Abbreviated CV

Dr. Judith S. Weis, Professor

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Academic Specialty - Marine Ecology, Environmental Sci., Ecotoxicology

Education: Cornell - B.A. 1962, N.Y.U. - M.S. 1964, Ph.D. 1967

Positions: Rutgers University, Newark - Asst. Prof. 1967-71,
Assoc. Prof., 1971-76,
Professor 1976- present.
Associate Dean for Academic Affairs 1985-86.
Congressional Science Fellow, U.S. Senate Environment and Public Works Committee, 1983-84.
Program Director, Undergraduate Education, National Science Foundation, 1988-1990
Elected Fellow of AAAS 1985

Committee/Administrative/Peer Panel Experience:
Marine Board, National Research Council 1991-94
NRC Marine Board Committee on Ballast Water Management to prevent introduction of non-indigenous species 1994
NRC Committee on Desalination 2006-07
NSF Graduate Fellowship Panel 1976,77; Panel Chair 1978-79 & 1982
EPA Environmental Biology Review Panel 1984-90
EPA Distinguished Visiting Scientist Review Panel 1987-88
EPA Endocrine Disruptors Screening & Testing Advisory Comm. 1996-98
NOAA National Sea Grant Advisory Board 1998-2009
EPA SAB Committee on the Report on the Environment 2006-2007
Chair of Biology Section of AAAS 1999
President-elect, President, and past-president, American Institute of Biological Sciences (AIBS) 2000-2003
Board member, Association for Women in Science 2002-2005.

Some Recent Support
Marsh plants roles in metal cycling, trophic transfer and remediation. NSF
Release of metals into salt marshes by CCA-treated walkways. Delaware Inland Bays
Pollution and predator/prey interactions in estuaries. USGS Water Resources Program
Habitat and nutritional value of the invasive plant *Phragmites australis* for estuarine animals, as compared with that of *Spartina alterniflora*. USGS Water Resources Research Program
Trophic transfer of contaminants in young-of-the-year bluefish. NOAA

Selected publications (of >200):
Weis, J.S. and P. Weis. Tolerance and stress in a polluted environment: the case of the mummichog. BioScience 39: 89-96, 1989.
Weis, J. and P. Weis 1995. Effects of embryonic and larval exposure to methylmercury on larval swimming performance and predator avoidance in the mummichog, Fundulus heteroclitus. Can. J. Fish. Aquat. Sci. 52: 2168-2173

Smith, G. and J.S. Weis 1997. Predator/prey interactions of the mummichog, *Fundulus heteroclitus*: Effects of living in a polluted environment. J. Exper. Mar. Biol. Ecol. 209: 75-87.

Zhou, T., H. John-Alder, P. Weis and J.S. Weis, 1999. Thyroidal status of mummichogs (*Fundulus heteroclitus*) from a polluted vs a reference habitat. Environ. Toxicol. Chem. 18: 2817-2823.

Weis, J.S., J. Samson, T. Zhou, J. Skurnick and P. Weis 2001. Prey capture ability by mummichogs (*Fundulus heteroclitus*) as a behavioral biomarker for contaminants in estuarine systems. Can J. Fish. Aquat. Sci. 58: 1442-1452.

Weis, J.S. and P. Weis 2000. Behavioral responses and interactions of estuarine animals with an invasive marsh plant. Biol. Invasions 2: 305-314

Bass, C.S., S. Bhan, G. Smith and J.S. Weis 2001. Some factors affecting size distribution and density of grass shrimp(*Palaemonetes pugio*) in 2 NJ estuaries. Hydrobiologia 450: 231-241.

Windham, L, J.S. Weis and P. Weis. 2001. Patterns and processes of mercury release from leaves of two dominant salt marsh macrophytes, *Phragmites australis* and *Spartina alterniflora*. Estuaries 24: 787-795.

Weis, J.S. 2002. Tolerance to environmental contaminants in the mummichog, *Fundulus heteroclitus*. Human and Ecological Risk Assessment 8: 933-953.

Weis, J.S., L. Windham and P. Weis 2003. Patterns of metal accumulation in leaves of the tidal marsh plants *Spartina alterniflora* (Loisel) and *Phragmites australis* (Cav. Trin ex Steud) over the growing season. Wetlands 23: 459-465.

Weis, J.S. and P. Weis. 2004. Metal uptake, transport, and release by wetland plants: Implications for phytoremediation and restoration. Environ. Internat. 30: 685-700.

Weis, J.S. 2005. Diet and food web support of the white perch, *Morone americana*, in the Hackensack Meadowlands of New Jersey. Environ. Biol. Fishes 74: 109-113.

Robertson, T. and J. S. Weis 2005 A comparison of epifaunal communities associated with the stems of salt marsh grasses *Phragmites australis* and *Spartina alterniflora*. Wetlands 25: 1-7

Mac Donald, J., R. Roudez, T. Glover and J.S. Weis. 2007 The invasive green crab and Japanese shore crab: behavioral interactions with the native blue crab. Biol Invasions 9: 837-848.

Bergey, L. and J.S. Weis 2007. Molting as a mechanism of depuration of metals in the fiddler crab, *Uca pugnax*. Marine Environmental Research 64: 556-562

Samson, J.C., S. Shumway and J.S. Weis. 2008 Effects of the toxic dinoflagellate *Alexandrium fundyense* on three species of larval fish: a food web approach. J. Fish Biol. 72: 168-188.

Bergey, L. and J.S Weis 2008. Aspects of population ecology in two populations of fiddler crabs, *Uca pugnax*. Marine Biology 154: 435-442.

Bass, C.S. and J.S. Weis 2009. Increased abundance of snails and trematode parasites of *Fundulus heteroclitus* (L.) in restored New Jersey wetlands. Wetland Ecol. Mgmt. 16:173-182.

Weis, J.S. 2009. Reproductive, Developmental, and Neurobehavioral Effects of Methylmercury in Fishes. Journal of Environmental Science and Health, Part C 27: 212-225.

Reichmuth, J.M., P. Weis and J.S. Weis, 2010. Bioaccumulation and depuration of metals in blue crabs (*Callinectes sapidus* Rathbun) from a contaminated and clean estuary. Environ. Pollut. 158: 361-368.

Candelmo, A., A. Deshpande, B. Dockum, P. Weis and J. S. Weis 2010. The effect of contaminated prey on feeding, activity, and growth of young-of-the-year bluefish, *Pomatomus saltatrix*, in the laboratory. Estuaries and Coasts 33: 1025-1038.

Burridge, L., J.S. Weis, F. Cabello, J. Pizarro and K. Bostick 2010. Chemical use in salmon aquaculture: A review of current practices and possible environmental effects. Aquaculture 306: 7-23

Weis, J.S., L. Bergey, J. Reichmuth and A. Candelmo 2011. Living in a contaminated estuary: Behavioral changes and ecological consequences for five species. BioScience 61: 375-385