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Jian Yang, Ph.D.

Chair Professor in Biomaterials and Regenerative Engineering
Department Chair of Materials Science and Engineering
Associate Vice President for International Affairs
Westlake University
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Fellow, American Association for the Advancement of Science (AAAS)
Fellow, American Institute of Medical and Biological Engineering (AIMBE)
Fellow, US Biomedical Engineering Society (BMES)
Fellow, International Academy of Medical and Biological Engineering (IAMBE)
Fellow, US National Academy of Inventors (NAI)

Editor-in-Chief: Bioactive Materials
Associate Editor: Science Advances

Academic Affiliated Professor
Department of Biomedical Engineering
Pennsylvania State University

EDUCATION AND POST-DOCTORAL TRAINING

2003 – 2006	Postdoctoral Fellow, Biomedical Engineering, Northwestern University, Evanston, IL, USA
1999 – 2002	Ph.D., Polymeric Biomaterials, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
1996 – 1999	M.S. Physical Chemistry, Nanchang University, Nanchang, China
1992 – 1996	B.S. Chemistry, Nanchang University, Nanchang, China

POSITIONS, HONORS, AND SERVICES

Positions and Employment

2006	Assistant Professor, Bioengineering Department, The University of Texas at Arlington (Arlington, TX)
2008	Graduate Faculty, The University of Texas Southwestern Medical Center (Dallas, TX)
2011	Associate Professor of Bioengineering with tenure, The University of Texas at Arlington (Arlington, TX)
2012	Associate Professor of Bioengineering with tenure, The Pennsylvania State University (PSU), (University Park, PA)
2015	Professor, Biomedical Engineering, The Pennsylvania State University, (University Park, PA)
2019	Lloyd & Dorothy Foehr Huck Chair Professor in Regenerative Engineering, PSU
2023	Chair Professor in Biomaterials and Regenerative Engineering, Westlake University, Hangzhou, China
2023	Chair of Biomedical Engineering Program, School of Engineering, Westlake University,

Hangzhou, China
2023 Associate Vice President for International Affairs, Westlake University, Hangzhou, China
2023 Academic Affiliated Professor, Biomedical Engineering, Penn State University (University Park, PA)
2024 Chair of the Department of Materials Science and Engineering, Westlake University, Hangzhou, China

2016-2018 Secretary, Founding Member, Chinese Association for Biomaterials (CAB) (https://chinesebiomaterials.org)
2018-2022 President, Chinese Association for Biomaterials (CAB)
2022-2024 Past-President, Chinese Association for Biomaterials (CAB)

2015- Medical Advisory Board Member, Acuitive Technologies, Allendale, NJ
2015- Co-Founder, Aleo BME, Inc, State College, PA

Professional Memberships

2004- Biomedical Engineering Society (BMES)
2008- Society for Biomaterials (SFB)
2013 American Heart Association (AHA)
2015- Chinese Association of Biomaterials (CAB) Life-Time Member
2017- American Chemical Society (ACS)
2016 Chinese American Society of Nanomedicine and Nanotechnology
2017- American Association for the Advancement of Science (AAAS)
2023- Lifetime Member, International Chinese Musculoskeletal Research Society

Awards and Honors

1993-1998 Excellent student scholarship
1998 "Yang zuli" graduate student scholarship
1999 Excellent MS Degree Thesis Award
2001 Excellent Young Scientist Award, Institute of Chemistry, Chinese Academy of Science
2007 UTSW-UTA Joint Venture Grant for Collaborative Research Award
2007 UTA Research Enhancement Program Award
2007 American Heart Association (AHA) Beginning-Grant-in-Aid award
2010 National Science Foundation (NSF) CAREER award
2010 Excellent Paper Award, Journal "Chemistry Bulletin"
2011 Outstanding Young Faculty Member Award, College of Engineering, UTA
2015 NIH Biomaterials and Biointerfaces (BMBI) study section, standing member
2016 Fellow, American Institute of Medical and Biological Engineering (AIMBE)
2016 PSU Inventor Incentive Award (PSU 2013-4903) ($1000 check for inventors)
2017 PSU Inventor Incentive Award (PSU 2013-4048) ($1000 check for inventors)
2017 PSU Inventor Incentive Award (PSU 2015-4297) ($1000 check for inventors)
2017 PSU Inventor Incentive Award (PSU 2015-4324) ($1000 check for inventors)
2017 PSU Inventor Incentive Award (PSU 2013-4079) ($1000 check for inventors)
2018 PSEAS Outstanding Research Award, Penn State University
2018 Penn State Venture IP conference Tech Tournament Third Place ($25K)
2018 Fellow, National Academy of Inventors (NAI)
2019 Nominated Candidate for Board of Directors, American Institute of Medical and Biological Engineering (AIMBE)
2020 Fellow, Biomedical Engineering Society (BMES)

2021 Fellow, American Association for the Advancement of Science (AAAS)
2022 Full Member, Sigma Xi, the Scientific Research Honor Society
2023 Fellow, International Academy of Medical and Biological Engineering (IAMBE)
2023 BMES Wallace H. Coulter Award for Healthcare Innovation
2023 Board of Director, International Chinese Musculoskeletal Research Society
2023 The Outstanding Editor-in-Chief Award, KeAi Publisher

Services for Professional Societies and Conferences

2006 Scientific session co-chair for 2006 Regenerate World Congress—Tissue Engineering and Regenerative Medicine, Pittsburgh, PA.
2010 Session chair for Society for Biomaterials 2010 annual Fall meeting, Seattle, Washington
2011 Session chair and abstract reviewer for Biomedical Engineering Society (BMES), Hartford, CT 2011
2011 Conference/Track organizer and session chair for 27th Southern Biomedical Engineering Conference, Arlington, TX
2011 Session chair and abstract reviewer for Society for Biomaterials annual meeting, Orando,FL
2011 Session chair and abstract reviewer for BMES Annual Fall Meeting
2011-2013 Society for Biomaterials Tissue Engineering SIG reporter
2012- Conference program committee, Symposium on design, test, integration & packaging of MEMS/MOEMS, Cannes Cote d'Azur, France, April 25-27, 2012
2013 NSF "Advanced Biomanufacturing" workshop invitee, Arlington, VA, July 25-26, 2013
2013 Session chair and abstract reviewer for BMES Annual Fall Meeting (Seattle, Washington)
2014 Session chair and abstract reviewer for Society for Biomaterials (SFB) Annual Meeting (Denver, CO)
2015 Session chair and abstract reviewer for 2015 SFB Annual Fall Meeting (Charlotte, NC)
2015 Reviewer for IEEE EMBC, Milan, Italy
2017 Organizer, Chinese Association for Biomaterials (CAB) Day Symposium, Minneapolis, MN, USA, April 5, 2017
2017 ACS Symposium organizer, Biomaterials Science and Translational Medicine, Division of Polymeric Materials Science and Engineering, 254th American Chemical Society (ACS)
National Meeting, Washington, DC, August 20-24, 2017
2017 American Institute of Medical and Biological Engineering (AIMBE) Cellular and Tissue Engineering Committee, Nomination Review Committee
2018 Symposium organizer "Biomaterials for Regenerative Engineering", Society for Biomaterials Annual Meeting, Atlanta, GA, April 11-14, 2018
2018 CAB Annual Biomaterial Symposium organizer, Atlanta, GA April 11, 2018
2018 American Institute of Medical and Biological Engineering (AIMBE) Cell: Functional Systems Committee, Nomination Review Committee
2019 American Institute of Medical and Biological Engineering (AIMBE) Tissue Engineering Committee, Nomination Review Committee
2019 Nominee for board of director of AIMBE
2020 American Institute of Medical and Biological Engineering (AIMBE) Tissue Engineering and Regenerative Medicine Committee, Nomination Review Committee
2020 American Institute of Medical and Biological Engineering (AIMBE) Award Committee
2021 Workshop organizer (Biomaterials Science and Technology Translation Workshop, 2021

