

# XIN GE

Associate Professor  
 Chemical Engineering, Bioengineering, Biochemistry  
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## EDUCATION:

- Ph.D.** Chemical Engineering, 05/2008  
 McMaster University, Hamilton, Ontario, Canada  
 Dissertation: "*In Vivo and In Vitro Applications of Elastin-like Polypeptides*"
- M.S.** Biochemical Engineering, 06/2003  
 Tsinghua University, Beijing, China  
 Thesis: "*Humoral Immune Responses Induced by Genetic Immunization*"
- B.S.** Chemical Engineering & Technology, 06/2000  
 Tsinghua University, Beijing, China  
 Thesis: "*Cloning and Expression of a Tumor Suppressors Protein PTEN*"

## CURRENT EMPLOYMENT:

### **University of California, Riverside, 2011-present**

Associate Professor (2018-present)  
 Step III (2018-present)  
 Assistant Professor (2011-2018)  
 Step III (2011-2013); Step IV (2013-2015); Step V (2015-2017); Step VI (2017-2018)  
 Department of Chemical & Environmental Engineering  
 Adjunct faculty member, Microbiology Graduate Program  
 Adjunct faculty member, Department of Biochemistry  
 Adjunct faculty member, Department of Bioengineering  
 Adjunct faculty member, Center for Plant Cell Biology

## ACADEMIC EXPERIENCE:

### **University of Texas, Austin, 2008-2011**

08/2010-06/2011      Research Associate, Department of Chemical Engineering  
 09/2008-07/2010      NCERC Postdoctoral Fellow, Department of Chemical Engineering

### **McMaster University, 2003-2008**

01/2008-07/2008      Post-Doctoral Fellow, Department of Chemistry  
 01/2004-12/2006      Teaching Assistant, Department of Chemical Engineering  
 09/2003-12/2007      Research Assistant, Department of Chemical Engineering

### **Tsinghua University, 2000-2003**

01/2000-05/2003      Research Assistant, Department of Chemical Engineering

## RESEARCH AREARS:

Antibody discovery and engineering; Protease inhibitory antibody  
 Therapeutic enzymes engineering; Quorum quenching  
 Biocatalysis; Directed evolution; Metabolic engineering  
 Deep sequencing and bioinformatics; High-throughput screening and selection

## AWARDS AND HONORS:

NSF CAREER Award, 2015-2020  
 Academic Senate Regents Committee on Research Grant, UCR, 2019  
 Academic Senate Regents Faculty Development Award, UCR, 2017

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Academic Senate Regents Faculty Fellowship, UCR, 2013  
Academic Senate Omnibus Travel Award, UCR, 2013; 2017; 2018; 2019  
NSERC (Canada) Postdoctoral Fellowship, 2008-2010  
Chinese Government Award for Outstanding Self-Financed Students Abroad, 2007  
Ontario Graduate Scholarship, 2006-2007  
E. Hameilec Award, McMaster University, 2006  
Zhonghui Graduate Scholarship, Tsinghua University, 2001  
Outstanding Student, Tsinghua University, 1997

**CURRENT RESEARCH SUPPORTS:**

NIH 1R01GM115672

Role: PI

Amount: \$1,499,361

Date: 06/01/2016-05/31/2021

Title: *Structure-Based Design of Camel-Like Human Selective mAbs Against MMPs in Disease*

NSF CAREER CBET BBE 1453645

Role: PI

Amount: \$500,000

Date: 07/01/2015-06/30/2020

Title: *CAREER: Generation of Highly Selective Inhibitory Antibodies by Novel Paratope Design, Function-Based Screening, and Deep Sequencing*

USDA-SCRI/CDRE

Role: Co-PI

PI: Wenbo Ma (UCR)

Amount: \$3,990,772

Date: 06/01/2016-05/31/2021

Title: *Effectoromics of the Huanglongbing (HLB)-associated pathogen*

USDA-SCRI/CDRE

Role: Co-PI

PI: Wenbo Ma (UCR)

Amount: \$401,980

Date: 04/01/2016-03/31/2020

Title: *Developing new control strategies via culturing pathogenic Liberibacters*

UCR Academic Senate Committee on Research Grant

Role: PI

Amount: \$3,500

Date: 07/01/2019-06/30/2021

Title: *Novel Bi-Specific Antibody Pro-Drug Design for Efficient Transportation Across the Blood-Brain Barrier*

**COMPLETED RESEARCH SUPPORTS:**

NSF CBET Catalysis/Biocatalysis 1265044

Role: PI

Co-PI: Ashok Mulchandani (UCR)

Amount: \$352,000

Date: 04/15/2014-03/31/2018 (with one year no-cost extension)

Title: *Spore-Based Designer Enzyme Cascade Biocatalysts*

California Breast Cancer Research Program 211B-0104

Role: PI

Co-PI: Alex Strongin (Sanford-Burnham Medical Research Institute)

Amount: \$241,174

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Date: 09/01/2015-02/28/2017

Title: *IDEA: Unique camel-human hybrid mAbs against pro-invasive MMP-14*

NSF IIP Synthetic Biology 1346312

Role: Co-PI

PI: Xiaozhou Zhang (Gates Fuels Inc)

Amount: \$225,000

Date: 01/01/2014-12/31/2014

Title: *STTR Phase I: Consolidated Biosynthesis of Methyl Ethyl Ketone from Cellulosic Biomass*

City of Hope - UC Riverside Biomedical Research Initiative (CUBRI)

Role: MPI

MPI: Markus Kalkum (City of Hope)

Amount: \$100,000

Date: 04/01/2016-03/31/2017

Title: *Antifungal CAR T Cells*

University of California, Cancer Research Coordinating Committee

Role: PI

Amount: \$52,500

Date: 07/01/2013-06/30/2014

Title: *Novel Antibody Paratope Design for Highly Selective Inhibition of Tumorigenic Matrix Metalloproteinases*

UCR Molecular Translational Medicine TransFund Award 2018

Role: PI

Amount: \$42,500

Date: 03/01/2018-02/28/2019

Title: *A Monoclonal Antibody Treatment for Neuropathic Pain*

UCR Collaborative Seed Grant Program

Role: PI

Co-PI: Bryan Wong (UCR)

Amount: \$10,000

Date: 07/01/2015-12/31/2015

Title: *Hybrid Structure Modeling / Quantum Mechanical Methods for Enzyme Engineering*

UCR Center for Catalysis

Role: Co-PI

PI: Phil Christopher (UCR)

