

# Travis Jackson Block

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## Education

University of Texas Health Science Center at San Antonio 08/12 – 08/16

PhD in Biomedical Engineering

Research emphasis in aging, regenerative medicine, stem cells, and tissue engineering

Dissertation title: *Rescuing the regenerative capacity of human mesenchymal stem cells from the elderly*

Laboratory of Xiao-Dong Chen MD PhD

University of Rochester – Rochester, NY 08/08 – 05/12

BS Biomedical Engineering

Concentration in Cell and Tissue Engineering

## Work Experience

Co-Founder & Partner – Et al BioCapital LLC. 02/19 – Current

With a team of scientists and a certified financial advisor, I co-founded a small hedge fund with a focus on the biotechnology industry. As a team we have raised capital, and continue to identify, evaluate and take long and short positions in publicly-traded biotech companies.

Co-Founder & Partner – Marinkovic & Block LLC. 01/19 – Current

Along with Milos Marinkovic, PhD, I am a founder and partner of a small biotechnology consultancy. We have expertise in stem cells, tissue engineering, regenerative medicine, biomaterials, and drug delivery. Together, we provide due diligence services to investors in the biotech space and consulting services to small biotechnology companies.

Chief Technology Officer – StemBioSys, Inc. 09/20 – 11/23

Principal Scientist – StemBioSys, Inc. 07/19 – 09/20

Senior Scientist – StemBioSys, Inc. 10/16 – 06/19

StemBioSys is a biotechnology start-up aiming to catalyze progress in drug development and toxicity screening as well as tissue engineering and regenerative medicine through the development of novel technologies for more biologically relevant cell culture. In my role as Chief Technology Officer, I am responsible for planning and executing all technology related activities. This includes, but is not limited to, developing R&D strategy, identifying potential opportunities, designing and executing experiments, generating new intellectual property, preparing & submitting grant applications, initiating & maintaining external collaborations, giving feedback to our manufacturing partners, managing research personnel, and reporting on progress to shareholders and the board of directors.

Founder/President – San Antonio Science, Inc. 11/15 – 06/18

In order to promote greater awareness, understanding, and enthusiasm for science in San Antonio, I founded San Antonio Science, Inc. San Antonio Science is a non-profit organization dedicated to promoting local science through outreach, and education. Specifically, we aimed to encourage engagement between scientists and non-scientists in order to create a voice for science in every conversation. Ultimately, we hoped to lead efforts to develop San Antonio's reputation as a city of science.

Post-Doctoral Fellow – UT Health Science Center SA 07/16 – 10/16

Funded by an NIH-sponsored Institutional National Research Service Award, my work focused on investigating how the design of culture environments can enable efficient trans-differentiation of human mesenchymal stem cells into functional salivary acinar cells in the lab of Dr. Chih-Ko Yeh. I also worked on developing technologies to enable autologous stem cell banking and autologous stem cell

therapies for age-related disease in collaboration with my graduate advisor, Dr. Xiao-Dong Chen. My responsibilities included assay development, experimental design, grant and manuscript writing, and mentoring and supervision of graduate students.

Graduate Research Assistant – UT Health Science Center SA 08/12 – 06/16

As a PhD candidate at the University of Texas Health Science Center at San Antonio (UTHSCSA), I worked full-time doing my dissertation research in the lab of Xiao-Dong Chen, MD PhD. My work focused on the identification, isolation, and subsequent expansion of a youthful sub-population of MSCs from elderly donors. Other projects included developing an algorithm for quantifying stem cell alignment, identifying multifactorial relationships between physical properties of the extracellular matrix and stem cell function, and characterizing various age-related changes in mesenchymal stem cells.

Founder/COO– MonoMano, Inc. 04/12 – 04/16

As a senior at the University of Rochester, I patented a device designed with my peers as part of a senior project, and co-founded MonoMano Cycling in order to bring our invention to the market. Our company designs, manufactures, and markets adaptive cycling equipment for individuals with limited use of one arm. Our mission is to enable all individuals to participate in the sport of cycling as a way to have fun and get fit, regardless of physical limitations.

