

Csilla Ari, Ph.D.

Positions and Employment

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Szent Istvan University, HU	M.A.	1997-2002	Zoology
Semmelweis University, HU	Ph.D.	2002-2008	Neurosciences
University of South Florida	Postdoctoral training	2010 - present	Molecular Med./Neuroscience

2001 Volunteer, University of California, Scripps Institution of Oceanography, San Diego, USA
2002 Volunteer, University of California, Scripps Institution of Oceanography, San Diego, USA
2003-present Principal Investigator, Foundation for the Oceans of the Future
2004-2005 Visiting scientist at CSIRO Marine Research Laboratories in Hobart, Tasmania, Australia
2007-2008 Cartilaginous fish and marine fish specialist, Hungarian Natural History Museum, Hungarian Academy of Sciences
2008 Supervisor, Museum of Anatomy, Semmelweis Medical University, Hungary
2009 Patient Safety Specialist, TATA Consultancy Services, AstraZeneca, Göteborg/ Sweden; Charnwood, Manchester/ UK; Budapest/ Hungary
2010-2012 Postdoctoral Scholar, USF Health Byrd Alzheimer's Center and Research Institute, University of South Florida, Department of Molecular Medicine, FL, USA
2012-present Postdoctoral Scholar, Hyperbaric Biomedical Laboratory, University of South Florida, Department of Molecular Pharmacology and Physiology, FL, USA

Other Experience

Reviewer for:
Brain, Behavior and Evolution
PlosOne
Brain Research Bulletin
Journal of Neuroscience and Behavioral Health
Journal of Medicine and Medical Sciences
Turkish Journal of Fisheries and Aquatic Sciences

Professional Memberships

Hungarian Academy of Sciences
Hungarian Biological Society
American Society for Neuroscience
International Behavioral Neuroscience Society

Honors and Awards

Grant from the Capital of Hungary (1996-97)
Grant from the Capital of Hungary (1997-98)
Grant from the Hungarian Republic (2001-2002)
Grant from the Portuguese Association for the Study and Conservation of Elasmobranchs (2004)

American Elasmobranch Society Meeting, Travel Award (2005 and 2008)
Richter Gedeon Grant for supporting Ph.D. studies (2006)
Grant from the National Office for Research and Technology (2008)
Grant from the Save Our Seas Foundation (2010)
Grant from the Signature Interdisciplinary Program in Neuroscience, USF, USA (2011)
Conference travel grant for postdoctoral scholars at USF, USA (2012)
Travel award from International Society of Neurochemistry (2013)

Selected Peer-Reviewed Publications

Book

1. **Ari, C.** (2009). On the brain of cartilaginous fishes: Cerebralization, astroglial architecture and blood-brain barrier composition, Lambert Academic Publishing.

Articles

2. Kálmán, M., **Ari, C.** (2002). Distribution of GFAP immunoreactive structures in the rhombencephalon of sterlet (*Acipenser ruthenus*) and its evolutionary implication; *Journal of Experimental Zoology*, 2002, 293: 395-406.
3. Gál, J., Vincze, Z., Jakab, C., **Ari, C.**, Lefler, K.K. (2005). Multiplex shafted fibroma on the upper jaw of a sand-tiger shark (*Carcharias (Odontaspis)taurus*); *Hungarian Veterinary Journal*, 127:242-245.
4. **Ari, C.**, Kálmán, M. (2008). Evolutionary changes of astroglia in Elasmobranchii comparing to Amniotes: a study based on three immunohistochemical markers (GFAP, S-100, and glutamine synthetase), *Brain, Behavior and Evolution*, 71:305-324.
5. **Ari, C.**, Kálmán, M. (2008). Glial architecture of the ghost shark (*Callorinchus millii*, Holocephalii, Chondrichthyes) as revealed by different immunohistochemical markers, *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution*, Vol 310B, 6: 504 – 519.
6. **Ari, C.**, Correia, J.P. (2008). Role of sensory cues on the food searching behaviour of a captive *Manta birostris* (Myliobatiformes, Mobulidae), *Zoo Biology* Vol 27, 4: 294 – 304.
7. **Ari, C.** (2011). Encephalization and brain organization of mobulid rays (Myliobatiformes, Elasmobranchii) with ecological perspectives, *The Open Anatomy Journal* 3:1-13.
8. Kitchen-Wheeler, A-M., **Ari, C.**, Edwards, A.J. (2012) Population estimates of Alfred mantas (*Manta alfredi*) in central Maldives atolls: North Male, Ari and Baa, *Environmental Biology of Fishes*, 93:4, 557-575.
9. Kalman, M., Majorossy, K., **Ari, C.** (2013) Absence of post-lesion glial reactivity in elasmobranchs and turtles and its bearing on the evolution of astroglia, *Journal of Experimental Zoology* (in press)

