STELIOS T. ANDREADIS, Ph.D.
SUNY Distinguished Professor

Stelios T. Andreadis received his M.S. in Applied Mathematics, and M.S. and Ph.D. degrees in Chemical Engineering from the University of Michigan. He then pursued postdoctoral training at the Center for Engineering in Medicine at Harvard Medical School, where he worked in the areas of gene therapy, tissue engineering and regenerative medicine. Currently he serves as SUNY Distinguished Professor of Chemical and Biological Engineering, Biomedical Engineering and Member of the Center of Excellence in Bioinformatics and Life Sciences at the University at Buffalo, State University of New York. He served as Director of the Stem Cells in Regenerative Medicine (SCiRM) Training Program that was funded by NYSTEM to train students in stem cell biology and bioengineering and applications of stem cells in regenerative medicine (2016-2021). He is the Founding Director of the Cell, Gene, and Tissue Engineering Center (CGTE) that was established two years ago to promote interdisciplinary research and education in these areas. He served as CBE department Chair for two terms from 2012 to 2018.

His research interests span a wide spectrum from fundamental to technological to pre-clinical/translational research. He has made significant research contributions in the areas of stem cell bioengineering; vascular, skin, muscle and gland tissue engineering and regeneration; molecular design of biomaterials; protein and gene delivery, and stem cell senescence and aging. He co-founded a start-up (Angiograft, LLC) to commercialize the cell-free vascular grafts that were developed in his laboratory as arterial replacement grafts for treatment of cardiovascular disease. He has been invited speaker at conferences and many departments around the country and internationally. To date his work has resulted over 145 peer-reviewed publications, 32 conference proceedings, 90 invited presentations and over 300 conference presentations. Publications from his group appeared in top journals including *Cell Stem Cell, Nature Communications, Science Advances, Advanced Science, Advanced Functional Materials, Advanced Healthcare Materials, Cell Reports, Stem Cells, Journal of Cell Science, FASEB J., Cardiovascular Research, Molecular Therapy, Journal of Virology, Journal of Investigative Dermatology, Gene Therapy, Biomaterials, Tissue Engineering, Annual Reviews of Biomedical Engineering* and others.

His work has been continuously funded over 20 years from federal, state, and private foundation sources including NIH, NSF, the New York State Stem Cell Fund (NYSTEM), JDRF, the John R. Oishei Foundation and the Whittaker Foundation, totaling over $25 million. Recently, he led a team of UB and RPCI investigators that was awarded a grant from NYSTEM to launch a new Training Program focusing on *Stem Cells in Regenerative Medicine (SCiRM)*.

For his work, he received several awards including the Whitaker Foundation Young Investigator Award (1999), the NSF CAREER Award (2000), the Exceptional Scholar Young Investigator Award (UB, 2003), Exceptional Scholar: Sustained Achievement Award (UB, 2009) and the SUNY Chancellor's Award for Excellence in Scholarship (2014). He was elected to the College of Fellows of the American Institute for Medical and Biological Engineering (AIMBE, 2009) Biomedical Engineering Society (BMES, 2016), American Institute of Chemical Engineers (AIChE, 2022) and American Association for the Advancement of Science (AAAS, 2022). In 2018, he was promoted to the rank of SUNY Distinguished Professor, the highest rank in the system of SUNY Colleges and Universities.

He has mentored over 120 mentees including 36 Ph.D. students (28 graduated), 22 M.S. students, 7 post-doctoral fellows and more than 55 undergraduate researchers. Eight of his former Ph.D. students hold faculty positions at top research Universities (Georgetown, U of Oklahoma, Auburn U, National Institute of Standards and Technology (NIST), U of South Florida, UB, IIT Kanpur, The Capital University of Medical Sciences, Beijing). Others hold post-doctoral positions at top Universities (Princeton, Harvard, Stanford, Johns Hopkins, U Penn); or research and leadership positions in leading pharmaceutical/biotechnology companies (Merck, Bristol-Myers Squibb, Biogen, Shire Pharmaceuticals, LifeTechnologies, Lyndra Therapeutics, MedImmune, etc.).

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EDUCATION

1996-1998	**Postdoctoral Research Fellow** Center for Engineering in Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, MA
1992-1996	**Ph.D. Chemical Engineering,** University of Michigan, Ann Arbor, MI Area of concentration: Bioengineering
1992-1996	**M.A., Mathematics**, University of Michigan, Ann Arbor, MI Area of concentration: Applied Mathematics
1991-1992	**M.S., Chemical Engineering**, University of Michigan, Ann Arbor, MI
1985-1991	**Bachelor, Chemical Engineering**, Aristotle University, Thessaloniki, Greece

EMPLOYMENT HISTORY

2018-Pres	**SUNY Distinguished Professor,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY
2020-Pres	**Director,** Cell, Gene and Tissue Engineering Center **(CGTE)**
2012-2018	**Chairman,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY
2016-2021	**Director,** Stem Cells in Regenerative Medicine **(SCiRM)** Training Program
2015-Pres	**Chief Scientific Officer,** Angiograft, LLC.
2008-2018	**Professor,** Department of Chemical and Biological Engineering, Department of Biomedical Engineering, State University of New York at Buffalo, Buffalo, NY
Fall 2009	**Visiting Professor,** Harvard Medical School, Children's Hospital of Boston, Department of Hematology/Oncology, Laboratory of Dr. George Daley
2003-2008	**Associate Professor,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY
2006-pres	**Member,** Center of Excellence of Bioinformatics and Life Sciences (CoE), Buffalo, NY, 14203
2003-2008	**Adjunct Associate Professor,** Department of Biological Sciences, State University of New York at Buffalo, Buffalo, NY
2001-2010	**Co-director,** Center for Biomedical Engineering, State University of New York at Buffalo, Buffalo, NY
2001-2010	**Member,** Center for Drug Discovery and Experimental Therapeutics

(CDDET), State University of New York at Buffalo, Buffalo, NY

2000-2003 **Adjunct Assistant Professor,** Department of Biological Sciences, State University of New York at Buffalo, Buffalo, NY

1999-2003 **Member,** Center for Advanced Molecular Biology and Immunology (CAMBI), State University of New York at Buffalo, Buffalo, NY

1998-2003 **Assistant Professor,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY

HONORS AND AWARDS

- Elected Fellow of the American Association for the Advancement of Science (*AAAS Fellow, 2022*).
- Elected to the *AIChE Class of 2022 Fellows,* March 2022
- University at Buffalo Graduate School's *Excellence in Graduate Student Mentoring Award,* December 3, 2018
- Elected to the SUNY Academy as *SUNY Distinguished Professor*, March 2018
- Elected to the *BMES Class of 2016 Fellows,* July 2016.
- Member, NIH BTSS Study Section, July 2015 – 2019.
- *SUNY Chancellor's Award for Excellence in Scholarship,* April 2014.
- Elected to the College of Fellows of the *American Institute for Medical and Biological Engineering (AIMBE),* 2009
- *Exceptional Scholar: Sustained Achievement Award*, UB, 2009
- *Exceptional Scholar Young Investigator Award*, UB, 2003
- *NSF CAREER Award*, 2000
- *Whitaker Foundation Young Investigator Award*, 1999
- *Innovator of Upstate New York*, UB Alliance for Innovation, 2001
- Individual Development Award, UB, 2000
- Riefler Award, UB, 1999
- Honor Student Award from Aristotle University (1985-1986 and 1987-1988).

KEYNOTE/PLENARY LECTURES

- Plenary Lecture: Area 15d/e Engineering Fundamentals of Life Sciences of the Food, Pharmaceutical and Bioengineering Division, *American Institute of Chemical Engineers*, Orlando, FL, Nov 12, 2019.
- Keynote Speaker: *TERMIS* European Chapter Meeting, Rhodes, Greece, 2019.
- AADR/IADR William J. Gies Award for Biomaterials and Bioengineering Research, for the best paper published in the Journal of Dental Research, 2019.
- Plenary Speaker, *Bioengineering and Stem Cell Research Symposium,* Rensselaer Center for Stem Cell Research, Troy, NY, June 8-9, 2015.
- Plenary Speaker, *Northeast Bioengineering Conference (NEBC)*, Northeastern University, Boston, MA, April 26, 2014
- Keynote Presentation, *Northeast Bioengineering Conference (NEBC)*, Syracuse University, Syracuse, NY, April 5-7, 2013.
- Keynote Presentation, *"Engineering Stem Cell Therapies"* Topical Session, *AIChE Meeting*, Pittsburg, PA, October 31, 2012
- Keynote Presentation, *Network of Excellence for Functional Biomaterials, National University of Ireland*, Galway, Ireland, June 19, 2012

- Invited presentation, National Science Foundation (NSF-CBET) Grantee Conference, June 6-8, 2012

EDITORIAL BOARDS

- Editorial Board of *npj Biomedical Innovations*, 2024-pres
- Guest Committee Member, *Annual Review of Biomedical Engineering*, Vol 23, 2021
- Editorial Board of *Bioengineering – MDPI*, 2020-pres
- Editorial Advisory Board of *StemJournal*, 2018-pres
- Editorial Board of *Technology*, 2013-pres
- Senior Editorial Board of the *American Journal of Stem Cells*, 2013-pres
- Editorial Board of *Biomatter*, 2011-2016
- Editorial Board of *Tissue Engineering, Part C (Methods)*, 2008-2011
- Editorial Board of *Tissue Engineering, Part B (Reviews)*, 2008-2011
- Editorial Board of *Tissue Engineering Part A*, 2006-2011

LEADERSHIP POSITIONS IN PROFESSIONAL SOCIETIES

- **Organizing Committee**, *4th Bioengineering & Translational Medicine Conference*, The Society for Biological Engineering, Duke University, Durham, NC, October 7-8, 2019
- **Conference Chair**, *3rd Bioengineering & Translational Medicine Conference*, The Society for Biological Engineering, Boston, MA, Sep 27-28, 2018
- **Programming Chair**, *Food, Pharmaceutical & Bioengineering Division (Division 15)*, American Institute of Chemical Engineers (AIChE), 2013
- **Executive Committee Chair**, *Food, Pharmaceutical & Bioengineering Division*, American Institute of Chemical Engineers *(AIChE)*, 2012
- **Vice Chair of Division**, *Food, Pharmaceutical & Bioengineering Division*, American Institute of Chemical Engineers *(AIChE)*, 2011
- **Director**, *Food, Pharmaceutical & Bioengineering Division (Div 15)*, American Institute of Chemical Engineers *(AIChE)*, 2008-2010
- **Program Chair**, Area 15d/e, *Food, Pharmaceutical & Bioengineering Division* of the American Institute of Chemical Engineers (2005-2006).

GRADUATE STUDENT AWARDS

- **Sydney Swedick, UG student**
  - **Goldwater Scholarship**, 2023
  - **Gates Cambridge Scholarship**, to pursue a postgraduate degree at the University of Cambridge, 2024

- **Ronel Zachariah Samuel, PhD Candidate**
  - Selected as the **Student Keynote Speaker** in the 26th UB CBE Graduate Research Symposium, Oct 2023
  - **Best Student Poster Presentation Award,** 24th UB CBE Graduate Research Symposium University at Buffalo, Oct 2021

- **Debanik Choudhury, PhD candidate**
  - **Best Student Poster Presentation Award,** 26th UB CBE Graduate Research Symposium University at Buffalo, Oct 2023
    Awarded paper: "Glutamine metabolism is linked to age-associated loss of skeletal muscle function"
  - Selected as the **Student Keynote Speaker** in the 25th UB CBE Graduate Research Symposium, Oct 2022
  - **Best Student Poster Presentation Award,** 20th UB CBE Graduate Research Symposium University at Buffalo, Oct 2017
    Awarded paper: "Overexpression of NANOG Preserves the Young Phenotype of Skeletal Muscle Myoblasts and Ameliorates Aging Hallmarks"

- **Dr. David Geer, PhD** was selected to be the **Keynote Speaker** in the 24th UB CBE Graduate Research Symposium.
  Dr. David Geer was one of my first graduate students (PhD 2004). David had a very successful career at Merck where he was Director, Process Development & Commercialization, Merck Research Laboratories, West Point, 2005-2017. After many years at Merck, he joined Takeda as Director, Technical Operations, 2017-2020. Currently, he is Senior Director, Head of Manufacturing Process and Development, Lyndra Therapeutics, 2020-Pres.

- **Pihu Mehrotra, PhD Candidate**
  - **AIChE Women in Chemical Engineering (WIC) Travel Award**, Nov 2022
  - Selected as the **Student Keynote Speaker** in the 24th UB CBE Graduate Research Symposium, Oct 2021
  - **Best Student Presentation Award,** Stem Cells in Regenerative Medicine Annual Symposium University at Buffalo, May 2021
  - **Best Student Presentation Award,** 23nd UB CBE Graduate Research Symposium University at Buffalo, Oct 2020
    Awarded paper: "Metabolic and Epigenetic rewiring mediated by Wnt/BMP axis preserves Neural Crest Stem Cell Identity"

- **Nika Rajabian, PhD Candidate**

- **UB Excellence in Research, Scholarship and Creativity Award,** April 27, 2022. This award recognizes outstanding Student Showcase projects from each decanal area that achieve superiority in presentation, content and scope, and which therefore merit acknowledgement as efforts worthy of university-wide distinction.
- **Students' Choice Poster Presentation Award,** 24th UB CBE Graduate Research Symposium University at Buffalo, Oct 2021
- **Best Student Poster Presentation Award,** 22nd UB CBE Graduate Research Symposium University at Buffalo, Oct 2019
  Awarded paper: "Bioengineered skeletal muscle as a model of muscle aging and regeneration"

- **Dr. Randall Smith, PhD**
  - **NIH-F31 Predoctoral Fellowship Recipient**, 2016-2019
  - **Best Oral Presentation (2nd place)**, University at Buffalo Research Fellow's Day, 2020

- **Dr. Aref Shahini, PhD**
  - Selected as the **Student Keynote Speaker** in the **22nd UB CBE Graduate Research Symposium**, Oct 2019
    Awarded paper: "Restoring Muscle Regeneration after Aging"
  - **Scholarship for Research in the Biology of Aging,** Glenn Foundation for Medical Research and American Federation for Aging Research (Glenn/AFAR). Spring 2017. https://www.afar.org/research/grantees/#Glenn/AFAR Scholars
  - **Superior Poster Presentation,** American Aging Association (AGE). July 2018
  - **Best Poster Award,** UB Stem Cell in Regenerative Medicine (SCiRM) Symposium. June 2018
  - **Excellence in Research, Scholarship and Creativity,** University at Buffalo, April 2018
  - **Travel Award for Presentation in AGE Annual Conference,** American Aging Association (AGE). June 2017
  - **Excellence in Research Award,** Chemical and Biological Engineering Annual Research Symposium, University at Buffalo. September 2017
  - **Best Poster Award,** Stem Cells in Regenerative Medicine Annual Symposium University at Buffalo. May 2017
  - **Best Oral Presentation Award** in the *3rd Genetics, Genomics and Bioinformatics Research Day*, Buffalo, NY, Jan 27, 2017.
    Awarded paper: "NANOG Expression Restores the Regenerative Capacity of Senescent Myoblasts".
  - **Teaching Assistant of The Year Award,** The Engineering Honor Society (Tau Beta Pi), University at Buffalo. Spring 2014

- **Dr. Na Rong, PhD**
  - **Best Student Poster Presentation Award,** 21st UB CBE Graduate Research Symposium University at Buffalo, Oct 2018
    Awarded paper: "NANOG restores collagen type III production in aged stem cells"

- **Dr. Yayu Liu, PhD**

- Selected as the **Student Keynote Speaker** in the 20th UB CBE Graduate Research Symposium, Oct 2017.
  Awarded paper: "Novel roles of cell-cell adhesion in stem cell differentiation, proliferation and extracellular matrix synthesis"

- **Dr. Panagiotis Mistriotis, PhD**
  - Selected as the **Student Keynote Speaker** in the 17th UB CBE Graduate Research Symposium, Oct 2014
    Awarded paper: "Rejuvenating Senescent Mesenchymal Stem Cells: Implication for Vascular Tissue Engineering".
  - Invited Presentation: "Molecular and Bioengineering Strategies for Improving the Differentiation of Adult Mesenchymal Stem Cells", *Biomedical Research Foundation, Academy of Athens*, Athens, Greece, December 19, 2013.
  - **Best Poster Presentation Award** at the *CBE Department Graduate Research Symposium*, Oct 2014 (with Vivek Bajpai)
    Awarded paper: "Fabrication of highly vasoreactive and robust tissue engineered vascular media using doxycycline treatment: implications for vascular tissue engineering".

- **Dr. Vivek Bajpai, MD, PhD**
  - **1st Place Poster Presentation Award** for his poster at the *4th Annual WNYSTEM Stem Cell Conference on Stem cells and Regenerative Medicine*, Buffalo, NY, June 12, 2015.
    Awarded paper: "Direct Reprogramming of Skin Keratinocytes into Functional Neural Crest Fate"
    Authors: V.K. Bajpai, Laura Kerosuo, Kirstie Cummings, Gabriela Popescu, Marianne Bronner and **Stelios T. Andreadis**
  - **Best Poster Presentation Award** at the *CBE Department Graduate Research Symposium*, Oct 2014 (with Panagiotis Mistriotis)
    Awarded paper: "Fabrication of highly vasoreactive and robust tissue engineered vascular media using doxycycline treatment: implications for vascular tissue engineering".

- **Dr. Maoshih Liang, PhD**
  - Selected as the **Student Keynote Speaker** in the 16th UB CBE Graduate Research Symposium, Oct 2013
    Awarded paper: "Engineering Biomimetic Microenvironment for Vascular Grafts"

- **Dr. Sindhu Row, PhD**
  - **AIChE 2013 Best Presentation** for her presentation at the *Annual AIChE Meeting*, San Francisco, CA, November 6, 2013. Session: Stem Cells in Tissue Engineering II
    Awarded paper: "Maturation of Implantable Vascular Grafts in An Ovine Model Using Small Intestinal Sub-Mucosa: Do We Need Pre-Seeding of Smooth Muscle Cells?"
    Authors: S. Row, H.F. Peng, E.M. Schlaich, C. Koenigsknecht, D.D Swartz and **S.T. Andreadis**
  - **BMES 2013 Outstanding Contribution** for her presentation at the *Annual BMES Meeting* in Seattle, WA, September 26, 2013.

Awarded paper: "Time Course of Healing and Maturation of Implantable Vascular Grafts in the Arterial System of an Ovine Model: Do We Need Cells in the Vascular Wall?"
Authors: S. Row, H.F. Peng, E.M. Schlaich, C. Koenigsknecht, D.D Swartz and **S.T. Andreadis**

- **Dr. Meng-Horng Lee, PhD**
  - **Best Poster Presentation Award**, *CBE Department Graduate Research Symposium*, University at Buffalo (2008)
    Awarded paper: "JNK phosphorylates beta-catenin and regulates adherens junctions"

- **Dr. Liana M. Lugo, MD**
  - **Best Oral Presentation Award** for her work, "Growth Factor Infiltration into Human Acellular Dermis Promotes Angiogenesis In Vivo" in the *Department of Surgery's Third Annual Research Day*, *University at Buffalo,* Buffalo, NY, May 31, 2007.
  - **Frawley Research Award** for her research proposal on "Fibrin delivery of keratinocytes along with keratinocyte growth factor onto modified human dermis", April 9, 2007.

- **Dr. Piyush Koria, PhD**
  - **Best Poster Presentation Award** to at the *CBE Department Graduate Research Symposium*, University at Buffalo (2006)
    Awarded paper: "Distinct CCAAT/enhancer binding protein isoforms mediate Keratinocyte Growth Factor induced migration and proliferation of epithelial cells".
  - **Outstanding Scientific Poster**, *Engineering Tissue Growth International Conference & Exposition (ETG)*, Pittsburgh, PA (2003)
    Awarded paper: **P. Koria**, D. Brazeau, P. Hayden & S.T. Andreadis, "Functional genomics in tissue engineering: gene expression profiles of tissue engineered skin subjected to barrier disruption"
  - **Best Poster Presentation Award**, *CBE Department Graduate Research Symposium*, University at Buffalo (2000)
    Awarded paper: "Retroviral gene transfer to epidermal stem cells"

- **Dr. Pedro Lei, PhD**
  - **Outstanding Scientific Poster**, *AIChE Meeting*, San Francisco (2003)
    Awarded paper: "Rate-limiting steps in retrovirus synthesis and assembly"

- **Dr. B.G. Bajaj, PhD**
  - **Best Poster Presentation Award**, *Center for Advanced Molecular Biology and Immunology (CAMBI),* University at Buffalo (2003)
    Awarded paper: "Retroviral gene transfer to epidermal stem cells"

PROFESSIONAL MEMBERSHIPS

- American Institute of Chemical Engineers (AIChE)
- Biomedical Engineering Society (BMES)
- Tissue Engineering & Regenerative Medicine International Society (TERMIS)
- American Society of Gene Therapy (ASGT)

- North American Vascular Biology Organization (NAVBO)
- American Society of Microbiology (ASM)
- Technical Chamber of Greece (T.E.E.)

PROFESSIONAL SERVICE

- Reviewer of NIH P01 Proposals, 2018, 2019, 2020, 2022, Aug 2023, Nov 2023.
- NIH F31 Review Panel, July 2022.
- NIH K99 Review Panel, June 2021, October 2021
- NSF CAREER Review Panel, Oct 2021
- NIH F31 Review Panel, March 2021.
- Reviewer for Keck Foundation Proposals, Fall 2020.
- Member, NIH BTSS Study Section, July 2015 – July 2019.
- Ad Hoc Member, NIH BTSS Study Section, June 2014, Sep 2014, Feb 2015, June 2015
- Grant reviewer, United States–Israel Binational Science Foundation (BSF), Oct 2014
- BMES-NSF Special Session Panel, *2014 BMES Annual Meeting*, San Antonio, TX
- NSF Tissue Engineering & Stem Cell Review Panel, Dec 2013
- Ad Hoc Member, NIH BTSS Study section, July 2013
- Ad Hoc Reviewer, USAMRMC grants, June 2013
- Grant reviewer for the Greek Ministry of Education, Religious Affairs, Culture and Sports: - ARISTEIA II grants administered by the General Secretariat for Research and Technology, February 2013.
- Ad Hoc Member, NIH Study Section, Oct 2012.
- NSF CAREER Review Panel, Oct 2012.
- Ad Hoc Member, BTSS NIH Study Section Member, May 2011.
- Vice Chair of Division 15, American Institute of Chemical Engineers *(AIChE)*, 2011
- Ad Hoc Member, NIH Review Panel ZHL1 CSR-N (M1, M2). RFA: "New Strategies for Growing 3D Tissues, March 2011.
- NSF CAREER Awards Review Panel, Fall 2010
- Ad Hoc Member, NIH EUREKA Grants Review Panel, Spring 2010
- Reviewer for the American Institute of Biological Sciences (AIBS) of proposals submitted to the US Army Medical Research and Materiel Command, 2010
- Organizer and Chair, "Cardiovascular Tissue Regeneration" session, BMES, Fall 2009
- NSF review panel, December 2009.
- Ad Hoc Member, NIH Eureka Grants Review Panel, Spring 2009
- Ad Hoc Member, NIH BTSS Study section, Spring, Summer and Fall 2009
- Director of Division 15, American Institute of Chemical Engineers *(AIChE)*, 2008-
- Organizer and Chair, "Modeling, Analysis and Control In Biomedicine" session, AIChE, Fall 2008
- Ad hoc Reviewer, NIH SBIR Grants Review Panel, February 2008
- AIChE Meeting, Program Chair, Area 15d/e, 2005-2006
- Organizer and Chair, "Gene Delivery I & II" sessions, AIChE, Fall 2006
- Ad Hoc Member, NIH SBIR Grants Review Panel, July 2006
- National Ireland Foundation Proposal Reviewer, May 2007
- Welcome Trust Fellowships on Wound Healing Proposal Reviewer, 2007
- Swiss National Science Foundation Proposal Reviewer, 2006

- NSF Review Panel, April 20-21, 2006
- Ad Hoc Member, NIH P20 Center for Wound Healing Panel, March 21, 2006
- Ad Hoc Member, NIH Proposals, November 2005
- AIChE Meeting, Program Vice Chair, Area 15d/e, 2004-2005
- Organizer and Chair, "Tissue Engineering and Biomaterials: Stem Cells in Tissue Engineering 1", session, BMES, Fall 2005
- Organizer and Chair, "Tissue Engineering and Biomaterials: Stem Cells in Tissue Engineering 2", session, BMES, Fall 2005
- Organizer and Chair, "Tissue Engineering and Biomaterials: Stem Cells in Tissue Engineering 3", session, BMES, Fall 2005
- Chair, "Gene Delivery (15D09)", session, AIChE, Fall 2005
- NSF Reviewer (September 2005)
- Ad Hoc Member, NIH BTSS Review Panel (October 2005)
- Ad Hoc Member, NIH/NIDDK Review Panel (July 2004)
- NSF Review Panels (June 2000, Dec 2000, June 2002, May 2003, Oct 2004, Aug 2005, April 2006)
- Ad Hoc Member, NIH P20 Center for Wound Healing Panel, March 2006
- Ad Hoc Member, NIH SBIR Grants, July 2006, May 2009, June 2009
- Reviewer for proposals for
    - National Science Foundation
    - Petroleum Research Fund – American Chemical Society
    - National Institutes of Health
    - National Ireland Foundation Proposals, May 2007
    - Welcome Trust Fellowships on Wound Healing, Jan 2007
    - Swiss National Science Foundation Proposals, Fall 2006
    - NYSTAR J.D. Watson Award Nominee Election Committee, July 2006
- Reviewer of manuscripts for scientific journals including:
    - Nature Medicine; Molecular Therapy; Stem Cells; Cloning and Stem Cells; Experimental Cell Research; Tissue Engineering; Regenerative Medicine; Human Gene Therapy; Gene Therapy; Journal of Virology; Journal of Investigative Dermatology; Journal of Cellular Physiology; Biomaterials; Journal of Biomedical Materials Research; Biomacromolecules; Acta Biomaterialia; Physiological Genomics; AAPS Pharmaceutical Sciences; Biochimica et Biophysica Acta; Biotechnology & Bioengineering; Biotechnology Progress; Biochemical Engineering Journal;; Biomacromolecules; Annals of Biomedical Engineering; Cell Adhesion and Communication Cardiovascular Research
- Member of the Technology Assessment Panel (TAP) of the UB Business Alliance (UBBA) Office of Technology Transfer & Licensing (4/2000 to 5/2002)
- Organizer and Chair, "Advances in Gene therapy and Viral Vaccines I", session, AIChE, Fall 2004
- Organizer and Chair, "Advances in Gene therapy and Viral Vaccines II", session, AIChE, Fall 2004
- Co-chair and co-organizer of "Cellular Engineering" Track, BMES, Fall 2004
- Organizer and Chair of "Drug and Gene Delivery" Track (10 sessions), BMES, Fall 2002
- Organizer, "Gene Therapy Mini-Symposium", BMES, Fall, 2002. Several very well-known researchers in the field of Gene Therapy including James Wilson (U of Pennsylvania

School of Medicine) and Kenneth Cornetta (Indiana University school of Medicine and center for Gene therapy) were invited to present their work in this Symposium sponsored by the Society of Biomedical Engineers.