Undergraduate Research Assistant – Univ. of Rochester 08/10 – 05/11

During my junior year at the University of Rochester, I worked under Miron Zuckerman PhD in the Dept. of Clinical and Social Psychology studying neuroeconomic theory as it relates to self-control decisions.

Medical Volunteer – Centro de Salud de Sumpango 06/10 – 08/10

During the summer of 2010, I spent 3 months living in Guatemala, volunteering full-time in a small government-run clinic in Sumpango, Sacatepequez. The clinic was the only means of medical care for 30-40 thousand people.

Aquatics Director – Green Tree Tennis Club 06/08 – 08/12

During the summers of 2008, '09, '11, and '12, I served as the aquatics director for Green Tree Tennis Club. In this role, I was responsible for scheduling lifeguards and instructors, training instructors, teaching lessons, and handling client concerns.

## Academic Appointments

Adjunct Assistant Professor – UT Health San Antonio 01/17 - Current

I received an adjunct appointment to the faculty of the department of comprehensive dentistry at the University of Texas Health at San Antonio. In this capacity, I continue to facilitate collaborations between faculty members at the university and StemBioSys, where I work full-time as a Chief Technology Officer.

Adjunct Assistant Professor – UT San Antonio 06/20 - Current

I received an adjunct appointment to the faculty of the department of biomedical engineering at the University of Texas at San Antonio. In this capacity, I continue to facilitate collaborations between faculty members at the university and StemBioSys, where I work full-time as a Chief Technology Officer and serve on one doctoral dissertation committee.

Part-time Faculty – Trinity University 08/19 – Current

I received an appointment as part-time faculty in the Department of Engineering Science at Trinity University. In this capacity, I have a teaching responsibility as the mentor of a team of senior engineering students in their capstone, senior design course.

## Teaching Experience

Instructor – Engineering Senior Design, Trinity College	2019-20
Guest Lecturer – Undergraduate Biomaterials, University of Texas at San Antonio	2016-17
Guest Lecturer – Graduate Stem Cells and Development, UT Health Science Center	2016

## Professional Memberships

2012 – present	The Order of the Engineer
2015 – present	American Academy for the Advancement of Science
2011 – 2018	Biomedical Engineering Society (BMES)
2016 – 2018	Sigma Xi
2015 – 2017	New York Academy of Science
2014 – 2017	Society for Biomaterials
2014 – 2017	American Aging Association
2012 – 2017	The Rehabilitative Engineering and Assistive Technology Society of North America (RESNA)

## Leadership Positions

2022 – Present	City of Olmos Park Economic Development Corporation Board Member
2022 – Present	City of Olmos Park Board of Adjustment
2022 – Present	Viva Science – Advisory Board Member
2016 – present	University of Rochester Hajim School of Engineering - Young Leadership Council Member
2016 – present	University of Rochester – Young Alumni Council Member
2020 – present	UT Health San Antonio – (Chairman) Graduate School Alumni Council
2017 – 2018	Animal Care Services – Advisory Board (COSA District 8 Appointee)
2015 – 2018	San Antonio Science, Inc. – Founder / President
2015 – 2018	Science Fiesta – Founder and Chief Organizer
2017	University of Rochester Class of 2012 – Reunion Committee Member
2015 – 2016	Graduate Student Association – President
2015	Science Career, Communication, & Outreach Symposium – Co-Organizer
2014 – 2016	Society for Biomaterials – Chapter President
2014 – 2015	Biomedical Engineering Journal Club – Founder and President
2014 – 2015	Graduate Student Association – Biomedical Engineering Program Representative / Treasurer
2010 – 2012	University of Rochester Water Polo Club – Team Captain
2011 – 2012	Delta Kappa Epsilon Fraternity – Chapter President
2010 – 2011	Delta Kappa Epsilon Fraternity – Chapter Treasurer

## Awards & Honors

2017	UT Health SA Graduate School Valedictory Address - UT Health SA, San Antonio, TX
2016	Winner – 12 <sup>th</sup> Annual World Stem Cell Summit Poster Award, West Palm Beach, FL

