The Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute

PhD in Health Economics and Outcomes Research
Information Session

October 19, 2022
9-10 am PDT
We are a global leader in generating knowledge to improve individual and population health through transformative learning, research, and dissemination about the effectiveness, safety, and value of medical products, services, and policies.

WHO WE ARE

THE CHOICE INSTITUTE

School of Pharmacy
MISSION

**Research**: Develop innovative methods and generate actionable evidence about the effectiveness, safety, and value of medical products and services that improve decision making in health care and policy.

**Training**: Provide transformative training in health economics, outcomes research, and policy analysis to meet contemporary health care challenges regionally, nationally, and globally.

**Service**: Be a leading resource on the effectiveness, safety, and value of medical products and services by providing expertise and facilitating collaborations at the regional, national, and global level.
Core Faculty

Assistant Professors
- Doug Barthold
- Kyu Eun Lee
- Jing Li

Associate Professors
- Jennifer Bacci
- Aasthaa Bansal
- Ryan Hansen

Professors
- Anirban Basu
- Josh Carlson
- Beth Devine
- Sean Sullivan
- Dave Veenstra

Emeritus Professors
- Lou Garrison
- Tom Hazlet
# Adjunct & Affiliate Faculty

<table>
<thead>
<tr>
<th>Adjunct Faculty</th>
<th>Brian Bresnahan, Radiology</th>
<th>Todd Edwards, HSPOP</th>
<th>David Flum, Surgery</th>
<th>Lurdes Inoue, Biostatistics</th>
<th>Jerry Jarvik, Medicine</th>
<th>Larry Kessler, HSPOP</th>
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<tr>
<td></td>
<td>Gary Lyman, Medicine</td>
<td>Scott Ramsey, Medicine</td>
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<tr>
<th>Affiliate Faculty</th>
<th>Blythe Adamson, Flatiron Health</th>
<th>Carrie Bennette, Reify Health</th>
<th>Denise Boudreau, Genentech</th>
<th>William Canestaro, WRF</th>
<th>Pete Fullerton, Strategic Pharmacy Innovations</th>
<th>Jens Grueger, Boston Consulting Group</th>
<th>Jan Hansen, Genentech</th>
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<tr>
<td>Brett Hauber, Pfizer</td>
<td>Zsolt Hepp, SeaGen</td>
<td>Eric Johnson, Northwest Permanente</td>
<td>Thomas Kanyok, Cepheid</td>
<td>Joshua Roth, Genentech</td>
<td>Parth Shah, Fred Hutch</td>
<td>Lotte Steuten, OHE</td>
<td>Amy Tung, AbbVie</td>
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<tr>
<td>Sepideh Varon, AbbVie</td>
<td>Elisabeth Vodicka, PATH</td>
<td>John Watkins, Premera Blue Cross</td>
<td>Jennifer Whiteley, Genentech</td>
<td>Davene Wright, Harvard Medical School</td>
<td>Kai Yeung, Amazon</td>
<td>Kai Yeung, Amazon</td>
<td>Marita Zimmermann, IDM</td>
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Staff

Marina Gano  Graduate Program & Operations Manager
Perchita Bhan  Research Project Manager
Bettina Schifferl  CHOICE/Plein Program Operations Specialist
ALUMNI CAREER PATHS

ACADEMIA
Todd Lee, PhD ('01)
Professor and Head, College of Pharmacy - Pharmacy Systems Outcomes and Policy, University of Illinois, Chicago

Jonathan Watanabe, PhD ('12)
Associate Dean of Assessment and Quality; Professor of Clinical Pharmacy, University of California, Irvine

Meng Li, PhD ('18)
Assistant Professor, Health Services, MD Anderson Cancer Center

Kangho Suh, PhD ('19)
Assistant Professor, University of Pittsburgh School of Pharmacy

INDUSTRY
Mitch Higashi, PhD ('01)
Senior Vice President, HEOR, Sema4

Denise Boudreau, PhD ('02)
Senior Principal Data Scientist, Genentech

Rafael Alfonso Cristancho, MD, PhD ('13)
Senior Director Value Evidence and Outcomes, GSK Pharmaceuticals

Blythe Adamson, PhD ('18)
Director of Quantitative Sciences, Flatiron Health

RESEARCH
Kai Yeung, PhD ('15)
Assistant Scientific Investigator, Kaiser Permanente, Washington Health Research Institute

Marita Zimmermann, PhD ('16)
Senior Research Economist, Institute for Disease Modeling

Elisabeth Vodicka, PhD ('17)
Health Economist, PATH, Seattle, WA

Wei-Jhih Wang, PhD ('20)
CLASS OF 2022

DOCTOR OF PHILOSOPHY (HEALTH ECONOMICS & OUTCOMES RESEARCH)

Boshen Jiao
BA, Economics, Fudan University, China; MPH, Epidemiology & Health Economics, EHESP French School of Public Health, France

DISSERTATION: Value of Expanding First-Line Treatment Choices: New Metrics for Economic Evaluation
CHAIR: Anirban Basu, PhD
CURRENT POSITION: Postdoctoral Fellow, Health Economics, Department of Global Health and Population, Harvard University