Amount: \$60,000

Date: 07/01/2014-06/30/2015

Title: *Digital control of selective chemical transformations via plasmon activated biocatalysis*

UCR Academic Senate, Regents Faculty Development Award

Role: PI

Amount: \$3,000

Date: 07/01/2017-06/30/2018

Title: *Discovery of Antibody Agonists Targeting G-Protein Coupled Receptors*

UCR Molecular Translational Medicine TransFund Award 2019

Role: PI

Amount: \$2,500

Date: 03/01/2019-06/01/2019

Title: *Enhanced BBB Penetration by Novel Antibody Prodrug Design*

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**UCR Collaborative Seed Grant Program**

Role: PI

Co-PIs: Huiwang Ai, Juchen Guo

Amount: \$12,000

Date: 07/01/2014-12/31/2014

Title: *Convert Electricity to Chemicals by Novel Biocatalysts***UCR Collaborative Seed Grant Program**

Role: Co-PI

(Co-)PIs: Yanran Li (PI), Wenbo Ma (co-PI)

Amount: \$32,500

Date 07/01/2018-06/30/2019

Title: *Reconstructing, Engineering, and Genomic Mining of Plant Immune Complex in Yeast***UCR Center for Catalysis**

Role: Co-PI

PI: Phil Christopher

Amount: \$60,000

Date: 07/01/2014-06/30/2015

Title: *Digital control of selective chemical transformations via plasmon activated biocatalysis***UCR Collaborative Seed Grant Program**

Role: Co-PI

(Co-)PI: Ashok Mulchandani (PI), Manuela Martins-Green (co-PI)

Amount: \$60,000

Date: 09/01/2013-12/31/2014

Title: *Treating Diseases by Controlling Bacterial Biofilms***DoD Research and Education Program for HBCU/MI Equipment/Instrumentation**

Role: Co-PI

PI: Dimitros Morikis

Amount: \$88,882

Date: 01/01/2014-12/31/2014

Title: *Acquisition of a Thermophoresis Instrument for Molecular Association Thermodynamic Studies***UCR Academic Senate, Regents' Faculty Fellowships**

Role: PI

Amount: \$3,400

Date: 07/01/2013-06/30/2014

Title: *Fighting Bacterial Infections by Engineering High Potent Human Paraoxonases***UC MEXUS-CONACYT Grants for Collaborative Projects**

Role: PI

Co-PI: Alfredo Martinez-Jimenez (Universidad Nacional Autonoma de Mexico)

Amount: \$25,000

Date: 07/01/2012-12/31-2013

Title: *Consolidated Biosynthesis of Poly-Lactic Acid Using Pretreated Cellulosic Substrates***NSERC Postdoctoral Fellowship**

(Natural Sciences and Engineering Research Council of Canada)

Role: Postdoctoral Fellow

Amount: \$80,000 (CAD)

Date: 09/01/2008-08/31/2010

Title: *Production of Therapeutic Monovalent Antibodies from Libraries Expressed in Escherichia coli*

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**PROFESSIONAL MEMBERSHIPS:**

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American Institute of Chemical Engineers  
American Chemical Society  
Protein Society  
Society for Industrial Microbiology and Biotechnology  
Biomedical Engineering Society

**PROFESSIONAL ACTIVITIES:**

## Editorial Board:

Guest Editor in Antibody Therapeutics (December 2018 - present)  
- For the Special Issue "Directed Evolution"  
Guest Editor in Antibodies (June - December 2018)  
- For the Special Issue "Inhibitory and Neutralizing Antibody Discovery".  
Applied Biochemistry and Biotechnology (April 2013 - 2017)  
AIMS Bioengineering (September 2013 - present)

## Book Proposal Reviewer:

"Cancer Causing Proteases: Structures, Functions, and Inhibition", Elsevier, July 2018  
"Handbook of Proteolytic Enzymes, 4<sup>th</sup> edition", Elsevier, May 2019

## Peer Manuscript Reviewer (# of manuscripts):

ACS Chemical Biology (2)  
ACS Synthetic Biology (1)  
AIChE Journal (1)  
AIMS Bioengineering (4)  
Analytical Chemistry (1)  
Analytical Biochemistry (1)  
Analyst (1)  
Applied Biochemistry and Biotechnology (7)  
Applied Microbiology and Biotechnology (2)  
BBA Molecular Cell Research (1)  
Biochemical Engineering Journal (10)  
Bioconjugate Chemistry (1)  
Biotechnology and Bioengineering (3)  
Biotechnology for Biofuels (5)  
Biotechnology Journal (4)  
Biotechnology Letters (4)  
Biologics: Targets and Therapy (1)  
Brazilian Journal of Chemical Engineering (1)  
ChemBioChem (1)  
Chemical Communications (1)  
Drug Design, Development and Therapy (9)  
Enzyme and Microbial Technology (1)  
Enzyme and Microbial Technology (1)  
Expert Opinion on Therapeutic Targets (1)  
Frontiers in Immunology (2)  
Green Chemistry (1)  
Industrial & Engineering Chemistry Research (1)  
International Journal of Biological Macromolecules (3)  
International Journal of Clinical and Experimental Medical Sciences (1)  
Journal of Agricultural and Food Chemistry (1)  
Journal of Basic Microbiology (1)  
Journal of Biotechnology (5)  
Journal of Genetic Engineering and Biotechnology (1)  
Journal of Industrial Microbiology & Biotechnology (1)  
Journal of Microbiological Methods (3)  
MDPI Molecules (1)

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Mini-Reviews in Medicinal Chemistry (1)  
Microbial Cell Factories (7)  
Molecular Biology Reports (1)  
Molecular Immunology (1)  
Molecular Pharmaceutics (1)  
Organic & Biomolecular Chemistry (2)  
PLoS ONE (7)  
Protein Engineering, Design, and Selection (2)  
Reviews in Environmental Science and Bio/technology (3)  
Scientific Reports (1)  
Technology (1)

Proposal Reviewer (# of proposals):

