

Curriculum Vitae

Chuan Xiao

Address

Current Address:

4140 Larchmont Dr.

El Paso, TX 79902

Email: cxiao@utep.edu

Web: <http://utminers.utep.edu/cxiao>

Office Tel: 915-747-8657

Office Address:

Dept. of Chemistry

500 West University Ave.

El Paso, TX 79968

Fax: 915-747-5996

Education

- 2005 - 2008 Department of Biological Sciences, Purdue University, West Lafayette, IN 47906, USA
Post Doctoral Research Associate
- 1998 - 2005 Department of Biological Sciences, Purdue University, West Lafayette, IN 47906, USA
Major: Biochemistry and Molecular Biology, GPA:3.92 out of 4.0
Degree: Doctor of Philosophy
Thesis Title: Interaction between three picornaviruses and their common receptor ICAM-1
- 1995 - 1998 Department of Biochemistry, Fudan University, Shanghai, P.R.China
Major: Biochemistry, GPA: 3.6 out of 4.0
Degree: Master of Science
Thesis Title: A novel calmodulin-like protein gene in rice which has an unusual prolonged C-terminal sequence carrying a putative prenylation site
- 1991-1995 Depart of Biochemistry, Fudan University
Major: Biochemistry, GPA: 3.5 out of 4.0
Minor: Electronics and Information system, GPA: 3.9 out of 4.0
Degree: Bachelor of Science
Thesis Title: Sequencing of the cDNA Encoding the 16 kDa Subunit of V-ATPase from Rice and Homology Searching
- 1990-1991 PLA Military Academy at Dalian, Cadet Training Required by Fudan University

Honors and scholarships

- Postdoctoral travel grant award, 27th Annual Meeting of American Society for Virology, 2008, Ithaca.
- One of three selected talks from poster session, Workshop on Advanced Topics in EM Structure Determination, 2007, San Diego.
- Committee Appreciation Poster Award, 3rd International Conference on Structural Analysis of Supramolecular Assemblies by Hybrid Methods, 2006, Lake Tahoe.
- MSA Presidential Student Award of Microscopy & Microanalysis, 2002, Quebec City. Canada.
- Graduate student travel grant award, 20th Annual Meeting of American Society for Virology, 2001, Madison, Wisconsin.
- Second Place Award, Poster Session of the 6th Biophysics and Cellular Biology Symposium, 2000, Purdue University.
- Highest Score, Doctoral Qualifying Examination, Biochemistry and Molecular Biology Program, Purdue University.
- The only second year master's degree student earning Dongs' Orient Scholarship, First rank scholarship, Fudan University.
- Highest scholarship of first year master's degree student, GuangHua Scholarship, Fudan University.
- Selected one of five *excellent graduates* in a forty-student class, Undergraduate, Fudan University.
- Third rank scholarship as freshman, Second Rank Scholarship as Sophomore and Senior student, Undergraduate, Fudan University.

Affiliation:

- 2010-present, member of American Chemical Society
- 2009-present, member of Sigma Xi,
- 2008-present, full member of American Society for Virology
- 2008-present, full member of Microscopy Society of America
- 2008-present, member of American Association for the Advancement of Science
- 2002-2008, student/postdoctoral member of Microscopy Society of America
- 2001-2008, associated member of American Society for Virology

Public Advisory Committee

- 2011- present member, Sigma Xi UTEP chapter admissions committee
- 2009-present, member, University of Texas at El Paso Institutional Biosafety/recombinant DNA Committee
- 2010, reviewer, NSF-MRI Review Panel One.

