven population-based surveys.

Scholarship without named authorship

1. Bell SP, Schnipper JL, Goggins K, Bian A, Shintani A, Roumie CL, Dalal AK, Jacobson TA, Rask KJ, Vaccarino V, Gandhi TK, Labonville SA, Johnson D, Neal EB, Kripalani, PILL-CVD Study Group*. Effect of Pharmacist Counseling Intervention on Health Care Utilization Following Hospital Discharge: A Randomized Control Trial. *J Gen Intern Med.* 2016 May; 31(5):470-7. (*member of the investigative team cited in the appendix of the manuscript) `PMID:26883526; PMCID:PMC4835388.` `doi:10.1007/s11606-016-3596-3.`

2. Kripalani S, Roumie CL, Dalal AK, Cawthon C, Businger A, Eden SK, Shintani A, Sponsler KC, Harris LJ, Theobald C, Huang RL, Scheurer D, Hunt S, Jacobson TA, Rask KJ, Vaccarino V, Gandhi TK, Bates DW, Williams MV, Schnipper JL, PILL-CVD Study Group*. Effect of a pharmacist intervention on

clinically important medication errors after hospital discharge: a randomized trial. *Ann Intern Med.* 2012 Jul 03; 157(1):1-10. (*member of the investigative team cited in the appendix of the manuscript) `PMID:22751755; PMCID:PMC3575734. doi:10.7326/0003-4819-157-1-201207030-00003.`

3. Schnipper JL, Roumie CL, Cawthon C, Businger A, Dalal AK, Mugalla I, Eden S, Jacobson TA, Rask KJ, Vaccarino V, Gandhi TK, Bates DW, Johnson DC, Labonville S, Gregory D, Kripalani S, PILL-CVD Study Group*. Rationale and design of the Pharmacist Intervention for Low Literacy in Cardiovascular Disease (PILL-CVD) study. *Circ Cardiovasc Qual Outcomes.* 2010 Mar; 3(2):212-9. (*member of the investigative team cited in the appendix of the manuscript) `PMID:20233982; PMCID:PMC3021350. doi:10.1161/CIRCOUTCOMES.109.921833.`

Non-peer reviewed scholarship in print or other media

1. Huang Y, Nghiem H, Noori A, Mukherjee S, Paruchuri A, Kondylis JG, Srivathsa N, Jeong H, Sadhuka S, Pradeepkumar J, Jeong C, Sun T, Kavishwar A, Aali A, Matton K, Chen L, Huang X, Unell A, Kumar A, Vidhya A, Celi LA, Fernandopulle R, Shanmugam D, **Reyes Nieva H**, Tang S, Liu Y, Duong Q, Kirmizi C, Warraich H, Arora R, Joshi S, Singhal K, Singh K, Shen L, Chang T, Healey E. Recent Advances, Applications and Open Challenges from ML4H Roundtables]Recent Advances, Applications and Open Challenges in Machine Learning for Health: Reflections from Research Roundtables at ML4H 2025 Symposium. *Proceedings of Machine Learning Research.* 2025.

2. Hegselmann S, Parziale A, Shanmugam D, Tang S, Severson K, Asiedu MN, Chang S, Dossou BFP, Huang Q, Kamran F, Zhang H, Nagaraj S, Oala L, Xu S, Okolo CT, Zhou H, Dafflon J, Ellington C, Jabbour S, Jeong H, **Reyes Nieva H**, Yang Y, Zamzmi G, Mhasawade V, Truong V, Chandak P, Lee M, Argaw P, Heuton K, Singh H, Hartvigsen T. Machine Learning for Health (ML4H) 2023. *Proceedings of Machine Learning Research.* 2023. 225: 1-12. `https://proceedings.mlr.press/v225/hegselmann23a.html.`

3. **Reyes Nieva H**, Kaplan RL, Madani N. Women and HIV: Update from the Middle East and North Africa. Global Network of Researchers on HIV/AIDS in the Middle East and North Africa (GNR-MENA). 2010 International AIDS Conference, Vienna, Austria.

