

## CURRICULUM VITAE

### Neelakanteswar Aluru

Associate Scientist (Tenure Track)  
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### EDUCATION

#### **Doctor of Philosophy (Ph.D) in Biology** **2001- 2005**

Department of Biology, University of Waterloo, Ontario.  
Thesis title: Impact of Aryl hydrocarbon receptor activation on the cortisol response to stress in rainbow trout. (Supervisor: Dr. M.M.Vijayan)

#### **Master of Science** **1999-2001**

College of Fishery Science, University of Tromso, Norway.  
Thesis title: Effect of Aroclor 1254 on physiological stress response in Arctic Charr (*Salvelinus alpinus*): modulation by nutritional status. (Supervisor: Dr. Even H. Jorgensen)

#### **Master of Fisheries Science (Aquaculture)** **1995-1997**

College of Fisheries, Kerala Agricultural University, Cochin, India.  
Thesis title: Larval rearing of Angel fish, *Pterophyllum scalare* on artificial diets. (Supervisor: Dr. P.M. Mathew)

#### **Bachelor of Fisheries Science** **1990-1994**

College of Fisheries, Orissa University of Agriculture and Technology, Berhampur, India.

### PROFESSIONAL EXPERIENCE

- Associate Scientist (Tenure Track), Biology Department, Woods Hole Oceanographic Institution (June 2016 – present)
- Assistant Scientist, Biology Department, Woods Hole Oceanographic Institution (2012 – 2016).
- Visiting Investigator, Biology Department, Woods Hole Oceanographic Institution (April 2010 – June 2012; Under the supervision of Dr. Mark E. Hahn, Senior Scientist, Biology Department, WHOI).
- Woods Hole Oceanographic Institution Postdoctoral Scholar (October 2008 – March 2010; Under the supervision of Dr. Mark E. Hahn, Senior Scientist, Biology Department, WHOI).
- National Science and Engineering Research Council (NSERC) Postdoctoral Fellow (May 2006 – August 2008): Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph, Ontario, Canada (Under the supervision of Dr. John F. Leatherland).

- Visiting Postdoctoral Fellow (February 2008): Columbia River Research Laboratory, Western Fisheries Research Center, United States Geological Survey, Biological Resources Division, Cook, Washington, USA. (Under the supervision of Dr. Alec G. Maule).
- Postdoctoral Fellow (May 2005- April 2006): Department of Biology, University of Waterloo, Waterloo, Ontario, Canada (Under the supervision of Dr. M.M. Vijayan).
- Visiting postdoctoral fellow (July-August 2005): Tropical Biosphere Research Center, University of the Ryukyus, Okinawa, Japan. (Under the supervision of Dr. Akihiro Takemura).

## **AWARDS**

- National Institute of Environmental Health Sciences (NIEHS/NIH; National Institute of Health) Outstanding New Environmental Scientist Award (February 2015)
- Woods Hole Oceanographic Institution Postdoctoral Scholarship (October 2008-March 2010)
- Natural Sciences and Engineering Research Council (NSERC) of Canada postdoctoral fellowship (May 2006-April 2008)
- W.B. Pearson Medal for best creative research in Biology (Ph.D., 2004). This is awarded by the Faculty of Science at University of Waterloo, Ontario, Canada.
- University of Waterloo graduate scholarship (2001-2004)
- Norwegian state educational fund scholarship (1999-2001)
- Indian Council of Agricultural Research (ICAR) – Senior Research Fellow (1998-1999)
- Indian Council of Agricultural Research (ICAR) – Junior Research Fellow (1995-1997)

## **PROFESSIONAL AFFILIATIONS**

- Society of Toxicology, 2009 – present
- DNA Methylation Society, 2015 – present

## **RESEARCH INTERESTS**

- Effect of environmental stressors on epigenetic mechanisms.
- Role of Epigenetic mechanisms (DNA methylation and non-coding RNAs) on phenotypic plasticity.

## **PROFESSIONAL ACTIVITIES**

### *WHOI*

- WHOI Institutional Animal Care and Use Committee, 2012 to present.
- Biology Department Seminar Series Co-ordinator, 2012 – 2016.
- WHOI Coastal Ocean Institute Advisory Committee (April 2015- September 2016)

### *Outside WHOI*

- Ad hoc member – NIH study section review panels

- Academic Research Enhancement Award (AREA) on topics relevant to Toxicology, Digestive, Urological and Kidney Systems (December 2018)
- Neurotoxicology and Teratology section (February 2018)
- Outstanding New Environmental Scientist (ONES) Award (R01) review (May 2016)
- National Institute of Environmental Health Sciences Special Emphasis Panel (February 2016)
- Systemic Injury to Environmental Exposure (SIEE) study section (February and October 2015)
- Xenobiotic and Nutrient Disposition and Action (XNDA) study section (June 2015)
- AREA grants (July 2015)
- Organizing committee member and toxicology session chair, 9<sup>th</sup> Aquatic models of human disease conference (September 29 – October 4, 2018)
- Co-chair, continuing education course on MicroRNAs in Biology and Toxicology at the Annual Meeting of Society of Toxicology (2012), San Francisco, CA.

## **PARTICIPATION IN EDUCATION PROGRAM**

### *Advising*

- Joint Program Student
  - Jordan Pitt (June 2018 – present; Co-advisor)
  - Alia Hidayat (June 2017 – present; Advisor)
  - Jennifer Panlilio (September 2013 – present; Co-advisor)
- Postdoctoral Scholar
  - Lilah Glazer, Postdoctoral Scholar (December 2013 – November 2015; Co-advisor)
- Summer Student Fellows
  - Adriane McDonald, Spelman College (Summer 2018)
  - Veronica De Pascuale, Oberlin College (Summer 2017)
  - Victoria Garefino, University of South Carolina (Summer 2016)
  - Daniel Chapman, Eckerd College (NOAA Hollings scholar, Summer 2016)
  - Lily Helfrich, Northwestern University (Summer 2014)
  - Elaine Kuo, Stanford University, California (Summer Student Fellow 2013)
  - Kristina Deak, Northeastern University (Summer 2011)
- Guest students
  - Ch'ng Chin Chin, Masters student, Brown Univeristy School of Public Health (April – August 2018)