Enrique Saldarriaga
MS, Epidemiology, University Cayetano Heredia, Peru; BS, Economics, Universidad Del Pacifico, Peru

Dissertation: The Value of using local data to allocate resources to fight the HIV Epidemic. Case of study in Atlanta, Georgia
CHAIR: Anirban Basu, PhD
CURRENT POSITION: Prevention Effectiveness Fellow, Division of STD Prevention, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia

Wo jung Lee
PharmD, Seoul National University, Korea; BS, Biology, Yonsei University

DISSERTATION: Investing in Clinical Trials for Older Adults: The Value and Challenges of Older Adult-Specific Clinical Trials
CHAIR: David Veenstra, PharmD, PhD
CURRENT POSITION: Associate Health Care, Analysis Group
## OUR PRIMARY RESEARCH COMPETENCIES

<table>
<thead>
<tr>
<th>Research Emphasis (Engaged Pharmacy Faculty)</th>
<th>Theory/Methods</th>
<th>Application</th>
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<tr>
<td><strong>HEALTH ECONOMICS</strong> Basu, Carlson, Devine, Garrison, Hansen, Sullivan, Veenstra</td>
<td>Cure Modeling, Machine Learning, Causal inference, CEA, Value of information analyses</td>
<td>Cancer, Diabetes, Mental Health, Pharmacogenomics</td>
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<td><strong>OUTCOMES RESEARCH</strong> Bacci, Bansal, Basu, Carlson, Devine, Garrison, Gray, Hansen, Stergachis, Sullivan, Veenstra</td>
<td>Observational and claims data methods, pragmatic trial designs, preference elicitation, evidence synthesis and meta-analysis, benefit-risk assessments, pharmacoepidemiology, pharmacovigilance, implementation science, qualitative methods</td>
<td>Treatment sequencing, adverse events, organ allocation, access to cancer clinical trials, precision medicine, drug safety, diagnostic imaging, organ transplantation, cystic fibrosis, medication adherence care transition, global health pipeline of medicine and vaccines</td>
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OUR COMMITMENT TO DIVERSITY

THE CHOICE INSTITUTE DIVERSITY ENDOWED GRADUATE FELLOWSHIP:

Recipients will be underrepresented students in the field of health economics, outcomes research, and policy with deep personal experience with, and connection to, diverse cultures.

CHOICE Statement on Diversity, Equity, and Inclusion

CHOICE is committed to creating an inclusive academic community where every individual is treated fairly and with dignity and respect. We strongly believe that diversity enriches learning, broadens the perspectives of all in our program, and improves our sense of community. Diversity requires an atmosphere of inclusion, tolerance, respect, and equity.

Our equality and diversity principles:

- We value the tremendous diversity of the human experience and believe that this diversity strengthens our communities and our program.
- We believe that discrimination or exclusion based on individual characteristics and circumstances, such as age; disability; caring or dependency responsibilities; gender or gender identity; marriage and civil partnership status; political opinion; pregnancy and maternity; race, color, caste, nationality, ethnic or national origin; religion or belief; sexual orientation; socio-economic status; or other distinctions, is unjust and represents a waste of talent and a denial of opportunity for self-fulfillment.
- We recognize that patterns of under-representation and differences in outcomes at CHOICE can be challenged through positive action.
- We respect the rights of individuals, including the right to hold their own opinions and beliefs, but will not allow these opinions to be manifested in a way that is hostile or degrading to others.
- We expect commitment and involvement from all our faculty, staff, and students in working towards the achievement of our vision.
IN-HOUSE DATABASES

> Truven-IBM MarketScan Claims databases, 2007-2019
> SEER-Medicare Databases 2007-2016
> Restricted Access:
  – HRS-Medicare linked databases
  – Medicare, Medicaid data for patients with Sickle Cell Data
UNIVERSITY of WASHINGTON

THE CHOICE INSTITUTE

School of Pharmacy

ANNUAL REPORT 2022
THE COMPARATIVE HEALTH OUTCOMES, POLICY & ECONOMICS INSTITUTE

Annual Report
Our PhD program prepares students to become independent scientists and leaders in health economics, outcomes research and policy evaluation, with special emphasis on the pharmaceutical sector.

CURRENT STUDENTS

- 18 PhD students
- 12 PharmD/MS fellows

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School of Pharmacy
FIELDS OF STUDY

Health economics

Decision sciences

Biostatistics

Epidemiology

Clinical trial design and analysis

Health policy
PHD PROGRAM CURRICULUM OVERVIEW

> The program of course work can be divided into four components:

1. Core courses
2. Electives
3. Seminars
4. Independent research and dissertation

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School of Pharmacy
## CORE PROGRAM