10. D'Agostino, D., Pilla, R., Held, H., Landon, C.S., **Ari, C.**, Puchowicz, M., Brunengraber, H., Arnold, P., Dean, J. (2013) Therapeutic ketosis with ketone ester delays central nervous system oxygen toxicity seizures in rats, *American Journal of Physiology* (in press)

Presented posters

11. **Ari, C.**, Kálmán, M. (2001) Search for astroglia in the GFAP-free areas of the brains of cartilaginous and bony fishes applying immunohistochemical staining of glutamine synthetase and S-100 protein; Conference of the Hungarian Neurobiological Society, Szeged, Hungary
12. Kálmán, M., **Ari, C.** (2001) Comparative study of astroglial markers, GFAP, glutamine synthetase and S-100 in skate brain; 96. Versammlung in Münster, Germany
13. **Ari, C.**, Kálmán, M. (2003) Supposed sexual dimorphism on the cerebellum of the ray *Mobula japonica* (order Myliobatiformes); Joint Meeting of Ichthyologists and Herpetologists and the American Elasmobranch Society, Manaus, Brazil
14. Kálmán, M., **Ari, C.**, Gould, R.M. (2003) Similar tendencies in the evolution of astroglia in elasmobranchs and amniotes. Joint Meeting of Ichthyologists and Herpetologists and the American Elasmobranch Society, Manaus, Brazil
15. **Ari, C.**, Kálmán, M. (2003) Morphometrical studies on the cerebellum of a ray species (*Mobula japonica*) of the order Myliobatiformes- sexual dimorphism?; Conference of the Hungarian Neurobiological Society, Balatonfüred, Hungary
16. **Ari, C.**, Stuber, I. (2004) Three-dimensional movements of captive Mobulids (*Manta birostris* and *Mobula mobular*); European Elasmobranch Society meeting, London, England
17. **Ari, C.**, Kálmán, M., Correia, J.P., Stuber, I. (2004) Analysis of movements by computerised tridimensional video reconstruction; Neuroscience Meeting, San Diego, USA
18. **Ari, C.**, Correia, J.P. (2005) A study on the sensory and learning capabilities of a captive *Manta birostris* (Mobulidae); Joint Meeting of Ichthyologists and Herpetologists and the American Elasmobranch Society Meeting, Tampa, USA
19. Kálmán, M., **Ari, C.** (2007) Evolutionary correlations of brain structure and glial architecture in Chondrichthyes: forebrain and hindbrain. 5th European Conference of Comparative Neurobiology, Paris, France
20. **Ari, C.** (2008) The brain of *Mobula japonica* (Myliobatiformes, Elasmobranchii) in gross morphological and ecological perspectives, Joint Meeting of Ichthyologists and Herpetologists and the American Elasmobranch Society Meeting, Montreal, Canada
21. **Ari, C.**, Borysov, S.I., Wu, J., Padmanabhan, J., Potter, H. (2011) A inhibits specific kinesin motors involved in both mitosis and neuronal function; potential implications for

neurogenesis and neuroplasticity in Alzheimer's Disease and Down Syndrome, International Conference on Alzheimer's Disease, Paris, France

22. **Ari, C.**, Borysov, S., Wu, J., Padmanabhan, J., Potter, H. (2011) Impairment of neurotransmitter and neurotrophin receptor localization and function associated with Alzheimer's disease is caused by A β inhibition of mitotic/neuronal kinesin Eg5, 41th Society for Neuroscience Conference, Washington, USA
23. Bennett, A., **Ari, C.**, Kesl, S., Luke, J., Diamond, D., Dean, J., D'Agostino, D. (2012) Effect of ketone treatment and glycolysis inhibition in brain cancer cells (U87MG) and rat primary cultured neurons exposed to hyperbaric oxygen and amyloid beta, Experimental Biology, San Diego, USA
24. D'Agostino, D., Pilla, R., Held, H., Landon, C., **Ari, C.**, Arnold, P., Dean, J.B. (2012) Development, testing and therapeutic applications of ketone esters (KE) for CNS oxygen toxicity (CNS-OT); i.e., hyperbaric oxygen (HBO2)-induced seizures, Experimental Biology, San Diego, USA

Submitted abstracts:

25. **Ari, C.**, Borysov, S., Wu, J., Padmanabhan, J., Potter, H. (2012) Impairment of Neurotransmitter and Neurotrophin Receptor Localization and Function in Alzheimer's Disease Caused by Inhibition of Kinesin Eg5, Federation of European Neuroscience Societies, Barcelona, Spain
26. **Ari, C.**, Borysov, S., Wu, J., Padmanabhan, J., Potter, H. (2012) Morphological and functional defects of neurotransmitter and neurotrophin receptors caused by Eg5 motor protein inhibition in Alzheimer's disease, International Behavioral Neuroscience Society Conference, Kona, USA
27. **Ari, C.** (2012) Visual abilities and social interaction of manta rays with the largest brain of fishes and the possible underlying neurological structures, International Behavioral Neuroscience Society Conference, Kona, USA