- Jan Engelhardt, Ph.D. candidate, University of Leipzig, Germany (Jan-March 2018)
- Carlo Bocconcelli, Harvard University (June – August 2015)
- Lukas John, Brown University (June – August 2015)
- Whitney Jaillet, Rogerwilliams University (January – April 2015)
- Shaneese Mackey, Savannah State University (Summer 2014)
- Elizabeth Meyer, Wheaton College, Massachusetts (Winter Internship 2013)
- High School students
  - Rebecca Butler and Anna Metri, Falmouth Academy, Massachusetts (October 2017 – January 2018)
  - Emma Stillman, Falmouth Academy, Massachusetts (October 2014 – January 2015)
  - Kate Armstrong, Falmouth Academy, Massachusetts (December 2013 – January 2014)
  - Matthew Czarnecki, Belmont Hill High School, Massachusetts (Summer 2013)

#### *Committees and Misc. activities*

- Joint Program Admissions Advisory Committee (Jan 2015 - Dec 2017)
- Presentation on Epigenetic Gene Regulation: Linking Developmental Exposure to Toxins and Toxicants to Adult Disease. Joint Program Faculty Meeting, November 13, 2014, Cambridge MA
- Lecture on Marine Toxicology. WHOI-BP short course, 18th September 2012, Woods Hole, Massachusetts.
- Lecture on Environmental Epigenetics. Summer Student Fellow Lecture Series, June 2012, Woods Hole, Massachusetts.

#### **SUPERVISION AT WHOI**

- Technical Staff
  - Veronica De Pascuale, Research Assistant I (November 2018 – present)
  - Sara Mindek, Research Assistant I (November 2017 – present)
  - Helena McMonagle, Research Assistant I (January 2017- January 2018)
  - Keegan Krick, Research Assistant I (September 2015 – August 2016; December-January 2017)
  - Zach Mickiewicz, Research Assistant I (April 2014 – September 2016)
  - Mat Schetne, Research Assistant I (September 2013 – December 2014)
  - Gale Clark, Research Assistant I (June 2012 – May 2013)

#### **PAPERS IN REFEREED JOURNALS AND BOOKS**

(\* denotes student or postdoc from my laboratory; # denotes equal contributions.)

1. Glazer, L\*., Kido Soule, M.C., Longnecker, K., Kujawinski, E.B., **Aluru, N. 2018.** Hepatic metabolite profiling of polychlorinated biphenyl (PCB)-resistant and sensitive populations of Atlantic killifish (*Fundulus heteroclitus*). *Aquatic Toxicology*. **205**:114-122.

2. Oh, D.-J., Hur, S.-P., Bouchekioua, S., Takeuchi, Y., Udagawa, S., **Aluru, N.**, Park, Y.-J., Park, Ji-G., Kim, Se-J., Moon, T.W., Vijayan, M.M., Takemura, A. **2018**. Tide-related changes in mRNA abundance of aromatases and estrogen receptors in the ovary and brain of the Three spot Wrasse *Halichoeres trimaculatus*. *Ocean Science Journal*. **53**(2), 239-249.
3. **Aluru, N.**, Karchner, S.I., Krick, K.S\*, Zhu, W., Liu, J. **2018**. Role of DNA methylation in altered gene expression patterns in adult zebrafish (*Danio rerio*) exposed to 3, 3', 4, 4', 5-pentachlorobiphenyl (PCB 126). *Environmental Epigenetics*. **4**(1):dvy005.
4. Sadoul, B., Birceanu, O., **Aluru, N.**, Thomas, J.K. Vijayan, M.M. **2017**. Bisphenol A in eggs causes development-specific liver molecular reprogramming in two generations of rainbow trout. *Scientific Reports*. **7**(1):14131.
5. **Aluru, N.**, Karchner, S.I., Glazer, L\*. **2017**. Early life exposure to low levels of AHR agonist PCB126 (3,3',4,4',5-pentachlorobiphenyl) reprograms gene expression in adult brain. *Toxicological Sciences*, **160**: 386–397.
6. **Aluru, N.** **2017**. Epigenetic effects of environmental chemicals: Insights from zebrafish. *Current Opinion in Toxicology*, **6**: 26-33.
7. Reid, N.M., Jackson, C.E., Gilbert, D., Minx, P., Montague, M.J., Hampton, T.H., Helfrich, L.W.\*, King, B.L., Nacci, D.E., **Aluru, N.**, Karchner, S.I., Colbourne, J.K., Hahn, M.E., Shaw, J.R., Oleksiak, M.F., Crawford, D.L., Warren, W.C., Whitehead, A. **2017**. The landscape of extreme genomic variation in the highly adaptable Atlantic killifish. *Genome Biology and Evolution* **9**(3): 659–676.
8. Faught, E., **N. Aluru**, M.M. Vijayan. **2016**. Chapter 4. The molecular stress response. In: *Fish Physiology, Volume 35. Biology of Stress in Fish*. Eds. C.B. Shreck, L. Tort, A. Farrell, C. Brauner. Academic Press.
9. Glazer, L\*., M.E. Hahn, and **N. Aluru**. **2016**. Delayed effects of developmental exposure to low levels of the aryl hydrocarbon receptor agonist 3,3',4,4',5-pentachlorobiphenyl (PCB126) on adult zebrafish behavior. *Neurotoxicology*, **52**: 134-143.
10. Lopes-Marques, M., R. Ruivo, I. Delgado, J.M. Wilson, **N. Aluru**, and L.F. Castro. **2015**. Basal Gnathostomes provide unique insights into the evolution of vitamin B12 binders. *Genome Biol Evol*, **7**(2): 457-464.
11. **Aluru, N.**, E. Kuo\*, L.W. Helfrich\*, S.I. Karchner, E.A. Linney, J.E. Pais, and D.G. Franks. **2015**. Developmental exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin alters DNA methyltransferase (dnmt) expression in zebrafish (*Danio rerio*). *Toxicol Appl Pharmacol*, **284**(2): 142-151.
12. **Aluru, N.**, S.I. Karchner, D.G. Franks, D. Nacci, D. Champlin, and M.E. Hahn. **2015**. Targeted mutagenesis of aryl hydrocarbon receptor 2a and 2b genes in Atlantic killifish (*Fundulus heteroclitus*). *Aquat Toxicol*, **158**: 192-201.
13. Wang, L., J. Zhang, J. Duan, X. Gao, W. Zhu, X. Lu, L. Yang, J. Zhang, G. Li, W. Ci, W. Li, Q. Zhou, **N. Aluru**, F. Tang, C. He, X. Huang, and J. Liu. **2014**. Programming and inheritance of parental DNA methylomes in mammals. *Cell*, **157**(4): 979-991.
14. **Aluru, N.**, M.J. Jenny, and M.E. Hahn. **2014**. Knockdown of a zebrafish aryl hydrocarbon receptor repressor (AHRRA) affects expression of genes related to photoreceptor development and hematopoiesis. *Toxicol Sci*, **139**(2): 381-395.
15. **Aluru, N.**, K.L. Deak\*, M.J. Jenny, and M.E. Hahn. **2013**. Developmental exposure to valproic acid alters the expression of microRNAs involved in neurodevelopment in zebrafish. *Neurotoxicol Teratol*, **40**: 46-58.