<table>
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<tr>
<th>Course</th>
<th>Credit</th>
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<tr>
<td>EPI 512, 513 Epidemiologic Methods I &amp; II</td>
<td>8</td>
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<tr>
<td>BIOST 511, 512, 513 (or 517-518) Medical Biometrics I, II &amp; III</td>
<td>8-12</td>
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<tr>
<td>HEOR 545 Methods in Pharmaceutical Policy Analysis</td>
<td>4</td>
</tr>
<tr>
<td>HEOR 520 Pharmacoepidemiology</td>
<td>3</td>
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<tr>
<td>HEOR 530 Economic Evaluation in Health and Medicine</td>
<td>3</td>
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<tr>
<td>HEOR 531 Assessing Outcomes in Health and Medicine</td>
<td>3</td>
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<tr>
<td>HEOR 532 Advanced Methods in Economic and Outcomes Evaluation in Health and Medicine</td>
<td>3</td>
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<tr>
<td>HEOR 540 Health Economics</td>
<td>3</td>
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<tr>
<td>HSERV 523 Advanced Research Methods</td>
<td>4</td>
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<tr>
<td>HSERV 525 Advanced Health Services Research Methods III: Casual Inference Using Observational Data</td>
<td>4</td>
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<tr>
<td>BIOSTAT 537 Survival Data Analysis in Epidemiology</td>
<td>4</td>
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<tr>
<td>HEOR 597 Graduate Seminar</td>
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<td>HEOR 800 Dissertation</td>
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<tr>
<td>Electives</td>
<td>14</td>
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<tr>
<td>HEOR 600 Independent Study</td>
<td>18</td>
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<td>TOTAL MINIMUM CREDITS</td>
<td>118*</td>
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*122 minimum credits if student takes the BIOST 511, 512, & 513 series.
PROGRESSION TO DOCTORAL DEGREE

First & Second Year:
- Completion of core courses and preliminary examinations.
- Begin the process of determining their potential interests in dissertation research.

Summer Quarter after Second Year:
- Explore potential dissertation topics and data sources available

Third Year:
- Selection of dissertation topic (with CHOICE faculty approval of short proposal) and establishment of Supervisory Committee.
- Completion of specialization coursework and Dissertation Proposal Defense.

Fourth Year+:
- Completion of dissertation and Dissertation Defense.
Frequently Asked Questions

> Funding
   - First 2 years guaranteed funding
   - 2+: Responsibility shifts but students remain funded (Path to independence)
   - Appointments vary by student, but core is 50% FTE as part of a fellowship, research assistantship, or teaching assistantship
     > Stipend varies by year but is approximately ~$2,779 / month
     > Possible to supplement with other UW or external work, but must be balanced with workload and academic progress
     > Includes health insurance

> Transfer course credits

> After graduation:
   - 1/3 academia, 1/3 industry, 1/3 governmental or non-profit organizations

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APPLICATION PROCESS
OVERVIEW

> **Application Deadline:** December 15, 2022
  > All application materials should be received by this date.

> **Interview Notification:** Mid January 2023

> **Interviews:** Late January

> **Offer Notification:** Mid February

> **Acceptance Deadline:** April 15, 2023

> **Program Start Date:** Late September 2023

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School of Pharmacy
PREREQUISITES

 Typical academic backgrounds:
  – Students with Master’s degrees in fields such as epidemiology, economics, statistics or public health
  – Students with professional degrees in pharmacy, medicine or a health-related field who have strong quantitative skills

 Other prerequisites:
  – Must meet all minimum Graduate School requirements, including a minimum grade point average of 3.0.
  – Competitive applicants have a GPA of 3.5 and above.

 The Graduate Record Examination (GRE) is not required or evaluated

 Non-native English speakers are required to demonstrate English proficiency as per Graduate School Memo 8
  – Minimum TOEFL score required is 100
  – Minimum IELTS score is 7.5
APPLICATION TIPS

> **Contact your recommenders early**
  – Include a “cheat sheet” about yourself and the program along with your request

> **Submit a strong, focused, and well-edited CV**
  – Research skills
  – Data analysis skills
  – Relevant rotations, electives, courses, and presentations
  – Leadership experience

> **Highlight any projects relevant to HEOR**

> **Include any publications you have contributed to, even if not yet in press**

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School of Pharmacy
HOW TO APPLY

> Apply directly to the UW Graduate School
> Go to: https://grad.uw.edu/admission/apply-now/
  > Create a Profile and New Application
  > Application Type: Graduate
  > Graduate Program: Pharmacy – Health Economics & Outcomes Research (PhD)
  > Quarter and Year: Fall 2023
– Mailed application materials are not accepted
– Official transcripts are only required if offered admission
  > unofficial transcripts are scanned and uploaded into the online application
Application Fee Waiver Information

> Financial Need Fee Waivers are available through the Graduate School
> Fee waiver requests must be submitted at least 7 days before the deadline!
> Washington State Need Grant Program eligibility criteria is used to determine financial need.
  – Waivers are based on the 100% Median Family Income (MFI).
  – Reported income should be based on the most recent tax year.
> For more information on how to request a waiver: https://grad.uw.edu/admission/application-fee-waivers/
CONTACT US

> Marina Gano, M.Ed.
Graduate Program & Operations Manager
The CHOICE Institute, Department of Pharmacy
206-616-1383
mcgano@uw.edu

> Josh Carlson, MPH, PhD
Professor and Graduate Program Director
The CHOICE Institute, Department of Pharmacy
carlsojj@uw.edu
THANK YOU!

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