CURRICULUM VITAE

XIMING GUO
Haskin Shellfish Research Laboratory
Institute of Marine and Coastal Sciences
Rutgers, the State University of New Jersey
6959 Miller Avenue, Port Norris, NJ 08349, USA
Ph: (856) 785-0074 ext 4324
FAX: (856) 785-1544
Email: xguo@hsrl.rutgers.edu

EDUCATION

Ph.D. 1991 University of Washington, Seattle.
M.S. 1987 University of Washington, Seattle.
B.S. 1983 Ocean University of China, Qingdao.

RESEARCH AND TEACHING AREAS

Molluscan genetics and genomics, cytogenetics, phylogenetics and evolution, molluscan aquaculture and breeding biotechnology

POSITIONS HELD

2007 - Professor, Haskin Shellfish Research Lab, IMCS, Rutgers University
2001 - 07 Associate Professor, Haskin Shellfish Research Lab, IMCS, Rutgers University
1997 - 02 Visiting Professor, Institute of Oceanology, Chinese Academy of Sciences
1995 - 01 Assistant Professor, HSRL, IMCS, Rutgers University
1992 - 94 Postdoctoral Research Associate, HSRL, IMCS, Rutgers University
1991 - 91 Postdoctoral Research Associate, Biological Sciences, SUNY Brockport
1985 - 91 Graduate Assistant and Pre-doctoral Associate, University of Washington

PROFESSIONAL ACTIVITY

Ad Hoc Reviewer, USDA/NRI, USDA/SBIR, NSF, National Sea Grant and State Sea Grants.
Adjunct Professor at Dalian Fisheries University (1998 - present)
Adjunct Professor at Hainan University (2003 - present)
Adjunct Professor at Horn Point Laboratory, University of Maryland (2004 - present)
Adjunct Professor in Marine Functional Genomics, Chinese Academy of Sciences (2005 -)
Adjunct Professor at Virginia Institute of Marine Science, College of William and Mary (1999 -)
Associate Editor, *Journal of World Aquaculture Society* (2004 -)
Chair, USDA Western Research Coordinating Committee (WCC-99) (2000)
Chief Scientist, Mid-Atlantic Shellfish Genetics and Breeding Technology Consortium (1998-)
Council Member, Chinese Society of Malacology (2003 -)
Editorial Board, *Aquaculture* Elsevier (2005-)
Editorial Board, *Aquaculture Research* Blackwell (2001-)
Editorial Board, *Acta Oceanologia Sinica* (2004-)
Editorial Board, *Marine Biotechnology* Springer (2005-)
Editorial Board, *Oceanologia et Limnologia Sinica* (2001-)
Guest professor at Zhejiang Institute of Mariculture, PRC (1999-)
Member, American Association for the Advancement of Science (1992 -)
Member, National Shellfisheries Association (1988 -)
Member, World Aquaculture Society (2005 -)

Member, Steering Committee, Oyster Genomics Consortium (2004 -)
Member, USDA Western Research Coordinating Committee (WCC-99) (1994-)
Member, USDA Regional Project on Genetic Maps of Aquaculture Species (NE-168) (1996-03)
Member, USDA National Animal Genome Research Program (NRSP-8) (2004 -)
Oversea Referee, National Science Award of China (2006)
Panelist, National Sea Grant/Gulf Oyster Industry Program (1999)
Panelist, National Science Foundation SBIR in Food and Aquaculture Technology (2006)
Panelist, National Science Foundation of China/Earth Science Division (2001)
Panelist, National Science Foundation of China/Life Science Division (2004)
Panelist, National Science Foundation of China/Life Science Division (2005)
Panelist, USDA/National Research Initiative Grant Program in Animal Genetics (1997-98)
Panelist, USDA/National Research Initiative Grant Program in Animal Genomics (2005)
Secretary, USDA Western Research Coordinating Committee (WCC-99) (1999)
Session Chair, Genetics session at the Fourth Asian Fishery Forum (1995)
Session Chair, Genomics session at World Aquaculture Society meeting (2002)
Session Chair, Molluscan Genetics and Molecular Biology, NSA annual meeting (2002)
Session Chair, Molluscan Systematics, Evolution and Population Genetics, Intl. Congr. Zool. (2004)
Session Chair, Molluscan Genetics and Breeding, Intl. Conf. Marine Science, IOCAS (2006)
Session Chair, Molluscan Genetics and Evolution, IX Intl. Conf. Appl. Med. Malacol., (2006)
Session Chair, Aquaculture in China, World Aquaculture 07 (2007)