16. Jenny, M.J.<sup>#</sup>, **N. Aluru**<sup>#</sup>, and M.E. Hahn. **2012**. Effects of short-term exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin on microRNA expression in zebrafish embryos. *Toxicol Appl Pharmacol*, **264**(2): 262-273. [<sup>#</sup> equal contribution]
17. Barkataki, S., **N. Aluru**, M. Li, M.M. Vijayan, and J.F. Leatherland. **2012**. Characteristics of ovarian follicle steroidogenesis during vitellogenesis in an asynchronously ovulating stock of rainbow trout *Oncorhynchus mykiss*. *J Fish Biol*, **80**(4): 741-751.
18. Shepherd, B.S., **N. Aluru**, and M.M. Vijayan. **2011**. Acute handling disturbance modulates plasma insulin-like growth factor binding proteins in rainbow trout (*Oncorhynchus mykiss*). *Domest Anim Endocrinol*, **40**(3): 129-138.
19. **Aluru, N.**, S.I. Karchner, and M.E. Hahn. **2011**. Role of DNA methylation of AHR1 and AHR2 promoters in differential sensitivity to PCBs in Atlantic Killifish, *Fundulus heteroclitus*. *Aquat Toxicol*, **101**(1): 288-294.
20. Alsop, D. and **N. Aluru**. 2011. *THE PITUITARY | Development of the Hypothalamus-Pituitary-Interrenal Axis*, in *Encyclopedia of Fish Physiology*, A.P. Farrell, Editor., Academic Press: San Diego. p. 1450-1456.
21. Vijayan, M.M., **N. Aluru**, Leatherland, J.F. 2010. *Organismal and cellular stress*, in *Fish Diseases and Disorders, Volume 2: Non-infectious Disorders*, J.F. Leatherland and P.Woo. Editors., CAB International: Oxfordshire, UK. p. 416.
22. Nikaido, Y., **N. Aluru**, A. McGuire, Y.J. Park, M.M. Vijayan, and A. Takemura. **2010**. Effect of cortisol on melatonin production by the pineal organ of tilapia, *Oreochromis mossambicus*. *Comp Biochem Physiol A Mol Integr Physiol*, **155**(1): 84-90.
23. Methling, C., **N. Aluru**, M.M. Vijayan, and J.F. Steffensen. **2010**. Effect of moderate hypoxia at three acclimation temperatures on stress responses in Atlantic cod with different haemoglobin types. *Comp Biochem Physiol A Mol Integr Physiol*, **156**(4): 485-490.
24. McGuire, A., **N. Aluru**, A. Takemura, R. Weil, J.M. Wilson, and M.M. Vijayan. **2010**. Hyperosmotic shock adaptation by cortisol involves upregulation of branchial osmotic stress transcription factor 1 gene expression in Mozambique Tilapia. *Gen Comp Endocrinol*, **165**(2): 321-329.
25. **Aluru, N.**, J.F. Leatherland, and M.M. Vijayan. **2010**. Bisphenol A in oocytes leads to growth suppression and altered stress performance in juvenile rainbow trout. *PLoS One*, **5**(5): e10741.
26. **Aluru, N.** and M.M. Vijayan. **2009**. Stress transcriptomics in fish: a role for genomic cortisol signaling. *Gen Comp Endocrinol*, **164**(2-3): 142-150.
27. **Aluru, N.** and M.M. Vijayan. **2008**. Brain transcriptomics in response to beta-naphthoflavone treatment in rainbow trout: the role of aryl hydrocarbon receptor signaling. *Aquat Toxicol*, **87**(1): 1-12.
28. **Aluru, N.** and M.M. Vijayan. **2008**. Molecular characterization, tissue-specific expression, and regulation of melanocortin 2 receptor in rainbow trout. *Endocrinology*, **149**(9): 4577-4588.
29. Park, C.B., A. Takemura, **N. Aluru**, Y.J. Park, B.H. Kim, C.H. Lee, Y.D. Lee, T.W. Moon, and M.M. Vijayan. **2007**. Tissue-specific suppression of estrogen, androgen and glucocorticoid receptor gene expression in feral vitellogenic male Mozambique tilapia. *Chemosphere*, **69**(1): 32-40.
30. Moran, P.W., **N. Aluru**, R.W. Black, and M.M. Vijayan. **2007**. Tissue contaminants and associated transcriptional response in trout liver from high elevation lakes of Washington. *Environ Sci Technol*, **41**(18): 6591-6597.
31. **Aluru, N.** and M.M. Vijayan. **2007**. Hepatic transcriptome response to glucocorticoid receptor activation in rainbow trout. *Physiol Genomics*, **31**(3): 483-491.

