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
Woods Hole Oceanographic Institution	Physical Oceanography	Postdoctoral Investigator	1989-1991

Thesis title: Orographically trapped coastal wind events and their oceanic response: a study in nonlinear adjustment

PROFESSIONAL APPOINTMENTS AND EXPERIENCE

Research Scientist, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington, 02/91-present (Principal Research Scientist 01/15-present).
Affiliate Associate Professor, School of Oceanography, University of Washington, 10/03-present.
Activities: Development and testing of physical models and their coupling with biological models for application to fisheries oceanography in the Gulf of Alaska, Bering Sea, and Pacific Northwest. Development of visualization techniques for immersive 3D display of model output.

Postdoctoral Investigator, Woods Hole Oceanographic Institution, Dept. of Physical Oceanography, 01/89-01/91.
Activities: Development and testing of oceanic circulation models. Numerical modeling of gravitational adjustment related to deep convection in the coastal and open ocean.

Pre-doctoral Research Associate, University of Washington, School of Oceanography. 09/82 - 12/88.
Activities: Interpretation and synthesis of physical and biological data from upwelling experiments in the Pacific Northwest. Numerical modeling of geophysical fluid phenomena near boundaries. Three months of cumulative seagoing experience.

Faculty Research Assistant, University of Maryland, Center for Environmental and Estuarine Studies, 03/80 - 08/82.
Activities: Numerical modeling of estuarine ecosystems and coastal plain hydrology.

PROFESSIONAL SERVICE

President, Eastern Pacific Ocean Congress (EPOC), 09/08-11/12
Ecosystem Science review panelist, NOAA Southeast Fisheries Science Center
Session chair for PICES, AGU, EPOC annual meetings
Northeast Pacific GLOBEC Executive Committee
Senior Investigator Council, Southeast Bering Sea Carrying Capacity (SEBSCC) program
NSF panelist, NSF proposal reviews, journal article reviews (JPO, DSR, CSR, JGR, others)
PhD committee member

REFEREED PUBLICATIONS

Submitted/in review:

Pilcher, D.J., S.A. Siedlecki, A. Hermann, K.O. Coyle, J.T. Mathis, and W. Evans, Simulated impact of high alkalinity glacial runoff on CO2 uptake in the Coastal Gulf of Alaska, Geophys. Res. Lett., in review.

Siedlecki, S.A., D.J. Pilcher, A. Hermann, K. Coyle, and J.T. Mathis, The importance of freshwater to spatial variability of aragonite saturation state in the Gulf of Alaska J. Geophys. Res. Oceans, in review.

Hodgson, E.E., Kaplan, I.C., Marshall, K.N., Leonard, J., Essington, T.E., Busch, D. S., Fulton, E.A., Harvey, C.J., Hermann, A., and McElhany, P. Spatially variable ocean acidification and its consequences in the California Current: interactions between oceanography, food webs, and fishing communities. Submitted to Fish and Fisheries.

Gibson, G.A, W. Stockhausen, K.O. Coyle, S. Hinckley, C. Parada, A. Hermann, M. Doyle, and C. Ladd. An individual-based model for Sablefish: Exploring the connectivity between potential spawning and nursery grounds in the Gulf of Alaska. Deep-Sea Research II, in review.

Hinckley, S., W. Stockhausen, K.O. Coyle , B. Laurel, G. A. Gibson, C. Parada, A. Hermann, M. Doyle, T. Hurst , A. E. Punt, and C. Ladd. Connectivity between spawning and nursery areas for Pacific cod (Gadus macrocephalus) in the Gulf of Alaska. Deep-Sea Research II, in review.

Stockhausen, William T., Kenneth O. Coyle, Albert J. Hermann, Deborah Blood, Miriam Doyle, Georgina Gibson, Sarah Hinckley, Carol Ladd, and Carolina Parada. Running the Gauntlet: Connectivity between natal and nursery areas for arrowtooth flounder (Atheresthes stomias) in the Gulf of Alaska, as inferred from a biophysical Individual-based Model. Deep-Sea Research II, in review.

Bednaršek, N., R.A. Feely, N. Tolimieri, A.J. Hermann, G.G. Waldbusser, S.A. Siedlecki, S.R. Alin, P. McElhany, J. Menkel, B. Moore-Maley, and G.T. Lebon. Loss of pteropod resilience under current OA conditions in the California Current Ecosystem. Nature Communications, in review.

Published/in press:

Marshall, K.N., I.C. Kaplan, E.E. Hodgson, A.J. Hermann, S. Busch, P. McElhany, T.E. Essington, C.J. Harvey, and E.A. Fulton. 2017. Potential effects of ocean acidification on the California Current food web and fisheries: ecosystem model projections. Global Change Biology, doi: 10.1111/gcb.13594.

Ortiz, I., K. Aydin, A. J. Hermann, G. Gibson, A. E. Punt, F. Wiese, L. B. Eisner, N. Ferm, T. W. Buckley, E. A. Moffitt, J. N. Ianelli, J. Murphy, M. Dalton, W. Cheng, M. Wang, K. Hedstrom, E. N. Curchitser, N. A. Bond and C. Boyd. 2016. Climate to fish: Synthesizing field work, data and models in a 39-year retrospective analysis of seasonal processes on the eastern Bering Sea shelf and slope. Deep-Sea Research II, doi: 10.1016/j.dsr2.2016.07.009.

Siedlecki, S.A., I.C. Kaplan, A.J. Hermann, T.T. Nguyen, N.A. Bond, J. Newton, G.D. Williams, W.T. Peterson, S. Alin and R.A. Feely. 2016. Experiments with seasonal forecasts of ocean conditions for the northern region of the California Current upwelling system. Nature Scientific Reports. doi:10.1038/srep27203.

Hermann, A. J., C. Ladd, W. Cheng, E. N. Curchitser and K. Hedstrom. 2016. A model-based examination of multivariate physical modes in the eastern and western Gulf of Alaska. Deep-Sea Research II, http://dx.doi.org/10.1016/j.dsr2.2016.04.005i

Wilderbuer, T. J., T. Duffy-Anderson, P.J. Stabeno and A.J. Hermann. 2016. Differential patterns of divergence in ocean drifters: Implications for larval flatfish advection and recruitment. J. Sea Res. http://dx.doi.org/10.1016/j.seares.2016.03.003

Kaplan, I.C., G.D. Williams, N.A. Bond, A.J. Hermann, S.A. Siedlecki. 2016. Cloudy with a chance of sardines: forecasting sardine distributions using regional climate models. Fisheries Oceanography, 25: 15–27. doi: 10.1111/fog.12131

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. 2016. Projected future biophysical states of the Bering Sea. Deep-Sea Research II. 134:30-47. http://dx.doi.org/10.1016/j.dsr2.2015.11.001

Parada, C., S. Hinckley, J. Horne, M. Mazur, A. Hermann and E. Curchitser. 2015. Modeling connectivity of walleye pollock in the Gulf of Alaska: Are there any linkages to Bering Sea and Aleutian Islands? Deep-Sea Research Part II, http://dx.doi.org/10.1016/j.dsr2.2015.12.010

Cheng, W., E. Curchitser, C. Stock, A. Hermann, E. Cokelet, C. Mordy, P. Stabeno, G. Hervieux, and F. Castruccio. 2015. What processes contribute to the spring and fall bloom co-variability on the Eastern Bering Sea shelf? Deep-Sea Research II. http://dx.doi.org/10.1016/j.dsr2.2015.07.009

Richar, J. I., G. H. Kruse, E. Curchitser and A. J. Hermann. 2014. Patterns in connectivity and retention of simulated Tanner crab *(Chionoecetes bairdi)* larvae in the eastern Bering Sea. Prog. Oceanogr., doi: 10.1016/j.pocean.2014.08.001.

Rooper, C. N., M. Zimmerman, M. M. Prescott and A. J. Hermann. 2014. Predictive models of coral and sponge distribution, abundance and diversity in bottom trawl surveys of the Aleutian Islands, Alaska. Marine Ecology Progress Series, 503:157-176, doi: 10.3354/meps10710.

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., 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, 94:121-139, doi:10.1016/j.dsr2.2013.04.007

Coyle, K., W. Cheng, S.L. Hinckley, E.J. Lessard, T. Whitledge, A.J. Hermann and K. Hedstrom. 2012. Model and field observations of effects of circulation on the timing and magnitude of nitrate utilization and production on the northern Gulf of Alaska shelf. Progress in Oceanography, 103:16-41, doi:10.1016/j.pocean.2012.03.002.

Cheng, W., A. Hermann, K. Coyle, E. Dobbins, N. Kachel, and P. Stabeno. 2012. Macro- and micro-nutrient flux to a highly productive submarine bank in the Gulf of Alaska: a model-based analysis of daily and interannual variability. Progress in Oceanography, 101:63-77, doi:10.1016/j.pocean.2012.01.001.

Williams, W., T. Weingartner, and A. Hermann. 2010. Idealized 2-dimensional modeling of a coastal buoyancy front under downwelling-favourable wind-forcing with application to the Alaska Coastal Current. Journal of Physical Oceanography 40(2): 279-294.

Brickman, D., B. Ådlandsvik, U. H. Thygesen, C. Parada, K. Rose, A. J. Hermann and K. Edwards. 2009. Particle Tracking. In: Manual of Recommended Practices for Modelling Physical – Biological Interactions during Fish Early Life, pp. 9 – 19. Ed. by E. W. North, A. Gallego, and P. Petitgas. ICES Cooperative Research Report No. 295. 111 pp.

Di Lorenzo, E., J. Fiechter, N. Schneider, P. J. S. Franks, S. J. Bograd, A. M. Moore, A. C. Thomas, W. Crawford. A. Peña and A. J. Hermann. 2009. Nutrient and Salinity Low-Frequency Variations in the central and eastern North Pacific. Geophysical Research Letters 36 (L14601), doi:10.1029/2009GL038261.

Hinckley, S., J.M. Napp, A.J. Hermann and C. Parada. 2009. Simulation of physically-mediated variability in prey resources for a larval fish - a 3-dimensional NPZ model Fisheries Oceanography, 18(4), 201–223.

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.

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, 56:2474-2486, doi:10.1016/j.dsr2.2009.02.008.

Dobbins, E. L., A. J. Hermann, P. J. Stabeno, N. A. Bond and R. C. Steed. 2009. Modeled transport of freshwater from a line-source in the coastal Gulf of Alaska. Deep Sea Research II, doi:10.1016/j.dsr2.2009.02.004

Hinckley, S., K. O. Coyle, G. Gibson, A. J. Hermann, and E. L. Dobbins. 2009. A biophysical NPZ model with iron for the Gulf of Alaska: Reproducing the differences between an oceanic HNLC ecosystem and a classical northern temperate shelf ecosystem. Deep Sea Research II, doi:10.1016/j.dsr2.2009.03.003

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.

