# Benjamin C. Chu

Website: www.bcchu.com Citizenship: USA

A driven Ph.D. Economics candidate at the University of Hawai'i at Mānoa with a research focus in health economics, public health, and applied econometrics. Possesses 6+ years of experience in academic research, data analysis, econometric methods, and statistical modeling. Skilled in drafting and disseminating statistical reports, conducting independent research, writing for academic journals, and teaching at the university level. Currently seeking employment as an economist.

### EDUCATION

University of Hawai'i at Mānoa

Honolulu, Hawai'i

Ph.D. - Economics

Expected: May 2023

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Mobile: (808) 429-8570

Dissertation: Three Essays on Public Insurance Policies Affecting Low-Income Populations Committee: Tim Halliday, Victoria Fan, Ruben Juarez, Sang-Hyop Lee & Teresa Molina

University of Hawai'i at Mānoa

Honolulu, Hawai'i

M.A. - Economics

May 2019

University of Hawai'i at Mānoa

B.S. - Family and Consumer Sciences

Honolulu, Hawai'i May 2015

# Work Experience

# Research Assistant | Public Health Analytics Collaborative

Honolulu, Hawai'i Sep 2019 - Present

Hours per week: 20

Salary: \$24,000/year

- o Applied statistical, econometric, and financial techniques to address and resolve issues of substance use and abuse within the State of Hawai'i.
- o Prepared technical reports, evaluation results, and key deliverables to be presented to various community stakeholders and academic audiences.
- o Implemented several techniques to extract, clean, and analyze data using various programming languages and
- Supervised fellow team members in performing rapid lit reviews; preparing reports; and learning techniques in

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

Honolulu, Hawai'i Jan 2019 - Present

Salary \$5,000 (per course)

Hours per week: 10

- o Taught undergraduate courses in the subjects related to microeconomic theory, macroeconomic theory, and data analysis and visualization.
- o Created and implemented a six-week intensive summer data analysis and visualization course for students pursuing quantitative economics.
- o Designed and constructed a learning curriculum that is easily accessible for students both in classrooms and online environments.

#### Educational Coach | Center on Disability Studies, University of Hawai'i at Manoa Honolulu, Hawai'i Hours per week: 10 Aug 2019 - Jan 2020

Salary: \$15/hr

• 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 Manoa Honolulu, Hawai'i Hours per week: 20 Aug 2017 - May 2019

Salary: \$20,000/year

- o Taught weekly sessions 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 the applied microeconomics field (i.e., health, econometrics, and health policy). Details of research-related experience include:

- Conducting predictive and explanatory models of policy issues related to Medicaid, risk adjustment, and other relevant issues in health care.
- Performing independent and original research in topics related to health economics, health policy, and econometrics.
- 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 and academic audiences.

# From Dissertation: Three Essays on Public Insurance Policies Affecting Low-Income Populations

- Who Did the ACA Medicaid Expansion Impact? Using Linear Discriminant Analysis to Estimate the Probability of Being a Complier (Job Market Paper) (Revise & Resubmit to Health Economics)
  - Used data from American Community Survey (ACS) to estimate probability of being a complier from the ACA Medicaid expansion.
  - Introduced a novel method that utilizes machine learning and econometrics to estimate the posterior probabilities of the compliers.
- Laying Down the Welcome Mat: Measuring the Impacts of the Medicaid Expansion for Children Previously Eligible for Medicaid (Working Paper)
  - Used data from the American Community Survey (ACS) to estimate the impact of the ACA Medicaid expansion on children who were previously eligible for Medicaid.
  - Applied Modified Gross Adjustment Income Thresholds from the Kaiser Family Foundation to determine Medicaid eligibility of children across various age groups, states, and years.

# 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 exchanges in estimating the risk score that accurately reflects the cost associated with treating those experiencing simultaneous 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.

# 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
- 2. 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, 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
- ECON 300: Intermediate Macroeconomics (Instructor) Summer 2019, Summer 2020
- ECON 425: Introduction to Econometrics (Teaching Assistant) Spring 2019
- ECON 627: Econometrics II (Grader) Fall 2022

#### Honors and Awards

- Burnham O. Campbell Scholarship, University of Hawai'i at Manoa 2022
- 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 Mānoa 2017-2019
- Phi Upsilon Omicron, University of Hawai'i at Mānoa 2012-2015
- Golden Key International Honor Society, University of Hawai'i at Mānoa 2012-2015
- Band Scholarship, University of Hawai'i at Manoa 2010-2016

#### Conferences

#### 2022:

- 4. "Who Did the ACA Medicaid Expansion Impact? Using Linear Discriminant Analysis to Estimate the Probability of Being a Complier". Hawai'i Economic Association Graduate Student Showcase, Honolulu, Hawai'i, TBD.
- 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? Using Linear Discriminant Analysis to Estimate 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? Using Linear Discriminant Analysis to Estimate 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).

#### 2010.

- "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.
- 1. "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).

#### 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

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Prof. Victoria Fan

Associate Professor Center on Aging University of Hawaiʻi at Mānoa

**☎** (808) 227-1842

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Prof. Sang-Hyop Lee

Professor

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