- Organizer and Chair, "Gene Delivery I", session, BMES, Fall 2002
- Organizer and Chair, "Gene Delivery for Tissue Engineering", session, BMES, Fall 2002
- Organizer and Chair, "Developments in Viral Vaccines and Gene Therapy I", session, AIChE, Fall 2002
- Organizer and Chair, "Developments in Viral Vaccines and Gene Therapy II", session, AIChE, Fall 2002
- Co-organizer and Chair, "Stem Cells" session, AIChE Meeting, Fall 2001
- Co-organizer and Chair, "Drug and Gene Delivery in Engineered Cells and Tissues", BMES, Fall 2001
- Co-organizer and Chair, "Cellular Therapies" session, AIChE Meeting, Fall 2000
- Co-organizer and Chair, "Novel Gene Carriers", BMES, Fall 2000
- Co-Chair, "Engineering Approaches in Gene Therapy" session, 1999 AIChE Meeting.
- Co-organizer, UB Chemical Engineering Graduate Research Symposium, Fall 1998-2002.
- Co-organizer, UB Chemical Engineering Graduate Student Seminar, 9/98 to /9/03.
- Registered Professional Engineer (Technical Chamber of Greece) (3/91)

UNIVERSITY SERVICE

- School of Dental Medicine Dean Search Committee, 2022-2023
- Chair, Decanal Review Committee, 2022
- Chair, International Faculty Launch Committee, 2021-2022, 2022-2023
- Member, Decanal Review Committee, 2018
- Top Funded Researchers Committee, UB Vice President for Research Advisory Committee, Dec 2013-pres
- Biomedical Engineering Department Chair Search Committee, Spring 2012
- Member, Zeiss Confocal Laser Scanning Microscope (Model LSM 710) Setup Committee, 2010 - 2011
- Member, Promotion Personnel Committee, School of Engineering and Applied Sciences, 2011
- UB/Roswell Park Cancer Institute *Stem Cell Research Oversight (SCRO) Committee* Member, Fall 2008-pres
- Chair, Biomedical Engineering Department Chair Search Committee, Spring 2008
- Member of the team to establish a new Biomedical Engineering Department at UB (Team Leader: Dean Stenger), Spring 2007
- Member of UB Interdisciplinary Strategic Strength Area: "Health and Wellness Across the Lifespan", Spring 2007
- Member, Search Committee for Dean of the School of Engineering and Applied Sciences (SEAS), Spring 2006
- Member of the committee to select UB's nominee for the NYSTAR J.D. Watson Award, July 2006
- Member, UB Review Panel for IRDF Proposals, February 2006.
- Member, UB Review Panel for Searle Proposals, July 2005.
- Mentor for junior faculty, UB-SEAS, 2004-present

- Member of a panel of UB inventors to evaluate candidates for the position of Commercialization Manager at STOR, November, 2004
- Co-director of the Center for Biomedical Engineering
- Member of the Technology Assessment Panel (TAP) of the UB Business Alliance (UBBA) Office of Technology Transfer & Licensing (4/2000 to 5/2002).
- Member of a group of investigators to establish a Center with focus on Nanotechnology and its applications in Biology, Medicine and Bioengineering (initiated by Dr. Turkkan).
- Participant in the "Upstate Alliance for Innovation" retreat at Beaver Hollow, NY, October 19-20, 2001.
- Member of the Bioengineering Masters Program Committee headed by Dr. Andres Soom.

CBE & SCHOOL OF ENGINEERING SERVICE

- SEAS Dean's Committee, 2020-pres
- SEAS Qualified Rank Committee, 2021-pres
- Chemical and Biological Engineering Awards Committee (2018-pres)
- Department Chair, UB Chemical and Biological Engineering (Fall 2012 – 2018)
- Member, Dean's Administrative Council (2012-pres)
- Member, IT committee, UB Chemical and Biological Engineering, (2012-pres)
- Member, Space Panning Committee, UB Chemical and Biological Engineering, (2010-pres)
- Chair of Faculty Search Committee, Chemical and Biological Engineering, 2011
- Member, Faculty Search Committee, Chemical and Biological Engineering, 2012, 2013, 2014, 2015, 2016.
- Member, Faculty Search Committee, Dept. of Biomedical Engineering, 2010
- Member, External Affairs Committee, UB Chemical and Biological Engineering, 2009-pres *(EAC was assembled to decide on strategies to improve the CBE department image and national rankings)*
- Mentor for junior faculty, UB-SEAS (Mentee Dr. Sheldon Park, 2006-present).
- Chair, Chemical and Biological Engineering Faculty Search Committee, 2006-2007
- Member, Faculty Search Committee, Chemical & Biological Engineering, 2005-2006
- Member, Chemical & Biological Engineering Committee for Revision of Undergraduate Curriculum, 2005-2006
- Member, Chemical & Biological Engineering Undergraduate Committee, 2003-2004
- Member, CBE Undergraduate Awards Committee, 2003-2004
- Co-organizer of CE Research symposium from Fall 1999-2002
- Member of the graduate Qualifying Exam committee, 1999-present
- Member of the Faculty Search Committee (Spring 2000 and Spring 2002)
- Mentor, Undergraduate Chemical Engineering students, UB (1998-present)
- Mentor, University at Buffalo Undergraduate Honors Program (1998 - present)
- Mentor, University at Buffalo, SEAS Freshmen Program

COMMUNITY SERVICE

I participated in the continuing education program of WNY teachers led by Dr. Nancolas. In this framework I gave a lecture to public school teachers entitled: "The construction of artificial organs in the laboratory". It was presented at *The Western New York Science and Technology Forum, University at Buffalo, SUNY,* December 5, 2001.

COURSES TAUGHT

CE 317; Transport Processes-I (undergraduate; 3 credit hours) Fall 2008 (45 students), Fall 2011 (64 students)

CE 311; Unit Operations (undergraduate; 3 credit hours) Spring 2000 (40 students), Spring 2001 (44 students), Spring 2002 (55 students), Spring 2003 (38 students), Spring 2004 (50 students), Spring 2005 (46 students), Spring 2006 (31 students)., Spring 2007 (28 students).

CE 429; Chemical Reaction Engineering (undergraduate, 3 credit hours) Fall 1998; (28 students); Fall 1999 (56 Students); Fall 2000 (40 students).

CE 564; Tissue Engineering (cross-listed with BIO 523) (graduate, 3 credit hours) Spring 1999; (12 CE students), Spring 2001 (8 CE students), Spring 2002 (11 CE students), Spring 2004 (8 CE students), Fall 2005 (15 students); Fall 2006 – Fall 2022.

CE 600; Advanced Bioengineering (graduate, 3 credit hours) Spring 2003 (6 students).

EAS 140; Engineering Solutions (undergraduate, 3 credit hours) Fall 2002 (109 students).

CE 630; Research Methods in Chemical and Biological Engineering I (graduate, 3 credit hours) Fall 2003 (7 students), Fall 2004 (7 students), Fall 2005 (7 students), Fall 2006 (8 students), Fall 2007 (11 students), Fall 2010 (14 students).

CE 631; Research Methods in Chemical and Biological Engineering II, Spring 2004 (7 students), Spring 2005 (7 students), Spring 2006 (7 students), Spring 2007 (8 students), Spring 2008 (11 students); Fall 2011-Fall 2022.

STUDENTS GRADUATED - DEGREES CONFERRED

Five of my former students hold tenured or tenure-track faculty positions in leading universities and others work for leading pharmaceutical/biotechnology companies.

Students Graduated: Ph.D. (28), M.S. (22), Post-doctoral Fellows (5)

Current Group Members: Ph.D. (9), M.S. (4), Post-doctoral Fellows (2), Research Associate Professor (1), UG Trainees (3)

Ph.D. Students Graduated

Dr. Pihu Mehrotra: Doctor of Philosophy, State University of New York at Buffalo, June 2024.
Thesis title: **Metabolic and cellular reprogramming to enhance stem cell function, reverse senescence and promote muscle reinnervation.**
Current position: **Postdoctoral Research Fellow**, Department of Chemical and Biomolecular Engineering, Princeton University, Laboratory of Dr. Celeste Nelson, June 2024 -

Dr. Ronel Z. Samuel: Doctor of Philosophy, State University of New York at Buffalo, Feb 2024.
Thesis title: **Salivary Gland Regeneration: Integrating Cellular and Acellular Techniques for Therapeutic Advancements**
Current position: **Postdoctoral Research Fellow**, University of Pennsylvania, Penn-CHOP Lung Biology Institute, Laboratory of Dr. Jarod Zepp, 2024 -

Dr. Debanik Choudhury: Doctor of Philosophy, State University of New York at Buffalo, Feb 2024.
Thesis title: **Metabolic Rejuvenation of Aging Cells: A Focus on Mitochondrial Dysfunction and Amino Acid Interventions**
Current position: **Postdoctoral Research Fellow**, Department of Chemical and Biomolecular Engineering, Johns Hopkins University, 2024 -

Dr. Bita Nasiri: Doctor of Philosophy, State University of New York at Buffalo, Feb 2024.
Thesis title: **Immunomodulation Strategies in Vascular Tissue Engineering: Monocyte Recruitment for Improved Endothelialization and Regeneration of Acellular Tissue Engineered Vessels**

Dr. Nika Rajabian: Doctor of Philosophy, State University of New York at Buffalo, Dec 2022.
Thesis title: **Metabolic Reprogramming and Stem Cell Rejuvenation for Skeletal Muscle Regeneration**
Current position: **Postdoctoral Research Fellow**, Laboratory of Dr. Jeffrey Schlom, Center for Immuno-Oncology, National Cancer Institute, National Institutes of Health, Jan 2023 -

Dr. Georgios Tseropoulos: Doctor of Philosophy, State University of New York at Buffalo, Aug. 2021.
Thesis title: **From Skin to Nervous System: Epidermal Neural Crest Stem Cells and their Schwann cell Derivatives**

Current position: **Postdoctoral Research Fellow**, Laboratory of Dr. Kristi Anseth, University of Colorado, Boulder, CO

Dr. Na Rong: Doctor of Philosophy, State University of New York at Buffalo, Aug. 2021.
Thesis title: **Genetic and Metabolic Approaches for Rejuvenating Aged Stem Cells**
Current position: **Senior Research Investigator**, CSPC, Beijing Research and Development Center, Beijing, 12/2021-Present

Dr. Yayu Liu: Doctor of Philosophy, State University of New York at Buffalo, Aug. 2021.
Thesis title: **Novel Role of Cadherin-11 in Regulation of Extracellular Matrix Synthesis, Proliferation and Breast Cancer Metastasis**
Previous position: Research Scientist, PureTech Health, Boston, MA
Current position: **Senior Scientist**, Sanofi, Cambridge, MA

Dr. Aref Shahini: Doctor of Philosophy, State University of New York at Buffalo, June 2020.
Thesis title: **Reprogramming Stem Cell Rejuvenation for Restoring Muscle Regeneration after Aging**
Previous position: **Postdoctoral Research Fellow**, Laboratory of Dr. Andrew Lassar, Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston MA.
Current position: **Scientist**, Walden Biosciences, Boston, MA

Dr. Randall J. Smith, Jr.: Doctor of Philosophy, State University of New York at Buffalo, Sep 2019.
Thesis title: **Vascular Tissue Engineering: Harnessing the Body's Regenerative Potential**
Current position: Technical Applications Scientist, Life Sciences Group, Thermo Fisher Scientific, Grand Island, NY
Previous position: Postdoctoral Research Fellow, Laboratory of Dr. Joseph Lau, Roswell Park Comprehensive Cancer Center, Buffalo, NY.

Dr. Suyog Pol: Doctor of Philosophy, State University of New York at Buffalo, May 2016.
Thesis title: **"Genomic analysis of human oligodendrocyte differentiation"**
co-advised with Professor Fraser Sim, UB Dept. of Pharmacology
Current position: Postdoctoral Research Fellow, Clinical and Translational Research Center, University at Buffalo

Dr. Panagiotis Mistriotis: Doctor of Philosophy, State University of New York at Buffalo, Dec 2015.
Thesis title: **"Reversing Stem Cell Aging: Implications for Vascular Regeneration"**
Former position: **Postdoctoral Research Fellow**, Department of Chemical and Biomolecular Engineering, Johns Hopkins University, 2016-19
Current position: **Assistant Professor**, Chemical Engineering, Auburn University, Jan 2020-present

Dr. Sindhu Row: Doctor of Philosophy, State University of New York at Buffalo, Oct 2015.
Thesis title: **"Extracellular Matrix Synthesis and Tissue Mechanics: Vascular Remodeling, Mechanism and Disease"**
Current position: **Chief Operating Officer**, Angiograft LLC, Amherst, NY

Dr. Vivek Bajpai: Doctor of Philosophy, State University of New York at Buffalo, May 2015.
Thesis title: **"Human Stem Cell Reprogramming for Tissue Engineering and Regenerative Medicine".**
Former position: **Postdoctoral Research Fellow**, Laboratory of Dr. Joanna Wysocka, Stem Cell Biology and Regenerative Medicine, Stanford University, 2015-2022
Current position: **Assistant Professor**, Chemical Engineering, University of Oklahoma, starting Jan 2023

Dr. Maxwell Koobatian: Doctor of Philosophy, State University of New York at Buffalo, Feb 2015.
Thesis title: **"Moving from Cellular to A-cellular Based Tissue Engineered Vascular Grafts for Use in a Clinical Setting"**
Previous position: Postdoctoral Professional Masters student at the Keck Graduate Institute (KGI), Claremont, CA
Current position: **Research Scientist**, Regeneron Pharmaceuticals, Inc

Dr. Stella Alimperti: Doctor of Philosophy, State University of New York at Buffalo, March 2014.
Thesis title: **"Directing Mesenchymal Stem Cell Fate toward Smooth Muscle Lineage"**
Previous position: **Postdoctoral Research Fellow**, Laboratory of Dr. Chris Chen, Department of Biomedical Engineering, Boston University and Wyeth Institute of Harvard, Boston, MA
Former position: **Project Leader,** American Dental Association Foundation/ National Institute of Standard and Technology (NIST)
Current position: **Assistant Professor**, Dept of Biochemistry, Georgetown University.

Dr. Mao-Shih Liang: Doctor of Philosophy, State University of New York at Buffalo, Feb 2014.
Thesis title: **"Engineering the Biomimetic Microenvironment for Vascular Tissue Engineering"**
Previous position: Scientist-I, Research & Development, MedImmune LLC, Gaithersburg, MD.
Current position: Teva Pharmaceutical Industries Ltd, North Wales, PA

Dr. Roshan Padmashali: Doctor of Philosophy, State University of New York at Buffalo, Feb 2013.
Thesis title: **"LENTIVIRUS: fibrin-based gene delivery, live cell arrays for high throughput screening and adherens junctions controlled entry"**
Current position: Senior Scientist, Drug Discovery and Biology, Shire Human Genetic Therapies, Shire Way, Lexington, MA
Current position: Director, Rare Disease Drug Discovery Unit, Takeda, Cambridge, MA

Dr. Hao Fan (Eric) Peng: Doctor of Philosophy, State University of New York at Buffalo, January 2012.
Thesis title: **"Tissue-Engineered Arterial Substitute for Cardiovascular Regeneration"**
Previous position: **Senior Scientist**, Research & Development, Biogen Idec, North Carolina.
Current position: **Acting Assistant Director**, FDA, Washington, DC.

Dr. Ju Hee Han: Doctor of Philosophy, State University of New York at Buffalo, February 2012.

Thesis title: **"Restoring the function of Aged Mesenchymal Stem Cells for Vascular Tissue Engineering"**
Current position: **Postdoctoral Research Fellow**, US Army Institute of Surgical Research (USAISR), Fort Sam Houston, TX 78234

Dr. Meng Horng Lee: Doctor of Philosophy, State University of New York at Buffalo, Aug 2010.
Thesis title: **"JNK-mediated Regulation of Adherens Junctions and Lentiviral Infection"**
Previous position: **Post-doctoral Fellow**, Laboratory of Dr. Dennis Wirtz, Department of Chemical and Biomolecular Engineering, Johns Hopkins University.
Previous position: **Scientist II**, Drug Discovery and Biology, Takeda, Lexington, MA
Current position: **Scientist II**, Broad Institute of MIT and Harvard, Boston, MA

Dr. Jun Tian: Doctor of Philosophy, State University of New York at Buffalo, May 2010.
Thesis title: **"Engineering Lentiviral Vectors for Gene Therapies and for Development of Live Cell Arrays for High-throughput and Real-time Gene Expression Analysis"**
Previous position: **Scientist III, Molecular Biology**, Life Technologies (Invitrogen), Grand Island, NY, May 2010-Nov 2011
Current position: **Scientist, Process Sciences Group,** Bristol-Myers Squibb (BMS), Syracuse, NY, Nov 2011-present

Dr. Piyush Koria: Doctor of Philosophy, State University of New York at Buffalo, February 2007.
Thesis title: **"Cellular Processes involved in Epidermal Morphogenesis & Wound Repair and Regeneration"**
Previous positions:

- **Post-doctoral fellow**, Laboratory of Dr. Martin Yarmush, Massachusetts General Hospital, Harvard Medical School, 2007-2010
- **Assistant Professor,** Department of Chemical and Biomedical Engineering, University of South Florida, Aug 2010 – 2017

Current position: **Associate Professor,** Department of Chemical and Biomedical Engineering, University of South Florida, Aug 2017 – pres.

Dr. Raghvendra Singh: Doctor of Philosophy, State University of New York at Buffalo, February 2008.
Thesis title: **"EGFR signaling in retrovirus mediated gene transfer and cell-scattering"**
Previous position:

- Post-doctoral fellow, Department of Pathology, Johns Hopkins University School of Medicine, 2008-2009.

Current position:

- **Associate Professor**, Department of Chemical Engineering, Indian Institute of Technology-Kanpur (IIT-Kanpur).

Dr. Daniel D. Swartz: Doctor of Philosophy, State University of New York at Buffalo, December 2003.
Thesis title: **"Development of a fibrin-based tissue-engineered blood vessel for implantation"**
Previous position: **Assistant Professor**, Department of Pediatrics, University at Buffalo, State University of New York, Buffalo, NY.

Current position: Chief Scientific Officer, Angiograft, LLC.
Director of Director Scientific and Clinical Research, ONY Biotech

Dr. Pedro Lei: Doctor of Philosophy, State University of New York at Buffalo, August 2004.
Thesis title: **"Novel strategies in retroviral production, purification and transduction for gene therapy: application in tissue engineered skin for treatment of Type I Diabetes"**
Previous position:

- **Research Instructor,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY.

Previous position:

- **Assistant Professor of Research,** Department of Chemical and Biological Engineering, State University of New York at Buffalo, Buffalo, NY.

Dr. David J. Geer: Doctor of Philosophy, State University of New York at Buffalo, November 2004.
Thesis title: **"Tissue engineered models of skin regeneration for the design and evaluation of novel drug-release systems"**
Previous position:

- **Director, Process Development & Commercialization**, Merck Research Laboratories, West Point, 2005-2017
- **Director, Technical Operations,** Takeda, 2017-2020

Current position:

- **Senior Director, Head of Manufacturing Process and Development**, Lyndra Therapeutics, June 2020-Pres

Dr. Bharat G. Bajaj: Doctor of Philosophy, State University of New York at Buffalo, February 2005.
Thesis title: **"Retroviral Gene Transfer to Stem Cells of the Human Epidermis"**
Previous position: **Post-doctoral fellow**, Dept of Microbiology, University of Pennsylvania Medical School, 2005-2010
Current position: **Vice President,** Loan Portfolio Management at RBC Capital Markets, Investment Banking Platform of the Royal Bank of Canada, 30th Floor, RBC Plaza, 200 Bay Street, Toronto, ON, Canada

Past Post-Doctoral Associates

Dr. Pedro Lei, Ph.D.: Post-doctoral Associate, 2004-2006
Previous position: **Instructor, Chemical and Biological Engineering**, University at Buffalo, State University of New York, 2006 - 2018
Current position: **Assistant Professor of Research, Chemical and Biological Engineering**, University at Buffalo, State University of New York, 2018 - pres

Dr. Jinyu Liu, Ph.D.: Post-doctoral Associate, 2004-2008
Position:

- 2009-2015 **Professor and Vice Director,** Department of Pathobiology, Key Lab of Ministry of Education College of Basic Medicine, Jilin University, Changchun, China

- 2015-Present, **Professor**, Department of Toxicology, School of Public Health, Jilin University, Changchun, China

Dr. Liana Lugo, MD: Post-doctoral Associate, 2007-2008
Title: "In situ skin regeneration by application of epidermal cells on pre-vascularized wound bed"

Previous: **Resident of Surgery**, School of Medicine, University at Buffalo, State University of New York
Current position: Surgeon, Midsota Plastic Surgeons, MN

Dr. Hui You, MD/Ph.D.: Post-doctoral Associate, 2010-2013
Project Title: "JNK, mechanical microenvironment and adherens junctions in epithelial cells and engineered tissues", and "Lentivirus microarrays for real-time monitoring MSC differentiation"
Current position: **Senior Research Scientist**, Allergan Pharmaceuticals, Irvine, CA

Dr. Izuagie Ikhapoh, Ph.D.: Post-doctoral Associate, 2019-2022
Project Title: "Metabolic reprogramming in skeletal muscle aging and rejuvenation"
Current position: **Senior Research Scientist**, Astra Zeneca, Cambridge, MA

Master of Science Students Graduated

Hamsa Vardini Senthil Kumar: Masters of Science, Genetics, Genomics and Bioinformatics, State University of New York at Buffalo, June 2023
Thesis title: **"Glutamine Metabolism is Linked to Skeletal Muscle Dysfunction"**
Current position: Ph.D. student in the Genetics, Genomics and Bioinformatics program; Andreadis lab

Aishwarya Kalyankar: Masters of Science, Biomedical Engineering, State University of New York at Buffalo, June 2022.
Project Title: **"Reversing skeletal muscle aging"** Expected in June 2022.