2016 Community Engagement Hero Award, Student Category – Institute for the Integration of Medicine in Science, San Antonio, TX

2016 UT Health Science Center Institute for the Integration of Medicine and Science Research Day Winner, Student Category, San Antonio, TX

2016 UT Health Science Center Graduate Student Leadership Award

2015 Winner – 11<sup>th</sup> annual World Stem Cell Summit poster contest, Atlanta, GA

2015 2<sup>nd</sup> Place – ASBMB Science Communication and Outreach Symposium Poster Session, San Antonio, TX

2013 Student of Da Vinci Award – Da Vinci Awards for Universal Design, National MS Society

2012 1<sup>st</sup> Place – Charles and Janet Forbes Entrepreneurial Competition, University of Rochester, Rochester, NY

2012 1<sup>st</sup> Place – Elevator Pitch Competition, University of Rochester, Rochester, NY

2012 1<sup>st</sup> Place – Senior Design Day Poster Contest, Hajim School of Engineering, University of Rochester

2012 Finalist – Rehabilitative Engineering and Assistive Technology Society of North America (RESNA) Student Design Competition, RESNA, Washington, DC

2012 2<sup>nd</sup> Place – Mark Ain Business Plan Competition, University of Rochester, Rochester, NY

2008 Wilder Trustee Scholarship, University of Rochester, Rochester, NY

2008 William Ludwikowski II Memorial Scholarship, WLIH Scholarship Foundation, San Antonio, TX

2008 Valero Alamo Bowl Scholarship, Valero Corporation, San Antonio, TX

2008 Portable Research Grant, University of Rochester, Rochester, NY

2008 Harvard Book Prize, Harvard College, Boston, MA

## Invited Talks

2018 *Cell Therapy: Academic vs. Industry Research and How We All Manage to Get it Wrong*. NIDA T32 Chalk Talk. July 2018

2018 *There's no place like home! Cell-derived extracellular matrices for cell culture*. International Society for Stem Cell Research Annual Meeting, June 2018.

2018 *Panel: The Bioscience Ecosystem*. Leadership San Antonio Healthcare and Bioscience Day. June 2018.

2017 *Changing the Paradigm of Cell Culture Methods*. Harvard Stem Cell Institute Seminar Series. October 2017.

2017 *Biomimetic Micro Environments for Biologically Relevant Cell Culture and Applications for the Treatment of Degenerative Diseases*. The South Texas Center for Emerging and Infectious Diseases Seminar Series. September 2017.

2017 *Ending the In Vitro Compromise*. International Society for Stem Cell Research Annual Meeting. June 2017.

2017 *UT Health SA Graduate School of Biomedical Sciences Valedictory Address*. UT Health SA. May 2017

2017 *Rejuvenating elderly stem cell populations for autologous cell-based therapies*. 3<sup>rd</sup> Annual RegenMedSA Meeting. February 2017.

2016 *How would you spend one billion dollars?*. TEDx San Antonio “Now You Know”. November 2016.

2016 *Improving the efficacy of autologous stem cell therapies in the elderly*. Institute for the Integration of Medicine and Science, Topic in Translational Research Seminar. June 2016.

2015 *Science in San Antonio: Obstacles and Opportunities for Science to Thrive in the Alamo City*. City of San Antonio, Council District 8 Strategic Planning Meeting. December 2015.

2015 *Rescuing the regenerative capacity of human mesenchymal stem cell populations from the elderly*. World Stem Cell Summit, The Best of the Best: Poster and Young Investigator Oral Presentations. December 2015.

2015 *High-performance microenvironments to enhance quality and quantity of expanded stem cells from elderly donors*. StemBioSys technology showcase dinner. December 2015.

## Research Fellowships

COSTAR (Craniofacial Oral-biology Student Training in Academic Research)

Postdoctoral NRSA Institutional Research Training Program (NIH/NIDCR), *Development of a Tissue Specific Scaffold for Guiding Stem Cell Based Salivary Gland Regeneration*, 07/2016 – 10/16.