Research Experience

- 8/2008-present Department Of Chemistry, University of Texas at El Paso, El Paso, Texas, USA
Assistant Professor
- Combine Cryo-EM and X-ray crystallography to study virus assembly process
 - Cryo-EM and X-ray crystallographic studies of the giant Marine virus CroV
 - Cryo-EM and X-ray crystallographic studies of mammalian circadian proteins
 - X-ray crystallographic studies of viral SUMOylation proteins
- 9/2005-8/2008 Biology Group, Purdue University, West Lafayette, Indiana, USA
Post Doctoral Research Associate
- Cryo-EM reconstruction of the giant Mimivirus
 - High resolution cryo-EM reconstruction of Sindbis virus deglycosylation mutants
 - Structure studies of the interaction between Coxsackievirus A21(CVA21) and its receptor DAF and ICAM-1
- 8/1998-8/2005 Structural Biology Group, Purdue University, West Lafayette, Indiana, USA
Graduate Research for Ph.D. Degree
- Structure determination of the CVA21 by X-ray crystallography
 - Structure determination of the complex of the CVA21 with its receptor ICAM-1
 - Structure determination of the complex of the major group Rhinoviruses with the receptor ICAM-1 by cryo-EM reconstruction
 - Writing many cryo-EM programs to achieve high-resolution
 - Webmaster of group web page
- 8/1995-8/1998 Satellite Laboratory of Rice Genome Project, Fudan University, Shanghai, China
Graduate Research for Master Degree
- Sequenced ESTs of Rice
 - Sequenced the cDNA complete sequence of the Rice GAPDH
 - Sequenced the cDNA complete sequence and genomic sequence of a calmodulin-like protein
 - In charge of all repairs and maintenance of the experimental instruments
- 8/1996-8/1998 State Key Laboratory of Genetic Engineering, Fudan University, Shanghai, China
School of Life Sciences, Fudan University, Shanghai, China
Computer and Network System Administrator
- Technological leader in the construction of campus network of three buildings of the School of Life Science and the State Key Laboratory of Genetic Engineering

- System Administrator of computer servers of the School and the Key Laboratory
 - Established and taught biological softwares
- 8/1992-8/1995 Satellite Laboratory of Rice Genome Project, Fudan University, Shanghai, China
Undergraduate Research for Bachelor Degree
- Participated in the establishment of the new laboratory
 - Sequenced approximately 100 ESTs of Rice
 - Directed the arrangement and submission of EST into GenBank
 - Sequenced the cDNA of 16kDa subunit of Vacuolar H⁺-ATPase of Rice

Publications

Invited book chapter:

1. **Xiao, C.**, McKinlay, M. A. and Rossman, M. G. (2010). "Design of Capsid-binding Antiviral Agents Against Human Rhinoviruses". in *Structural Virology* M. Agbandje and R. McKenna, Editors, Book Sales Department, Royal Society of Chemistry:Cambridge. p. 319-337.

Invited review articles:

2. **Xiao, C.**, Rossman, M. G. (2011) "Structures of giant icosahedral eukaryotic dsDNA viruses." *Current Opinion in Virology* 1(2): 101-109.
3. Klose, T., Kuznetsov, Y. G., **Xiao, C.**, Sun, S., McPherson, A. and Rossmann, M. G. (2010). "The three-dimensional structure of Mimivirus." *Intervirology* 53(5): 268-73.

Peer reviewed journal articles:

4. Hildenbrand, Z. L., Molugu, S. K., Herrera, N., Ramirez, C., **Xiao, C.** and Bernal, R. A. (2011). "Hsp90 can Accommodate the Simultaneous Binding of the FKBP52 and HOP Proteins." *Oncotarget* 2(1-2): 45-58.
5. Hildenbrand, Z. L., Molugu, S. K., Paul, A., Avila, G. A., Herrera, N., **Xiao, C.**, Cox, M. B. and Bernal, R. A. (2010). "High-yield expression and purification of the Hsp90-associated p23, FKBP52, HOP and SGTalpha proteins." *J Chromatogr B Analyt Technol Biomed Life Sci* 878(28): 2760-4
6. Kuznetsov, Y. G., **Xiao, C.**, Sun, S., Raoult, D., Rossmann, M. and McPherson, A. (2010). "Atomic force microscopy investigation of the giant mimivirus." *Virology* 404(1): 127-37.
7. **Xiao, C.**, Kuznetsov, Y. G., Sun, S., Hafenstein, S. L., Kostyuchenko, V. A., Chipman, P. R., Suzan-Monti, M., Raoult, D., McPherson, A. and Rossmann, M. G. (2009). "Structural studies of the giant mimivirus." *PLoS Biol* 7(4): e92.
8. Cherrier, M. V., Kostyuchenko, V. A., **Xiao, C.**, Bowman, V. D., Battisti, A. J., Yan, X., Chipman, P. R., Baker, T. S., Van Etten, J. L. and Rossmann, M. G. (2009). "An icosahedral algal virus has a complex unique vertex decorated by a spike." *Proc Natl Acad Sci U S A* 106(27): 11085-9.
9. Zauberman, N., Mutsafi, Y., Halevy, D. B., Shimoni, E., Klein, E., **Xiao, C.**, Sun, S. and Minsky, A. (2008). "Distinct DNA exit and packaging portals in the virus *Acanthamoeba polyphaga* mimivirus." *PLoS Biol* 6(5): e114.
10. Hafenstein, S., Palermo, L. M., Kostyuchenko, V. A., **Xiao, C.**, Morais, M. C., Nelson, C. D., Bowman, V. D., Battisti, A. J., Chipman, P. R., Parrish, C. R. and Rossmann, M. G. (2007). "Asymmetric binding of transferrin receptor to parvovirus capsids." *Proc Natl Acad Sci U S A* 104(16): 6585-9.
11. Rossmann, M. G., Arisaka, F., Battisti, A. J., Bowman, V. D., Chipman, P. R., Fokine, A., Hafenstein, S., Kanamaru, S., Kostyuchenko, V. A., Mesyanzhinov, V. V., Shneider, M. M., Morais, M. C., Leiman, P. G., Palermo, L. M., Parrish, C. R. and **Xiao, C.** (2007). "From structure of the complex to understanding of the biology." *Acta Crystallogr D Biol Crystallogr* 63(Pt 1): 9-16.
12. **Xiao, C.** and Rossmann, M. G. (2007). "Interpretation of electron density with stereographic roadmap projections." *J Struct Biol* 158(2): 182-7.