NIH CMIA (Cellular and Molecular Immunology A) study section, June 2019 (73)  
Alzheimer's Association Research Fellowship (AARF) Program, December 2018 (1)  
NIH CMIA (Cellular and Molecular Immunology A) study section, October 2018 (72)  
NSF SBIR/STTR Phase I – Synthetic Biology, September 2018 (10)  
NSF GRFP – Biomedical Engineering, January 2018 (21)  
NSF SBIR/STTR Phase I – Synthetic Biology, August 2017 (16)  
NSF SBIR/STTR Phase I – Synthetic Biology, February 2017 (14)  
NSF SBIR/STTR Phase I – Synthetic Biology, August 2016 (20)  
NSF CBET – BBE Protein Engineering & Enzyme Technology, February 2016 (22)  
NSF SBIR/STTR Phase I – Synthetic Biology, February 2016 (19)  
NSF SBIR/STTR Phase I – Synthetic Biology, August 2015 (16)  
NSF PIRE, May 2015 (1)  
NSF CBET – Biocatalysis, March 2015 (17)  
NSF SBIR/STTR Phase I – Synthetic Biology, February 2015 (19)  
NSF CBET – BBE Protein Engineering & Enzyme Technology, February 2015 (25)  
NSF GRFP – Chemical Engineering 2, January 2015 (32)  
NSF SBIR/STTR Phase I – Synthetic Biology, August 2014 (21)  
NSF SBIR/STTR Phase I – Synthetic Biology, February 2014 (18)  
NSF GRFP – Chemical Engineering, January 2014 (24)  
The Foundation for Science and Technology (FCT, Portugal) 2013 (1)  
The Foundation for Science and Technology (FCT, Portugal) 2012 (2)

Judger for student poster competition (# of posters):

Undergraduate Student Poster Competition, AIChE 2013 Annual Meeting (20)

Conference Organizing:

255th (2018 Spring) ACS National Meeting (New Orleans, LA), chair on Protein Structure & Function session in Biophysical and Biomolecular Symposium  
AIChE 2015 Annual Meeting (Salt Lake City, UT), co-chair on Protein Engineering I: Combinatorial Techniques.  
AIChE 2014 Annual Meeting (Atlanta, GA), chair/co-chair on two sessions: Protein Engineering III: Therapeutics, and Division 15c Poster Session  
AIChE 2013 Annual Meeting (San Francisco, CA), chair/co-chair on two sessions: Biobased Fuels and Chemicals III: Applications, and Biocatalysis and Biosynthesis I  
246th (2013 Fall) ACS National Meeting (Indianapolis, IN), co-chair on Symposium of Advances in Biocatalysis

Consultant:

AbMART Inc, Shanghai, China, May 2011  
Maverick Therapeutics, Brisbane CA, March 2018  
AnaptysBio Inc, San Diego CA, August 2019  
Anonymous via Guidepoint, April 2019

## Workshops Participated:

- City of Hope-UC Riverside Biomedical Research Initiative Workshop, UCR, October 2018
- City of Hope-UC Riverside Biomedical Research Initiative Workshop, City of Hope, October 2017
- City of Hope-UC Riverside Biomedical Research Initiative Workshop, City of Hope, October 2015
- NSF CBET CAREER Proposal Writing Webinar, NSF, November 2014
- Effective Teaching for New or Prospective Faculty, AIChE, November 2013
- Grant Writing Seminar and Workshop, UCR, January 2012

**PUBLICATIONS (\*=corresponding author, †=undergraduate student)****Book Chapters**

2. Nam DH, \*Ge X. Generation of Highly Selective MMP Antibody Inhibitors. In *Proteases and Cancer. Methods in Molecular Biology* book series (Clifton, N.J.) 1731:307-324 Jan 2018.
1. Nam DH, Lee KB, \*Ge X. Functional production of catalytic domains of human MMPs. In *Proteases and Cancer. Methods in Molecular Biology* book series (Clifton, N.J.) 1731: 65-72 Jan 2018.

**Journal Articles****UC Riverside papers** († undergraduate; \* corresponding author)

37. Li X, Zhao Y, Chen C, Lee H-H, Wang Z, Zhang N, Kolonin MG, An Z, Ge X, Scherer PE, Sun K. The Central Role of MMP14 in Adipose Tissue Remodeling During Obesity. *Submitted* Nov 2019.
36. \*Yu X, Ge X, Hille R, Mulchandani A. Electrochemistry of the Mo-containing formate dehydrogenase from *Cupriavidus necator*. *Submitted* July 2019.
35. Mei M, Li J, Wang S, Lee KB, Iverson BL, Zhang G, \*Ge X, \*Yi L. Prompting Fab Yeast Surface Display Efficiency by ER Retention and Molecular Chaperon Co-expression. *Frontiers in Bioengineering and Biotechnology* 7:362.
34. Sedki M, Chen X, Chen C, Ge X, \*Mulchandani A. Non-lytic M13 Phage-based Highly Sensitive Impedimetric Cytosensor for Detection of Coliforms. *Biosensors and Bioelectronics* (2020) 148:111794.
33. Lopez T, †Mustafa Z, Chen C, Lee KB, †Ramirez A, †Benitez C, Luo X, Ji R-R, \*Ge X. Functional Selection of Protease Inhibitory Antibodies. *Proceedings of the National Academy of Sciences of the United States of America* (2019) 116 [33]:16314-16319.
32. Yu X, Nicks D, Ge X, Liu H, \*Hille R, \*Mulchandani A. Synthesis of Formate from CO<sub>2</sub> Gas Catalyzed by an O<sub>2</sub>-tolerant NAD-Dependent Formate Dehydrogenase and Glucose Dehydrogenase. *Biochemistry* (2019) 58[14]:1861-1868.
31. Lee KB, †Dunn Z, \*Ge X. Reducing Proteolytic Liability of an MMP-14 Inhibitory Antibody by Site-Saturation Mutagenesis. *Protein Science* (2019) 28[3]:643-653.
30. Lopez T, †Ramirez A, †Benitez C, †Mustafa Z, †Pham H, †Sanchez R, \*Ge X. Selectivity Conversion of Protease Inhibitory Antibodies. *Antibody Therapeutics* (2018) 1[2]:55-63.
29. Lopez T, Chen C, †Ramirez A, Chen KE, Lorenson MY, †Benitez C, †Mustafa Z, †Pham H, †Sanchez R, Walker AM, \*Ge X. Epitope Specific Affinity Maturation Improved Stability of Potent Protease Inhibitory Antibodies. *Biotechnology and Bioengineering* (2018) 115[11]:2673-2682.
28. \*Chen KE, Chen C, Radecki KC, Bustamante K, Lopez T, Lorenson MY, Ge X, Walker AM. Use of a Novel Camelid-inspired Human Antibody Demonstrates the Importance of MMP-14 to Cancer Stem Cell Function in the Metastatic Process. *Oncotarget* (2018) 9[50]:29431-29444.
27. Chen L, \*Ge X. Correlation Between Size and Activity Enhancement of Recombinantly Assembled Cellulosomes. *Applied Biochemistry and Biotechnology* (2018) 186[4]:937-948.
26. Wang J, Boddupalli A, Koelbl J, Nam DH, Ge X, Bratlie K, \*Schneider IC. Degradation and Remodeling of Epitaxially Grown Collagen Fibrils. *Cellular and Molecular Bioengineering* (2019) 12[1]:69-84.
25. Limsakul P, Peng Q, Wu Y, Allen M, Liang J, Rémacle AG, Lopez T, Ge X, Kay B, Zhao H, Strongin AY, Yang X-L, \*Lu S, \*Wang Y. Directed Evolution to Engineer Monobody for FRET Biosensor Assembly and Imaging at Live-Cell Surface. *Cell Chemical Biology* (2018) 25[4]:370-379.
24. Chen L, †Holmes M, †Schaefer E, Mulchandani A, \*Ge X. Highly Active Spore Biocatalyst by Self-Assembly of Co-Expressed Anchoring Scaffoldin and Multimeric Enzyme. *Biotechnology and Bioengineering* (2018) 115[3]:557-564.
23. †Rodriguez C, Nam DH, †Kruczowy E, \*Ge X. Efficient Antibody Assembly in *E. coli* Periplasm by Chaperone Co-expression and Culture Optimization. *Applied Biochemistry and Biotechnology* (2017) 183[2]:520-529.
22. Lee KB, Nam DH, Nuhn JA, Wang J, Schneider IC, \*Ge X. Direct Expression of Active Human Tissue Inhibitors of Metalloproteinases by Periplasmic Secretion in *Escherichia Coli*. *Microbial Cell Factories* (2017)