Suting Huang: Masters of Science, State University of New York at Buffalo, Aug 2021.
Thesis title: "**Exploring Metabolic Rewiring in Senescent Mesenchymal Stem Cells Through Metabolic Modeling"**
Current Position: Metabolic modeler, LanzaTech

Samaneh Moghadasi: Masters of Science, State University of New York at Buffalo, June 2020.
Thesis title: "**Derivation of Neural Crest Stem Cells from Human Epidermis of Aged Donors**"

Xiaoyan Wang: Masters of Science, State University of New York at Buffalo, Jan 2016.
Thesis title: **"NANOG Increases the Contractile and Extracellular Matrix Remodeling Capacity of Senescent Cells in 3D Aging Model"**
Current position: **Senior Formulation Specialist, Regeneron Therapeutics,** Tarrytown, NY
Previous position: Development Associate II, MacroGenics, Rockville, MD

Previous position: Analytical Development Associate, Novavax Inc., Gaithersburg, MD

Seoyoung Son: Masters of Science, State University of New York at Buffalo, Dec 2013.
Thesis title: **"Non-viral, high-efficiency DNA delivery for transient Nanog overexpression in mesenchymal stem cells using magnetofection"**
Current position: Ph.D. Candidate at Penn State University

Randall Smith: Masters of Science, State University of New York at Buffalo, Dec 2013.
Thesis title: **"VEGF Mediated Capture of Endothelial Cells under Flow"**
Current position: **Postdoctoral Research Fellow**, Laboratory of Dr. Joseph Lau, Roswell Park Comprehensive Cancer Center, Buffalo, NY.

Evan Schlaich: Masters of Science, State University of New York at Buffalo, July 2012.
Thesis title: **"Mechanical conditioning and the vascular remodeling potential of small intestine submucosa based grafts"**
Current position: Associate Scientist I, Global Manufacturing and Supply Biologics Manufacturing and Process Development, Bristol-Myers Squibb (BMS), Hopewell site, Pennington NJ, March 2013-present

Aishwarya Arangana: Masters of Science, State University of New York at Buffalo, January 2012.
Thesis title: **"Adherens junctions in epithelial cells and in bioengineered tissues"**
Current position: Associate Manager, Division of Assay Services, Meso Scale Diagnostics, Gaithersburg, Maryland, June 2012 – pres.

Siddhita Gopinath: Masters of Science, State University of New York at Buffalo, December 2008.
Thesis title: "**Multipotent human hair follicle stem cells for cardiovascular tissue engineering"**
Current position: Invitrogen Corporation, Molecular Probes Division, Eugene, Oregon

Shruti Raut: Masters of Science, State University of New York at Buffalo, December 2008.
Thesis title: "**Use of Fibrin Hydrogels for Localized and Cell-Controlled Lentiviral Gene Delivery"**
Current position: Merck Research Laboratories, Boston, Massachusetts

Deepa Makkar: Masters of Engineering, State University of New York at Buffalo, December 2006.
Thesis title: **"Retroviral gene transfer with immobilized retrovirus particles"**
Current position: Process Engineer, Flownamics Inc., Madison, Wisconsin

Lan Yao: Masters of Science, State University of New York at Buffalo, October 2006.
Thesis title: **"Tissue Engineering of Implantable Small-Diameter Blood Vessels using Fibrin as Scaffold"**

Adebimpe Ogunade: Masters of Science, State University of New York at Buffalo, February 2006.
Thesis title: **"Regulatable Insulin Delivery through Tissue Engineered Skin"**
Current position: Research Engineer, Kimberly Clark, Nina, Wisconsin

Shahram Behshad: Masters of Science, State University of New York at Buffalo, July 2001.
Thesis title: **"Retroviral Transduction of Epidermal Keratinocytes on Fibronectin"**

Current position: Research Engineer, Naval Surface Warfare Center, Indian Head Division.

Master of Engineering Students Graduated

Shilpashree Saha: Masters of Engineering (Biomedical Engineering), State University of New York at Buffalo, August 2021
Project title: **"Bioengineered models of skeletal muscle aging"**
Previous position: Cell culture Technician, Trailhead Biosystems Inc., Cleveland, OH
Current Position: Associate Scientist, EMD Serono, Inc.

Anagha Murli Kashyap: Masters of Engineering (Biomedical Engineering), State University of New York at Buffalo, August 2021
Project title: **"CDH11 Signaling in Breast Cancer"**
Previous position: Scientist I, Immunology and Respiratory Diseases Research at Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, CT
Current Position: Senior Associate Scientist, EMD Serono, Inc.

Vydiam Datta Saravana Kalyan Kumar: Masters of Engineering (Biomedical Engineering), State University of New York at Buffalo, August 2018
Project title: **"Investigating the Effects of NANOG in Enhancing the Contractile Properties of 3D Skeletal Muscle Tissues"**
Current position: Biomedical Engineer, Organ Manufacturing Group at United Therapeutics Corporation, Manchester, New Hampshire,

Selvam, Surya R.: Masters of Engineering, State University of New York at Buffalo, May 2017
Project title: **"Reprogramming of Adult Epidermal Cells to Neural Crest Stem Cells"**
Current position: Research Technologist Sr., Department of Neurological Surgery, University of Louisville, Louisville, KY

Janhavi Moharil: Masters of Engineering, State University of New York at Buffalo, May 2016
Project title: **"Lentiviral Arrays for Monitoring Stem Cell Differentiation"**
Current position: CDx Biostatistician, HTG Molecular Diagnostics Inc., 3430 E. Global Loop, Tucson AZ 85706

Zahra Chamanzar: Masters of Engineering (Biomedical Engineering), State University of New York at Buffalo, August 2015
Project title: **"Geometric control of cell-cell contact using novel micropatterns"**

Pulari Thaganvelu: Masters of Engineering, State University of New York at Buffalo, June 2014
Project title: **"Intercellular adhesion in MSC spheroid formation and differentiation"**
Previous position: PhD student, University of Queensland Diamantina Institute at The Translational Research Institute
Current position: Trainee Patent Attorney, Pizzeys Patent and Trade Mark Attorneys, Brisbane, Queensland, Australia

CURRENT GROUP MEMBERS

9 Ph.D., 4 M.S., 2 post-doctoral fellows, 3 Undergraduate researchers; and 1 Research Associate Professor

Ph.D. Candidates

Laura Sherwood: "Salivary gland regeneration", (Biomedical Engineering); Ph.D. Expected in June 2027.

Hamsa Vardini Senthil Kumar: "Skeletal muscle senescence and metabolism", (Genetics, Genomics and Bioinformatics); Ph.D. Expected in June 2027.

Sai Harsha: "Reversing skeletal muscle aging", (Chemical and Biological Engineering); Ph.D. Expected in 2027

Artem Nikolaev: "Metabolic reprogramming of stem cell senescence", (Biomedical Engineering); Ph.D. Expected in Dec 2027.

Arundhati Das: "Immune Cells in Vascular Graft Regeneration", (Chemical and Biological Engineering); Ph.D. Expected in 2026

Yulun Wu: "Vascular Graft Immunoengineering", (Chemical and Biological Engineering); Ph.D. Expected in 2025

Shahryar Shahini: "Reversing skeletal muscle aging", (Chemical and Biological Engineering); Ph.D. Expected in 2025

Ashis Kumar Podder: "Design of Biomaterials for Neural Crest Stem Cell Implantation for treatment of De-myelinating Diseases", (Chemical and Biological Engineering); Ph.D. Expected in Dec 2023.

Ruiqi Wang: "Shear-thinning hydrogels for human oligodendrocyte transplantation for treatment of demyelinating Diseases", (Chemical and Biological Engineering); Ph.D. Expected in June 2028.

M.S. Students

Frederick C. Earl: "NANOG reprogramming to reverse skeletal muscle aging", M.S. Expected in June 2025

Dilip Kumar Gollamoni: "Dynamic Hydrogels for human Oligodendrocyte Transplantation"; M.S. Expected in June 2026.

Satyanarayana Reddy Marudi: "Dynamic Hydrogels for human Oligodendrocyte Transplantation"; M.S. Expected in June 2026.

Breanna Roper: "Bioengineering Strategies Salivary Gland Regeneration"; M.A. Biological Sciences, Expected in June 2026.

Post-Doctoral Fellows

Dr. Karthik Ramachandran, Ph.D.: Post-doctoral Associate, 2022-pres
Project Title: "Immunoengineering strategies for arterial graft endothelialization"

Dr. Mohamed Alaa Mohamed, Ph.D.: Post-doctoral Associate, 2020-pres
Project Title: "Synthesis of novel biomaterials for cell therapies"

Associate Professor of Research

Dr. Pedro Lei, Chemical and Biological Engineering, University at Buffalo, State University of New York

Current Undergraduate Students Trainees
Jake Flash (junior, UB Biological Sciences)

Jared Lamson (junior, UB Biomedical Engineering)

Carlie Aquilino (sophomore, Binghamton University, Biological Sciences)

UNDERGRADUATE RESEARCH TRAINEES

Student	*Degree*	*Department*	*Current Position*
Chris Bellber	B.S.	Chemical Engineering	UB, Medical School
Trevor McKee	B.S.	Chemical Engineering	PhD, CBE, MIT
Amit Parikh	B.S.	Chemical Engineering	
Sarah C. Karl	B.S.	Chemical Engineering	
Yanling Chen	B.S.	Biol. Sci. (CAMBI)	Grad. Student, Biology, UB
Reecha Wadhwa	B.S.	Biochem. Eng & Biotech.	Senior, IIT, New Delhi, India
Robert Chang	B.S.	Chemical Engineering	Grad Student, U. Rochester
Raymond Cooley	B.S.	Chemical Engineering	Grad Student, UB
Jennifer Leigh	B.S.	Biomed Eng, B-SURE	Jr., BME, Tulane U
Matthew Cole	B.S.	Chemical Engineering	Senior, UB CBE
Jawaad Sheriff	B.S.	Chemical Engineering	Sophomore, UB
Matthew Bizou	B.S.	Chemical Engineering	Senior, UB CBE
Man Yau Tsz	B.S.	Chemical Engineering	Sophomore, UB
Tze-Jan Lin	B.S.	Mech Eng, B-SURE	Junior, UB
Meei Sunn Chin	B.S.	Chemical Engineering	MBA, Malaysia
Adebimpe Ogunade	B.S.	Chemical Engineering	Grad. Student, UB
Nishat Hamid,	B.S.	Chemical Engineering	Senior, UB

Duan Meei Tan,	B.S.	Chemical Engineering	
Tanya Smith	B.S.	Biol. Sci. (IGPBS)	Grad. Prog, Biology, UB
Dan Leo	B.S.	Chemical Engineering	UB Law School
Abhijeet Kholi	B.S.	Chemical Engineering	Merck Research Labs
Chin G. (Ryan) Lim	B.S.	Chemical Engineering	Graduate student, UB
Kok Hong Lim	B.S.	Chemical Engineering	Graduate student, UB
Krystine Santos	B.S.	Chemical Engineering	Junior, UB
Qing Qing Chen	B.S.	Chemical Engineering	Junior, UB
Daniel Vehkter	B.S.	Biology	Yale U (Grad student)
Evan Schlaich	B.S.	Chemical Engineering	Bristol-Myers Squibb, NJ
Tushar Kesavadas		High School senior (2012)	UG at Northwestern U
Natalia Alexandridis		High School senior (2012)	BME BS, MD from UB
Daniel Brenna	B.S.	UB CBE (2012)	Grad School, U Rochester
Joseph Marchica	B.S.	UB CBE (2012)	Grad Prog, Rutgers U
Francis J. Cunningham	B.S.	BME U R (Summer 2013)	Junior, U Rochester
Kevin A. Colman	B.S.	BME U R (Summer 2013)	Senior, U Rochester
Ryan Carpenter	B.S.	UB CBE (F 2013, Sp 2014)	Senior, UB
Francis J. Cunningham	B.S.	BME Uof R (Summer 2014)	Senior, U Rochester
Meghan Capeling	B.S.	UB CBE (Sophomore, Sp 2015)	U of Michigan
Ana G. Santandreu	B.S.	UB CBE (Senior, Sp16 to Sp17)	Grad School, Berkeley
Nathan Cho	B.S.	Biological Sciences (Senior, F16, Sp17)	
James O'Donnell	B.S.	CBE (Sophomore, Sp17)	
Erin Maloney	B.S.	CBE (F16, Sp17, Sp18)	Grad School, Cornell
Michael Janek	B.S.	CBE (Senior, F17)	
Jack Grossman	B.S.	CBE (Su16, F17, Sp18)	
Sibi Ramachandran	B.S.	BME (F17)	
Thy Ngoc Nha Nguyen (Jo)		BME (F17, Su18, Sp18, F18)	
Samiha Islam	B.S.	MAE (F17, Sp18)	
Evan M. Lemma	B.S.	CBE (F'17)	
Haley Zebraski	B.S.	BME (Sp19, Su19, F19)	Res Scientist I, AMRI
Joseph Kulczyk	B.S.	CBE (Sp19, Su19, F19, Sp20, Sp21)	MS, Cornell
Kendall Breed	B.S.	CBE (F21, Sp22)	
John Toftegaard	B.S.	CBE (Sp22, Su22, F22, Sp23)	Grad School, Cornell BME
Lia Vargas	B.S.	Biological Sciences (F22, Sp23)	
Sydney Swedick	B.S.	BME (F22, Sp23, F24, Sp24)	Grad School, Univ of Cambridge, UK
Jake Flash	B.S.	Biological Sciences (Sp24, Su24, F24)	
Jared Lamson	B.S.	BME (Sp24, Su24, F24)	
Carlie Aquilino	B.S.	Binghamton U, Biology (Su24)	

MEMBER IN GRADUATE STUDENT M.S. AND PH.D. THESIS COMMITTEES:

Student Name	*Degree*	*Department*	*Thesis Advisor(s)*
Michael J. Ryan	Ph.D.	Physiology & Biophysics	George Hajduczok
Suddha Talukdar	M.S.	CBE	Paschalis Alexandridis
Fariyal Ahmet	M.S.	CBE	Sriram Neelamegham
Stephen Selkirk	Ph.D.	Neurology, RPCI	Steven J. Greenberg
Vassilios Sikavitsas	Ph.D.	CBE	T.J. Mountziaris
Matthew J. Gounis	M.S.	MAE	Baruch Lieber
Troy S. Thomson	M.S.	Periodontics & Endodontics	Keith L. Kirkwood
Adam Adler	M.S.	CBE	Sriram Neelamegham
Fuwad Al-Sabek	M.S.	Periodontics & Endodontics	Keith L. Kirkwood
Tsuo-Feng Wang	Ph.D.	CBE	Johannes Nitsche
Harrish Shankaran	Ph.D.	CBE	Sriram Neelamegham
Kosmas Kretsos	Ph.D.	CBE	Johannes Nitsche
Camille Williams	M.S.	CBE	Sriram Neelamegham
Siddhartha S Mitra	Ph.D.	Biological Sciences	Bruce Nicholson
Heidi Lin Grandin	M.S.	CBE	Paschalis Alexandridis
Yi Zhang	Ph.D.	CBE	Sriram Neelamegham
Jun Wang	Ph.D.	CBE	T.J. Mountziaris
Yuri Dancik	Ph.D.	CBE	Johannes Nitsche
Giuseppe Intini	Ph.D.	UB Dental Medicine	Libuse Anna Bobek
Xiao Zhihua	Ph.D.	CBE	Sriram Neelamegham
Leonard Effendi	Ph.D.	CBE	Mattheos Koffas
Michael Szymanski	M.S.	MAE	Hui Meng
Rose-Anne Romano	Ph.D.	Biochemistry	Satrajit Sinha
Zhijie Wang	Ph.D.	MAE	Hui Meng
Gang Liu	Ph.D.	CBE	Sriram Neelamegham
Dananje Marathe	Ph.D.	CBE	Sriram Neelamegham
Dayle Hodge	M.S.	MAE	Hui Meng
Dong Hui	Ph.D.	CBE	Manolis Tzanakakis
Daniel Kehoe	Ph.D.	CBE	Manolis Tzanakakis
Eleni Metaxa	Ph.D.	MAE	Hui Meng
Katie Ann Bush	Ph.D.	BME (WPI/U Mass Med)	George Pins
Folarin Erogbogbo	Ph.D.	CBE	Mark Swihart
Ramanan Sekar	M.S.	CBE	Mattheos Koffas
Karan Prakash Shah	M.S.	CBE	Mattheos Koffas
Jasdeep Mann	Ph.D.	CBE	Sheldon Park
Nandini Mandal	Ph.D.	CBE	Sriram Neelamegham
Lye Lock	Ph.D.	CBE	Manolis Tzanakakis
Tracy Gwyther	Ph.D.	BME (WPI)	Marsha W. Rolle
Alexander Buffone	Ph.D.	CBE	Sriram Neelamegham
Sri Madabhushi	Ph.D.	CBE	Sriram Neelamegham
Pascal R. Beauchesne	Ph.D.	U of British Columbia	James Piret
Mangesh Kulkarni	Ph.D.	Biomaterials Institute (National Univ. of Ireland)	Abhay Pandit
Yukun Li	Ph.D.	CBE	Chong Cheng
Chih Kuang Chen	Ph.D.	CBE	Chong Cheng

Jasdeep Mann	Ph.D.	CBE	Sheldon Park
Snehal Rajesh Rane	M.S.	CBE	Blaine Pfeifer
Chi Lo	Ph.D.	CBE	Sriram Neelamegham
Nandini Mondal	Ph.D.	CBE	Sriram Neelamegham
Amanda L. Clement	Ph.D.	BME (WPI/U Mass Med)	George Pins
Rohitesh Gupta	Ph.D.	CBE	Sriram Neelamegham
Jiaochen Shen	M.S.	CBE	Sheldon Park
Daniel DeMonte	Ph.D.	CBE	Sheldon Park
Yumiao Zhang	Ph.D.	BME	Jonathan Lovell
Maulasri Bhatta	Ph.D.	Neuroscience	Sarah X. Zhang
Nina J. Kristofik	Ph.D.	BME (Yale)	Themis Kyriakides
Mohammad Asmani	Ph.D.	BME (UB)	Ruogang Zhao
Andrew B. Hill	Ph.D.	CBE (UB)	Blaine Pfeifer
Tala Mon	M.S.	CBE (UB)	Natesh Parashurama
Jessie Polanco	Ph.D.	Pharmacology/Toxicology	Fraser Sim
Richard Seidman	Ph.D.	Pharmacology/Toxicology	Fraser Sim
Yuqi Zhu	Ph.D.	CBE	Sriram Neelamegham
Xinheng Yu	Ph.D.	CBE	Sriram Neelamegham
Ogechi Ogoke	Ph.D.	CBE	Natesh Parashurama
Michael Weaver	Ph.D.	Neuroscience	Laura Feltri
Kyle Mentowski	Ph.D.	BME	Jennifer Lang
Alexander Chiang	M.S.	CBE	Natesh Parashurama
Theodore Groth	Ph.D.	CBE	Sriram Neelamegham
Qi Yang	Ph.D.	CBE	Sriram Neelamegham
Haryana Y. Thomas	Ph.D.	CBE	Ashlee Ford-Versypt
Erik Munoz	Ph.D.	BME	Rita Alevriadou
Shriram Venkatesan	Ph.D.	CBE	Rudi Gunawan
Matthew Pattrick	Ph.D.	BME	Ramkumar Annamalai

GRANT SUPPORT
Total grant support received to date: ~ $25M
(Excluding Center grants such as WNYSTEM, T32 and IGERT, where I participated as co-I/Mentor).

ACTIVE GRANTS

- **National Institutes of Health (NINDS, NS130130):** "Title Programmable Hydrogels for Optimized Human Oligodendrocyte Transplantation in Demyelinating Disease" (*MPI grant*)
  S.T. Andreadis (contact PI) Dates: 7/1/2023 – 6/30/2028 Total Costs: $2,930,725
  Fraser Sim (PI)

- **National Institutes of Health (NHLBI, R01 HL1511967):** "Cell-free vascular grafts: immunological response and vascular regeneration"
  S.T. Andreadis (PI) Dates: 4/1/2020 – 8/31/2024 Total Costs: $2,441,496

- **National Institutes of Health (NIA, R01 AG068250):** "Restoring the regenerative capacity of the aged muscle"
  S.T. Andreadis (PI) Dates: 9/1/2020-5/31/2025 Total Costs: $2,039,770

- **National Institutes of Health (NIDCR, 5R01DE022971-07):** "The Use of Fibrin Hydrogels to Build an Artificial Salivary Gland" (*MPI grant*)
  O. Baker (contact PI) Dates: 09/21/2016 - 08/31/2026 Total Costs: $1,931,292
  S.T. Andreadis (PI)

- **National Institutes of Health (NIDCR, T32 DE023526):** "Advanced Training in Oral Biology"
  PIs: Scannapieco/Ruhl Dates: 07/01/13-06/30/23
  Role: co-I, Mentor

PREVIOUS GRANT SUPPORT

- **National Institutes of Health (NIA, 1 R56 AG065561-01)** "The impacts of vitamin D status and HIIT on physical performance and frailty during aging" *(at NCE)*
  Troen, Bruce (PI) Dates: 9/15/20-8/31/21 Total Costs: $759,718

- ***S.T. Andreadis (co-PI)*** **New York State Stem Cell Science (NYSTEM) Training Grant:** "Stem Cells in Regenerative Medicine (SCiRM)"
  P.I.: S.T. Andreadis Dates: 09/01/16-08/31/21 Total Costs: $1,859,403

- **National Institutes of Health (NIA, R01 AG052387-01:** "High throughput genetic and functional screens for restoring stem cell potential" (at *No Cost Extension*)
  S.T. Andreadis (PI) Dates: 9/15/17-5/30/20 Total Costs: $1,206,072

- **National Institutes of Health (NIBIB, R01EB023114-01):** "Direct reprogramming of epidermal cells to neural crest derivatives for cell therapies" (at *No Cost Extension*)
  S.T. Andreadis (PI) Dates: 9/14/16-9/13/20 Total Costs: $1,712,7

- **New York State Stem Cell Science (NYSTEM IIRP, C32601GG-3450000):** "Skin-derived neural crest stem cells for treatment of neurogenic disorders"
  P.I.: S.T. Andreadis Dates: 08/01/18-07/31/21 Total Costs: $ 1,066,777

- **National Institutes of Health (NHLBI, 2R01HL086582-05A1):** "Reversing the effects of donor aging on adult stem cell potential"
  S.T. Andreadis (PI) Dates: 12/17/13-11/30/18 Total Costs: $1,557,588
  D.D. Swartz (co-PI)

- **National Institutes of Health (NHLBI, 1R43OD023242-01A1):** "Pre-clinical evaluation of vascular grafts in an aging ovine model"
  D.D. Swartz (PI) Dates: 09/15/17-08/14/18 Total Costs: $222,304
  S.T. Andreadis (co-I; Subcontract)

- **National Institutes of Health (NHLBI, 1R43HL134439-01):** "HLS: Self-endothelializing off-the-shelf vascular grafts" *(at No Cost Extension)*
  D.D. Swartz (PI) Dates: 08/01/16-07/31/18 Total Costs: $223,150
  S.T. Andreadis (co-I; Subcontract)

- **National Science Foundation (CBET 1403086):** "Cell-cell adhesion and stem cell fate commitment" *(at no cost extension)*
  S.T. Andreadis (PI) Dates: 06/01/14-05/31/17 Total Costs: $451,130
  Kwang Oh (co-PI)

- **NIH/NIDCR Training Grant 1 T32 (DE023526-01):** "Advanced Training in Oral Biology"
  Scannapieco (PI) Dates: 07/01/13-06/30/18
  S.T. Andreadis (Mentor)

- **University at Buffalo Center for Advanced Technology (UB CAT):** "Development of Cell-Free Vascular Grafts for Clinical Applications"
  S.T. Andreadis (PI) Dates: 07/01/16-06/30/17 Total Costs: $100,000

- **National Institutes of Health (NIDCR, 1R01DE022971-01):** "The Use of Fibrin Hydrogels to Build an Artificial Salivary Gland" *(MPI grant)*
  O. Baker (contact PI) Dates: 07/01/12-06/30/16 Total Costs: $1,542,825
  S.T. Andreadis (PI)

- **New York State Stem Cell Science (NYSTEM),** "Western New York Stem Cell Culture and Analysis Center"
  R.M. Gronostajski (PI) Dates: 01/01/10-12/31/15 Total Costs: $3,500,000
  S.T. Andreadis (co-I)

- **IMPACT Award, University at Buffalo:** "Derivation of functional neurons from skin epithelium without genetic factors"
  S.T. Andreadis (PI) Dates: 04/15/14-12/31/15 Total Costs: $32,800
  G. Popescu (co-PI)

- **National Institutes of Health (NHLBI, R01 HL086582):** "Stem Cells for Vascular Tissue Engineering"
  P.I.: S.T. Andreadis Dates: 05/01/08-03/31/14 Total Costs: $1,534,659
  co-PIs: D.D. Swartz, J.A. Russell

- **National Institutes of Health (5R44GM084551):** "SBIR: Genetically Modified Tissue Engineered In Vitro Human Models" *(with MatTek Corp.)*
  P. Hayden (PI) Dates: 07/01/12-06/30/14 Total Costs: $483,227
  S.T. Andreadis (co-I) Subcontract to UB: $53,595

- **National Science Foundation (CBET 0853993):** "High-throughput and live monitoring of MSC differentiation" *(at no cost extension).*
  S.T. Andreadis (PI) Dates: 07/01/09-06/31/14 Total Costs: $600,000

- **New York State Stem Cell Science (NYSTEM, Contract #C024315):** "High-throughput, real-time dynamic monitoring of stem cell differentiation"
  P.I.: S.T. Andreadis Dates: 01/01/09-12/31/12 Total Costs: $1,055,958

- **New York State Stem Cell Science (NYSTEM, Contract #C024316):** "Hair Follicle Stem Cells for Cardiovascular Tissue Regeneration"
  P.I.: S.T. Andreadis Dates: 01/01/09-12/31/12 Total Costs: $1,010,489
  co-PI: D.D. Swartz

- **Life Technologies, Inc.:** "Development of a Novel Culture System to Expand Mesenchymal Stem Cells in Suspension as Spheroids: Implication for MSC-based Therapies"
  P.I.: S.T. Andreadis Dates: 07/01/11-12/31/13 Total Costs: $30,000
  co-PI: Jun Tian (Life Technologies, Inc.)