32. Vijayan, M.M., **N. Aluru**, A.G. Maule, and E.H. Jorgensen. **2006**. Fasting augments PCB impact on liver metabolism in anadromous arctic char. *Toxicol Sci*, **91**(2): 431-439.
33. Jorgensen, E.H., M.M. Vijayan, J.E. Killie, **N. Aluru**, Ø. Aas-Hansen, and A. Maule. **2006**. Toxicokinetics and effects of PCBs in Arctic fish: a review of studies on Arctic charr. *J Toxicol Environ Health A*, **69**(1-2): 37-52.
34. **Aluru, N.** and M.M. Vijayan. **2006**. Aryl hydrocarbon receptor activation impairs cortisol response to stress in rainbow trout by disrupting the rate-limiting steps in steroidogenesis. *Endocrinology*, **147**(4): 1895-1903.
35. **Aluru, N.** and M.M. Vijayan. **2006**. Resveratrol affects CYP1A expression in rainbow trout hepatocytes. *Aquat Toxicol*, **77**(3): 291-297.
36. Cara, J.B., **N. Aluru**, F.J. Moyano, and M.M. Vijayan. **2005**. Food-deprivation induces HSP70 and HSP90 protein expression in larval gilthead sea bream and rainbow trout. *Comp Biochem Physiol B Biochem Mol Biol*, **142**(4): 426-431.
37. **Aluru, N.**, K. Vuori, and M.M. Vijayan. **2005**. Modulation of Ah receptor and CYP1A1 expression by alpha-naphthoflavone in rainbow trout hepatocytes. *Comp Biochem Physiol C Toxicol Pharmacol*, **141**(1): 40-49.
38. **Aluru, N.**, R. Renaud, J.F. Leatherland, and M.M. Vijayan. **2005**. Ah Receptor-mediated impairment of interrenal steroidogenesis involves StAR protein and P450scc gene attenuation in rainbow trout. *Toxicol Sci*, **84**(2): 260-269.
39. **Aluru, N.** and M.M. Vijayan. **2004**. beta-Naphthoflavone disrupts cortisol production and liver glucocorticoid responsiveness in rainbow trout. *Aquat Toxicol*, **67**(3): 273-285.
40. **Aluru, N.**, E.H. Jorgensen, A.G. Maule, and M.M. Vijayan. **2004**. PCB disruption of the hypothalamus-pituitary-interrenal axis involves brain glucocorticoid receptor downregulation in anadromous Arctic charr. *Am J Physiol Regul Integr Comp Physiol*, **287**(4): R787-793.
41. Jorgensen, E.H., M.M. Vijayan, **N. Aluru**, and A.G. Maule. **2002**. Fasting modifies Aroclor 1254 impact on plasma cortisol, glucose and lactate responses to a handling disturbance in Arctic charr. *Comp Biochem Physiol C Toxicol Pharmacol*, **132**(2): 235-245.

## PUBLISHED ABSTRACTS

1. Hahn, M.E., Karchner, S.I., Becker, C.C., **Aluru, N.** Franks, D.G., Goldstone, J.V., Stegeman, J.J., Champlin, D., Nacci, D., Clark, B.W., Jayaraman, S., Kartha, V., Monti, S. 2018. Developmental effects of *Ortho*-substituted PCB-153: Evidence for altered glucose homeostasis in PCB-sensitive killifish and in zebrafish, but not in PCB-tolerant killifish from a Superfund site. *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #2010.
2. **Aluru, N.**, Chapman, D., McMonagle, H., Becker, B., Van Mooy, B., Karchner, S.I., Stegeman, J.J., Hahn, M.E. 2018. Developmental exposure to low-level saxitoxin affects neuronal gene expression. *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #1415.
3. Karchner, S.I., Jenny, M.J., **Aluru, N.**, Franks, D.G., Laub, L.B., Linney, E., Williams, L.M., Teraoka, H., Hahn, M.E. **2017**. Evidence for developmental versus toxicological roles for zebrafish AHR1b. *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #1165.
4. Krick, K., Karchner, S.I., Stegeman, J.J., Hahn, M.E., **Aluru, N.** **2017**. Developmental Exposure to PCB153 Alters Genes Related to Circadian Rhythm and Metabolism in Zebrafish (*Danio rerio*). *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #1213.

5. **Aluru, N.**, Glazer, L., Hahn, M.E. **2017**. Early life exposure to low levels of AHR agonist PCB126 (3,3',4,4',5-pentachlorobiphenyl) reprograms gene expression in adult brain. *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #2219.
6. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. **2017**. Domoic Acid Exposure during a Critical Period in Development Causes Myelination Deficits and Alters the Startle Response. *The Toxicologist*, Supplement to *Toxicological Sciences*, 150 (1), Abstract #2614.
7. Birceanu, O., Dindia, L., Mohammad, A., Woody, O., McConkey, B., **Aluru, N.**, Vijayan, M.M. 2016. From transcriptome to metabolome: Multigenerational biomarkers of BPA exposure during embryogenesis. In: Laurentian SETAC 21<sup>st</sup> Annual General Meeting and Conference. June 24, 2016. University of Waterloo, Waterloo, Ontario, Canada.
8. **Aluru, N.**, Karchner, S.I., Krick, K. Role of DNA Methylation in Altered Gene Expression Patterns in Adult Zebrafish (*Danio rerio*) Exposed to 3,3',4,4',5-Pentachlorobiphenyl (PCB 126). In: *2016 Annual Meeting Abstract Supplement*, Society of Toxicology, **2016**. Abstract no. 3837.
9. Hahn, M.E., **Aluru, N.**, Karchner, S.I., Franks, D.G. Altered Basal and TCDD-induced Gene Expression in AHRNull Zebrafish Embryos Generated by ZFN-Mediated Gene Targeting. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 150(1), Society of Toxicology, **2016**. Abstract no. 2424.
10. Panlilio, J.M., **N. Aluru**, and M.E. Hahn. **2015**. Domoic acid targets developing oligodendrocytes to potentially mediate toxicity in the nervous system. *Neurotoxicology and Teratology*, **49**: 130-131.
11. Glazer, L., **N. Aluru**, and M.E. Hahn. **2015**. Delayed neurobehavioral effects caused by zebrafish embryonic exposure to low levels of PCB-126. *Neurotoxicology and Teratology*, **49**: 129.
12. Glazer, L., **Aluru, N.**, Hahn, M.E. When zebrafish 'misbehave' - learning about delayed effects of low level embryonic contaminant exposure from adult zebrafish behavior. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 144(1), Society of Toxicology, **2015**. Abstract no. 267.
13. Glazer, L., Soule, M., Longnecker, K., Kujawinski, E.B., **Aluru, N.** Hepatic metabolite profiling of Atlantic killifish (*Fundulus heteroclitus*) from PCB-resistant and sensitive populations. In: *2015 Annual Meeting Abstract Supplement*, Society of Toxicology, **2015**. Abstract no. 2497.
14. Kuo, E., Karchner, S.I., Yu, Z., **Aluru, N.** Effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) exposure on the expression of DNMT genes during development in zebrafish (*Danio rerio*). In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 138(1), Society of Toxicology, **2014**. Abstract no. 965.
15. **Aluru, N.**, Karchner, S.I., Jenny, M.J., Hahn, M.E. Understanding the physiological role of Aryl Hydrocarbon Receptor Repressor (AhRR) using gene knock-down and targeted mutagenesis in zebrafish. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 132(1), Society of Toxicology, **2013**. Abstract no. 1288.
16. **Aluru, N.**, Deak, K.L., Jenny, M.J. Hahn, M.E. MicroRNA expression profiling after developmental exposure of zebrafish embryos to valproic acid. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 126(1), Society of Toxicology, **2012**. Abstract no. 1936.
17. **Aluru, N.**, Marsit, C.J. MicroRNAs in Biology and Toxicology. Overview of MicroRNA Quantification Methods. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 126(1), Society of Toxicology, **2012**. Abstract no. 10. (Platform presentation)
18. **Aluru, N.**, Jenny, M.J., Hahn, M.E. MicroRNA expression profiles after developmental exposure of zebrafish (*Danio rerio*) embryos to TCDD. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 120(2), Society of Toxicology, **2011**. Abstract no. 1642.
19. Hahn, M.E., Karchner, S.K., Jenny, M.J., Franks, D.G., Reitzel, A.M., Timme-Laragy, A.R., **Aluru, N.**, Nacci, D.E., Oleksiak, M.F. Gene-Environment Interactions and Dioxin Sensitivity in Natural and Laboratory Populations of Fish. In: *The Toxicologist*: Supplement to *Toxicological Sciences*, 120(2), Society of Toxicology, **2011**. Abstract no. 1776.



