

Curriculum Vitae

Personal Information



Full name: **Yajie Liu**

Nationality: Canadian citizen, Married

Address: Faculty of Biosciences, Fisheries and Economics, UiT The Arctic University of Norway

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https://uit.no/ansatte/person?p_document_id=549707

Google Scholar:

<https://scholar.google.no/citations?user=wDNtdSsAAAAJ&hl=en&oi=ao>

Research Interest

Applied microeconomics; // Evaluation of environmental resources (ecosystem services); // bioeconomic modeling; // Environmental Economics and Policy; // Effects of climate change on Marine resources; // Productivity and Efficiency Analysis

Education and Pedagogy Training

2021	Certificate for pedagogic competence , workshop organized by the Faculty of Biosciences, Fisheries and Economics, UiT
2019 - 2020	Certificate for supervising competence , 1 year course (200 hrs), UiT
2018 - 2019	Certificate for Pedagogic competence , 1 year course (200 hrs), UiT
2008	Ph.D in Resource and Environmental Economics, University of British Columbia (UBC), Vancouver, Canada,
2000	M.Sc in International Fisheries Management, Norwegian College of Fishery Science, University of Tromsø, Norway.
1990	B.Sc (Hons) in Marine Aquaculture, Shanghai Ocean University (or Shanghai Fisheries University), Shanghai, P.R. China.

Professional Experience (current and past positions)

2018 –	Associate Professor , Faculty of Bioscience, Fisheries and Economics, UiT The Arctic University of Norway.
2016 - 2019	Senior Research Scientist , Centre for Economic Research (SØF), Department of Economics and Political Science Department, Norwegian University of Science and Technology (NTNU); Norway
2011 - 2015	Research Scientist , SINTEF Fisheries and Aquaculture (now SINTEF OCEAN);
2008 - 2011	Postdoc fellow , Centre for Economic Research (SØF), Department of Economics, NTNU, Norway.
2000 - 2008	Researcher/Research Assistant , Fisheries Economics Research Unit (FERU)- Institute of Fisheries and Oceans, UBC, Vancouver, Canada.
2007	Consultant with Ecoplan International, Vancouver, BC, Canada.
2004	Consultant with WWF International.
1990 – 1998	Researcher , Research Institute of Oceans and Fisheries of Liaoning, Dalian, China;

Fellowships and Awards

2024 - 2025	UiT North2North Scholarship in the Arctic
2018 - 2019	CN-ARCTIC Fellow, China-Nordic Arctic Research Center (CNARC),
2017	Fellowship for research visit abroad, Norwegian Research Council
2005 – 2007	PhD Fellowship, Canada's Research Network in Aquaculture (3yrs);
2006	Pacific Biologist Scholarship, Fisheries Centre, UBC;
2006	Travel Award, Canada's Research Network in Aquaculture;
2004	Graduate Award in Environmental Economics, Environment Canada;
2004	Travel award, Graduate Studies, UBC;
2004	WWF Research Grant;
2003 - 2005	Female Doctoral Grants, Canada;

Mobility

2025	Visiting scholar, University of Akureyri, (2 weeks, April)
2022	Visiting scholar, University of Santiago De Compostela (3 months: April - July)
2021	Visiting scholar, Dalian Ocean University/Ocean University of China (6 months)
2019	Visiting scholar, Shanghai Jiaotong University, Shanghai, China (4 weeks) Ocean University of China, Qingdao, China (2 weeks)
2017	Visiting scholar, University of British Columbia, Canada (5 months)
2013	Visiting scholar, University of British Columbia, Canada (5 weeks)
2009	Visiting scholar, University of British Columbia, Canada (2 months)

Supervising Experiences

PhD Candidate

- Dana Elizabeth Wright (**main supervisor**): Faculty of Bioscience, Fisheries and Economics (BFE), UiT The Arctic University of Norway, June 2020 – 2025,
- Eric Bakke (**Co-supervisor**): Faculty of Bioscience, Fisheries and Economics (BFE), UiT The Arctic University of Norway, 2025 – 2028
- Lorenzo Mucciarelli (**co-supervisor**): Faculty of Bioscience, Fisheries and Economics (BFE), UiT The Arctic University of Norway, March 2024 – August 2024 (withdrew),
- Asit Kumar Roy (**external supervisor**), Department of Geography, Jadavpur University, India, 2017 -2021,

