

TOM AHN

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Naval Postgraduate School
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PROFESSIONAL AND ACADEMIC APPOINTMENTS

2025-Present **Associate Professor**, Naval Postgraduate School, *Monterey, CA*
2018-2025 **Assistant Professor**, Naval Postgraduate School, *Monterey, CA*
2017-2018 **Research Associate Professor**, Naval Postgraduate School, *Monterey, CA*
2009-2017 **Assistant Professor**, University of Kentucky, *Lexington, KY*
2007-2009 **Research Associate**, Center for Child and Family Policy, Duke University, *Durham, NC*
2004-2007 **First Lieutenant**, Republic of Korea, Army, *Seoul, Korea*
1998-1999 **Consultant**, Exeter Consulting Group, *Cambridge, MA*

EDUCATION

Ph.D. in Economics (2003), Duke University, *Durham, NC*
B.A. in Economics and Biochemistry (1998), Cornell University, *Ithaca, NY*

PUBLICATIONS

General Interest and Methodology

"The Importance of Matching Effects for Labor Productivity: A Multidimensional Value-Added Approach" with E. Aucejo & J. James, Forthcoming at ***Review of Economics and Statistics***

"Information Transmission within Groups: Peer Influence in High-stakes, Irreversible Financial Decisions" with J. Cunha & P. Veith, Forthcoming at ***Review of Economics and Statistics***

"Equilibrium Grading Policies with Implications for Female Interest in STEM Courses" with P. Arcidiacono, A. Hopson, & J. Thomas, ***Econometrica***, Vol. 92 (3), pp. 849-880. (2024)

"The Distributional Impacts of Minimum Wage Increases when Both Labor Supply and Labor Demand are Endogenous" with P. Arcidiacono & W. Wessels, ***Journal of Business and Economic Statistics***, Vol. 29 (1), pp. 12-23. (2011)

"Explaining Cross-Racial Differences in Teenage Labor Force Participation: Results from a Two-Sided Search Model" with P. Arcidiacono, A. Murphy & O. Swinton, ***Journal of Econometrics***, Vol. 156 (1), pp. 201-211. (2010)

"Paying to Queue: A Theory of Persistent Differences in Nonunion Wage", with P. Arcidiacono, ***Journal of Urban Economics***, Vol. 55 (3), pp. 564-579. (2004)

Labor, Education, and Public Economics

"Opening the Black Box: Behavioral Responses of Teachers to Pay-for-Performance Incentive Programs" with J. Vigdor, ***Journal of Human Capital***, Vol. 17 (3), pp. 315-348. (2023)

"When Incentives Matter Too Much: Explaining Significant Responses to Irrelevant Information" with J. Vigdor, ***Journal of Human Capital***, Vol. 15 (4), pp. 629-664. (2021)

"Peer Delinquency and Student Achievement in Middle School" with J. Trogdon, *Labour Economics*, Vol. 44, pp. 192 – 217. (2017)

"Strategic Matching of Schools and Teachers with (and without) Accountability Pressure" *Education Finance and Policy*, Vol. 12 (4), pp. 516-535. (2017)

"A Theory of Dynamic Investment in Education in Response to Accountability Pressure" *Economics Letters*, Vol. 149, pp. 75–78. (2016)

"Matching Strategies of Teachers and Schools in General Equilibrium" *IZA Journal of Labor Economics*, Vol 4 (5), (2015)

"The Effect of Sharing a Mother Tongue with Peers: Evidence from North Carolina Middle Schools" with C. Jepsen, *IZA Journal of Migration*, Vol. 4 (5), (2015)

"A Regression Discontinuity Analysis of Graduation Standards and Their Impact on Students' Academic Trajectories" *Economics of Education Review*, Vol. 38, pp. 64-75. (2014)

"The Missing Link: Estimating the Impact of Incentives on Teacher Effort and Instructional Effectiveness Using Teacher Accountability Legislation Data" *Journal of Human Capital*, Vol. 7 (3), pp. 230-273. (2013)

"Distributional Impacts of a Local Living Wage Increase with Ability Sorting" *Economics Letters*, Vol. 112 (3), pp. 283-286. (2011)

Interdisciplinary, Policy, and Defense Research

"Analysis of Separation Behavior Using Machine Learning: The Case of Australian Navy Sailors" with S. Cole, J. Fan, & C. Griffin, *Military Operations Research Journal*, Vol. 28 (2), (2023)