20. **Aluru, N.**, Leatherland, J.F., Vijayan, M.M. Developmental and growth effects associated with acute exposure of eggs to bisphenol A in rainbow trout. In: *The Toxicologist: Supplement to Toxicological Sciences*, 108(1), Society of Toxicology, **2009**. Abstract no. 1302. (Platform presentation)
21. Moran, P.W., Black, B., **Aluru, N.**, Vijayan, M.M. 2008. Liver Transcriptomics in trout collected across a gradient of urbanization in Puget Sound, Washington State, USA. 26<sup>th</sup> Annual Meeting of Society of Environmental toxicology and chemistry (SETAC), 16-20 November, Tampa, Florida, USA.
22. **Aluru, N.**, Moran, P.W., Vijayan, M.M. 2005. Patterns of gene expression using cDNA microarray in trout collected from high alpine lakes in Washington state. 26<sup>th</sup> Annual Meeting of SETAC North America. November 13-17, Baltimore, Maryland, USA.
23. Vijayan, M.M. and **Aluru, N.** 2005. Ah receptor activation impairs the rate limiting steps in steroidogenesis in rainbow trout. 26<sup>th</sup> Annual Meeting of SETAC North America. November 13-17, Baltimore, Maryland, USA.

## INVITED LECTURES AND PAPERS PRESENTED AT MEETINGS

### Invited Lectures

1. **Aluru, N.** 2018. Epigenetic effects of environmental exposures. 13<sup>th</sup> International congress on the biology of fish, Calgary, Alberta, Canada (July 15-19, 2018).
2. **Aluru, N.** 2018. Role of epigenetics in environmental adaptation to stressors: Implications to Ocean acidification research. Ocean Acidification Research Kick off meeting, Norwegian Institute of Marine Research, Tromsø, Norway (June 28, 2018).
3. **Aluru, N.** 2018. Ecological Epigenetics: Implications for Adaptation to Changing Marine Environments. Ocean Outlook meeting. WHOI (May 2-4, 2018).
4. **Aluru, N.** 2018. My Grant Funding story. Research Funding Insights Session: Research Funding 101: Multiple Perspectives on the NIH Grant Process. 57<sup>th</sup> Annual Meeting of Society of Toxicology, San Antonio, Texas (March 11-15, 2018).
5. **Aluru, N.** 2018. Environmental exposures, sensitive windows of development and epigenetic regulation. Gijs van Seventer Seminar Series, Boston University School of Public Health. February 16, 2018.
6. **Aluru, N.** 2017. Environmental chemical exposures, epigenetic effects and gene expression changes. Connecticut Valley Zebrafish Meeting, Brown University. November 3, 2017.
7. **Aluru, N.**, Jenny Panlilio, Lilah Glazer, Sibel Karchner, John Stegeman, Mark Hahn. *Oceans and Human Health: Effects of developmental exposure to marine toxins and toxicants*. 8th Aquatic Animal Models of Human Disease Conference, Birmingham, AL, January 2017.
8. **Aluru, N.** 2016. Submitting trainee and career initiation grants. Northeast Superfund Research Program training workshop (April 26-27, 2016).
9. **Aluru, N.** 2015. Role of epigenetics in environmental toxicology. Presented at Department of Arctic Biology, May 22nd, University of Tromsø, Norway.
10. **Aluru, N.** 2014. Role of epigenetics in developmental basis of adult health and disease. Presented at Luduc Bioimaging facility, November 7th, Department of Molecular Biology, Cell Biology and Biochemistry, Brown University.

11. **Aluru, N.** 2014. Understanding the Mechanisms Associated with Developmental Exposure to Marine Toxins and Toxicants. Gordon Research Conference on Oceans and Human Health. June 1-6, University of New England, Maine.
12. **Aluru, N.** 2010. Endocrine Physiology of stress response: Long term effects of short-term exposures. Arnold School of Public Health, University of South Carolina. October 24<sup>th</sup> 2010, Columbia, South Carolina.
13. **Aluru, N.** 2007. Endocrine and developmental toxicity in fish: Mechanisms and Implications. Invited speaker at Department of Integrative Biology Fish and Loaves Seminar Series. 19<sup>th</sup> October, University of Guelph, Guelph, Ontario, Canada.