TST TL1 – ULI TR001119

Predoctoral Translational Science Training TL1 Program (NIH/NCATS), *Rescuing the Regenerative Potential of Human Mesenchymal Stem Cells Populations from Elderly Donors*, 07/2015 – 06/2016

## Research Grants

### Active

No Active Grants

### Pending

No Pending Grants

### Completed

Small Business Innovation Research Commercialization Readiness Pilot (NIH/NIEHS)

*Clinical Trials in a Dish- hiPSC Cardiomyocyte HTS Electrophysiology System for Detecting Drug Induced Fatal Cardiac Arrhythmias*  
\$300,000      July 1, 2022 – June 30, 2023      Role: PI

Small Business Innovation Research Phase I (NIH/NIDDK)

*Cell-derived extracellular matrices to improve islet function and viability in 2D culture*  
\$300,000      May 1, 2023 – November 30, 2023      Role: PI

Small Business Innovation Research Phase I (NIH)

*hiPSC Cardiomyocyte HTS Electrophysiology System for Detecting Drug Induced Fatal Cardiac Arrhythmias*  
\$1,316,038      April 1, 2019 – March 31, 2021      Role: Co-PI

Small Business Innovation Research Phase I (NIH)

*Expansion of “Youthful” Mesenchymal Stem Cells from Elderly Individuals for Autologous Cell-Based Therapies*  
\$142,000      October 1, 2018 – September 30, 2019      Role: PI

Institute for the Integration of Medicine and Science Community Engagement Small Project Grant

*Evaluating efficacy of community outreach on implementing a healthy diet*  
\$5,000      March 1, 2018 – February 28, 2019      Role: PI

## Selected Publications and Patents

### Patents

1. US 11,220,671 B2. “Methods for the maturation of cardiomyocytes on amniotic fluid cell-derived ecm, cellular constructs, and uses for cardiotoxicity and proarrhythmic screening of drug compounds”. Filed February 21, 2021. Published January 11, 2022.

2. US 11,180,732 B2. "Amniotic fluid cell-derived extracellular matrix and uses thereof". Filed October 3, 2019. Published November 23, 2021.
3. USTK.PO493US.P1 "Enrich and Amplify Highly Potent Human Mesenchymal Stem Cells from Elderly Cell Populations". Patent Pending. Application #: US16/60624.
4. US 8,955,862 "Cycling Control System". Filed April 26, 2013. Published February 17, 2015.

## Book Chapters

1. Block TJ, Dean DD, Chen X-D (2018). What should we learn from this book?, *A Roadmap to Non-Hematopoietic Stem Cell-Based Therapeutics: From Bench to Clinic*. Amsterdam, The Netherlands, Elsevier.
2. Block TJ, Dean DD, Chen X-D (2018). Use of Mesenchymal Stem Cells in Anti-Aging Therapies. *A Roadmap to Non-Hematopoietic Stem Cell-Based Therapeutics: From Bench to Clinic*. Amsterdam, The Netherlands, Elsevier.

## Peer-reviewed Papers

Links to my published manuscripts may be found at

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1IShAA63hpcQP/bibliography/49578575/public/?sort=date&direction=ascending>