AWARDS AND HONORS

2006 Paper featured on the cover of *Marine Biotechnology* 8(2).
2004 *Marine Biotechnology* 2004 Best Paper Award, Springer.
2001 Board of Trustee Fellowship for Scholarly Excellence, Rutgers University.
2001 First Prize in Scientific Advancement, Chinese Academy of Sciences
1999 Award from Rutgers University in recognition of patented research.
1997 "100 Talent" award at IOCAS, Chinese Academy of Sciences.
1994 Research profile by Aquaculture Magazine, 20(6):69-74.
1997 Research featured on the cover of Genome, Vol. 4(3).
1994 Research featured on the cover of Mol. Mar. Biol. Biotechnol., Vol. 3(1).
1988 Donaldson Memorial Scholarship, University of Washington.
1987 Deans Honor Student, University of Washington.
1986 Deans Honor Student, University of Washington.
1986 Donaldson Memorial Scholarship, University of Washington.
1985 National Scholarship for Overseas Studies, China.

PATENT

Guo, X. and S.K. Allen, Jr. Methods of Producing Tetraploid and Triploid Molluscs. China Patent No. 95192167.3, August 31, 2001.
Guo, X. and S.K. Allen, Jr. Tetraploid Shellfish. US Patent No: 5,824,841, October 20, 1998.
Guo, X. and S.K. Allen, Jr. Tetraploid Shellfish. Australia Patent No: 701609, May 20, 1999.
Guo, X. and S.K. Allen, Jr. Tetraploid Shellfish. EU Patent No. 0752814, April 25, 2001.
Guo, X. and S.K. Allen, Jr. Tetraploid Shellfish. R.O.C. Patent No. 75451, 1996.
Guo, X. and S.K. Allen, Jr. Tetraploid Shellfish. South Africa Patent No. 95/0431, 1996.

GRANTS (AS LEADING PI UNLESS OTHERWISE NOTED)

2009-11 GIGASNP: Genetic and physical mapping of the Pacific oyster genome in support of an

international sequencing initiative. USDA/NRI, Animal Genomics Tools, $711,884, Co-PI with Hedgecock and Gaffney.

2008-10 Marker-assisted breeding technology for the eastern oyster. New Jersey Sea Grant, $207,486.

2007-09 Validation of disease-resistance markers for marker-assisted selection in the eastern oyster. NOAA ODRP, $282,115

2007-09 Development of JOD-resistant lines and markers for eastern oyster aquaculture. USDA NRAC via University of Rhode Island, $115,603.

2007-07 An automated genetic analyzer for shellfish genetics and breeding. Rutgers University SEBS and NJAES Competitive Intramural Awards Program, Research Infrastructure Awards 2007, $65,000.

2006-09 Collaborative research: field and modeling studies in support of understanding disease resistance in estuarine populations and response to climate change. NSF, $1,180,514, co-PI with Haidvogel, Bushek, Powell (Guo's share of funding, $473,093).

2006-08 Cross-breeding and field trials of disease-resistant eastern oysters. USDA NRAC via University of Maine, $30,655.

2006-08 Evaluation and genetic analysis of hard clam, *Mercenaria mercenaria*, stocks for QPX-resistance. USDA/NRAC, $71,173, co-PI with Kraeuter et al.