Masters Student

- 8- Faculty of Bioscience, Fisheries and Economics (BFE), UiT The Arctic University of Norway, 2019 ---
- 1 - **Co-supervisor**, Department of Marine Sciences and Applied Biology, University of Alicante, Alicante, Spain, 2010/2011
- 3 - Department of Economics, Norwegian University of Science and Technology (NTNU), 2011, 2015-2016
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Several: Institute of Fisheries and Oceans, University of British Columbia: assisted to supervise a few Master students; 2003 – 2008

Bachelor student

- 1- Faculty of Bioscience, Fisheries and Economics (BFE), UiT The Arctic University of Norway, 2024

Teaching Experience

Courses	University	Year and responsible
<u>PhD courses</u>		
BED-8004 Academic Entrepreneurship	High North Academy, UiT The Arctic University of Norway	Spring 2024 -, coordinating and lecturing (partially)
FSK-8002 Scientific writing	High North Academy, UiT The Arctic University of Norway	Fall 2024, Mentor
<i>FISH-500</i> - Graduate seminar	University of British Columbia	2002 – 2003, coordinator
<u>Master courses</u>		
<i>SOK-3600 Environmental and Resource Economics</i>	NFH, UiT The Arctic University of Norway	Fall 2025, coordinator and lecture
FSK-3551 Mini Research Project (MRP)	NFH, UiT The Arctic University of Norway	Spring 2024, supervisor
<i>SVF-3404 Blue Innovation for the Green Shift</i>	NFH, UiT The Arctic University of Norway	Fall 2023 -, lecture & coordinating the module on blue/circular Economy
<i>SOK-3555 – Fisheries Economics</i>	NFH, UiT The Arctic University of Norway	Spring, 2019 – 2021, Lecture & coordinator
<i>SOK-3554 Resource Economics & Project Appraisal</i>	NFH, UiT The Arctic University of Norway	Fall, 2018 – 2021, Lecture & coordinator
<u>Bachelor courses</u>		
FSK-2054 Environmental Economics	NFH, UiT The Arctic University of Norway	Spring 2025, lecture
FSK-2030 Sustainable aquaculture	NFH, UiT The Arctic University of Norway	Spring 2025, lecture
<i>FSK-1123 Introduction to microeconomics</i>	NFH, UiT The Arctic University of Norway	Spring 2023 -, lecture & coordinating
<i>FSK-2020-Fisheries/resource Economics</i>	NFH, UiT The Arctic University of Norway	Fall 2022 -, lecture & coordinator
SOK-1101 Statistics	NFH, UiT The Arctic University of Norway	Fall 2019 – 2020: Lecture
SOK-2037 Resource Economics	NFH, UiT The Arctic University of Norway	Spring 2018

SØK-1101 Environmental & Resource Economics	Department of Economics, Norwegian University of Science and Technology	Fall 2010: lecture & coordinator
<u>Intensive courses and Guest lecture</u>		
Fisheries Economics	National <i>Fisheries and Aquaculture Institute</i> , Kalawewa, Sri Lanka	Lectures, intensive course Jan. 2020
Land and Resource Economics, Food & Resource Economics and Forest Resource Management	Faculty of Land and Food Systems, University of British Columbia	Guest lectures, 2005 - 2007
Economic evaluation and tools	Conservation Strategy Fund. Koeve Lodge, Heiltsuk Traditional Territory, British Columbia, Canada;	Intensive course, 2003, lecture

Organization of Scientific Meetings

- 2024** Co-organizing a session on AI in fisheries and aquaculture economics and management, IIFET, Penang, Malaysia, July 15 -19,
- 2021 - 2025** Co-chairing ICES WGRMES annual meeting,
- 2017** Member of the scientific committee, NAAFE (North American Association of Fisheries Economics), and Session organizer, coordinator and moderator: The climate change in the Arctic, 22 – 24 March, La Paz, Mexico,
- 2012** Member of the scientific committee, IIFET, and Session organizer, coordinator and moderator on “The Economics of Aquaculture”, July 16 - 20, Dar es Salaam, Tanzania
- 2009** Symposium on Age-structured modeling in fisheries economics and bioeconomic modelling, August 12-13, Trondheim, Norway

Institutional Responsibilities/ Commissions of Trust

Co-chair of the ICES WGs on Resilience and Marine Ecosystem Services, 2021 - 2026