1. Andrew Allan, Jeffery Creech, Christian Hausner, Peyton Krajcarski, Bianca Gunawan, Noah Poulin, Paul Kozlowski, Christopher Wayne Clark, Rachel Dow, Prakaimuk Saraithong, Devin B Mair, **Travis Block**, Andre Monteiro da Rocha, Deok-Ho Kim, Todd J Herron. *High Throughput Longitudinal Electrophysiology Screening of Mature Chamber Specific hiPSC-CMs Using Optical Mapping*. iScience, 2023.
2. da Rocha, Andre Monteiro; Allan, Andrew; **Block, Travis**; Creech, Jeffery; Herron, Todd J. *High-Throughput Cardiotoxicity Screening Using Mature Human Induced Pluripotent Stem Cell-Derived Cardiomyocyte Monolayers*. Journal of Visualized Experiments, 2023.
3. Marinkovic, Milos; Dai, Qiuxia; Gonzalez, Aaron O; Tran, Olivia N; **Block, Travis J**; Harris, Stephen E; Salmon, Adam B; Yeh, Chih-Ko; Dean, David D; Chen, Xiao-Dong. *Matrix-bound Cyr61/CCN1 is required to retain the properties of the bone marrow mesenchymal stem cell niche but is depleted with aging*. Matrix Biology, 2022.
4. **Travis Block**, Jeffery Creech, Andre Monteiro da Rocha, Milos Marinkovic, Daniela Ponce-Balbuena, Eric N Jimenez-Vasquez, Sy Griffey, Todd Herron. *Human perinatal stem cell derived extracellular matrix enables rapid maturation of hiPSC-CM structural and functional phenotypes*. Nature Scientific Reports, 2020.
5. Milos Marinkovic, Olivia N Tran, **Travis J Block**, Rubie Rakian, Aaron O. Gonzalez, David D Dean, Chih-Ko Yeh, Xiao-Dong Chen. *Native extracellular matrix, synthesized ex vivo by bone marrow or adipose stromal cells, faithfully directs mesenchymal stem cell differentiation*. Matrix Biology Plus, 2020.
6. M Marinkovic, NF Dybdal-Hargreaves **TJ Block**, DD Dean, CK Yeh, XD Chen. *Oral and Craniofacial Stem Cells: An Untapped Source for Neural Tissue Regeneration*. Tissue Engineering, 2020.
7. Yong Mao, **Travis Block**, Anya Singh-Varma, Anne Sheldrake, Rachel Leeth, Sy Griffey, Joachim Kohn. *Extracellular matrix derived from chondrocytes promotes rapid expansion of human primary chondrocytes in vitro with reduced dedifferentiation*. Acta Biomaterialia, 2018.
8. M Marinkovic\*, **Travis J Block\***, G Kondraske. *Towards a unified "quality" framework for cell-based therapies*. Cytotherapy, 2018.
9. **T Block**, M Marinkovic, O Tran, A Marshall, DD Dean, X-D Chen. *Restoring the Quantity and Quality of Elderly Human Mesenchymal Stem Cells for Autologous Cell-based Therapies*. Stem Cells Research and Therapy, 2017.
10. **Travis J Block**, Jaime Garza. *Regenerative Cells for the Management of Osteoarthritis and Joint Disorders: A Concise Review of the Literature*. Aesthetic Surgery Journal, 2017.
11. Junjie Wu, Yun Sun, **Travis J. Block**, Milos Marinkovic, Zhi-Liang Zhang, Richard Chen, Yixia Yin, Juquan Song, David D Dean, Zhongding Lu, Xiao-Dong Chen. *Umbilical cord blood-derived non-hematopoietic stem cells retrieved and expanded on bone marrow-derived extracellular matrices display pluripotent characteristics*. Stem Cells Research and Therapy, 2016.
12. **Travis J Block**, Milos Marinkovic, Jodie Gray, Charlotte Anthony, Ryan Daly, LaShauna Evans, Chase Fordtran, Elizabeth Hassan, Tara Holmgren, Aaron Horning, Sabrina Martinez-Anz, Rosemary Riggs, Thomas Vanasse, Paul Dowell, Mikaela Sifuentes, Jonathon Berman, Teresa M Evans. *"Science Fiesta!" Integrating Science with Local Culture to Improve Engagement*. F1000Research, 2016.



13. Teresa Evans, Arunabh Bhattachary Yun Shi, Wenbo Qi, **Travis J Block**, Alakanada Ray Chaudhuri, Kara Hawker, Asish Chaudhuri, Holly Van Remmen. *Moderate modulation disease in the G93A model of ALS by compound 2-(2-hydroxyphenyl)-benzoxazole (HBX)*. Neuroscience Letters, 2016.
14. Milos Marinkovic, **Travis J Block**, Rubie Rakian, Qihong Li, Exing Wang, Matthew Reilly, David D Dean, X-D Chen. *One size does not fit all: Developing a cell-specific niche for in vitro study of cell behavior*. Matrix Biology, 2016.
15. Rubie Rakian\*, **Travis J. Block\***, Shannon M. Johnson\*, Milos Marinkovic, Junjie Wu, Qiuxia Dai, David D. Dean, and Xiao-Dong Chen\*. *Native extracellular matrix preserves mesenchymal stem cell "stemness" and differentiation potential under serum-free culture conditions*. Stem Cell Research and Therapy, 2015.