- **National Science Foundation (DBI 0923133):** "MRI: Acquisition of a Confocal Microscopy System for Research and Education"
  PI: James Berry Dates: 08/31/09-08/31/12 Total Costs: $482,314
  S.T. Andreadis (Co-I)

- **National Institutes of Health (NIBIB, RO1 EB00876):** "Retroviral gene transfer to epidermal stem cells for tissue engineering"
  P.I.: S.T. Andreadis Dates: 02/01/03-01/31/09 Total Costs: $1,506,261

- **The John R. Oishei Foundation:** "Stem Cells for Tissue Engineered Vasculature"
  P.I.: S.T. Andreadis Dates: 04/01/07-03/31/09 Total Costs: $270,000
  co-PI: D.D. Swartz

- **National Institutes of Health (NIH/NIDDK RO1 DK068699):** "Regulated insulin delivery from tissue engineered skin"
  P.I.: S.T. Andreadis Dates: 8/1/04-7/31/07 Total Costs: $498,850
  co-PIs: K.L. Kirkwood, S. Laychock

- **National Science Foundation (BES-0354626):** "Mechanistic Studies on Retroviral Gene Transfer to Epithelial Cells"
  P.I.: S.T. Andreadis Dates: 08/01/04-07/31/07 Total Costs: $419,000

- **National Science Foundation Integrative Graduate Education and Research Training (IGERT):** "Biophotonics: materials and applications" *(multi-investigator grant proposal)*
  P.I.: Alex Cartwright Dates:09/15/01-09/14/06 Total Costs: $2,685,476
  Co P.I.: S.T. Andreadis

- **Juvenile Diabetes Research Foundation (JDRF) International:** "Growth Factors and Angiogenesis in Pancreatic Islet Transplantation"
  P.I.: S. Laychock
  Co-P.I.: S.T. Andreadis Dates: 07/01/05- 06/31/06 Total Costs: $100,000

- **National Science Foundation CAREER:** "Quantitative studies of the rate-limiting steps of retroviral production and transduction to achieve high levels of gene transfer to in vitro skin equivalents"
  P.I.: S.T. Andreadis Dates: 06/01/00-05/31/05 Total Costs: $250,000

- **Sterbutzel Fund, University at Buffalo: "Biomedical Assays Based on Zinc Selenide and Silicon Luminescent Quantum Dots"**
  P.I.:E. Ruckenstein. Dates: 04/01/05-03/31/07 Total Costs: $70,000
  Co-P.Is.: S.T. Andreadis, M.T. Swihart, T.J. Mountziaris.

- **IRCAF Award, University at Buffalo:** "Insulin Gene Delivery with tissue Engineered Skin Equivalents: Development of a Tissue-Based Device for the Treatment of Type-I Diabetes"
  PI: S.T. Andreadis Dates: 03/03/03-02/29/04 Total Costs: $45,000

co-PIs: K.L. Kirkwood, S. Laychock

- **IRCAF Award, University at Buffalo:** "Stem Cells and Cell Transplantation" *(multi-investigator grant proposal)*
  co-PI: S.T. Andreadis Dates: 03/03/03-02/29/04 Total Costs: $10,000

- **Whitaker Foundation:** "The role of integrins in retroviral gene transfer of epidermal keratinocytes"
  P.I.: S.T. Andreadis Dates: 12/1/02-11/30/03 Total Costs: $79,999

- **IRCAF Award, University at Buffalo:** "Development of a Tissue-Engineered Vascular Graft"
  PI: S.T. Andreadis Dates: 11/01/02-10/31/03 Total Costs: $43,000
  co-PI: J. Russell

- **National Science Foundation CAREER Industrial Matching Funds:** "Quantitative studies of the rate-limiting steps of retroviral production and transduction to achieve high levels of gene transfer to in vitro skin equivalents"
  P.I.: S.T. Andreadis Dates: 6/1/01-5/31/04 Total Costs: $72,000

- **MatTek Corporation:** "Response of engineered skin equivalents to chemical injury"
  P.I.: S.T. Andreadis Dates: 6/1/01-5/31/04 Total Costs: $72,000

- **Whitaker Foundation:** "Engineering gene therapy for human epidermal stem cells"
  P.I.: S.T. Andreadis Dates: 9/1/99-8/31/02 Total Costs: $209,855

PEER REVIEWED PUBLICATIONS

In Review/Revision

1. R.Z. Samuel, L.J. Sherwood, K. Nam, F. Maslow, Y. Zhang, J. Wang, S. Liu, O.J. Baker, **S.T. Andreadis** (2024). Development-inspired approach for derivation of salivary gland progenitors and organoids from human pluripotent stem cells. *(In Revision, Nature Comms)*.
2. B. Nasiri, A. Das, K. Ramachandran, S.H. Bhamidipati, Y. Wu, S. Venkatesan, R. Gunawan, D.D. Swartz, S.T. Andreadis (2024). Immune-mediated regeneration of cell-free vascular grafts in an ovine model *(In Review)*.
3. Y. Wu, M.A. Mohamed, T. Yi, A. Das, C.L. Rumsey, M. Trebbin, C.K. Breuer, S.T. Andreadis (2024). Self-healing and Cell-free Tissue Engineered Vascular Grafts *(In Revision)*.
4. Pihu Mehrotra, Sai Harsha Bhamadhipati, Pedro Lei, John Toftegaard, Debanik Choudhury, Maryam Elsayed and Stelios T. Andreadis (2024). Loss of GPR81 is associated with impaired fatty acid metabolism and skeletal muscle aging *(In Review)*.

Published/Accepted for Publication

5. P. Mehrotra, J. Jablonski, J. Toftegard, Y. Zhang, S. Shahini, J. Wang, C.W. Hung, R. Ellis, G. Kayal, N. Rajabian, S. Liu, K. Roballo, S.B. Udin, **S.T. Andreadis***, K. Personius* (2024). Skeletal muscle reprogramming enhances reinnervation after peripheral nerve injury. *Nature Communications* **(Accepted)** *Res Sq [Preprint].* 2024 Jan 5:rs.3.rs-3463557. doi: 10.21203/rs.3.rs-3463557/v1. * Co-corresponding authors.
6. A.K. Podder, M.A. Mohamed, R.A. Seidman, G. Tseropoulos, J.J. Polanco, P. Lei, F.J. Sim, **S.T. Andreadis** (2024). Injectable shear-thinning hydrogels promote oligodendrocyte progenitor cell survival and remyelination in the central nervous system *Science Advances* **10(28)**: eadk9918. PMID: 38996029. doi: 10.1126/sciadv.adk9918.
7. G. Tseropoulos, P. Mehrotra, A.K. Podder, E. Wilson, Y. Zhang, J. Wang, A. Koontz, S. Liu, L.M. Feltri, M.E. Bronner, **S.T. Andreadis** (2024). Immobilized NRG1 accelerates differentiation towards functional Schwann cells, mediated through YAP/TAZ nuclear translocation. *Advanced Science,* e2402607. PMID: 38952126
8. A. Das, R.J. Smith, Jr., **S.T. Andreadis** (2024). Monocytes and Macrophages for Endothelialization of Tissue Engineered Vessels. *Cardiovascular Research* **120(8):** 839-854.
9. J.J. León, N. Oetiker, N. Torres, N. Bruna, E. Oskolkov, P. Lei, A.N. Kuzmin, K. Chen, **S.T. Andreadis**, B.A. Pfeifer, M.T. Swihart, P.N. Prasad, J. Pérez-Donoso (2024). Microbial green synthesis of luminescent terbium sulfide nanoparticles using *E. Coli*: a rare earth element detoxification mechanism. *Microb Cell Fact.* **23(1):** 248.
10. S.E. Cassel, W. Chen, P. Lei, **S.T. Andreadis**, A.M. Kloxin (2024). Dynamic reporters for probing real-time activation of human fibroblasts from single cells to populations. *APL Bioengineering* **8(2):** 026127. doi: 10.1063/5.0166152.
11. D. Choudhury, N. Rong, N. Rajabian, S. Swedick, J. Toftegaard, R Thiyagarajan, H.V.S. Kumar, A.K. Podder, K.L. Seldeen, B. Troen, **S.T. Andreadis** (2024). Proline restores senescence-associated loss of mitochondrial function. *Cell Reports* **43(2):** 113738. doi: 10.1016/j.celrep.2024.113738. PMID: 38354087.
12. K. Nam, H.T. dos Santos, F. Maslow, T. Small, R.Z. Samuel, P. Lei, **S.T. Andreadis**, O.J. Baker. (2023). Fibrin hydrogels fortified with FGF-7/10 and laminin-1 peptides promote regeneration of irradiated salivary glands. *Acta Biomaterialia* Oct 14:S1742-7061(23)00613-X. doi: 10.1016/j.actbio.2023.10.013.

13. M.A. Mohamed, C.L. Rumsey, M. Trebbin, **S.T. Andreadis** (2023). Multifunctional polyurethane networks combining strength, toughness and fast autonomous self-healing via the synergy of multiple dynamic bonds. *Chemistry of Materials* **35 (16):** 6332-6345.
14. Y. Liu, P. Lei, R.Z. Samuel, A.M. Kashyap, T. Groth, W. Bshara, S. Neelamegham, **S.T. Andreadis** (2023). Cadherin-11 regulates tumor cell proliferation and metastatic potential via the Wnt pathway. *Molecular Oncology* **17(10):** 2056-2073. doi: 10.1002/1878-0261.13507. PMID: 37558205
15. F. Hemmati, A. Akinpelu, F. Amiri, A. McDaniel, C. McMurray, A. Afthinos, **S.T. Andreadis**, V.C. Biancardi, P. Mistriotis (2023). Downregulation of YAP activity restricts P53 hyperactivation to promote cell survival in confinement. *Advanced Science* **10(23):** e2302228. doi: 10.1002/advs.202302228.
16. N. Rajabian*, I. Ikhapoh*, S. Shahini, D. Choudhury, R. Thiyagarajan, A. Shahini, J. Kulczyk, K. Breed, S. Saha, M.A. Mohamed, S.B. Udin, A. Stablewski, K. Seldeen, B.R. Troen, K. Personius, **S.T. Andreadis** (2023). Methionine adenosyltransferase inhibition decreases insulin resistance and restores strength of aged skeletal muscle. *Nature Communications* **14(1):** 886. doi: 10.1038/s41467-023-36483-3. PMID: 36797255 (* co-first authors).
17. N. Rajabian, D. Choudhury, I. Ikhapoh, S. Saha, A.S. Kalyankar, P. Mehrotra, A. Shahini, K. Breed, **S.T. Andreadis** (2023). Reversine ameliorates hallmarks of cellular senescence in human skeletal myoblasts via reactivation of autophagy. *Aging Cell* **22(3):** e13764. doi: 10.1111/acel.13764. PMID: 36625257
18. P. Mehrotra, I. Ikhapoh, P. Lei, G. Tseropoulos, Y. Zhang, J. Wang, S. Liu and **S.T. Andreadis** (2023). Wnt/BMP mediated metabolic and epigenetic reprogramming preserves multipotency of skin derived neural crest like stem cells. *Stem Cells* **41(3):** 287-305. doi: 10.1093/stmcls/sxad001.PMID: 36617947.
19. D. Choudhury, N Rong, I. Ikhapoh, N. Rajabian, G. Tseropoulos, Y. Wu, P. Mehrotra, R. Thiyagarajan, A. Shahini, K.L. Seldeen, B.R. Troen, P. Lei, **S.T. Andreadis** (2022). Inhibition of glutaminolysis restores mitochondrial function in senescent stem cells. *Cell Reports* **41(9):** 111744. doi: 10.1016/j.celrep.2022.111744. PMID: 36450260
20. B. Nasiri, T. Yi, Y. Wu, R.J. Smith Jr., C.K. Breuer, **S.T. Andreadis** (2022). Monocyte Recruitment for Vascular Tissue Regeneration. *Advanced Healthcare Materials* **11(22):** e2200890. doi: 10.1002/adhm.202200890. PMID: 36112115
21. R.J. Smith Jr, **S.T. Andreadis** (2022). Generating Monocyte-Derived Endothelial-like Cells for Vascular Regeneration. *Methods Mol. Biol.* **2375:**13-19. PMID: 34591295.
22. A.K. Podder, M.A. Mohamed, G. Tseropoulos, B. Nasiri, **S.T. Andreadis** (2022). Engineering nanofiber scaffolds with biomimetic cues for differentiation of skin de-rived neural crest like stem cells to Schwann cells. *International Journal of Molecular Sciences*. *(Invited paper)* **23(18):** 10834. doi: 10.3390/ijms231810834. PMID: 36142746
23. M.A. Mohamed, L. Yan, A. Shahini, N. Rajabian, A. Jafari, **S.T. Andreadis**, Y. Wu, C. Cheng (2022). Well-defined pH-responsive self-assembled block co-polymer for effective co-delivery of doxorubicin and antisense oligonucleotide to breast cancer cells. *ACS Appl Bio Mater* **5(10):**4779-4792. doi: 10.1021/acsabm.2c00464. PMID: 36170623
24. A. Shahini, N. Rajabian, D. Choudhury, S. Shahini, I. Ikhapoh, K. Vydiam, T. Nguyen, J. Kulczyk, T. Santarelli, Y. Zhang, J. Wang, S. Liu, A. Stablewski, R. Thiyagarajan, K. Seldeen, B.R. Troen, J. Peirick, P. Lei, **S.T. Andreadis** (2021). NANOG expression ameliorates the hallmarks of cellular senescence in skeletal muscle myogenic progenitors in vitro and in vivo. *Science Advances* **7(36):** eabe5671.
25. N. Anandakrishnan, H. Ye, Z. Guo, Z. Chen, K.I. Mentkowski, J.K. Lang, N. Rajabian, **S.T. Andreadis**, T. Winston, Z. Ma, D. Wang, J. Xia, C. Zhou, R. Zhao (2021). Fast

stereolithography printing of large-scale biocompatible hydrogel models. *Advanced Healthcare Materials* Feb 15: e2002103. PMID: 33586366.
26. K. Nam, H.T dos Santos, F. Maslow, B.G. Trump, P. Lei, **S.T. Andreadis**, O.J. Baker (2021). Laminin-1 Peptides Conjugated to Fibrin Hydrogels Promote Salivary Gland Regeneration in Irradiated Mouse Submandibular Glands. *Front Bioeng Biotechnol.*, *Section Tissue Engineering and Regenerative Medicine,* **9:** 729180.
27. A. Wang, S.M. Boroujeni, P.J. Schneider, L.B. Christie, K.A. Mancuso, **S.T. Andreadis**, K.W. Oh (2021) An integrated centrifugal degassed PDMS-based microfluidic device for serial dilution. *Micromachines (Basel)*. Apr 23; **12(5):** 482. PMID: 33922553
28. K.L. Seldeen, A. Shahini, R. Thiyagarajan, Y. Redae, M. Leiker, N. Rajabian, A. Dynka, **S.T. Andreadis**, B.R. Troen (2021). Short term nicotinamide riboside treatment improves muscle quality and function in mice as well as increases cellular energetics and regenerative capacity of myogenic progenitors. *Nutrition* **87-88:** 111189. PMID: 33744645.
29. N. Rajabian, A. Shahini, M. Asmani, K. Vydiam, D. Choudhury, T. Nguyen, I. Ikhapoh, P. Lei, R. Zhao, and **S.T. Andreadis**. (2021). Bioengineered skeletal muscle as a model of muscle aging and regeneration. *Tissue Eng. Part A* **27(1-2):** 74-86 PMID: 32364045 ***(Journal Cover Image)***.
30. M.A. Mohamed, A. Shahini, N. Rajabian, J. Caserto, A.M.A. El-Sokkary, M.A. Akl, **S.T. Andreadis***, C. Cheng* (2021). Fast photocurable thiol-ene elastomers with tunable biodegradability, mechanical and surface properties enhance myoblast differentiation and contractile function. *Bioactive Materials* **6(7):** 2120-2133. PMID: 33511311
31. H.T. Dos Santos, K. Nam, C.T. Brown, S.M. Dean, S. Lewis, C.S. Pfeifer, P. Lei, M.J. Petris, **S.T. Andreadis**, O.J. Baker (2021) Trimers Conjugated to Fibrin Hydrogels Promote Salivary Gland Function. *J Dent. Res.* **100(3):** 268-275. PMID: 33043768
32. R.J. Smith Jr, B. Nasiri, D.D. Swartz, **S.T. Andreadis** (2020). Endothelialization of arterial vascular grafts by circulating monocytes. *Nat Commun.* **11(1):** 1622. doi: 10.1038/s41467-020-15361-2.
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PATENT APPLICATIONS

1. **S.T. Andreadis,** B Nasiri, R Smith
   Pat. App Ser. Number: 63/355,320
   Title: Cell Free Vascular Grafts and Graft Materials for Cellular Recruitment
   Filing Date: 6/24/2022
   IEdison Number: 5992614-21-0010
2. **S.T. Andreadis,** Mohamed Alaa Mohamed
   Pat. App Ser. Number: 63/255,012
   Title: Autonomous Self-Healing Elastomers and Applications Thereof
   Filing Date: 10/13/21
   IEdison Number: 5992614-20-0017
3. **S.T. Andreadis,** Mohamed Alaa Mohamed
   Pat. App Ser. Number: 63/238,911
   Title: Shear-Thinning Hydrogels and Uses Thereof
   Filing Date: 8/31/21
4. Jun Tian and **Stelios T. Andreadis**
   "Coordinate independent, consistent and high level dual-gene transgenesis from a single lentiviral vector"
   A provisional Patent Application was filed with the U.S. Patent and Trademark Office on May, 2008 by the Research Foundation of the State University of New York, Serial No. R6277.
5. Dan Swartz and **Stelios T. Andreadis**
   "Fibrin-based tissue engineered vasculature"
   Filed with the U.S. Patent and Trademark Office on October 23, 2003 by the Research Foundation of the State University of New York, U.S. Patent Application Serial No. 10/692,381
6. D.J. Geer and **Stelios T. Andreadis**
   "Conjugation and controlled delivery of growth factors through fibrin gels"
   Filed with the U.S. Patent and Trademark Office on November 17, 2003 by the Research Foundation of the State University of New York as a Provisional Patent Application, Serial Number 60/520,697
7. Pedro Lei and **Stelios T. Andreadis**
   "Tissue engineered insulin releasing skin grafts for treatment of diabetes"
   Filed with the U.S. Patent and Trademark Office on October 15, 2004 by the Research Foundation of the State University of New York as a Provisional Patent Application, Serial Number 60/619,228
8. Jinyu Liu and **Stelios T. Andreadis**
   "Isolation of functional smooth muscle cells using tissue specific promoters"
   Filed with the U.S. Patent and Trademark Office on September 20, 2005 by the Research Foundation of the State University of New York as a Provisional Patent Application, Serial Number 60/718,813
9. Jun Wang, **Stelios T. Andreadis** and Triantafillos J. Mountziaris
   "Fluorescence amplification of water-soluble ZnSe quantum dots and ZnSe/ZnS core/shell nanostructures: applications in clinical diagnostics"
   Filed with the U.S. Patent and Trademark Office on May 4, 2006 by the Research Foundation of the State University of New York as a Provisional Patent Application Serial Number 60/757,261
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INVITED RESEARCH PRESENTATIONS

1. **S.T. Andreadis**, "Cellular Reprogramming for Reversing Stem Cell Aging: Implications for Vascular and Muscle Regeneration", *Gordon Research Conference*, *Signal Transduction by Engineered Extracellular Matrices*, Invited Discussion Leader for Session: *ECM Drivers of Cellular Quiescence, Senescence, and Stress*, Manchester, NH, July 21-26, 2024.
2. **S.T. Andreadis**, "Cellular Reprogramming for Reversing Stem Cell Aging: Implications for Vascular and Muscle Regeneration", *Landon Center on Aging, Division of Geriatrics, Department of Internal Medicine, University of Kansas Medical Center*, Kansas City, KS, Nov 15, 2023.
3. **S.T. Andreadis**, "Reprogramming Stem Cell Aging for Enhanced Vascular and Muscle Regeneration", *Dept of Chemical Engineering, University of Massachusetts, Amherst*, MA, Oct 24, 2023.
4. **S.T. Andreadis**, "Cell Reprogramming for Reversing Aging: Implications for Tissue Engineering and Regeneration", *Huck Institute of Life Sciences, Pennsylvania State University, University Park*, PA, Oct 4, 2023.
5. **S.T. Andreadis**, "Reprogramming Cellular Aging for Tissue Engineering and Regeneration", *Dept of Biomedical Engineering, University of Connecticut, Storrs*, CT, Sep 26, 2023.
6. R.Z. Samuel and **S.T. Andreadis,** "iPSC as a potential autologous source for Salivary Gland Regeneration", *Gordon Research Conference, Salivary Glands and Exocrine Biology: Visualizing Exocrine Biology in Health and Disease,* Ventura, CA, Jan 29, 2023.
7. **S.T. Andreadis**, "Reprogramming Cellular Aging for Tissue Engineering and Regeneration", *MD-PhD Program MD-PhD Seminar, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, SUNY,* Jan 17, 2023.
8. **S.T. Andreadis**, "Bioengineering Strategies for Enhanced Vascular and Muscle Regeneration", *Dept of Physiology and Biophysics, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, SUNY,* Dec 8, 2022.
9. **S.T. Andreadis**, "Reprogramming Stem Cell Rejuvenation for Enhanced Vascular and Muscle Regeneration", *Dept of Oral Biology, School of Dental Medicine, University at Buffalo, SUNY,* Dec 5, 2022.
10. **S.T. Andreadis**, "Reprogramming Stem Cell Rejuvenation for Enhanced Vascular and Muscle Regeneration", *Dept of Chemical and Biomolecular Engineering, Case Western Reserve University (CWRU),* Cleveland, OH, Oct 27, 2022.
11. **S.T. Andreadis**, "Ameliorating Stem Cell Aging for Enhanced Vascular and Muscle Regeneration", *Annual Retreat of the Center for Engineering in Medicine and Surgery, Harvard Medical School,* Red Jacket Mountain View Resort, North Conway, NH*,* May 22-24, 2022.
12. **S.T. Andreadis**, "Ameliorating Stem Cell Aging Hallmarks for Enhanced Vascular and Muscle Regeneration", *Dept of Chemical and Biomedical Engineering, Cleveland State University,* Cleveland, OH, March 10, 2022.
13. **S.T. Andreadis**, "Ameliorating Stem Cell Aging Hallmarks for Enhanced Vascular and Muscle Regeneration", *Dept of Biochemistry, University of Missouri,* Nov 12, 2021.
14. **S.T. Andreadis**, "Resetting the Aging Clock: Reprogramming Stem Cell Rejuvenation for Enhanced Tissue Regeneration", *University of Minnesota Stem Cell Institute,* Oct 26, 2020.
15. **S.T. Andreadis**, "Reprogramming Stem Cell Rejuvenation for Tissue Regeneration", ***Plenary Lecture****, Food, Pharmaceutical, and Bioengineering Division, Area 15d/e: Engineering Fundamentals in Life Science, Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando FL, Nov 12, 2019.