Chair of the
evaluation
committee

- 5 PhD thesis/defense: UiT, 2020 ---
- 7 Master thesis/Defense, UiT, 2020 ---:
- 4 Recruitment: (Faculty/postdoc/PhD), UiT 2019 ---

Member of
committee

- 3 PhD mid-term evaluation - UiT: 2020 ---
- IFM Master Program Evaluation - UiT: 2020/2021
- ICES WGREMEs: 2017 -

**External
sensors/eval
uation**

- **Thesis:** 1 PhD thesis evaluation - University of Porto, Portugal, 2024; 2 Master thesis - University of Agder, Norway and Memorial University of Newfoundland, Canada, 2022/2023;

- **Proposal evaluation:** French Research Council (1 -2016; 1-2025); EU of Horizon programs (2 – 2016/2017); 2 – Norwegian College of Fisheries Science, UiT, 2023
- **Course: BIO412** (Master level) – Ecosystem Services and Marine Spatial Planning (2021 – 2023), (University of Agder, Norway); **BIA3003** – Introduction to Research Methods (2023), NTNU, Norway.
- **Faculty position:** University of Akureyri, 2025; Sothorn University of Denmark, Denmark 2020;
- **Students paper/presentations:** NAAFE – 2017; IIFET – 2012
- **Journals Reviewers:** 20+ journals

Memberships of Scientific Society

2017 –	ICES WGs on Resilience and Marine Ecosystem Services
2012 – 2018	Members: TBTI (Too Big To Ignore – Global Partnership for Small-Scale Fisheries Research)
2005 –	International Institute for Fisheries Economics and Trade (IIFET); Members of European Association of Environmental and Resource Economists (EAERE); Norther American Association of Fisheries Economics (NAAFE); International Association of Aquaculture Economics and Management (IAAFM).

Major Projects

- 1) **EUGLOH** (2023 ---), The European University Alliance for Global Health (EUGLOH). Funded by the European Union.
- 2) **ECOGIV** (NORAD II, 2022 – 2026, co-applicant). Ecosystem-based management of coastal marine resources – Ghana, Indonesia, Vietnam. Funded by the Norwegian Research Council, Norway
- 3) **C2C** (2022 – 2026, participant). From Catchment to Coast. Funded by the Environmental Directorate through the Fram Center, Norway.
- 4) **FIPA Project** 2025-02: "Evaluation of the effects of benthic resource management measures with application in case studies administered by the Chinquihue Foundation, Chile.
- 5) **Cod Enhancement** (Co-PI, UiA, 2022 – 2023). Evaluation public perception to a potential cod enhancement program in the Sothorn Norway. Partially funded by the UiA, Norway.
- 6) **VALLFEST** (PI, 345 000, 2021). Virtual and Augmented Learning: lessons from ex-situ tourism; Funded by North2North at UiT, Norway.
- 7) **PhD project** "The Economics and Management of Lobster Fisheries" (BFE faculty, UiT, 2020 – 2024); funded by the BFE-UiT, Norway
- 8) **GoJelly** (RCN - 309097, co-applicant, 1 million, 2020). Strengthening the Norwegian participation in the GoJelly! project through increased stakeholder involvement in a Norwegian context; funded by the Norwegian Research Council (NFR); Norway
- 9) **SAMT, Sustainable Tourism Development in the Nordic Arctic** (Nordregio, co-applicant, 2018 – 2021), Nordic
- 10) **Nor-CHN Aquaculture Technology and Market**, (PI, RCN, 295217, 2019, 171 000 kr). Research collaboration with China related to aquaculture technology and market. Funded by the Norwegian Research Council, Norway