Haidvogel, D. B., H. Arango, W. P. Budgell, B. D. Cornuelle, E. Curchitser, E. Di Lorenzo, K. Fennel, W. R. Geyer, A. J. Hermann, L. Lanerolle, J. Levin, J. C. McWilliams, A. J. Miller, A. M. Moore,T. M. Powell, A. F. Shchepetkin, C. R. Sherwood, R. P. Signell, John C. Warner, J. Wilkin. 2008. Regional Ocean Forecasting in Terrain-following Coordinates: Model Formulation and Skill Assessment. J. Comput. Phys. 227: 3595-3624.

Stockhausen, W. T., and A. J. Hermann. 2007. Modeling larval dispersion of rockfish: A tool for marine reserve design? In: J. Heifetz, J. DiCosimo, A.J. Gharrett, M.S. Love, T. O'Connell, and R. Stanley (eds.), Biology, assessment, and management of North Pacific rockfishes. Alaska Sea Grant College Program, University of Alaska Fairbanks, pp. 251-273. AK-SG-07-01.

Williams, W., T. Weingartner, and A. Hermann. 2007. Idealized Modeling of Seasonal Variation in the Alaska Coastal Current *J. Geophys. Res.*,112, C07001, doi:10.1029/2005JC003285.

Powell, T. M., C. V. W. Lewis, E. N. Curchitser, D. B. Haidvogel, A. J. Hermann, and E. L. Dobbins, 2006. Results from a three-dimensional, nested biological-physical model of the California Current System: Comparisons with Statistics from Satellite Imagery, J. Geophys. Res., 111, C07018, doi:10.1029/2004JC002506.

Curchitser, E. N., D. B. Haidvogel, A. J. Hermann, E. L. Dobbins, and T. M. Powell, 2005. Multi-scale modeling of the North Pacific Ocean I: Assessment and analysis of simulated basin-scale variability (1996-2003). J. Geophys. Res., 110, C11021, doi:101029/2005JC002902.

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. Cont. Shelf Res. 24: 859-897.

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 (http://www.pmel.noaa.gov/~hermann/globec-2001/ms.pdf).

Weingartner, T., B. Finney, L. Haldorson, P. Stabeno, J. Napp, S. Strom, R. Brodeur, M. Dagg, R. Hopcroft, A. Hermann, S. Hinckley, T. Royer, T. Whitledge, K. Coyle, T. Kline, E. Lessard, D. Haidvogel, E. Farley and C. Lee. 2002. The Northeast Pacific GLOBEC Program: Coastal Gulf of Alaska. Oceanography Magazine 15:30-35.

Hermann, A. J., P. J. Stabeno. D. B. Haidvogel and D. L. Musgrave. 2002. A regional tidal/subtidal circulation model of the southeastern Bering Sea: Development, sensitivity analyses and hindcasting. Deep-Sea Res. II (Topical Studies in Oceanography) 49: 5495-5967. (http://www.pmel.noaa.gov/~hermann/sebscc-2001/ms.pdf).

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 (http://www.pmel.noaa.gov/~hermann/doc/ices/icesweb.htm).

Hinckley, S., Hermann, A. J., Meir, K. L. and B. A. Megrey. 2001. The importance of spawning location and timing to successful transport to nursery areas: a simulation modeling study of Gulf of Alaska walleye pollock. ICES J. Mar. Sci. 58:1042-1052.

Hermann, A. J. and P. J. Stabeno. 1996. An eddy resolving model of circulation on the western Gulf of Alaska shelf. I. Model development and sensitivity analyses. J. Geophys. Res. 101: 1129-1149.

Stabeno. P. J. and A. J. Hermann. 1996. An eddy resolving model of circulation on the western Gulf of Alaska shelf. II. Comparison of results to oceanic observations. J. Geophys. Res. 101: 1151-1161.

Hermann, A. J., S. Hinckley, B. A. Megrey and P. J. Stabeno. 1996. Interannual variability of the early life history of walleye pollock near Shelikof Strait, as inferred from a spatially explicit, individual-based model. Fish. Oceanogr. 5 (Suppl. 1): 39-57.

Hermann, A. J., W. C. Rugen, P. J. Stabeno and N. A. Bond. 1996. Physical transport of young walleye pollock larvae (*Theragra chalcogramma*) near Shelikof Strait as inferred from a hydrodynamic model. Fish. Oceanogr. 5 (Suppl. 1): 58-70.

Hinckley, S., A. J. Hermann and B. A. Megrey. 1996. Development of a spatially explicit, individual-based model of marine fish early life history. Mar. Ecol. Prog. Ser. 139: 47-68.

Stabeno, P. J., A. J. Hermann, N. A. Bond and S. J. Bograd. 1995. Modeling the possible impact of climate change on the survival of larval walleye pollock (*Theragra chalcogramma*) in the Gulf of Alaska. Can. Spec. Pub. Fish. Aquat. Sci. 121: 719-727.

Kemp, W. M., W. R. Boynton and A. J. Hermann. 1995. Ecosystem modeling and energy analysis of submerged aquatic vegetation in Chesapeake Bay. *In:* C. A. S. Hall, ed., *Maximum Power: The Contribution of H. T. Odum to Ecology, Energy, and Engineering* , University Press of Colorado.

Kemp, W. M., W. R. Boynton and A. J. Hermann. 1995. Simulation models of an estuarine macrophyte ecosystem. *In:* B. Patten and S. Jorgensen, eds., *Complex Ecology: The Part-Whole Relation in Ecosystems*, Prentice-Hall.

Hermann, A. J. and H. M. Hsu. 1993. A vertical coordinate mapping technique for semi-spectral primitive equation models of oceanic circulation. Journal of Atmospheric and Oceanic Technology 10: 381-396.

Hermann, A. J. and W. B. Owens. 1993. Energetics of gravitational adjustment for mesoscale chimneys. Journal of Physical Oceanography 23: 346-371.

Hermann, A. J. and W. B. Owens. 1991. Modeling the geostrophic adjustment and spreading of waters formed by deep convection. *In:* P. C. Chu and J. C. Gascard, eds., *Deep Convection and Deep Water Formation in the Oceans*., Elsevier Publishers.

Hermann, A. J., B. M. Hickey, C. F. Mass and M. D. Albright. 1990. Orographically- trapped coastal wind events in the Pacific Northwest and their oceanic response. J. Geophys. Res. 95:13169-13193.

Kemp, W. M., W. R. Boynton and A. J. Hermann. 1989. Simulation models of an estuarine macrophyte ecosystem: community dynamics and resource management. *In*: B. C. Patten and S. E. Jorgensen, eds., *Progress in Systems Ecology*, John Wiley.

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.

Hermann, A. J., B. M. Hickey, M. L. Landry and D. F. Winter. 1989. Coastal Upwelling Dynamics. *In*: B. M. Hickey and M. R. Landry, eds., *Coastal Oceanography of Washington and Oregon*, Elsevier Publishers.

Bayley, S. E., J. Zoltek, Jr., A. J. Hermann, T. J. Dolan and L. Tortorra. 1985. Experimental manipulation of nutrients and water in a freshwater marsh: Effects on biomass, decomposition, and nutrient accumulation. Limnol. Oceanogr. 30: 500 - 512.

Dolan, T. J., A. J. Hermann, S. E. Bayley and J. Zoltek, Jr. 1984. Evapotranspiration of a Florida, U.S.A., freshwater wetland. J. Hydrol. 74: 355 - 371.

Kemp, W. M., W. R. Boynton and A. J. Hermann. 1983. A simulation modeling framework for ecological research in complex systems: the case of submerged vegetation in upper Chesapeake Bay. *In*: K. W. Turgeon, ed., *Marine Ecosystem Modeling*, U. S. Dept. of Commerce NOAA publication # S/T 83-38.

Dolan, T. J., S. E. Bayley, J. Zoltek, Jr. and A. J. Hermann. 1981. Phosphorous dynamics of a Florida freshwater marsh receiving treated wastewater. J. Appl. Ecol. 18: 205 - 219.

Boynton, W. R., W. M. Kemp, A. J. Hermann and others. 1981. An analysis of energetic and economic values associated with the decline of submerged macrophytic communities in Chesapeake Bay. *In*: W. J. Mitsch and R. W. Bosserman, eds., *Energy and Ecological Modeling*. Int. Soc. Ecol. Modl. Publ., Copenhagen.

TECH REPORTS

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.

Brand, E. J., I. C. Kaplan, C. J. Harvey, P. S. Levin, E. A. Fulton, A. J. Hermann, J. C. Field. 2007. A spatially explicit ecosystem model of the California Current's food web and oceanography. U.S. Dept. of Commerce, NOAA Tech. Memo., NMFS-NWFSC-84, 145 p.

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)

Hermann, A. J., S. Hinckley, B. A. Megrey and P. J. Stabeno. 1997. Interannual variability of mesoscale eddies and patchiness of young walleye pollock as inferred from a spatially explicit, individual-based model. In: Boehlert, G. W. and J. D. Schumacher (eds.), Changing Oceans and Changing Fisheries: Environmental Data for Fisheries Research and Management, NOAA Tech. Memo NMFS, NOAA-TM-NMFS-SWFSC-239, 146pp (abstract only).

U.S. GLOBEC. 1996. Report on Climate Change and Carrying Capacity of the North Pacific Ecosystem. U.S. GLOBEC Report #15 (contributor to section on existing numerical models).

Hermann, A. and B. Hickey. 1983. Time-dependent marine ecosystem dynamics. In: Pollutant transport and sediment disposal in the Washington-Oregon Coastal Zone. Report of Progress, 1 August 1983 - 31 July 1983, to US DOE, Contract No. DE-AT06-76-EV-71025. Ref: A83-10. Compiled by Barbara M. Hickey, Principal Investigator, University of Washington, Seattle.

Kemp, W. M., A. J. Hermann, and W.R. Boynton. 1981. Resource dynamics and ecology of submerged aquatic vegetation in Chesapeake Bay: A modeling approach to demonstrate resource management concepts. Submitted to Coastal Resources division, Tidewater Administration, MD. Dept. of Natural Resources, Annapolis, MD.

Schueler, T. R., A. J. Hermann, R. J. Thomann and W. M. Kemp. 1981. Nitrate and sediment runoff from the Choptank River Basin: A modeling approach. In: W. M. Kemp et al. (eds.), Submerged aquatic vegetation in Chesapeake Bay. Annual Rept. to US EPA. UMCEES Horn Pt. Environ. Labs, Cambridge, MD.

Hermann, A. J. 1980. Nitrogen cycling in a freshwater marsh receiving secondary sewage effluent. M.Sc. thesis. University of Florida, Gainesville. 300 pp.

