Hui Liu Curriculum Vitae Associate Professor

Department of Marine Biology Texas A&M University at Galveston 200 Seawolf Parkway Galveston, TX 77553

Education Ph.D. Oceanography (2006) M.S. Statistics (2008) M.S. Marine Biology (1995) B.S. Fisheries (1992) Email: liuh@tamug.edu http://www.tamug.edu/marb/Faculty/ Phone: (409)740-4716 Fax: (409)740-5001

University of Alaska Fairbanks University of Alaska Fairbanks Ocean University of China Ocean University of China

## **Professional Experience**

2018-, Associate Professor, Department of Marine Biology, Texas A&M University at Galveston 2012-2018, Assistant Professor, Department of Marine Biology, Texas A&M University at Galveston 2013-, Graduate Faculty, Department of Oceanography, Texas A&M University 2011-2012, Research Scientist, NOAA/Northeast Fisheries Science Center, Woods Hole, MA 2009-2011, Postdoctoral Fellow, NOAA/Northeast Fisheries Science Center, Woods Hole, MA 2007-2009, Postdoctoral Researcher, Hatfield Marine Science Center, Oregon State University

## **Peer-Reviewed Publications**

\*graduate students supervised by HL

<sup>§</sup> in Chinese

- Zuo T, Liu H. (2019) Seasonal size composition and abundance distribution of *Euphausia* pacifica in relation to environmental factors in the southern Yellow Sea. Acta Oceanologica Sinica 38:2, 70–77
- Kobari T, Sastri AR, Yebra L, **Liu H**, Hopcroft RR. (2019) Evaluation of trade-offs in traditional methodologies for measuring metazooplankton growth rates: assumptions, advantages and disadvantages for field applications. *Progress in Oceanography* 10.1016/j.pocean.2019.102137
- Rooker JR, Fraile I, Liu H, Abid N, Dance MA, Itoh T, Kimoto A, Tsukahara Y, Rodriguez-Marin E, Arrizabalaga H. (2019) Wide-ranging temporal variation in transoceanic movement and population mixing of bluefin tuna in the North Atlantic Ocean. *Frontiers in Marine Science* 6:398. doi: 10.3389/fmars.2019.00398
- Yang Q, Liu H, Liu G-z, Gu Y-b (2018) Spatio-temporal distribution pattern of *Calanus sinicus* and its relationship with climate variability in the northern Yellow Sea. *ICES Journal of Marine Science* 75:2, 764–772.
- Liu H, Karnauskas M, Zhang X, Linton B, Porch C (2017) Forecasting dynamics of red snapper (*Lutjanus campechanus*) in the U.S. Gulf of Mexico. *Fisheries Research* 187, 31–40.
- Bi R\*, Liu H (2017) Effects of variability among individuals on zooplankton population dynamics under environmental conditions. *Marine Ecology Progress Series* 564, 9–28.
- Harford WJ, Karnauskas M, Walter JF, Liu H (2017) Non-parametric modeling reveals environmental effects on Bluefin tuna recruitment in Atlantic, Pacific, and Southern Oceans. *Fisheries Oceanography* 26:4, 396–412.
- Liu H, Zhang X, Yang Q, Zuo T, Quigg A (2017) Mesozooplankton dynamics in relation to environmental factors and juvenile fish in a subtropical estuary of the Gulf of Mexico. *Journal of Coastal Research* 33:5, 1038–1050.

