Benjamin C. Chu

Website: www.bcchu.com

Address: 5975 Haleola Street, Honolulu, HI 96821

Citizenship: USA

A driven Ph.D. Economics candidate at the University of Hawai'i at Mānoa with a research focus in health economics, health policy, and applied econometrics. Possesses 6+ years of experience in policy analysis, academic research, econometric methods, and statistical analysis. Skilled in drafting and disseminating statistical reports, researching policies related to Medicare and Medicaid, presenting to technical and non-technical audiences, and teaching at the university level.

### EDUCATION

University of Hawai'i at Mānoa

Honolulu, Hawai'i

Expected: May 2023

Email: bcchu@hawaii.edu

Mobile: (808) 429-8570

Ph.D. - Economics

 ${\bf Dissertation:}\ Essays\ on\ Public\ Insurance\ Policies\ Affecting\ Low-Income\ Populations$ 

Committee: Timothy Halliday, Victoria Fan, Ruben Juarez, Sang-Hyop Lee & Teresa Molina

University of Hawai'i at Mānoa

Honolulu, Hawai'i May 2019

M.A. - Economics

Honolulu, Hawaiʻi

University of Hawai'i at Mānoa

B.S. - Family and Consumer Sciences

Honoruru, Hawari $May\ 2015$ 

# WORK EXPERIENCE

Research Assistant | Telecommunications and Social Informatics Program (TASI)

Honolulu, Hawai'i Oct 2022 - Present

Supervisor: Norman Okamura, (808) 956-2909

Address: 2424 Maile Way, Saunders Hall 704, Honolulu, HI 96822

- Providing technical, analytic, and coordination support for research activities, reporting, data requests, and presentations; including development of codes, workflow, briefs, and Standard Operation Procedures for various data science and Health Information Technology projects.
- Assisting with research on various healthcare and healthcare system topics, including conducting literature reviews, writing academic papers, and preparing findings for dissemination to stakeholders and non-technical audiences.
- Conducting statistical analysis and modeling of health claims data using statistical software such as R, SAS, Python, or other data science tools.

# Lecturer | Department of Economics, University of Hawai'i at Manoa

Honolulu, Hawai'i Jan 2019 - Present

 $Supervisor:\ Sang-Hyop\ Lee,\ (808)\ 956-7041$ 

Address: 2424 Maile Way, Saunders Hall 542, Honolulu, HI 96822

- Taught undergraduate courses in the subjects related to microeconomic theory, macroeconomic theory, econometrics and data analysis and visualization.
- Responsible for creating and instructing a course in data science as part of a focused economics bridge program between Kapi'olani Community College (KCC) and the University of Hawai'i at Mānoa (UHM) for four COVID-19 Affected groups, Native Hawaiians, Pacific Islanders, Filipinos and women.
- Designed and constructed a learning curriculum that is easily accessible for students both in classrooms and online environments.

# Research Assistant | Pacific Health Analytics Collaborative (PHAC)

Honolulu, Hawai'i Sep 2019 - Sep 2022

Supervisor: Victoria Fan, (617) 398-0797

Address: Biomedical Sciences, 1960 East-West Rd, Honolulu, HI 96822

- Conducted economic research that proposed innovations in Medicaid, risk adjustment systems, and diagnostic classification for the purpose of improving health care quality and accessibility.
- Applied methods in economics and econometrics to conduct statistical analyses of health policy topics using electronic health records, medical claims, and survey data.
- Utilized multiple programming languages and software to perform tasks in data cleaning, web scraping, statistical inference and data visualization.
- Prepared summary reports, academic papers, data dashboards, briefings, and data quality assessments to be presented to various community stakeholders, health professionals, and non-technical audiences.

Educational Coach | Center on Disability Studies, University of Hawai'i at Mānoa Honolulu, Hawai'i Supervisor: Sean Nagamatsu, (808) 292-5503 Aug 2018 - Jan 2019 Address: 1410 Lower Campus Road, 171F Honolulu, HI 96822

- Assisted students with special health care needs in improving their academic and self-management skills such as time management, organization, and study habits.
- Helped students identify and build strengths to transfer abilities across domains, develop individual plans for academic support, and foster the growth of affective skills.
- Teaching Assistant | Department of Economics, University of Hawai'i at Mānoa Honolulu, Hawai'i Supervisor: Sang-Hyop Lee, (808) 956-7041 Address: 2424 Maile Way, Saunders Hall 542, Honolulu, HI 96822
  - Taught weekly sessions in microeconomics and econometrics for undergraduate students.
  - Assisted in the creation and grading of assignments and exams for undergraduate economic courses.