2005-07 Mapping dermo-resistance genes for marker-assisted selection in the eastern oyster. NOAA Sea Grant ODRP, $243,266.

2005-07 Enhance growth and disease-resistance of the eastern oyster by interstrain hybridization and triploidy. NOAA Sea Grant ODRP, $263,185, co-PI with Wang.

2005-07 Analysis of molecular indicators of oyster's response to Dermo infection using microarray technology. National Sea Grant GOIP through Auburn University, $120,051 (Rutgers' portion).

2004-07 Genetic and ecological structures of oyster estuaries in China and factors affecting success of *Crassostrea ariakensis*: clues from a reclassification. NOAA/NMFS CBO, $492,610.

2004-08 Production of tetraploid eastern oyster lines. 4Cs Breeding Technologies, Inc., $75,000.

2004-06 Fertilization interference between *Crassostrea ariakensis* and *Crassostrea virginica*. NOAA/NMFS CBO, $93,897, Co-PI with Bushek.

2004-06 A histological investigation of oyster parasites and pathology in three Chinese estuaries containing varying mixtures of coexisting oyster species, including *Crassostrea ariakensis*. NOAA/NMFS CBO, $52,865, Co-PI with Bushek and Ford.

2003-05 Production and evaluation of all-triploid and disease-resistant eastern oysters for aquaculture. NOAA Sea Grant ODRP, $306,186.

2003-05 Identification and mapping of oyster genes involved in host-defense against Dermo and MSX. NOAA Sea Grant ODRP, co-PI with Yu, $285,372.

2003-05 Beyond CROSBreed I: line expansion and dissemination of stocks with joint resistance to Dermo and MSX diseases in the eastern oyster, *Crassostrea virginica*. VIMS, $81,300, Co-PI with DeBrosse.

2001-03 Breeding, evaluation and molecular analysis of oyster strains selected for resistance to MSX, Dermo and JOD. National Sea Grant Oyster Disease Research Program, $255,231.

2001-03 Cooperative Regional Oyster Selective Breeding Project III. National Sea Grant Oyster Disease Program, $75,130.

2000-05 A cytogenetic program for shellfish breeding biotechnology. New Jersey Commission on Science and Technology, R&D Excellence Program, $812,418.

2000-02 The triploid-tetraploid technology for hard clam aquaculture. New Jersey Sea Grant, $115,117.

1999-01 The triploid-tetraploid technology for eastern oyster aquaculture. National Sea Grant

Technology Program, $112,099.

1999-02 Breeding and evaluation of oyster strains selected for resistance to MSX, Dermo and JOD. National Sea Grant Oyster Disease Program, $160,634.

1999-01 Cooperative Regional Oyster Selective Breeding Project. National Sea Grant Oyster Disease Program, $78,533 (Rutgers part).

1999-01 Studies on the Scallop Mortality in China. NOAA US-China Marine Living Resource program and Chinese Academy of Science. Co-PI with S.E. Ford, $11,000.

1998-01 Molecular characterization of American oyster chromosomes by fluorescence in situ hybridization. National Sea Grant Biotechnology Program, $191,720.

1998-99 Induction of Tetraploid Scallops. 4Cs Breeding Technologies Inc., $26,888.

1998-02 Marine molluscan genetics and biotechnology. China's Natural Science Foundation, grant at IOCAS, $97,000.

1998-00 Studies on new tetraploid technologies for molluscs. China's Commission on Science and Technology 863 Program, grant at IOCAS, $96,700.

1997-00 Aquaculture genetics and biotechnology program at IOCAS. Chinese Academy of Science, grant at IOCAS, $170,000.

1997-97 Studies on the Chinese molluscan aquaculture industry: a review. US-China Marine Living Resource program, NOAA and Chinese Academy of Science, $8,000.

1996-00 The production of characterization of trisomic oyster lines for aquaculture. USDA/NRICGP/CSREES, $145,873.