- 11) **CNARC** Fellowship for abroad visit (PI, 2019). Climate Change and Environmental governance in the Arctic. Funded by the Norwegian Research Council, Norway
- 12) **CHASES** (RCN – 255110, Co-applicant, WP leader, 2016 – 2020, 7 million NOK): Consequences of land-use change and human activity on anadromous salmonids and the ecosystem services that they provide; funded by the Norwegian Research Council, Norway
- 13) **REGIMES** (RCN – 257628, Co-applicant, WP leader, 2016 - 2019, 5.9 million NOK): An interdisciplinary investigation into scenarios of national and international conflicts in the Svalbard zone under a changing climate in the Arctic, funded by the Norwegian Research Council.
- 14) **OCEAN-CERTAIN** (EU- 603773, participant, 2012 – 2017, 9.3 million Euro): Ocean food-web patrol - climate effects: reducing targeted uncertainties with an interactive network, funded by the Norwegian Research Council.
- 15) **Externality (DSF-Canada- PI, 2014- 2015, close to 1 million NOK)**: Evaluate environmental cost of salmon aquaculture and feasibility analysis of netcage vs. land-based farming systems in BC, Canada; funded by the David Foundation.
- 16) **JANUS** (RCN - 216604, Co-applicant and WP leader, 2012 – 2015, 5.3 million NOK): Modeling an Interdisciplinary Early Warning System for Future Fisheries Scenarios: A socio-bioeconomic value-chain evaluation; funded by the Norwegian Research Council.
- 17) **SALMODIS** (RCN - 207570, participant, 2010 – 2014, 20.8 million): Sustainable disease control strategies in salmon farming; decision support integrating economic, environmental and social dimensions; funded by the Norwegian Research Council.
- 18) **VANN** (RCN – 183982, participant, 2008 – 2011, 3 million NOK) Management of wild Atlantic salmon and escaped farmed salmon: economic drivers, impacts and conflicts. Funded by the Norwegian Research Council.

Selected Publications

Track Record: 40+ peer reviewed and other publications. **H-Index:** 20 and **i10-Index:** 26.

- 1) Liu, Y., T. Rafoss, L. F. O. Turbis and E. B. Gonzalez (2024). Stakeholders' Perception and Willingness-to-pay for an Aquaculture-based Fishery Enhancement Program for Coastal Cod in Norway. *Aquaculture* 591, 741111. <https://doi.org/10.1016/j.aquaculture.2024.741111>
- 2) Datta,D, A. K. Roy, Y. Liu and N. Das (2024). Contextualizing willingness to pay for sustainable management of agroecosystem services in a rapidly transforming landscape: insights from the interdunal wetlands of Medinipur Coastal Plain, India. *Journal for Nature Conservation* 80, 126658. <https://doi.org/10.1016/j.jnc.2024.126658>
- 3) Ren, H., Y. Liu, & K.P. Paudel (2023). *Cod Catch Forecasting through Machine Learning Algorithms at the Haul Level*. International Academy, Research and Industry Association (IARIA). ISBN 978-1-68558-089-6.
- 4) Liu, X, H. Wu, Y. Wang, Y. Liu, H. Shu, Z. Li, P. Shan and Z. Yuan (2023). Comparative assessment of Chinese mitten crab aquaculture in China: spatiotemporal changes and trade-offs. *Environmental pollution* 337, 122544. <https://doi.org/10.1016/j.envpol.2023.122544> [Get rights and content](#)
- 5) Wright, D.E and Y. Liu. (2023). Assessing the Impact of Environmental Variability on Harvest in a Heterogeneous Fishery: A Case Study of the Canadian Lobster Fishery. *Journal*