- 16[1]:73.
21. Lopez T, Nam DH, †Kaihara E, †Mustafa Z, \*Ge X. Identification of Highly Selective MMP-14 Inhibitory Fabs by Deep Sequencing. *Biotechnology and Bioengineering* (2017) 114[6]:1140-1150.
  20. Nam DH, Fang K, †Rodriguez C, Lopez T, \*Ge X. Generation of Inhibitory Monoclonal Antibodies Targeting Membrane-Type 1 Matrix Metalloproteinase by Motif Grafting and CDR Optimization. *Protein Engineering Design and Selection* (2017) 30[2]:113-118.
  19. Chen L, Mulchandani A, \*Ge X. Spore-Displayed Enzyme Cascade with Tunable Stoichiometry. *Biotechnology Progress* (2017) 33[2]:383-389.
  18. Nam DH, †Rodriguez C, Remacle AG, Strongin AY, \*Ge X. Active-Site MMP-Selective Antibody Inhibitors Discovered from Convex Paratope Synthetic Libraries. *Proceedings of the National Academy of Sciences of the United States of America* (2016) 113[52]:14970-14975.
    - AAAS Eurekalert
    - Genetic Engineering & Biotechnology News (GEN)
    - Bioon (生物谷)
    - Medical Xpress
    - Health Canal
    - Medical News Today
    - Drug Discovery and Development
    - Business Standard
    - Today Topics
    - Technology.org
    - NEWS.am
    - Fierce Biotech
    - Medindia
    - UCR Today
  17. Remacle AG, Cieplak P, Nam DH, Shiryayev SA, Ge X, \*Strongin AY. Selective Function-Blocking Monoclonal Human Antibody Highlights the Important Role of Membrane Type-1 Matrix Metalloproteinase (MT1-MMP) in Metastasis. *Oncotarget* (2017) 8:2781-2799.
  16. Li XC, †Wang C, Mulchandani A, \*Ge X. Engineering Soluble Human Paraoxonase 2 for Quorum Quenching. *ACS Chemical Biology* (2016) 11[11]:3122-3131.
  15. Nam DH, \*Ge X. Direct Production of Functional Matrix Metalloproteinase-14 Without Refolding or Activation and its Application for In Vitro Inhibition Assays. *Biotechnology and Bioengineering* (2016) 113[4]: 717-723.
  14. Haage A, Nam DH, Ge X, \*Schneider IC. Matrix Metalloproteinase-14 is a Mechanically Regulated Activator of Secreted MMPs and Invasion. *Biochemical and Biophysical Research Communications* (2014) 450[1]:213-218.
  13. Nam DH, \*Ge X. Development of Periplasmic FRET-Based Screening Method for Protease Inhibitory Antibodies. *Biotechnology and Bioengineering* (2013) 110[11]:2856-2864.

#### **UT Austin / McMaster / Tsinghua papers:**

12. \*Ge X, Eleftheriou NM, Dahoumane SA, \*Brennan JD. Sol-Gel Derived Materials for Production of Pin-Printed Reporter Gene Living-Cell Microarrays. *Analytical Chemistry* (2013) 85[24]: 12108-12117.
11. Eleftheriou NM, Ge X, Kolesnik J, Falconer SB, Harris RJ, Khursigara C, Brown ED, \*Brennan JD. Entrapment of Living Bacterial Cells in Low-Concentration Silica Materials Preserves Cell Division and Promoter Regulation. *Chemistry of Materials* (2013) 25[23]:4798-4805.
10. Ippolito GC, Hoi KH, Reddy ST, Carroll SM, Ge X, Rogosch T, Zemlin M, Shultz LD, Ellington AD, Vandenberg CL, \*Georgiou G. Antibody Repertoires in Humanized NOD-scid-IL2Rγ(null) Mice and Human B Cells Reveals Human-Like Diversification and Tolerance Checkpoints in the Mouse. *PLoS One* (2012) 7[4]:e35497.
9. Ge X, Lebert JM, Monton MN, Lautens LL, \*Brennan JD. Materials Screening for Sol-Gel Derived High-Density Multi-Kinase Microarrays. *Chemistry of Materials* (2011) 23[16]:3685-3691.
8. Reddy ST, Ge X, Miklos AE, Hughes RA, Kang SH, Hoi KH, Chrysostomou C, Hunicke-Smith SP, Iverson BL, Tucker PW, Ellington AD, \*Georgiou G. Monoclonal Antibodies Isolated Without Screening by Analyzing the Variable-Gene Repertoire of Plasma Cells. *Nature Biotechnology* (2010) 28[9]:965-969.
  - *Cell* (2010) 143:491
  - *Biotechniques News* 10/5/2010
7. Ge X, Mazor Y, Hunicke-Smith SP, Ellington AD, \*Georgiou G. Rapid Construction and Characterization of