1995-96 Gene transfer in oysters through allotetraploids, hyperallotriploids and hypoallotetraploids. Sea Grant/ODRP, $71,564.

1995-98 Cooperative regional oyster selective breeding (CROSBreed) project. Sea Grant/ODRP, co-PI with Allen et al., $377,506.

1995-97 Triploids for Biological Containment: the Risk of Heteroploid Mosaics. USDA Biotech Risk Assessment, co-PI with Allen, $185,000.

1994-95 Gene transfer through interspecific partial gynogenesis and its potential use in the transfer of disease resistance to the American oyster. NOAA/NMFS ODR, $83,311.

1994-96 New opportunities for ploidy manipulation in shellfish using tetraploids. NOAA/Sea Grant Biotech Program, co-PI with Allen, $150,000.

1992-94 Uniparental inheritance and inbreeding in bivalves: aquacultural implications. USDA, co-PI with Allen, $168,294.

1991-91 Production of inbred lines in the Pacific oyster, *Crassostrea gigas*: the gynogenetic approach. Taylor United, Inc., Washington, $3,421.

1989-90 Biotechnical approach to improve the production and growth of triploidy in the Pacific oyster. NOAA/Sea Grant, with Chew and Hershberger, $170,500.

PUBLICATIONS (PEER-REVIEWED)

Zheng, H., G. Zhang, X. Guo and X. Liu. 2008. Inbreeding depression from various traits in two cultured populations of the American bay scallop, *Argopecten irradians irradians* Lamarck (1819) introduced into China. J. Exp. Mar. Biol. Ecol. 364:42-47.

Wang, H., G. Zhang, X. Liu and X. Guo. 2008. Classification of common oysters from North China. *J. Shellfish Res.*, 27(3):495-503.

Wang, H. and **X. Guo**. 2008. Identification of *Crassostrea ariakensis* and related oysters by multiplex species-specific PCR. *J. Shellfish Res.*, 27(3):481-487.

Wang, Y. and **X. Guo**. 2008. ITS length polymorphism in oysters and its potential use in species identification. *J. Shellfish Res.*, 27(3):489-493.

Bushek, D., A. Kornbluh, H. Wang, **X. Guo**, G. DeBrosse, J. Quinlan. 2008. Fertilization interference between *Crassostrea ariakensis* and *Crassostrea virginica*: a gamete sink? *J. Shellfish Res.*, 27(3):593-600.

Wang, Y. and X. Guo. 2008. Chromosomal mapping of the major ribosomal RNA genes in the Dwarf Surfclam (*Mulinia lateralis* Say). *J. Shellfish Res.*, 27(2):307-311.

Jenny, M. J., R. W. Chapman, A. Mancia, Y.A. Chen, D. J. McKillen, H. Trent, P. Lang, J.-M. Escoubas, E. Bachere, V. Boulo, Z. J. Liu, P. S. Gross, C. Cunningham, P. M. Cupit, A. Tanguy, **X. Guo**, D. Moraga, I. Boutet, A. Huvet, S. D. Guise, J. S. Almeida, G. W. Warr. 2007. A cDNA microarray for *Crassostrea virginica* and *C. gigas*. *Marine Biotechnology*, 9, 577–591.

Qin, Y., X. Liu, H. Zhang, G. Zhang and **X. Guo**. 2007. Genetic mapping of size-related quantitative trait loci (QTL) in the bay scallop (*Argopecten irradians*) using AFLP and microsatellite markers. *Aquaculture*, 272:281-290.

Wang, L., H. Zhang, L. Song and **X. Guo**. 2007. Loss of allele diversity in introduced populations of the hermaphroditic bay scallop *Argopecten irradians*. *Aquaculture*, 271:252-259.

Wang, Y. and **X. Guo**. 2007. Development and characterization of EST-SSR markers in the eastern oyster *Crassostrea virginica*. *Marine Biotechnology*, 9, 500–511.