- 6) Mangano, M. C. et al. (2022). The Aquaculture Supply Chain in the time of COVID-19 pandemic: vulnerability, resilience, solutions and priorities at the global scale. *Environmental Science and Policy* 127: 98 - 110.
<https://doi.org/10.1016/j.envsci.2021.10.014>
- 7) Murciano, M.G., Y. Liu, V. Unal and J.L.S. Lizaso (2021). Comparative analysis of the social vulnerability assessment to climate change applied to fisheries from Spain and Turkey. *Scientific Report* 11, 13949.
- 8) Sara, M.C., et al. (2021). The synergistic impacts of anthropogenic stressors and COVID-19 on aquaculture: a current global perspective. *Reviews in Fisheries Science and Aquaculture*, 1 – 13.
- 9) Dankel, D. J., R. G. Tiller, E. Koelma, V.W.Y. Lam & Y. LIU (2020). The Melting Snowball Effect: A heuristic for sustainable Arctic governance under climate change. *Frontiers in Marine Science* 7, 537.
- 10) Johannesen, A. B and Y. Liu (2019). Non-use Values and Cooperation in Local Common Property Exploitation. In Olaussen (Ed): *Contribution to Natural Resource Economics* (festschrift to Anders Skonhoft). Fagbokforlaget, Bergen. 161-181.
- 11) Liu, Y.; Bailey, L.J.; Davidsen, J.G. (2019) Social-Cultural Ecosystem Services of Sea Trout Recreational Fishing in Norway. *Frontiers in Marine Science* 6 (178): 1- 13.
- 12) Tiller, R., E. Nyman, D. Dankel and Y. Liu (2019). Resilience to exogenous shocks in environmental management regimes in the Arctic – lessons learned from survivors. *The Polar Journal* 9 (1): 133 -153.
- 13) Luis Outeiro, Elena Ojea, João Garcia Rodrigues, Amber Himes-Cornell, Andrea Belgrano, Yajie Liu, Edna Cabecinha, Cristina Pita, Gonzalo Macho & Sebastian Villasante (2017). The role of non-natural capital in the co-production of marine ecosystem services, *International Journal of Biodiversity Science, Ecosystem Services & Management*, 13:3, 35-50.
- 14) Bailey, J.L., Y. Liu and J.G. Davidsen (2017). Incorporating Societal Concerns into Science: Exploring Fisheries Science as a Social Activity. *ICES Journal of Marine Science* 74 (2): 598-611.
- 15) Tiller, R.G., Borgersen, Å.L., Knutsen, Ø., Bailey, J., Bjelland, H.V., Mork, J., Eisenhauer, L. and Liu, Y. (2017). Coming Soon to a Fjord Near You: Future Jellyfish Scenarios in a Changing Climate. *Coastal Management*, 45(1): 1-23.
- 16) Liu, Y., T.W. Rosten, K. Henriksen, E. S. Hognes, S. Summerfelt, B. Vinci (2016). Comparative economic performance and carbon footprint of two farming models for producing Atlantic salmon (*Salmo salar*): Land-based closed containment system in freshwater and open netpen in seawater. *Aquaculture Engineering* 71: 1 - 12.
- 17) Olaussen, J.O., Y. Liu and A. Skonhoft (2015). Conservation versus harvest of wild Atlantic salmon: The cost of farmed salmon induced mortality. *Fisheries Research* 168: 63 -71.
- 18) Tiller, R.G., J. Mork, Y. Liu, R. Richards, and Å.L. Borgersen. To adapt or not adapt: assessing the adaptive capacity of artisanal fishers in 1 the Trondheimsfjord (Norway) to both jellyfish (*Periphylla periphylla*) bloom and purse seiners. *Marine and Coastal Fisheries* 7(1): 260 -273.
- 19) Richards, R.G., J.O. Meynecke, O. Sahin, R. Tiller and Y. Liu (2014). Ocean acidification and fisheries – a Bayesian network approach to assessing a wicked problem. In Ames,

D.P., Quinn, N.W.T., Rizzoli, A.E. (Eds.): *Proceedings of the 7th International Congress on Environmental Modelling and Software*, June 15-19, San Diego, California, USA. ISBN: 978-88-9035-744-2.

- 20) **Liu, Y.** and H.V. Bjelland (2014). Estimating costs of sea lice control strategy in Norway. *Preventive Veterinary Medicine* 117 (3): 469 – 477.
- 21) **Liu, Y.**, J.O. Olaussen and A. Skonhoft (2014). Fishy Fish? Economic Impacts of Invasive Species: Farmed vs wild salmon. *Aquaculture Economics and Management* 18(3): 273 - 302.
- 22) Tiller, R.G., J. Mork, R. Richards, L. Eisenhauer, **Y. Liu**, J.-F. Nakken and Å.L. Borgersen (2014). Something fishy: Assessing stakeholder resilience to increasing jellyfish (*Periphylla periphylla*) in Trondheimsfjord, Norway. *Marine Policy* 46: 72 -83.
- 23) **Liu, Y.**, O.H. Diserud, K. Hindar and A. Skonhoft (2013). An ecological-economic model on the effects of interactions between escaped farmed and wild salmon. *Fish and Fisheries* 14(2): 158-173.
- 24) **Liu, Y.**, R. Chuenpagdee and R. Sumaila (2013). Salmon Aquaculture in Canada and Norway – Appraising Governability. In M. Bavinck, R. Chuenpagdee, S. Jentoft and J. Kooiman (Eds): *Governability of Fisheries and Aquaculture: Theory and Applications*, 201-218.
- 25) **Liu, Y.**, J. Volpe and R. U. Sumaila (2011). Potential ecological and economic impacts of sea lice from farmed salmon on wild salmon fisheries. *Ecological Economics* 70: 1746-1755.
- 26) Olaussen J.O. and **Y. Liu** (2011). On the willingness-to-pay for recreational fishing - Escaped farmed versus wild Atlantic salmon. *Aquaculture Economics and Management* 15: 245-261.
- 27) **Liu, Y.**, J.O. Olaussen and A. Skonhoft (2011). Wild and farmed salmon sectors in Norway – a review. *Marine Policy* 35: 413-418.
- 28) **Liu, Y.** and R. Sumaila (2010). Estimating pollution abatement costs of salmon aquaculture: a joint production approach. *Land Economics* 86(3): 569-584.
- 29) **Liu, Y.** and U.R. Sumaila (2008). Can farmed salmon production keep growing? *Marine Policy* 32:497-501.
- 30) **Liu, Y.** and U.R. Sumaila (2007). Economic analysis of netcage versus sea-bag production systems for salmon aquaculture in British Columbia. *Aquaculture Economics and Management* 11: 413-437.
- 31) Sumaila, U.R., J. Volpe and **Y. Liu** (2007). Potential economic benefits from sablefish farming in British Columbia. *Marine Policy* 31(2): 81-84.
- 32) Sumaila, U.R., G. Ishimura, **Y. Liu** and A.D. Marsden, 2008. Session summary: Reconciling fisheries with conservation and the valuation of fisheries. In: *“Reconciling fisheries with conservation: Proceedings of the Fourth World Fisheries Congress.”* J. Nielsen, J.J. Dodson, K. Friedland, T.R. Hamon, J. Musick, and E. Verspoor, eds. pp. 705-706.