Society for Biomaterials (SFB) Annual Meeting
2021 Area chair in Regenerative Engineering, 2021 AIChE Annual Meeting
2021 AIMBE Award Committees
2022 Organizer and host of CAB Reception and Award Ceremony at 2022 SFB Annual Meeting
2022 AIMBE Annual Meeting Advisory Committee
2023 BMES Annual Meeting-Biomanufacturing Track Chair
2023 Symposium Organizer, 2023 TERMIS AP Conference, Hong Kong
2024 Symposium Organizer, International Advisory Committee Member, 12th World Biomaterials Congress, Korea

Editorial Board

2013- Editorial board member of "Journal of Materials Science and Nanotechnology"
2013- Editorial board member of "Journal of Analytical and Molecular Techniques"
2014- Associate Editor, "Frontiers in Biomaterials" section in "Frontiers in Bioengineering and Biotechnology" and "Frontiers in Materials"
2015-2018 Associate Editor, Bioactive Materials
2019- **Editor-in-Chief**, **Bioactive Materials**
2019- Editorial Advisory Board Member, ACS Biomaterials Science and Engineering
2020- Editorial Board Member, Applied Materials Today
2022- **Associate Editor**, **Science Advances**

Grant Review Panel Services

2006 USAMRAMC proposals, invited by American Institute of Biological Sciences (AIBS)
2007 NIH R01 proposal Special Emphasis Panel, NIBIB, March 9, 2007
2007 NIH/SBIR Small Business: Biomaterials and Tissue Engineering, June 25, 2007–June 26, 2007.
2007 A*STAR in Singapore: Agency for Science, Technology and Research's Biomedical Research Council (BMRC) in Singapore, Aug. 3, 2007
2007 NIH/NIBIB Special Emphasis Panel, Gaithersburg, MA. Nov. 16, 2007
2007 Florida State Department of Health, James and Esther King Biomedical Research Program and Bankhead Coley Cancer Research Program.
2007 HK BME International Conference 2010 (BME2010) Judging Panel Member for Best Young Engineer's Paper Competition
2008 NIBIB special emphasis panel, March 11, 2008,
2008 Indo-US Science and Technology Forum
2008 New York State Department of Health, Stem Cell Science Program
2008 NIBIB special emphasis panel, Nov. 13rd, Gaithersburg, MA
2008 Canadian Foundation for Innovation (CFI)
2009 NIH/SBIR-STTR Biomaterials, Delivery Systems, and Nanotechnology, 7/20/09
2009 NIH/Challenge Grants, June, 2009
2009. UK's National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) August, 2009
2010 Department of Health, Florida
2010 Florida State Department of Health, James and Esther King Biomedical Research Program and Bankhead Coley Cancer Research Program
2010 National Research Foundation, Singapore
2010 American Chemical Society Petroleum Research Grant
2010 Chinese Institute of Engineering (CIE) Annual Conference panel discussion member
2011 Fulbright Scholarship Judging Panel member, UTA
2011 National Medical Research Council, Singapore
2011 NSF review Panel

2011 NIH K Award Panel
2011 Maryland Technology Development Corporation Research Program reviewer
2011 Florida Department of Health
2011 American Heart Association EIA panel 10/17/11
2011 NIH SBIR panel (cardiovascular and surgical panel) 11/7/11
2012 NIH SBIR panel (cardiovascular and surgical panel) 2/27/12
2012 American Heart Association (AHA) Established Investigator Award (EIA) panel 10/18/12
2012 NIH SBIR panel (cardiovascular and surgical panel) 10/29/12
2012 NIH Career Development K99/R00 Award panel 10/22/12
2012 NIH Predoctoral and postdoctoral training grant T32 award panel 10/11/12
2012 Cariplo Foundation, Italy Material Science Review Panel 10/01/12
2013 NSF review panel, Feb. 25-26, 2013
2013 NIH SBIR Panel (cardiovascular and surgical panel) 03/08/13
2013 NIH BMBI panel, June 6-7, 2013
2013 NIH SBIR panel (cardiovascular and surgical panel) 06/21/13
2011 NIH SBIR panel (cardiovascular and surgical panel) 11/06/13
2012 West Virginia Internal Grant;
2013 South Carolina GEAR: Collaborative Research Program (CPR)
2014 Netherlands STW open technology program
2014 NSF review panel, 1/6-1/7, 2014
2014 NSF review panel, 3/19/14
2014 NIH SBIR Panel (cardiovascular and surgical panel) 02/28/14
2014 NIH SBIR Panel (cardiovascular and surgical panel) 06/23/14
2014 NIH BMBI panel, 06/04-06/05, 2014
2014 NIH BMBI panel, 10/2-10/05, 2014
2014 NIH SBIR panel (cardiovascular and surgical panel)11/03/2014
2015 NIH P41 NIBIB Biomedical Technology Resource Center Grant 3/3-3/5, 2015
2015 NIH SBIR panel (cardiovascular and surgical panel), 2/27/15
2015 NSF PIRE proposal review
2015 NIH BMBI panel, 10/13-10/14, 2015
2016 NSF review panel, 01/19-01/20, 2016
2016 NIH P41 center grant review meeting, 02/25/2016
2016 NIH BMBI, 02/11-02/12, 2016
2016 NIH BMBI 06/16-06/17, 2016
2016 NIH R21/R33 Biomanufacturing, 07/11/2016
2016 NIH U01 Cancer Nanotechnology, 07/21/2016
2016 NIH BMBI 10/13-10/14, 2017
2017 NIH BMBI 02/15-02/16, 2017
2017 NSF SBIR 03/06/2017
2017 NIH BMBI 06/08-06/09, 2017
2017 NSF SBIR Cardiovascular Technology, Aug. 31, 2017
2017 NIH BMBI 10/26-10/27, 2017
2018 NIH BMBI 2/1-2/2, 2018
2018 NSF BMAT, 3/12-3/13, 2018
2018 NIH BMBI 6/7-6/8, 2018
2018 NIH T32 Training Grant, October 23, 2018
2018 NIH BMBI Oct 30-31, 2018
2018 Poland National Science Center Grant Review
2019 NIH BMBI 2/7-2/8, 2019
2019 NIH Transformative R01, March 4.

2019. NIH BMBI 6/21-6/22
2019 NIH T32, 10/28
2020 NSF EBMS CAREER award panel
2020 DOD CDMRP Discovery Award review panel
2020 Hong Kong Research Grant Council (RGC) Faculty Development Scheme (FDS)
2021 NCI Special Emphasis Panel, Innovative Molecular and Cellular Analysis Technologies ZCA1 TCRB-J(J1), Feb, 4-5, 2021
2021 NIH ZRG1 BST-V-02 M 20210401, April 1, 2021
2022 NIH ZNS1 SRB-R 03 S HEAL U19, February 23, 2022
2022 NIH SBIR ZRG1 BBBT-F (10), November 17-18, 2022
2022 NIH SBIR ZRG1 ETTN-M (12)B, June 13, 2022
2024 NSF MPS-Ascend postdoc research fellowships reviewer (NSF 23-501)
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University/College/Department Services

Westlake University

- Associate Vice President in charge of the Office of International Affairs
- Chair of Materials Science and Engineering Department, Oversee the MSE department
- Chair of Biomedical Engineering Program oversee the BME program matters
- Co-Chair of P&T Committee, School of Engineering
- Ad-hoc chair/member of University Academic Council

Penn State University

College of Engineering and BME Department

- BME PhD candidacy exam committee (2012-present)
- BIOE Curriculum Committee Member (2012)
- BIOE Newsletter Committee Member (2012)
- BME graduate admission committee (chair) (2013-present)
- BME Undergraduate advisor (2013-)
- COE sabbatical committee – alternative member (2013)
- BME faculty search committee (2014, 2015, 2016, 2017)
- COE Frontier Faculty Hire Search Committee (2014-2015)
- COE Strategic Thrust Committee (Advanced Manufacturing) (2015)
- COE P&T committee (2016-2018)
- BIOE Schreyer Honors Student Advisor (2016-)
- COE review committee for nominations of University Distinguished Professor (2017)
- BME faculty search committee chair (2019-2020)
- BME P&T committee (2020-)
- BME 20th anniversary townhall event speaker (2021)