#### Other Selected Publications

1. Travis J Block. [Vericel Is Substantially Undervalued Given Strong Balance Sheet, Profitability And Competitive Advantages](#). 2020.
2. Travis J Block. ResTORbio Is A Risky Bet Ahead Of Phase-III Results. 2019.
3. Travis J Block. PolarityTE has room to fall. 2019.
4. Travis J Block. Technical Bulletin: CELLvo™ Human Cord Blood-Endothelial Progenitor Cells are Highly Proliferative and Angiogenic. 2017.
5. Travis J Block. [Technical Bulletin: Optimized Isolation and Growth of Mesenchymal Stem Cells](#). 2017.

#### Selected Abstracts

1. **Travis J. Block**, Yong Mao, Anya Singh-Varma, Joachim Kohn, Anne Sheldrake, Sy Griffey. Cell-derived matrix promotes in vitro expansion and phenotype retention of primary human chondrocytes. International Society for Cellular Therapy 2018, Montreal, Quebec, Canada.
2. **T Block**, Milos Marinkovic, Olivia N. Tran, Amanda Marshall, David D Dean, Xiao-Dong Chen. *Rescuing the Regenerative Potential of Human Mesenchymal Stem Cells from the Elderly*. Meeting on the Mesa 2017, La Jolla, CA.
3. **T Block**, Milos Marinkovic, Olivia N. Tran, Amanda Marshall, David D Dean, Xiao-Dong Chen. *A Novel Approach for Restoring Quantity and Quality of Elderly Mesenchymal Stem Cells for Autologous Cell-Based Therapies*. International Society for Stem Cell Research 2017, Boston, MA.
4. **T Block**, Sy Griffey. *A Xeno-Free 3-Dimensional Microenvironment to Enhance Stem Cell Expansion*. International Society for Stem Cell Research 2017, Boston, MA. **ORAL PRESENTATION**
5. **Travis J Block**, Milos Marinkovic, Olivia N. Tran, Amanda Marshall, David D Dean, Xiao-Dong Chen. *Isolation and Expansion of "Youthful" Bone Marrow Mesenchymal Stem Cells from Elderly Populations*. Experimental Biology 2017, Chicago, IL.
6. **Travis J Block**, Milos Marinkovic, Olivia N. Tran, Amanda Marshall, David D Dean, Xiao-Dong Chen. *Rescuing Elderly Mesenchymal Stem Cell Populations*. 3<sup>rd</sup> Annual RegenMedSA Meeting, San Antonio, TX. **ORAL PRESENTATION**.
7. **Travis J Block**, Mary Navarro, Lucero Alvarado, Sy Griffey. *Stem cell-derived extracellular matrix as a cell culture substrate elicits very different and desirable cell behaviors versus standard plastic substrates*. EuroSciCon Advances in three-dimensional cell culture. Online Conference. **ORAL PRESENTATION**
8. **Travis J Block**, Milos Marinkovic, Amanda Marshall, David D Dean, Xiao-Dong Chen. *Diamonds in the Rough: Identification, Isolation, and Expansion of Healthy Mesenchymal Stem Cells from Elderly Donors*. 12<sup>th</sup> Annual World Stem Cell Summit, West Palm Beach, FL, 2016.
9. **Travis J Block**, Milos Marinkovic, Amanda Marshall, David D Dean, Xiao-Dong Chen. *Diamonds in the Rough: Identification, Isolation, and Expansion of Healthy Mesenchymal Stem Cells from Elderly Donors*. International Society for Stem Cell Research, San Francisco, CA, 2016.
10. Marinkovic M, **Block TJ**, Rakian R, Wang E, Reilly M, Dean D, and Chen X-D. To each its own: Tissue-specific extracellular matrix provides and optimal niche for studying stem cells derived from bone marrow and adipose tissues. International Society for Stem Cell Research, San Francisco, CA, 2016.
11. Marinkovic M, **Block TJ**, Rakian R, Wang E, Reilly M, Dean D, and Chen X-D: One size does not fit all: Developing a cell-specific niche for in vitro study of stem cell behavior. 11th World Stem Cell Summit, Atlanta, GA, 2015.
12. Rakian RA, Johnson S, **Block TJ**, Marinkovic M, Wu J, Dean D, and Chen X-D: Native extracellular matrix preserves mesenchymal stem cell "stemness" properties under serum-free culture conditions. American Association for Dental Research Annual Meeting. Los Angeles, CA, 2015.
13. **Travis J Block**, Milos Marinkovic, Amanda Marshall, David Dean, Xiao-Dong Chen. *Rescuing Regenerative Capacity of Human Mesenchymal Stem Cell Populations from the Elderly*. 2015. Gordon Research Conference on Aging. Sunday River, ME.
14. **Travis J Block**, Milos Marinkovic, Rubie Rakian, Amanda Marshall, David Dean, Xiao-Dong Chen. *Development of biomarkers for Identifying aging human mesenchymal stem cells*. 2014. World Stem Cell Summit. San Antonio, TX
15. Marinkovic M, **Block T**, Rakian R, Wang E, Dean D, Chen XD. *Tissue-specific ECMs Form the Stem Cell Niche and Display Differences in Physical, Mechanical, and Chemical Properties*. 2014. World Stem Cell Summit, San Antonio, TX