16. **S.T. Andreadis**, "Molecular Rewiring of Senescence for Stem Cell Rejuvenation and Enhanced Tissue Regeneration", *Heart Institute and Department of Medical Engineering, University of South Florida*, Tampa, FL, Oct 22, 2019.
17. S**.T. Andreadis**, "Reprogramming Stem Cell Rejuvenation for Enhanced Tissue Regeneration", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) EU 2019*, Rhodes, Greece, May 27-31, 2019.
18. **S.T. Andreadis**, "Resetting the Aging Clock: Stem Cell Rejuvenation for Vascular and Neural Regeneration", *Yale Stem Cell Center*, New Haven, CT, April 22, 2019.
19. **S.T. Andreadis**, "Resetting the Aging Clock: Reprogramming Stem Cell Rejuvenation for Enhanced Tissue Regeneration", *Department of Chemical and Biological Engineering,* Iowa State University, Ames, IA, Nov 8, 2018.
20. **S.T. Andreadis**, "Stem Cell Engineering for Regenerative Medicine", *Department of Bioengineering,* Northeastern University, Boston, MA, Mar 24, 2018.
21. **S.T. Andreadis**, "Stem Cell Aging and Reprogramming: Implications for Regenerative Medicine", *2nd Bioengineering & Translational Medicine Conference, Society for Biological Engineering*, Minneapolis, MN, Oct 28-29, 2017.
22. **S.T. Andreadis**, "Stem Cell Aging and Reprogramming: Implications for Regenerative Medicine", *Chemical & Biochemical Engineering*, Missouri S&T, September 11, 2017.
23. **S.T. Andreadis,** "Neural Crest stem cells from skin: implications for regenerative medicine", *1st Annual Stem Cells in Regenerative Medicine (SCiRM) Symposium,* Center of Excellence in Bioinformatics and Life Sciences, Buffalo, NY, June 8-9, 2017.
24. **S.T. Andreadis**, "Directing and Monitoring Stem Cell Fate for Vascular Tissue Regeneration", 2016 *Biopharmaceutical Research and Development Symposium, University of Nebraska Medical Center,* Omaha, NE, Sep 14-15, 2016.
25. **S.T. Andreadis**, "Molecular Engineering of Stem Cells for Regenerative Medicine", *University of Connecticut Health Sciences Center,* Farmington, CT, April 5, 2016.
26. **S.T. Andreadis**, "Molecular Engineering of Stem Cells for Regenerative Medicine", *School for Engineering of Matter, Transport and Energy,* Arizona State University, AZ, Jan 11, 2016.
27. **S.T. Andreadis**, "Reversing Stem Cell Senescence: Implications for Vascular Tissue Engineering and Regenerative Medicine", **Plenary Speaker,** *Bioengineering and Stem Cell Research Symposium,* Rensselaer Center for Stem Cell Research, Troy, NY, June 8-9, 2015.
28. **S.T. Andreadis**, "Molecular and Systems Bioengineering Strategies to Enhance Stem Cell Function: Implications for Vascular Tissue Engineering and Regenerative Medicine", *Department of Bioengineering,* University of Maryland, MD, May 14, 2015.
29. **S.T. Andreadis**, "Stem cell engineering for vascular regeneration: molecular and systems biology approaches", *3rd Annual WNYSTEM Stem Cell Symposium: Stem Cells and Personalized Medicine,* Hauptman-Woodward Institute, Buffalo, NY, June 6, 2014.
30. **S.T. Andreadis**, "Molecular and Systems Biology Approaches in Stem Cell Engineering and Regenerative Medicine", *Department of Bioengineering,* Northeastern University, Boston, MA, May 15, 2014.
31. **S.T. Andreadis**, "Molecular and Systems Bioengineering Approaches to Monitor and Control Stem Cell Fate Decisions", *Center for Engineering in Medicine, Massachusetts General Hospital, Harvard Medical School*, Boston, MA, April 24, 2014.
32. **S.T. Andreadis**, "Controlling Stem Cell Fate Decisions via Cell-Cell Adhesion", **Plenary Speaker,** *Northeast Bioengineering Conference (NEBEC)*, Northeastern University, Boston, MA, April 26, 2014.

33. **P. Mistriotis**, S.T. Andreadis, "Molecular and Bioengineering Strategies for Improving the Differentiation of Adult Mesenchymal Stem Cells", *Biomedical Research Foundation, Academy of Athens*, Athens, Greece, December 19, 2013.
34. **S.T. Andreadis**, "Molecular and Systems Biology Approaches in Stem Cell Engineering and Regenerative Medicine", *Department of Chemical and Biomolecular Engineering, Georgia Institute of Technology,* Atlanta, GA, October 16, 2013.
35. **S.T. Andreadis**, "Molecular and Systems Biology Approaches in Stem Cell Fate Decisions and Applications in Regenerative Medicine", **Keynote Speaker**, *Northeast Bioengineering Conference (NEBC)*, Syracuse University, Syracuse, NY, April 5-7, 2013.
36. J. Han, P. Mistriotis, **S.T. Andreadis**, "Stem Cell Senescence: Nanog Reverses the Effects of Organismal Aging on Proliferation and Myogenic Differentiation Potential of Mesenchymal Stem Cells", *Engineering Stem Cell Therapies Session, Annual Meeting of the American Institute of Chemical Engineers*, Pittsburgh, PA, October 31, 2012.
37. **S.T. Andreadis**, "Molecular and Systems Biology Approaches in Stem Cell based Tissue Engineering", **Keynote Presentation** *at the Network of Excellence for Functional Biomaterials, National University of Ireland*, Galway, Ireland, June 19, 2012.
38. **S.T. Andreadis**, "Lentiviral arrays for mesenchymal stem cell differentiation", *National Science Foundation CBET Grantee Conference*, Baltimore, MD, June 6-8, 2012.
39. **S.T. Andreadis**, "Stem cells for engineering human arteries: teaching old stem cells new tricks", *1st Annual WNYSTEM Stem Cell Symposium: Stem Cells in Health and Disease,* Hauptman-Woodward Institute, Buffalo, NY, June 2, 2012.
40. **S.T. Andreadis**, "Molecular and Systems Biology Approaches in Tissue Engineering", *Department of Biomedical Engineering, City College of New York,* New York, NY, May 9, 2012.
41. **S.T. Andreadis**, "Adult and induced pluripotent stem cells for engineering vascular tissues", *Department of Bioengineering, University of Pittsburgh, 2012 McGowan Institute for Regenerative Medicine Retreat,* Nemacolin Woodlands Resort, PA, March 6, 2012.
42. **S.T. Andreadis**, "Stem Cells and Lentivirus Microarrays for Tissue Engineering", *Department of Oral Biology, University at Buffalo (SUNY),* Buffalo, NY, Nov. 21, 2011.
43. **S.T. Andreadis**, "Stem Cells, Signaling Pathways and Live Cell Arrays for Tissue Regeneration", *School of Engineering, Brown University,* Providence, RI, Feb. 24, 2011.
44. **S.T. Andreadis**, "Hair follicle derived mesenchymal stem cells as a source of smooth muscle cells for engineering mechanically robust and vasoreactive vascular media", *New York State Stem Cell Science (NYSTEM) Awardees Meeting*, May 27, 2010.
45. **S.T. Andreadis**, "Stem Cells for Tissue Regeneration and Vascular Bioengineering", *Children's Hospital Boston, Harvard Medical School Longwood Campus, Boston*, MA, October 29, 2009.
46. **S.T. Andreadis**, "Stem Cells for Wound Healing and Vascular Tissue Regeneration", *School of Engineering and Applied Sciences, Harvard University,* Cambridge, MA, September 23, 2009.
47. **S.T. Andreadis**, "Hair Follicle Stem Cells for Vascular Tissue Engineering", *1st NYSTEM Meeting, Stem Cell Science in New York State: Emerging Opportunities,* Albany, NY, June 12, 2009.
48. **S.T. Andreadis**, "Stem Cells and Delivery Strategies for Wound Healing and Vascular Tissue Engineering", *Department of Biomedical Engineering, Johns Hopkins University,* Baltimore, MD, May 6, 2009.

49. **S.T. Andreadis**, "Stem Cells and Delivery Strategies for Wound Healing and Vascular Tissue Engineering", *Department of Medicine, Division of Dermatology, Vanderbilt University,* Nashville, TN, April 10, 2009.
50. **S.T. Andreadis**, "Multipotent human hair follicle stem cells for vascular tissue engineering", *Vascular Matrix Biology and Bioengineering Conference,* Whistler, British Columbia, Canada, March 16-19, 2009.
51. **S.T. Andreadis**, "Signaling pathways, experimental models and delivery strategies for tissue engineering", *Department of Biomedical Engineering, Case Western Reserve University,* Cleveland, OH, September 4, 2008.
52. **S.T. Andreadis**, "Stem cells, signaling pathways and delivery strategies in tissue engineering", *Department of Chemical and Biological Engineering, Northwestern University,* Evanston, IL, October 25, 2007.
53. **S.T. Andreadis**, "Signaling pathways, experimental models and delivery strategies for tissue regeneration", *2nd Annual WPI/UMass Symposium on Tissue Regeneration,* Worcester, MA, June 4-5, 2007.
54. **S.T. Andreadis**, "Stem Cells for Wound Healing and Vascular Regeneration", *Frontiers in Biological Systems Symposium, Center of Excellence in Bioinformatics & Life Sciences,* Buffalo, NY, June 13-15, 2006.
55. **S.T. Andreadis**, "Stem Cells and Gene/Protein Delivery for Tissue Engineering", *Department of Biomedical Engineering, Georgia Institute of Technology,* Atlanta, GA, June 10-11, 2006.
56. **S.T. Andreadis**, "Tissue Engineering for Wound Healing and Vascular Replacement Therapy", *Center of Excellence in Bioinformatics & Life Sciences,* Buffalo, NY, May 26, 2006.
57. **S.T. Andreadis**, "Stem Cells and Gene/Protein Delivery for Tissue Engineering", *Department of Biomedical Engineering, Columbia University,* New York, NY, March 21, 2006.
58. **S.T. Andreadis**, "Stem Cells and Gene Therapeutics for Tissue Regeneration", *Department of Chemical and Biomolecular Engineering, Johns Hopkins University,* Baltimore, MD, February 16, 2006.
59. **S.T. Andreadis**, "Tissue Engineering: Current Advances and Future Prospects", *Department of Chemical and Department of Biomedical Engineering, University of Rochester,* Rochester, NY, November 16, 2005.
60. **S.T. Andreadis**, "Gene Therapy in Epithelial and Cardiovascular Tissue Engineering", *Department of Chemical Engineering, University of Massachusetts,* Amherst, MA, September 15, 2005.
61. **S.T. Andreadis**, "Gene and Protein Delivery for Wound Healing and Tissue Engineering", *Department of Biomedical Engineering, Tufts University,* Boston, MA, June 28, 2005.
62. **S.T. Andreadis**, "Gene and Protein Delivery for Skin and Vascular Tissue Engineering", *Department of Biomedical Engineering, University of California at Davis,* Davis, CA, June 22, 2005.
63. **S.T. Andreadis**, "Gene and Protein Delivery for Skin and Vascular Tissue Engineering", *Department of Biomedical Engineering, Rutgers, The State University of New Jersey,* Piscataway, NJ, June 20, 2005.
64. B.G. Bajaj, R. Singh and **S.T. Andreadis,** "Integrin Signaling in Retroviral Gene Transfer to Epithelial Stem Cells", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005
65. D.J. Geer, D.D. Swartz and **S.T. Andreadis,** "Cell-controlled Release of Keratinocyte Growth Factor Accelerates Wound Healing *in vitro* and *in vivo*", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005

66. L. Yao, D.D. Swartz, J.A. Russell and **S.T. Andreadis,** "Tissue Engineering of Implantable Small-Diameter Blood Vessels", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005
67. **S.T. Andreadis**, "Gene Therapy in Skin and Vascular Tissue Engineering", *Department of Biomedical Engineering, Ohio State University,* Columbus, OH, April, 2005.
68. **S.T. Andreadis**, "Gene Therapy and Growth Factor Delivery for Wound Healing and Vascular Tissue Engineering", *Department of Pharmaceutics, University at Buffalo,* Amherst, NY, March 31, 2005.
69. **S.T. Andreadis,** "Insulin Delivery through Genetically Modified Living Skin Equivalents for Treatment of Diabetes", *ET 2005: Engineering Tissues Conference,* Sea Pines Plantation, Hilton Head, SC, March 9-13, 2005.
70. **S.T. Andreadis**, "Gene Therapy in Skin and Vascular Tissue Engineering", *Department of Chemical and Biological Engineering, Tufts University,* Boston, MA, Feb 7, 2005.
71. **S.T. Andreadis**, "Gene Therapy in Skin and Vascular Tissue Engineering", *Department of Chemical Engineering, Carnegie Mellon University,* Pittsburgh, PA, Jan 13, 2005.
72. **S.T. Andreadis**, "Gene Therapy and Genomics in Skin and Vascular Tissue Engineering", *Department of Chemical Engineering, Princeton University,* Princeton, NJ, Dec 1, 2004.
73. **S.T. Andreadis**, "Retroviral Gene Transfer: Mechanisms and Applications in Tissue Engineering", *Department of Molecular and Cellular Biology, Roswell Park Cancer Institute,* Buffalo, NY, May 6, 2004.
74. **S.T. Andreadis**, "Retrovirus gene transfer to epidermal stem cells: implications for tissue engineering", *Stem Cell & Cell Transplantation Group, Hearing Research Lab, School of Medicine, State University of New York at Buffalo*, Buffalo, NY, Oct 28, 2003.
75. **S.T. Andreadis**, *Lindsay Lecturer,* "Gene Therapy and Tissue Engineering of Skin and Blood Vessels", *Dept of Chemical Engineering, Texas A&M University,* College Station, TX, Sep 23, 2003.
76. **S.T. Andreadis**, "Gene Therapy and Genomics in Tissue Engineering", *Dept of Surgery, Division of Plastic Surgery, University of Massachusetts Medical School,* Worcester, MA, June, 25, 2003.
77. **S.T. Andreadis**, "Gene Therapy and Genomics in Tissue Engineering", *Dept of Chemical Engineering and Dept of Biomedical Engineering,* Worcester Polytechnic Institute, Worcester, MA, April, 17, 2003.
78. **S.T. Andreadis**, "Retrovirus gene transfer to epidermal stem cells: the role of integrins and extracellular matrix", *American Chemical Society 225th Meeting*, New Orleans, LA, March 23-27, 2003.
79. **S.T. Andreadis,** "Gene therapy and genomics in tissue engineering", *Center for Excellence in Bioinformatics,* University at Buffalo, Buffalo, NY, December 12, 2002
80. **S.T. Andreadis,** "The role of extracellular matrix in retrovirus gene transfer to epidermal stem cells", *Dept of Chemical Engineering, Tufts University*, Medford, MA, November 25, 2002.
81. **S.T. Andreadis,** "Fibrin-mediated delivery of KGF in 2D and 3D models of wound regeneration", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October 23, 2002.
82. **S. Andreadis**, "The role of extracellular matrix in retroviral gene transfer: applications in tissue engineering and wound healing", presented at *The Department of Pediatrics, Division of Neonatology, Children's Hospital of Buffalo*, *University at Buffalo, SUNY,* September 12, 2002.

83. **S. Andreadis**, "The construction of artificial organs in the laboratory", will be presented at *The Western New York Science and Technology Forum, University at Buffalo, SUNY,* December 5, 2001.
84. **S. Andreadis**, "Retroviral gene transfer and tissue engineering of genetically modified skin for wound healing", presented at *The Department of Bioengineering, University of Pittsburgh*, April 6, 2001.
85. **S. Andreadis**, "Gene transfer using recombinant retroviruses: kinetic studies and applications in tissue engineering of the skin", presented at *The Department of Biological Sciences, School of Arts and Sciences, State University of New York at Buffalo*, April 6, 2000.
86. **S. Andreadis**, "Gene therapy using recombinant retroviruses: applications in tissue engineering", presented at *The Department of Physiology & Biophysics, Medical School, State University of New York at Buffalo*, November 22, 1999.
87. **S. Andreadis**, "Gene therapy using recombinant retroviruses: applications in tissue engineering", presented at *The Department of Pathology, Medical School, State University of New York at Buffalo*, November 16, 1999.
88. **S. Andreadis**, "Gene therapy in tissue engineering of the skin", *Department of Neurology, Roswell Park Cancer Institute*, Buffalo, NY, November 15, 1999.
89. **S. Andreadis**, "Kinetics of retroviral transduction and application in tissue engineering of the skin", presented at *Life Technologies – Gibco BRL, Grand Island, NY,* March 25, 1999.
90. **S. Andreadis**, "Kinetics of retroviral transduction and application in tissue engineering of the skin", presented at *The Department of Pharmacy, State University of New York at Buffalo*, February 25, 1999.
91. **S. Andreadis**, "Kinetics of retroviral transduction and application in tissue engineering of the skin", presented at *The Department of Neurology, Roswell Park Cancer Institute*, November, 1998.
92. **S. Andreadis**, "Effects of KGF on *in vitro* reconstituted genetically modified human epidermis", *The Department of Physiology, Medical School, State University of New York at Buffalo*, May 4, 1998.
93. **S. Andreadis** & J.R. Morgan, "Genetically modified *in vitro* skin equivalents". *LifeCell Corp,* The Woodlands, Texas, April 14-17, 1998.
94. **S. Andreadis**, "Dynamics of retroviral transduction: the importance of intracellular stability of retroviral vectors", *Chemical, Bio and Materials Engineering Department Seminar, Arizona State University, Phoenix, AZ*, April, 1997.
95. **S. Andreadis**, "Dynamics of retroviral transduction: the importance of intracellular stability of retroviral vectors", *Harvard-MIT Division of Science and Technology Biomedical Engineering Seminars,* Cambridge, MA, September 26, 1996.
96. **S. Andreadis**, "Dynamics of retroviral-mediated gene transfer". *Center for Engineering in Medicine, Shriners Hospital for Children and Massachusetts General Hospital, Harvard Medical School*, Cambridge, MA, March, 1996.

PRESENTATIONS AT SCIENTIFIC MEETINGS

1. T. Tarvirdizadeh, M.A. Mohamed, **S.T. Andreadis**, J.K. Lang, The Impact of Shear-Thinning Hydrogel Delivery on Extracellular Vesicle Cardiac Retention, Extracellular Vesicles and Exosome Biology, *American Heart Association (AHA) Meeting*, Basic Cardiovascular Sciences (BCVS) Scientific Sessions, Chicago, IL, July 22-25, 2024

2. P. Mehrotra, D. Choudhury, J. Toftegard, S. Shahini Shahryar, P. Lei, K. Personius, **S.T. Andreadis**. Loss of GPR81 is associated with impaired fatty acid metabolism and skeletal muscle aging, *American Aging Association Annual Meeting*, Madison, WI, June 3, 2024.
3. D. Choudhury, N. Rong, N. Rajabian, G. Tseropoulos, Y. Wu, P. Mehrotra, R. Thiyagarajan, K. Seldeen, B.R. Troen, P. Lei and **S.T. Andreadis**. Inhibition of Glutaminolysis Restores Age-Associated Loss of Mitochondrial Function, *American Aging Association Annual Meeting*, Madison, WI, June 3, 2024.
4. D. Choudhury, N. Rong, N. Rajabian, S. Swedick, J. Toftegard, H.V.S. Kumar, A.K. Podder, P. Mehrotra and **S.T. Andreadis**. Proline Restores Mitochondrial Function and Reverses Aging Hallmarks in Aged Stem Cells, *American Aging Association Annual Meeting*, Madison, WI, June 3, 2024.
5. P. Mehrotra, D. Choudhury, J. Toftegard, S. Shahini, P. Lei, K. Personius and **S.T. Andreadis**. Loss of GPR81 Is Associated with Impaired Fatty Acid Metabolism and Skeletal Muscle Aging, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 9, 2023.
6. D. Choudhury, N. Rong, N. Rajabian, G. Tseropoulos, Y. Wu, P. Mehrotra, R. Thiyagarajan, K.L. Seldeen, B.R. Troen, P. Lei and S.T. Andreadis, Inhibition of Glutaminolysis Restores Age-Associated Loss of Mitochondrial Function, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 9, 2023.
7. A.K. Podder, M.A. Mohamed, G. Tseropoulos, R. Seidman, F.J. Sim, and **S.T. Andreadis**, Engineering Cell-Instructive Injectable Hydrogels with Pro-Survival Signals to Promote Oligodendrocyte Progenitor Cell Transplantation for Demyelinating Diseases, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 9, 2023.
8. A.K. Podder, M.A. Mohamed, G. Tseropoulos, B. Nasiri and **S.T. Andreadis**, Engineering Nanofiber Scaffolds with Biomimetic Cues for Differentiation of Neural Crest-like Stem Cells to Schwann Cells, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 7, 2023.
9. P. Mehrotra, S. Shahini, N. Rajabian, Y. Zhang, J. Wang, S. Liu, J. Jablonski, S. Udin, **S.T. Andreadis** and K. Personius, NANOG Induced Skeletal Muscle Reprogramming Enhances Innervation after Peripheral Nerve Injury, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 6, 2023.
10. D. Choudhury, N Rong, N. Rajabian, S. Swedick, J. Toftegard, H.V.S. Kumar, A.K. Podder, P. Mehrotra and **S.T. Andreadis**, Proline Restores Mitochondrial Function and Reverses Aging Hallmarks in Aged Stem Cells, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Orlando, FL, Nov 6, 2023.
11. S. Swedick, D. Choudhury, N. Rong, N. Rajabian, A.K. Podder, **S.T. Andreadis**, Proline restores senescence-associated loss of mitochondrial function, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Oct 13, 2023. (poster)
12. D. Choudhury, N. Rong, N. Rajabian, Y. Wu, P. Mehrotra, P. Lei, **S.T. Andreadis**, Inhibition of Glutaminolysis Restores Age-associated Loss of Mitochondrial Function, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Oct 13, 2023.
13. M.A. Mohamed, C. Rumsey, M. Trebbin, **S.T. Andreadis**, Multifunctional Polyurethane Networks Combining Strength, Toughness, and Fast Autonomous Self-Healing Via the Synergy of Multiple Dynamic Bonds, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Oct 13, 2023. (poster)
14. B. Nasiri, A. Das, D.D. Swartz, **S.T. Andreadis**, Evaluation of regeneration and immune response of functionalized cell-free arterial grafts in a large animal model, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Oct 13, 2023. (poster)

15. A.K. Podder, M.A. Mohamed, G. Tseropoulos, R. Seidman, F. Sim, **S.T. Andreadis**, Engineering cell-instructive injectable hydrogels with pro-survival signals to promote oligodendrocyte progenitor cell transplantation for demyelinating diseases, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Oct 12, 2023.
16. D. Choudhury, N. Rajabian, I. Ikhapoh, S. Shahini, R. Thiyagarajan, A. Shahini, A. Stablewski, S. Udin, K. Personius, B.R. Troen, **S.T. Andreadis**, "Metabolic Rewiring of Aged Myoblasts Restores Regenerative Potential of Progeric Skeletal Muscle". *American Aging Association Annual Meeting: Current Topics Leading Research in Aging*. June 2023. Oklahoma City, OK.
17. D. Choudhury, N. Rong, N. Rajabian, G. Tseropoulos, Y. Wu, P. Mehrotra, R. Thiyagarajan, K. Seldeen, B.R. Troen, P. Lei, **S.T. Andreadis**, "Inhibition of Glutaminolysis Restores Age-associated Loss of Mitochondrial Function". *American Aging Association Annual Meeting: Current Topics Leading Research in Aging*. June 2023. Oklahoma City, OK.
18. A.K. Podder, M.A. Mohamed, G. Tseropoulos, R. Seidman, J.J. Polanco, F. Sim, **S.T. Andreadis**, Engineering Supramolecular Shear-Thinning Hydrogels to Promote Oligodendrocyte Progenitor Cell Transplantation for Demyelinating Diseases, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 17, 2022.
19. P. Mehrotra, S. Shahini, N. Rajabian, Y. Zhang, J. Wang, S. Liu, J. Jablonski, S. Udin, **S.T. Andreadis**, K. Personius, Engineering the Skeletal Muscle for Improved Innervation after Peripheral Nerve Injury, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 16, 2022.
20. D. Choudhury, N. Rong, N. Rajabian, G. Tseropoulos, P. Mehrotra, R. Thiyagarajan, P. Lei, I. Ikhapoh, K. Seldeen, B.R. Troen, **S.T. Andreadis**, Mitochondrial Mechanisms Underlying NANOG Induced Reversal of Aging, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 16, 2022.
21. Bita Nasiri, T. Yi, R.J. Smith Jr., Y. Wu, C. Breuer, **S.T. Andreadis**, Monocyte Recruitment for Vascular Tissue Regeneration, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 15, 2022.
22. N. Rajabian, I. Ikhapoh, S. Shahini, R. Thiyagarajan, A. Shahini, J. Kulczyk, S. Udin, A. Stablewski, K. Seldeen, B.R. Troen, K. Personius, **S.T. Andreadis**, Metabolic Rewiring of Aged Myoblasts and Restores Regenerative Potential of Progeric Skeletal Muscle, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 15, 2022.
23. P. Mehrotra, I. Ikhapoh, P. Lei, G. Tseropoulos, Y. Zhang, J. Wang, S. Liu, **S.T. Andreadis**, Skin Tissue Derived Neural Crest Stem Cells and Metabolic Requirements for Multipotency, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Phoenix, AZ, Nov 15, 2022.
24. D. Choudhury, N. Rong, I. Ikhapoh, N. Rajabian, G. Tseropoulos, Y. Wu, R. Thiyagarajan, P. Mehrotra, K. Seldeen, B.R. Troen, P. Lei, **S.T Andreadis**, Inhibition of Glutaminolysis restores Mitochondrial Function in Aged Stem Cells, *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, TX, Oct 16, 2022.
25. P. Mehrotra, N. Rajabian, S. Shahini, Y. Zhang, J. Wang, S. Liu, J. Jablonski, S.B. Udin, **S.T. Andreadis**, K. Personius, Engineering the Skeletal Muscle for Improved Innervation After Peripheral Nerve Injury, *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, TX, Oct 16, 2022.
26. D. Choudhury, N. Rong, R. Thiyagarajan, N. Rajabian, Y. Wu, A.K. Podder, P. Mehrotra, K. Seldeen, B.R. Troen, **S.T Andreadis**, Proline Restores Mitochondrial Function and Reverses Aging Hallmarks in Aged Stem Cells (Poster), *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, TX, Oct 14, 2022.

