

Joanne J. Ho

[School of Environmental and Forest Sciences](#)

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Leadership Skills

Project management methodologies: Agile, Kanban, Scrum, Lean, and Kaizen

Manage distributed teams across Europe, Africa, U.S., and Asia

Facilitate climate change adaptation workshops

Coordinate interdisciplinary climate change assessments: atmospheric science, hydrology, ecology, soils science, wildlife biology, fish and aquatic sciences, infrastructure engineering, rangeland management, archeology, economics, and tourism and recreation

Technical Skills

Statistical programming: R, STATA

Spatial programming: ArcGIS

Operating Systems: Linux, Windows, Mac OS

Databases: SQL

Editing/Publishing: Microsoft Office Suite, LaTeX, Prezi, WebEx, AdobeConnect

Languages

English: native

Chinese (Cantonese): native

Chinese (Mandarin): conversational

German: conversational

Dutch: conversational

Scientific Specializations

Natural Science

- Fire ecology: multivariate modeling between hydrology, vegetative growth, fuel consumption, weather and climate variability, and human intervention
- use of meteorological and atmospheric data in quantifying natural hazards
- Forest ecology: forest health and environmental management towards long-term landscape function

Social Science/Humanities

- Finance: asset pricing and option pricing applications to natural disaster risk management
- Economics: risk aversion and risk perception evaluation, systemic risk evaluation, international trade, currency valuation
- Anthropology: ethnographic methodologies to qualitative data collection
- Development Studies: food security, farm productivity, infrastructure, logistics, and supply chain development, market participation of remote communities

Quantitative methods

- extreme value theory
- multivariate regression
- time-series
- maximum likelihood estimation
- logit, probit, nested probit, conditional probit
- longitudinal and panel data
- censored and truncated data

Professional Experience

Research scientist II, University of Washington (Feb 2016 - present)

- Connect state-of-the-science climate change research with on-the-ground management on National Forest Service lands for western U.S. (17 states)
- Leverage scientific knowledge to create climate change strategies and tactics for years 2050 and 2080.
- Project manage research across climate science, hydrology, ecology, soils science, wildlife biology, fish and aquatic sciences, infrastructure engineering, archeology, economics, and recreation
- Science lead for socio-economic assessment of climate change impacts
- Facilitate interdisciplinary approaches to solving complex social natural resource needs
- Organize workshops to connect stakeholders and land management needs with scientific knowledge
- Provide guidance to national forests in climate-oriented planning and implementation
- Grant writing

Business Process Consultant, Powerhouse 360, LLC (Feb 2011 - Feb 2016)

- Powerhouse 360 is a business process consulting company aimed to bring organizational effectiveness to innovation, research, and discovery. We focus on applying software development processes such as Agile, Scrum, Kanban, and Lean to non-software sectors such as government, non-profit, and academia. research pipeline to maximize effectiveness and return on investment (ROI)

Statistical Analyst, Globys, Inc (Oct 2009-Aug 2010)

- **Research:** Analyze 2+ million of customer data to provide business intelligence for telecom carriers
- Predict customer behaviors and characteristics based on billing data using probabilistic estimation
- Recommend customer target groups for advertisers
- Advise on software development requirements based on analytical process
- Work with chief architect to design analytical database to optimize future analytical methodologies
- **Project Management:** Spearheaded team process change to Agile methodology using Scrum
- Scrum master for research team: transform traditional solitary research organization into paired workload, group problem-solving and consensus-making, and foster overall teamship
- Facilitate communication across 3 teams by managing scrum-of-scrums and running daily stand-ups
- Sprint planning: Work with product owner to ensure meaningful research requirements vis-à-vis product vision.
- Assist product manager in backlog prioritization.

Research Fellow, University of Washington (Sep 2006-Dec 2009)

- Part of an interdisciplinary team of 7 researchers (biology, civil engineer, geology, anthropology, archeology, economics) with the following goals:
 - Identify effective ways to conduct interdisciplinary research through communication, identifying commonalities across disciplines, identify disciplinary strengths, project planning, and delegation of tasks.
 - Apply interdisciplinary approaches on a chosen environmental issue: Biodiversity protection and challenges posed by imports, immigration, recreation, and agricultural production in New Zealand

- Supervisor: Tom Hinckley, Ecologist, and Michael Brett, Civil Engineer

Visiting Researcher, Humboldt University at Berlin (Germany, Sep 2008 - Sep 2009)

- As a representative from the University of Washington Worldwide program, worked closely with Humboldt University's Farm Management Group under the Dept. of Agricultural Economics and Geography of Climates and Environmental Climatology under the Dept. of Climatology.
- Topics: climate change implications to catastrophic risks; securitization framework for individual catastrophic risks; financial risk assessment based on weather forecasting; spatial correlation of environmental hazards, joint probabilities of multi-hazards and implications to systemic risks.
- Supervisor: Martin Odening

Intern, Seattle City Light, Integrated Resource Planning (Jun 2008-Sep 2008)

- Planning Seattle's renewable energy resources based on demand growth and supply constraints
- Conduct scenario-based simulations city's energy demand in year 2020 based on expected population, climate, technological, and economic changes.
- Strategic planning of renewable resource acquisition based on feasibility, competition, and future cost projections.
- Geographic information system (GIS): map geographic locations of all potential renewable and non-renewable resource in western U.S. and their potential capacity, overlay with existing transmission lines and their current capacity.