Zoltek, J. Jr., S. E. Bayley, A. J. Hermann, L. R. Tortorra and T. J. Dolan. 1979. Removal of nutrients from treated municipal wastewater by freshwater marshes. Final report to the City of Clermont, Florida. Center for Wetlands,

University of Florida, Gainesville.

Dolan, T. J., S. E. Bayley, J. Zoltek, Jr. and A. Hermann. 1978. The Clermont project: renovation of treated effluent by a freshwater marsh. In: Environmental Quality through wetlands utilization: proceedings from a symposium sponsored by the Coordinating Council on the Restoration of the Kissimmee River Valley and Jaylor Creek-Nubbin Slough Basin, Feb. 28 - March 2, 1978, Tallahassee,
Florida.

WORKSHOPS ORGANIZED

North Pacific Research Board workshop on "Evaluation of ocean circulation models for the Bering Sea and Aleutian Islands Region", with Dr. David Musgrave (U Alaska Fairbanks), 3-4 Feb 2005, Seattle, WA.

Pacific Northwest Modeling Workshop, with Drs. Barbara Hickey and Parker MacReady (University of Washington), 10 Jan 2003, Seattle, WA.

Regional Ocean Modeling System User's workshop, with Dr. Hernan Arango (Rutgers Univeristy) and Dr. Tal Ezer (Princeton University), 4-6 Aug 2003, Seattle, WA.

SYMPOSIA/CONFERENCES ORGANIZED

Convener of session on "General Oceanography", Easter Pacific Ocean Conference, 20-23 Sep 2016, Fallen Leaf Lake, CA

Co-Convener of session on "Coupled Biophysical Processes, Fisheries Resources, and Climate Variability in Coastal Ecosystems of the Northeast Pacific Ocean", for 2002 Ocean Sciences Meeting, Honolulu, Hawaii, Feb. 11-15, 2002.

Co-Convener of session on "Lagrangian Parcel Trajectories, Retention and Tracking", for Eastern Pacific Ocean Conference (EPOC), Stanford Sierra Camp, Fallen Leaf Lake, CA, 23-26 Sep, 2001.

Co-Convener of symposium on "Subarctic Gyre processes and their interaction with coastal and transition zones: physical and biological relationships and ecosystem impacts", for North Pacific Marine Science Organization (PICES) 9th annual meeting, Hakodate, Hokkaido, Japan, 20-28 October 2000.

TEACHING

Instructor, "Regional Oceanographic Modeling", 1st Summer School of Geophysics, Department of Geophysics, Faculty of Mathematics and Physical Sciences, Universidad de Concepcion, January 6-10, 2014, Concepcion, CHILE

Teaching Assistant for Dr. Peter Rhines, Geophysical Fluid Dynamics, University of Washington, Seattle, WA, Sep-Dec 1985 and Apr-Jun 1985.

Teaching Assistant for Dr. Karl Banse, Biological Oceanography for non-biologists, University of Washington, Seattle, WA, Sep-Dec 1984.

CITATIONS AND AWARDS

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

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators (partial list; 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
Elaina M. Jorgensen, University of Washington, Seattle (doctoral committee), received PhD Dec. 2011
William J. Williams, University of Alaska Fairbanks (doctoral committee), received PhD Apr. 2000

FUNDED PROJECTS

Key:
NSF = National Science Foundation
NPRB = North Pacific Research Board
NOAA = National Oceanic and Atmospheric Administration
IERP = Integrated Ecosystem Research Program
FATE = Fisheries and the Environment program
HPCC = High Performance Computing and Communications incubator program
ESDIM = Environmental Services Data and Information Management
SEBSCC = Southeast Bering Sea Carrying Capacity
ESPC = Earth System Prediction Capability

Presently Funded projects where Hermann was lead or co-Principal Investigator of proposal:

NOAA FATE (2016-2018) Title: Short-term forecasting of Pacific hake distribution in the California Current Ecosystem (Hunsicker, Brodeur, Haltuch, Hicks, Kaplan Parker-Stetter, Bond, Hermann, Newton)

NOAA OAP (2015-2018) Enhancement of an existing ocean forecast system to include ocean acidification (Alin, Feely, Siedlecki, Hermann, Bednarsek)

NPRB-GOAIERP (2015-2017): Connectivity in the Gulf of Alaska: a synthesis based on the Gulf of Alaska Integrated Ecosystem Research Program (Ormseth, Mordy, Hopcroft, Strom, Ladd, Banks)

NOAA-FATE: Refinement of J-SCOPE Forecast System for the California Current Integrated Ecosystem Assessment (Kaplan, Bond, Hermann, Levin, Newton, Peterson, Siedlecki)

NOAA-FATE: Evaluating ecosystem indicators performance under climate change (Aydin, Ortiz, Hermann)

NPRB: Cross-isobath exchange in Bering Canyon: Episodic and seasonal variability (Ladd, Cheng, Hermann)

NPRB: Impacts of climate change on red king crab larval advection in Bristol Bay: implications for recruitment variability (Daly, Hinckley, Hermann, Armstrong, Parada)

NOAA ARCTIC ESPC: Assessing regional sea ice predictability in the US Arctic: A multimodel approach (Ladd, Stabeno, Cheng, Hermann, Curchitser)

Other presently funded projects where Hermann is supported:

NOAA-IEA: NOAA Integrated Ecosystem Assessment Program - Alaska Complex Region

AOOS: Creating a Coastal Carbon Model for the Northern Gulf of Alaska to Determine the Controls and Extent of Ocean Acidification Events in the Region

Previously Funded projects where Hermann was lead or co-Principal Investigator of proposal:

NOAA-Ocean Acidification, $440,138**,** Sep 2012 – Aug 2014**. Vulnerability Assessment of California Current Food Webs and Economics to Ocean Acidification**

NOAA-FATE, Jun 2012 - Jun 2014. **Development of a Prediction System for the California Current Integrated Ecosystem Assessment.**

NSF PLR-1107250, $467,207, Sep 2011 - Aug 2013. **Collaborative Research: Impact of sea-ice on bottom-up and top-down controls of crustacean zooplankton and the mediation of carbon and energy flow in the eastern Bering Sea.**

NPRB GOA IERP project G84, $999,995, May 2010 - Feb 2015. **Exploring temporal and spatial variability in Gulf of Alaska groundfish dynamics with integrated biophysical models.**

Washington Sea Grant project R/COCC-1, Feb 2010 - Jan 2012. **Projections of Ocean Properties Along the Washington Coast Related to Environmental Health.**

NPRB project 814, $248,190, 1 Aug, 2008 - 15 Apr, 2012. **Recruitment Mechanisms for Tanner Crab in the Eastern Bering Sea.**

NSF OCE-0732534, $802,861, Aug 2007-2011. **Downscaling global climate projections to the ecosystems of the Bering sea with nested biophysical models.**

NOAA-FATE, FY2007. **Developing recruitment forecasts for age structured flatfish stock assessments in the eastern Bering Sea based on models of larval dispersal.**

NSF OCE-0624490, $1,023,000, 2006-2009. **US-GLOBEC NEP Phase IIIb-CGOA: Synthesis of biophysical observations at multiple trophic levels using spatially nested, data-assimilating models of the Coastal Gulf of Alaska.** (lead PI)

NPRB Project 624, $294,515, 1 July, 2006 - 31 May, 2010. **Modeling transport and survival of larval crab: Investigating the contraction and variability in snow crab stocks in the Eastern Bering Sea using Individual-Based Models**

NPRB Project 614, $256,648, 1 May, 2006 - 31 May, 2010. **Optimization of a nutrient-phytoplankton-zooplankton ecological model for quantifying physical and biological interactions on the Gulf of Alaska shelf.**

NSF OCE-0435592, $182,000, 2005-2008. **Collaborative Research: US-GLOBEC NEP Phase IIIa-CCS: Effects of Meso- and Basin Scale Variability on Zooplankton Populations in the CCS Using Data-Assimilative, Physical/Ecosystem Models.**

NPRB Project 523, $131,251, 1 July, 2005-30 June, 2008. **Walleye Pollock Recruitment and Stock Structure in the Gulf of Alaska: An investigation using a suite of biophysical and individual-based models**

NPRB Project 402, $74,949, 1 May, 2004 - 30 Dec, 2005. **Evaluation of ocean circulation models for the Bering Sea and Aleutian Islands Region**

NOAA-FATE, FY2002 - FY2004. **Multi-decadal simulations of circulation and walleye pollock in the Northern Gulf of Alaska**

NSF OCE-0113461, $1,068,000, 2001-2006. **GLOBEC 2000: Nested Interdisciplinary Models for the Gulf of Alaska.**

NSF OCE-9711329, $497,000, 1997-2001. **Coupled Biophysical Models for the Coastal Gulf of Alaska.**

NOAA-SEBSCC, $119,986, FY1999-FY2000. **Circulation modeling for the Southeast Bering Sea**.

Other previously funded projects where Hermann was lead author or co-author of proposal:

NOAA-HPCC, $ 125,000, FY 2011. **Using HPCC Techniques to Power User Tools for Ecosystem Models: the Bering Sea example** (lead PI: K. Aydin).

NOAA-HPCC, $43,688, FY 2010**. A portable immersive high-definition display system for HPC model output** (lead PI: P. Stabeno).

NOAA-HPCC, $59,230, FY 2009**. Pocket visualization of ocean data and model output through the web** (lead PI: P. Stabeno).

NOAA-HPCC, $56,000, FY 2007**. A Virtual Globe for the Interactive Display of OpenDAP Data** (lead PI: N. Soreide)

NOAA-HPCC, $75,700, FY 2005. **Parallel Analytical Visualization Grid Service** (lead PI: N. Soreide).

NOAA-HPCC, $39,800, FY 2004. **Personal Access Grid nodes for Immersive Collaboration** (lead PI: P. Stabeno).

NOAA-ESDIM, $25,000 , FY 1999. **Stereoscopic views of model and observational data: A low cost application of Virtual Reality techniques** (lead PI: N. Soreide)

OTHER

Participation in interdisciplinary FOCI research cruise, May 1-16, 1993, in the Gulf of Alaska. Work included CTD and ADCP surveys, mapping of surface chlorophyll, and sampling for larval distribution near Shelikof Strait with a variety of biological gear.

Review of existing and planned Bering Sea and Gulf of Alaska models for Background Document on Climate Change and Carrying Capacity, U.S. GLOBEC Planning Workshop.

Summary of breakout session 4 : "What is required to model the impact of climate change on the carrying capacity of the region"?, for Draft Summary of U.S. GLOBEC Climate Change and Carrying Capacity Planning Meeting, Batelle Conference Center, 19-20 April 1995.