University Level (Penn State University)

- MCL leadership team meeting (2014-)
- MRI strategic plan committee (2014)
- Founding Organizer, Biomaterials Innovation Group (BIG) Talks (BIG Talks Series) (2014-)
- MRI distinguished speaker series organizing committee (2013)

- Huck MSC Advisory Board Member (2014-)
- Molecular, Cellular and Integrative Biology (MCIBS) admission committee (2014-2016)
- Huck Microscopy and Cytometry facility faculty steering committee (2014-)
- MRI Materials Day breakout session organizer: Materials for Health (2017)
- Erikson Discovery Grant reviewer (2019, 2020)
- Mallinckrodt Foundation PSU downselection (2020)
- Schreyer Honors Program Admission Reviewer (2021)
- Led the creation of a university-level research center program: Center for Regenerative Engineering and Ecosystem (CREATE) (2022)

A. Publications (in chronological order).

Peer-reviewed journal articles (173 in total)

1. Zhili Lan, Fengyi Li, Xiaoli Zhan, Jian Yang. "Study on hydrosilylation of acetylene with methyldichlorosilane IV Modification of PtO_2/Al_2O_3 and its characterizations". ***Journal of Molecular Catalysis*** 1998, 12(5): 329-334.
2. Zhili Lan, Fengyi Li, Xiaoli Zhan, Jian Yang. "Study on hydrosilylation of acetylene with methyldichlorosilane III Mechanism of gas-phase hydrosilylation over PtO_2/Al_2O_3". ***Journal of Molecular Catalysis*** 1998, 12(4): 279-284.
3. Shenguo Wang, Jian Yang, Qing Cai, Guixin Shi, Jianzhong Bei. "Research progress of biomaterial and cells scaffold for tissue engineering use". ***Chinese Journal of Plastic Surgery*** 2000; 16(6): 328-330
4. Jian Yang, Jianzhong Bei, Shenguo Wang. "Cells scaffold for tissue engineering and improvement of cells affinity between the cells and cells scaffold". ***Journal of Functional Polymers*** 2000, 13(4): 454-460.
5. Jian Yang, Jianzhong Bei, Shenguo Wang. "Study on Improvement of Cell Affinity of Polymeric materials —Modified Poly(D,L-lactide) by Anhydrous Ammonia Gaseous Plasma". ***Chinese Journal of Reparative and Reconstructive Surgery*** 2001, 15(5): 269-272.
6. Jian Yang, Jianzhong Bei, Shenguo Wang. A new method for improving the cell affinity of poly(D,L-lactide). ***Chinese Journal of Biomedical Engineering*** (English Edition) 2001, 10(2): 63-65.
7. Wenna Cheng, Jian Yang, Jianzhong Bei, Shenguo Wang. Synthesis and properties of poly(L-lactide)-Poly(ethylene glycol) multiblock copolymers. ***Acta Polymeric Sinica*** 2002, 5:695-698.
8. Qing Cai, Jian Yang, Jianzhong Bei, Shenguo Wang. A novel porous cells scaffold made of polylactide-dextran blend by combining phase-separation and particle-leaching techniques. ***Biomaterials.*** 2002,23:4483-4492.
9. Jian Yang, Jianzhong Bei and Shenguo Wang. Improving cell affinity of poly (D,L-lactide) film modified by anhydrous ammonia plasma treatment. ***Polymers for Advanced Technologies*** 2002;13:220-226
10. Jian Yang, Jianzhong Bei and Shenguo Wang. Enhanced cell affinity of Poly (D, L-lactide) by combining plasma treatment with collagen anchorage. ***Biomaterials*** 2002,23:2607-2614.
11. Jian Yang, Guixin Shi, Jianzhong Bei, Shenguo Wang, Yilin Cao, Qingxin Shang, Guanghui Yang, Wenjing Wang. "Fabrication and surface modification of macroporous Poly (L-lactic acid) and Poly (L-lactic-co-glycolic acid)(70/30) cells scaffold for human skin fibroblast cells culture". ***Journal of Biomedical Materials Research*** 2002,62A(3): 438-446.
12. Chifeng Tu, Qing Cai, Jian Yang et al. The fabrication and characterization of poly (lactic acid) scaffolds for tissue engineering by improved solid-liquid phase separation. ***Polymers for Advanced Technologies*** 2003, 14(8):565-573.
13. Shenguo Wang, Qing Cai, Jianwei Hou, Jianzhong Bei, Tao Zhang, Jian Yang, Yuqing Wan. Acceleration effect of basic fibroblast growth factor on the regeneration of peripheral nerve through a

15-mm gap. ***Journal of Biomedical Materials Research*** 2003,66A:522-531.

14. Yuqing Wan, Jian Yang, Junlin Yang, Jianzhong Bei, Shenguo Wang. Cell adhesion on gaseous plasma-modified poly(L-lactide) surface under shear stress field. ***Biomaterials*** 2003; 24(21): 3757-3764.
15. Yuqing Wan, Wenna Chen, Jian Yang, Jianzhong Bei, Shenguo Wang. Biodegradable Poly (L-lactide)-Poly (Ethylene Glycol) Multiblock Copolymer: Synthesis and Evaluation of Cell Affinity. ***Biomaterials*** 2003, 24(13):2195-2203.
16. Jian Yang, Yuqing Wan, Chifeng Tu, Qing Cai, Jianzhong Bei, Shenguo Wang. Enhancing the Cell Affinity of Macroporous Poly(L-Lactide) Cell Scaffold by A Convenient Surface Modification Method. ***Polymer International*** 2003,52:1892-1899.
17. Jian Yang, Yuqing Wan, Junlin Yang, Jianzhong Bei, Shenguo Wang. Plasma-treated, collagen-anchored polylactone: Its cell affinity evaluation under shear or shear-free conditions. ***Journal of Biomedical Materials Research*** 2003, 67A(4):1139-1147.
18. Shenguo Wang, Jian Yang, Yuqing Wan, Jianzhong Bei. Research Progress of Degradable Biomaterials in Tissue Engineering and Their Future Development Direction. ***Chemistry (Huaxue Tongbao)*** 2004, 67(4):237-245.
19. Antonio Webb, Jian Yang, Guillermo Ameer. Biodegradable polyester elastomers for tissue engineering. ***Expert Opinion on Biological Therapy*** 2004,4(6):801-812.
20. Jian Yang, Antonio Webb, Guillermo Ameer. Novel citric acid-based biodegradable elastomers for tissue engineering. ***Advanced Materials***. 2004,16(6):511-516.
21. Jian Yang, Delara Motlagh, Antonio R. Webb, Guillermo A. Ameer. A novel biphasic elastomeric scaffold for small-diameter blood vessel tissue engineering. ***Tissue Engineering*** 2005,11(11-12):1876-1886.
22. Jian Yang, Antonio Webb, Guillermo Ameer. Biodegradable Elastomeric Polymers for Tissue Engineering. In "**Handbook of Biodegradable Polymeric Materials and Their Applications**". Edited by Surya K. Mallapragada and Balaji Narasimhan. ***American Scientific Publishers*** 2005. Volume 2: 191-232 (ISBN:1-58883-053-5).
23. Delara Motlagh, Jian Yang, Guillermo Ameer. Hemocompatibility of poly(glycerol-sebacate) in vascular engineering. ***Biomaterials*** 2006; 27(24): 4315-4324.
24. Yong Kang, Jian Yang, Sadiya Khan, Lucas Anissian, Guillermo A. Ameer. A new biodegradable polyester elastomer for cartilage tissue engineering. ***Journal of Biomedical Materials Research*** 2006 77A:331-339.
25. Yuqing Wan, Chifeng Tu, Jian Yang, Jianzhong Bei, Shenguo Wang. Influence of ammonia plasma treatment on modifying depth and degradation of poly(L-lactide) scaffolds. ***Biomaterials*** 2006; 27(13):2699-2704.
26. Hongjin Qiu, Jian Yang, Pradeep Kodali, Jason Koh, Guillermo A. Ameer. A citric acid-based hydroxyapatite composite for orthopaedic implants. ***Biomaterials*** 2006, 27, 5845-5854.
27. Jian Yang, Antonio R. Webb, Samuel J. Pickerill, Gretchen Hageman, Guillermo A. Ameer. Synthesis and evaluation of poly(diol citrates) biodegradable elastomer. ***Biomaterials*** 2006,27: 1889-1898.
28. Jian Yang, Delara Motlagh, Josephine B. Allen, Antonio R. Webb, Melina R. Kibbe, Oliver Aalami, Muneera Kapadia, Timothy J. Carroll, Guillermo A. Ameer. Modulating ePTFE vascular graft host response via citric acid-based biodegradable elastomers. ***Advanced Materials*** 2006, 18:1493-1498.
29. Delara Motlagh, Josephine Allen, Ryan Hoshi, Jian Yang, Karen Lui, Guillermo Ameer. Hemocompatibility evaluation of poly (diol citrate) in vitro for vascular tissue engineering. ***Journal of Biomedical Materials Research Part A*** 2007, 82A(4): 907-916.
30. Ashwin Nair, Jian Yang, Liping Tang. A novel preparation of degradable scaffolds using BSA microbubbles as porogen. ***Engineering in Medicine and Biology Workshop*** 2007 IEEE Dallas 11-12 Nov. 2007 Page(s):31 - 34 (IEEE Xplore, peer-revewed article). DOI: 10.1109/EMBSW.2007.4454166.
31. Jeena Mathew, Vikas Kache, Chao Liu, Liping Tang, Jian Yang. Nano-featured highly interconnective

