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Curriculum Vitae

John Thomas Langell, MD, PhD, MPH, MBA
4209 Street, Route 44
Rootstown, Ohio 44272

EDUCATION AND TRAINING

Undergraduate

B.S.	University of California at Los Angeles, Los Angeles, CA Major: Biology	1991
	El Camino College, Torrance, California	1986

Graduate

M.D.	Drexel University School of Medicine, Philadelphia, PA Honor Graduate— <i>Cum Laude</i>	1999
Ph.D.	Drexel University School of Medicine, Philadelphia, PA Major: Microbiology and Immunology	1997
M.B.A.	University of Utah School of Business, Salt Lake City, UT	2013
M.P.H.	University of Texas Medical Branch, Galveston, TX Focus: Disaster and Mass Casualty Management Focus: Cosmic Radiation Risk Mitigation	2005
	University of Houston School of Business, Houston, TX Focus: Organizational Development	2003

Post-graduate

Stanford University Healthcare, Stanford, California

Intern	Department of Surgery, General Surgery Residency	1999-2000
Resident	Department of Surgery, General Surgery Residency	2000-2005
Chief Resident	Department of Surgery, General Surgery Residency	2005-2006

NASA-Johnson Space Center/University of Texas Medical Branch, Galveston, Texas

Resident	Department of Aerospace Medicine Space Medicine Residency	2002-2004
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Other Formal Education

2016	Business Innovation Strategies in Global Healthcare, Harvard Business School, MA
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- 2016 *American College of Healthcare Executives, Board of Governor's Board Certification Course*
 - 2016 Lean and Six Sigma Black Belt Course, Management and Strategy Institute, PA
 - 2016 USAF (CEO) Commanders Leadership Course, Atlanta, GA
 - 2014 Advanced Professional Joint Leadership College, U.S. National Staff College, VA (1-year program)
 - 2012 Health Services Executive Leadership Program, Atlanta, GA
 - 2011 Emergency Surgeons Course, Department of Defense, Lackland Air Force Base, TX
 - 2010 Advanced Leadership and Strategy College, United States Government Distance Learning, (2-year program)
 - 2010 American College of Surgeons, Leadership and Political Advocacy Course, Washington D.C.
 - 2008 Leadership and Strategy College, United States Government Distance Learning, (2-year program)
 - 2004 Aircraft Crash and Mishap Investigation Medicine Course, San Antonio, TX
 - 2004 Advanced Mountain and Crevasse Medical Stabilization and Rescue Course, Denali, AK
 - 2004 Top Knife, USAF Advanced Fighter Aircraft Training Course, Klammoth Falls, OR
 - 2003 Aerospace and Space Medicine Training Program, San Antonio, TX
 - 2003 Basic and Advanced Aerobatic Flight and Upset Training, Houston, TX
 - 2001 Hyperbaric Medicine Certification Course, University of South Carolina, SC
 - 1987 Business Ethics and Quality Management Systems, McDonnell Douglas Aircraft
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APPOINTMENTS AND POSITIONS

Current Academic Appointments

President	Northeast Ohio Medical University (2019-Present)
Professor of Surgery	Northeast Ohio Medical University (2019-Present)
Professor Family and Community Medicine (tenured)	Northeast Ohio Medical University (2019-Present)
Executive Director	University of Utah, Center for Medical Innovation (2012-2019)
Vice Dean	University of Utah School of Medicine (2014-2019)
Associate Professor	Department of Surgery, University of Utah School of Medicine (2016-2019)
Associate Professor (tenured)	Department of Strategy, University of Utah School of Business (2016-2019)
Associate Professor	Department of Bioengineering, University of Utah College of Engineering (2016-2019)
Section Chief	Innovation Department of Surgery, University of Utah School of Medicine (2015-2019)
Director	BioInnovate Fellowship, University of Utah Health (2011-2019)

Current Non-academic Appointments

Physician	Surgeon, Trauma, Critical Care and Acute Care Surgery, University Hospitals Cleveland Medical Center (2021-2022)
Lean Healthcare Lead	Veterans Affairs Regional Center of Innovation, Salt Lake City, UT
President	Xenocor Incorporated, Salt Lake City, UT