Served as co-chair for workshop session: "What is required to model the impact of climate change on the carrying capacity of the region"?, U.S. GLOBEC Climate Change and Carrying Capacity Planning Meeting, Batelle Conference Center, 19-20 April 1995.

PRESENTATIONS (Conferences, Workshops, and Public Outreach)

Hermann, A. J. and W. Cheng, “Regional modeling and related activities at PMEL”. Lecture and electronic display for visiting high school students, 4 April 2017, Pacific Marine Environmental Laboratory, Seattle, WA.

Hermann, A. J., W. Cheng, G. A. Gibson, I. Ortiz and K. Aydin, “Statistical downscaling of global projections to the Bering Sea, based on an ensemble of regional model output”, Alaska Marine Science Mini-Symposium, 01-02 Mar 2017, Seattle, WA.

Hermann, A. J., W. Cheng, G. A. Gibson, I. Ortiz and K. Aydin, “Statistical downscaling of global projections to the Bering Sea, based on an ensemble of regional model output”, Alaska Marine Science Symposium, 23-27 Jan 2017, Anchorage, AK.

Hermann, A. J., “Live immersive exploration of biophysical forecasts for the Pacific Northwest and the Bering Sea”. Lecture and electronic display, 14 Nov 2016, Ballard High School, Seattle, WA.

Hermann, A. J., W. Cheng, G. A. Gibson, I. Ortiz and K. Aydin, “Statistical downscaling of global projections to the Bering Sea, based on an ensemble of regional model output”, PICES Annual Meeting, 02-13 November 2016, La Jolla, CA.

Hollowed, A., K. Holsman, A. Haney and A. Hermann. “Evaluating fishery management strategies under different climate change scenarios in the Bering Sea, initial report from the ACLIM Project”. Webinar sponsored by NOAA Fisheries Alaska Fisheries Science Center and Office of Science and Technology, 26 October 2016.

Hermann, A. J., S. Siedlecki, N. Bednarsek, T. Nguyen and N. Bond. “Plankton life histories in the Pacific Northwest, as inferred from a regional downscaling model”. Eastern Pacific Ocean Congress (EPOC), 21-24 Sep 2016, Timberline Lodge, Mt. Hood, OR.

Hermann, A. J., G. Gibson, S. Siedlecki and T. Nguyen. “Biophysical uncertainty in the Northeast Pacific as a function of space, time, and trophic scale”. Poster presentation at 2016 Ocean Sciences Meeting, 21-26 Feb 2016, New Orleans, LA.

Hermann, A. J. “JISAO modeling: Live immersive exploration of biophysical forecasts for the Pacific Northwest and the Bering Sea”. Electronic display at Discover Science Weekend, 15 Nov 2015, Seattle Aquarium, Seattle, WA.

Hermann, A. J. “Live immersive exploration of biophysical forecasts for the Pacific Northwest and the Bering Sea”. Electronic display, 13 Nov 2015, Ballard High School, Seattle, WA.

Hermann, A. J., G. Gibson, S. Siedlecki and T. Nguyen. “Biophysical uncertainty in the Northeast Pacific as a function of space, time, and trophic scale”. Easter Pacific Ocean Conference, 20-23 Sep 2015, Fallen Leaf Lake, CA.

Hermann, A. J. “Past, present and emerging methods for immersive 3D visualization of regional oceanographic models”. Electronic poster presentation at Gordon Research Conference on Coastal Ocean Modeling, 8-11 June 2015, University of New England, Biddeford, ME.

Hermann, A.J., S. Hinckley and K. O. Coyle. “A multivariate method for the characterization of IBM larval life histories in the Gulf of Alaska”. Poster presentation at Alaska Marine Science Symposium, 19-23 Jan 2015, Anchorage, AK.

Hermann, A. J., S. A. Siedlecki and N. A. Bond. “Sources of predictability (and unpredictability) in the Pacific Northwest”, Eastern Pacific Ocean Congress (EPOC), 17-20 Sep 2014, Timberline Lodge, Mt. Hood, OR.

Kerim Aydin, I. Ortiz, A. J. Hermann, G. A. Gibson and A. E. Punt, “Evaluating long-term climate predictions for the Bering Sea ecosystem using a suite of modeling approaches”, 2014 PICES FUTURE Open Science Meeting, 13-18 April 2014, Kohala Coast, Big Island, HI.

Hermann, A. J., G. A. Gibson, N. A. Bond, E. Curchitser, K. Hedstrom, W. Cheng, M. Wang and P. J. Stabeno, “Multiple realizations of future biophysical states in the Bering Sea”, 2014 PICES FUTURE Open Science Meeting, 13-18 April 2014, Kohala Coast, Big Island, HI.

Hermann, A.J., “Models linking climate to lower trophic levels: Status and future – Bering Sea”, 2014 PICES FUTURE Open Science Meeting, 13-18 April 2014, Kohala Coast, Big Island, HI.

Hermann, A. J. , G. A. Gibson, N. A. Bond, E. N. Curchitser, K. Hedstrom, W. Cheng, M. Wang, and P. J. Stabeno, “Multiple realizations of future biophysical states in the Bering Sea”, Bering Sea Open Science Meeting, 22-23 Feb 2014, Honolulu, HI.

Hermann, A. J., C. W. Mordy, G. A. Gibson and R. N. Sambrotto. “A nutrient flux budget among time-variable biophysical domains on the Bering Sea shelf”, Bering Sea Open Science Meeting, 22-23 Feb 2014, Honolulu, HI.

Hermann, A. J. , S. A. Siedlecki and N. A. Bond. “Regional predictability of the northeastern Pacific on seasonal time scales”, 2014 Ocean Sciences meeting, 23-28 Feb 2014, Honolulu, HI

Hermann, A. J., “A rapid multivariate method for estimating regional forecast uncertainty”, Department of Geophysics, Faculty of Mathematics and Physical Sciences, Universidad de Concepcion, Jan 10, 2014, Concepcion, CHILE.

Hermann, A. J. “JISAO modeling: Live immersive exploration of biophysical forecasts for the Pacific Northwest and the Bering Sea”. Electronic display at Discover Science Weekend, 9-10 Nov 2013, Seattle Aquarium, Seattle, WA.

Richar, J. I., G. H. Kruse, A. J. Hermann and E. N. Curchitser. “Effects of shifting population demographics, oceanography, and predation on apparent stock-recruit relationships for Tanner crabs in the eastern Bering Sea”. PICES annual meeting, 11-20 Oct 2013, Nanaimo, CANADA.

Hermann, A. J., “A rapid multivariate method for estimating regional forecast uncertainty”. PICES annual meeting, 11-20 Oct 2013, Nanaimo, CANADA.

Hermann, A. J., “Physical and biophysical predictability: a matter of scale” (INVITED). Program on Climate Change Summer Institute ("Climate Forcing of Marine Ecosystems: Causes and Consequences"), 11-13 Sep 2013, Friday Harbor, WA.

Hermann, A. J., S. Siedlecki and N. Bond, “Live immersive exploration of biophysical forecasts for the Pacific Northwest”. Electronic display at Easter Pacific Ocean Conference, 16-19 Sep 2013, Fallen Leaf Lake, CA

Hermann, A. J. “3D biophysical forecasts of the Bering Sea”, Seattle Science Festival Expo Day, Seattle Center, Seattle, WA, June 8, 2013

Hermann, A. J., C. Ladd, W. Cheng, E. Curchitser and K. Hedstrom, “A model-based examination of multivariate physical modes in the eastern and western Gulf of Alaska”. Poster presentation at Alaska Marine Science Symposium, Jan 21-25, 2013, Anchorage, AK.

Ortiz, I., K. Aydin and A. J. Hermann (presenter), “20 species, 15 lengths: How fish move driven by happiness as defined by growth and predation”, PICES annual meeting, 12-21 Oct 2012, Hiroshima, JAPAN.

Hermann, A. J., Nicholas A. Bond, Georgina A. Gibson, Enrique N. Curchitser, Kate Hedstrom and Phyllis J. Stabeno, “Biophysical frequency response of the Bering Sea to large-scale forcing”, PICES annual meeting, 12-21 Oct 2012, Hiroshima, JAPAN.

Hermann, A. J., C. Ladd, W. Cheng, E.N. Curchitser and K. Hedstrom. "A model-based examination of multivariate physical modes in the eastern and western Gulf of Alaska", Eastern Pacific Ocean Congress (EPOC), 19-22 Sep 2012, Timberline Lodge, Mt. Hood, OR.

Hermann, A. J., Gibson, G. A., Bond, N. A., Curchitser, E. N., Hedstrom, K., Cheng, W., Wang, M., Stabeno, P. J., Eisner, L., Janout, M., "A Multivariate Analysis of Observed and Modeled Biophysical Variability on the Bering Sea Shelf: Multidecadal Hindcasts (1969-2009) and Forecasts (2010-2040)", Ocean Sciences Meeting, 20-24 Feb 2012, Salt Lake City, UT.

Gibson, G. A., Hermann, A. J., Hedstrom, K., Curchitser, E., "Predicting the Impacts of Changing Environmental Conditions on Lower Trophic Level Ecosystem Dynamics in the Bering Sea", Ocean Sciences Meeting, 20-24 Feb 2012, Salt Lake City, UT.

Richar, J., G. H. Kruse, A. Hermann and E. N. Curchitser. "Recruitment mechanisms for eastern Bering Sea Tanner crab—a geospatial approach", Alaska Marine Science Symposium, 16-20 Jan 2012, Anchorage, AK.

Richar, J., G. H. Kruse, A. Hermann and E. Curchitser. "Spatio-temporal variability in simulated advection patterns of larval Tanner crab in the eastern Bering Sea", Alaska Marine Science Symposium, 16-20 Jan 2012, Anchorage, AK.

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, P. J. Stabeno, L. Eisner and M. Janout. "A Multivariate Analysis Of Observed And Modeled Biophysical Variability On The Bering Sea Shelf: Multidecadal Hindcasts (1969-2009) And Forecasts (2010-2040)", Alaska Marine Science Symposium, 16-20 Jan 2012, Anchorage, AK.

Hermann, A. J., C. Ladd, W. Cheng, E.N. Curchitser and K. Hedstrom, "Sources and patterns of interannual oceanic variability of in the Gulf of Alaska", Alaska Marine Science Symposium, 16-20 Jan 2012, Anchorage, AK.

Aydin, K., I. Ortiz, A. Hermann and G. Gibson, "Climate to Fisheries: 40-year Hindcast of Vertically Integrated Model for the Eastern Bering Sea", Alaska Marine Science Symposium, 16-20 Jan 2012, Anchorage, AK.

Hermann, A.J. and C. W. Moore. "Harnessing your GPU for interactive immersive oceanographic modeling", American Geophysical Union Fall Meeting, 5-9 Dec 2011, San Francisco, CA.