13. Pokidysheva, E., Zhang, Y., Battisti, A. J., Bator-Kelly, C. M., Chipman, P. R., **Xiao, C.**, Gregorio, G. G., Hendrickson, W. A., Kuhn, R. J. and Rossmann, M. G. (2006). "Cryo-EM reconstruction of dengue virus in complex with the carbohydrate recognition domain of DC-SIGN." *Cell* 124(3): 485-93.
14. **Xiao, C.**, Bator-Kelly, C. M., Rieder, E., Chipman, P. R., Craig, A., Kuhn, R. J., Wimmer, E. and Rossmann, M. G. (2005). "The crystal structure of coxsackievirus A21 and its interaction with ICAM-1." *Structure (Camb)* 13(7): 1019-33.
15. **Xiao, C.**, Chipman, P. R., Battisti, A. J., Bowman, V. D., Renesto, P., Raoult, D. and Rossmann, M. G. (2005). "Cryo-electron microscopy of the giant Mimivirus." *J Mol Biol* 353(3): 493-6.
16. **Xiao, C.**, Tuthill, T. J., Bator Kelly, C. M., Challinor, L. J., Chipman, P. R., Killington, R. A., Rowlands, D. J., Craig, A. and Rossmann, M. G. (2004). "Discrimination among rhinovirus serotypes for a variant ICAM-1 receptor molecule." *J Virol* 78(18): 10034-44.
17. Rieder, E., Gorbalenya, A. E., **Xiao, C.**, He, Y., Baker, T. S., Kuhn, R. J., Rossmann, M. G. and Wimmer, E. (2001). "Will the polio niche remain vacant?" *Dev Biol (Basel)* 105: 111-22; discussion 149-50.
18. **Xiao, C.**, Bator, C. M., Bowman, V. D., Rieder, E., He, Y., Hebert, B., Bella, J., Baker, T. S., Wimmer, E., Kuhn, R. J. and Rossmann, M. G. (2001). "Interaction of coxsackievirus A21 with its cellular receptor, ICAM-1." *J Virol* 75(5): 2444-51.
19. **Xiao, C.**, Xin, H., Dong, A., Sun, C. and Cao, K. (1999). "A novel calmodulin-like protein gene in rice which has an unusual prolonged C-terminal sequence carrying a putative prenylation site." *DNA Res* 6(3): 179-81.
20. **Xiao, C.**, Liu, X., Zhan, S., Wang, X. and Cao, K. (1998). "Rice Glyceraldehyde-3-phosphate Dehydrogenase cDNA Structure Analyze and Molecular Evolution Properties." *Progress in Natural Science* 8(4): 411-419.