### Oral Presentations

1. Hahn, M.E., Karchner, S.I., **Aluru, N.**, Franks, D.G., Goldstone, J.V., Stegeman, J.J., Champlin, D., Clark, B., Jayaraman, S., Nacci, D., Kartha, V., Reed, E., Monti, S. Molecular Ecology at Superfund Sites: Application of population genomics and genome editing to understand genetic mechanisms of adaptation following multi-generational exposure to chemical mixtures. National Institute of Environmental Health Sciences (NIEHS) Superfund Research Program 30<sup>th</sup> Annual Meeting, Philadelphia, PA. (December 6-8, 2017).
2. Hahn, M.E., **Aluru, N.**, Karchner, S.I. Applications of Genome Editing to Understand Molecular Mechanisms of Chemical Sensitivity and Resistance. The promise of genome editing tools to advance environmental health research, National Academies of Sciences, Engineering, and Medicine, Washington, D.C. (January 10-11, 2018).
3. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. 2017. Exposure to domoic acid during a critical period of neurodevelopment alters myelin sheath formation and leads to behavioral deficits. Talk by Jennifer Panlilio at the Joint Meeting of the Neurotoxicity Society and the International Neurotoxicology Association, May 2017, Florianopolis, Brazil.
4. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. 2017. Novel mechanisms of neurotoxicity from developmental exposures to domoic acid. Talk by Jennifer Panlilio at Gordon Research Conference in Phycotoxins and Mycotoxins, July 2017.
5. **Aluru, N.** 2017. Oceans and human health: Understanding how environment influences our genes WHOI Summer Student Fellow Lecture. July 5, 2017, Redfield Auditorium.
6. **Aluru, N.** 2016. The role of epigenetics in organismal responses to environmental change. WHOI Summer Student Fellow Lecture. July 6, 2016, Redfield Auditorium.
7. **Aluru, N.** 2016. Role of DNA methyltransferases in toxicant-induced alterations in DNA methylation. ONES Awardee symposium. NIEHS Building 101, Rodbell Auditorium. May 17-18, 2016, Research Triangle Park, North Carolina.
8. Birceanu, O., Mohammad, A., Woody, O., McConkey, B., **Aluru, N.**, Vijayan, M.M. 2016. Multigenerational effects of Bisphenol A on the rainbow trout transcriptome. 55<sup>th</sup> Annual Meeting of Canadian Society of Zoologists. May 9-13, 2016. Western University, London, Ontario, Canada.
9. **Aluru, N.** 2016. Hidden layers of the genome: The role of epigenetics in organismal responses to environmental change. Biology Department seminar, April 28<sup>th</sup>, 2016, Woods Hole Oceanographic institution.
10. **Aluru, N.** 2016. Behavioral and Epigenetic Effects of PCB Exposure. Oceans and Human Health Grantee Meeting, April 13-14, 2016, NIEHS, Research Triangle Park, NC.
11. **Aluru, N.** 2016. Oceans and Human Health: Long-term consequences to toxicant exposure. Central Marine Fisheries Research Institute, 30<sup>th</sup> January 2016, Cochin, Kerala, India.

12. **Aluru, N.**, Ingeborg, H., Helgason, L.B., Harju, M. 2015. Transcriptomic changes associated with exposure to organophosphorus flame retardants in Atlantic cod (*Gadus morhua*). 18th International symposium on *Pollutant Responses in Marine Organisms* (PRIMO18), May 24-27, 2015, Trondheim, Norway.
13. **Aluru, N.**, Karchner, S.I., Franks, D.G., Nacci, D., Champlin, D., Hahn, M.E. 2014. Understanding the molecular basis of evolved resistance to PCBs in fish and its impacts on sensitivity to multiple stressors. Eighth International PCB Workshop, October 5-9, Marine Biological Laboratory, Woods Hole, MA.
14. **Aluru, N.**, Jenny, M.J., Hahn, M.E. 2010. MicroRNA expression profiles after developmental exposure of zebrafish (*Danio rerio*) embryos to TCDD. NUTMEG Conference. October 7-9, Woods Hole, Massachusetts, USA.
15. **Aluru, N.** 2009. Endocrine Physiology of stress response: Integrated effects of nutrition and persistent organic pollutants. Biology Seminar Series, 24<sup>th</sup> September, Biology Department, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, USA.
16. **Aluru, N.**, Leatherland, J.F., Vijayan, M.M. 2008. Bisphenol A impacts embryogenesis and growth by disrupting the GH-IGF axis in rainbow trout. NUTMEG Conference. October 6-7, Woods Hole, Massachusetts, USA.
17. Vijayan, M.M., **Aluru, N.** 2008. Melanocortin 2 receptor and its role in the stress response. 8<sup>th</sup> International Congress on the Biology of Fish. July 27-31, Portland, Oregon, USA.
18. **Aluru, N.**, Leatherland, J.F., Vijayan, M.M. 2008. Bisphenol A impacts embryogenesis and growth by disrupting the somatotrophic axis in rainbow trout. 8<sup>th</sup> International Congress on the Biology of Fish. July 27-31, Portland, Oregon, USA.
19. **Aluru, N.**, Vijayan, M.M. 2008. Genomic cortisol signaling and metabolic adjustments to stress in fish. 6<sup>th</sup> International symposium on fish endocrinology, June 22-27, Calgary, Canada.
20. Maule, A.G., Jørgensen, E.H., Vijayan, M.M., Killie, J.A., Aas-Hansen, Ø., **Aluru, N.** 2007. PCBs reduce fitness of Arctic Charr by disrupting endocrine system functioning and impacting multiple physiological processes. 137<sup>th</sup> Annual Meeting of American Fisheries Society, September 2-6, San Francisco, USA.
21. Vijayan, M.M., **Aluru, N.** 2007. Stress steroid disruption in fish: mechanisms and implications. 137<sup>th</sup> Annual Meeting of American Fisheries Society, September 2-6, San Francisco, USA.
22. Vijayan, M.M., Gravel, A., **Aluru, N.** 2007. Aiming for the StAR: Stress and Steroid Disruption in Rainbow Trout. Canadian Society of Zoologists, May 21-25, Montreal, Quebec, Canada.
23. **Aluru, N.**, Leatherland, J.F., Vijayan, M.M. 2007. Effect of maternal exposure to Bisphenol A on somatotrophic axis in early life stages of rainbow trout (*Oncorhynchus mykiss*). Canadian Society of Zoologists, May 21-25, Montreal, Quebec, Canada.
24. Moran, P.W., Black, R.W., **Aluru, N.**, Vijayan, M.M. 2007. Contaminants and Associated Transcriptional Responses in Fish from Remote High Elevation Lakes of Western Washington, USA. Georgia Basin Puget Sound Research Conference, March 26-29, Vancouver, British Columbia, Canada.
25. Vijayan, M.M., Wiseman, S.B., **Aluru, N.** 2006. Molecular responses to stress in fish: Role of cortisol. VII International Congress on the Biology of Fish. July 18-22, St. John's, Newfoundland, Canada.
26. **Aluru, N.**, Vijayan, M.M. 2006. Aryl hydrocarbon receptor dependent transcriptional responses in the brain of rainbow trout. VII International Congress on the Biology of Fish. July 18-22, St. John's, Newfoundland, Canada.
27. Maule, A.G., Jørgensen, E.H., Vijayan, M.M., Killie, J.E.A., Aas-Hansen, Ø., **Aluru, N.** 2005. PCBs impair multiple physiological processes in fasted arctic charr leading to reduced fitness. 135<sup>th</sup> annual meeting of American Fisheries Society, September 2005, Anchorage, Alaska, USA.