Quilang, J., S. Wang, P. Li, J. Abernathy, E. Peatman, Y. Wang, L. Wang, Y. Shi, R. Wallace, **X. Guo**, and Z. Liu. 2007. Generation and analysis of ESTs from the eastern oyster, *Crassostrea virginica* Gmelin and identification of microsatellite and SNP markers. *BMC Genomics*, 8:157.

Wang, L., L. Song, H. Zhang, Q. Gao and **X. Guo**. 2007. Genetic linkage map of bay scallop, *Argopecten irradians irradians* (Lamarck 1819). *Aquaculture Research* 38 (4):409-419.

Qin, Y., X. Liu, H. Zhang, G. Zhang and **X. Guo**. 2007. Identification and mapping of AFLP markers linked to shell color in bay scallop, *Argopecten irradians* (Lamarck, 1819). *Marine Biotechnology*, 9:66-73.

Wang, Y. and **X. Guo**. 2007. Chromosomal mapping of major ribosomal rRNA genes in the hard clam (*Mercenaria mercenaria*) using fluorescence *in situ* hybridization. *Marine Biology*, 150:1183-1189.

Zheng, H., G. Zhang and **X. Guo**. 2006. Heterosis between two stocks of the bay scallop, *Argopecten irradians irradians* Lamarck (1819). *J. Shellfish Res.*, 25(3):807-812.

Yang, H. and **X. Guo**. 2006. Tetraploid induction by inhibiting mitosis I with heat shock, cold shock and nocodazole in the hard clam *Mercenaria mercenaria* (Linnaeus, 1758). *Marine Biotechnol.*, 8:501-510.

Alcivar-Warren, A., D. Meehan-Meola, Y. Wang' , **X. Guo**, L. Zhou, J. Xiang, S. Moss, S. Arce, W. Warren, Z. Xu and K. Bell. 2006. Isolation and mapping of telomeric pentanucleotide $(TAACC)_n$ repeats of the Pacific whiteleg shrimp, *Penaeus vannamei*, using fluorescence in situ hybridization. *Marine Biotechnology*, 8:467-480.

Liu, X., X. Liu, **X. Guo**, Q. Gao and G. Zhang. 2006. A preliminary genetic linkage map of the Pacific abalone *Haliotis discus hannai* Ino. *Marine Biotechnology*, 8:386-397.

Zheng, H., G. Zhang, X. Liu and **X. Guo**. 2006. Sustained response to selection in an introduced population of the hermaphroditic bay scallop *Argopecten irradians irradians* Lamarck (1819). *Aquaculture*, 255:579-585.

Song, L., W. Xu, C. Li, H. Li, L. Wu, J. Xiang and **X. Guo**. 2006. Development of expressed sequence tags from the bay scallop, *Argopecten irradians irradians*. *Marine Biotechnology*, 8(2):161-169. (Coverpage)

Yu, Z. and **X. Guo**. 2006. Identification and mapping of disease-resistance QTL in the eastern oyster, *Crassostrea virginica* Gmelin. *Aquaculture*, 254:160-170.

Yang, H. and **X. Guo**. 2006. Polyploid induction by heat shock-induced meiosis and mitosis inhibition in the dwarf surfclam *Mulinia lateralis* Say. *Aquaculture*, 252:171-182.

Wang, Y., Z. Xu and **X. Guo**. 2005. Chromosomal mapping of 5S ribosomal RNA genes in the eastern oyster, *Crassostrea virginica* Gmelin by fluorescence *in situ* hybridization. *J. Shellfish Res.*, 24(4):959-964.

Xiao, J., S.E. Ford, H. Yang, G. Zhang, F. Zhang and **X. Guo**. 2005. Studies on mass summer mortality of cultured zhikong scallops (*Chlamys farreri* Jones et Preston) in China. *Aquaculture*, 250:602-615.