27. B. Nasiri, T. Yi, Y. Wu, R.J. Smith Jr., A.K. Podder, C.K. Breuer, **S.T. Andreadis**, Capture of Circulating Monocytes for Vascular Regeneration, *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, TX, Oct 14, 2022.
28. M.A. Mohamed, L. Yan, A. Shahini, N. Rajabian, A. Jafari, **S.T. Andreadis**, Y. Wu, C. Cheng, Well-defined pH-Responsive Self-Assembled Block Copolymer for Effective Co-delivery of Doxorubicin and Antisense Oligonucleotide to Breast Cancer Cells. *Division of Colloid and Surface Chemistry, Synthetic Amphiphiles and Formulations for the Delivery of Drugs, Nucleic Acids and Proteins Session, ACS National Meeting,* San Diego, United States, March, 2022.
29. M.A. Mohamed, **S.T. Andreadis**. Bio-inspired Autonomous Self-healing Elastomers for Tissue Engineering. *Division of Polymer Chemistry, Engineering Functionality into Bio(mimetic) Polymers session, ACS National Meeting*, San Diego, United States, March, 2022.
30. G. Tseropoulos, P. Mehrotra, M.A. Mohammed, E. Wilson, J.J. Polanco, N.P. Gao, V.K. Bajpai, A. Koontz, R. Gunawan, F.J. Sim, L.M. Feltri, M.E. Bronner and **S.T. Andreadis**, From Skin to Nervous System – Epidermal Neural Crest Stem Cells, a Novel Autologous Candidate for Therapeutic Applications, *Stem Cell Bioengineering Session*, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Virtual Meeting, Nov 16, 2020.
31. G. Tseropoulos, M.A. Mohammed, E. Wilson, L.M. Feltri, and **S.T. Andreadis**, Immobilized NRG1-Fc Enhances Differentiation of Human Epidermal Neural Crest to Schwann Cells and Promotes Radial Sorting, *Biomaterial Scaffolds for Tissue Engineering Session*, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Virtual Meeting, Nov 16, 2020.
32. G. Tseropoulos, M.A. Mohammed, E. Wilson, L.M. Feltri, **S.T. Andreadis,** Promoting Schwann Cell Differentiation through Immobilized Growth Factors on Biomaterial Substrates (Poster), *The International Society of Stem Cell Research Annual Meeting (ISSCR)*, Virtual Meeting, June 25, 2020.
33. R.J. Smith Jr., B. Nasiri, J. Kann, D. Yergeau, D.D. Swartz, **S.T. Andreadis**, Monocytes participate in the endothelialization of arterial vascular grafts, *Tissue Engineering and Regenerative Medicine International Society (TERMIS AMERICAS)*, Orlando, FL, Dec 5, 2019.
34. S.M. Boroujeni, G. Tseropoulos, P. Lei, **S.T. Andreadis**, Derivation of Neural Crest Stem Cells from Human Epidermis of Aged Donors, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Philadelphia, PA, Oct 19, 2019.
35. A. Shahini, N. Rajabian, D. Choudhury, K Vydiam, T. Nguyen, T. Santarelli, I. Ikapolah, Y. Zhang, S. Liu, H. Pletts, A. Stablewski, R. Thiyagarajan, Y. Redae, S. Kenneth, B.R. Troen, P. Lei, **S.T. Andreadis**, NANOG Expression Ameliorates the Hallmarks of Aging in Skeletal Muscle Progenitors, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Philadelphia, PA, Oct 18, 2019.
36. N. Rajabian, A. Shanini, M. Asmani, K. Vydiam, D. Choudhury, T. Nguyen, I. Ikhapoh, P. Lei, R. Zhao, **S.T. Andreadis**, Bioengineered senescent skeletal muscle tissue model for assessing therapeutic compounds, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Philadelphia, PA, Oct 18, 2019.
37. R.Z. Samuel, P. Lei, K. Nam, O.J. Baker, **S.T. Andreadis**, Spatial Delivery of FGF-7 and FGF-10 via Laminin-111 Peptide Conjugated Fibrin Hydrogels Controls the Branching Phenotype in Parotid Gland Cell Clusters, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Philadelphia, PA, Oct 18, 2019.

38. G. Tseropoulos, S. Moghadasi Boroujeni, P. Mehrotra, A. Koontz, J.J. Polanco, N.P. Gao, V.K. Bajpai, R. Gunawan, F.J. Sim, M.E. Bronner, **S.T. Andreadis,** From Skin to Nervous System: Keratinocyte Derived Neural Crest Stem Cells, An Autologous Multipotent Cell Source for Neurodegenerative Disease, *The International Society of Stem Cell Research Annual Meeting (ISSCR),* Los Angeles, CA, June 28, 2019.
39. A. Shahini, N. Rajabian, D. Choudhury, K. Vydiam, T. Nguyen, I. Ikapolah, P. Lei, **S.T. Andreadis**, NANOG Expression Reverses the Hallmarks of Aging, *The International Society of Stem Cell Research Annual Meeting (ISSCR),* Los Angeles, CA, June 27, 2019.
40. A. Shahini, N. Rajabian, D. Choudhury, K. Vydiam, T. Nguyen, T. Santarelli, I. Ikapolah, P. Lei, **S.T. Andreadis**, NANOG Expression Reverses the Ameliorates Hallmarks of Aging, *American Aging Association 48th Annual Meeting (AGE),* San Francisco, CA, May 30 - June 2, 2019.
41. N. Rajabian, A. Shanini, M. Asmani, K. Vydiam, D. Choudhury, T. Nguyen, P. Lei, R. Zhao, **S.T. Andreadis**, Bioengineered senescent skeletal muscle tissue model for assessing therapeutic compounds, *American Aging Association 48th Annual Meeting (AGE),* San Francisco, CA, May 30 - June 2, 2019.
42. Y. Liu, S. Row and **S.T. Andreadis**, Cadherin 11 Modulate Fibroblast Growth Via Cooperation with Platelet Derived Growth Factor Receptor Beta, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Nov 1, 2018.
43. G. Tseropoulos, S.M. Boroujnei, V.K. Bajpai and **S.T. Andreadis**, From Skin to Nervous System: Experimental and Bioinformatics Approaches Investigating Signaling in Neural Crest Stem Cells from Interfollicular Human Epidermis, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 31, 2018.
44. N. Rong, P. Mistriotis, X. Wang, G. Tseropoulos, N. Rajabian and **S.T. Andreadis**, NANOG Restores Collagen Type III Production in Aged Stem Cells, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 29, 2018.
45. S.M. Boroujnei, G. Tseropoulos, S.R. Selvam, P. Lei and **S.T. Andreadis**, Neural Crest Stem Cells from Human Epidermis Skin Tissue, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 29, 2018.
46. R. Smith Jr., Bita Nasiri, Tai Yi, Christopher Breuer, Stelios T. Andreadis, Surface Modifications of Small Diameter Tissue Engineered Vessels In Vivo: Immunological and Healing Response Variations *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 29, 2018.
47. A. Shahini, D. Choudhury, K. Vydiam, N. Rajabian, T. Nguyen, P. Lei and **S.T. Andreadis**, NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 29, 2018
48. R. Smith Jr., D.D. Swartz, **S.T. Andreadis**, The Role of Circulating Monocytes in the Endothelium Regeneration of Cell-Free Vascular Grafts, *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Pittsburgh, PA, Oct 29, 2018.
49. Na Rong, Panagiotis Mistriotis, Xiaoyan Wang, Georgios Tseropoulos, Nika Rajabian, **S.T. Andreadis** , NANOG rejuvenates the impaired Collagen expression with aging through directly binding to SMADs promoters and proteins, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, Oct 20, 2018.
50. R. Smith Jr., T. Yi, B. Nasiri, C. Breuer, **S.T. Andreadis**, Immunological and Healing Response Variations in Small Diameter Tissue Engineered Blood Vessels with Differing Surface Modifications, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, Oct 19, 2018.

51. G. Tseropoulos, S. Moghadasi Boroujeni, V. K. Bajpai, **S.T. Andreadis**, Investigating The FGF2- And IGF1- Mediated Signaling On Human Epidermal Interfollicular Neural Crest Stem Cells Utilizing Experimental And Bioinformatics Approaches, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, Oct 19, 2018.
52. S. Moghadasi Boroujeni, G. Tseropoulos, S. Selvam, P. Lei, **S.T. Andreadis,** Derivation of Adult Neural Crest Stem Cells from Human Epidermal Keratinocytes, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, Oct 19, 2018.
53. Y. Liu, S. Row, S. Agarwal, **S.T. Andreadis**, Cadherin 11 Modulate Fibroblast Growth Via Cooperation with Platelet Derived Growth Factor Receptor Beta, *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, Oct 19, 2018.
54. A. Shahini, K. Vydiam, D. Choudhury, N. Rajabian, M. Asmani, P. Lei, R. Zhao, **S.T. Andreadis**, NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts, *American Aging Association (AGE),* Philadelphia, PA, June 28, 2018.
55. K. Nam, C.L. Maruyama, C-S Wang, P. Lei, **S.T. Andreadis**, O.J. Baker, "Laminin-1 peptide conjugated fibrin hydrogels restores salivary gland function", *AADR/CADR Annual Meeting*, Fort Lauderdale, FL, March 21-24, 2018.
56. A. Shahini, D. Choudhury, M. Asmani, R. Zhao, P. Lei and **S.T. Andreadis**, "NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Minneapolis, MN, Nov 01, 2017.
57. Y. Liu, S. Row, S. Agarwal, and **S.T. Andreadis**, "Novel role of Cadherin-11 in cell signaling via direct interaction with the PDGF receptor", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Phoenix, AZ, Oct 14, 2017.
58. G. Tseropoulos, V. Bajpai, L. Kerosuo, K. Cummings, S.M.Boroujeni, P. Lei, S. Selvam, X. Wang, B. Liu, S. Liu, G. Popescu, M. Bronner, and **S.T. Andreadis**, "Investigating The Role Of FGF In Reprogramming Of Epidermal Keratinocytes Towards Neural Crest Fate ", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Phoenix, AZ, Oct 13, 2017. (Poster).
59. A. Shahini, D. Choudhury, M. Asmani, R. Zhao, P. Lei, and **S.T. Andreadis**, "NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Phoenix, AZ, Oct 13, 2017. (Poster)
60. R. Smith Jr. and **S.T. Andreadis**, "Enhanced Capture of Endothelium Regenerating Cells In-vitro and Ex-vivo Using A Combinatorial Approach of Growth Factors", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Phoenix, AZ, Oct 12, 2017. (Poster)
61. A. Shahini, D. Choudhury, K. Vydiam, N. Rajabian, M. Asmani, P. Lei, R. Zhao, **S.T. Andreadis**, NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts, *American Aging Association (AGE),* New York, NY, July 1, 2017.
62. G. Tseropoulos, V. K. Bajpai, L. Kerosuo, K.A. Cummings, X. Wang, P. Lei, B. Liu, S. Liu, G. Popescu, M.E. Bronner and **S.T. Andreadis**, "The Role of FGF2 in Reprogramming of Epidermal Keratinocytes Toward Neural Crest", *International Society for Stem Cell Research (ISSCR) Annual Meeting,* Boston, MA, June 13-17, 2017. (Poster).
63. A. Shahini, D. Choudhury, M. Asmani, R. Zhao, P. Lei, **S.T. Andreadis**, "NANOG Restores the Myogenic Differentiation Potential of Senescent Myoblasts", *46th Annual Conference of the American Aging Association (AGE)*, New York, NY, June 10-12, 2017.
64. G. Tseropoulos, S. Bogadasi, V. K. Bajpai, L. Kerosuo, K.A. Cummings, X. Wang, P. Lei, B. Liu, S. Liu, G. Popescu, M.E. Bronner and **S.T. Andreadis**, "The Role of FGF2 in Reprogramming of Epidermal Keratinocytes Toward Neural Crest", *New York Stem Cell Science (NYSTEM) Meeting*, New York, NY, May 11-12, 2017. (Poster)

65. A. Shahini, D. Choudhury, M. Asmani, R. Zhao, P. Lei, S.T. Andreadis, "Nanog Expression Restores the Regenerative Capacity of Senescent Myoblasts", *New York Stem Cell Science (NYSTEM) Meeting*, New York, NY, May 11-12, 2017. (Poster)
66. R. Smith Jr., D.D. Swartz, and **S.T. Andreadis,** "Directing Vascular Regeneration In-Situ", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, 2016.
67. A. Shahini, P. Mistriotis, M. Asmani, R. Zhao and **S.T. Andreadis**, "NANOG Restores the Impaired Contractile Function of Senescent Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, 2016.
68. N. Rong, P. Mistriotis, X. Wang, G. Tseropoulos and **S.T. Andreadis,** "NANOG Rejuvenates the Impaired Extracellular Matrix Expression in Senescent Cells and Thus Restores the Decreased Mechanical Properties of Engineered Tissues", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, 2016. *(Poster)*
69. Y. Liu, K. Seldeen, B. Troen, S. Row, S. Agarwal and **S.T. Andreadis,** "Novel Role of Cadherin 11 in Extracellular Matrix Synthesis and Muscular Physiology", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, 2016.
70. V. K. Bajpai, L. Kerosuo, K.A. Cummings, G. Tseropoulos, X. Wang, P. Lei, B. Liu, S. Liu, G. Popescu, M.E. Bronner and **S.T. Andreadis**, "The Role of FGF2 in Reprogramming of Epidermal Keratinocytes Toward Neural Crest", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, 2016.
71. R. Smith Jr., D.D. Swartz, and **S.T. Andreadis,** "Directing Vascular Regeneration In-Situ", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Minneapolis, MN, Oct 6, 2016.
72. A. Shahini, P. Mistriotis, M. Asmani, R. Zhao, and **S.T. Andreadis,** "Improving the Contractile Properties of Mesenchymal Stem Cells by Expressing NANOG", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Minneapolis, MN, Oct 7, 2016.
73. N. Rong, P. Mistriotis, X. Wang, G. Tseropoulos, and **S.T. Andreadis,** "NANOG Restores the Effects of Senescence on Extracellular Matrix Deposition", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Minneapolis, MN, Oct 8, 2016.
74. Y. Liu, K. Seldeen, S. Row, B. Troen, S. Agarwal, and **S.T. Andreadis,** "Novel Role of Cadherin 11 in Extracellular Matrix Synthesis and Muscular Physiology", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Minneapolis, MN, Oct 8, 2016.
75. Liu, S. Row, S. Alimperti, T.A. George, S. Agarwal and **S.T. Andreadis**, "Cadherin-11 Regulates Mechanical Properties of Tissues and Collagen and Elastin Synthesis in-Vivo and in-Vitro", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Salt Lake, Utah, 2015.
76. N. Rong, P. Mistriotis, X. Wang, G. Tseropoulos, and **S.T. Andreadis**, "Nanog Restores the Impaired Extracellular Matrix Synthesis and Mechanical Strength in Senescent Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Salt Lake, Utah, 2015.
77. V.K. Bajpai, X. Wang, R. Zeiger and **S.T. Andreadis**, "Exploring the Myelinogenic Potential of Human Keratinocytes Derived Neural Crest Cells: Implications for Demyelinating Diseases", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Salt Lake, Utah, 2015.
78. S. Row, M.T. Koobatian, A. Shahini, C. Koenigsknecht, **S.T. Andreadis,** and D.D. Swartz, "Development of a Hypertensive Ovine Model to Study Implantation of Autologous Arteries and Veins", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Salt Lake, Utah, 2015.

79. P. Mistriotis, X. Wang, N. Rong, A. Shahini, V.K. Bajpai, M. Asmani, R. Zhao, **S.T. Andreadis**, "Ectopic Expression of NANOG Restores the Actin Filamentous Organization and Contractile Capacity of Senescent Cells", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Salt Lake, Utah, 2015.
80. V.K. Bajpai, X. Wang, R. Zeiger, and **S.T. Andreadis**, "Human Keratinocytes Derived Neural Crest Cells: An Untapped Source of Myelinogenic Schwann Cells for Demyelinating Diseases", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Tampa, FL, Oct 7-9, 2015.
81. S. Row, M.T. Koobatian, A. Shahini, C. Koenigsknecht, **S.T. Andreadis**, D.D. Swartz, "Development of a Hypertensive Ovine Model to Study Vascular Graft Implantation", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Tampa, FL, Oct 7-9, 2015.
82. Y. Liu, S. Row, S. Alimperti, A.T. George, S.K. Agarwal, **S.T. Andreadis**, "Cadherin-11 Regulates Collagen and Elastin Synthesis in-vivo and in-vitro by Activating TGF-β and ROCK Pathway", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Tampa, FL, Oct 7-9, 2015.
83. P. Mistriotis, X. Wang, N. Rong, A. Shahini, V.K. Bajpai, M. Asmani, R. Zhao, **S.T. Andreadis**, "Nanog restores the actin polymerization capacity of senescent cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Tampa, FL, Oct 7-9, 2015.
84. N. Rong, P. Mistriotis, X. Wang, G. Tseropoulos and **S.T. Andreadis**, "Nanog restores the effects of senescence on extracellular matrix molecule expression", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Tampa, FL, Oct 7-9, 2015.
85. V.K. Bajpai, L. Kerosuo, K. Cummings, G. Popescu, M. Bronner and **S.T. Andreadis,** "Direct Reprogramming of Skin Keratinocytes into Functional Neural Crest Fate", *International Society of Stem Cell Research (ISSCR)*, Stockholm, Sweden, June 26, 2015.
86. C. Maruyama, J.W. Nelson, N.J. Leigh, A.D. McCall, R.E. Mellas, Lei P., **Andreadis, S.T.** and Baker, O.J., "hHF-MSC Conditioned Media Enhances Branching Morphogenesis in Mouse Submandibular Glands", *American Association for Dental Research (AADR) Meeting,* Tampa, Florida, March, 2015.
87. M.T. Koobatian, S. Row, R. Smith Jr., **S.T. Andreadis** and D.D. Swartz, "Development of an A-Cellular Vascular Graft Capable of Complete Host Integration", *Tissue Engineering and Regenerative Medicine International Society (TERMIS)*, Washington, DC, Dec 15, 2014.
88. S. Row, S. Alimperti, M.T. Koobatian, Y. Liu, T.A. George, S. Agarwal and **S.T. Andreadis,** "Cadherin-11 Directs Mesenchymal Stem Cell Differentiation and Regulates Extracellular Matrix Production and Mechanical Properties of Myogenic Tissues in-Vivo and in Vitro", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 1, 2014.
89. M.T. Koobatian, S. Row, R. Smith Jr., **S.T. Andreadis** and D.D. Swartz, "Development of an a-Cellular Off the Shelf Vascular Graft", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 18, 2014.
90. R. Smith Jr., M.T. Koobatian, D.D. Swartz and **S.T. Andreadis**, "VEGF Mediated Capture of Endothelial Cells Under Flow", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 18, 2014.
91. P. Mistriotis, M.-S. Liang, L.G. Karacosta and **S.T. Andreadis**, "Nanog Synergizes with the Myogenic Transcription Factor Machinery and Restores the Lost Stem Cell Function", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 17, 2014.
92. V.K. Bajpai, P. Mistriotis, Z. Chamanzar, R. Carpenter, and **S.T. Andreadis,** "Biofabrication of Robust Tissue Engineered Vascular Media Employing Doxycycline Treatment", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 17, 2014.

93. V.K. Bajpai and **S.T. Andreadis,** "Direct Reprogramming of Skin Derived Stem Cells into Functional Neural Crest Stem Cell Fate", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, Atlanta, GA, Nov 17, 2014.
94. P. Mistriotis, M. Liang, L. Karacosta, and **S.T. Andreadis,** "Nanog Restores the Lost Myogenic Capacity of Senescent Stem Cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 25, 2014.
95. V.K. Bajpai, and **S.T. Andreadis,** "Direct Conversion of Skin Stem Cells into Functional Neural Crest Fate", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 25, 2014.
96. S. Row, S. Alimperti, M. Koobatian, Y. Liu, T. George, S. Agarwal, and **S.T. Andreadis,** "Cadherin-11 Directs Mesenchymal Stem Cell Differentiation and Regulates Extracellular Matrix Production and Mechanical Properties of Myogenic Tissues in-vivo and in vitro", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 24, 2014.
97. V. Bajpai, P. Mistriotis, Z. Chamanzar, R. Carpenter, **and S.T. Andreadis,** "Fabrication of Highly Vasoreactive and Robust Tissue Engineered Vascular Media Using Doxycycline Treatment: Implication for Vascular Tissue Engineering", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 23, 2014.
98. M. Koobatian, R. Smith, S. Row, **S.T. Andreadis,** and D. Swartz, "Acellular Small Diameter Vascular Graft Evaluated In a Pre-clinical Animal Model", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 23, 2014.
99. R. Smith Jr., M. Koobatian, D. Swartz, and **S.T. Andreadis,** "Capture of VEGFR-expressing Stem Cells under Flow", *Annual Meeting of the Biomedical Engineering Society (BMES)*, San Antonio, Oct 23, 2014.
100. R. Padmashali, M. Liang, P. Mistriotis and **S.T. Andreadis,** "Lentiviral Arrays for High-Throughput, Live Monitoring Gene and Pathway Activation during Stem Cell Differentiation", Microtechnologies & High Throughput Screening, *4th International Conference on Stem Cell Engineering,* (co-sponsored by SBE and ISSCR), Coronado, CA, March 19, 2014.
101. P. Mistriotis and **S.T. Andreadis,** "Nanog Reverses the Effects of Senescence on Proliferation and Myogenic Differentiation of Human Mesenchymal Stem Cells", *4th International Conference on Stem Cell Engineering,* (co-sponsored by SBE and ISSCR), Coronado, CA, March 16, 2014 (poster and rapid fire presentation).
102. S. Alimperti, H. You, T.A. George, S. Agarwal and S.T. **Andreadis,** "Directing Stem Cell Differentiation By Engineering Cell-Cell Adhesion Pathways", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 7, 2013.
103. S. Alimperti, H. You, T.A. George, S. Agarwal and S.T. **Andreadis,** "OB-Cadherin Regulates Mesenchymal Stem Cell Differentiation Into Smooth Muscle Cells and Development of Contractile Function in Vivo", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 7, 2013.
104. S.Y. Son, M-S. Liang, P. Lei and **S.T. Andreadis**, "Nanog Transient Overexpression With Optimized Magnetofection to Reverse the Effects of Organismal Aging On Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 6, 2013.
105. S. Row, H-F. Peng, E.M. Schlaich, **S.T. Andreadis,** D.D. Swartz, "Maturation of Implantable Vascular Grafts in An Ovine Model Using Small Intestinal Sub-Mucosa: Do We Need Pre-Seeding of Smooth Muscle Cells?", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 6, 2013.
106. P. Mistriotis, M. Liang and **S.T. Andreadis**, "Ectopic Expression of Nanog Up-Regulates SRF and Reverses the Loss of Myogenic Differentiation Capacity of human Mesenchymal

Stem Cells Due to Senescence", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 6, 2013.

