

ALBERT J. HERMANN

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ACADEMIC TRAINING

Cornell University	Ecological Modeling	B.Sc.Eng.	1977
University of Florida	Systems Ecology	M.Sc.	1980
University of Washington	Physical Oceanography	Ph.D.	1988

PROFESSIONAL APPOINTMENTS AND EXPERIENCE

Affiliate Associate Professor, School of Oceanography, University of Washington	10/03-present
Senior Research Oceanographer, Joint Institute for the Study of the Atmosphere and Oceans, University of Washington	02/91-present
Postdoctoral Investigator, Physical Oceanography, Woods Hole Oceanographic Inst.	01/89-01/91
Pre-doctoral Research Associate, School of Oceanography, University of Washington	09/82-12/88

RESEARCH ACTIVITIES

Principal Investigator in multi-investigator programs, e.g.: Bering Sea Ecosystem Study (BEST), Gulf of Alaska Integrated Ecosystem Research Program (GOAIERP), Global Ocean Ecosystem Dynamics (GLOBEC), JISAO Seasonal Ocean Prediction of the Ecosystem (J-SCOPE)
Development, testing, and deployment of biophysical models for application to fisheries oceanography of the Bering Sea, Gulf of Alaska, and Pacific Northwest
Development of 3D visualization hardware/software for exploration/analysis of model output
Numerical modeling of geophysical fluid phenomena at high latitudes and near boundaries

PROFESSIONAL SERVICE

President, Eastern Pacific Ocean Congress (EPOC), 09/08-11/12
Session chair for PICES, AGU, EPOC annual meetings
Northeast Pacific GLOBEC Executive Committee
NSF panelist, NSF proposal reviews, journal article reviews (JPO, DSR, CSR, JGR, others)
PhD committee member

FIVE RELEVANT PUBLICATIONS

Hermann, A. J., G. A. Gibson, N. A. Bond, E. N. Curchitser, K. Hedstrom, W. Cheng, M. Wang, E. D. Cokelet, P. J. Stabeno and K. Aydin. 2015. Projected future biophysical states of the Bering Sea. Deep-Sea Research II. <http://dx.doi.org/10.1016/j.dsr2.2015.11.001>

Hermann, A. J., G. A. Gibson, N. A. Bond, E. N. Curchitser, K. Hedstrom, W. Cheng, M. Wang, P. J. Stabeno, L. Eisner, K. D. Cieciel. 2013. A multivariate analysis of observed and modeled biophysical variability on the Bering Sea shelf: multidecadal hindcasts (1970-2009) and forecasts (2010-2040). Deep Sea Research II, doi:10.1016/j.dsr2.2013.04.007.

Hermann, A.J., S. Hinckley, E. L. Dobbins, D. B. Haidvogel, N. A. Bond, C. Mordy, N. Kachel and P. J. Stabeno. 2009. Quantifying cross-shelf and vertical nutrient flux in the Gulf of Alaska with a spatially nested, coupled biophysical model. Deep Sea Research II, doi:10.1016/j.dsr2.2009.02.008.

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel and E. L. Dobbins. 2009. A comparison of remote versus local influence of El Nino on the coastal circulation of the Northeast Pacific. Deep Sea Research II, doi:10.1016/j.dsr2.2009.02.005.

Stabeno, P. J., N. A. Bond, A. J. Hermann, C. W. Mordy and J. E. Overland. 2004. Meteorology and Oceanography of the Northern Gulf of Alaska. Prog. Oceanog. 24: 859-897.