16. Marinkovic M, **Block T**, Dean D, Reilly M, Chen XD. Native Tissue-Specific ECMs Exhibit Distinct Mechanical Properties Affecting the Fate of hMSCs. 2014. Tissue Engineering & Regenerative Medicine International Society-USA. Washington, DC
17. **Travis Block**, Milos Marinkovic, Amanda Marshall, David D Dean, Xiao-Dong Chen. Characterization of Human Mesenchymal Stem Cell Populations from Old Donors. 2014. Biomedical Engineering Society Annual Meeting. San Antonio, TX
18. Marinkovic M, **Block T**, Rakian R, Dean D, Chen XD. Native Tissue-Specific ECMs Exhibit Distinct Mechanical Properties Affecting the Fate of hMSCs. 2014. Biomedical Engineering Society Annual Meeting. San Antonio, TX
19. RA Rakian, J Wu, **TJ Block**, M Marinkovic, Q Dai, XD Chen. Tissue-Specific Extracellular Matrix Guides Mesenchymal Stem Cell Differentiation. 2014. International Association for Dental Research Annual Meeting. Cape Town, South Africa
20. **Travis Block**, Milos Marinkovic, Rubie Rakian, David D Dean, Xiao-Dong Chen. Identification and Improvement of Aged Human Mesenchymal Stem Cells. 2014. Mikiten Research Forum. San Antonio, TX
21. **Travis Block**, Milos Marinkovic, Rubie Rakian, David D Dean, Xiao-Dong Chen. Development of Biomarkers for Identifying Aged Human Mesenchymal Stem Cells. 2014. American Aging Association Annual Meeting. San Antonio, TX
22. **Travis Block**, Milos Marinkovic, Rubie Rakian, David D. Dean, Xiao-Dong Chen. Age-related Changes to the Human Mesenchymal Stem Cell Phenotype. 2014. 5th Annual Frontiers of Translational Science Research Day. San Antonio, TX
23. **Travis Block**, Milos Marinkovic, Rubie Rakian, David D Dean, Xiao-Dong Chen. Identification of Biomarkers Related to Aged Mesenchymal Stem Cells. 2014. SA Conference on Stem Cell Research and Regenerative Medicine. San Antonio, TX
24. Rubie Rakian, Zhi-Liang Zhang, **Travis Block**, Qiuxia Dai, Zhongding Lu, Xiao-Dong Chen. Tissue Specific Extracellular Matrix Controls the Fate of Bone Marrow-derived Mesenchymal Stem Cell Differentiation. 2013. J Bone Mineral Res 28 (Suppl 1). ASBMR Annual Meeting. Washinton, DC