Hermann, A.J. and C. Moore. "Harnessing your GPU for interactive immersive Individual-Based Modeling", Eastern Pacific Ocean Congress (EPOC), 11-15 Oct 2011, Stanford Sierra Conference Center, Fallen Leaf Lake, CA

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, P. J. Stabeno, L. Eisner and M. Janout. "A multivariate EOF analysis of modeled vs. observed modes of biophysical variability on the Bering Sea shelf", Eastern Pacific Ocean Congress (EPOC), 11-15 Oct 2011, Stanford Sierra Conference Center, Fallen Leaf Lake, CA

Hermann, A.J. and W. Cheng. "Harnessing your GPU for interactive immersive Individual-Based Modeling", Advances in Marine Ecosystem Modelling Research (AMEMR) Symposium, 24-30 Jun 2011, Plymouth, UK

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, P. J. Stabeno, L. Eisner and M. Janout. "Modeled and observed modes of biophysical variability on the Bering Sea shelf", Advances in Marine Ecosystem Modelling Research (AMEMR) Symposium, 24-30 Jun 2011, Plymouth, UK

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, P. J. Stabeno, L. Eisner and M. Janout. "Modeled and observed modes of biophysical variability on the Bering Sea shelf", Comparative Studies of Climate Effects on Polar and Sub-Polar Ecosystems: Progress in Observation and Prediction, 23-26 May 2011, Seattle, WA

Hermann, A.J. "Fast, inexpensive, immersive examination of remotely hosted geophysical data", Supercomputing 2010, 14-18 Nov 2010, New Orleans, LA

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, and P. J. Stabeno. INVITED. "Modes of biophysical variability on the Bering Sea shelf", PICES annual meeting, 23-29 Oct, 2010, Portland, OR

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, and P. J. Stabeno. "Modes of biophysical variability on the Bering Sea shelf" (poster), Easter Pacific Ocean Congress (EPOC), 22-25 Sep, 2010, Mt. Hood, OR

Hermann, A.J. "Regional Modeling of the Gulf of Alaska", ePOPf West Coast Modeling Workshop, 20-22 Sep, 2010, Portland, OR.

Hermann, A.J. and C. Moore. "Fast, inexpensive, immersive examination of remotely hosted geophysical data", Workshop on Global Ocean Ecosystems and Climate, 23-27Aug, 2010, Friday Harbor Laboratories, Friday Harbor, WA

Hermann, A.J. "Analysis of coupled biophysical modes from downscaling models. Workshop on Global Ocean Ecosystems and Climate", 23-27Aug, 2010, Friday Harbor Laboratories, Friday Harbor, WA

Hermann, A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, and P. J. Stabeno. "Simulated modes of biophysical variability on the Bering Sea shelf, PICES symposium on Climate Change Effects on Fish and Fisheries: Forecasting Impacts, Assessing Ecosystem Responses, and Evaluating Management Strategies", 25-29 Apr, 2010, Sendai, JAPAN

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, Y. Ortiz, M. Wang, and P. J. Stabeno. "The Bering Sea Integrated Ecosystem Research Program: downscaling climate change to a subarctic region", AGU Ocean Sciences 22-26 Feb, 2010, Portland, OR

Hermann. A.J., K. Aydin, N. A. Bond, W. Cheng, E. N. Curchitser, G. Gibson, K. Hedstrom, M. Wang, P. J. Stabeno and Y. Ortiz. "The Bering Sea Integrated Ecosystem Research Program: downscaling climate change to a subarctic region" Eastern Pacific Ocean Congress 2009, 23-26 Sep, 2009, Sydney, BC, CANADA

Hermann, A.J. "Regional modeling of the Coastal Gulf of Alaska; progress and pitfalls", GLOBEC Open Science Meeting, 22-26 Jun 2009, Victoria BC, CANADA.

Hermann, A. J., Sarah Hinckley, Elizabeth L. Dobbins, Dale B. Haidvogel, Nicholas A. Bond, Phyllis J. Stabeno and Calvin Mordy, "Significance of curl-driven upwelling to production in the Coastal Gulf of Alaska", PICES 17th annual meeting, 23 Oct – 1 Nov, 2008, Dalian, China.

Hermann, A. J. and Bernard A. Megrey, "Examining the predictability limits of NPZ-fish dynamics in the Coastal Gulf of Alaska and the Bering Sea using a numerical model", PICES 17th annual meeting, Oct 23-Nov 1, 2008, Dalian, China.

Hermann, A. J., J. Sirott and N. N. Soreide, "Immersive multi-scale visualization of downscaling climate models", Easter Pacific Ocean Congress (EPOC), 23-26 Sep, 2008, Stanford Sierra Camp, Fallen Leaf Lake, CA.

Hermann, A. J., "Exploring nutrient flux in the coastal Gulf of Alaska with numerical models", University of Washington Physical Oceanography seminar, 28 May, 2008, Seattle, WA.

Hermann, A. J., W. Cheng, S. Hinckley, K. Coyle, J. Fiechter, T. M. Powell, E. N. Curchitser and D. B. Haidvogel, "A Comparison of Lower Trophic Level Models for the Coastal Gulf of Alaska", AGU/Ocean Sciences, 2-7 March, 2008, Orlando, Fla.

Kenneth O. Coyle and Albert J. Hermann, "Coupled Physical – Biological Model Simulations of GLOBEC Long-Term Observations along the Seward Line, Northern Gulf of Alaska", Alaska Marine Sciences Symposium 20-23 Jan, 2008, Anchorage, AK.

Hermann, A. J., Kerim Y. Aydin, Nicholas A. Bond, Wei Cheng, Enrique Curchitser, Georgina Gibson, Katherine S. Hedstrom, and Muyin Wang, "Efficient Strategies for Climate Downscaling in the Bering Sea", Alaska Marine Sciences Symposium 20-23 Jan, 2008, Anchorage, AK.

Hinckley, S., Carolina Parada, Billy Ernst, Lobo Orensanz, David Armstrong and Albert J. Hermann, "Temperature Effects on Larval Snow Crab Transport and Source-Sink Relationships in the Bering Sea: How Will Larval Settlement Success be affected by Climate Change?", Alaska Marine Sciences Symposium 20-23 Jan, 2008, Anchorage, AK.

Hermann, A. J., Thomas M. Powell, Wei Cheng and Sarah Hinckley, "Performance of NEMURO with the Regional Ocean Modeling System (ROMS) for the Coastal Gulf of Alaska", PICES 16th annual meeting, 26 October -5 Nov, 2007, Victoria, B.C.

Hermann, A. J., Christopher W. Moore, Sarah Hinckley, Carolina Parada, Elizabeth L. Dobbins and Dale B. Haidvogel, "Immersive visualization online: A modern approach for the rapid exploration of Eulerian and individual-based models", PICES 16th annual meeting, 26 October -5 Nov, 2007, Victoria, B.C.

Hermann, A. J., S. Hinckley, C. Parada, E. Dobbins, C. W. Moore and D. B. Haidvogel, "Immersive visualization: a modern approach for the rapid exploration of Eulerian and Individual-Based models", Gordon Conference on Coastal Ocean Modeling, 17-22 June 2007, Colby-Sawyer College, New London NH.

Coyle, K. O., S. Hinckley and A. J. Hermann. "Calibration of a nutrient - phytoplankton - zooplankton model for use with a three dimensional physical model to simulate ecological mechanisms on the northern Gulf of Alaska shelf", Alaska Marine Sciences Symposium, 21-24 Jan, 2007, Anchorage, AK.

Parada, C., S. Hinckley, J. Horne, A. Hermann, B. Megrey, and M. Dorn. "Hindcasting walleye pollock recruitment and examining pollock stock structure in the Gulf of Alaska using a biophysical model", Alaska Marine Sciences Symposium, 21-24 Jan, 2007, Anchorage, AK.

Hermann, A. J., T. M. Powell, E. L. Dobbins, S. Hinckley, E. N. Curchitser, D. B. Haidvogel and K. Coyle, "A comparison of different NPZ models for the Northeast Pacific", PICES 15th Annual Meeting: Boundary current ecosystems, October 13-22, 2006, Yokohama, Japan.

Hermann, A. J. "Relative merits of Eulerian vs. individual-based models of fish dynamics in patchy habitats", 53rd annual Eastern Pacific Ocean Conference, 27-30 September 2006, Timberline Lodge, OR USA.

Hermann, A. J., S. Hinckley, C. Parada, E. Dobbins, C. W. Moore and D. B. Haidvogel, "Immersive visualization: a modern approach for the rapid exploration of Eulerian and Individual-Based models", Workshop on advancements in modelling physical-biological interactions in fish early-life history: recommended practices and future directions (WKAMF), 3-5 April 2006, IFREMER, Nantes, France.

Hermann, A. J., "Relative merits of Eulerian vs. Individual-Based models of fish dynamics in patchy habitats", Workshop on advancements in modelling physical-biological interactions in fish early-life history: recommended practices and future directions (WKAMF), 3-5 April 2006, IFREMER, Nantes, France.

Hermann, A. J. "3D Astronomy and Oceanography", Whittier Elementary Science Fair, March 28, 2006, Seattle, WA USA.

Hermann, A. J., "Immersive visualization of oceanographic phenomena", University of Washington College of Ocean and Fishery Sciences Open House, April 22, 2006, University of Washington, Seattle, WA USA.

Hermann, A. J., "Immersive 3D visualization of Lagrangian and Eulerian phenomena in oceanography", University of Washington Physical Oceanography seminar, May 31, 2006, University of Washington, Seattle, WA USA.

Hermann, A. J., T. M. Powell, E. L. Dobbins, E. N. Curchitser and D. B. Haidvogel, "A model-based investigation of lower trophic level covariance across the Northeast Pacific on interannual time scales", PICES/GLOBEC

Symposium on Climate variability and ecosystem impacts on the North Pacific: A basin-scale synthesis, April 19-21, 2006, Ala Moana Hotel, Honolulu, HI U.S.A.

2005 ROMS/TOMS User Workshop, October 24-26, 2005, Scripps Institution of Oceanography, La Jolla, CA USA. Hermann, A. J. and E. L. Dobbins, "The estuarine parameterization problem: sensitivity of ROMS to the specifics of line source buoyancy input in the Coastal Gulf of Alaska",

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel and E. L. Dobbins, "A comparison of remote versus local influences on the coastal circulation of the Northeast Pacific", 52nd Annual Eastern Pacific Ocean Conference, September 27-30 2005, Stanford Sierra Camp, Fallen Leaf Lake, CA USA.