- Synthetic Antibody Libraries Without DNA Amplification. *Biotechnology and Bioengineering* (2010) 106[3]: 347-357.
6. **Ge X**, Hoare T, \*Filipe CDM. Protein Based Aqueous-Multiphasic Systems. *Langmuir* (2010) 26[6]:4087-4094.
  5. **Ge X**, Conley A, Brandle JE, Truant R, \*Filipe CDM. *In Vivo* Formation of Protein Based Aqueous Microcompartments. *Journal of the American Chemical Society* (2009) 131[25]:9094-9099.
  4. **Ge X**, \*Filipe CDM. Simultaneous Phase Transition of ELP Tagged Molecules and Free ELP: An Efficient and Reversible Capture System. *Biomacromolecules* (2006) 7[9]:2475-2478.
  3. **Ge X**, Trabbic-Carlson K, Chilkoti A, \*Filipe CDM. Purification of an Elastin Like Fusion Protein by Microfiltration. *Biotechnology and Bioengineering* (2006) 95[3]:424-432.
  2. **Ge X**, Yang DSC, Trabbic-Carlson K, Kim B, \*Chilkoti A, \*Filipe CDM. Self-Cleavable Stimulus Responsive Tags for Protein Purification Without Chromatography. *Journal of the American Chemical Society* (2005) 127[32]:11228-11229.
    - *Chemical & Engineering News* (2005) 83[32]:36
    - *The Scientist* (2005), 19[22]:24
    - *Faculty of 1000 Biology* 16089436
  1. **Ge X**, \*Li Q. Humoral Immune Responses to Human Cardiac Troponin T by Genetic Immunization. *Chinese Journal of Microbiology and Immunology* (2003) 23[7]:544-547.

### Patents

6. Lopez T, **Ge X**, Ji R-R. Highly Specific MMP-9 Inhibitory Monoclonal Antibodies for Neuropathic Pain Relief. US62/850,914 (2019-05-21 Application); UC Case No. 2019-764-1
5. Lopez T, **Ge X**. Highly Specific MMP-9 Inhibitory Antibodies. US62/851,001 (2019-05-21, Application); UC Case No. 2019-118-1
  - Licensed to Maverick Therapeutics, December 2018.
4. Nam DH, Lopez T, **Ge X**. Inhibitory Antibodies and Methods of Use Thereof. WO2018067198A1 (2018-04-12 Application); PCT/US2017/022341 (2017-03-14 Application); US16/223,943 (2018-12-18 Application); US20190185581A1 (2019-06-20 Publication); UC Case No. 2015-758-3
3. Reddy ST, **Ge X**, Boutz D, Ellington AD, Marcotte EM, Georgiou G. Rapid Isolation of Monoclonal Antibodies from Animals. US9090674B2 (2015-07-28 Grant); EP2572203B1 (2017-10-25 Grant); KR20130135028A (2013-12-10 Application); CN103003697A (2013-03-27 Application); CA2799746A1 (2011-11-24 Application); WO2011146514A3 (2012-11-22 Application).
  - Licensed to Cell Signaling Technology Inc, May 2014.
2. **Ge X**, Mazor Y, Georgiou G. Methods for Creating Antibody Libraries. US12868399 (2010-08-25 Pending); EP2470653A1 (2012-07-04 Application); CA2772298A1 (2011-03-03 Application); WO2011025826A1 (2011-03-03 Application).
1. Chilkoti A, Carlson KT, Christensen T, Filipe CDM, **Ge X**. Purification of Low-Abundant Recombinant Proteins from Cell Culture. WO2008024311A3(2008-10-30 Application).
  - Licensed to PhaseBio Pharmaceuticals Inc, March 2008.

### Conference Presentations (presenting author)

29. **Ge X**. Discovery and Evaluation of Protease Inhibitory mAbs. BIT's 12th Anniversary of Protein & Peptide Conference (PepCon-2019), Beijing, China, June 2019 (talk)
28. **Ge X**. Discovery and Evaluation of Protease Inhibitory mAbs. Chinese Biopharmaceutical Association (CBA) 24th Annual Conference, Guangzhou, China, June 2019 (invited talk)
27. Lee KB, Dunn Z, Lopez T, **Ge X**. Generation of Functional Monoclonal Antibodies Inhibiting Matrix Metalloproteinases. Spring 2019 ACS National Meeting, Orlando, FL, April 2019 (talk)
26. **Ge X**. A Monoclonal Antibody Treatment for Neuropathic Pain. MolMed Symposium - Translational Medicine Activities at UC Riverside, March 2019 (talk)
25. **Ge X**. Discovery, Characterization, Engineering and Efficacy Evaluation of Protease Inhibitory mAbs. 9th ICBE (International Conference on Biomolecular Engineering). Newport Beach, CA, January 2019 (talk)
24. **Ge X**. Discovery of Protease Inhibitory mAbs, Antibody Technology Research Symposium, UCSF, June 2018 (invited talk)
23. Lopez T, Chen C, Mustafa Z, Ramirez A, Benitez C, Pham H, Sanchez R, **Ge X**. Genetic Selection of Protease Antibody Inhibitors, Antibody Technology Research Symposium, UCSF, June 2018 (poster)
22. Lee KB, Nam DH, **Ge X**. Inhibition Mechanism and Proteolytic Stability Improvement of a MMP-14 antibody,