- 33) Pauly, D., P. Tyedmers, R. Froese, and **Y. Liu** (2001). Fishing down and farming up the food web. *Conservation Biology in Practice* 2, 25.
- 34) Cheng, J., W.W. Cheung, T.J. Pitcher, **Y. Liu** and G. Pramod (2006). An estimation of compliance of the fisheries of China with the Article (Fisheries Management) of the UN Code of Conduct for responsible fishing. In: Pitcher, T.J., D. Kalikoski and G. Pramod (eds): Evolutions of Compliance with the FAO (UN) Code of Conduct for Responsible Fisheries. Fisheries Centre Research Report 14(2): 1-20.
- 35) **Liu, Y.**, J. Volpe and Sumaila, U.R. (2005). Ecological and economic impact assessment of sablefish aquaculture in British Columbia. Fisheries Centre Research Reports 13(3), 33p.
- 36) Sumaila, U.R., **Y. Liu** and P. Tyedmers (2001). Small versus large scale fishing operations in the North Atlantic. In: Pitcher, T., U. R. Sumaila and D. Pauly (eds.), Fisheries Impacts on North Atlantic Ecosystems: Evaluation and Policy Exploration. Fisheries Centre Research Reports 9(3): 28-35

Other Publications:

- 37) **Liu, Y** and E. Svendsen (2015). Cost Analysis of Diesel and LNG Engines for wellboat Transport Systems for Salmon Aquaculture. SINTEF Fiskeri og Havbruk Report. P13.
- 38) **Liu, Y** (2014). Cost Analysis of Different Wellboat Transport Systems for Salmon Aquaculture. SINTEF Fiskeri og Havbruk Report. P15.
- 39) Hognes, E.S and **Y. Liu** (2013). Cost and Climate Assessment of Semi-rigid Materials from Salmon Aquaculture. SINTEF Fiskeri og Havbruk Report. P25.
- 40) **Liu, Y.** (2008). An Analysis of the Management and Economics of Salmon Aquaculture. PhD thesis. 158p.
- 41) **Liu, Y.**, D. Nandakumar, S. Salas and R. Chuenpagdee (2005). Economic discussion at the 4th World Fisheries Congress. In: Chuenpagdee, R. and Bundy, A. (eds.): Innovation and Outlook in Fisheries: An Assessment of Research Presented at the 4th World Fisheries Congress. Fisheries Centre Research Report 13(2): 42-28.
- 42) **Liu, Y.** (2004). Waste discharge and salmon aquaculture: waste estimation, ecological impacts, environmental costs and profitability. Submitted to WWF, 42p.
- 43) **Liu, Y.** (2000). Aquaculture technology of flatfish and its possible application in China. Master thesis, 48p.
- 44) **Liu, Y.** (1990). The study of LHDs in Chinese Shrimp larvae (*Penaeus chinensis*). BSc thesis, Shanghai Fisheries University, 30p.