107. M.-S. Liang, S.Y. Son, S. Sinha and **S.T. Andreadis** "Engineering Nanog Protein for Effective Protein Transduction: A Possible Alternative to Reverse the Effects of Organismal Aging On Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 5, 2013.
108. M.T. Koobatian, M-S. Liang, D.D. Swartz and **S.T. Andreadis,** "Comparing the Effects of Mechanical Stimulation On Bone Marrow and Hair-Follicle Mesenchymal Stem Cells: Vascular Tissue Engineering", *Annual Meeting of the American Institute of Chemical Engineers (AIChE)*, San Francisco, CA, November 4, 2013.
109. P. Mistriotis, M. Liang and **S.T. Andreadis**, "Nanog Enhances the Proliferation and Reverses the Effect of Senescence on Myogenic Differentiation of human Mesenchymal Stem Cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, September 26, 2013.
110. M.-S. Liang, M. Koobatian, D. D. Swartz and **S.T. Andreadis**, "Synergistically Providing Cyclic Mechanical Stimulation and Local TGF-β1 Delivery Enhances Mechanical Properties and Uniformity of the Fibrin Vascular Construct", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Sep 25, 2013.
111. S. Row, H. Peng, E.M. Schlaich, C. Koenigsknecht, D.D Swartz and **S.T. Andreadis**, "Time Course of Healing and Maturation of Implantable Vascular Grafts in the Arterial System of an Ovine Model: Do We Need Cells in the Vascular Wall?", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, September 26, 2013.
112. S. Alimperti, S. Row, S. Agrawal and **S.T. Andreadis**, "Directing mesenchymal stem cell fate decisions by engineering cell-cell adhesion pathways", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, September 25, 2013.
113. S. Alimperti, H. You, T. George, S. Agrawal and **S.T. Andreadis,** "OB-Cadherin Regulates Mesenchymal Stem Cell Differentiation into Smooth Muscle Cells and Development of Contractile Function in Vivo", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, September 25, 2013.
114. S. Son, M.-S. Liang, P. Lei and **S.T. Andreadis**, "Non-viral DNA Delivery Approach for High-Efficiency Nanog Transient Overexpression in Mesenchymal Stem Cells to Reverse the Effects of Organismal Aging", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, Sep 25, 2013.
115. K. Maxwell, M-S. Liang, D. Swartz, and **S. Andreadis**, "Differential response of mesenchymal stem cells from different anatomic locations to long-term culture and mechanical stimulation", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Seattle, WA, September 27, 2013.
116. S. Alimperti and **S.T. Andreadis**, "Cell-Cell Contact Regulates Myogenic Fate Differentiation of Mesenchymal Stem Cell Through OB-Cadherin", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 29, 2012.
117. H. You and **S.T. Andreadis**, "JNK Regulates Rigidity-Dependent Adherence Junction Formation of Epithelia in Vivo and in Vitro", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 29, 2012.
118. J. Moharil, P. Mistriotis, H. You, P. Lei, J. Tian and **S.T. Andreadis**, "High Throughput Monitoring of Pathway Activation Upon Ectopic Expression of Nanog in Human Mesenchymal Stem Cells Using Lentiviral Arrays, *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 30, 2012.

119. R. Padmashali, M. Liang, P. Mistriotis and **S.T. Andreadis**, "Live-Cell Screens for Studying Regulatory Networks in Human Mesenchymal Stem Cell Differentiation", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 31, 2012.
120. **S. Row**, E.M. Schlaich, H.F. Peng, D.D. Swartz and **S.T. Andreadis**, "Implantation of Vascular Grafts Made From Small Intestinal Sub-Mucosa and Hair Follicle Stem Cells in an Ovine Animal Model", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 31, 2012.
121. V.K. Bajpai and **S.T. Andreadis**, "Human Induced Pluripotent Stem Cells Differentiate Into Contractile Vascular Smooth Muscle Fate Via Mesenchymal Stem Cell Intermediates: Implication for Cardiovascular Regeneration", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 31, 2012.
122. J. Han, P. Mistriotis and **S.T. Andreadis**, "Stem Cell Senescence: Nanog Reverses the Effects of Organismal Aging On Proliferation and Myogenic Differentiation Potential of Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, October 31, 2012.
123. R. Padmashali, H. You and **S.T. Andreadis,** "Adherens Junctions Formation Prevents Lentiviral Entry", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, November 1, 2012.
124. M. Liang, M.T. Koobatian, D.D. Swartz and **S.T. Andreadis**, "Development of Biomimetic Environments with Appropriate Chemical and Mechanical Cues for Cells in Bioengineered Vascular Grafts", *Annual Meeting of the American Institute of Chemical Engineers,* Pittsburgh, PA, November 1, 2012.
125. S. Row, E. Schlaich, H.F. Peng, D.D. Swartz and **S.T. Andreadis**, "Implantation of Vascular Grafts from Hair Follicle Stem Cells in the Arterial System of an Ovine Animal Model", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 27, 2012.
126. J. Moharil, P. Mistriotis, H. You, P. Lei, J. Tian, and **S.T. Andreadis**, "Lentiviral Arrays for High Throughput Monitoring of Pathway Activation in Nanog-Expressing Human Mesenchymal Stem Cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 26, 2012.
127. V.K. Bajpai and **S.T. Andreadis**, "Human Pluripotent Stem Cell Differentiate into Smooth Muscle Via Mesenchymal Stem Cell Intermediates", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 26, 2012.
128. H. You, A. Ranganathan and **S.T. Andreadis**, "JNK Regulates Rigidity-dependent Adherence Junction Formation of Epithelia", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 25, 2012.
129. S. Alimperti and **S.T. Andreadis**, "Cell-Cell Contact Controls Myogenic Differentiation of Mesenchymal Stem Cells Through OB-cadherin", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 25, 2012.
130. R. Padmashali, M. Liang, P. Mistriotis and **S.T. Andreadis**, "Using Live Cell Arrays to Develop Gene Regulation Fingerprint for Mesenchymal Stem Cell Differentiation Research", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 25, 2012.
131. P. Mistriotis, M. Liang, J. Han, and **S.T. Andreadis**, "Nanog Reverses the Effect of Senescence on Myogenic Differentiation of Human Mesenchymal Stem Cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Atlanta, GA, October 25, 2012.
132. P. Hayden, C. E. Mankus, P. Lei, G.R. Jackson, J. Bolmarcich, A. Armento, **S. Andreadis**, M. Klausner, "Organotypic *in vitro* human epithelial models with engineered gene knockdown

or mechanistic reporter functions", *Society of Investigative Dermatology Annual Meeting,* Raleigh, NC, May 9-12, 2012.

133. Manzella K., Lei P., **Andreadis, S.T.** and Baker, O.J., "Combination of Fibrin Hydrogels and Matrigel Enhance Par-C10 Acinar Differentiation", *American Association for Dental Research (AADR) Meeting,* Tampa, Florida, March 21-24, 2012.
134. Liang, M., and **Andreadis, S.T.,** "Covalent Immobilization of Transforming Growth Factor- β1 (TGF- β1) for Enhanced Vascular Functionality In Vitro Perhaps Through Prolonged Activation of TGF- β1 Pathway", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 20, 2011
135. Alimperti, S., and **S.T. Andreadis,** "Regulation of Mesenchymal Stem Cell Myogenic Differentiation by Cell-Cell Adhesion: The Role of Cadherins In Differentiation", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 19, 2011.
136. Lei, P., Moharil, J., Tian, J., and **S.T. Andreadis,** "Temporal Gene Expression Profiling In Live Cell Array: Monitoring Mesenchymal Stem Cell Differentiation", *Annual Meeting of the American Institute of Chemical Engineers, Minneapolis,* MN, October 19, 2011.
137. Bajpai, V.K., and **S.T. Andreadis,** "Functional Smooth Muscle Cells Derived from Induced Pluripotent Stem Cells for Cardiovascular Tissue Engineering Applications", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 18, 2011.
138. Han J., **S.T. Andreadis,** "Nanog Reverses the Effects of Donor Aging on Proliferation and Myogenic Differentiation of Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 18, 2011.
139. You H., Ranganathan A, and **S.T. Andreadis**, "JNK Regulates Rigidity-dependent Cross Talk between Focal Adhesion and Adherent Junction", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 17, 2011.
140. Alimperti, S., and **S.T. Andreadis,** "Quantitative Assessment of Cell Signaling Pathways Affecting Stem Cell Differentiation Using Lentiviral Arrays", *Annual Meeting of the American Institute of Chemical Engineers*, Minneapolis, MN, October 16, 2011.
141. Alimperti, S., Lei, P., Tian J., and **S.T. Andreadis,** "Quantitative Assessment of Cell Signaling Pathways Affecting Stem Cell Differentiation Using Lentiviral Arrays", *Biomedical Engineering Society,* Hartford, CT, October 15, 2011.
142. Moharil, J., Lei, P., Tian, J., and **S.T. Andreadis,** "Live Cell Array for Real Time Acquisition of Gene Expression Profiles during Myogenic Differentiation in Mesenchymal Stem Cells", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Hartford, CT, October 15, 2011 (poster).
143. Bajpai, V.K., and **S.T. Andreadis,** "Induced Pluripotent Stem Cell Derived Functional Smooth Muscle Cells for Vascular Tissue Engineering", *Annual Meeting of the Biomedical Engineering Society*, Hartford, CT, October 15, 2011.
144. Han J., and **S.T. Andreadis,** "Neonatal and Adult Mesenchymal Stem Cells for Vascular Tissue Engineering: Effects of Nanog Overexpression on Proliferation and Myogenic Differentiation", *Annual Meeting of the Biomedical Engineering Society (BMES)*, Hartford, CT, October 15, 2011.
145. Liang, M., and Andreadis, S.T., "Genetically engineered TGF-β1 that binds to fibrin and enhances the function of vascular grafts with MSC derived smooth muscle progenitor cells", *Annual Meeting of Biomedical Engineering Society (BMES)*, Hartford, CT, October 13, 2011
146. Peng, H., Schlaich, E.M., Row, S., and **S.T. Andreadis,** "A Novel Ovine ex-vivo Arteriovenous Shunt Model for Testing Vascular Implantability", *Annual Meeting of the Biomedical Engineering Society (BMES),* Hartfort, CT, October 13, 2011 (poster).

147. You, H., Ranganathan, A., and **S.T. Andreadis,** "JNK Phosphorylation Regulates Rigidity-dependent Cross Talk between Focal Adhesion and Adherent Junction", *Annual Meeting of the Biomedical Engineering Society (BMES),* Hartfort, CT, October 13, 2011.
148. H. Peng, E.M. Schlaich, S. Row, D.D. Swartz and S.T. Andreadis, "A novel arterio-venous shunt model for testing tissue engineered vascular grafts from hair follicle stem cells", *NHLBI Symposium on Cardiovascular Regenerative Medicine*, Bethesda, MD, October 4-5, 2011 (poster).
149. H. Peng, E. Schlaich, D. D. Swartz, and **S.T. Andreadis, "**Engineering a functional vascular graft from hair follicle derived smooth muscle cells and small intestinal submucosa", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) Annual Conference and Exposition*, Orlando, FL, December 7, 2010.
150. J. Han, S. Row, D. D. Swartz, and **S.T. Andreadis,** "Effects of Nanog or Oct4 overexpression on proliferation and myogenic differentiation of mesenchymal stem cells for vascular tissue engineering", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) Annual Conference and Exposition*, Orlando, FL, December 6, 2010.
151. P. Lei, J. Tian, J. Moharil, P. Xu, C.P. Schaffer and **S.T. Andreadis**, "Live Cell Array for High-Throughput Study of Real-Time Gene Expression Dynamics: Towards Understanding of Mesenchymal Stem Cell Differentiation", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 10, 2010.
152. R. Padmashali, and **S.T. Andreadis**, "Cell-Controlled and Spatially Localized Gene Delivery with Fibrin-Conjugated VSV-Pseudotyped Lentivirus: Implications for Lentiviral Microarrays", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 10, 2010.
153. M. Liang and **S.T. Andreadis,** "Covalent Conjugation of Transforming Growth Factor-beta1 to Fibrin Hydrogel for Tissue Engineering", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 9, 2010.
154. J. Han, S. Row, D. D. Swartz, and **S.T. Andreadis,** "Mesenchymal Stem Cells for Vascular Tissue Engineering: Effects of Nanog and Oct4 Overexpression On Proliferation and Myogenic Differentiation", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 8, 2010.
155. H. Peng, E. Schlaich, D. D. Swartz, and **S.T. Andreadis, "**Engineering Functional Vascular Media From Hair Follicle Derived Mesenchymal Stem Cells and Small Intestinal Submucosa", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 8, 2010.
156. M. Lee, R. Padmashali, and **S.T. Andreadis**, "JNK-Mediated Regulation of Cell-Cell Adhesion", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 8, 2010.
157. J. Han, S. Row, D. D. Swartz, and **S.T. Andreadis,** "Effects of Nanog and Oct4 Overexpression on Mesenchymal Stem Cells for Vascular Tissue Engineering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 9, 2010.
158. M. Liang and **S.T. Andreadis,** "Covalent Conjugation of Transforming Growth Factor-beta1 to Fibrin Hydrogel for Tissue Engineering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 9, 2010.
159. H. Peng, E. Schlaich, D. D. Swartz, and **S.T. Andreadis,** "Hair Follicle Derived Mesenchymal Stem Cells for Engineering Arterial Substitute", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 9, 2010.
160. M. Lee, and **S.T. Andreadis**, "JNK-mediated Regulation of Adherens Junctions", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 8, 2010.

161. P. Lei, J. Tian, J. Moharil, P. Xu, C. P. Schaffer, and **S. T. Andreadis**, **"**Real-time live cell array for monitoring gene expression in mesenchymal stem cell differentiation**",** *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 7, 2010.
162. R. Padmashali, and **S.T. Andreadis**, "Fibrin-conjugated VSV-G pseudotyped lentiviruses for localized gene delivery and live cell microarray applications", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Austin, TX, October 7, 2010.
163. **S.T.Andreadis**, "Hair follicle mesenchymal stem cells as a source of smooth mu scle cells for engineering mechanically robust and vasoreactive vascular media", *New York State Stem Cell Science (NYSTEM) Awardees Meeting*, May 27, 2010
164. J. Tian, P. Lei, R. Padmashali, X. Peng, **S.T. Andreadis**, "Monitoring real-time gene expression during differentiation of mesenchymal stem cells using high throughput live cell arrays", *New York State Stem Cell Science (NYSTEM) Awardees Meeting*, May 26, 2010
165. J. Tian, S. Allimperti, P. Lei, **S.T. Andreadis,** "Lentiviral Microarrays for High-Throughput and Real-Time Monitoring of Gene Expression Dynamics", *13th Annual Meeting of the American Society of Gene Therapy (ASGT)*, Washington, DC, May 21, 2010.
166. M.H. Lee, R. Padmashali, **S.T. Andreadis**, "The role of JNK in lentivirus gene transfer", *13th Annual Meeting of the American Society of Gene Therapy (ASGT)*, Washington, DC, May 20, 2010.
167. R. Padmashali, P. Lei, **S.T. Andreadis**, "Fibrin-Conjugated Pseudotyped Lentivirus for Cell-Controlled and Spatially Localized Gene Delivery on Microarrayed Surfaces", *13th Annual Meeting of the American Society of Gene Therapy (ASGT)*, Washington, DC, May 21, 2010.
168. J. Tian, S. Alimperti, **S.T. Andreadis**, "Microarray of Lentiviral Reporter Vectors for High-throughput and Real-time Dynamic Gene Expression Profiling", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Pittsburgh, PA, October 10, 2009.
169. R. Padmashali1, **S.T. Andreadis**, "Fibrin-Conjugated Pseudotyped Lentivirus for Cell-Controlled and Spatially-Localized Gene Delivery: Implications for Lentiviral Microarrays", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Pittsburgh, PA, October 9, 2009.
170. J. Han, V. Bajpai, D.D. Swartz and **S.T. Andreadis**, "Mesenchymal Stem Cells for Vascular Tissue Engineering: Effects of Nanog and Sox2 Overexpression on Self-Renewal and Myogenic Differentiation", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Pittsburgh, PA, October 9, 2009.
171. M.H. Lee and **S.T. Andreadis**, "Alpha-catenin is necessary for JNK-mediated regulation of adherens junctions", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Pittsburgh, PA, October 8, 2009.
172. H.F. Peng, J.Y. Liu, J. Han, D.D. Swartz and **S.T. Andreadis**, "Engineering vascular constructs from hair-follicle stem cells and small intestinal submucosa", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Pittsburgh, PA, October 8, 2009.
173. **S.T. Andreadis**, "Hair Follicle Stem Cells for Vascular Tissue Engineering", *1st NYSTEM Meeting, Stem Cell Science in New York State: Emerging Opportunities,* Albany, NY, June 12, 2009.
174. **S.T. Andreadis**, "Multipotent human hair follicle stem cells for vascular tissue engineering", *Vascular Matrix Biology and Bioengineering Conference,* Whistler, British Columbia, Canada, March 16-19, 2009.
175. J. Tian, **S.T. Andreadis,** "Independent and high level dual-gene expression from double promoter lentivirus for high-throughput and real-time dynamic gene expression

profiling", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) Meeting*, San Diego, CA, December 10, 2008.

176. J.Y. Liu, H.F. Peng, J. Tian, S. Gopinath, **S.T. Andreadis,** "Hair follicle is a novel source of mesenchymal stem cells for tissue engineering", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) Meeting*, San Diego, CA, December 9, 2008.

177. J. Han, J.Y. Liu, D.D. Swartz, **S.T. Andreadis**, "Mesenchymal Stem Cells for Vascular Tissue Engineering: Effects of Organismal Aging on Gene Expression Profile and Functionality of Vascular Grafts", *Tissue Engineering and Regenerative Medicine International Society (TERMIS) Meeting*, San Diego, CA, December 8, 2008.

178. J. Tian, **S.T. Andreadis,** "Engineering Vectors for Dual Gene Expression from Independent Promoters for High Throughput Studies", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 21, 2008.

179. S. Raut, P. Lei, R. Padmashali, **S.T. Andreadis,** "Use of Fibrin Hydrogels for Localized and Cell-Controlled Lentiviral Gene Transfer", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 20, 2008.

180. R. Singh, **S.T. Andreadis,** "EGFR Regulates Cell-Cell Adhesion and E-Cadherin Translocation through PKC-Delta", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 20, 2008.

181. L.M. Lugo, **S.T. Andreadis,** "Acellular Dermis Promotes Neovascularization and Epidermal Regeneration: Implications for Wound Healing", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 19, 2008.

182. J. Wang, T. Heckler, B.C. Mei, P. Lei, **S.T. Andreadis**, T.J. Mountziaris, "DNA Hybridization Detection Using Zinc Selenide Nanocrystals as Active Sensors", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 19, 2008.

183. H.F. Peng, J.Y. Liu, J. Han, D.D. Swartz, **S.T. Andreadis,** "Fibrin-Infiltrated Small Intestine Submucosa as a Scaffold for Tissue Engineered Vessels Using Hair-Follicle Derived Smooth Muscle Progenitor Cells", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 19, 2008.

184. M.H. Lee, **S.T. Andreadis,** "JNK Regulates Adherens Junctions by Phosphorylating Beta-Catenin", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 19, 2008.

185. M.H. Lee, R. Padmashali, **S.T. Andreadis,** "JNK Signaling Is Necessary for Lentivirus Gene Transfer", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 19, 2008.

186. P. Lei, R. Padmashali, **S.T. Andreadis,** "Target Cell Controlled and Spatially Arranged Gene Delivery from Fibrin Hydrogels", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 17, 2008.

187. J. Han, J.Y. Liu, D.D. Swartz, **S.T. Andreadis**, "Effect of Organismal Aging on Bone Marrow Derived Smooth Muscle Progenitor Cells", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 17, 2008.

188. J.Y. Liu, H.F. Peng, J. Tian, S. Gopinath, **S.T. Andreadis,** "Direct Differentiation of Human Hair Follicle Stem Cells into Vascular Smooth Muscle Lineage for Cardiovascular Therapy", *Annual Meeting of the American Institute of Chemical Engineers*, Philadelphia, PA, November 17, 2008.

189. J. Han, J.Y. Liu, D.D. Swartz, **S.T. Andreadis**, "Bone Marrow Derived Smooth Muscle Progenitor Cells: Effects of Organismal Aging on Tissue Engineered Vascular

Constructs", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

190. J. Tian, **S.T. Andreadis**, "Consistent and High Level Dual-Gene Expression from a Single Lentiviral Vector", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

191. H.F. Peng, J.Y. Liu, J. Han, D.D. Swartz, **S.T. Andreadis**, "Engineering Vascular Constructs from Hair-Follicle Stem Cells and Fibrin-Infiltrated Small Intestinal Submucosa", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

192. S. Raut, R. Padmashali, P. Lei, **S.T. Andreadis**, "Enhanced, Localized and Cell-Controlled Lentivirus Gene Transfer from Fibrin Hydrogels", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

193. M.H. Lee, **S.T. Andreadis**, "JNK Phosphorylates Beta-Catenin and Regulates Adherens Junctions", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

194. R. Padmashali, P. Lei, **S.T. Andreadis**, "Localized and Cell-Controlled Gene Delivery from Fibrin Hydrogels", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

195. J.Y. Liu, H.F. Peng, S. Goppinath, **S.T. Andreadis**, "Multipotent Human Hair Follicle Stem Cells for Cardiovascular Tissue Engineering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

196. R. Singh, **S.T. Andreadis**, "PKC-Delta Binds to E-Cadherin and Mediates EGF-Induced Cell Scattering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

197. M.H. Lee, **S.T. Andreadis**, "The Role of JNK Signaling in Lentivirus Gene Transfer", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, St. Louis, MO, October 1-4, 2008.

198. J. Tian, P. Lei, S.G. Laychock and **S.T. Andreadis**, "Regulated Secretion of Insulin from Genetically Modified Epidermal Stem Cells for Treatment of Diabetes", *11th Annual Meeting of the American Society of Gene Therapy (ASGT)*, Boston, MA, May 28-June 1, 2008.

199. Liana M. Lugo-Recart and **S.T. Andreadis**, "Fibrin Delivery of Keratinocytes Along with Keratinocyte Growth Factor onto Modified Human Dermis", *3rd Annual Academic Surgical Congress*, Huntington Beach, CA, February 15, 2008.

200. J. Wang, G. Qiu, B.C. Mei, T. Heckler, **S.T. Andreadis**, T.J. Mountziaris, "Zinc Selenide Quantum Dots as Fluorescent Labels for DNA Detection Applications", *Annual Meeting of the American Institute of Chemical Engineers*, Salt Lake City, UT, November 5, 2007.

201. J. Tian, P. Lei, S.G. Laychock and **S.T. Andreadis**, "Regulated secretion of insulin from genetically modified skin cells for treatment of diabetes", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.

202. J.Y. Liu, H.F. Peng and **S.T. Andreadis**, "Follicular stem cells as a source of functional smooth muscle cells for vascular tissue engineering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.

203. M.H. Lee and **S.T. Andreadis**, "JNK signaling is necessary for lentivirus gene transfer", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.