- Antibody Technology Research Symposium, UCSF, June 2018 (poster)
21. **Ge X**. Discovery of Protease Inhibitory mAbs. PEGS, Boston MA, May 2018 (poster)
  20. **Lopez T, Ge X**. Discovery of Inhibitory Antibodies Using Genetic Selection. *The 17<sup>th</sup> PepTalk: The Protein Science Week*. San Diego, CA, January 2018 (poster)
  19. Nam DH, Lopez T, **Ge X**. Discovery and Application of Highly Selective and Potent Anti-Protease mAb Inhibitors. *The 10th General Meeting of the International Proteolysis Society*. Banff Center, Alberta, Canada. October 2017 (poster)
  18. **Ge X**. Generation of highly selective and potent mAbs inhibiting MMPs. *Gordon Research Conference: Antibody Biology & Engineering*. Galveston, TX. March 2016 (poster)
  17. **Lopez T, Ge X**. Selection of inhibitory antibodies using next generation high throughput sequencing. *251st ACS National Meeting*. San Diego, CA. March 2016 (talk)
  16. **Nam DH, Rodriguez C, Lopez T, Ge X**. Generation of Protease-Inhibiting Monoclonal Antibodies By Novel Paratope Design. *AICHE 2015 Annual Meeting*. Salt Lake City, UT. November 2015 (talk)
  15. **Ge X**. Highly selective mAbs inhibiting matrix metalloproteinases, *City of Hope-UC Riverside Biomedical Research Initiative Workshop*, Duarte, CA. October, 2015 (talk)
  14. **Ge X**. Redox Biocatalysis by Spore-Based Designer Enzyme Cascades and Conductive Amino Acid Incorporation, *2015 Metabolic Engineering and Green Manufacturing in Microorganisms*, Beijing, China. July 2015 (invited talk)
  13. **Li X, Ge X**. Soluble and Highly Active Human Paraoxase Variants for Quorum Quenching. *249th ACS National Meeting*, Denver, CO. March 2015 (talk).
  12. **Chen L, Mulchandani A, Ge X**. NADPH Recycling By Spore-Based Designer Enzyme Cascades. *AICHE 2014 annual meeting*. Atlanta, GA. November 2014 (talk).
  11. **Jacobson G, Ge X**. Converting 2,3-Butanediol to Butanone by Engineered Diol Dehydratase. *AICHE 2013 annual meeting*. San Francisco, CA. November 2013 (talk).
  10. **Nam DH, Ge X**. Generation of Inhibitory Monoclonal Antibodies Targeting Membrane-Type Matrix Metalloproteinase By Motif Grafting. *AICHE 2013 annual meeting*. San Francisco, CA. November 2013 (poster).
  9. **Li X, Ge X**. Engineering Human Paraoxonase for Quorum Sensing Quenching. *AICHE 2013 annual meeting*. San Francisco, CA. November 2013 (poster).
  8. **Jacobson G, Ge X**. Discovery and engineering diol dehydratase for the production of methyl ethyl ketone. *American industrial microbiology society - 35th Symposium for Biofuels and Chemicals*. Portland, OR. May 2013 (talk).
  7. **Nam DH, Ge X**. Function based periplasmic FRET assays for metalloproteinases inhibitory antibody selection. *ACS annual meeting*, New Orleans, AL. April 2013 (poster).
  6. **Nam DH, Ge X**. Function Based Periplasmic FRET Assays for Metalloproteinases Inhibitory Antibody Selection. *4th International Conference on Biomolecular Engineering – AICHE Society for Biological Engineers*. Fort Lauderdale, FL. January 2013 (poster)
  5. **Ge X, Georgiou G**. Novel Methods for the Discovery of Highly Potent Therapeutic Antibodies, *Biomedical Engineering Society Annual Meeting*. Austin, TX. October 2010 (talk).
  4. **Reddy ST, Ge X, Georgiou G**. Rapid Generation of Monoclonal Antibodies Without Screening by Exploiting High-throughput DNA Sequencing of Immunized Repertoires, *Biomedical Engineering Society Annual Meeting*. Austin, TX. October 2010 (talk).
  3. **Ge X, Georgiou G**. Novel Methods for the Discovery of Highly Potent Therapeutic Antibodies. *60th Canadian Chemical Engineering Conference*. Saskatoon, SK, Canada. October 2010 (talk).
  2. **Ge X, Georgiou G**. Rapidly Construction of Synthetic Antibody Libraries and Analysis by High Throughput Sequencing, *IBC's 20th Annual Antibody Engineering and 7th Annual Antibody Therapeutics International Conferences*. San Diego, CA. December 2009 (poster).
  1. **Ge X, Filipe CDM**. Protein Purification with Stimulus Responsive Tags. *The 2006 American Institute of Chemical Engineers (AIChE) annual meeting*. San Francisco, CA. November 2006 (talk).

### Seminars

- 2019 UC Davis, Dept. of Chemical Engineering (Oct 31)  
 AnaptysBio Inc, San Diego CA (Aug 7)  
 UT Health Science Center at Houston, Texas Therapeutics Institute (Aug 2)  
 UC Riverside, Center for Molecular and Translational Medicine (Mar 26)
- 2018 Shenzhen University, School of Translational Medicine (Aug 30)

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- Chinese Academy of Sciences, Shenzhen Institutes of Advanced Technology (Jun 20)  
 Chinese Academy of Sciences, Tianjin Institute of Industrial Biotechnology (Jun 14)  
 Maverick Therapeutics, Brisbane CA (Mar 28)
- 2017 Kookmin University, Dept. of Bio and Nano Chemistry, Seoul Korea (Aug 31)  
 Tianjin University, School of Pharmaceutical Science and Technology, China (Jun 29)  
 UC Irvine, Dept. of Chemical Engineering & Materials Science (May 19)  
 UC San Diego, Dept. of Bioengineering (May 16)  
 Harbin Institute of Technology, School of Life Science & Technology, China (May 10)
- 2016 Princeton University, Dept. of Chemical and Biological Engineering (Nov 9)  
 Johns Hopkins University, Dept. of Chemical and Biomolecular Engineering (Sept 8)  
 Chinese Academy of Sciences, Institute of Biophysics, Beijing China (Jul 25)  
 Hubei University, College of Life Sciences (Jul 1)  
 UCLA, Dept. of Chemical Engineering (Apr 22)
- 2015 City of Hope, School of Biological Sciences (Dec 8)  
 Arizona State University, School for Engineering of Matter, Transport & Energy (Nov 30)  
 UC Riverside, Microbiology Graduate Program (Sept 22)  
 Zhejiang University, College of Chemical Engineering, China (Mar 27)  
 Beijing University of Chemical Technology, College of Chemical Engineering (Mar 24)  
 UC Riverside, Dept. of Chemistry (Jan 22)
- 2013 UC Riverside, Dept. of Biochemistry (Apr 8)
- 2011 UC Riverside, Dept. of Bioengineering (Nov 30)  
 UC Riverside, Dept. of Chemical and Environmental Engineering (Mar 2)  
 Wayne State University, Dept. of Chemical Engineering (Feb 11)  
 SUNY Buffalo, Dept. of Chemical and Biological Engineering (Feb 7)
- 2010 Queen's University, Dept. of Chemical Engineering, (Dec 6)
- 2009 University of Western Ontario, Dept. of Chemical and Biochemical Engineering (Apr 15)

### **CAMPUS SERVICE**

Participating faculty member at UCR:

- Biochemistry
- Bioengineering
- Microbiology and Plant Pathogen
- Center for Plant Cell Biology

Panelist at UCR:

- mock CAREER review panel (July 2019)
- mock CAREER review panel (July 2018)
- mock CAREER review panel (July 2017)
- new faculty orientation (August 2015)
- CAREER workshop (April 2015)
- SBIR/STTR workshop (December 2014)

### **COLLEGE SERVICE**

Panelist at BCOE:

- new faculty orientation (October 2018)
- new faculty orientation (October 2017)

Co-chair in BCOE Cell Culture Facility (2014-2016)

Represent CEE department in BCOE executive committee (2015-2018)

### **DEPARTMENT SERVICE**

- Undergraduate/ABET Committee (2011 to 2020)
- Faculty Recruitment Committee for the water positions (2018-2019)
- Graduate Committee (2016-2017)
- Space/Resource Committee (2019-2020)
- Chair Lecture Recruitment Committee (2016-2017)
- Chair CHE ABET (2015-2016)
- Organize Department Seminar Series (2014-2015)

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Supervise the Graduate Preparation Program (GPP) students (2014-2015)  
Coordinate GPP tour to China (Spring 2015)

**COURSES TAUGHT**

CHE 117, Separation Processes - Falls 2011-2018  
CHE 124L, Biochemical Engineering Lab - Falls 2015, 2018, 2019  
CHE 140 / CEE 210, Cell Engineering - Springs 2013-2018  
CHE 160C, Chemical Engineering Lab III - Winters 2012-2017  
CHE 211, Upstream Bioprocesses - Winter 2019

**Ph.D. AND POSTDOC ADVISORS**

Carlos Filipe (McMaster University, Canada)  
John Brennan (McMaster University)  
George Georgiou (University of Texas, Austin)

**CURRENT COLLABORATORS**

Junlei Leo Chang (CAS Shenzhen), Charles Craik (UCSF), Laurent Devel (Commissariat à l'Energie Atomique - CEA, France), Vincent Dive (CEA, France), Jacob Galan (Texas A&M-Kingsville / NNTRC), Bruce Hammock (UC Davis), Ru-Rong Ji (Duke), Yi Li (Hubei U), Wenbo Ma (UCR), Karen McDonald (UC Davis), Tanya Petrova (U Lausanne, Switzerland), Kai Sun (UT Health Science Center at Houston), Yingxiao Peter Wang (UCSD), Hoi Leong Xavier Wong (Hong Kong Baptist U)

**PREVIOUS COLLABORATORS**

Huiwang Ai (U of Virginia), Gregory Blaha (UCR), Christine Brown (City of Hope), Kaustabh Ghosh (UCR), Juchen Guo (UCR), Rong Hai (UCR), Markus Kalkum (City of Hope), Yanran Li (UCR), Costas Maranas (Penn State), Manuela Martins-Green (UCR), Alfredo Martinez-Jimenez (Universidad Nacional Autonoma de Mexico), Dimitros Morikis (UCR), Ashok Mulchandani (UCR), Santiago Rivera (Aix-Marseille Université, France), Ian Schneider (Iowa State U), Alex Strongin (Sanford-Burnham Medical Research Institute), Ameae Walker (UCR), Bryan Wong (UCR), Percival Zhang (Virginia Tech), Xiaozhou Zhang (Gates Fuels Inc)

**POSTDOCS / VISITING RESEARCHERS SUPERVISED**

Dr. Chuan Chen, October 2016 - October 2019  
Dr. Long Chen, July 2017- December 2017  
Dr. Yu-Ting Hu, October 2013 - March 2014  
Dr. Yahan Liu, October 2018 - present  
Dr. Tyler Lopez, October 2018 - January 2019  
Dr. Dong Hyun Nam, July 2015 - March 2017

**Ph.D. STUDENTS SUPERVISED**

Long Chen, Chemical and Environmental Engineering (CEE), December 2013 - June 2017  
Ki Baek Lee, CEE, September 2015 - present  
Xin (Cathy) Li, Biochemistry, December 2012 - August 2017  
Tyler Lopez, CEE, July 2014 - September 2018  
Ngoc Huynh, Biochemistry, September 2019 - present  
Dong Hyun (Peter) Nam, CEE, July 2011 - June 2015  
Zening Wang, CEE, September 2018 - present  
Xuejun (Snow) Yu (Co-Advising), Bioengineering, July 2014 - August 2018

**M.S. STUDENTS SUPERVISED**

Matthew Chow, Bioengineering (Course), December 2015 - June 2017  
Kuili Fang, CEE (Thesis), September 2012 - August 2014  
Gregory Jacobson, CEE (Course), September 2012 - July 2014  
Elmer Wei, CEE (Course), October 2014 - June 2016