"Lethality and Deterrence in Affairs of Honor" with J. Sandford & P. Shea, *Rationality and Society*, Vol. 35 (3), pp. 259-292. (2023)

"How Long Have You Been Waiting? Explaining the Role of Irrelevant Information in the Promotion of U.S. Navy Officers" with J. Niven & A. Veilleux, *Economics Bulletin*, Vol. 41 (2), pp. 604-614. (2021)

"Optimal Long-Run Talent Management of the AWF in Response to COVID-19: A Dynamic Programming Approach" with A. Menichini, *Defense Acquisition Research Journal*, Vol. 29 (1), pp. 50-77. (2021)

"The Short-Run Impacts of Connecticut's Paid Sick Leave Legislation" with A. Yelowitz, *Applied Economics Letters*, Vol. 25 (15), pp. 1267-1272. (2015)

"Geo-spatial Patterns in HPV Vaccination Uptake: Evidence from Uninsured and Publicly Insured Children in North Carolina" with J. Trogdon, *Cancer, Epidemiology, Biomarkers, and Prevention*, Vol. 24, pp. 595-602. (2015)

"Geo-spatial Patterns in Influenza Vaccination: Evidence from Uninsured and Publicly Insured Children in North Carolina" with J. Trogdon, *American Journal of Infection Control*, Vol. 43 (3), pp. 234-240. (2015)

"A Note on Bubbles and Worthless Assets: The Curious Case of General Motors" with J. Sandford & P. Shea, *Macroeconomic Dynamics*, Vol. 18 (1), pp. 244-254. (2014)

RESEARCH FUNDING

External funding as PI or Co-PI exceeds \$2.5 million.

Principal Investigator (PI) Awards

Defense Health Agency (DHA). 2024-2026 “Relocation-related Changes in Mental Health and Self-reported Behavioral Outcomes of Active-duty Personnel and Their Families” (\$618,023).

Naval Research Program (NRP). 2023-2024 “Determinants of Navy Performance Evaluation Records” (\$125,000).

Pioneer Institute of Public Policy Research. 2022 “Massachusetts Gig Worker Study” (\$7,500).

Acquisition Research Program (ARP). 2021-2022 “Individualized and Optimal Talent Management of the AWF in Response to COVID-19: Dynamic Programming Approach” (\$93,420).

Acquisition Research Program (ARP). 2021-2022 “Machine Learning in AWF Talent Management: New Approaches to Prediction of Workforce Retention and Promotion” (\$100,456).

Acquisition Research Program (ARP). 2020-2021 “Retention Analysis Modeling for the Acquisition Workforce II” (\$123,174).

Acquisition Research Program (ARP). 2019-2020 “Retention Analysis Modeling for the Acquisition Workforce” (\$96,000).

Employment Policy Institute (EPI). 2016 “Labor Market Impacts of Paid-Sick-Leave” (\$12,000).

Manhattan Institute for Policy Research. 2016 “SchoolGrades 2.0 Project” (\$96,000).

Collaborative and Institutional Research Support

Naval Research Program (NRP). 2024-2025 “Identifying Cognitive Biases in Selection Boards Using a Data-Driven Approach” (\$175,000). Role: Co-Principal Investigator.

U.S. Military Entrance Processing Command (USMEPCOM). 2020-2022 “Applying Predictive Analytics in Assessing Health Conditions of Applicants” (\$60,000). Role: Co-Investigator.

Naval Research Program (NRP). 2018-2019 “Retention Analysis Model for Navy Manpower” (\$150,000). Role: Co-Investigator.

American Enterprise Institute for Public Policy. 2009 “Accountability Sanctions in North Carolina” (\$36,900). Role: Co-Principal Investigator.

Institute of Education Sciences (IES). 2007-2009 “The Impact of School Accountability Sanctions: Evidence from North Carolina” (\$850,948). Role: Co-Principal Investigator.

Spencer Foundation. 2007-2008 “Does School Accountability Help Disadvantaged Children? Evidence from North Carolina” (\$40,000). Role: Co-Principal Investigator.

Center for Child and Family Policy, Duke University. 2007-2009 NIDA Post-doctoral Fellowship.