Manuscripts under Review/in Preparation:

- 45) **Y- Liu** and Nguyen, T.V. (**under review**). Productivity Growth in Norwegian cod trawl fishery: new insights into marine fisheries in the Arctic Region. *Marine Policy*.
- 46) **Liu, Y.**, E. Aasmaa and K.M. Dunlop. (**under review**). Assessing Anglers' participation and willingness to pay for the current eradication management program for pink salmon invasion. *Economic Analysis and Policy*.

- 47) Wright, D.E and **Y. Liu**. (**under review**). Assessing production risk under environmental variability in a competitive fishery. *Marine Resource Economics*.
- 48) **Liu, Y.**, J. Bailey and J.G. Davidsen. Estimating recreational value of sea trout fishing in Norway: a choice experiment approach (re-submitting).
- 49) Liu, Y. and R. Gombau (in preparation). Economic feasibility analysis of seaweed farming. (Aquaculture Economics and Management?)
- 50) Nguyen, T.V. and **Y.Liu** (submitting). Efficiency analysis in a changing climate for marine fisheries in the Arctic region. New insights into the productivity growth of Norwegian cod Fisheries. *Journal of productivity Analysis*
- 51) **Liu, Y**, Ren, H., and K.K. P. Paudel (in preparation). Forecasting fish harvests and their climate impact through machine learning analysis.
- 52) **Liu, Y.** and T.T.T. Pham (in preparation). Optimal Stocking and harvesting strategy of salmon aquaculture.
- 53) **Liu, Y.**, V. Lam. Potential economic impacts of climate change on Norwegian Fisheries resources in the Arctic.
- 54) Zhao, HY and **Y. Liu** (resubmit). Are laws and policies adequate for Arctic environmental governance? From the perspective of China 's "Polar Silk Road".
- 55) **Liu, y.**, et al. Fishing location matters? Assessing effects of climate change on fishing, an agent-based modeling framework. (in preparation)

Presentations/Seminars

- Assessing ecosystem service from sea trout fishing. **Oral presentation** at the IIFET, July 18- 22, 2022. Vigo, Spain.
- Fisheries Economics and Management in Norway, **Invited presentation**, at the University of Ruhuna, January 9. 2020, Sri Lanka.
- The "Melting Snowball Effects. **Invited presentation**, at the Arctic Cycle Assembly, Oct 10 -12, 2019. Reykjavik, Iceland.
- Modelling changes in economics of fisheries in the Arctic under climate change. **Oral presentation** at the CNARC conference, May 6-7, 2019, Shanghai, China
- The research-management nexus. **Oral presentation** at the Norwegian Ecological Society Conference, Feb. 11- 12, 2019. Tromsø, Norway
- Economic Impacts of climate change on marine fisheries in the Arctic. **Invited presentation** at Bioeconomic workshop, October 18-19, 2018, Bergen, Norway.
- Potential impacts of multiple stressors on marine fisheries resources: a case study of Fraser River Sockeye Salmon in British Columbia. **Oral presentation** at the Nature Resource Modeling, June 11 -13 June, 2018, China, Guangzhou, China
- Ecosystem services of Recreational sea trout fishing In Norway. **Invited presentation**
- At Sjørøret og Sjørøyekonferanse NJFF. May 25 -26, 2018, Tromsø.
- Emerging jellyfish and its significance in local fisheries – a Periphylla Periphylla story in the Trondheimsfjord. **Invited presentation** at CIESM workshop, April 17 -20, 2017, Paris, France