28. **Aluru, N.** 2005. Ah receptor activation and stress response: Insights from trout corticosteroidogenesis. 32<sup>nd</sup> Annual Aquatic Toxicity Workshop, October 3-5, Waterloo, Ontario, Canada.
29. **Aluru, N.** and M.M.Vijayan. 2004. Aryl hydrocarbon receptor activation impacts corticosteroidogenesis and tissue glucocorticoid responsiveness in rainbow trout. Canadian Society of Zoologists, May 11-15, Acadia, Nova Scotia, Canada.
30. **Aluru, N.**, Jorgensen, E.H., Maule, A.G. and Vijayan, M.M. 2003. Fasting modulates brain response to PCB exposure in anadromous Arctic charr, *Salvelinus alpinus*. Canadian Society of Zoologists, May 6-10, Waterloo, Ontario, Canada.
31. **Aluru, N.** and M.M.Vijayan. 2002. Role of  $\beta$ -Naphthoflavone on interrenal steroidogenesis in Rainbow trout. Canadian Society of Zoologists, May 8-11, Lethbridge, Alberta.

#### **Poster Presentations** (Presenting author underlined)

1. **Aluru, N.**, Engelhardt, J. Epigenetic effects of environmental chemicals: Integrative effects on DNA methylation and noncoding RNAs. 9<sup>th</sup> Aquatic models of human disease conference (September 29 – October 4, 2018), Marine Biological Laboratory, Woods Hole, Massachusetts
2. Hidayat, A., MacDonald, J., Bammler, T., **Aluru, N.**, Lefebvre, K. Domoic acid exposure induced gene expression changes in adult zebrafish (*Danio rerio*) brain. 9<sup>th</sup> Aquatic models of human disease conference (September 29 – October 4, 2018), Marine Biological Laboratory, Woods Hole, Massachusetts.
3. Panlilio, J.M., **Aluru, N.** and M.E. Hahn. Developmental exposure to domoic acid disrupts startle response circuitry and behavior. 13<sup>th</sup> International zebrafish conference (June 20-24, 2018), Madison, Wisconsin.
4. Hidayat, A., **Aluru, N.**, Lefebvre, K., McDonald, J., Bammler, T. Effects of domoic acid exposure on zebrafish central nervous system. Zebrafish Development and Genetics course, Marine Biological Laboratory, Woods Hole (August 4-18, 2018).
5. Hahn, M.E., Karchner, S.I., Becker, C.C., **Aluru, N.** Franks, D.G., Goldstone, J.V., Stegeman, J.J., Champlin, D., Nacci, D., Clark, B.W., Jayaraman, S., Kartha, V., Monti, S. 2018. Developmental effects of *Ortho*-substituted PCB-153: Evidence for altered glucose homeostasis in PCB-sensitive killifish and in zebrafish, but not in PCB-tolerant killifish from a Superfund site. Annual meeting of the Society of Toxicology, San Antonio, Texas (11-15 March 2018).
6. **Aluru, N.**, Chapman, D., McMonagle, H., Becker, B., Van Mooy, B., Karchner, S.I., Stegeman, J.J., Hahn, M.E. 2018. Developmental exposure to low-level saxitoxin affects neuronal gene expression. Annual meeting of the Society of Toxicology, San Antonio, Texas (11-15 March 2018).
7. Brun, N., Schlezinger, J.J., Karchner, S.I., Hahn, M.E., **Aluru, N.**, Stegeman, J.J., Goldstone, J.V. 2018. Exploring developmental effects of PCB153 on glucose and lipid metabolism in zebrafish. Northeast Superfund Research Program meeting, Woods Hole, MA. (March 22-23, 2018).
8. Karchner, S.I., Becker, C.C., **Aluru, N.**, Franks, D.G., Champlin, D., Nacci, D., Clark, B.W., Jayaraman, S., Goldstone, J.V., Stegeman, J.J., Kartha, V., Monti, S., Hahn, M.E. 2017. Shared responses of killifish (*F. heteroclitus*) and zebrafish (*D. rerio*) embryos to *ortho*-substituted PCB153. 19<sup>th</sup> International symposium on the pollutant responses in marine organisms (PRIMO19). 30 June – 3 July, 2017.
9. Panlilio, J.M., Hahn, M.E., Stegeman, J.J., **Aluru, N.** 2016. Exposure to the harmful algal bloom toxin, domoic acid, during specific developmental periods alters oligodendrocyte development and larval behavior in