Conference Presentations

1. Parra, R., Rush, S., Avila, G. A., Chiocca, S., **Xiao, C.**, ABRCMS 2012: Annual Biomedical Research Conference for Minority Students, "The Structural Investigation of an Early Gene Product of the Avian Adenovirus CELO," American Society for Microbiology, San Jose, CA, USA. (November 7, 2012).
2. Jain, R., **Xiao, C.**, The 12th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Science/crobiology, "RIVEM 2: A Comprehensive Software tool for creating 3D to 2D plots of Protein Surface," UTEP and NMSU, El Paso, TX. (October 27, 2012).
3. Parra, R., Rush, S., Avila, G. A., Chiocca, S., **Xiao, C.**, 2012 COURI Summer Symposium: Showcasing Emerging Researchers at the Forefront of Science and Engineering, "The Structural Investigation of an Early Gene Product of the Avian Adenovirus CELO," COURI, COS, UTEP, El Paso, TX, USA. (July 27, 2012).
4. Avila, G., Jacquez, P., Ernesto, L., Sherman, M., Xiao, C., Sun, J., Gordon Research Conference- Microbial Toxins & Pathogenicity, "Disulfide reduction-induced conformational changes inhibited anthrax toxin action," Gordon Research Conference, Waterville, NH. (July 8, 2012).
5. Blankenship, T.*, Jain, R.*, Xiao, C., 2nd Annual COURI Symposium: Showcasing Emerging Researchers at the Forefront of Science and Engineering, "Geometric Surface Function of a Giant Marine Virus Cafeteria roenbergensis virus," COURI, COS, UTEP, El Paso, TX, USA. (April 21, 2012).
6. Blankenship, T.*, Xiao, C., The 11th Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Science/crobiology, "Geometric Surface Function of Trisymmetron of the Giant Marine Virus Cafeteria roenbergensis virus," UTEP and NMSU, Las Cruces, NM. (March 31, 2012).
7. Avila, G. A., Jacquez, P., Altiyev, A., Licon, E., Boone, K., Sherman, M. B., **Xiao, C.**, Sun J. (2012) Cryo-Electron Microscopic Structural Studies of Anthrax Toxin Receptors, Poster presented at: Rio Grande Branch of the American Society for Microbiology Annual Meeting (Las Cruces, New

Mexico, USA)

8. Enriquez, A.S., Bolotauolo, D., Fischer, M.G., Suttle, C.A., **Xiao, C.** (2012) Structural Studies of the capsid of a Giant Marine Virus, Poster presented at: Rio Grande Branch of the American Society for Microbiology Annual Meeting (Las Cruces, New Mexico, USA)
9. **Xiao, C.**, Fischer, M.G., Bolotaulo, M.D., Ulloa-Rondeau, N., Avila, G.A., Suttle, C.A. (2011) Cryo-EM study of the *Cafeteria roenbergensis* virus. Talk presented at: American Society for Virology 28th Annual Meeting (Minneapolis, Minnesota, USA)
10. Avila G.A., Zhang E. E., **Xiao, C.**, (2011) Diserting the interaction between mammalian circadian core components. Poster presented at: Infectious Diseases and Health Disparities in a Changing World Symposium (El Paso, Texas, USA.)
11. **Xiao, C.**, Fischer, M.G., Avila, G.A., Ulloa-Rondeau, N., Suttle, C.A. (2009) Cryo-EM study of the *Cafeteria roenbergensis* virus. Poster presented at: American Society for Virology 28th Annual Meeting (Vancouver, British Columbia, Canada)
12. **Xiao, C.**, Kuznetsov, Y. G., Sun, S., Hu, B., Criswell, M. J., Bator-Kelly, C. M., Hafenstein, S. L., Chipman, P.R., Suzan-Monti, M., Raoult, D., McPherson, A., Rossmann, M. G. (2008) AFM and cryoEM studies of the giant Mimivirus. Talk presented at: Microscopy Society of America 66th Annual Meeting (Albuquerque, New Mexico, USA.)
13. **Xiao, C.**, Kuznetsov, Y.G., Sun, S., Hafenstein, S., Chipman, P.R., Barrassi, L., Raoult, D., McPherson, A., Rossmann, M.G. (2008). Unexpected Structural Features of Mimivirus. Talk presented at: American Society for Virology 27th Annual Meeting (Ithaca, New York, USA).
14. **Xiao, C.**, Hu, B., Criswell, M. J., Bator-Kelly, C. M., Battisti, A. J., Chipman, P. R., Bowman, V. D., Renesto, P., Raoult, D., Rossmann, M. G. (2007). Cryo-EM studies of the Giant Mimivirus. Poster and talk presented at: Workshop on Advanced Topics in EM Structure Determination (San Diego, California, USA.)
15. **Xiao, C.**, Hafenstein, S. L., Morais, M., Palermo, L. M., Chipman, P. R., Bowman, V. D., Battisti, A. J., Parrish, C. R., Rossmann, M. G. (2006). Analyses of asymmetric cryo-EM reconstruction of parvovirus complexed with transferrin receptor. Poster presented at: 3rd International Conference on Structural Analysis of Supramolecular Assemblies by Hybrid Methods (Lake Tahoe, California, USA.).
16. **Xiao, C.**, Bator Kelly, C. M., Chipman, P. R., Baker, T. S., Rowlands, D., Craig, A., and Rossmann, M. G. (2004). Interaction Between Three Picornaviruses And Their Common Receptor ICAM-1. Poster presented at: International Workshop on Structural Analysis of Supramolecular Assemblies by Hybrid Methods (Lake Tahoe, California, USA.).
17. **Xiao, C.**, Bator Kelly, C. M., Chipman, P. R., Kuhn, R. J., and Rossmann, M. G. (2003). Interaction Between Three Picornaviruses And Their Common Receptor ICAM-1. Talk presented at: 9th Annual Purdue University BioPhysics Symposium (West Lafayette, Indiana, USA).
18. **Xiao, C.**, Bator, C. M., Chipman, P. R., Baker, T. S., Kuhn, R. J., Wimmer, E., Craig, A., and Rossmann, M. G. (2002). Pseudo-atomic Structure of Coxsackievirus A21 Complexed with Its Cellular Receptor, ICAM-1. Talk presented at: Microscopy Society of America 60th Annual Meeting (Quebec City, Quebec, Canada, Cambridge University Press).
19. **Xiao, C.**, Bator, C. M., Bowman, V. D., Rieder, E., He, Y., Hebert, B., Bella, J., Baker, T. S., Wimmer, E., Kuhn, R. J., and Rossmann, M. G. (2001). The Interaction of Coxsackievirus A21 with its Cellular Receptor, ICAM-1. Poster presented at: American Society for Virology 20th Annual Meeting (Madison, Wisconsin, USA).
20. **Xiao, C.**, Bator, C. M., Bowman, V. D., Rieder, E., He, Y., Hebert, B., Bella, J., Baker, T. S., Wimmer, E., Kuhn, R. J., and Rossmann, M. G. (2000). The Interaction of Coxsackievirus A21 with its Cellular Receptor, ICAM-1. Poster presented at: 6th Annual Purdue University BioPhysics Symposium (West Lafayette, Indiana, USA).