Deng, Y., X. Liu, G. Zhang and **X. Guo**. 2005. Inbreeding depression and maternal effects on early performance of Pacific abalone. *North American Journal of Aquaculture*, 67:231-236.

Hedgecock, D. P.M. Gaffney, P. Goulletquer, **X. Guo**, K. Reece and G. Warr. 2005. A case for sequencing the Pacific oyster genome. *J. Shellfish Res.*, 24(2):429-441.

Wang, Y., Z. Xu. J.C. Pierce and **X. Guo**. 2005. Characterization of eastern oyster (*Crassostrea virginica* Gmelin) chromosomes by fluorescence *in situ* hybridization with bacteriophage P1 clones. *Marine Biotechnology*, 7:207-214.

Yu, Z. and **X. Guo**. 2005. Genetic analysis of selected strains of the eastern oyster (*Crassostrea virginica* Gmelin) using AFLP and microsatellite markers. *Marine Biotechnology*, 6:575-586.

Wang, L., L. Song, Y. Chang, W. Xu, D. Ni and **X. Guo**. 2005. A preliminary genetic map of zhikong scallop (*Chlamys farreri*, Jones et Preston 1904). *Aquaculture Research*, 36:643-653.

Wang, Y. and **X. Guo**, 2004. Chromosomal rearrangement in Pectinidae revealed by rRNA loci and implications for bivalve evolution. *Biol. Bull.*, 207:247-256.

Wang, H. **X. Guo**, G. Zhang and F. Zhang. 2004. Classification of jinjiang oysters *Crassostrea rivularis* (Gould, 1861) from China, based on morphology and phylogenetic analysis. *Aquaculture*, 242:137-155.

Zheng, H., G. Zhang, X. Liu, F. Zhang and **X. Guo**. 2004. Different responses to selection in two stocks of the bay scallop, *Argopecten irradians irradians* Lamarck (1819). *J. Exp. Mar. Biol. Ecol.*, 313:213-223.

Tanguy, A., **X. Guo** and S.E. Ford. 2004. Discovery of genes expressed in response to *Perkinsus marinus* challenge in eastern (*Crassostrea virginica*) and Pacific (*C. gigas*) oysters. *Gene*, 338:121-131.

Gong, N., H. Yang, G. Zhang, B.J. Landau and **X. Guo**. 2004. Chromosome inheritance in autotriploid Pacific oyster *Crassostrea gigas* Thunberg. *Heredity*, 93:408-415.

Yang, H. and **X. Guo**. 2004. Tetraploid induction by meiosis inhibition in the dwarf surfclam *Mulinia lateralis*: effects of cytochalasin B duration. *Aquaculture Res.*, 35:1187-1194.

Li, L. and **X. Guo**. 2004. AFLP-based genetic linkage maps of the Pacific oyster *Crassostrea gigas* Thunberg. *Marine Biotechnology* 6:26–36.

Wang, Y., Z. Xu and **X. Guo**. 2004. Differences in the rDNA-bearing chromosome divide the Asian-Pacific and Atlantic species of *Crassostrea* (Bivalvia, Mollusca). *Biol. Bull.*, 206:46-54.

Yu, Z., X. Kong, L. Zhang, **X. Guo**, J. Xiang. 2003. Taxonomic status of four *Crassostrea* oysters from China as inferred from mitochondrial DNA sequences. *J. Shellfish Res.*, 22(1):31-38.

Yu, Z. and **X. Guo**. 2003. Genetic linkage map of the eastern oyster *Crassostrea virginica* Gmelin. *Biol. Bull.* 204: 327–338.

Peruzzi, S. and **X. Guo**. 2002. Tetraploid induction by meiosis inhibition with cytochalasin B in the dwarf surfclam, *Mulinia lateralis* Say: effects of temperature. *J. Shellfish Res.*, 21(2): 677-684.