204. Liana M. Lugo-Recart and **S.T. Andreadis**, "In vivo stratification of epidermal tissue on vascularized scaffolds", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.
205. P. Koria, M.H. Lee and **S.T. Andreadis**, "JNK controls cell migration by regulating adherens junctions", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.
206. R. Singh and **S.T. Andreadis**, "PKC-delta binds to E-cadherin and mediates EGF induced cell-scattering", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Los Angeles, CA, September 26-29, 2007.
207. P. Koria, M.H. Lee and **S.T. Andreadis**, "JNK affects epithelial cell migration and wound healing by regulating formation of adherens junctions", *2nd Annual Methods in Bioengineering Conference*, Boston, MA, July 12-13, 2007.
208. J.Y. Liu, D.D. Swartz, H.F. Peng, S.F. Gugino, J.A. Russell, and **S.T. Andreadis**, "Functional tissue-engineered blood vessels from bone marrow stem cells", *2nd Annual Methods in Bioengineering Conference*, Boston, MA, July 12-13, 2007.
209. J.Y. Liu, H.F. Peng, D.D. Swartz and **S.T. Andreadis**, "Contractile smooth muscle cells derived from hair follicle stem cells" *Tissue Engineering and Regenerative Medicine Conference and Exposition*, Toronto, June 13-16, 2007.
210. P. Koria and **S.T. Andreadis**, "JNK signaling controls wound healing by regulating assembly of adherens junctions" *Tissue Engineering and Regenerative Medicine Conference and Exposition*, Toronto, June 13-16, 2007.
211. J. Tian, P. Lei, S.G. Laychock and **S.T. Andreadis**, "Controlled secretion of insulin from gene modified tissue engineered skin for treatment of diabetes" *Tissue Engineering and Regenerative Medicine Conference and Exposition*, Toronto, June 13-16, 2007.
212. R. Singh and **S.T. Andreadis**, "Intracellular signaling pathways affecting retroviral gene transfer to epithelial cells" *Tissue Engineering and Regenerative Medicine Conference and Exposition*, Toronto, June 13-16, 2007.
213. L. Lugo and **S.T. Andreadis**, "Growth Factor Infiltration into Human Acellular Dermis Promotes Angiogenesis In Vivo" *University at Buffalo, Department of Surgery's Third Annual Research Day*, Buffalo, NY, May 31, 2007.
214. L. Lugo and **S.T. Andreadis**, "Fibrin Delivery of Keratinocyte Growth Factor Promotes Epidermal Proliferation of Bioengineered Skin Substitutes" *University at Buffalo, Department of Surgery's Third Annual Research Day*, Buffalo, NY, May 31, 2007.
215. L. Lugo and **S.T. Andreadis**, "Growth Factor Infiltration into Human Acellular Dermis Promotes Angiogenesis In Vivo" *University at Buffalo Medical School Scholarly Exchange Day,* Buffalo, NY, May 4, 2007.
216. J.Y. Liu, D.D. Swartz, S.F. Guigino, J.A. Russell and **S.T. Andreadis**, "Engineering of implantable, bi-layered tissue-engineered blood vessels from adult bone marrow stem cells", *Annual Meeting of the American Institute of Chemical Engineers*, San Francisco, CA, November 16, 2006.
217. P. Koria, **S.T. Andreadis**, "Migratory and Proliferative effects of KGF are mediated by ERK 1/2 MAPKinase Pathway and CCAAT/enhancer binding proteins", *Annual Meeting of the American Institute of Chemical Engineers*, San Francisco, CA, November 16, 2006.
218. P. Lei, J. Tian, S.G. Laychock and **S.T. Andreadis**, "Regulated production of biologically active insulin from human engineered skin substitutes for treatment of diabetes",

Annual Meeting of the American Institute of Chemical Engineers, San Francisco, CA, November 15, 2006.

219. R. Singh, **S.T. Andreadis**, "EGF Ligands Decrease Retroviral Gene Transfer through Protein Kinase C-delta", *Annual Meeting of the American Institute of Chemical Engineers*, San Francisco, CA, November 14, 2006.

220. Jun Wang, S.T. Andreadis and **T.J. Mountziaris**, "Development of Novel Clinical Diagnostic Tools Using Zinc Selenide Quantum Dots as Fluorescent Labels", *Annual Meeting of the American Institute of Chemical Engineers*, San Francisco, CA, November 14, 2006.

221. P. Koria, **S.T. Andreadis**, "Involvement of JNK in cellular trafficking of adherens junction proteins E-cadherin and □-catenin: Implication to cell-cell adhesion", *Annual Meeting of the American Institute of Chemical Engineers*, San Francisco, CA, November 13, 2006.

222. J.Y. Liu, D.D. Swartz, S.F. Guigino, J.A. Russell and **S.T. Andreadis**, "Implantable Tissue Engineered Blood Vessels from Bone Marrow Stem Cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Chicago, IL, October 10-13, 2006.

223. R. Singh, **S.T. Andreadis**, "EGFR signaling pathways affect retroviral gene transfer to epithelial cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Chicago, IL, October 10-13, 2006.

224. P. Koria, **S.T. Andreadis**, "Distinct c/ebp isoforms mediate KGF-induced migration and proliferation of epithelial cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Chicago, IL, October 10-13, 2006.

225. P. Koria, **S.T. Andreadis**, "Involvement of JNK in endocytosis of adherens junction protein E-cadherin", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Chicago, IL, October 10-13, 2006.

226. J.Y. Liu, L. Yao, D.D. Swartz and **S.T. Andreadis**, "Engineering of implantable tissue-engineered blood vessels from bone marrow stem cells", *1st Annual Methods in Bioengineering Conference*, Boston, MA, July 17-18, 2006.

227. P. Koria and **S.T. Andreadis**, "Distinct C/EBP Isoforms Mediate Integrin Expression and Proliferation of Epidermal Keratinocytes and Bioengineered Skin Substitutes", *1st Annual Methods in Bioengineering Conference*, Boston, MA, July 17-18, 2006.

228. R. Singh, **S.T. Andreadis**, "EGF Ligands Decrease Retroviral Gene Transfer through Protein Kinase C-delta", *American Society of Gene Therapy (ASGT) 9th Annual Meeting*, Baltimore, MD, May 31-June 4, 2006.

229. J. Liu, D.D. Swartz, L. Yao, S.F. Guigino, J.A. Russell and **S.T. Andreadis**, "Vasoreactive Tissue-Engineered Blood Vessels from Bone Marrow Stem Cells", *Regenerate World Congress on Tissue Engineering and Regenerative Medicine,* Pittsburgh, PA, April 25, 2006.

230. P. Koria and **S.T. Andreadis,** "KGF upregulates integrin □5□1 in tissue engineered skin through the ERK 1/2 MAPK pathway", *Regenerate World Congress on Tissue Engineering and Regenerative Medicine,* Pittsburgh, PA, April 25, 2006.

231. P. Lei, A. Ogunade, S.G. Laychock, K.L. Kirkwood and **S.T. Andreadis,** "Gene Modified Insulin-Secreting Tissue Engineered Skin for Treatment of Diabetes", *Regenerate World Congress on Tissue Engineering and Regenerative Medicine,* Pittsburgh, PA, April 25, 2006.

232. Jun Wang, S.T. Andreadis and **T.J. Mountziaris**, "Synthesis, Surface Functionalization, and Clinical Diagnostic Applications of Zinc Selenide Quantum Dots", *Materials Research Society Meeting*, San Francisco, CA, April 20 - 21, 2006

233. P. Koria and **S.T. Andreadis,** "Transcriptional Profiling of Engineered Skin: Mechanistic insights to Epidermal Development and Stratification", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, November 3, 2005.
234. P. Lei, A. Ogunade, S.G. Laychock, K.L. Kirkwood and **S.T. Andreadis,** "High levels of insulin production from genetically modified skin substitutes for treatment of diabetes", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, November 2, 2005.
235. J. Liu, D.D. Swartz, L. Yao and **S.T. Andreadis,** "Functional Tissue-Engineered Blood Vessels Derived-from Bone Marrow Mesenchymal Stem Cells", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, November 2, 2005.
236. L. Yao and **S.T. Andreadis,** "Strength Enhancement for Arterial-Implantable Fibrin Based TEV", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, November 2, 2005.
237. R. Singh and **S.T. Andreadis,** "EGF Receptor Signaling Affects Retroviral Gene Transfer to Primary Epidermal Cells", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, October 31, 2005.
238. P. Koria and **S.T. Andreadis,** "The Role of JNK Signaling in Cell-Cell Adhesion and Differentiation of Epithelial Cells: Implications for Tissue Engineering of Stratified Epithelium", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, October 31, 2005.
239. J. Wang, **S.T. Andreadis** and T.J. Mountziaris, "Synthesis Functionalization and Clinical Diagnostic Applications of Znse Quantum Dots", *Annual Meeting of the American Institute of Chemical Engineers*, Cincinnati, OH, October 31, 2005.
240. P. Koria and **S.T. Andreadis,** "The Role of JNK Signaling in Cell-Cell Adhesion and Differentiation of Epithelial Cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Baltimore, MD, October 1, 2005.
241. P. Lei, A. Ogunade and **S.T. Andreadis,** "Regulated production of mature insulin from gene modified skin equivalents for treatment of diabetes", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Baltimore, MD, September 30, 2005.
242. R. Singh and **S.T. Andreadis,** "Protein kinase C isoforms mediate the effect of EGF on retroviral gene transfer to epithelial cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Baltimore, MD, September 30, 2005.
243. J. Liu, D.D. Swartz, S. Guigino, L. Yao, J.A. Russell and **S.T. Andreadis,** "Vasoreactive tissue-engineered blood vessels from bone marrow derived smooth muscle cells", *Annual Fall Meeting of the Biomedical Engineering Society (BMES)*, Baltimore, MD, September 29, 2005.
244. **S.T. Andreadis,** "Integrin Signaling in Retroviral Gene Transfer to Epithelial Stem Cells", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005
245. **S.T. Andreadis,** "Cell-controlled Release of Keratinocyte Growth Factor Accelerates Wound Healing *in vitro* and *in vivo*", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005
246. **S.T. Andreadis,** "Tissue Engineering of Implantable Small-Diameter Blood Vessels", *2nd International Conference in Tissue Engineering, Crete, Greece,* May 22-24, 2005
247. **S.T. Andreadis,** "Insulin Delivery through Genetically Modified Living Skin Equivalents for Treatment of Diabetes", *ET 2005: Engineering Tissues Conference,* Sea Pines Plantation, Hilton Head, SC, March 9-13, 2005
248. L. Yao, D.D. Swartz, J.A. Russell and **S.T. Andreadis,** "Fibrin-based tissue engineered blood vessels: differential effects of biomaterial and culture parameters on mechanical

strength and vascular reactivity", *ET 2005: Engineering Tissues Conference,* Sea Pines Plantation, Hilton Head, SC, March 9-13, 2005.

249. D.J. Geer, J. Liu, D.D. Swartz and **S.T. Andreadis,** "Cell-Controlled Delivery of Keratinocyte Growth Factor Promotes Wound Healing In Vitro and In Vivo ", *ET 2005: Engineering Tissues Conference,* Sea Pines Plantation, Hilton Head, SC, March 9-13, 2005.

250. R. Singh and **S.T. Andreadis,** "Epidermal and hepatocyte growth factors inhibit retroviral gene transfer to primary keratinocytes by murine leukemia virus", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 11, 2004

251. P. Lei and **S.T. Andreadis,** "Genetically modified tissue engineered skin for insulin delivery", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 10, 2004

252. L. Yao, D.D. Swartz and **S.T. Andreadis,** "Fibrin-based tissue engineered blood vessels: vasoreactive properties and implantation in vivo", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 10, 2004

253. P. Koria and **S.T. Andreadis,** "Keratinocyte growth factor upregulates integrin alpha5-beta1 in epidermal keratinocytes and tissue engineered skin equivalents through the ERK 1/2 MAP kinase pathway", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 10, 2004

254. B.G. Bajaj, R. Singh and **S.T. Andreadis,** "Role of integrins in retroviral gene delivery to human epidermal keratinocytes", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 10, 2004

255. J. Wang, **S.T. Andreadis** and T.J. Mountziaris, "Synthesis and Functionalization of Luminescent II-VI Quantum Dots and their use for Sensing DNA", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 10, 2004

256. D.J. Geer, D.D. Swartz and **S.T. Andreadis,** "Cell-controlled delivery of keratinocyte growth factor accelerates wound healing in vivo", *Annual Meeting of the American Institute of Chemical Engineers*, Austin, TX, November, 9, 2004

257. D.J. Geer, D.D Swartz and **S.T. Andreadis,** "Controlled delivery of keratinocyte growth factor promotes healing of acute and chronic wounds", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 16, 2004.

258. L. Yao, D.D Swartz and **S.T. Andreadis,** "Cell-cell interactions in reactivity and implantation of tissue engineered blood vessels", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 15, 2004.

259. R. Singh and **S.T. Andreadis,** "Growth factor-mediated signaling pathways affect retroviral gene transfer to human epithelial cells", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 15, 2004.

260. P. Lei and **S.T. Andreadis,** "Development of tissue engineered skin for systemic delivery of insulin in vivo", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 14, 2004.

261. P. Koria and **S.T. Andreadis,** "Keratinocyte growth factor upregulates integrin alpha5-beta1 through the ERK1/2 MAP kinase pathway", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 14, 2004.

262. B.G. Bajaj, R. Singh and **S.T. Andreadis,** "Integrin signaling in retroviral gene transfer to epithelial cells", *Annual Fall Meeting of the Biomedical Engineering Society*, Philadelphia, PA, October, 14, 2004.

263. D.J. Geer, P. Lei, D.D. Swartz and **S.T. Andreadis,** "Cell-Controlled Growth Factor and Gene Delivery Enhances Wound Healing in a Novel Model of Tissue Regeneration", *Materials Research Society Meeting,* Boston, MA, December 3, 2003.

264. R. Singh, J.M. Nitsche and S.T. Andreadis "An Integrated Reaction-Transport Model for DNA Surface Hybridization: Implications for DNA Microarrays", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 17, 2003.
265. D.D Swartz, J.A. Russell and **S.T. Andreadis,** "Effects of Mechanical Forces on the Development of Small-diameter Tissue-engineered Blood Vessels", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 17, 2003.
266. P. Koria and **.T. Andreadis,** "Functional Genomics in Tissue Engineering: The Role of the Air-liquid Interface in the Development of Tissue Engineered Skin", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 17, 2003.
267. P. Lei and **S.T. Andreadis,** "Rate-limiting Steps in Retrovirus Synthesis and Assembly", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 18, 2003.
268. D.J. Geer and **S.T. Andreadis,** "Controlled Delivery of Keratinocyte Growth Factor Promotes Wound Healing In Vitro and In Vivo", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 19, 2003.
269. P. Koria and **S.T. Andreadis,** "Keratinocyte Growth Factor Upregulates Integrin alpha5-beta1 in Epidermal Keratinocytes And Tissue Engineered Skin Equivalents", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 20, 2003.
270. Jun Wang, **S.T. Andreadis** and T.J. Mountziaris, "Functionalized ZnSe Quantum Dots as Luminescent Tags in High-Throughput Biological Assays", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 20, 2003.
271. B.G. Bajaj and **S.T. Andreadis,** "Gene Transfer to Human Epidermal Stem Cells with Fibronectin-immobilized Retrovirus", *Annual Meeting of American Institute of Chemical Engineers*, San Francisco, CA, November 21, 2003.
272. R. Singh, J.M. Nitsche and S.T. Andreadis "Biophysics of surface DNA hybridization: implications for DNA microarrays", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 2, 2003.
273. P. Lei and **S.T. Andreadis,** "Production of Recombinant Retrovirus is Limited by mRNA Synthesis and Encapsidation", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 2, 2003.
274. D.D Swartz, J.A. Russell and **S.T. Andreadis,** "Small-diameter Tissue-engineered Vasculature: Effects of Mechanical Forces on Structure and Function", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 2, 2003.
275. P. Koria and **.T. Andreadis,** "Functional Genomics to Understand Development of Tissue Engineered Skin", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 3, 2003.
276. D.J. Geer and **S.T. Andreadis,** "Cell-Controlled Release of Keratinocyte Growth Factor Promotes Healing of Skin Wounds", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 3, 2003.
277. B.G. Bajaj and **S.T. Andreadis,** "Selective Transduction of Human Epidermal Stem Cells with Fibronectin-Immobilized Retrovirus", *Annual Fall Meeting of the Biomedical Engineering Society*, Nashville TN, October, 3, 2003.
278. B.G. Bajaj, S. Behshad, P. Lei and **S.T. Andreadis**, "Gene transfer to human epidermal stem cells with fibronectin-immobilized retrovirus", Gordon Research Conference, Epithelial Differentiation and Keratinization, Tilton, NH, July 13-18, 2003.
279. B.G. Bajaj and **S.T. Andreadis**, "Retrovirus gene transfer to epidermal stem cells: the role of integrins and extracellular matrix", *American Chemical Society 225th Meeting*, New Orleans, LA, March 23-27, 2003.

280. P. Koria, D. Brazeau, P. Hayden & **S.T. Andreadis,** "Functional genomics in tissue engineering: gene expression profile of engineered skin equivalents subjected to barrier disruption", *American Chemical Society 225th Meeting*, New Orleans, LA, March 23-27, 2003.
281. D.J. Geer and **S.T. Andreadis**, "Development of in vitro and in vivo models of wound healing based on engineered tissues: a novel role of fibrin in wound healing", *American Chemical Society 225th Meeting*, New Orleans, LA, March 23-27, 2003.
282. B. G. Bajaj and **S.T. Andreadis**, "Retroviral gene transfer to epidermal stem cells: implications for tissue engineering", *Engineering Tissue Growth International Conference & Exposition (ETG)*, Pittsburgh, PA, March 17-20, 2003.
283. P. Koria, D. Brazeau, P. Hayden & **S.T. Andreadis,** "Functional genomics in tissue engineering: gene expression profiles of tissue engineered skin subjected to barrier disruption", *Engineering Tissue Growth International Conference & Exposition (ETG)*, Pittsburgh, PA, March 17-20, 2003.
284. D.D. Swartz, J. Russell, **S.T. Andreadis,** "Tissue engineering of small diameter functional vessels: effects of pulsatile forces on vessel reactivity", *Engineering Tissue Growth International Conference & Exposition (ETG)*, Pittsburgh, PA, March 17-20, 2003.
285. D.D. Swartz, J. Russell, **S.T. Andreadis,** "Tissue-engineering of functional small-diameter vessels", *Tissue Engineering Meeting*, Cold Spring Harbor Laboratory, November 21-24, 2002.
286. B.G. Bajaj & **S.T. Andreadis,** "Retroviral gene transfer of epidermal stem cells on extracellular matrix", *Tissue Engineering Meeting*, Cold Spring Harbor Laboratory, November 21-24, 2002.
287. P. Koria, D. Brazeau, P. Hayden & **S.T. Andreadis,** "Functional genomics in tissue engineering: gene expression profile of engineered skin equivalents subjected to barrier disruption", *Tissue Engineering Meeting*, Cold Spring Harbor Laboratory, November 21-24, 2002.
288. D.D. Swartz, J. Russell, **S.T. Andreadis,** "A tissue-engineered vessel developed from fibrin gels", *Annual Meeting of American Institute of Chemical Engineers*, Indianapolis, IN, November 7, 2002.
289. P. Lei & **S.T. Andreadis,** "Quantitative studies of the rate-limiting steps in retroviral production and gene transfer", *Annual Meeting of American Institute of Chemical Engineers*, Indianapolis, IN, November 7, 2002.
290. B.G. Bajaj & **S.T. Andreadis,** "Efficient transduction of epidermal stem cells with fibronectin immobilized retrovirus", *Annual Meeting of American Institute of Chemical Engineers*, Indianapolis, IN, November 6, 2002.
291. P. Koria, D. Brazeau, P. Hayden & **S.T. Andreadis,** "Differential gene expression analysis of engineered skin substitutes subjected to chemical injury", *Annual Meeting of American Institute of Chemical Engineers*, Indianapolis, IN, November 5, 2002.
292. D.J. Geer, D.D. Swartz & **S.T. Andreadis,** "Differential effects of fibrin in two- and three-dimensional migration", *Annual Meeting of American Institute of Chemical Engineers*, Indianapolis, IN, November 4, 2002.
293. D.D. Swartz, J. Russell, **S.T. Andreadis,** "Development of fibrin-based tissue engineered vessels", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October, 26, 2002.
294. B. Bajaj & **S.T. Andreadis,** "Efficient retroviral gene transfer to epidermal stem cells on recombinant fibronectin", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October, 26, 2002.

295. P. Lei & **S.T. Andreadis,** "Rate-limiting steps in retrovirus production and gene transfer", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October, 25, 2002.
296. P. Koria, D. Brazeau, P. Hayden & **S.T. Andreadis,** "Gene Expression Profiling in Engineered Skin Substitutes Subjected to Chemical Injury: Protective Effects of Keratinocyte Growth Factor", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October, 24, 2002.
297. D.J. Geer & **S.T. Andreadis,** "Fibrin-mediated delivery of KGF in 2D and 3D models of wound regeneration", *Annual Fall Meeting of the Biomedical Engineering Society*, Houston, TX, October, 23, 2002.
298. **S.T. Andreadis,** "Engineering gene therapy for epidermal stem cells", The Whitaker Foundation Biomedical Engineering Research Conference, La Jolla, CA, August 8-11, 2002.
299. S. Behshad & **S.T. Andreadis,** "Retroviral gene transfer to epidermal stem cells", *Annual Meeting of American Institute of Chemical Engineers*, Reno, NV, November 7, 2001.
300. B. Bajaj, P. Lei & **S.T. Andreadis,** "Immobilization of recombinant retrovirus to fibronectin for gene transfer: factors that mediate virus binding", *Annual Meeting of American Institute of Chemical Engineers*, Reno, NV, November 8, 2001.
301. D.J. Geer, D.D. Swartz & **S.T. Andreadis, "**Fibrin Promotes Reepithelialization of Engineered Skin Equivalents", *Annual Meeting of American Institute of Chemical Engineers*, Reno, NV, November 8, 2001.
302. S. Behshad & **S.T. Andreadis** "Retroviral gene transfer to epidermal cells correlates with stem cell phenotype", *Annual Fall Meeting of the Biomedical Engineering Society*, RDU, NC, October, 6, 2001.
303. P. Lei, B. Bajaj & **S.T. Andreadis** "Mechanistic studies of retrovirus gene transfer on recombinant fibronectin", *Annual Fall Meeting of the Biomedical Engineering Society*, RDU, NC, October, 6, 2001.
304. D.J. Geer, D.D. Swartz & **S.T. Andreadis** "Effects of fibrin on cell migration and differentiation during wound healing of skin equivalents", *Annual Fall Meeting of the Biomedical Engineering Society*, RDU, NC, October, 6, 2001.
305. D.J. Geer, D.D. Swartz & **S.T. Andreadis** "Effects of Bioactive Gels and Keratinocyte Growth Factor on Reepithelialization of Wounded Skin Equivalents", presented at the *Annual Research Day of the Center for Advanced Molecular Biology and Immunology (CAMBI)*, SUNY - Buffalo, Buffalo, NY, January 10, 2001.
306. B. Bajaj, P. Lei & **S.T. Andreadis** "Gene Transfer using Recombinant Retroviruses Immobilized on Extracellular Matrix Molecules", presented at the *Annual Research Day of the Center for Advanced Molecular Biology and Immunology (CAMBI)*, SUNY - Buffalo, Buffalo, NY, January 10, 2001.
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308. **S.T. Andreadis,** B. Bajaj & P. Lei "High Efficiencies of Gene Transfer using Immobilized Recombinant Retroviruses", *Annual Meeting of American Institute of Chemical Engineers*, Los Angeles, CA, November 13, 2000.
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presented at the *Annual Meeting of American Institute of Chemical Engineers*, Dallas, Texas, November 5, 1999.

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313. **S.T. Andreadis**, Yarmush, M.L. & Morgan, J.R. "Effects of KGF on *in vitro* reconstituted genetically modified human epidermis". *Annual Meeting of American Institute of Chemical Engineers*, Miami, FL, November 15-20, 1998.
314. J.R. Morgan, S. Eming, D. Medalie, **S.T. Andreadis**, K. Hamoen, G. Pins, "Growth Factor Delivery from Genetically Modified Skin Grafts". *BioMedical Engineering Society (BMES)*, Cleveland, OH, Oct 10-13, 1998.
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