- zebrafish. Oceans and Human Health Grantee Meeting, NIEHS, Research Triangle Park, NC. April 13-14, 2016.
10. Glazer, L., Hahn, M.E., **Aluru, N.** 2016. Delayed effects of developmental exposure to low levels of the aryl hydrocarbon receptor agonist 3,3',4,4',5-pentachlorobiphenyl (PCB126) on adult zebrafish behavior. Oceans and Human Health Grantee Meeting, NIEHS, Research Triangle Park, NC. April 13-14, 2016.
  11. Goldstone, J., Krick, K., **Aluru, N.**, Hahn, M.E., Stegeman, J.J. 2016. PCB153 exposure induced behavioral and transcriptional changes in developing zebrafish (*Danio rerio*). Oceans and Human Health Grantee Meeting, NIEHS, Research Triangle Park, NC. April 13-14, 2016.
  12. **Aluru, N.**, Karchner, S.I., Krick, K. 2016. PCB126 exposure induced gene expression and DNA methylation changes in adult zebrafish (*Danio rerio*). Oceans and Human Health Grantee Meeting, NIEHS, Research Triangle Park, NC. April 13-14, 2016.
  13. Hahn, M.E., Karchner, S.I., **Aluru, N.**, Franks, D.G., Clark, B., Champlin, D., Nacci, D. 2015. Understanding the genomic basis for adaptation to long-term PCB exposure at Superfund sites: Application of genome editing to aryl hydrocarbon receptor (AHR) signaling pathways in fish. Superfund Research Program Annual Meeting, November 18-20, San Juan, Puerto Rico.
  14. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. 2015. Domoic acid targets oligodendrocyte precursor cells and causes developmental neurotoxicity. 8th Annual Zebrafish Disease Models Conference (ZDM8) August 24-27, Boston, Massachusetts, USA.
  15. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. 2015. Domoic acid exposure during early development targets oligodendrocyte precursors and alters the larval startle response. Gordon Research Conference on Cellular and Molecular Mechanisms of Toxicity, August 9-14, Andover, New Hampshire, USA.
  16. **Aluru, N.**, Karchner, S.I., Zhu, W., Liu, J. 2015. Tissue-specific DNA methylation changes in PCB 126 (3,3', 4,4', 5-pentachlorobiphenyl) exposed adult zebrafish (*Danio rerio*). Gordon Research Conference on Cellular and Molecular Mechanisms of Toxicity, August 9-14, Andover, New Hampshire, USA.
  17. Helfrich, L.W., Karchner, S.I., Hahn, M.E., **Aluru, N.** 2015. Characterization of microRNAs in Atlantic killifish embryos from PCB-resistant and sensitive populations. SICB Annual Meeting, January 3-7, West Palm Beach, Florida, USA.
  18. Glazer, L., **Aluru, N.**, Hahn, M.E. 2014. Delayed effects of embryonic exposure to low levels of PCB-126 on adult zebrafish behavior. Prenatal Programming and Toxicity (*PPTox*) IV, October 26-29, Boston, Massachusetts, USA.
  19. Panlilio, J.M., **Aluru, N.**, Hahn, M.E. 2014. Investigating the mechanisms that mediate the later life consequences of developmental exposure to domoic acid in zebrafish. Collaborative Workshop on Aquatic Models and 21st Century Toxicology: Leveraging Small Aquarium Fishes to Advance Understanding of Environmentally Influenced Human Disorders and Diseases, May 5-6, Raleigh, North Carolina, USA.
  20. Karchner, S.I., **Aluru, N.**, Jenny, M.J., Welch, D.B.M., Hahn, M.E. 2011. mRNA and microRNA transcriptomes of Atlantic killifish (*Fundulus heteroclitus*) embryos from PCB-sensitive and PCB-resistant populations. 16<sup>th</sup> Pollutant Responses in Marine Organisms Conference, May 15-18, Long Beach, California, USA.
  21. **Aluru, N.**, Karchner, S.I., Franks, D.G., Timme-Laragy, A.R., Williams, L.M., Hahn, M.E. 2011. Targeted gene inactivation in Atlantic Killifish (*Fundulus heteroclitus*): Adaptation of the zinc finger nuclease (ZFN) approach. 16<sup>th</sup> Pollutant Responses in Marine Organisms Conference, May 15-18, Long Beach, California, USA.
  22. **Aluru, N.**, Jenny, M.J., Hahn, M.E. 2011. Knock-down of a zebrafish aryl hydrocarbon receptor repressor (AHR $\alpha$ ) affects transcription of genes related to photoreceptor development. 16<sup>th</sup> Pollutant Responses in Marine Organisms Conference, May 15-18, Long Beach, California, USA.

23. **Aluru, N.**, Karchner, S. I., Hahn, M.E. 2010. Developmental exposure to PCB126 leads to short and long-term changes in gene expression patterns in zebrafish, *Danio rerio*. 9<sup>th</sup> International conference on zebrafish development and genetics. June 16-20. University of Wisconsin-Madison. Madison, Wisconsin, USA.
24. **Aluru, N.**, Karchner, S. I., Hahn, M.E. 2009. Investigating the role of DNA methylation in differential sensitivity to PCBs in Atlantic Killifish, *Fundulus heteroclitus*. NUTMEG Conference. October 5-6, Woods Hole, Massachusetts, USA.
25. Henrickson, L.M., **Aluru, N.**, Leatherland, J.F., Vijayan, M.M. 2008. Bisphenol A disrupts stressor induced cortisol and glucose response in rainbow trout. 26<sup>th</sup> Annual Meeting of Society of Environmental toxicology and chemistry (SETAC), November 16-20, Tampa, Florida, USA.
26. Hontela, A., Quinn, A., Friesen, C., **Aluru, N.**, Vijayan, M.M. 2008. Adrenal toxicity of pesticide dimethoate in rainbow trout (*Oncorhynchus mykiss*) and fathead minnow (*Pimephales promelas*). 6<sup>th</sup> International symposium on fish endocrinology, June 22-27, Calgary, Canada.
27. Vijayan, M.M., **Aluru, N.** 2008. Molecular characterization and regulation of melanocortin 2 receptor in rainbow trout. Canadian Society of Zoologists, May 19-23, Halifax, Nova Scotia, Canada.
28. Nikaido, Y., **Aluru, N.**, A. McGuire, M.M. Vijayan and A. Takemura. 2006. Direct effect of cortisol on melatonin production in the pineal organ of tilapia, *Oreochromis mossambicus*. VII International Congress on the Biology of Fish. July 18-22, St. John's, Newfoundland, Canada.
29. **Aluru, N.** and M.M.Vijayan. 2004. Dioxin stress and Red Wine: Insights from trout corticosteroidogenesis. Fifth International symposium on Fish Endocrinology, September 5-9, Castellon, Spain.
30. **Aluru, N.** and M.M.Vijayan. 2003.  $\beta$ -naphthoflavone impacts interrenal corticosteroidogenesis in rainbow trout, Society of Integrative and Comparative Biology, Toronto. January 4-8th. (Honourable mention in the Comparative endocrinology Division).