WORKING PAPERS

“Investment Decisions for Colleges in an Era of Declining Enrollment” with J. Vigdor

“Course Withdrawals and the Path to College Dropout” with P. Arcidiacono and H. Shah

“When Free Isn't Enough: Encouraging Young, Working Adults to Attend College via Peer Influence” with L. Hartmann

“Retirement, and the Discount Factor: A Regression Discontinuity Analysis” with J. Cunha and J. Thornton

“Revisiting Tests of Forecast Unbiasedness in Teacher Value-Added Models” with E. Aucejo and J. James

"The Impact of NCLB's Accountability Sanctions on School Performance: Regression Discontinuity Evidence from North Carolina." with J. Vigdor, NBER Working Paper 20511. Featured in NPR's All Things Considered and NBER Digest (Feb. 2015)

"Cracking Under Pressure: The Information Gap and the Sub-optimal Responses of First-Generation College Students to Academic and Financial Pressures"

POLICY AND TECHNICAL REPORTS

Federal / Defense Policy Reports

"Identifying Cognitive Biases in Selection Boards using a Data-driven Approach" with L. Hartmann, Naval Research Program. (2024)

"Determinants of Navy Performance Evaluation Records" with L. Hartmann, Naval Research Program. (2023)

"Performance Evaluation Needs Assessment" with L. Hartmann, Naval Research Program. (2022)

"Machine Learning in AWF Talent Management: New Approaches to Prediction of Workforce Retention and Promotion" with J. Fan, Acquisition Research Program. (2022)

"Individualized and Optimal Talent Management of the AWF in Response to COVID-19: Dynamic Programming Approach" with A. Menichini, Acquisition Research Program. (2022)

"USMC Mid-Career Reclassification of PMOS Personnel Policy Forecast and Analysis" with MN4106 researchers, USMC Talent Management Oversight Directorate. (2021)

"Multi-angle Intermittent Test Administrator Analysis" with MN4106 researchers, U.S. Military Entrance Processing Command. (2020)

"Retention Analysis Modeling for the AWF II" with A. Menichini, Acquisition Research Program. (2020)

"Retention Analysis Modeling for the AWF" with A. Menichini, Acquisition Research Program. (2019)

"Longitudinal Retention Analysis for Navy Personnel" with A. Menichini & S. Tick, Naval Research Program. (2019)

"Retention Analysis Model for Manpower and Personnel Analysis" with J. Arkes, J. Cunha, K. Doerr, & W. Gates, Naval Research Program. (2018)

Think Tank / Policy Briefs

"What We Do and Don't Know about Online Platform Rideshare/Delivery Workers in Massachusetts" Pioneer Institute of Public Policy Research. (2022)

"The Problem with Measuring Effects of Delinquent Peers in Education-and How to Get Around It" with J. Trogon, *The Brookings Institution, Brown Center Chalkboard* (2017) & *The Education Digest* 82(9), 18. (2017)

"Labor Market Impacts of Paid-Sick-Leave" *Employment Policy Institute Brief*. (2016)

"Were All Those Standardized Tests for Nothing? The Lessons of NCLB" with J. Vigdor, *American Enterprise Institute Brief*. (2013)

"Making Teacher Incentives Work: Lessons from NC's Teacher Bonus Program" with J. Vigdor, *American Enterprise Institute Brief*. (2011)

"Dropout Prevention: Strategies for improving high school graduation rates" with various, *North Carolina Family Impact Seminar Brief*. (2008)

"Minimum Wages and Job Search: What Do Employment Effects Really Measure?" with P. Arcidiacono, *Employment Policy Institute Brief*. (2004)

GRADUATE STUDENT MENTORSHIP AND THESIS ADVISING

Supervised over 40 theses for U.S. and International Officers. This research program functions as an applied econometrics laboratory, leveraging high-stakes administrative data to inform federal personnel, education, and health policy. Selected theses include (denotes primary advisor; unmarked entries indicate co-advisor or second reader):*

Recruiting, Retention, and Compensation

Show Me The Money: Optimizing the Timing of Continuation Pay Incentives (Reynolds 2026)*
Do Longer Service Obligations Increase Retention? Evidence from Marine Aviators (Wrinkle 2026)*
The Aging German Navy: Sea-Staff-School Workforce Dynamics and Markov Projections To 2040 (Rabe 2026)*
Retaining Talent: Estimating the Causal Effect of the BRS on Marine Corps Personnel Attrition (Thornton 2025)*
Pay to Stay: The Impact of the Navy Retention Incentive Payment in the Royal Australian Navy (Peach 2025)*
An Analysis of the Effect of the Continuation Pay Bonus on Active-Duty Marine Personnel (Martin 2024)*
Analysis of Navy Nurse Corps Specialties and Effects of Civilian Market Wages on Retention (Looker 2022)*
Assessing The Impact of Recognition on The Retention of Royal Australian Air Force Personnel (Daniel 2022)*
You Recruit Who You Are: The Quality Relationship Between Marine Recruiter and Enlistee (Eliason 2021)*
Impact of Civilian Education on Proficiency, Conduct, and Retention of Enlisted Marines (Pincus 2021)*
Long-term Impact of Personnel Vacancies in a Multi-crewing Concept: Modeling & Simulation (Roedel 2019)