Previous Academic Appointments

CEO (Commander)	349 th Medical Group, U.S. Air Force, Travis AFB, CA (2015-2018)
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Chief of General Surgery	George E. Wahlen VA Medical Center, Salt Lake City, UT (2007-2015)
Associate Director	Sorenson Discovery and Innovation Center, University of Utah School of Business (2013-2016)
Section Chief/Director	Acute Care Surgery, Department of Surgery, University of Utah School of Medicine (2006-2012)
Assistant Professor	Department of Surgery, University of Utah School of Medicine (2006-2016)
Assistant Professor	Department of Strategy, University of Utah School of Business (2006-2016)
Assistant Professor	Department of Bioengineering, University of Utah College of Engineering (2010-2016)
Clinical Specialist	Department of Anesthesia and Critical Care, MD Anderson Cancer Center, University of Texas (2002-2005)
Chief Resident	Department of Surgery, Stanford University School of Medicine (2005-2006)
Post-Doctoral Fellow	Center for Gene Therapy, Drexel University School of Medicine (1997-1999)
Previous Non-academic Co-Director	University Health System Lean Operations Program, Salt Lake City, UT (2012-2015)
CEO (commander)	624 th Medical Squadron, Joint Base Pearl Harbor-Hickam, HI (2013-2016)
CEO (Commander)	926 th Aerospace Medicine Squadron, Nellis Air Force Base, NV (2010-2013)
CEO (Commander)	310 th Aerospace Medicine Squadron, Buckley Air Force Base, CO (2007-2010)
Basecamp Physician	Mount Everest— Himalayan Rescue Association, Kathmandu, Nepal (2004)

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Section Chief	Aerospace Medicine, 302 nd Aeromedical Staging Squadron, Peterson Air Force Base, CO (2004-2007)
Director	Intravenous Access and Phlebotomy Team, Hahnemann University Hospital, Philadelphia, PA
Research Assistant	Department of Psychiatry, Drexel University, Philadelphia, PA
Research Assistant	Department of Emergency Medicine, University of California and Los Angeles, Los Angeles, CA
R&D Specialist	McDonnell Douglas Aircraft Corporation, Torrance, CA (1986-1989)
Quality Management Instructor	McDonnell Douglas Aircraft Corporation, Torrance, CA (1988-1989)

CERTIFICATION AND LICENSURE

Specialty Certification

2006	Diplomat, American Board of Surgery—General Surgery (recertification 2017)
2004	Board Eligible, American Board of Preventive Medicine—Aerospace Medicine (eligibility maintained 2018)
2003	Aerospace Medicine Certification, USAF School of Aerospace Medicine, San Antonio, TX
2000	Diplomat, National Board of Medical Examiners
1999	Advanced Cardiac Life Support (ACLS)
1999	Advanced Trauma Life Support (ATLS)

Medical Licensure

2019-Present	Ohio Medical Board—Physician and Surgeon
2006-Present	Utah Division of Professional Licensing—Physician and Surgeon
2006-Present	Utah Division of Professional Licensing—Controlled Substance

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2000-Present	U.S. Drug Enforcement Administration—Controlled Substance
2002-2013	Texas Medical Board—Physician
1999-Present	Medical Board of California—Physician and Surgeon

Nonmedical Certifications

2016	Lean and Six Sigma Black Belt Certification, Management and Strategy Institute, PA
2003	U.S Federal Aviation Administration, Private Pilot’s License

HONORS AND AWARDS (Selected)

2017	<i>Governor’s Office of Economic Development and Stoel Rives “Utah Medical Device Innovation of the Year Award”—Xenocor Inc.</i>
2017	Sundance Film Festival Panel and Documentary Selectee, <i>“Healing Healthcare with Disruptive Health Technology”</i>
2017	<i>American Medical Association National “Health Innovation of the Year” Award, Veritas Medical</i>
2016	<i>Governor’s Office of Economic Development and Stoel Rives “Utah Medical Device Innovation of the Year Award”—Veritas Medical</i>
2015	NASA, Rice University Business Plan--Best Medical Space Technology Award
2015	Rice University Business Competition, Technology Innovation Business Plan Award
2014	Association for Academic Surgery, Surgical Innovation Award
2014	United States Patent and Trademark Office, Collegiate Inventors Competition Award, Mentor—National Finals, Washington DC
2014	James Sorenson Discovery and Innovation Faculty Fellow, University of Utah, David Eccles School of Business
2012	University of Utah Entrepreneurial Faculty Scholar
2011	International Space Medicine Society, Award for Most Outstanding Publication

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2006	White House Presidential Fellows Program, National Finalist
2004	William K. Douglas Scholarship Award for Academic Excellence in Aerospace Medicine, NASA/University of Texas Medical Branch
2003	Astronaut Finalist, NASA-Johnson Space Center, Houston, TX
1999	The Donald R. Cooper, M.D. Excellence in Surgery Award, Drexel University School of Medicine
1999	The Merck Manual Award for Excellence in Clinical Medicine, Drexel University School of Medicine
1999	Drexel University (former MCPH) <i>School of Medicine Dean's Award</i>
1998	Alpha Omega Alpha Honor Medical Society Inductee
1998	American Society of Transplant Surgeons, Young Investigators Award for Outstanding Research
1998	Society of Transplant Surgeons, Young investigators Award for Outstanding Research
1997	International Congress for Xenotransplantation, Young Investigators award for Outstanding Research
1996	Drexel University Health Sciences Graduate Research Award for Most Outstanding Research
1991	MD/PhD Full Scholarship, Drexel University (Formerly Medical College of Pennsylvania—Hahnemann School of Medicine)