- Hu H, Wang J, **Liu H**, Goes J (2016) Simulation of phytoplankton distributions and variations in the Bering-Chukchi Sea with a 3-D physical biological model, *Journal of Geophysical Research Oceans* 121,4041–4055.
- Zhang H<sup>§</sup>, Song C-m, Yan Q-l, **Liu H**, Fan J-f, Guo H, Yang Q (2016) Comparative study on the spatial niche of zooplankton in the Liaohe Estuary in spring and summer. *Marine Environmental Science* 35, 920–925.
- Pulver JR\*, Liu H, Scott-Denton E (2016) Modeling community structure and species co-occurrences using fishery observer data. *ICES Journal of Marine Science* 73, 1750–1763.
- Doerr JC, Liu H, Minello TJ (2016) Salinity selection by juvenile brown shrimp (*Farfantepenaeus aztecus*) and white shrimp (*Litopenaeus setiferus*) in a gradient tank. *Estuaries and Coasts* 39, 829–838.
- Liu H, Bi H, Peterson WT (2015) Large-scale forcing of environmental conditions on subarctic copepods in the northern California Current system. *Progress in Oceanography* 134, 404–412.
- Glaser SM, Fogarty MJ, Liu H, Altman I, Hsieh C-h, Kaufman L, MacCall A, Rosenberg A, Ye H, Sugihara G (2014) Dynamic complexity in coupled human-marine resource systems. *Fish and Fisheries* 15, 616–633.
- Liu H, Fogarty MJ, Hare JA, Hsieh C-h, Glaser SM, Ye H, Deyle E, Sugihara G (2014) Modeling dynamic interactions and coherence between marine zooplankton and fishes linked to environmental variability. *Journal of Marine Systems* 131,120–129.
- Bi H, Ji R, Liu H, Jo Y-H, Hare JA (2014) Decadal changes of zooplankton in the northeast coast of the United States. *PLoS ONE* 9(1): e87720. doi:10.1371/journal.pone.0087720.
- Liu H, Hopcroft RR, Bi H (2013) Statistical modeling copepod growth rates: comparisons for data collections using the artificial cohort (AC) method. *Journal of Experimental Marine Biology and Ecology* 448, 271–280.
- Fogarty MJ, Friedland K, Col L, Gamble R, Hare J, Hyde K, Link L, Lucey S, Liu H, Nye J, Overholtz WJ, Richardson D, Rountree B, Taylor M (2012) Status of the Northeast U.S. continental shelf Large Marine Ecosystem: An indicator-based approach. *AFS Gulf of Maine Symposium Proceedings: Advancing an Ecosystem Approach in the Gulf of Maine. American Fisheries Society Symposium* 79, 139–165.
- Liu H, Fogarty MJ, Glaser SM, Altman I, Kaufman L, Rosenberg AA, Sugihara G (2012) Nonlinear dynamic features and co-predictability in the Georges Bank fish community. *Marine Ecology Progress Series* 464, 195–207.
- Pranovi F, Link J, Fu C, Cook AM, Liu H, Gaichas S, Friedland KD, Utne KR, Benoît HP (2012) Trophic-level determinants of biomass accumulation in marine ecosystems. *Marine Ecology Progress Series* 459, 185–201.
- Fu C, Boldt J, Link JS, Bundy A, Gaichas S, Gamble R, Cook A, Utne KR, **Liu H**, Friedland K (2012) The effects and relative importance of fishing, trophodynamic and environmental drivers on ecosystems. *Marine Ecology Progress Series* 459, 169–184.
- Liu H, Peterson WT (2010) Seasonal and inter-annual variations in the abundance and biomass of Neocalanus plumchrus in continental slope waters off Oregon. Fisheries Oceanography 19:5, 354– 369.
- Liu H, Hopcroft RR (2008) Growth and development of *Pseudocalanus spp*. in the northern Gulf of Alaska. *Journal of Plankton Research* 30, 923–935.
- Liu H, Hopcroft RR (2007) A comparison of seasonal growth and development of *Calanus marshallae* and *C. pacificus* in the northern Gulf of Alaska. *Journal of Plankton Research* 29, 569–581.
- Liu H, Hopcroft RR (2006b) Growth and development of *Metridia pacifica* (Copepoda:Calanoida) in the northern Gulf of Alaska. *Journal of Plankton Research* 28, 769–781.
- Liu H, Hopcroft RR (2006a) Growth and development of *Neocalanus flemingeri/plumchrus* in the northern Gulf of Alaska: validation of the artificial cohort method in cold waters. *Journal of Plankton Research* 28, 87–101.

- You K<sup>§</sup>, Zeng X, Liu H, Zhang X, Liu Q (2003) Selectivity and tolerance of sea urchin (*Hemicentrotus pulcherrimus*) to environmental change. *Chinese Journal of Applied Ecology* 14, 409–412.
- Wang Y<sup>§</sup>, Ye Z, You K, Liu H (2001) On the mathematical trend in fisheries resources research. *Transactions of Oceanology and Limnology* 4, 66–68.
- You K<sup>§</sup>, Liu H, Wang Y (2001) Sustainable fisheries and conservation of fisheries biodiversity. *Ocean Economy* 1, 49–56.
- Liu H<sup>§</sup>, Wu Y, Gao S, Zhang Z (1998) Studies on chlorophyll *a* and some other factors in shrimp ponds before the outbreak of shrimp disease. *Journal of Ocean University of Qingdao* 28, 378–382.
- Liu H<sup>§</sup>, Wu Y, Gao S, Zhang Z (1998) The variations of chlorophyll *a* and phaeophytin in the sediment of Jimo shrimp ponds before the outbreak of shrimp disease. *Transactions of Oceanology and Limnology* 1, 66–68.

## **Scientific Cruises**

15+ daily cruises onboard *R/V Trident* of Texas A&M University in Galveston Bay and off Texas coast from October 2017-present

20+ daily cruises onboard *R/V ELAKHA* of Oregon State University off Oregon coast from August 2007 to July 2009

NOAA Ship *McArthur II* (M2-08-07) off coast of Washington-Oregon-California, 11-22 July 2008 *R/V TIGLAX* (TXs07) of Alaska Maritime in the northern Gulf of Alaska, 4-12 May 2007

*R/V THOMAS G. THOMPSON* (TN194) of University of Washington in the northern Gulf of Alaska, 4-12 May 2006

*R/V WECOMA* (WE307a) of Oregon State University in the northern Gulf of Alaska, 5-12 July 2003 15 nine-day cruises onboard *R/V ALPHA HELIX* of University of Alaska in the northern Gulf of Alaska between March and October from 2002 to 2004

## Synergistic activities

- Ad-hoc reviewer of Proposals for: National Science Foundation, United Kingdom-Natural Environment Research Council, New Jersey Sea Grant Consortium; Panelist for: NOAA/National Marine Fisheries Services
- Co-organized a symposium: *Empirical dynamic modeling for fisheries prediction and management*, the 147<sup>th</sup> American Fisheries Society annual meeting, Tampa, Florida
- U.S. representative on the *North Pacific Marine Science Organization* (PICES) working group (PICES WG37) on zooplankton production