### RESEARCH EXPERIENCE

6+ years of experience (20 hours per week) conducting independent, original economic research in health economics, health policy, and applied econometrics. Details of research-related experience include:

- Analyzing the effects of health programmes connected to Medicare and Medicaid on low-income populations using innovative methods from economic theory, econometrics, and machine learning.
- Performing independent and original research that serves to motivate policy development for Medicare and Medicaid.
- Implementing appropriate statistical econometric techniques (i.e., difference-in-differences, linear discriminant analysis, instrumental variable regression, etc) in the analysis and interpretation of economic research questions.
- Preparing a written analysis of statistical findings to be disseminated in reports or submitted to academic journals.
- Presenting research at conferences and meetings with various professional organizations, stakeholders, academic
  audiences and non-technical audiences.

From Dissertation: Essays on Health Coverage Expansions and its Impacts on Low-Income Populations

- Who Did the ACA Medicaid Expansion Impact? Estimating the Probability of Being a Complier (Solo Author) (Forthcoming: Health Economics)
  - Used data from the American Community Survey (ACS) to estimate the conditional likelihood of being induced by ACA Medicaid expansion to enroll in Medicaid (i.e., probability of being a complier).
  - Found that in non-expansion states, many of which have high Black populations, the probability of being a complier is higher for Black individuals than for other racial/ethnic groups, suggesting that Black individuals in non-expansion states would be the largest beneficiaries of any new expansions.
  - First study to apply techniques in complier analysis to estimate the compliers from the ACA Medicaid expansion.
- Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid (Solo Author) (Under Review)
  - Used data from the American Community Survey (ACS) to estimate the impact of the ACA Medicaid expansion for children who were eligible for Medicaid prior to the expansion.
  - Crafted measurements of Medicaid eligibility for children using both Modified Gross Adjustment Income (MAGI) thresholds from the Kaiser Family Foundation (KFF) and poverty thresholds from the Census Bureau.
  - Found modest yet significant increases in public coverage across all years for children who were previously
    eligible for Medicaid and CHIP prior to the expansion, but with significant crowding out in employer-sponsored
    insurance.

## Other Research:

- Assessing the Effectiveness of Risk Adjustment Systems in Recognizing Dual Diagnosis and Co-occurring Conditions for Mental Health and Substance Use Disorders (Work in Progress)
  - Estimating the performance of current risk adjustment models for health insurance marketplaces and Medicare in predicting the risk score that accurately reflects the costs associated with treating those experiencing multiple co-occurring conditions in mental health and substance use.
  - Developing a novel comorbidity index that captures the prevalence of co-occurring mental health conditions and dual diagnoses for high risk enrollees.

## Policy Papers & Legislative Reports

- 1. Chu, B., Nakano, L., Do, B., Emory, C., Fan, V.Y. Hawai'i State Epidemiologic Report and County Profiles. Honolulu, HI. August 6th, 2022. Web Version: Report
- Aoki, C., Valdez, K., Abe, A., Burke, K., Chu, B., Subia, C., Lumbao, S., Untalan, R., McKee, S., Ha, E., Talagi, D., Fontanilla, T., Worley, K., Galanis, D., Bolan, A., Fan, V.Y. Hawai'i Opioid Initiative Evaluation Report 2021. Honolulu, HI. August 31st, 2021. Web Version: Report
- 3. Abe, A., Chu, B., Fan, V.Y. State Opioid Response Technical Assistance Plan, 2021.
- 4. Chu, B., Fontanilla, T., Fan, V.Y. University of Hawai'i at Mānoa. Overdose Data to Action Plan (OD2A) Laulima Outpatient Dataset Data Quality Assessment, 2021.
- 5. Chu, B., Fontanilla, T., Fan V.Y. University of Hawai'i at Mānoa. Overdose Data to Action Plan (OD2A) Laulima Inpatient Dataset Data Quality Assessment, 2021.