21. **Xiao, C.**, Bator Kelly, C. M., Hebert, B., Bowman, V. D., He, Y., Baker, T. S., Kuhn, R. J., Wimmer, E., and Rossmann, M. G. (1999). The Structure of Coxsackievirus A21 and Its Interaction with ICAM-1. Poster presented at: WisPur (Wisconsin-Purdue) Meeting on Virus Structure and Function (Advanced Photon Source, Argonne National Laboratory, Chicago, Illinois, USA.).
22. **Xiao, C.**, Cao, K., and Sun, C. (1997b). Analyze of the cDNA clone of A Novel Calmodulin Like Protein. Abstract presented at: The No. 8 National Meeting of Biochemistry - Annual meeting of Chinese Biochemistry and Molecular Biology Society (Kunming, Yunnan, P.R.China).
23. **Xiao, C.**, Cao, K., and Sun, C. (1997a). Sequencing of the cDNA Clone Encoding the 16 kDa Subunit of V-ATPase from Rice and Structural Modeling. Abstract presented at: The No. 8 National Meeting of Biochemistry - Annual meeting of Chinese Biochemistry and Molecular Biology Society (Kunming, Yunnan, P.R.China).
24. **Xiao, C.**, Cao, K., and Sun, C. (1996). Sequencing of the cDNA Encoding the 16 kDa Subunit of V-ATPase from Rice and Homology Searching. Abstract presented at: The No.6 National Symposium of Gene Structure, Expression and Regulation--Annual meeting of Chinese Biochemistry and Molecular Biology Society (Beijing, P.R.China).

Database Contributions:

1. Cryo-EM reconstruction of the giant Mimivirus using C5 symmetry (EMDB, 5039, December, 2008)
2. Crystal Structure of Coxsackievirus A21 (PDB, 1Z7S, August, 2005)
3. Human Coxsackievirus A21 complex with ICAM-1^{KilifiFc} (EMDB, 1114, August, 2004)
4. Cryo-EM structure of human Coxsackievirus A21 complexed with five domain ICAM-1^{KilifiFc} (PDB, 1Z7Z, August, 2005)
5. Genomic sequence of a new calmodulin-like protein (GenBank, AF064456, June, 1998)
6. cDNA sequence of GAPDH(GenBank, U31676, August, 1996)
7. cDNA sequence of 16kDa subunit of Vacuolar H⁺-ATPase(GenBank, U27098, June, 1996)
8. cDNA sequence of A new calmodulin-like protein (GenBank, U37936, May, 1996)
9. About 200 ESTs of Rice in GenBank (1996-1998)