Wang, Z., **X Guo**, S.K. Allen, Jr. and R. Wang. 2002. Heterozygosity and body size in triploid Pacific oysters, *Crassostrea gigas* Thunberg, produced from meiosis II inhibition and tetraploids. *Aquaculture*, 204(3-4):337-248.

Wang, Y. and **X. Guo**. 2001. Chromosomal mapping of the vertebrate telomere sequence (TTAGGG)n in four bivalve Molluscs by fluorescence *in situ* hybridization. *J. Shellfish Res.*, 20(3):1187-1190.

Wang, Y., Z. Xu and **X. Guo**. 2001. A centromeric satellite sequence in the Pacific oyster, *Crassostrea gigas* (Thunberg) identified by fluorescence in situ hybridization. *Marine Biotechnology*, 3:486-492.

Xu, Z., **X. Guo**, J. Pierce and P.M. Gaffney, 2001. Chromosomal location of the major ribosomal RNA genes in the eastern and Pacific oysters. *The Veliger*, 44:79-83.

Yang, H., F. Zhang and **X. Guo**. 2000. Triploid and tetraploid zhikong scallop, *Chlamys farreri* Jones et Preston, produced by inhibiting polar body I. *Marine Biotechnology*, 2:466-475.

Yang, H., T. Gallivan, **X. Guo** and S.K. Allen, Jr. 2000. A method for preserving oyster tissue samples for flow cytometry. *J. Shellfish Res.*, 19(2):835-839.

Eudeline, B., S.K. Allen, Jr. and **X. Guo**. 2000. Delayed meiosis and polar body release in eggs of triploid Pacific oysters, *Crassostrea gigas*, in relation to tetraploid production. *J. Exp. Mar. Biol. Ecol.*, 248:151-161.

Eudeline, B., S.K. Allen, Jr. and **X. Guo**. 2000. Optimization of tetraploid induction in the Pacific oysters, *Crassostrea gigas*, using the first polar body as a natural indicator. *Aquaculture*, 187:73-84.

Guo, X., S.E. Ford and F. Zhang. 1999. Molluscan aquaculture in China. *J. Shellfish Res.*, 18(1):19-31.

Yang, H., **X. Guo**, Z. Chen and Y. Wang. 1999. Tetraploid induction by inhibiting mitosis I in zhikong scallop, *Chlamys farreri*. *Chin. J. Oceanol. Limnol.*, 17(4):350-358.

Wang, Z., **X. Guo,** S.K. Allen, Jr. and R. Wang. 1999. Aneuploid Pacific oyster (*Crassostrea gigas* Thunberg) as incidentals from triploid production. *Aquaculture*, 173:347-357.

Guo, X., D. Hedgecock, W.K. Hershberger, K. Cooper and S.K. Allen, Jr. 1998. Genetic determinants of protandric sex in *Crassostrea* oyster. *Evolution*, 52(2):394-402.

Que, H., **X. Guo**, F. Zhang and Standish K. Allen. 1997. Chromosome segregation in fertilized eggs from triploid Pacific oyster, *Crassostrea gigas* Thunberg, following inhibition of polar body I. *Biol. Bull.*, 193:14-19.

Guo, X. and S.K. Allen, Jr. 1997. Sex and meiosis in autotetraploid Pacific oyster (*Crassostrea gigas* Thunberg). *Genome*, 40 (3):397-405.

Guo, X. and S.K. Allen, Jr. 1997. Fluorescence in situ hybridization of the vertebrate telomere sequence to chromosome ends of the Pacific oyster, *Crassostrea gigas* Thunberg. *J. Shellfish Res.*, 16(1):87-89.

Guo, X. and S.K. Allen, Jr. 1996. Complete interference and nonrandom distribution of meiotic crossover in a mollusk, *Mulinia lateralis* Say. *Biol. Bull.*, 191(2):145-148.