macroporous elastic scaffolds for cardiovascular tissue engineering. ***Engineering in Medicine and Biology Workshop***, 2007 IEEE Dallas 11-12 Nov. 2007 Page(s):43 - 46. (IEEE Xplore, peer-revewed article) DOI: 10.1109/EMBSW.2007.4454169.

32. A. Webb, J. Yang, G.A. Ameer. A new strategy to characterize the extent of reaction of thermoset elastomers. ***Journal of Polymer Science Part A: Polymer Chem*** 2008,46:1318-1328.
33. Paul Thevenot, Ashwin Nair, Jagannath Dey, Jian Yang, Liping Tang. Method to analyze 3D cell distribution and infiltration in degradable scaffolds. ***Tissue Engineering, Part C*** 2008, 14(4): 319-331.
34. Jagannath Dey, Hao Xu, Jinhui Shen, Paul Thevenot, Sudershan R. Gondi, Kytai T. Nguyen, Brent S. Sumerlin, Liping Tang, Jian Yang. Development of biodegradable crosslinked urethane-doped polyester elastomers. ***Biomaterials*** 2008, 29:4637-4649.
35. Richard T. Tran, Yi Zhang, Dipendra Gyawali, Jian Yang. Recent developments on citric acid derived biodegradable elastomers. ***Recent Patents on Biomedical Engineering*** 2009, 2(3): 216-227.
36. Jian Yang, Yi Zhang, Santosh Gautam, Li Liu, Jagannath Dey, Wei Chen, Ralph Mason, Carlos Serrano, Kevin Schug, Liping Tang. Development of aliphatic biodegradable photoluminescent polymers. ***PNAS*** 2009 106:10086-10091. (Highlighted in In This Issue of PNAS).
37. Ashwin Nair, Paul Thevenot, Jagannath Dey, Jinhui Shen, Man-Wu Sun, Jian Yang, Liping Tang. Novel polymeric scaffolds using protein microbubbles as porogen and growth factor carriers. ***Tissue Engineering Part C*** 2010, 16(1): 23-32.
38. Melina R. Kibbe, Janet Martinez, Daniel A. Popowich, Muneera R. Kapadia, Sadaf S. Ahanchi, Nick D. Tsihlis, Oliver O. Aalami, Qun Jiang, Antonio R. Webb, Jian Yang, Timothy Carroll, and Guillermo A. Ameer. Citric Acid-Based Elastomers Provide a Biocompatible Interface for Vascular Grafts. ***Journal of Biomedical Materials Research Part A*** 2010, 93A (1): 314-324.
39. Dipendra Gyawali, Richard Tran, Kristine Guleserian, Liping Tang, Jian Yang. Citric-acid-derived photo-cross-linked biodegradable elastomers. ***Journal of Biomaterials Science: Polymer Edition*** 2010, 21: 1761-1782.
40. Richard T. Tran, Paul Thevenot, Yi Zhang, Liping Tang, and Jian Yang. Scaffold sheet design strategy for soft tissue engineering. ***Materials*** 2010, 3(2): 1375-1389.
41. Richard Tran, Paul Thevenot, Dipendra Gyawali, Jung-Chih Chiao, Liping Tang, Jian Yang. Synthesis and characterizaion of a biodegradable elastomer featuring a dual crosslinking mechanism. ***Soft Matter*** 2010, 6: 2449-2461.
42. Jagannath Dey, Hao Xu, Kytai Nguyen, Jian Yang. Crosslinked urethane doped polyester (CUPE) biphasic scaffolds: potential for in vivo vascular tissue engineering. ***Journal of Biomedical Materials Research Part A*** 2010, 95A:361-370.
43. Dipendra Gyawali, Parvathi Nair, Yi Zhang, Richard Tran, Chi Zhang, Mikhail Samchukov, Marina Makarov, Harry Kim, Jian Yang. Citric acid-derived in situ crosslinkable biodegradable polymers for cell delivery. ***Biomaterials*** 2010, 31: 9092-9105.
44. Richard Tran, Jagannath Dey, Dipendra Gyawali, Yi Zhang, and Jian Yang. Biodegradable elastomeric polymers and MEMS in tissue engineering. In "***Biomaterials for MEMS***", Edited by Mu Chiao, JC Chiao. 2010 Chapter 3:33-64.
45. Carlos A. Serrano, Yi Zhang, Jian Yang, Kevin A. Schug. MALDI-MS analysis of aliphatic biodegradable photoluminescent polymers using new ionic liquid matrices. ***Rapid Communications in Mass Spectrometr*** 2011,25:1152-1158.
46. Diane Manry, Dipendra Gyawali, Jian Yang. Size optimization of biodegradable fluorescent nanogels for cell imaging. ***Journal of High School Research*** 2011 In press.
47. Jagannath Dey, Richard T. Tran, Jinhui Shen, Liping Tang, Jian Yang. Development and long-term in vivo evaluation of a crosslinked urethane doped polyester elastomer. ***Macromolecular Materials & Engineering*** 2011, 296:1149-1157.
48. Richard T. Tran, Elhum Naseri, Aleksey Kolasnikov, Xiaochun Bai, Jian Yang. A New Generation of Sodium Chloride Porogen for Tissue Engineering. ***Biotechnology and Applied Biochemistry*** 2011, 58(5):335-344.