Professional educational materials or reports, in print or other media

1. Interrogating the Ethics of Artificial Intelligence in Healthcare: A Casebook Engaging Justice, Equity, Diversity, and Inclusion*
   *member of the writing committee

2. When Things Go Wrong in the Ambulatory Setting. 2013. The PROMISES Study.*
   *member of the writing committee

3. Using the Monthly Report Form Tool. 2011. Harvard PEPFAR Nigeria. Training Manual.

4. Using the Adult Quality Improvement Tool. 2011. Harvard PEPFAR Nigeria. Training Manual.

5. Using the Pediatric Quality Improvement Tool. 2011. Harvard PEPFAR Nigeria. Training Manual.

6. Using the Data Quality Assessment Tool. 2011. Harvard PEPFAR Nigeria. Training Manual.

7. Data Quality Control and Assurance (Intermediate Data Manual). 2010. Harvard PEPFAR Nigeria. Training Manual.

8. Guidelines for Reporting Clinical Data Quality Assessments. 2010. Harvard PEPFAR Nigeria. Technical Guideline.

9. Generating Adult Quality of Clinical Care Indicators in an HIV Program. 2010. Harvard PEPFAR Nigeria. Technical Guideline.

10. Generating Pediatric Quality of Clinical Care Indicators in an HIV Program. 2010. Harvard PEPFAR Nigeria. Technical Guideline.

11. Introduction to Data Management (Beginner Data Manual). 2009. Harvard PEPFAR Nigeria. Training Manual.

Theses

1. **Reyes Nieva, H**. Leveraging Computational Methods to Advance Health Equity Science Through Evidence Synthesis, Strategic Monitoring, and Precision Public Health. Doctoral Thesis, Columbia University.

2. **Reyes Nieva, H**. Spatiotemporal Modeling of Opioid Prescribing and Persistent Opioid Use in Eastern Massachusetts, 2000-2018. Master's Thesis, Johns Hopkins Bloomberg School of Public Health.

3. **Reyes Nieva, H**. Individual Development Accounts and Other Asset-based Approaches to Poverty Alleviation. Undergraduate Thesis, Yale University.
   Received a Mellon Forum Undergraduate Research Award.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings

Works resulting in publication or presented more than 5 years ago are not included below unless awarded special recognition.

Regional

1. **Reyes Nieva H**, Kashyap A, Voss EA, Ostropolets A, Anand A, Ketenci M, Guang S, Allen MN, DeFalco FJ, Choi YS, Li Y, Natarajan K, Ryan P, Elhadad N. Expanding Endometriosis Diagnostic Guidelines Captures More Women with Non-Classical Symptoms, Different Care-Seeking Patterns, and Lack of Access to Surgical Care. Endometriosis: A Look at Current Practices and Emerging Science, New York Academy of Sciences. New York, NY; 06/2025.

2. Flanagan M, Foumena Nkodo A, Parkinson M, Zucker J, Purpura L, Hill S, Wiant S, McAndrew M, Li J, Ahmed S, Peralta H, Benitez J, **Reyes Nieva H**, Theodore DA, Sobieszczyk ME, Castor D. Healthcare Technology Use and Attitudes Toward AI-Assisted Diagnosis Among Individuals With and Without Long COVID in New York City. 2nd Annual Quality in Care Symposium, New York Academy of Medicine. New York, NY; 06/2025.

National

1. Richter LR, **Reyes Nieva H**, DeLozier S, Arif A, Zucker J. HIV Acquisition After PrEP Initiation: Quantifying Opportunities for Long-Acting Injectable Interventions Using Large-Scale Observational Data. American Medical Informatics Association Annual Symposium. Atlanta, GA; 11/2025.
   Received the AMIA Distinguished Poster Award

2. Hill SE, Parkinson M, Nkodo AF, Ahmed S, Li J, McAndrew M, Flanagan M, Wiant S, Peralta H, Benitez J, **Reyes Nieva H**, Purpura L, Zucker J, Theodore DA, Sobieszczyk ME, Castor D. Social Determinants of Decisions about COVID-19, Influenza, and RSV Immunization Among Predominantly Black and Latino Communities and Households in New York City: A Cross-Sectional Analysis. ID Week. Atlanta, GA; 10/2025.