Guo, X., G. DeBrosse and S.K. Allen, Jr. 1996. All-triploid Pacific oysters (*Crassostrea gigas* Thunberg) produced by mating tetraploids and diploids. *Aquaculture*, 142:149-161.

Guo, X. and S.K. Allen, Jr. 1994. Sex determination and polyploid gigantism in the dwarf-surf clam, *Mulinia lateralis* Say. *Genetics*, 138:1199-1206.

Guo, X. and S.K. Allen, Jr. 1994. Reproductive potential and genetics of triploid Pacific oyster, *Crassostrea gigas* (Thunberg). *Biol. Bull.*, 187:309-318.

Guo, X. and S.K. Allen, Jr. 1994. Viable tetraploid Pacific oyster (*Crassostrea gigas* Thunberg) produced by inhibiting polar body I in eggs from triploids. *Mol. Mar. Biol. Biotech.*, 3(1):42-50.

Guo, X., W.K. Hershberger, K. Cooper and K.K. Chew. 1994. Tetraploid induction with mitosis I inhibition and cell fusion in the Pacific oyster, *Crassostrea gigas* (Thunberg). *J. Shellfish Res.*, 13(1):193-198.

Guo, X., W.K. Hershberger, K. Cooper and K.K. Chew. 1993. Artificial gynogenesis with ultraviolet irradiated sperm in the Pacific oyster, *Crassostrea gigas*: I Induction and survival. *Aquaculture*, 113:201-214.

Guo, X. and P. Gaffney. 1993. Artificial gynogenesis with ultraviolet irradiated sperm in the Pacific oyster, *Crassostrea gigas*: II Allozyme inheritance and early growth. *J. Heredity*, 84(4):311-315.

Guo, X., K. Cooper, W.K. Hershberger and K.K. Chew. 1992. Genetic consequences of blocking polar body I with cytochalasin B in fertilized eggs of the Pacific oyster, *Crassostrea gigas:* I. Ploidy of resultant embryos. *Biol. Bull.*, 183:381-386.

Guo, X., W.K. Hershberger, K. Cooper and K.K. Chew. 1992. Genetic consequences of blocking polar body I with cytochalasin B in fertilized eggs of the Pacific oyster, *Crassostrea gigas:* II. Segregation of chromosomes. *Biol. Bull.*, 183:387-393.

Guo, X., W.K. Hershberger and J. Myers. 1990. Growth and survival of intrastrain and interstrain triploids of rainbow trout, *Oncorhynchus mykiss*. *J. World Aqua. Soc.*, 21(4):250-256.

PEER-REVIEWED IN CHINESE:

Sun, B., X. Liu, G. Zhang, H. Zheng and X. Guo. 2006. Molecular verification of fertilization between bay scallop individuals. *J. Fish. China*, 30(5):713-719. (In Chinese with English Abstract)

Que, H., **X. Guo**, G. Zhang and F. Zhang. 2005. Tetraploid induction by inhibiting polar body I with cytochalasin B in jinjiang oyster (*Crassostrea rivularis*). *Oceanologia et Limnologia Sinica*, 36(5):437-444. (In Chinese with English Abstract)

Liu, X., X. Peng, G. Zhang, M. Zhao and **X. Guo**. 2005. Mortality and growth of cobalt-60 gamma-irradiated adult Pacific oyster, *Crassostrea gigas*. *Journal of Fisheries of China*, 29(3):424-428. (In Chinese with English Abstract)

Xiao, J., X. Liu, G. Zhang and **X. Guo**. 2004. Studies on segregation of RAPD markers in a F1 hybrid family and parents of *Haliotis discus hannai* Ino. *ACTA Oceanologia Sinica*, 26(6):124-132. (In Chinese with English Abstract)

Li, L. and **X. Guo**. 2003. Preliminary linkage mapping in the Pacific oyster using RAPD and AFLP markers. *Oceanologia et Limnologia Sinica*, 34(5):541-551. (In Chinese with English Abstract)

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