49. Yi Zhang, Richard T. Tran, Dipendra Gyawali, Jian Yang. Development of photocrosslinkable urethane-doped polyester elastomers for soft tissue engineering. ***International Journal of Biomaterials Research and Engineering*** 2011, 1(1): 18-31.
50. Richard T. Tran, Dipendra Gyawali, Parvathi Nair, Jian Yang. Biodegradable injectable systems for bone tissue engineering. In "***A Handbook of Biopolymers: Synthesis, Degradation and Applications***". Publisher: RSC Publishing, United Kingdom. 2012, chapter 14: 419-451.
51. Dipendra Gyawali, Richard T. Tran, Michael Palmer, Jian Yang. Progress of nanobiomaterials for theranostic systems. In "**Biomedical Materials and Diagnostic Devices**". **Wiley-Scrivener Publishing LLC, USA, Ed(s) Ashutosh Tiwari and Hisatoshi Kobayashi** 2012: 435-476. ISBN: 978-1-118-03014-1.
52. ang Jiao, Dipendra Gyawali, Joseph M Stark, Pinar Akcora, Parvathi Nair, Richard T. Tran, Jian Yang. A rheological study of biodegradable injectable PEGMC/HA composite scaffolds. ***Soft Matter*** 2012,8:1499-1507.
53. Richard Tran, Michael Palmer, Shou-Jiang Tang, Thomas L. Abell, Jian Yang. Injectable Drug Eluting Elastomeric Polymer: A Novel Submucosal Injection Material. ***Gastrointestinal Endoscopy*** 2012, 75(5): 1092-1097.
54. Aniket S. Wadajkar, Tejaswi Kadapure, Yi Zhang, Weina Cui, Kytai T. Nguyen, Jian Yang. Dual-imaging enabled cancer-targeting nanoparticles. ***Advanced Healthcare Materials*** 2012, 1(4): 450-456.
55. Hao Xu, Kytai Nguyen, Emmanouil S. Brilakis, Jian Yang, Eric Fuh, Subhash Banerjee. Enhanced endothelialization of a new stent polymer through surface enhancement and incorporation of growth factor delivering. ***Journal of Cardiovascular Translational Research*** 2012, 5(4): 519-527.
56. Kin Ming Kam, Li Zeng, Qiang Zhou, Richard Tran, Jian Yang. On assessing spatial uniformity of particle distributions in quality control of manufacturing processes. ***Journal of Manufacturing Systems*** 2012, 32(1): 154-166.
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2. Guillermo A. Ameer, Hongjin Qiu, Jian Yang. "Poly (diol co-citrate) hydroxyapatite composite for tissue engineering and orthapaedic fixation devices." (US 8,568,765 B2, Date of Patent: October 29, 2013)
3. Guillermo A. Ameer, Jian Yang, Antonio Roy Webb. "Poly(dio citate) elastomers". US 8,911,720 B2 (Date of Patent: December 16, 2014)
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6. Jian Yang, Minh-Tuan Richard Tran, Michael Palmer, Shou-Jiang Tang. Methods for endoscopic mucosal resection and endoscopic submucosal dissection. US 9,248,147 B2 (Date of Patent: Feb. 2, 2016)

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11. Jian Yang, Zhiwen Xie. Fluorescent polymers and applications thereof. US 9,840,583 B2 (Date of Patent: Dec. 12, 2017)
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13. Jian Yang, Zhiwen Xie. Fluorescent polymers and applications thereof. US 9,840,583 B2 (Date of Patent: Dec. 12, 2017)
14. Jian Yang. Compositions comprising citrate and applications thereof. US 10,076,538 B2 (Date of Patent: Sep. 18, 2018)
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19. Jian Yang, Jimin Peter Kim, Zhiwei Xie. Luminescent compositions and applications thereof. US 10,648,917 B2 (Date of Patent: May 12, 2020)
20. Jian Yang, Jianqing Hu, Jinshan Guo. Clickable waterborne polymers and click-crosslinked waterborne polymers, clickable functional compounds, click functionalized waterborne polymers, and uses thereof. US 11,091,588 B2 (Date of Patent: Aug. 17, 2021)
21. Chao Liu, Jian Yang. Polymeric materials for biomedical applications. US 11,267,965 B2 (Date of Patent: March 8, 2022)
22. Jian Yang, Kytai Nguyen, Zhiwen Xie. Wound dressings and applications thereof. US 11,173,327 B2 (Date of Patent: Nov. 16, 2021)
23. Zhiwen Liu, Jian Yang, Yizhu Chen, Dingbowen Wang. Spectrally encoded imaging using band-shifting imaging probes. US 12,144,491 B2 (Date of Patent: Nov. 19, 2024)

B. Research Grants (Prior to Westlake)

R01 NS123433 Yang (PI) **05/18/2022-03/31/2027**
NIH/NINDS **$2,144,853**
Project Title: Photoacoustic and epigenetic nerve scaffold for nerve regeneration
Project Goal: This proposal aims to uncover the underexplored epigenetic and biomechanical roles of folate (FA, Vitamin B9) for neuronal morphogenesis and develop epigenetically stimulating nerve guidance conduits (NGCs) for the repair of critical-sized peripheral nerve (PN) defects
Role: PI

R01 HL158204 (PIs: Nguyen, Yang, Mason) **05/02/2022-04/30/2026**
NIH/NHLBI **$2,112,669**
Project Title: Novel nanoparticles to stimulate therapeutic angiogenesis in peripheral arterial disease

Project Goal: The goal is to develop novel degradable dual-modal imaging nanoparticles (DINPs) to delivery therapeutic agents for the treatment of peripheral arterial disease (PAD).
Role: MPI

R01 AR072731 **05/012018-02/28/2023**
NIH/NIAMS **$1,722,174**
Title: Citrate Metabonegenic Regulation for the next Generation of Orthopedic Biomaterial Design
Project goal: The goal of this proposal is to understand a new metabonegenic regulation of citrate and design the next generation of citrate based orthopedic biomaterials.
Role: PI

R56 HL157190 (PI: Ravnic) **09/20/2021-08/31/2023**
NIH/NHLBI **$77,810 (Yang budget)**
Project Title: Mechanisms and Application of Micropunctured Induced Angiogenesis for the Rapid Perfusion of Intraoperative Bioprinted Flaps
Project Goal: This proposal's objective is to define the mechanisms and impact of a coordinated surgical and additive manufacturing approach for the rapid vascularization of engineered tissues
Role: Co-I

R21 EB030140 (PI: Cheng) **09/18/2021-09/17/2024**
NIH/NIBIB **$619,556**
Project Title: Smart skin grafts for quantitative assessment and treatment of diabetic wounds
Project Goal: The goal is to develop and validate fully resorbable smart tissue-engineering skin grafts for diabetic wound care.
Role: Co-I

Research Gift **11/01/2018-No End Date**
Acuitive Technology, Inc **$65,000**
Role: PI

R41 1DK123949-01 (PIs: Cheng, Yang) **09/15/2019-08/31/2021**
NIH/NIDDK **$225,000**
Title: STTR Phase I Development of novel antibacterial and antifungal bioadhesives biomaterials for diabetic wound healing.
Project goal: This project aims to develop novel collagen-citrate-based polymer biomaterial medical devices which may find applications in skin wound healing, especially in challenging diabetic skin wound healing
Role: MPI

COE Multidisciplinary Seed Grant **08/01/2022-07/31/2023**
Penn State University **$60,000 (Direct Cost)**
Project Title: The next generation citrate-based biomaterials for bone regeneration
Project Goal: The goal is to develop and understand a novel biomimetic citrate-based biomaterial that incorporates glutamine and magnesium for improved bone regeneration.
Role: PI

COM CMI Seed Grant **01/01/2023-06/30/2023**
Penn State University **$50,000**
Project Title: Citrate-based intracanalicular implants for treatment of cataract surgery induced

inflammation
Project Goal: We propose to develop fully degradable NSAID releasing intracanalicular implants to combat the cataract surgery induced inflammation.
Role: Co-I

COM CMI Seed Grant **01/01/2023-06/30/2023**
Penn State University **$50,000**
Project Title: Biodegradable optoelectrical neural block catheter for sustained anesthesia
Project Goal: We propose to design the first fully degradable and optoelectronic peripheral nerve block catheter for pain management.
Role: Co-PI

R01 1R01AR071316-01A1 **09/06/2017-06/30/2021**
NIH/NIAMS (PI: Chang Lee, Columbia U) **$122,225 (Yang budget)**
Title: Seamless healing of avascular meniscus tears by stem cell recruitment
Project goal: the goal of this project is to in situ delivery chemokine for meniscus regeneration via stem cell recruitment.
Role: Co-I

