

Curriculum Vitae

Name: Kang-Ning Shen

Birthplace: Taoyuan, Taiwan, ROC

Birth date: May 23, 1972

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Degree:

2002-2007 **Ph. D** in the Institute of Zoology, College of Life Science, National Taiwan University.

Dissertation Title: The population genetic structure and evolutionary scenario of three freshwater eels *Anguilla reinhardtii*, *A. australis* and *A. dieffenbachii* in the eastern Australia as revealed by microsatellites.

1995-1997 **Master of Science** degree in the Institute of Fisheries Science, College of Science, National Taiwan University.

Dissertation Title: Early life history and recruitment dynamics of amphidromous goby *Sicyopterus japonicus*.

1991-1995 **Bachelor of science** degree in Department of Marine Resource, College of Marine Science, National Sun Yat-Sen University.

Work Experience:

Dec. 2012 ~ Present Assistant Research Fellow, Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University.

Aug. 2012- Nov. 2012 Postdoctoral Fellow, Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University.

Feb. 2007- Jul. 2012 Postdoctoral Fellow, Institute of Fisheries Science, National Taiwan University.

2000-2002 Research assistant in Institute of Molecular Biology, Academia Sinica.

1999-2000 Research assistant in Department of Zoology, National Taiwan University.

International Research Involvement:

1. European Commission INCO-CT-2006-026180 (2006-2009): Main Uses of the Grey mullet as Indicator of Littoral environmental changes. MUGIL www.mugil.univ-montp2.fr.

2. Australia (University of the Sunshine Coast)(2009-2010): Using mullet as an international standard bio-indicator of river, beach and estuarine health. Stage I: establishing the international collaboration with USC.
3. France (Institute of Research and Development, IRD) (2010-2012) EDISPOM - Étude intégrée de la DIspersion et de la Structure des POulations de Mulets en Afrique de l'Ouest (Population structure of *M. cephalus* in West Africa)
4. Taiwan-France Orchid Program - Joint Project (2011-2012) MULTTRACE: Worldwide Phylogeography and genetic diversity of *Mugil cephalus* from major roe production areas.
5. Taiwan-Philippines Joint Project (2011-2013) Estuarine and near-shore fishes as indicators of environmental changes: Assessment of the impacts of climate change and human activities on fish diversity thru genetic based analysis.
6. France (IRD, CNRS) (2012-2014) DISTRIMUGES: Multidisciplinary approach to understand the role of temperature in the distribution of three cryptic species of flathead mullet, *Mugil cephalus*, in the North West Pacific.
7. Taiwan-China Joint Project (2013) 「烏魚(鯔魚)優良品種選育的基礎研究」。

Local Research Involvement:

1. 遺傳及耳石微化學標記在兩側洄游型及瀕危經濟性魚類族群管理的應用 (2004-2006) (國科會)
2. 耳石微量元素組成及遺傳標記在鰻魚族群鑑別上之研究 (2007-2008)(國科會)
3. 日本鰻族群遺傳結構之時空分析(2008-2010) (國科會)
4. 以烏魚做為沿岸環境指標生物之歐盟科研架構研究計畫(2006-2009) (國科會)
5. 三種海流交互影響下的西北太平洋烏魚族群遺傳結構和生活史策略之整合性研究(2009-2012) (國科會)
6. 海洋生物博物館主題計畫(2010-2013): 海洋生物多樣性及典藏 (Marine Biodiversity and Collections)
 - (1) 蓋刺科 Pomacanthidae 魚類的分子鑑定與親緣演化
 - (2) 以分子及生物學特性探討世界鼻魚屬(*Naso*)之演化關係

Research and other interests:

1. Population genetic structure, phylogeography and evolution of fishes
2. Molecular phylogenetics of fishes
3. Fish Biology and Ecology
4. DNA barcoding of fishes
5. Diving
6. Aquaculture