LEADERSHIP AND SERVICE

National and Regional Boards

2017-Present	Mountain-Pacific Venture Fund, Executive Board of Advisors, Salt Lake City, UT
2016-Present	Leonhardt Ventures, Executive Board of Advisors, Salt Lake City, UT
2015-Present	Medical Product Outsourcing, Executive Board of Advisors, Boston, MA

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2014-Present BioUtah, Executive Board of Directors

Leadership and Service to Professional Societies

2014-2016 Association for Academic Surgeons, Program Committee Member

2012-2014 Salt Lake Surgical Society, Secretary

2012-2014 American College of Surgeons, National Advocacy and Policy Representative

2012-2013 American College of Surgeons, President, Utah Chapter

2011 American College of Surgeons Utah, Chairman, Annual Scientific Meeting

2010-2012 American College of Surgeons, Vice President, Utah Chapter

2010-2012 American College of Surgeons—Utah Medical Association, Patient Rights Coalition Representative

2008-2010 Salt Lake Surgical Society, Treasurer

2008-2010 Association for Academic Surgery, Issues Committee Member

2007-2015 Association for Academic Surgery, Institutional Representative

1993-1994 American Medical Association—Medical Student Section, President Drexel University Medical School (formerly MCP-Hahnemann)

1992-1993 American Medical Association—Medical Student Section, President Drexel University Medical School (formerly MCP-Hahnemann)

Institutional Leadership and Service

2015-Present Chairman, Technology Assessment Committee, University of Utah Healthcare System

2014-2017 Senator, Faculty Academic Senate, University of Utah

2013-Present *President's Institutional Commercialization Coordination* Committee, University of Utah

2013-2016 Chairman, Health and Preventive Medical Application and Gaming Group, University of Utah Health Sciences

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2012-2016	Retention, Promotion and Tenure Revisions Committee, University of Utah Health Sciences
2012-2016	<i>Senior Vice President's Liaison, Operating Room Executive</i> Committee, University of Utah Health Sciences
2012-2017	Technology and Commercialization Advisory Board, University of Utah
2012-2016	Hospital Lean Healthcare Oversight Group, University of Utah Health Sciences
2012-2016	Center for Quantitative Biology Advisory Board, University of Utah
2012-2016	Multidisciplinary Design Major Advisory Board, University of Utah
2012-2015	Technology Assessment Committee, University of Utah Healthcare System
2012-2014	Intellectual Property and Copyright Committee, University of Utah
2012-2013	Faculty Compensation Review Committee, University of Utah Health Sciences
2011-Present	Advisory Board, Center for Global Surgery, University of Utah
2011-2015	Board of Directors, Pierre Lassonde Entrepreneurship Institute, University of Utah
2010-2016	Internal Seed Grant Committee, University of Utah
2010-2012	Institutional Review Board, University of Utah
2009-Present	Faculty Advisor, Student Technology, Research, Development and Innovation Group, University of Utah
2009-2012	Director, Department of Surgery Fourth-Year Medical Student Honors Program, University of Utah School of Medical School
2008-2016	Medical School Admissions Committee, University of Utah School of Medicine
2005-2006	Rambar-Mark Award for Excellence in Patient Care Committee, Stanford University
2004-2006	Graduate Medical Education Committee, Stanford University

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2005-2006	Surgical Residency Selection Committee, Stanford University
2003-2004	Master of Public Health Executive Advisory Committee, University of Texas Medical Branch
1995-1997	MD/PhD Admissions and Affairs Committee, Drexel University School of Medicine (formerly MCP-Hahnemann)
1994-1995	Student Appeals Committee, Drexel University School of Medicine (formerly MCP-Hahnemann)
1993-1994	Research Advisory Committee, Drexel University School of Medicine (formerly MCP-Hahnemann)

MAJOR PROGRAM DEVELOPMENT (Selected)