Dobbins, E. L., A. J. Hermann, S. Hinckley, P. Stabeno, and N. Kachel, "Investigating the causes and limits of increased productivity over Portlock Bank, Alaska, with a 3D bio-physical model", Advances in Marine Ecosystem Modelling Research symposium, Jun. 27-29, 2005, Plymouth Marine Laboratory, Plymouth, UK

Hermann, A. J., S. Hinckley, C. Parada, E. Dobbins, C. W. Moore and D. B. Haidvogel, "Immersive visualization: a modern approach for the rapid exploration of coastal ecosystem model dynamics", Advances in Marine Ecosystem Modelling Research symposium, Jun. 27-29, 2005, Plymouth Marine Laboratory, Plymouth, UK

Hermann, A. J., S. Hinckley, E. L. Dobbins, D. B. Haidvogel, and N. A. Bond, "Downwelling winds, upwelling response: Quantifying cross-shelf and vertical nutrient flux in the Gulf of Alaska with a spatially nested, coupled biophysical model", Advances in Marine Ecosystem Modelling Research symposium, Jun. 27-29, 2005, Plymouth Marine Laboratory, Plymouth, UK

Hermann, A. J. "Immersive visualization techniques for the exploration of hydrodynamic and biological model output", Fisheries Oceanographic Modeling Workshop, Centre de Recherche Halieutique (CRH), , June 24, 2005, Sete, France.

Hermann, A. J., "A Brief History of IBM/NPZ/Hydrodynamic Modelling in FOCI", Centre de Recherche Halieutique (CRH) seminar, June 23, 2005, Sete, France.

Hermann, A., M. Dorn and S. Hinckley, "Multi-decadal simulations of circulation and walleye pollock in the Northern Gulf of Alaska", Fisheries and the Environment (FATE) Science Meeting, Jun. 8-9, 2005, Seattle, WA.

Curchitser , E., A. Hermann , K. Hedstrom, and P. Budgell, "Coupled sea-ice/ocean numerical simulations of the Bering Sea for the period 1996-2003", Climate Variability and Sub-Arctic Marine Ecosystems, May 16-20, 2005, Victoria, BC, Canada.

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel, E. L. Dobbins, S. Hinckley and C. W. Moore, "Immersive visualization of the circulation and biology of the Northeast Pacific using spatially nested models", Physical Oceanography Seminar, College of Oceanic and Atmospheric Sciences, Oregon State University, Feb 16, 2005, Corvallis, OR USA

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel, E. L. Dobbins, "A comparison of remote versus local influence of El Nino on the coastal circulation of the Northeast Pacific", Physical Oceanography Seminar, College of Oceanic and Atmospheric Sciences, Oregon State University, Feb 15, 2005, Corvallis, OR USA

Hermann, A. J., "Extant ocean circulation models of the Bering Sea and Aleutian Island Region – A summary of models at PMEL", Workshop to Evaluate Ocean Circulation Models for the Bering Sea and Aleutian Island Regions, February 3-4, 2005, Pacific Marine Environmental Laboratory (PMEL), Seattle, Washington

Hermann, A. J., S. Hinckley, D. B. Haidvogel and E. L. Dobbins, "Physical and Lower Trophic Level Modeling in the CGOA", U.S. GLOBEC NEP CGOA Scientific Investigator Meeting, Jan. 31 – Feb. 2, 2005, Pacific Marine Environmental Laboratory, Seattle, WA

Moore, C. W., A. J. Hermann, and E. L. Dobbins. “Serving and Rendering Cluster-Based Ocean Model Output on a Geowall Using the Live Access Server”, Fall Meeting of the American Geophysical Union, Dec 13-17, 2004, San Francisco, CA USA.

Hermann, A. J., S. Hinckley, E. L. Dobbins and D. B. Haidvogel, “Quantifying cross-shelf and vertical nutrient flux in the Gulf of Alaska with a spatially nested, coupled biophysical model”, FOCI seminar, Dec. 8, 2004, Alaska Fisheries Science Center, Seattle, WA.

Curchitser, E. , D. Haidvogel, A. J. Hermann, S. Hinckley and E. L. Dobbins. “Modeling of Physics and Lower Trophic Levels”, U.S. GLOBEC NEP California Current Scientific Investigators' Meeting, Nov. 15-16, 2004, CH2M Hill Alumni Center, Oregon State University, Corvallis, Oregon.

Hermann, A. J., S. Hinckley, E. L. Dobbins and D. B. Haidvogel, “Quantifying cross-shelf and vertical nutrient flux in the Gulf of Alaska with a spatially nested, coupled biophysical model”, North Pacific Marine Science Organization (PICES) 13th annual meeting, Oct. 14-24, 2004, Honolulu, Hawaii, USA.

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel and E. L. Dobbins, “A comparison of remote versus local influence of El Niño on the coastal circulation of the Northeast Pacific”, North Pacific Marine Science Organization (PICES) 13th annual meeting, Oct. 14-24, 2004, Honolulu, Hawaii, USA.

Curchitser, E., D. Haidvogel, A. J. Hermann, E. Dobbins and T. Powell, A numerical simulation of large-scale physical events in the North Pacific ocean during the 1997-2003 period. North Pacific Marine Science Organization (PICES) 13th annual meeting, Oct. 14-24, 2004, Honolulu, Hawaii, USA.

Hermann, A. J., E. N. Curchitser, D. B. Haidvogel, E. L. Dobbins, S. Hinckley and C. W. Moore. “Immersive Visualization of the circulation and biology of the Northeast Pacific using spatially nested ROMS output”. 2004 ROMS/TOMS European Workshop. CNR-ISMAR, October 18-20, 2004, Venice, Italy.

Hermann, A. J., S. Hinckley, E. L. Dobbins, and D. B. Haidvogel. “Quantifying cross-shelf and vertical nutrient flux in the Gulf of Alaska with a spatially nested, coupled biophysical model”. 51st Eastern Pacific Ocean Conference (EPOC), Sep. 22-25, 2004. Dunsmuir Lodge, Vancouver Island, Canada.

Hermann, A. J. “ROMS GLOBEC work in the Gulf of Alaska”. Development Workshop of a Real-Time, Operational Prince William Sound Ocean Forecasting System. Sep 7-8, 2004, Anchorage, AK.

A. J. Hermann and E. L. Dobbins, “Recent Experience with ROMS in NEP-GLOBEC Simulations”, Pacific Northwest ROMS user meeting, 19 Apr. 2004, University of Washington, Seattle, WA.

S. Hinckley and A. Hermann, “Recent Results from NEP-GLOBEC NPZ Models”, GLOBEC biological modeler’s workshop, 26 Mar. 2004, Anacortes, WA.

A. J. Hermann. “The Ocean in 3D”. Whittier Elementary School science fair, 25 Mar. 2004, Seattle, WA.

S. Hinckley and A. Hermann. “What Can We Learn About Transport of Nutrients onto the GOA Shelf: New Results from a Biophysical NPZ Model Which Includes Iron”. PMEL FOCI seminar, 25 Feb. 2004, Seattle, WA.

A. J. Hermann. “Immersive Visualization of Mesoscale Physics in the Northeastern Pacific”. PMEL FOCI seminar, 18 Feb. 2004, Seattle, WA.

A.J. Hermann, D.B. Haidvogel N. A. Bond, P.J. Stabeno, E.L. Dobbins, E.N. Curchitser, K. Hedstrom, D.L. Musgrave. “Analysis of Transport in the Gulf of Alaska with Nested Circulation Models: Sensitivity to Mesoscale Forcing”. American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

T. M. Powell, C.V. Lewis, E.N. Curchitser, E.L. Dobbins, D.B. Haidvogel, A. J. Hermann. “Statistics of Near Surface Biological and Physical Quantities: Calculations with a 3D Biological-physical Model of the California Current System”. American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

E. N. Curchitser, D.B. Haidvogel, A.J. Hermann, E.L. Dobbins, K. Hedstrom, D. Musgrave. “Simulation of Basin-Scale Physical Events in the North Pacific Ocean During the 1997-2003 Period”. American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

A. J. Hermann, E.L. Dobbins, S. Hinckley, S. Moore, D.B. Haidvogel, E.N. Curchitser and K. Hedstrom. “Immersive Visualization of Mesoscale Physics and Biology in the Northeastern Pacific. American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

N. A. Bond, A.J. Hermann, R.C. Steed, P.J. Stabeno. “Shelf Transports in the Gulf of Alaska: Using a Mesoscale NWP Model to Diagnose Air-Sea Interactions”. American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

E. L. Dobbins, S. Hinckley, A.J. Hermann. “Inclusion of Copepod Diapause and Iron in a Biophysical Model of the Gulf of Alaska – What Have We Learned about Cross-Shelf Transport”? American Geophysical Union Ocean Sciences meeting, 26-30 Jan. 2004, Portland, OR.

A. J. Hermann and C.W. Moore. “Commodity Passive Stereo Graphics for Collaborative Display of Ocean Model Output”. 20th Conference on Interactive Information Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology (84th AMS annual meeting), 12-15 Jan 2004, Seattle, WA. (Extended abstract published)
A. J. Hermann and C. W. Moore. “Exploring the Virtual Atmosphere and Ocean in 3D”. 3rd Annual Weatherfest of the American Meteorological Society, 11 Jan 2004, Seattle, WA.

A.J. Hermann, “Spatially Nested Bio-Physical Modeling of the Northeast Pacific”. Departmental Seminar, Department of Environmental and Biomolecular Systems, Oregon Graduate Institute School of Science & Engineering, Oregon Health Sciences University, 5 Dec. 2003, Portland OR

A. J. Hermann. “Nested Modeling of the NE Pacific Ocean”. Regional meeting of the Puget Sound Chapter of the American Meteorological Society, 25 Nov. 2003, Seattle WA.

A. J. Hermann and J. Mark. “El Nino in 3D”. Whittier Elementary School, Nov. 3 2003, Seattle WA

A. J. Hermann and C. Moore. “Low-cost Immersive Technology for Collaborative Examination of Model Output”. NOAATech, October 21-22 2003, Washington DC

A. J. Hermann and C. Moore. “Immersive,3D Visualization of the North Pacific”. UW Oceanography Open House, Oct 17-18 2003, Seattle WA

A.J. Hermann, E.L. Dobbins, C. Moore, D.B. Haidvogel, E.N. Curchitser and K. Hedstrom. “Immersive Visualization of Mesoscale Processes in the Northeastern Pacific”. Eastern Pacific Oceanography Conference (EPOC), Sep 24 2003, Catalina Island CA

A. J. Hermann, E. L. Dobbins, N. Bond, R. Steed and P. J. Stabeno. Variability in Shelf Transports in the Gulf of Alaska. “Variability in shelf transports in the Gulf of Alaska, Part IV: Response to Mesoscale Forcing using the Regional Ocean Modeling System (ROMS)”. Fifth Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 5-8 Aug 2003, Seattle, WA. (Extended abstract published)

A. J. Hermann. “Nesting and Coupling of Physical-Biological Models” (Invited). 2003 Terrain-Following Ocean Models Users Workshop, 4-6 Aug. 2003, PMEL/NOAA, Seattle, WA.