Teaching Experience

- 8/2008-present Teaching graduate and undergraduate level classes in biochemistry and chemistry
- 1/2006-8/2008 Mentoring research of two senior undergraduate students, Purdue University
- 1/2002-5/2002 Teaching assistant for Biochemistry Laboratory 309, Purdue University
- 8/1997-12/1997 Teaching assistant for Advanced Biochemistry Laboratory, Fudan University

Mentoring Expeience

Undergraduate Research

- Marshall Criswel, Biology, Purdue, 2005-2008
- Bo Hu, Biology, Purdue, 2005-2008
- Melissa Desilets, UTEP, 2008-2010
- Silvia R. Olivares, UTEP, 2009
- John Mcclusky, UTEP, 2009-2010
- Duer Bolotaulo, EPCC and UTEP, Bridges to the Baccalaureate, LSAMP SRA, 2010-present
- Brenda L. Rodarte, UTEP, 2010-2011
- Nicolas Silva, UTEP, 2010-2011
- Adrian Enriquez, UTEP, LSAMP SRA, 2010-2012
- Kenneth Caulfield, UTEP, 2011
- Tiffany Blankenship, UTEP, UPBiT, 2011-2012
- Merrit Romeike, Germany DAAD-RISE program, 2011

- Scott Rush, UTEP, NSF-SMARTS fellow, 2012-present
- Jorge Lopez, UTEP, 2012
- Ricardo Parra, EPCC & UTEP, Bridges to the Baccalaureate, 2012-present
- Emmanuel Silva, UTEP, NSF-RTI fellow, 2012-present
- Martin C. Chacon, UTEP, NSF-RISE fellow, 2012-present

Master

- Sangita Pal, Biology, UTEP, 2008-2010 (Graduated, thesis committee member)
- Joshua Fredrick, Biology, UTEP, 2010-2012 (thesis committee member)
- Charles Gilbert, Biology, UTEP, 2010-present (thesis committee member)
- Andres Santos, Biology, UTEP, 2010-present (thesis committee member)
- Joaquin A. De Leon III, Biology, UTEP, 2010-2012 (thesis committee member)
- Daniel Reyes, Biology, UTEP, 2011 (Graduated, thesis committee member)
- Yue Ma, Biology, UTEP, 2011-present (thesis committee member)
- Rishabh Jain, Bioinformatics, 2011-present (supervisor)
- Sayan Chakraborty, Chemistry, UTEP, 2011-present (supervisor)
- Maria F. Medina, Biology, UTEP, 2013-present (dissertation committee member)

PhD

- Sudheer Molugu, Chemistry, UTEP, 2008-2011 (Graduated, dissertation committee member)
- Zacariah Hildenbrand, Chemistry, UTEP, 2008-2010 (Graduated, dissertation committee member)
- Veronica Gonzalez, Chemistry, UTEP, 2008-present (dissertation committee member)
- Gustavo A. Avila, Chemistry, UTEP, 2009-present (supervisor)
- Nancy U. Rondeau, Chemistry, UTEP, 2009-2010 (left due to sickness, supervisor)
- Rituraj Pal, Chemistry, UTEP, 2010-2011 (Graduated, dissertation committee member)
- Jorge Rodriguez-Devora, UTEP, 2012-present (dissertation committee member)
- Adrain Enriquez, Chemistry, UTEP, 2012 (supervisor)
- Jason M Chacon, Biology, UTEP, 2012-present (dissertation committee member)
- Veronica Gonzalez, Chemistry, UTEP, 2012-present (dissertation committee member)
- George S Martinez, Biology, UTEP, 2012-present (dissertation committee member)
- Zachary S Martinez, Biology, UTEP, 2012-present (dissertation committee member)
- Angelica Lopez, Biology, UTEP, 2013-present (dissertation committee member)

Experimental and Computer Skills

- X-ray crystallography, cryo-electron microscopy and cryo-electron tomography
- Virus purification and crystallization. Molecular biological experiments.
- Network design and UNIX system administration and webpage design
- Programming in C, Fortran, BASIC, and Assemble language and parallelizing by MPI and OpenMP

Synergistic Activities:

- 2000, 2004, 2005, 2006, crew for the champion boat of Lafayette Sailing Club
- 1999-2000, Vice president of Purdue University Chinese Student and Scholar Association