**GRADUATE STUDENT COMMITTEES SERVED** (unless specified, the degree is in CEE)

Christian Alcaraz, Ph.D. Candidacy, June 2016

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Leonard Aponetti, M.S. Defense, September 2018  
Christina Awad, M.S. Defense, August 2012  
Tanfeng Cao, Ph.D. Candidacy, June 2013  
Claudi Chaves-Villarreal, Ph.D. Candidacy, October 2015  
Nicha Chartuprayoon, Ph.D. Defense, June 2012  
Rachna Dhir, Ph.D. Candidacy, August 2014  
Yichong Fan, Ph.D. Candidacy (Environmental Toxicology), September 2014; Ph.D. Defense, June 2017  
Zi Gao, Ph.D. Candidacy (Chemistry), September 2019  
Niranjan Ilawe, Ph.D. Candidacy, February 2016  
Setareh (Star) Jahansouz, Ph.D. Candidacy, June 2018  
Ji Jiang, Ph.D. Candidacy (Cellular, Molecular and Developmental Biology), August 2014  
Caroline Kim, Ph.D. Candidacy, July 2016  
Jehoon Kim, Ph.D. Candidacy, August 2012; Ph.D. Defense, March 2015  
Sang Yong Kim, Ph.D. Candidacy (Microbiology), May 2019  
Ninad Kothari, Ph.D. Candidacy, March 2015  
Louis Lancaster, Ph.D. Candidacy, June 2014  
Guanghui Li, Ph.D. Candidacy, March 2016  
Lijie Li, Ph.D. Candidacy, March 2013  
Mengwan Li, Ph.D. Candidacy, August 2019  
Jyun-Liang Lin, Ph.D. Candidacy, August 2012; Ph.D. Defense, August 2015  
May-Ling Lu, Ph.D. Candidacy, August 2014; Ph.D. Defense, May 2019  
Ann-Kathrin Loeb, Ph.D. Candidacy, March 2015; Ph.D. Defense, May 2018  
Ninad Kothari, Ph.D. Candidacy, April 2018  
Holly Mayton, Ph.D. Candidacy, July 2016  
Rohith Mohan, Ph.D. Candidacy (Bioengineering), June 2015; Ph.D. Defense, September 2018  
Nikhil Nagane, Ph.D. Candidacy, October 2014  
Yen Nguyen, Ph.D. Candidacy (Bioengineering), October 2014  
Samson Or, M.S. Defense, August 2015  
Leidy Palomec, M.S. Defense, June 2014  
Abhishek Patri, Ph.D. Candidacy, March 2015  
Parawee Pumwongpitak, Ph.D. Candidacy, January 2016  
Adithya Ramesh, Ph.D. Candidacy, December 2017  
Chris Salinas, Ph.D. Candidacy, June 2014  
Pablo Sanchez, Ph.D. Defense (Microbiology), March 2012  
Priya Sengupta, Ph.D. Candidacy, March 2017  
Cory Schwartz, Ph.D. Candidacy, September 2016  
Brandon Simmons-Rawls, M.S. Defense, Aug 2017  
Sira Srinives, Ph.D. Candidacy, August 2011; Ph.D. Defense, June 2012  
Jerry Tam, M.S. Defense, June 2013  
Aaron Toop, Ph.D. Candidacy, April 2015  
Michael Trinh, Ph.D. Candidacy (Chemistry), December 2017 and May 2018 (re-take)  
Tan Truong, Ph.D. Candidacy (Cell, Molecular and Developmental Biology), September 2016  
Nicole Williams, Ph.D. Candidacy (Chemistry), June 2015  
Jiabin Wu, Ph.D. Candidacy (Chemistry), September 2016  
Shanhui Xu, Ph.D. Candidacy, June 2018  
Suzan Youssef, Ph.D. Candidacy (Chemistry), December 2013  
Zheng Yan, Ph.D. Candidacy, August 2016  
Sooyoun Yu, Ph.D. Candidacy, March 2017  
Miluo Zhang, Ph.D. Candidacy, August 2011  
Shen Zhang, Ph.D. Candidacy (Chemistry), May 2015  
Yifan Zhao, Ph.D. Candidacy, June 2019  
Jie Zhu, Ph.D. Candidacy (Biochemistry), December 2014; Ph.D. Defense, March 2017

**UNDERGRADUATE STUDENT RESEARCHERS SUPERVISED**

Chris Benitez (August 2016 - June 2018)  
Eric Bustamante (June - August 2014, Universidad Autónoma de Baja California of Mexico)

Amy Calgaro (January - June 2012)  
 William Chen (October 2011 - December 2011)  
 Zachary Dunn (September 2016 - June 2018)  
 Sean Fahmian (October 2013 - December 2014)  
 Ryan Flores (October 2011 - March 2012)  
 Suk Hyun Hahm (April - July 2014)  
 Gregory Jacobson (December 2011 - August 2012)  
 Evan Kaihara (January 2015 - September 2016)  
 Kailyn Kong (October 2019 - present)  
 Evan Kruchowy (January 2015 - July 2016)  
 James Kwon (January - May 2014)  
 Zahid Mustafa (January 2015 - June 2019)  
 Nathan Nakamoto (January 2014 - April 2014)  
 Johny Nguyen (September 2012 - June 2013)  
 Kathy Nguyen (May 2012 - August 2012)  
 Henry Pham (January 2016 - June 2018)  
 Aaron Ramirez (August 2016 - June 2018)  
 Carlos Rodriguez (September 2012 - June 2016)  
 Humberto Scott Sanchez (December 2014 - June 2015)  
 Ramon Sanchez (March 2015 - June 2018)  
 Manik Sethi (June 2016 - June 2017)  
 Wei Zhong Tan (May 2012 - July 2012)  
 Christopher Wang (September 2014 - March 2015)  
 William Xue (September 2018 - June 2019)  
 Cheri Yang (September - December 2012)  
 Ran Ye (January 2016 - May 2017)

## STUDENT AWARDS

2019 Ki Baek Lee, Dissertation Year Program Fellowship (two quarters), \$14,400 + Fee (May)  
 2018 Ki Baek Lee, Mogam Science Scholarship Foundation Fellowship, \$10,000 (Oct)  
 Tyler Lopez, Dissertation Year Program Fellowship, \$7200 + Fee (Apr)  
 Zachary Dunn, Undergraduate Education Minigrant Program, \$930 (Feb)  
 2017 Tyler Lopez, Graduate Dean's Dissertation Research Grant, \$500 (Nov)  
 Ki Baek Lee, Graduate Dean's Dissertation Research Grant, \$800 (Nov)  
 Tyler Lopez, PepTalk Student Fellowship, discounted registration fee (Aug)  
 Tyler Lopez, Graduate Research Mentorship Fellowship, \$5400 + Fee (May)  
 2016 Aaron Ramirez, Sophomore STEM Success Award, \$2250 (Jun)  
 Carlos Rodriguez, Chancellor's Award for Excellence in Undergraduate Research (Apr)  
 2015 Ramon Sanchez, HSI Undergraduate Research Award, \$1200 (Oct)  
 Carlos Rodriguez, HSI Undergraduate Research Award, \$1200 (Apr)  
 Humberto Scott Sanchez, HSI Undergraduate Research Award \$1200 (Jan)  
 2014 Tyler Lopez, GAANN Fellowship, 5 quarters of support (Jul)  
 Dong Hyun Nam, Dissertation Year Program Fellowship, \$7200 + Fee (Apr)  
 Dong Hyun Nam, Graduate Dean's Dissertation Research Grant, \$700 (Feb)  
 Carlos Rodriguez, NASA California Space Grant Consortium Fellowship, \$2000 (Jan)  
 2013 Dong Hyun Nam, UCR Earl C. Anthony Travel Award, \$1700, (Nov)  
 Carlos Rodriguez, HSI Undergraduate Research Award, \$1000 (Mar)  
 Johny Nguyen, HSI Undergraduate Research Award, \$1000 (Mar)  
 Carlos Rodriguez, HSI Undergraduate Research Award, \$1000 (Jan)  
 2012 Dong Hyun Nam, Best Presentation in Department Symposium (Sep)