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Peddrick Weis, Ph.D.

Treated Wood Impacts/Alternatives

Curriculum Vitae (Abbreviated)

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Education:

	Dates	Institution	Discipline	Degree
Undergrad:	1956-1959	Cornell University	Zoology	
Graduate:	1959-1963	New York University	Dentistry	D.D.S

Postdoctoral Training:

1. Research Fellowships:
 - a. 1963-64: NATIONAL SCIENCE FOUNDATION (at New York University)
 - (1) SUPERVISOR: E.D. Bueker, Ph.D.
 - (2) DISCIPLINE: Neuroembryology
 - b. 1992: NAS/NRC Senior Res. Fellowship: at U.S.E.P.A.
 - (1) DISCIPLINE: Aquatic Toxicology
2. Continuing Education:
 - a. 1968: Electron Microscopy (at Cornell U. College of Engineering)
 - b. 1978: Scanning E. M. & Energy Dispersive X-ray Analysis (at S.U.N.Y. - New Paltz)
 - c. 1986: Comparative Pathology tutorial (at W. Va. Univ.)

University Appointments:

- 1964-1967 New York University (College of Dentistry)
 - ◆ Anatomy Department, **Instructor**
- 1967-1971 UMDNJ-New Jersey Medical School, Newark, N.J.
 - ◆ Dept. of Anatomy, **Assistant Professor**
- 1971-1978 UMDNJ-New Jersey Medical School, and Graduate School of Biomedical Sciences (G.S.B.S.), Newark, N.J.
 - ◆ Dept. of Anatomy, **Associate Professor**
- 1978-2001 UMDNJ-New Jersey Medical School and G.S.B.S.
 - ◆ Dept. of Anatomy, Cell Biology & Injury Science, **Professor**
- 2002 -- UMDNJ-New Jersey Medical School and G.S.B.S.
 - ◆ Dept. of Radiology, **Professor**

Awards/Honors:

- New York State Regents' Scholarship
- New York State Regents' Cornell Scholarship
- New York State Regents' Professional Study Scholarship
- N.S.F. Post-doctoral Research Fellowship
- N.R.C. Senior Research Fellowship
- Fellow, American Association for the Advancement Science

Major Research Interest:

- Environmental Toxicology: Effects of anthropogenic inputs in the aquatic environment on development, growth and adult health.
- Biology of Fishes

Some Recent Funding:

- U.S. Dept. Agr.: Treated Wood (CCA) Leachates in Estuarine Sediments: Bioavailability and Effects. 1994-1997. (PI & Interuniv. Proj. Coord.)
- N.S.F.: Wetland Plants' Roles in Uptake & Transport of Heavy Metals and Remediation 1998-01 (with J. S. Weis, PI & Interuniv. Proj. Coord.)

- Meadowlands Env. Res. Inst.: Eight-day Swamp: Assessment of Heavy Metal Contamination and Benthic Biodiversity. 2001-2002. (PI & Interuniv. Proj. Coord.)

Selected Publications:

- WEIS, P. Ultrastructural changes induced by low concentrations of DDT in the liver of the zebrafish and guppy. *Chem.-Biol. Interact.* 8:25-30 (1974).
- WEIS, P., and J.S. WEIS. DDT causes changes in activity and schooling behavior in goldfish. *Environ. Res.* 7:68-74 (1974).
- WEIS, P., and WEIS, J.S. Methylmercury teratogenesis in the killifish, *Fundulus heteroclitus*. *Teratology* 16:317-326 (1977).
- WEIS, P., and WEIS, J.S. The effect of zinc on fin regeneration in the mummichog, *Fundulus heteroclitus*, and its interaction with methylmercury. *Fish. Bull.* 78:163-166 (1980).
- WEIS, J.S., WEIS, P., HEBER, M.A., and VAIDYA, S. Methylmercury tolerance in *Fundulus heteroclitus* embryos from a polluted vs. a non-polluted environment. *Mar. Biol.* 65:283-287 (1981).
- WEIS, P. Metallothionein and mercury tolerance in the killifish, *Fundulus heteroclitus*. *Mar. Environ. Res.* 14:153-166 (1984).
- WEIS, P., BOGDEN, J.D., and ENSLEE, E.C. Hg- and Cu-induced hepatocellular changes in mummichog, *Fundulus heteroclitus*. *Environ. Health Perspec.* 65:167-173 (1986).
- WEIS, P., and WEIS, J.S. Cadmium acclimation and hormesis in *Fundulus heteroclitus* during fin regeneration. *Environ. Res.* 39:356-363 (1986).
- WEIS, P., and WEIS, J.S. Effects of environmental factors on release of mercury from Berry's Creek (New Jersey) sediments and its uptake by killifish *Fundulus heteroclitus*. *Environ. Poll. (Ser. A)*40:303-315 (1986).
- KRAUS, M., WEIS, P. and CROW, J. Excretion of heavy metals by the salt marsh cord grass, *Spartina alterniflora*, and *Spartina's* role in mercury cycling. *Mar. Environ. Res.* 20:307-316 (1986).
- PERRY, D.M., WEIS, J.S., and WEIS, P. Cytogenetic effects of methylmercury in embryos of the killifish, *Fundulus heteroclitus*. *Arch. Environ. Contam. Toxicol.* 17:569-574, 1988.
- WEIS, J.S. and WEIS, P. Tolerance and stress in a polluted environment: the case of the mummichog. *BioScience* 39:89-95 (1989).
- WEIS, P., J.S. WEIS, and A. GREENBERG. Treated municipal wastewaters: effects on development and growth of fishes. *Mar. Environ. Res.* 28:527-532 (1989).
- WEIS, P., J.S. WEIS AND L.M. COOHILL. Toxicity to estuarine organisms of leachates from chromated copper arsenate treated wood. *Arch. Environ. Contam. Toxicol.* 20:118-124 (1991).
- WEIS, P., J.S. WEIS, A. GREENBERG AND T.J. NOSKER. Toxicity of construction materials in the marine environment: a comparison of chromated-copper-arsenate-treated wood and recycled plastic. *Arch. Environ. Contam. Toxicol.* 22:99-106 (1992).
- WEIS, P., J.S. WEIS, and T. PROCTOR. Copper, chromium, and arsenic in estuarine sediments adjacent to wood treated with chromated-copper-arsenate (CCA). *Est. Coastal Shelf Sci.* 36:71-79 (1993).
- WEIS, P., WEIS, J.S., and J. COUCH. Histopathology and metal uptake in oysters (*Crassostrea virginica*) living on wood preserved with chromated copper arsenate. *Dis. Aquat. Org.* 17:41-46 (1994).
- SMITH, G.M., KHAN, A.T., WEIS, J.S., and WEIS, P. Behavior and brain chemistry correlates in mummichogs (*Fundulus heteroclitus*) from polluted and unpolluted environments. *Mar. Environ. Res.* 39:329-334 (1995).
- WEIS, P., WEIS, J.S., COUCH, J., DANIELS, C., and CHEN, T. Pathological and genotoxicological observations in oysters *Crassostrea virginica* living on chromated copper arsenate (CCA) treated wood. *Mar. Environ. Res.* 39:275-278 (1995).
- COLE, A.M., WEIS, P., and DIAMOND, G. Isolation and characterization of pleurocidin, an antimicrobial peptide in the skin secretions of winter flounder. *J. Biol. Chem.* 272:12008-12013 (1997).
- WEIS, P. and WEIS, J.S. Accumulation of metals in consumers associated with chromated copper arsenate (CCA)-treated wood panels. *Mar. Environ. Res.* 48: 73-81 (1999).
- BURKE, D.J., WEIS, J.S., and WEIS, P. Release of metals by the leaves of the salt-marsh grasses *Spartina alterniflora* and *Phragmites australis*. *Estuar. Coast. Shelf Sci.* 51: 153-159 (2000).
- WEIS, J.S., SAMSON, J., ZHOU, T., SKURNICK, J., and WEIS, P. Prey capture ability of mummichogs (*Fundulus heteroclitus*) as a behavioral biomarker for contaminants in estuarine systems. *Can. J. Fish. Aquat. Sci.* 58: 1442-1452 (2001).