Research Grant (PI: Yang) **11/01/2017-10/31/2019**
Cystic Fibrosis Foundation **$200,000**
Title: High-Accuracy Citrate-Derived Halide Sensor For Diagnosing Cystic Fibrosis
Project goal: The goal of this project is to develop citrate-based halide sensing molecules and a point-of-care device for the diagnosis of cystic fibrosis.
Role: PI

1R01CA182670 (Multi-PIs: Hsieh, Yang) **09/30/2013-08/31/2019**
NIH/NCI **$1,583,425**
Developing targeted therapy with prostate cancer specific nanomedicine
The major goal of this project is to develop prostate cancer targeting genotoxin delivery system for prostate cancer treatment.
Role: MPI

Research Grant (18-R-31) **06/01/2018-05/31/2019**
Ohio Soybean Council **$50,000**
Title: Injectable soybean oil and citrate polymer for bone repair
Goal: the goal of this proposal is to develop biodegradable injectable citrate/soybean based biomaterials for bone repair and regeneration.
Role: PI

CMMI 1537008 (PI: Costanzo) **08/01/2015 – 07/31/2019**
National Science Foundation (NSF) **$101,202 (Yang budget)**

Title: Computational Prediction of Mechanical and Transport Response Evolution in Degrading Porous Scaffolds
Project goal: The goal of this proposal is to build a general scheme to predict the evolution of the mechanical and transport properties of biodegradable porous structures as can be found in tissue engineering.
Role: Co-PI

Aleo BME, Inc. **09/01/17 – 08/31/19**

Industry Grant **$20,000**
Project Title: Physical and Chemical Characterization of Materials from Aleo BME, Inc
Role: PI

R21 EB024829 **09/30/2017-07/31/2019**
NIH/NIBIB (Multi-PIs: Liu, Yang) **$409,599**
Title: Chromatic two-photon fluorescence microscopy using band-shifting imaging probes
Project goal: The goal of the proposed research is to overcome this limitation by developing a new chromatic two-photon imaging technique using band shifting imaging probes, which can perform axial imaging in parallel.
Role: MPI

1R01HL118498 (Multi-PIs: Nguyen, Yang) **01/01/2014-12/31/2018**
NIH/NHLBI **$1,431,578**
Novel engineered particle platform for endothelium regeneration
The major goal of this project is to develop platelet-mimicking EPC-capturing nanoparticle scaffold for in situ endothelium regeneration, a potential promising way to treat vascular injury.
Role: MPI

Res Grant **05/01/2017-04/30//2018**
Ohio Soybean Council **$50,000**
Title: Citrate resin column for soybean oil purification
Goal: the goal of this proposal is to citrate based resin column to remove metal ions in soybean oil.
Role: PI

Aleo BME, Inc. **09/01/15 – 08/31/17**
Industry Grant **$50,382**
Project Title: Physical and Chemical Characterization of Materials from Aleo BME, Inc
Role: PI

Grant 4100062216 (Multi-PIs: Connor, Dong, Yang) **08/05/2015 –12/31/2016**
PA Tabacco Settlement Fund **$300,000**
Title: Development of Immune Cell-guided Drug Delivery Strategy for Brain Cancer
Project Goal: The purpose of this project is to discover a unique immune-cell-medicated nanoparticle (CICNP) drug delivery platform that can address unmet challenges in cancer treatment, especially the challenges posed for brain cancer drug delivery.
Role: Co-PI

CMMI 1266116 (PIs: Zeng and Yang) **07/01/2013-06/30/2016**
NSF **$132,777 (Yang budget)**
Collaborative Research: Quality Profile Modeling and Control with Applications in Tissue-engineered Scaffolds Fabrication
Project goal: this research aims to develop a generic and systematic methodology for the modeling, monitoring and control of quality profiles through the integration of advanced statistical techniques and expert knowledge of manufacturing processes in tissue engineering scaffold fabrication.
Role: PI

1R01EB012575 (PI: Yang) **07/11/2011-06/30/2016**
NIH/NIBIB **$1,250,184**
Creating safe biodegradable fluorescent implant polymers.

Project goal: the major goal of this project is to develop and evaluate novel biodegradable fluorescent polymers and biodegradable fluorescent polymeric “quantum dots” for bioimaging.
Role: PI

NSF CAREER award (1313553, PI: Yang) **05/01/2010-04/30/2016**
NSF **$500,000**
CAREER: Methodology of biodegradable photoluminescent polymer development.
Project Goal: The major goal of this project is to establish a methodology to expand the biodegradable photoluminescent polymers into multi-classes polymers.
Role: PI

Industry sponsored project Yang (PI) **05/01/2014-05/31/2015**
Acuitive Technologies, Inc. **$117,083**
Phase I: Citrate-based orthopedic material research and development project
Project goal: The goal of this project is to evaluate the citrate-based materials for potential orthopedic applications.
Role: PI

Research Award (PI: Nguyen) **06/01/2012-05/51/2013**
Cancer Research Foundation North Texas **$25,000**
Novel biodegradable photostable nanoparticles to detect and cure prostate cancer.
Project goal: The major goal of this small grant is to preliminarily develop photostable fluorescent nanoparticles for cancer detection and treatment.
Role: Co-Investigator

R21 EB009795-01 (PI: Yang) **08/01/2009-07/31/2012**
NIH/NIBIB **$406,213**
Enabling aliphatic biodegradable photoluminescent polymeric biomaterials
Project Goal: The major goal of this project is to synthesize and characterize novel biodegradable photoluminescent BPLP polymers.
Role: PI

RP110412 (PI: Yang) **12/01/2010-11/30/2012**
Cancer Prevention & Research Institute of Texas (CPRIT) **$200,000**
Biodegradable theranostic nanoparticles for detection and treatment of thyroid cancer
Project goal: The goal of this project is to develop a multifunctional nanoparticle system for thyroid cancer targeting and imaging.
Role: PI

Norman Hackerman ARP (PI, Nguyen) **07/01/2010-06/30/2012**
Texas Higher Education Coordinating Board **$196,460**
In situ rapidly forming biodegradable hydrogels mediate wound healing
The overall goal of this project is to use a recently developed in situ polymerizable materials for wound healing and peptide delivery applications.
Role: Co-Investigator

Grant-in-Aid (PI, Tang) **07/01/2010-06/30/2013**
American Heart Association (AHA) **$140,000**
Engineering vascular grafts in vivo via orchestrated autologous stem cells

The overall goal of this project is to develop CUPE vascular grafts that recruit stem cells for vascular regeneration.
Role: Co-Investigator

Seed Grant (PI: Yang) 09/01/09-08/31/10
Texas Scottish Rite Hospital For Children (TSRHC) $9,600
Novel injectable biodegradable polymers for bone tissue engineering and drug delivery
Project Goal: The major goal of this proposal is to develop injectable scaffolds for in situ bone regeneration and drug delivery.
Role: PI

AHA Beginning-Grant-in-Aid (PI: Yang) 7/1/07-6/30/09
American Heart Association (AHA) $130,000
Building blood vessels through scaffold sheet engineering
The overall goal of this proposal is to engineer a small diameter blood vessel graft in vitro via a scaffold-sheet engineering design
Role: PI

UTA Research Enhancement Program Grant Yang (PI) 9/01/07-10/31/08
UTA $10,000
Novel biodegradable elastomers for blood vessel tissue engineering
This study is to synthesize and characterize a new generation of biodegradable elastomer for tissue-engineering small diameter blood vessels.
Role: PI

A Joint Venture Grant for Collaborative Research Yang (PI) 4/01/07-5/31//08
UTSW/UTA $100,000
Development of a novel biodegradable coronary artery stent
This study is to collect preliminary data for proof-of-concept on developing a novel biodegradable coronary artery stent.
Role: PI