A. J. Hermann. "Nesting, nudging, and coupling of physical and biological models: the quest for simple robust methods in a complex world“. Gordon Conference on Coastal Ocean Modeling, 22-27 June 2003, Colby-Sawyer College, New London NH. (Invited)

A. J. Hermann. “Strategies for coupling physical and biological models: examples of Lagrangian and Eulerian approaches for the Coastal Gulf of Alaska”. Prince William Sound Nowcast-Forecast Workshop, 16-17 June 2003, Anchorage, AK (Invited)

A. J. Hermann, D. B. Haidvogel, C. Moore, N. Bond, E. L. Dobbins, and E. Curchitser. “Coupled biophysical models for coastal downwelling and upwelling environments”. NCSA/Alliance All-Hands Meeting, April 30-May 2 2003, Urbana, IL.

P. Stabeno, N. Bond, A. Hermann and N. Kachel. “Along-shelf and cross-shelf flow on the GOA shelf”. U.S. GLOBEC NEP-CGOA SI Meeting 13-17 January 2003, Anchorage, AK (poster)

D. L. Musgrave, K. Hedstrom, A. J. Hermann and D. B. Haidvogel. “Comparison of the Coastal Gulf of Alaska Circulation (3-km grid) to GLOBEC data”. U.S. GLOBEC NEP-CGOA SI Meeting 13-17 January 2003, Anchorage, AK (poster)

S. Hinckley, A. Hermann and E. Dobbins. “Progress in 3-dimensionalization of the GLOBEC CGOA NPZ model and other aspects of CGOA NPZ modeling”. U.S. GLOBEC NEP-CGOA SI Meeting 13-17 January 2003, Anchorage, AK (poster)

K. Hedstrom, D. Musgrave, A. J. Hermann, and E. L. Dobbins. “Modeled Lagrangian Drifters in the Gulf of Alaska”. U.S. GLOBEC NEP-CGOA SI Meeting, 13-17 January 2003, Anchorage, AK (poster)

E. L Dobbins, C. V. W. Lewis, S. Hinckley and A. J. Hermann. “Comparison of physical-biological models of the California Current System and the Coastal Gulf of Alaska”. U.S. GLOBEC NEP-CGOA SI Meeting,13-17 January 2003, Anchorage, AK (poster)

N. A. Bond, R. Steed, A. J. Hermann, D. Righi and P. J. Stabeno, “Diagnosis of Coastal GOA Air-Sea Interactions Using a High Resolution NWP Model”. U.S. GLOBEC NEP-CGOA SI Meeting, 13-17 January 2003, Anchorage, AK

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, S. Hinckley, P. J. Stabeno, D. Musgrave, K. Hedstrom. “Nested biophysical modeling of the Coastal Gulf of Alaska: inferences from circulation results”. U.S. GLOBEC NEP-CGOA SI Meeting,13-17 January 2003, Anchorage, AK (poster)

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, S. Hinckley, P. J. Stabeno, D. Musgrave, K. Hedstrom. "Nested biophysical modeling of the Coastal Gulf of Alaska: inferences from recent circulation results”. U.S. GLOBEC NEP-CGOA SI Meeting 13-17 January 2003, Anchorage, AK

P. Stabeno, N. Bond, A. Hermann, N. Kachel, C. Mordy and S. Salo. “Physical and chemical measurements along the GOA shelf”. Marine Science in the Northeast Pacific: Science for Resource Dependent Communities, 13-17 January 2003, Anchorage, AK.

A.J. Hermann, D. Haidvogel, E. L. Dobbins, P. J. Stabeno, D. Musgrave, K. Hedstrom “Spatially nested circulation modeling of the Coastal Gulf of Alaska: inferences from results in the vicinity of Kodiak Island”. Marine Science in the Northeast Pacific: Science for Resource Dependent Communities, 13-17 January 2003, Anchorage, AK.

A. J. Hermann, C. Moore and N. N. Soreide. “Recent Advances in Immersive Visualization of Ocean Data: Virtual Reality Through the Web on Your Laptop Computer”. AGU 2002 Fall Meeting, 6-10 December 2002, San Francisco, CA.

D. D. Righi, P. J. Stabeno and A. J. Hermann. “Transports on the Shelf of the Southeastern Bering Sea”. AGU 2002 Fall Meeting, 6-10 December 2002, San Francisco, CA.

A. J. Hermann, C. Moore, Nancy N. Soreide. “Recent advances in immersive visualization of ocean data: Virtual Reality through the web on your laptop computer”. PICES 11th annual meeting, 18-26 October 2002, Qingdao, P. R. China.

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, P. B. Stabeno. “Interannual variability of SST and cross-shelf transport in the coastal Northeast Pacific”. 2nd GLOBEC Open Science Meeting, 'Comparative Ecosystems and Climate Change' 15-18 October 2002, Qingdao, P. R. China (Poster)

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, S. Hinckley, K. Hedstrom, D. Musgrave, E. Curchitser, H. Batchelder, C.A. Edwards, and T.M. Powell. “Coupled biophysical models of transport in coastal downwelling and upwelling environments”. 2nd GLOBEC Open Science Meeting, 'Comparative Ecosystems and Climate Change' 15-18 October 2002, Qingdao, P. R. China (Invited talk)

A. J. Hermann, C. W. Moore, N. N. Soreide (presenter), and P. J. Stabeno. “Continuous VRML output from regional circulation models: a rapid model diagnostic, analysis, and educational tool”. High Performance Computing and Communications FY2001 proposal review. Charleston, SC, May 14-16 2002.

N. Bond, A. Hermann, G. Johnson, C. Mordy, J. Overland, P. Stabeno (presenter). “Climate Variability: Physical Environment on Regional to Local Scales”. Steller Sea Lion Coordinated Research Program, Anchorage, Alaska, March 18-20, 2002.

A. J. Hermann, P. J. Stabeno, D. B. Haidvogel, N. Kachel and E. L. Dobbins. “Spatial and temporal structure of shelf circulation in the Northern Gulf of Alaska”. 2002 Ocean Sciences Meeting, Honolulu, Hawaii., Feb. 11-15, 2002.

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins and P. J. Stabeno. “Visualization of Regional Circulation Models for the Coastal Gulf of Alaska.” GLOBEC NEP Scientific Investigators Workshop, Seattle, WA, November 2001.

A. J. Hermann, “Modeling of Waters Adjacent to Prince William Sound”. Physical Oceanography in PWS: Measures and Models (sponsored by Exxon Valdez Oil Spill Council), Anchorage, AK, Nov. 5-6, 2001.

A. J. Hermann and C. Moore (presenter). “Low-cost interactive stereo visualization on the desktop”. NOAATech 2002, Silver Spring, MD, October 23-25, 2001.

A. J. Hermann, P. J. Stabeno, and M. Spillane. “Twenty Years of Eddies in the Alaska Coastal Current”, North Pacific Marine Science Organization (PICES) 10th Annual Meeting, Victoria Conference Centre, Victoria, B.C., October 5-13, 2001.

A. J. Hermann, P. J. Stabeno, and M. Spillane. “Lagrangian Statistics of Eddies in the Alaska Coastal Current”. Eastern Pacific Ocean Conference (EPOC), Stanford Sierra Camp, Fallen Leaf Lake, CA, Sep. 23-26, 2001.

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins and P. J. Stabeno, “Coupled Global and Regional Circulation Models for the Coastal Gulf of Alaska”. Second joint biannual Terrain-following modeling communities (POM, ROMS, SCRUM, SPEM) meeting, Boulder, Colorado (USA), August 20-22, 2001.

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, S. Hinckley, P. Rand, and P. J. Stabeno “The relative importance of local and remote influences on cross-shelf transport in the Coastal Gulf of Alaska.” Eastern Pacific Ocean Conference 2000, Dunsmuir Lodge, Vancouver Island, September 27-30, 2000.

A. J. Hermann, D. B. Haidvogel, E. L. Dobbins, S. Hinckley, P. Rand, and P. J. Stabeno. “Local and remote influences on cross-shelf transport in the Coastal Gulf of Alaska.” PICES 9th annual meeting, Future University, Hakodate, Hokkaido, Japan, October 20-28, 2000.

A. J. Hermann, S. Hinckley, E. L. Dobbins, D. B. Haidvogel, P.S. Rand and P. J. Stabeno. “Cross-shelf transport of plankton and salmon in the Coastal Gulf of Alaska”. Beyond El Nino: A Conference on Pacific Climate Variability and Marine Ecosystems Impacts from the Tropics to the Arctic, La Jolla, California, March 23-26, 2000.

A. J. Hermann, S. Hinckley, E. L. Dobbins, D. B. Haidvogel, P.S. Rand and P. J. Stabeno. “Coupled Circulation-NPZ-Salmon modeling for the Coastal Gulf of Alaska”. American Geophysical Union Ocean Sciences Meeting, San Antonio, Texas, January 24-28, 2000.

A. J. Hermann, N. N. Soreide, and C. Moore. “Low-cost stereoscopic virtual reality for physical and biological model visualization”. North Pacific Marine Science Organization (PICES) 8th annual meeting, Vladivostok, Russia, 8-17 October 1999.

A. J. Hermann, D. B. Haidvogel, P. J. Stabeno, S. Hinckley and D. Musgrave. “Interannual modeling of tidal and subtidal dynamics on the Southeastern Bering Sea shelf”. North Pacific Marine Science Organization (PICES) 8th annual meeting, Vladivostok, Russia, 8-17 October 1999.

A. J. Hermann, P. Rand, E. L. Dobbins, D. B. Haidvogel, and P. J. Stabeno. “Interannual modeling of circulation and salmon in the Coastal Gulf of Alaska”. North Pacific Marine Science Organization (PICES) 8th annual meeting, Vladivostok, Russia, 8-17 October 1999.

A. J. Hermann, E. L. Dobbins (presenter), D. B. Haidvogel, S. Hinckley, P. J. Stabeno and P. S. Rand. “Hydrodynamic modeling of the Coastal Gulf of Alaska, with particular reference to the Sitka Eddy”. Eastern Pacific Ocean Conference (EPOC), Sierra Camp Conference Center, CA, 5-8 October 1999.

A. J. Hermann, D. B. Haidvogel (presenter), E. L. Dobbins, P. J. Stabeno, and D. Musgrave. “Simulation of the Southeastern Bering Sea and Gulf of Alaska Using Coupled Regional/Basin-Scale Models”, Sigma Coordinate Ocean Model Users Meeting, Bar Harbor, ME, 20-22 September 1999.