FIVE OTHER SIGNIFICANT PUBLICATIONS

- Coyle, K. O., G.A. Gibson, K. Hedstrom, A.J. Hermann, and R.R. Hopcroft. 2013. Zooplankton biomass, advection and production on the northern Gulf of Alaska shelf from simulations and field observations. *Journal of Marine Systems*, 128:185-207, doi:10.1016/j.jmarsys.2013.04.018.
- Hermann, A.J. and C. W. Moore. 2009 Visualization in fisheries oceanography: new approaches for the rapid exploration of coastal ecosystems. In: B.A. Megrey and E. Moksness (eds.), *Computers in Fisheries Research*, 2nd ed., DOI 10.1007/978-1-4020-8636-6_10, Springer Science and Business Media B.V.
- Hermann, A.J., D. B. Haidvogel, E. L. Dobbins, and P. J. Stabeno. 2002. Coupling Global and Regional Circulation Models in the Coastal Gulf of Alaska. *Prog. Oceanog.* 53: 335-367.
- Hermann, A. J., S. Hinckley, B. A Megrey and J. M. Napp. 2001. Applied and theoretical considerations for constructing spatially explicit Individual-Based Models of marine larval fish that include multiple trophic levels. *ICES J. Mar. Sci.* 58: 1030-1041.
- Hermann, A. J., P. B. Rhines and E. R. Johnson. 1989. Nonlinear Rossby adjustment in a channel: beyond Kelvin waves. *J. Fluid Mech.* 205: 469 - 502.

SELECTED TECH REPORTS

- Hermann, A. J. and D. L. Musgrave. 2006. Evaluation of ocean circulation models for the Bering Sea and Aleutian Islands Region. North Pacific Research Board Project 402 Final Report (http://doc.nprb.org/web/04_prjs/f0402_final_report.pdf)
- Horne, P.J., I.C. Kaplan, K.N. Marshall, P.S. Levin, C.J. Harvey, A.J. Hermann, and E.A. Fulton. 2010. Design and parameterization of a spatially explicit ecosystem model of the central California Current. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-104, 140 p.

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators (last five years)

S. Alin (PMEL), D. Armstrong (UW-SAFS), K. Aydin (NMFS), N. Bednarsek (UW), N. Bond (UW-JISAO), N. Cokelet (PMEL), K. Coyle (UAF), W. Cheng (UW-JISAO), E. Curchitser (Columbia-LDEO), E. DiLorenzo (GaTech), E. Dobbins (UAF), L. Eisner (NMFS), B. Ernst (Universidad de Concepcion, Chile), R. Feely (PMEL), J. Fiechter (UCSC), G. Gibson (UAF), D. Haidvogel (Rutgers), K. Hedstrom (ARSC), S. Hinckley (NMFS), A. Hollowed (NMFS), N. Kachel (UW-JSIAO), I. Kaplan (NWFSC), G. Kruse (UAF), C. Ladd (PMEL), E. Lessard (UW), B. Megrey (deceased), C. Moore (UW-JIASO), C. Mordy (UW-JISAO), J. Napp (NMFS), J. Overland (PMEL), I. Ortiz (UW-JISAO) C. Parada (Universidad de Concepcion, Chile), J. Richar (UAF), C. Rooper (NMFS), S. Siedlecki (UW), N. Soreide (PMEL), P. Stabeno (PMEL), W. Stockhausen (NMFS), M. Wang (UW-JISAO), T. Weingartner (UAF), T. Whitledge (UAF), W. Williams (IOS)

Graduate and Postdoctoral Advisors

PhD co-chairs: Drs. Barbara M. Hickey and Peter B. Rhines, University of Washington
Postdoctoral sponsor: Dr. Breck Owens, Woods Hole Oceanographic Institution

Students Advised

William J. Williams, University of Alaska Fairbanks (doctoral committee)
Elaina M. Jorgensen, University of Washington, Seattle (doctoral committee)

AWARDS

NOAA Gold Medal, 2015 (group award to Bering Sea Program)
NOAA Bronze Medal, 2002 (group award to Fisheries Oceanography Coordinated Investigations)
NOAATECH Grid Computing Award, 2004 (with Christopher Moore and Dan Schaffer)
NOAATECH 3D Visualization Award, 2004 (with Christopher Moore)