## SKILLS SUMMARY

- Programming Languages: R, Python, SQLite, HTML, MATLAB
- Software Experience: Stata, SPSS, RStudio, Microsoft PowerBI, Microsoft Excel
- Operating Systems: Microsoft Windows OS, Mac OS
- Media/Design: LATEX, Adobe Illustrator, Microsoft PowerPoint
- Research: Health Economics, Risk Adjustment, Regression Analysis, Model Evaluation, Statistical Modeling, Research Design, Academic Writing, Quantitative Analysis, Econometrics

# Teaching

- ECON 130: Principles of Microeconomics (Teaching Assistant) Fall 2016, Spring 2017, Fall 2018, Spring 2019
- ECON 130: Principles of Microeconomics (Instructor) Spring 2019, Spring 2020, Fall 2022
- ECON 131: Principles of Macroeconomics (Instructor) Summer 2021
- ECON 256: Data Analysis and Visualization (Instructor) Summer 2022, Spring 2023, Summer 2023
- ECON 300: Intermediate Macroeconomics (Instructor) Summer 2019, Summer 2020
- ECON 425: Introduction to Econometrics (Teaching Assistant) Spring 2019
- ECON 628: Econometrics I (Teaching Assistant) Spring 2023
- ECON 629: Econometrics II (Teaching Assistant) Fall 2022
- ECON 674: Health Economics and Policy (Guest Lecturer) Fall 2022

## Honors and Awards

- College of Social Science Excellence in Teaching Award (Nomination), University of Hawai'i at Manoa 2023
- Burnham O. Campbell Scholarship, University of Hawai'i at Mānoa 2022
- $\bullet\,$  Pi Gammu Mu, University of Hawai'i at Mānoa 2022
- Frances Davis Graduate Student Teaching Nomination, University of Hawai'i at Manoa 2017-2019
- Graduate Assistantship, University of Hawai'i at Manoa 2017-2019
- Phi Upsilon Omicron, University of Hawai'i at Manoa 2012-2015
- $\bullet$  Golden Key International Honor Society, University of Hawai'i at Mānoa 2012-2015
- Band Scholarship, University of Hawai'i at Mānoa 2010-2016

# Conferences

#### 2023:

- 2. "Who Did the ACA Medicaid Expansion Impact? Estimating the Probability of Being a Complier". American Society of Health Economists (ASHEcon), St. Louis, Missouri, June 11th, 2023.
- 1. Keynote Speaker. Special Education Conference I Ke Alu Like, Honolulu, Hawai'i, March 14th, 2023.

### 2022:

- 4. "Who Did the ACA Medicaid Expansion Impact? Estimating the Probability of Being a Complier". Hawai'i Economic Association Graduate Student Showcase, Honolulu, Hawai'i, November 30th, 2022.
- 3. "Find Your Peace, Find Your Space". Special Parents Information Network Conference, Honolulu, Hawai'i, October 22nd, 2022 (with Thao Le).
- 2. "Who Did the ACA Medicaid Expansion Impact? Estimating the Probability of Being a Complier". University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, September 20th, 2022.

1. "Does Smoking Affect Wages?". Workshop on the Economics of Risky Behavior, Honolulu, Hawai'i, July 9th, 2022 (Discussant) (with Gregor Pfeifer).

### 2021:

- 3. "Who Did the ACA Medicaid Expansion Impact? Estimating the Probability of Being a Complier". University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, November 16th, 2021.
- 2. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid". Hawai'i Economic Association Graduate Student Showcase, Honolulu, Hawai'i, November 4th, 2021.
- 1. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid". University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, October 12th, 2021.

#### 2020:

1. "Autism Supports See Through My Eyes". Special Parents Information Network Conference, Honolulu, Hawai'i, October 17th, 2020 (with Alysha Kim).

#### 2019:

- 2. "A Horse of Different Color: Strategies to Support Students with Autism Focusing on Motivation". Special Parents Information Network Conference, Honolulu, Hawai'i, April 13th, 2019 (with Ann N. Garfinkle).
- 1. "Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid". University of Hawai'i at Mānoa Applied Microeconomics Workshop, Honolulu, Hawai'i, March 5th, 2019.

#### 2018:

1. "Mindful Meditation and Communication Strategies". Special Parents Information Network Conference, Honolulu, Hawai'i, April 21st, 2018.

### 2017:

1. Keynote Address. Special Parents Information Network Conference, Honolulu, Hawai'i, April 22nd, 2017.

## References

Prof. Timothy Halliday Professor Department of Economics University of Hawai'i at Mānoa (808) 956-8615

⊠ halliday@hawaii.edu

**Prof. Victoria Fan** Associate Professor

Center on Aging University of Hawai'i at Mānoa

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Prof. Sang-Hyop Lee

Professor

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