

Chunlei Su

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EDUCATION:

- 1995 - 99, Ph.D. The Pennsylvania State University, PA.
Major: Pathobiology. Adviser: Dr. Lorraine M. Sordillo.
Dissertation: Isolation of *Staphylococcus aureus* candidate virulence determinants related to bovine mastitis.
- 1992 - 95, M.S. Brigham Young University, UT.
Major: Animal Science. Adviser: Dr. Beverly L. Roeder.
Thesis: Development of a serum trypsin-like immunoreactivity assay for Holstein dairy cows.
- 1982 - 87, D.V.M. College of Veterinary Medicine, China Agricultural University, Beijing, China.

APPOINTMENTS:

- 2004.8 – present. Assistant Professor. Department of Microbiology, University of Tennessee, Knoxville. TN.
- 1999.9-2004.8 Postdoctoral Research Associate. Washington Univ. School of Medicine, MO.
- 1995.8 – 1999.8 Research Assistant. Center for Mastitis Research, Penn State University.

PEER-REVIEWED PUBLICATIONS:

Su C, Shwab EK, Zhou P, Zhu XQ, Dubey JP. Moving towards an integrated approach to molecular detection and identification of *Toxoplasma gondii*. *Parasitology*. 2009. In press.

Yai LEO, Ragozo AMA, Soares RM, Pena HFJ, Su C, Gennari SM. Genetic diversity among capybara (*Hydrochaeris hydrochaeris*) isolates of *Toxoplasma gondii* from Brazil. *Veterinary Parasitology*. 2009. 162:332-337.
<http://www.sciencedirect.com/science/journal/03044017>

Zhou P, Zhang H, Lin RQ, Zhang DL, Song HQ, Su C, Zhu XQ. Genetic characterization of *Toxoplasma gondii* isolates from China. *Parasitology International*. 2009. 58:193-195.
<http://www.sciencedirect.com/science/journal/13835769>

Dubey JP, Su C. Population biology of *Toxoplasma gondii*: what's out and where did they come from. *Memórias do Instituto Oswaldo Cruz*. 2009. 104(2):190-195. http://www.scielo.br/scielo.php?pid=0074-0276&script=sci_issues

Prestrud KW, Asbakk K, Mørk T, Fuglei E, Tryland M, Su C. Direct high-resolution genotyping of *Toxoplasma gondii* in arctic foxes (*Vulpes lagopus*) in the remote arctic Svalbard archipelago reveals widespread clonal Type II lineage. 2008. *Veterinary Parasitology*. 158:121-128. <http://www.sciencedirect.com/science/journal/03044017>

Velmurugan GV, Dubey JP and Su C. Genotyping studies of *Toxoplasma gondii* isolates from Africa revealed that the archetypal clonal lineages predominate as in North America and Europe. 2008. *Veterinary Parasitology*. 155:314-318. <http://www.sciencedirect.com/science/journal/03044017>

Pena HFJ, Gennari SM, Dubey JP, Su C. Population structure and mouse-virulence of *Toxoplasma gondii* in Brazil. *International Journal for Parasitology*. 2008. 38:561-569. <http://www.sciencedirect.com/science/journal/00207519>

Sundar N, Cole RA, Thomas NJ, Majumdar D, Dubey JP, Su C. Genetic diversity among sea otter isolates of *Toxoplasma gondii*. *Veterinary Parasitology*. 2008. 151: 125-132. <http://www.sciencedirect.com/science/journal/03044017>

Khan A, Fux B, Su C, Dubey JP, Darde ML, Ajioka JW, Rosenthal BM, Sibley LD. Recent transcontinental sweep of *Toxoplasma gondii* driven by a single monomorphic chromosome. *Proceedings of the National Academy of Sciences (USA)*. 2007; 104(37): 14872–14877. <http://www.pnas.org/cgi/content/abstract/0702356104v1>

Fux B, Nawas J, Khan A, Gill D. B, Su C, Sibley L. D. 2007. *Toxoplasma gondii* strains defective in oral transmission are also defective in developmental stage differentiation. *Infection and Immunity*. 75: 2580-2590. <http://iai.asm.org/cgi/content/abstract/75/5/2580>

Dubey JP, Sundar N, Gennari SM, Minervino AH, Farias NA, Ruas JL, Dos Santos TR, Cavalcante GT, Kwok OC, Su C. 2007. Biologic and genetic comparison of *Toxoplasma gondii* isolates in free-range chickens from the northern Para state and the southern state Rio Grande do Sul, Brazil revealed highly diverse and distinct parasite populations. *Veterinary Parasitology*. 143:182-188. <http://www.sciencedirect.com/science/journal/03044017>

Taylor S, Barragan A, Su C, Fux B, Fentress SJ, Tang K, Beatty WL, El Hajj H, Jerome M, Behnke MS, White M, Wootton JC, Sibley LD. 2006. A secreted serine-threonine kinase determines virulence in the eukaryotic pathogen *Toxoplasma gondii*. *Science*. 314:1776-1780. <http://www.sciencemag.org/cgi/content/full/314/5806/1776>