- Estimating the recreational values of sea trout fishing in Norway. **Oral presentation** at the Nordic Association of Environmental and Resource Economics, April 12 -13, 2018, Bergen, Norway
- Impacts of climate change on marine fisheries resource in the Arctic. **Oral presentation** at NAAFE conference, La Paz, Mexico, March 22-24, 2017
- Incorporating Societal Concerns into Science: Exploring Fisheries Science as a Social Activity. **Poster presentation** at IIFET conference, Aberdeen, Scotland, July 11-14, 2016
- Exploring the Influence of Climate, Competition and Aquaculture on the Dynamics of Fraser River Sockeye Salmon and the Economics of their Fisheries. **Oral presentation** at IIFET conference, Brisbane, Australia, July 7-11, 2014.
- Emerging Jellyfish and its Significance in Local Fisheries - a Periphylla Story in the Trondheimsfjord. **Oral presentation** at IIFET conference, Brisbane, Australia, July 7-11, 2014.
- Economic Tradeoffs of Climate Change – Adaptation strategies and measures. **Workshop** on AL CLIMATE, Trondheim, Norway, October 11, 2013.
- Fishy Fish? Economic Impacts of Invasive Species: Farmed vs wild salmon. **Oral presentation** at BioEco conference, Cambridge, England, Sept. 18-20, 2013.
- Norwegian renewable energy in a resource economic perspective. **Seminar**, at the Department of Industrial Economics and Management, NTNU, November 6, 2012.
- Economic cost of escapees to salmon aquaculture industry. **Oral presentation** at World Aquaculture Society meeting, Prague, Czech Republic, September 1 - 5, 2012.
- 'Optimal' stocking and harvesting strategies for salmon aquaculture. **Oral presentation** at World Aquaculture Society meeting, Prague, Czech Republic, September 1 - 5, 2012.
- Economics of Disease control strategy for salmon aquaculture. **Oral presentation** and **section chair** at IIFET, Des Salaam, Tanzania, July 16-20, 2012.
- Costs of Escapees in Norway. **Oral presentation** at Havbruk Programm, Stavanger, Norway, April 17-19, 2012.
- Economics of genetic interaction between wild and farmed salmon. **Oral presentation** at BIOECON conference, Geneva, September 12-14, 2011.
- Ecological and economics of genetic interaction between wild and farmed salmon. **Oral presentation** at EAERE conference, Rome, June 28-30, 2011.
- What is the value of a wild salmon – the case of farmed escapees. **Oral presentation** at Miljø 2015-konferansen III, Oslo, February 15-16, 2011.
- An Ecological-Economic Model on the Effects of Interactions between Escaped Farmed and Wild Salmon. **Invited presentation** at PICES, Portland, October 25-29, 2010.
- An ecological-economic model of genetic interaction between wild and farmed salmon. **Oral presentation** at the 15th IIFET conference, Montpellier, France, July 13-16, 2010.
- The economics of biological invasion. **Invited seminar** at the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), Lowestoft, England, 31 March, 2010.

- Economic impacts of biological invasion: escaped farmed vs. native species. **Invited Seminar** at the Scottish Marine Institute, Oban, Scotland, 29 March, 2010.
- The economics of genetic interaction between farmed escapees and wild salmon. **Oral presentation** at the workshop titled '*age-structured models in fisheries economics and bioeconomic modeling*'. Trondheim, Norway, August 12-13, 2009.
- The economic impacts of invasive species: farmed vs. wild. **Oral presentation** at EAERE Conference, Amsterdam, Netherlands, June 24-27, 2009
- The economics of invasive species: a general model. **Oral presentation** at NAAFE Forum, Rhode Island, USA, May 18-22, 2009.
- The economics of invasive species: farmed vs. wild salmon. **Oral presentation** at Norwegian Business Economics Conference, Bergen, Norway, January 5-6, 2009.
- Estimating pollution abatement costs of salmon aquaculture. **Invited Seminar** at the Department of Economics and Business Administration, University of Stavanger, Norway, November 28, 2008.
- The pollution abatement costs of salmon aquaculture. **Oral presentation** at the 14th IIFET Conference, Nha Trang, Vietnam, July 21-25, 2008.
- The governance of salmon aquaculture. **Invited oral presentation** at the 138th American Fisheries Society Conference, Ottawa, Canada, August 18-22, 2008.
- Wild salmon fisheries and salmon aquaculture in British Columbia. **Invited oral presentation** at the Ecological Society of America, Memphis, U.S.A., August 6-11, 2006.
- Potential ecological and economic impacts of sea lice on wild salmon fisheries. **Oral presentation** at the 13th IIFET, Portsmouth, England, July 11-14, 2006.
- Economic evaluation of Pinto abalone selective breeding program. **Oral presentation** at World Aquaculture Conference, Florence, Italy, May 9-14, 2006.
- Economic values for Pinto abalone selective breeding index. **Poster presentation** at AquaNet V, Victoria, BC, Canada, October 17-21, 2005.
- Ecological impacts and environmental costs associated with waste discharges from salmon aquaculture. **Poster presentation** at the World Fisheries Congress, British Columbia, Canada, May 2-6, 2004.
- Alternative technologies for salmon aquaculture: economic assessment. **Oral presentation** at the World Aquaculture Conference, Hawaii, U.S.A., March 1-5, 2004.
- The economics of salmon aquaculture and fisheries in British Columbia. **Invited presentation** by Conservation Strategy Fund at Koeye Lodge, Heiltsuk Traditional Territory, British Columbia, Canada; October, 2003.