Publications

1. Leander NJS, Yeh NT, **Shen KN**, Han YS, Tzeng WN (2013) Effect of metamorphosis timing and larval growth rate on the latitudinal distribution of the sympatric freshwater eels, *Anguilla japonica* and *A. marmorata*, in the western North Pacific. *Ecology of Freshwater Fish* (In press)(SCI)(IF:1.573)
2. Arlyza IS, **Shen KN**, Solihin DD, Soedharma D, Berrebi P, Borsa P. (2013) Species boundaries in the *Himantura uarnak* species complex (Myliobatiformes: Dasyatidae). *Molecular Phylogenetics and Evolution* 66(1):429-435 (SCI) (IF: 3.889)
3. Durand JD, Chen WJ, **Shen KN**, Fu CZ, Borsa P. (2012) Genus-level taxonomic changes implied by the mitochondrial phylogeny of grey mullets (Teleostei: Mugilidae). *Comptes Rendus Biologies* 335:687-697 (SCI)(IF:1.533)
4. Durand JD, **Shen KN**, Chen WJ, Jamandre BW, Blel H, Diop K, Nirchio M, Garcia de León FJ, Whitfield AK, Chang CW, Borsa P. (2012) Systematics of the grey mullets (Teleostei: Mugiliformes: Mugilidae): molecular phylogenetic evidence challenges two centuries of morphology-based taxonomic studies. *Molecular Phylogenetics and Evolution* 64:73-92 (SCI) (IF: 3.889)
5. **Shen KN**, Ho HC, Chang CW (2012) The Blue Velvet Angelfish, *Centropyge deborae*, a New Pomacanthid from the Fiji Islands, based on Genetic and Morphological Analyses. *Zoological Studies* 51:415-423 (SCI) (IF: 1.046)
6. Leander NJS, **Shen KN**, Chen RT, Tzeng WN (2012) Species composition and seasonal occurrence of freshwater eels (*Anguilla* spp.) in the eastern coast of Taiwan. *Zoological Studies* 51:59-71 (SCI) (IF: 1.046)
7. Jamandre BW, **Shen KN**, Tzeng WN (2011) Is the geographic variation in size of American eel *Anguilla rostrata* elvers due to genetic differentiation? *International Aquatic Research* 3: 197-203 (SCI)
8. Ho HC*, **Shen KN***, Chang CW (2011) A new species of the unicornfish genus *Naso* (Teleostei: Acanthuridae) from Taiwan, with comments on its phylogenetic relationship. *Raffles Bulletin of Zoology* 59(2): 63-69 (SCI) (*Equal contribution, IF: 1.46)
9. **Shen KN**, Jamandre BW, Hsu CC, Tzeng WN, Durand JD (2011) Plio-Pleistocene sea level and temperature fluctuations in the northwestern Pacific promoted speciation in the globally-distributed flathead mullet *Mugil cephalus*. *BMC Evolutionary Biology* 11:83 (SCI)(IF: 3.702)
10. Jamandre BW, Durand JD, **Shen KN**, Tzeng WN (2010) Differences in Evolutionary Pattern and Variability Between mtDNA Cytochrome b and Control Region of the Flathead Mullet *Mugil cephalus* from the Northwest Pacific. *Journal of the Fisheries Society of Taiwan* 37(3): 163-172.
11. **Shen KN**, Chen CY, Tzeng WN, Chen JD, Knibb W, Durand JD (2010) Development and characterization of 13 GT/CA microsatellite loci in cosmopolitan flathead mullet *Mugil cephalus*. In Permanent Genetic Resources added to Molecular Ecology Resources Database 1 April 2010 – 31 May 2010. *Molecular Ecology Resources* 10: 1098–1105.(SCI) (IF: 3.062)
12. **Shen KN**, Chang CW, Iizuka Y, Tzeng WN (2009) Facultative habitat selection of Pacific tarpon *Megalops cyprinoides* as revealed from otolith Sr:Ca ratios. *Marine Ecology Progress Series* 387: 255-263.(SCI) (IF: 2.711)
13. **Shen KN**, Tzeng WN (2008) Reproductive strategy and recruitment dynamics of amphidromous goby *Sicyopterus japonicus* as revealed by otolith microstructure. *Journal of Fish Biology* 73: 2497-2512.(SCI) (IF: 1.685)

14. Chen HL, **Shen KN**, Chang CW, Iizuka Y, Tzeng WN (2008) Effects of water temperature, salinity and feeding regimes on metamorphosis, growth and otolith Sr/Ca ratios of Pacific tarpon *Megalops cyprinoides* leptocephali. *Aquatic Biology* 3: 41-50. (SCI)(IF:1.61)
15. Han YS, Sun YL, Liao YF, Liao IC, **Shen KN**, Tzeng WN (2008) Temporal analysis of population genetic composition in the overexploited Japanese eel *Anguilla japonica*. *Marine Biology* 155:613-621. (SCI) (IF: 2.276)
16. Tzeng WN, Chu H, **Shen KN**, Wang YT (2008) Hatching period and early-stage growth rate of the gold estuarine anchovy *Stolephorus insularis* in Taiwan as inferred from otolith daily growth increments. *Zoological Studies* 47 (5): 544-554. (SCI) (IF: 1.046)
17. Chang ST, Yeh MF, Chen RT, Tsai CL, **Shen KN**, Tsai CF (2008) A giant exotic speckled longfin eel (*Anguilla reinhardtii* Steindachner, 1867) captured from the Sun Moon Lake. *Endemic Species Research* 10(2): 59-64.
18. Jamandre BW, **Shen KN**, Yambot AV, Tzeng WN (2007) Molecular phylogeny of Philippine freshwater eels *Anguilla* spp. (Actinopterygi: Anguilliformes: Anguillidae) inferred from mitochondrial DNA. *Raffles Bulletin of Zoology*, Supplement 14: 51-59. (SCI) (IF:1.46)
19. **Shen KN**, Tzeng WN (2007a) Population genetic structure of the year-round spawning tropical eel *Anguilla reinhardtii* in Australia. *Zoological Studies* 46 (4): 331-453 (SCI). (IF: 1.046)
20. **Shen KN**, Tzeng WN (2007b) Genetic differentiation among populations of the shortfinned eel *Anguilla australis* from East Australia and New Zealand. *Journal of Fish Biology* 70 (Supplement B): 177–190 (SCI). (IF: 1.685)
21. Münsterle M, Taraschewski H, Klar B, Chang CW, J. Shiao C, **Shen KN**, He JT, Lin SH, Tzeng WN (2006) Occurrence of *Anguillicola crassus* (Nematoda: Dracunculoidea) in Japanese eels *Anguilla japonica* from a river and an aquaculture unit in SW Taiwan. *Diseases of Aquatic Organisms* 71: 101–108 (SCI)(IF:2.201)
22. **Shen KN**, Tzeng WN (2002) Formation of a metamorphosis check in otolith of the amphidromous goby *Sicyopterus japonicus*. *Marine Ecology Progress Series* 228: 205-211. (SCI). (IF: 2.711)
23. **Shen KN**, Lee YC, Tzeng WN (1998) Use of otolith microchemistry to investigate the life history pattern of gobies in a Taiwanese stream. *Zoological Studies* 37(4): 322-329. (SCI). (IF: 1.046)