Hermann, A. J., E. L. Dobbins, D. B. Haidvogel, S. Hinckley, P. J. Stabeno, C. Moore and N. N. Soreide. “Coastal modeling of circulation and fish dynamics in the Gulf of Alaska, and its visualization with low cost virtual reality techniques”. Gordon Conference on Coastal Ocean Modeling, Colby-Sawyer College, NH, 21-25 June 1999.

Hermann, A. J. “Regional modeling of the Bering Sea and CGOA”. SPEM/SCRUM/ROMS/SEOM/SEAM Users Meeting, University of California - Davis, CA, 28-31 October 1998.

Hermann, A. J., E. L. Dobbins (presenter), D. B. Haidvogel, S. Hinckley, P. J. Stabeno, “Tidal and Subtidal Coupling of Linked Physical and Biological Models for the Coastal Gulf of Alaska”. Eastern Pacific Ocean Conference (EPOC), Mount Hood, OR, October 1998.

Hermann, A. J. and H. Batchelder, “Modeling Activities within the U.S. GLOBEC Northeast Pacific Program”. North Pacific Marine Science Organization (PICES) 7th annual meeting, Fairbanks, AK, October 1998.

Hermann, A. J. and D. B. Haidvogel, (INVITED) “An open boundary technique for the simultaneous modeling of tidal and subtidal dynamics in the coastal gulf of Alaska and the Bering Sea”. International conference on coastal ocean and semi-enclosed seas: circulation and ecology modeling and monitoring. Moscow, Russia, 8-12 September 1998.

Hermann, A. J., S. Hinckley, B.A. Megrey and J.M. Napp, "Methods for incorporating NPZ dynamics into spatially explicit Individual Based Models of marine fish early life history", 1998 Ocean Sciences Meeting of the American Geophysical Union, San Diego, CA, 8-13 February, 1998.

A.J. Hermann, "Coupled Bio-physical models for the Coastal Gulf of Alaska in U.S. GLOBEC", presented at the Canada GLOBEC West Coast Workshop, Vancouver, BC, 7-8 October 1997.

A.J. Hermann, S. Hinckley, B.A. Megrey and J.M. Napp, "Incorporating prey dynamics in a spatially explicit individual-based model of marine fish early life history", presented at the International Council for the Exploration of the Seas International Symposium on "Recruitment Dynamics of Exploited Marine Populations: Physical Biological Interactions", Baltimore, Maryland, USA, 22-24 September 1997.

Megrey, B. A., A. J. Hermann, S. Hinckley and J. M. Napp. 1997. "Effects of mesoscale circulation features on prey dynamics and growth of young walleye pollock as determined from a trophodynamic, biophysical, individual-based model", 5th Annual Meeting of The Oceanography Society, Seattle, WA, 1-4 April 1997.

Hermann, A. J. and P. J. Stabeno. 1996. "A preliminary regional circulation model of the eastern Bering Sea". Theme session on "Exchanges of water, organisms and sediment between continental shelf waters and the nearby ocean", 5th Annual Meeting of the North Pacific Marine Science Organization (PICES), Nanaimo, B.C., 11-20 October, 1996.

Hermann, A. J., S. Hinckley, B. Megrey, and P. J. Stabeno. Biophysical modeling of young walleye pollock (Theragra chalcogramma) in Shelikof Strait, Alaska: a spatially explicit, individual-based exploration of interannual variability. Quantitative Lunchtime Seminar series, School of Fisheries, University of Washington, Seattle, WA, 7 April, 1995.

"Comparison of results from a numerical model with oceanographic observations on the Northern Gulf of Alaska shelf". Presented at the AGU 1994 Fall meeting, San Francisco, California, 5-9 December 1994.

Hermann, A. J., S. Hinckley, B. Megrey, and P. J. Stabeno. Comparative hindcasts of egg and larval transport during years of strong versus weak recruitment of walleye pollock. FOCI lunch seminar, Alaska Fisheries Science Center, Seattle, WA, 15 December 1994.

E. Boss and A. J. Hermann (co-presenters) Varieties of bio-physical models: can physicists learn from the biology? Physical Oceanography Seminar, School of Oceanography, University of Washington, Seattle, 23 November 1994.

"Interannual variability in spatial patterns of walleye pollock larvae as inferred from a spatially explicit, individual-based model". Presented at Spatial Patterns: Survey Designs, Geographic Analysis and Migration Models, National Marine Fisheries Service Stock Assessment Workshop, Seattle, WA, 10-12 August 1994.

"Animated hindcasts and sensitivity analyses of circulation in the Gulf of Alaska with a primitive equation model". Presented at Workshop on High Latitude Ocean-Atmosphere-Ice Interactions: Measurements and Models, Geophysical Institute, University of Alaska Fairbanks, 26-30 July 1994.

Hermann, A., P. Stabeno, S. Hinckley and B. Megrey, Modeling the Interannual Variability of a North Pacific Fishery. Presented at Seattle University for course on Global Climate Change (Dr. Cheryl Greengrove, instructor), Seattle, WA, 2 June 1994.

Provided graphics and background for article, "Ocean Current Model Shows Where Larvae Drift", published in "Challenges", the newsletter of the Arctic Region Supercomputing Center (vol. 2 no. 1), Fairbanks, Alaska, 1994.

Radio interview with PBS affiliate KMXT, Kodiak, AK, concerning our physical-biological modeling of walleye pollock, 6 April 1994.

"Biophysical Modeling of the Early Life History of Walleye Pollock near Shelikof Strait; A Spatially Explicit, Individual-Based Approach" (with S. Hinckley and B. Megrey). Presented at the AGU/ASLO Ocean Sciences Meeting, San Diego, CA, 21-25 February, 1994.

Hermann, A. J. Animated Hydrodynamic Model Results for Three Years in the Gulf of Alaska, FOCI lunch seminar, Pacific Marine Environmental Laboratory, Seattle, WA, 17 February 1994.

"An Individual-Based Model of the Juvenile Stage of Walleye Pollock, Theragra chalcogramma, in the Western Gulf of Alaska" (with S. Hinckley and B. Megrey). Presented by S. Hinckley at the Workshop on the Importance of Pre-recruit Walleye Pollock to the Bering Sea and North Pacific Ecosystems, Seattle, WA, October 28-30, 1993.

"Modeling the Early Life History of Walleye Pollock near Shelikof Strait: A Comparison of Probabilistic and Deterministic Approaches" (with S. Hinckley, B. Megrey, P. Stabeno and J. Overland). Presented at the 123rd Annual Meeting of the American Fisheries Society, Portland, OR, 30 Aug - 3 Sep, 1993.

"An Eddy-Resolving Model of Wind- and Buoyancy-Driven Coastal Circulation in the Western Gulf of Alaska". Presented at the Workshop on North Pacific Modeling, Scripps Institute of Oceanography, La Jolla, CA, 23 August, 1993.

"A Statistical Comparison of Modeled Currents with Lagrangian and Eulerian Data from the Gulf of Alaska" (with P. J. Stabeno). Presented at the Gordon Research Conference on Coastal Ocean Circulation, Plymouth, New Hampshire, June 14-18, 1993.

"Hermann, A. J., P. J. Stabeno, S. Hinckley and B. Megrey. Animated Hindcasts of Mesoscale Circulation in the Northern Gulf of Alaska: What Drives the Variability at Each Time Scale? Physical Oceanography Seminar, University of Washington, Seattle, WA, 18 April 1993.

Sensitivity of an Individual-Based Model to Lagrangian Time Series" (with S. Hinckley and B. A. Megrey). Presented at the Third Scientific Meeting of The Oceanographic Society, Seattle, WA, April 13-16, 1993.

Hermann, A. J., P. J. Stabeno, N. A. Bond and S. J. Bograd. An eddy-resolving model of wind- and buoyancy-driven coastal circulation over complex bathymetry: the Northern Gulf of Alaska. Physical Oceanography Seminar, University of Washington, Seattle, WA, January 6, 1993.

"An Eddy-Resolving Model of Wind- and Buoyancy-Driven Coastal Circulation in the Western Gulf of Alaska". Presented at the 1992 Fall Meeting of the American Geophysical Union, San Francisco, CA, Dec. 7-11, 1992.

Hermann, A. J. An eddy-resolving model of the Alaskan Coastal Current near Kodiak Island. FOCI Seminar, Alaskan Fisheries Science Center, Seattle, WA, November 5,1992.

"Observation and Modeling of Mesoscale Circulation in the Western Gulf of Alaska for Shelikof Strait FOCI". Presented at the 39th Eastern Pacific Ocean Conference, Mt. Hood, OR, October 21-23, 1992.

"Modeling the Possible Impact of Climate Change on Survival of Larval Walleye Pollock (Theragra chalcogramma) in the Gulf of Alaska" (with P. J. Stabeno, N. A. Bond, and S. Bograd). Presented at the International Symposium on Climate Change and Northern Fish Populations, Victoria, British Columbia, Canada, October 13-16, 1992.

"SPEM in a Complex Region: Shelikof Strait and the Gulf of Alaska". Presented at the Semispectral Primitive Equation Model User's Meeting, Woods Hole Oceanographic Institution, Woods Hole, MA, September 14-15, 1992.

"Coupling an individual-based model of pollock dynamics with a three-dimensional hydrodynamic model of Shelikof Strait, Alaska" (with S. Hinckley). Presented at the Aquatic Sciences Meeting of the American Society of Limnology and Oceanography, Santa Fe, New Mexico, February 9-14, 1992.

"Blending individual-based population models with hydrodynamic models: prospects and problems." Presented as the FOCI Lunch Seminar at PMEL/NMFS, Seattle, November 21, 1991.

"Maximizing the rate of formation of deep water: the mesoscale energetics of convective chimneys." Presented as the Oceanography Seminar at the University of Washington School of Oceanography, Seattle, October 2, 1991.

"Development of a 3-dimensional hydrodynamic model for Shelikof Strait". Presented at the Workshop on Fisheries Oceanography of Shelikof Strait, sponsored by Fisheries Oceanography Coordinated Investigations, Seattle, August 27-28, 1991.

"Energetics of geostrophic adjustment and spreading of waters formed by deep convection" (with W. B. Owens). Presented at the XX General Assembly of the International Union of Geology and Geophysics, Vienna, Austria, August 11-24, 1991.

"Energetics of geostrophic adjustment and spreading of waters formed by deep convection." Presented at the Second Annual Semi-spectral Primitive Equation Model User's Workshop, Boulder, Colorado, August 8-9, 1991.

Hermann, A. J. and H. M. Hsu. 1989. A semi-spectral ocean circulation model with mixed layer physics; Part 2: The value of stretched vertical coordinates. Presented at the American Geophysical Union Fall Meeting, Dec. 4 - 8, San Francisco, California. Abstract in EOS Vol. 70 No. 43.

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