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### Education

1992 Ph.D., Biology, Texas Tech University, Lubbock, Texas.  
1987 B.Sc., Biology, Middle East Technical University, Ankara, Turkey.

### Professional Experience

September 2003-present Research Specialist, Dept. of Biology, Woods Hole Oceanographic Institution, Woods Hole, MA.  
June 1996- September 2003 Research Associate, Dept. of Biology, Woods Hole Oceanographic Institution, Woods Hole, MA.  
April 1994-April 1996 NIH Postdoctoral Fellow, Dept. of Biology, Woods Hole Oceanographic Institution, Woods Hole, MA.  
March 1993-March 1994 Visiting Investigator, Dept. of Biology, Woods Hole Oceanographic Institution, Woods Hole, MA.

### Academic Honors

1988-1990 NATO scholarship for doctoral studies.  
1991 Doctoral fellowship from Louise B. Belsterling Foundation.  
1994-1996 Recipient of an Individual National Research Service Award (NRSA) in Environmental Toxicology from the National Institute of Environmental Health Sciences (NIEHS).  
2008-2012 Allyn Vine Senior Technical Staff Award, Woods Hole Oceanographic Institution  
2021 Linda Morse-Porteous Technical Staff Award, Woods Hole Oceanographic Institution

### Professional Memberships

2005- American Association for the Advancement of Science

### Publications:

Aluru, N and **Karchner, SI**. "PCB126 exposure revealed alterations in m6A RNA modifications in transcripts associated with AHR activation. *Tox. Sci.* 2021 Jan 6;179(1):84-94. doi: 10.1093/toxsci/kfaa158. PMID: 33064826

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Lemaire B, **Karchner SI**, Goldstone JV, Lamb DC, Drazen JC, Rees JF, Hahn ME, Stegeman JJ. Molecular adaptation to high pressure in cytochrome P450 1A and aryl hydrocarbon receptor systems of the deep-sea fish *Coryphaenoides armatus*. *Biochim Biophys Acta - Proteins and Proteomics* 1866 (2018) 155–165. PubMed PMID: 28694077.

Aluru N, **Karchner SI**, and Glazer, L. Early life exposure to low levels of AHR agonist PCB126 (3,3',4,4',5-pentachlorobiphenyl) reprograms gene expression in adult brain. *Toxicol Sci*. (2017) 160(2):386-397. doi: 10.1093/toxsci/kfx192. PubMed PMID: 28973690.

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Merson RR, **Karchner SI**, Hahn ME. Interaction of fish aryl hydrocarbon receptor paralogs (AHR1 and AHR2) with the retinoblastoma protein. *Aquat Toxicol.* 2009 Aug 13;94(1):47-55. doi: 10.1016/j.aquatox.2009.05.015. Epub 2009 Jun 2. PubMed PMID: 19539383; PubMed Central PMCID: PMC2833323

Jenny MJ, **Karchner SI**, Franks DG, Woodin BR, Stegeman JJ, Hahn ME. Distinct roles of two zebrafish AHR repressors (AHRRa and AHRRb) in embryonic development and regulating the response to 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Toxicol Sci.* 2009 Aug;110(2):426-41. doi: 10.1093/toxsci/kfp116. Epub 2009 Jun 3. PubMed PMID: 19494032; PubMed Central PMCID: PMC2708601.

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### Abstracts and Presentations:

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Aluru N, Chapman D, McMonagle H, Becker K, Van Mooy B, **Karchner SI**, Stegeman JJ, and Hahn ME (2018) Developmental Exposure To Low-level Saxitoxin Affects Neuronal Gene Expression. Society of Toxicology Annual Meeting, San Antonio, TX.

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Ulin A, Henderson J, Pham M-T, Meyo J, Chen Y, Hahn ME, **Karchner SI**, Goldstone JV, Williams LM (2018) Transcriptional regulation of the nuclear factor erythroid-2 related factor (*nrf*) family by aryl

hydrocarbon receptor 1b (AHR1b) during *Danio rerio* development. Society of Toxicology Annual Meeting, San Antonio, TX.

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