D. Student Supervising

Current PHD Students at Westlake University (5 females)

1. Yutong Lu
2. Dewei Zhou
3. Linyu Ding
4. Shiyi Geng
5. Shumin Yue
6. Ruiqin Feng
7. Fanqi Wang
8. Liuzhou Mao

Current PHD Students at PSU (1 female)

1. Hui Xu (F) (PhD candidate, PSU Biomedical Engineering) 2019-
2. Yuqi Wang (PhD candidate, PSU Biomedical Engineering) 2021-

Updated 2025/8/22

Current Research Staff at Westlake (1 female out of 12)

1. Ruiquan Li (Research Assistant Professor, Biomedical Engineering, Westlake U)
2. Muhammad Akram (Research Assistant Professor, Biomedical Engineering, Westlake U)
3. Dingbowen Wang (Research Assistant Professor, Biomedical Engineering, Westlake U)
4. Lujiao Zhang (Research Assistant Professor, Biomedical Engineering, Westlake U)
5. Jianguo Tao (Research Assistant Professor, Biomedical Engineering, Muyuan Laboratory)
6. Lingkun Zhang (Postdoc, Biomedical Engineering, Westlake U)
7. Rongchen Wang (Postdoc, Biomedical Engineering, Westlake U)
8. Hao Zhang (Postdoc, Biomedical Engineering, Westlake U)
9. Zili Gao (Postdoc, Biomedical Engineering, Westlake U)
10. Xiao Wu (Postdoc, Biomedical Engineering, Westlake U)
11. Hao Huang (Postdoc, Biomedical Engineering, Westlake U)
12. Chengwei Zhou (Postdoc, Biomedical Engineering, Westlake U)

Former Undergraduate Students at PSU (26 Females/URM out of 47)

1. George Fadel (ChE) (Schreyer Honor)
2. Maria Hudock (BME) (Schreyer Honor) (F)
3. Sarah Knappman (BME) (F)
4. Nmachi Anumba (BME) (F)
5. Jessica Smith (Biology) (Schreyer Honor) (F)
6. Julia Harrer (BME) (F)
7. Carolina Carlton (BME) (F)
8. Hannah Kemper (BME) (F)
9. Sara Orr (BME) (Schreyer Honor) (now in medical school) (F)
10. John Fadel (BME)
11. Madeline Annabele Ferraro (BME) (F)
12. Samantha Anne Kirk (BME) (F)
13. Lucas French (BME)
14. Brady Goulden (Biology)
15. Kenny Yau (Chemistry)
16. Kelley Yuan (BME) (F)
17. Anita Lung (BME) (F)
18. Kerrick Johnstonbaugh (BME)
19. Ruiqi Dong (ChE) (F)
20. Qiaoling Lin (BME) (Now at Princeton Globelsynthesis) (F)
21. Jiarong Lin (BME) (Now at U Pitt Graduate School)
22. Ye Zhu (BME) (Now at Rice U Graduate School) (F)
23. Carina Chu (ESM) (Schreyer Honor) (F)
24. Leonor Helmund (BME) (F)
25. Bardia Jahanshahi (BME)
26. Grace Warkulwiz (BME) (Now at Inovio Pharmaceuticals, Inc) (F)
27. Yiming Liu (ChE) (Now at PSU Graduate School)
28. Laura McGimpsey (BME) (F)
29. Demetrius Harris (BME) (Now at J&J) (URM)
30. Jacob Irwin (Arizona State U REU student)
31. Spencer Seipt (BME)
32. Samuel Vilchez (BME) (Now PSU Graduate Student) (URM)
33. Minjung Kim
34. Emily Zaczkiewicz (BME) (F)

35. Denis Pasic (BME)
36. Carolina Carlton (BME) (F)
37. Alex Thomason (BME)
38. William Su (BME)
39. Kevin Rhan (Schreyer Honor)
40. Hui Xu (BME) (F)
41. Julianne Bake (BME) (F)
42. Lily Farmerie (BME) (F)

Former Postdocs and Visiting Scholars at PSU (10)

1. Qing Cai (2014-2015), Now: Professor at Beijing University of Chemical Technology, Beijing, China
2. Steve (Denghui) Xie (2013-2014) Now: Professor, Southern Medical University, Guangzhou, China
3: Jianqing Hu (2013-2015) Now: Associate Professor at South China University of Technology, Guangzhou, China
4. Richard Tran, Research Associate, Now: VP for Research at Acuitive Technologies, Inc, (New Jersey)
5. Dianna Nguyen (Research Technician)
6. Zhiwei Xie (Postdoc)
7. Jinshan Guo (postdoc), Now: Professor, Southern Medical University, Guangzhou, China
8. Kaitian Xu (Research Scientist)
9. Jian Zhang (postdoc)
10. Ruiquan Li, Postdoctoral Fellow, Now: Professor in University of Chinese Academy, Wenzhou
11. Xinyu Tan, Visiting Scholar, Now: Associate Professor, Southern Medical University, Guangzhou, China
12. Jasper (Le) Yu, Assistant Professor, University of Missouri, Kansas City

Awards received by students supervised by Dr. Yang (44 awards, 28 awards from female/URM students)

1: PSU College of Engineering Summer Research Experience for Undergraduates (REU) awards (Samuel Vilchez) (Summer 2014, PSU);
2: PSU College of Engineering Summer Research Experience for Undergraduates (REU) awards (Grace Warkulwiz,) (Summer 2014, PSU); (F)
3: PSU College of Engineering Summer Research Experience for Undergraduates (REU) awards (Spencer Seipt) (Summer 2014, PSU);
4: PSU College of Engineering Summer Research Experience for Undergraduates (REU) awards (Bardia Jahanshahi) (Summer 2014, PSU);
5: PSU College of Engineering Summer Research Experience for Undergraduates (REU) awards (Carina Chu) (Summer 2014, PSU); (F)
6: College of Engineering Research Experience for Undergraduates (REU) awards (Sara Orr) (Fall, 2014) (F)
7: College of Engineering Research Experience for Undergraduates (REU) awards (Sara Orr) (Spring, 2015) (F)
8: College of Engineering Research Experience for Undergraduates (REU) awards (Madeline Ferraro,) (Fall, 2014) (F)
9: College of Engineering Research Experience for Undergraduates (REU) awards (Madeline Ferraro,) (Spring, 2015) (F)
10: College of Engineering Research Experience for Undergraduates (REU) awards (Kevin Rahn) (Spring