3. **Reyes Nieva H**, Zucker J, Elhadad N. Elucidating Health Inequities and Research Gaps in HIV and Other Sexually Transmitted Infections Using Data Mining and a Large Language Model: A Computational Scoping Review. Poster Presentation. STI Prevention. Atlanta, GA; 09/2024.

4. D'Avanzo P, Bosco J, Carnevale C, Meyers K, Theodore DA, **Reyes Nieva H**, Zucker J. "I Don't See Myself as a Gatekeeper": Doxy-PEP Knowledge, Attitudes and Practices Among Healthcare Providers in New York. Poster Presentation. STI Prevention. Atlanta, GA; 09/2024.

5. **Reyes Nieva H** and Elhadad N. Mining the Health Disparities and Minority Health Bibliome: A Computational Scoping Review. Oral presentation. American Medical Informatics Association Annual Symposium. Washington, DC; 11/2022.
   Spotlighted and invited for special presentation by AMIA DEI Committee for "demonstrating best practices in promoting diversity, equity, and inclusion through scholarly communications in biomedical informatics"

6. Acharya N, **Reyes Nieva H**, Natarajan K. Analyzing shifts in healthcare-seeking behavior among All of Us enrollees in the era of COVID-19. Poster Presentation. American Medical Informatics Association Annual Symposium. Washington, DC; 11/2022.

7. Sun T, Hardin J, **Reyes Nieva H**,Natarajan K, Cheng RF, Ryan P, Elhadad N. Large-scale Characterization of Gender Differences in Age at Diagnosis and Time to Diagnosis in Longitudinal Observational Health Data. National Institutes of Health (NIH) Office of Research on Women's Health (ORWH) Workshop on Gender and Health: Impacts of Structural Sexism, Gender Norms, Relational Power Dynamics, and Gender Inequities. (selected oral abstract presented by Elhadad). Virtual Event; 10/2022.

8. Sun TY, Chen J, **Reyes Nieva H**, Bear Don't Walk OJ IV, Altosaar J, Elhadad N. Gender Differences in Time to Diagnosis through Fairness and Time Variant Evaluation of EHR Data (selected oral abstract presented by Sun). American Medical Informatics Association Annual Symposium. San Diego, CA; 11/2021.

9. Pang C, Chen R, **Reyes Nieva H**, Kalluri KS, Sun TY, Jiang X, Rodriguez VA, Ryan PB, Natarajan K. Characterization and Comparison of Embedding Algorithms for Phenotyping across a Network of Observational Databases. (selected oral abstract presented by Pang). American Medical Informatics Association Annual Symposium. Virtual Event; 11/2020.

10. Boskey E, Tabaac A, Wigell R, Wolf K, Lage I, Landrum S, **Reyes Nieva H**, Bearnot B, Streed C. Using patterns of missing EHR data to identify care disparities in gender diverse patients. (selected oral abstract presented by Tabaac). APHA Annual Meeting and Expo. Virtual Event; 10/2020.

International

1. **Reyes Nieva H**, Kashyap A, Voss EA, Ostropolets A, Anand A, Ketenci M, DeFalco FJ, Natarajan K, Choi YS, Li Y, Allen MN, Guang S, Elhadad N. The Impact of Evolving Diagnostic Guidelines on Clinical Characterization of Endometriosis. Poster Presentation. OHDSI Global Symposium, New Brunswick, NJ; 10/2024.

2. **Reyes Nieva H**, Zucker J, Tucker EG, McLean J, DeLaurentis C, Gunaratne S, Elhadad N. Development and Validation of Machine and Deep Learning Classifiers for Monkeypox. Poster Presentation. Symposium on Artificial Intelligence for Learning Health Systems (SAIL), Río Grande, Puerto Rico; 05/2023.

3. Desai PM, Ostropolets A, Richter LR, **Reyes Nieva H**, Spotnitz M, Rodriguez VA, Sun TY, Natarajan K. Phenotype Development and Evaluation of Heart Failure: A Case Study in using Patient-Level Prediction to Improve Phenotype Validity. Poster presentation. OHDSI Global Symposium. 09/2021.