Education

Ph.D. in Forest Resources, University of Washington (Seattle, Oct 2006 - Dec 2009)

- Advisor: John Perez-Garcia, Professor of Forest Resources
- Dissertation research: *Wildfire and Weather in Southern California: an exploratory quantitative assessment*

M.A. in International Economics, University of Sussex (Brighton, United Kingdom, Oct 2005 - Sep 2006)

- Advisor: Richardo Gottschalk, Senior Lecturer of Development Studies
- Dissertation: *Valuation of the Chinese Renminbi: signs of macroeconomic stability and deep integration in East Asia*

Postgraduate Diploma in Economics, University of Sussex (Brighton, United Kingdom, Oct 2004 - Jun 2005)

- Advisor: Sherman Robinson, Professor of Economics
- Concentration in international trade: gravity modeling and computational general equilibrium modeling
- GAMS workshop

B.A. in International Studies, University of Washington (Seattle, Sep 2000 - Jun 2004)

- Advisor: Stevan Harrell, Professor of Anthropology
- Jackson School of International Studies, International Political Economy, Honors
Thesis: *Pockets of Poverty in a Fast-growing Economy: Quantifying market shares in rural southwest China*
- UW Worldwide Sichuan Joint Program in Environmental Research

Publications and Conferences

Halofsky, J.E.; Peterson, D.L.; Ho, J.J., eds. [in press a]. [Vulnerability of natural resources to climate change in the South Central Oregon region](#). PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Hudec, J.; Halofsky, J.E.; Peterson, D.L.; Ho, J.J., eds. [in press b]. [Vulnerability of natural resources to climate change in the Southwest Washington](#). PNW-GTR-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Halofsky, J.E.; Peterson, D.L.; Ho, J.J. [et al.], eds. 2018. [Climate change vulnerability and adaptation in the Northern Rocky Mountains](#). Gen. Tech. Rep. RMRS-GTR-374. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Halofsky, J.E.; Peterson, D.L.; Ho, J.J. [et al.], eds. 2018. [Climate change vulnerability and adaptation in the Intermountain Region](#). Gen. Tech. Rep. RMRS-GTR-375. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Ho, J.J. 2018. [Climate Risk Management Practices](#). U.S. Department of Agriculture Climate Hubs.

Halofsky, J.E.; Warziniack, T. W.; Peterson, D.L.; Ho, J.J. 2017. Understanding and Managing the Effects of Climate Change on Ecosystem Services in the Rocky Mountains. Mountain Research and Development. 37: 340-352.

van den Heuvel, M.; Ho, J.; Benson, J. 2013. [Beyond Agile: Tales of Continuous Improvement](#). Modus Cooperandi. An international collection of narratives on corporate reorganizations from dysfunction towards healthy work environments that deliver customer needs.

Ho, J. 2012. [The Struggling Academic's Guide to Research](#). A leadership and management guide for scientific research.

Ho, J. 2009. Wildfire and Weather in Southern California: an exploratory quantitative assessment. PhD Dissertation for University of Washington, College of Forest Resources.

Ho, J., Odening, M. 2009. [Weather-based estimation of wildfire risk](#). SFB 649 Discussion Paper Series.

Ho, J. [Behind the Scenes: Economist Hedges Bets on Wildfires in California](#). LiveScience, August 22, 2008.

Ho, J. 2006. Valuation of the Chinese Renminbi: macroeconomic balances and regional integration in East Asia. Master of Arts Dissertation for University of Sussex, Department of Economics.

Harrell, S.; Li, X.; Ho, J.; Warren, K.; Nadal, R. 2005. Historical Ecological Change in the Upper Baiwu Valley, prepared for the Fourth International Conference on Yi Studies, Meigu, China, August, 2005.

Ho, J. 2005. Gendered Interactions in Yi Households: labor and resource allocation in Yangjuan Village, prepared for the Fourth International Conference on Yi Studies, Meigu, China, August 2005.

Ho, J. 2004. Rising Pockets of Poverty in a Fast-growing Economy: Quantifying market shares in rural southwest China. Honors Thesis for University of Washington, Jackson School of International Studies.

Awards

Co-recipient of the U.S. Department of Agriculture, Forest Service Intermountain Region Regional Forester's Award (Oct 2018)

As co-lead and co-editor of the [Intermountain Adaptation Partnership](#)

German Academic Exchange Service (DAAD) Research Grant for Doctoral Candidates (Jan 2009)
6-month fellowship supporting collaborative research between U.S. doctoral candidate and German research institutions

National Science Foundation Integrative Graduate Education and Research Traineeship (Oct 2006)
2-year fellowship at University of Washington for research on multinational models on the environment and natural resource sustainable management