- Su C**, Zhang X, and Dubey JP. 2006. Genotyping of *Toxoplasma gondii* by multilocus PCR-RFLP markers: A high resolution and simple method for identification of parasites. *International Journal for Parasitology*. 36:841-848.
<http://www.sciencedirect.com/science/journal/00207519>
- Dubey JP, **Su C**, de Oliveira J, Morales JA, Bolanos RV, Sundar N, Kwok OC, Shen SK. 2006. Biologic and genetic characteristics of *Toxoplasma gondii* isolates in free-range chickens from Costa Rica, Central America. *Veterinary Parasitology*. 139:29-36.
<http://www.sciencedirect.com/science/journal/03044017>
- Khan A, Taylor S, **Su C**, Mackey AJ, Boyle J, Cole R, Glover D, Tang K, Paulsen IT, Berriman M, Boothroyd JC, Pfefferkorn ER, Dubey JP, Ajioka JW, Roos DS, Wootton JC, and Sibley LD. 2005. Composite genome map and recombination parameters derived from three archetypal lineages of *Toxoplasma gondii*. *Nucleic Acids Research*. 33:2980-2992. <http://nar.oxfordjournals.org/cgi/content/full/33/9/2980>
- Ajzenberg D, Bañuls AL, **Su C**, Dumètre A, Demar M, Carme B and Dardé ML. 2004. Genetic diversity, clonality and sexuality in *Toxoplasma gondii*. *International Journal for Parasitology*. 34: 1185-1196.
<http://www.sciencedirect.com/science/journal/00207519>
- Su C**, Hott C, Brownstein BH and Sibley LD. 2004. Typing single-nucleotide polymorphisms in *Toxoplasma gondii* by allele-specific primer extension and microarray detection. *Methods in Molecular Biology*. 270:249-262.
- Fux B, Rodrigues CV, Portela RW, Silva NM, **Su C**, Sibley LD, Ricardo W. A. Vitor RWA and Gazzinelli RT. 2003. Role of Cytokines and Major Histocompatibility Complex Restriction in Mouse Resistance to Infection with a Natural Recombinant Strain (Type I-III) of *Toxoplasma gondii*. *Infection and Immunity*. 71:6392-6401.
<http://iai.asm.org/cgi/content/full/71/11/6392>
- Su C**, Evans D, Cole R, Kissinger J, Ajioka JW and Sibley LD. 2003. Recent expansion of *Toxoplasma* through enhanced oral transmission. *Science*. 299:414-416.
<http://www.sciencemag.org/cgi/content/full/299/5605/414>
- Su C**, Howe DK, Dubey JP, Ajioka J and Sibley LD. 2002. Identification of quantitative trait loci controlling acute virulence in *Toxoplasma gondii*. *Proceedings of the National Academy of Sciences (USA)*. 99:10753-10758.
<http://www.pnas.org/cgi/content/full/99/16/10753>
- Blackston CR, Dubey JP, Dotson E, **Su C**, Thulliez P, Sibley LD and Lehmann T. 2001. High-resolution typing of *Toxoplasma gondii* using microsatellite loci. *Journal of Parasitology*. 87:1472-1475.
<http://www.bioone.org/perlserv/?request=get-toc&issn=0022-3395&volume=87&issue=6>

Su C, Kanevsky I, Jayarao BM and Sordillo LM. 2000. Phylogenetic relationships of *Staphylococcus aureus* from bovine mastitis based on coagulase gene polymorphism. *Veterinary Microbiology*. 71:53-58.

Su C, Herbelin C, Frieze N, Skardova O and Sordillo LM. 1999. Coagulase gene polymorphism of *Staphylococcus aureus* isolates from dairy cattle in different geographical areas. *Epidemiology and Infection*. 122:329-336.

Su C and Sordillo LM. 1998. A simple method to enrich mRNA from prokaryotic total RNA. *Molecular Biotechnology*. 10:83-85. (cover feature for the issue).

Anderson N, Petch DA, Tan LX, Gong XH, **Su C** and Guo ZM. 1993. Treatment and control of the intestinal fluke, *Skrjabinotrema ovis*. *Veterinary Parasitology*. 51:61-68.

INVITED TALKS

11/30/2004 “*Toxoplasma gondii* - Virulence, Genotype and Population Structure”. Department of Cellular Biology, University of Georgia, Athens.

7/10/2005 “*Toxoplasma gondii* - Virulence, Genotype and Population Structure”. The XIIth International Congress of Protozoology, Guanzhou, China. Served as the chairperson for the session: S5.2 Virulence and Pathogenesis.

9/26/2007 “Population structure and virulence of *Toxoplasma gondii*”. Department of Biological Sciences. Texas Tech University, Lubbock, TX.

9/11/2008 “Population structure and virulence regulation of *Toxoplasma gondii*”. University of Connecticut Health Science Center, Farmington, Connecticut.

9/28/2008 “Population genetics and diversity of *Toxoplasma gondii*”. University of Sao Paulo, Brazil.

3/2/2009 “Population structure and virulence of *Toxoplasma gondii*”. Department of Molecular Sciences, University of Tennessee Health Science Center, Memphis, TN.

TEACHING EXPERIENCE:

2007. Spring semester. Advanced Microbiology (Micro320), 3 credit hours (for junior and senior undergraduate students major in Microbiology).

2007. Fall semester. Journal Club for Microbial Pathogenesis (Micro602), 1 credit hour graduate course. 14 graduate students.

2008. Spring semester. General Genetics (Biology 240), 3 credit hours (for undergraduate students major in Biology). 80 students.

2008. Spring semester. Topics in Eukaryotic Pathogens (Microbiology 660). 3 credit hours. 9 graduate students.

2008. Spring semester. 5 lectures in Parasitology section, for the course Microbial Pathogenesis (Microbiology 420, 3 credit hours). 70 junior and senior undergrads.

2008. Fall semester. Topics in Microbial Pathogenesis (Microbiology 620), 3 credit hours. 18 graduate students.

2008. Fall semester. General Seminar (Microbiology 595), 1 credit hour. 35 graduate students.

AWARDS

2007. Undergraduate Faculty Award for Outstanding Undergraduate Teacher. Department of Microbiology, University of Tennessee, Knoxville. TN.

American Heart Association National Scientist Development Grant. "Gene expression networks and virulence regulation in *Toxoplasma gondii*". Funded 1/1/2008 - 12/31/2011, \$77,000/yr.