2016)
11: Samantha Kirk, 2015 PPG Undergraduate Research Fellowship in Materials. (F)
12: Sara Orr, 2015 Erickson Discovery Grant for undergraduate researchers. (F)
13: Gloria Bora Kim, Penn State Student Leadership Award, 2016 (F)
14: Demetrius Harris, Summer Research Opportunities Program (SROP) at PSU, 2016
15: John Fadel, PPG Undergraduate Research Fellowship in Materials, 2016 Summer
16: Brady Goulden, Office of Science Engagement award ($1000) at PSU, 2016
17: Samantha Kirk, 2016 Erickson Discovery Grant for undergraduate researchers. (F)
18: Demetrius Harris, 2016 Undergraduate exhibition award, third place in Engineering
19: Ye Zhu, 2017 PSU College of Engineering Research Initiative (CERI) awards. (F)
20: William Tz-Je Su, 2017 PSU College of Engineering Research Initiative (CERI) awards.
21: Jimin Kim, Leighton Riess Graduate Fellowship in Engineering, 2017
22: Kelly Miller, won the first place in the poster competition out of 65 posters of the PSU Multi-Campus REU program, 2017 (F)
23: Qiyao Li received Outstanding Poster Award at the 254th American Chemical Society National Meeting. (only 3 poster awards out of nearly 200 posters), 2017 (F)
24: Dingying Shan received CAB-BM Young Investigator Merit Award at the 254th American Chemical Society (ACS) National Meeting held in Washing DC. They both presented at the ACS Symposium of Biomaterials Science and Translational Medicine. (F)
25: Chuying Ma received CAB-BM Young Investigator Merit Award at the 254th American Chemical Society (ACS) National Meeting held in Washing DC. They both presented at the ACS Symposium of Biomaterials Science and Translational Medicine. (F)
26. Laura McGimpsey, Committee on Institutional Cooperation Summer Research Opportunity Program (CIC-SROP) Fellowship (Summer 2015); (F)
27: Laura McGimpsey, Undergraduate Exhibition Award (2016) (F)
28: Maria Hudock, COE CERU REU Spring 2018 (F)
29: Maria Hudock, 2018 Erickson Discovery Grant (F)
30. Jessica Smith, 2018 Erickson Discovery Grant (F)
31. Sarah Knappman, COE CERI REU, Summer 2018 (F)
32. Sarah Knappman, COE CERI REU, Fall 2018 (F)
33. Yu-Chi Huang, COE CERI REU, Fall 2018 (F)
34. Sarah Knappman, David and Shirley Wormley Scholarship, Summer 2019 (F)
35. Chuying Ma, Harold K. Schilling Dean's Graduate Scholarship (F)
36. Sarah Knappman, Research Scholarship, Society for Women Engineers (SWE) (F)
37. Yu-Chi Huang, David and Shirley Wormley Scholarship, Spring 2020 (F)
38. Matt Venable, Erickson Discovery Grant, Summer 2021
39. Claire Tse, Erickson Discovery Grant, Summer 2022 (F)

Prior to PSU (5)
1-2: Reza Mehdizadeh, “excellence in abstract writing for best abstract” ACES award, and Academic Excellence Award from MSE department (2012, UTA)
3-4: PhD student, Richard Tran won “University Scholar” award (2011) and “Potwin Outstanding Bioengineering Student” award (2011, UTA)

Richard Tran won "University Scholar" award. The University created this award to formally recognize the top one percent of the student body who exemplify academic excellence (2010, UTA)

5: MS student, Jagannath Dey won “Potwin Outstanding Bioengineering Student” award (2008, UTA)

List of M.S., Ph. D., and High School students supervised (Major Advisor)

PhD Students (4 females out of 10)

1. Richard Tran (PhD, BE, UTA, thesis title: Methodology of citrate-based biomaterial development and applications. Fall 2011), Last known Position: VP for Research, Acuitive Technologies, Inc.
2. Yi Zhang (PhD, BE, UTA, thesis title: Methodology of citrate-based functional biomaterials development of applications. Summer 2012), Last known Position: Senior Scientist, Codiak BioSciences.
3. Aniket Wadajkar (PhD, BE, UTA, co-advised by Prof. Kytai Nguyen, thesis title: Polymer-coated supraparamagnetic iron oxide nanoparticles as theranostic agents for prostate cancer management, Summer 2012), Last known Position: Director of Nanoparticle Platform Development, Neximmune, Inc.
4. Mohammadreza Mehdi Zadeh (PhD, MSE, UTA, thesis title: Syntheses, characterization, and applications of injectable citrate-based mussel-inspired biodegradable adhesive (iCMBA) polymers and hydrogels, Summer 2012)
5. Gloria Bora Kim (F) (PhD candidate, PSU Biomedical Engineering) (Co-advised by Prof. Cheng Dong, Fall 2017), Last known Position: Assistant Professor, Mayo Clinic
6. Dingying Shan (F) (PhD, PSU Biomedical Engineering) 2013-2018, Last known Position: Postdoc at Stanford U.
7. Jimin Peter Kim (PhD, PSU Biomedical Engineering) 2014-2018, Last known Position: FDA
8. Chuying Ma (F) (PhD, PSU Biomedical Engineering) 2014-2019, Last known Position: Merck
9. Qiyao Li (F) (PhD, PSU Biomedical Engineering) 2015-2020
10. Ethan Gerhard, (PhD, PSU Biomedical Engineering) 2014-2023

MS Students (19)

1. Jeena Mathew (F) (MS non-thesis project, Bioengineering, UTA 2007. Currently at Georgetown University, Research Associate) (F)
2. Jaya Ram Banjara (MS non-thesis project, Bioengineering, UTA 2008)
3. Purak Khadka (F) (MS non-thesis project, Bioengineering, UTA 2008)
4. Binod Basnet (MS non-thesis project, Bioengineering, UTA 2008)
5. Preethi Suriamoorthy (F) (MS non-thesis project, Bioengineering, UTA 2009) (F)
6. Santosh Gautam, MS, BE, thesis title: Biodegradable fluorescent polymers. UTA 2008 Summer.
7. Jagannath Dey, MS, BE, thesis title: synthesis and characterization of crosslinked urethane doped polyesters for vascular tissue engineering. UTA 2008 Fall. Currently at Georgetown University, Research Associate.
8. Dipendra Gyawali, MS, BE, thesis title: Synthesis and Characterization of photocrosslinkable elastomer for soft tissue engineering. UTA 2009 Spring
9. Parvathi Nair (F), MS, BE, thesis title: A novel injectable porous hydrogel composite scaffold for bone tissue engineering. Summer 2010. (F)
10. Shengyuan Zhou, MS, MSE, thesis title: Development of biodegradable photoluminescent amphiphilic polymers. Summer 2010
11. Elaheh Naseri (F), MS non-thesis project, BE, UTA, 2011 (F)
12. Pouriska Kivanany (F), MS thesis, BE, UTA, thesis title: Electrospun biodegradable polymeric membranes for post-surgery anti-adhesion applications. Fall 2012 (F)
13. Chang Zhang (F), MS non-thesis project, BE, UTA, 2012. (F)
14. Yixue Su (F), MS, PSU Biomedical Engineering, 2015 (F)
15. Surge Kalaba, MS, PSU Biomedical Engineering 2016
16. Gerald Kirk, MS, PSU Biomedical Engineering, 2017
17. Erici Typpi, 1-Y MS, Biomedical Engineering, 2017
18. Prachi Chandna (F) (MS candidate, PSU Materials Science and Engineering) 2019
19. Jacob Idowu (MS, BME) 2022

List of high school students worked in Dr. Yang lab (13)

1. Thomas Wang, Mansfield High School, Mansfield, TX, 2009 Summer. Now at UT Austin
2. Arjun Awasthi, Martin High School, Arlington, TX, 2009 Summer. Now at UT Austin
3. Jimmy Zhu, Martin High School, Arlington, TX, 2009, 2010 Summer. Now at Cornell University
4. Diane Manry, The Oakridge School, Arlington, TX, 2010 Summer. Now at Princeton University

High School Student First-Author Paper

Diane Manry, Dipendra Gyawali, Jian Yang. Size optimization of biodegradable fluorescent nanogels for cell imaging. ***Journal of High School Research*****.** 2011 In press

5. David Chou, Undergraduate student at UT Austin BME, 2010 Summer
6. Michael Lau, Martin High School, Arlington, TX, 2010 Summer; Now at UT Dallas
7. Brian Bates, Martin High School, Arlington, TX, 2010 Summer
8. Ken Lee, Martin High School, Arlington, TX, 2010 Summer|
9. Dalton Alstaetter, Martin High School, Arlington, TX, 2010 Summer
10. Anna Liu, Martin High School, Arlington, TX, 2010 Summer; Now at California Institute of Technology
11. Tony Han, Martin High School, Arlington, TX 2011 Summer
12. Daniel Xie, Assumption College, Winsor, ON, Canada (Fall 2018)
13. Silun Xia, CATS College, Kent CT1 3LQ, UK (Fall 2017)

E. Teaching at PSU

1: BME 518 Organic Nanobiomaterials
2: BME 419 Artificial Organ and Prosthetic Devices
3: BME 446 Polymers in Bioengineering
4: BIOE 590 Bioengineering Colloquium
5: BIOE 508 Biomedical Materials
6: BME 440 Biomedical Engineering Professional Seminar