Performance Evaluations and Promotions

Unintended Consequences: An Analysis of the Impact of Increased Time-In-Service Promotion Requirements on NCO Retention and Performance in the USMC (Young 2024)*
Determinants of Navy Promotions: Identifying & Understanding Potential Predictors for Promotion within the Navy Medical Service Corps (Winston 2024)*
The Effects on Navy Diversity with Removal of Officer Photos from Promotion Selection Boards (Peralta 2022)*
Analyzing Outcomes & Punishments Awarded at Courts-Martial in USMC for Systemic Differences (Otis 2021)*
Analysis of Promotion Zone Effects on Naval Officers Careers (Niven, Veilleux 2020)*

Education, Training, and Human Capital

Legacy Nav. Flight Schl Pathways vs. An Expediated Nav. Helicopter Flight Schl Approach (Dedmon, Guhin 2025)*
USMC School/Course Choices & Success with TA: An Analysis of Participation and Outcomes 2014-2021 (Scott 2025)*
Recruiting Civilian Expertise: Developing a Skills-based Hiring Model for Direct Accession into the Military (Ng 2024)*
Clearing for Takeoff: A Comparative Analysis of the Latest Aviation Service Test Battery (Campbell 2023)
Tuition Assistance: Effect of Policy Change on Usage in The Marine Corps (Hanlon 2022)*

Machine Learning and Workforce Analytics

A Machine Learning Approach to Predict Voluntary Separation from the Australian Army (Lam 2026)*
A Machine Learning Approach for More Efficient Marine Corps Recruiter Prospecting (Born 2024)
Strategic Warfighting Readiness: Evaluating the Navy Reserve Cross-Assignment Program (Neal 2023)*
Using Machine Learning to Predict Early Service Separation of Technical and Non-technical Sailors (Cole 2019)*

Ph.D. Committee (External)

Gray Hunter (2017 – University of Arizona)
Selma Begum (2013 – North South University (Bangladesh))
Nathan Barrett (2011 – LSU)

PROFESSIONAL SERVICE

Editorial Responsibilities

Associate Editor, Economics Bulletin (2018-Present)

Referee Service

Refereed over 80 manuscripts. Selected journals include:

General Interest & Methodology: AEJ: Applied Economics, AEJ: Economic Policy, Economic Journal, International Economic Review, Journal of Applied Econometrics, JPE: Microeconomics, Oxford Bulletin of Economics and Statistics, Quantitative Economics, Review of Economics and Statistics.

Labor, Education, & Public Economics: Economics of Education Review, Education Finance and Policy, Journal of Economic Behavior and Organization, Journal of Human Capital, Journal of Human Resources, Journal of Labor Economics, Journal of Policy Analysis and Management, Journal of Public Economics, Labour Economics.

Interdisciplinary & Science: American Educational Research Journal, Health Affairs, National Science Foundation (Grant Reviewer).

PRESENTATIONS

2024: NPS

2023: AEFPP

2022: USMC Talent Mgmt. Oversight Directorate, Sam Houston State Univ.

2021: ARP symposium, Naval Research Working Group

2020: ARP symposium (canceled – presentation uploaded)

2019 & Prior: Selected presentations include NBER Ed. Prgm. Mtg., Dept. of Ed., Program on Ed. Policy & Governance Conf. – Harvard Kennedy Schl, Duke Univ., UKY, UNC-Greensboro, Wake Forest Univ., Sogang Univ, Lancaster Univ., Univ. College Dublin, Sungkyunkwan Univ., Cal Poly San Luis Obispo, APPAM, AEA, American Enterprise Institute, Cleveland Federal Reserve, IWAAEE, ICFES, AEFPP, SEA, EdVoice Inst. Symposium

AWARDS

Louis D. Liskin Award for Teaching Excellence, NPS (2024)

Superintendent's Commendation for Curriculum Development, Korea Military Academy, Republic of Korea Army (2007)

Seoktap Teaching Award, Korea University (2006)