2017	Faculty Innovation-Research and Entrepreneurial Scholars Program (FIRES), University of Utah
2014	Crocker Interdisciplinary Innovation and Design Laboratory (Only ISO13485 Certified Lab at a University Worldwide), University of Utah
2014	Digital Medical Therapeutics Center (The GApp Lab), University of Utah
2014	Regulatory Consulting and Assisting Program, University of Utah
2013	New Venture and Intellectual Property Clinic, University of Utah
2012	Center Medical Innovation, University of Utah
2012	Lean Healthcare Operations Program, University of Utah Health Sciences Center
2012	Willem Kolff Surgical Innovation Annual Lectureship Series, University of Utah
2010	Bench to Bedside Multidisciplinary Medical Innovation Training Program, University of Utah

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RESEARCH and FUNDING

Grant Funding (Current)

- 2019-2021 Development of a Health Technology Business Innovation Fellowship Program
Dell Loy Hansen Foundation
(\$540,000)
Role: Program Manager/Director
- 2017-2022 Development of an NSF I-Corps Site Program
National Science Foundation Type II I-CORPS Site Renewal
National Science Foundation
(\$300,000)
Role: Principal Investigator

Grant Funding (Expired)

- 2019-2020 Phase II: Development and Deployment of a Surgical Safety Application
US Veterans Administration—Innovation Program Grant
Digital Healthcare Technology
(\$142,000)
Role: Principal Investigator
- 2011-2019 Bench to Bedside Development and Sustainment Program
Zions Bank
(\$1,100,000)
Role: Program Manager
- 2014-2019 Development of an NSF I-Corps Site Program (2-year extension)
National Science Foundation (NSF), Type-I I-Corps Site Grant
(\$300,000)
Role: Principal Investigator
- 2018 Development of an Interdisciplinary Prototype and Design Lab
Sorenson Legacy Foundation Grant
(\$500,000)
Role: Principal Investigator
- 2018 *Utah Governor's Office of Economic Development* -Technology Commercialization and Innovation Program, Sixth-Sensing LLC
(\$100,000)
Role: Co-principal Investigator

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- 2018 Development and Deployment of a Surgical Safety Application
US Veterans Administration—Innovation Program Grant
Digital Healthcare Technology
(\$34,000)
Role: Principal Investigator
- 2017-2020 Clinical Testing and Development of a Peripheral Catheter
Thrombosis and Flow Model
Utah—USTAR Technology Innovation Industry Partnership
Program Grant
USTAR and BD Medical
(\$2,500,000) (\$800,000 USTAR and \$1.7MM BD Medical)
Role: Principal Investigator
- 2017-2018 Center for Medical Innovation development Grant (renewal)
Ray and Tye Noorda Foundation
(\$200,000)
Role: Program Manager
- 2017 Catheter-based active antimicrobial system
Utah—USTAR Technology Accelerator Program
(\$250,000)
Role: Senior Personnel
- 2017 Global Health Innovation Fellows Grant
Zions Bank and Patel Family Foundation
(\$50,000)
Role: Program Manager
- 2017 Neurotracker Active learning Enhancement in Surgery Study
Rockwell Collins Industry Grant
(38,000)
Role: Senior Personnel
- 2014-2017 Creation of an interdisciplinary technology development and
entrepreneurship space
Sorenson Legacy Foundation Grant
(\$975,000)
Role: Principal Investigator
- 2012-2017 Clinical Emersion as an Empathetic Training Tool in Medical Device
Innovation (R25 EB013122-01A1)
NIH R25 Program
(\$213,000)
Role: Co-Principal Investigator

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- 2017 Center for Medical Innovation Development Grant
Ray and Tye Noorda Foundation
(\$200,000)
Role: Principal Investigator
- 2016 Development of a Mobile Wireless Laparoscope
Utah—*Governor's Office of Economic Development TCIP Grant*
(\$100,000)
Role: Principal Investigator
- 2014 Building Awareness of Sex and Gender Differences Research:
Phase II
U.S. Public Health Service-ICF
(\$50,000)
Role: Co-Principal Investigator
- 2014 Mobile Wireless Laparoscope (Renewal)
Utah—*Governor's Office of Economic Development TCIP Grant*
(\$40,000)
Role: Principal Investigator
- 2014 Development of a Self-closing Laparoscopic trocar
Utah—*Governor's Office of Economic Development TCIP Grant*
(\$40,000)
Role: Principal Investigator
- 2013 *Technology and Venture Commercialization "Engine Grant" for New
Technology Development*
Utah—*Governor's Office of Economic Development TCIP Grant*
(\$20,000)
Role: Principal Investigator
- 2013 Development of a fully translatable cloud-based electronic health
record for the developing world
Sorenson Legacy Foundation Grant
(\$50,000)
Role: Principal Investigator
- 2013 University of Utah Hospital Operations Grant-Development of a
comprehensive perioperative care application to improve
operational efficiency and the exceptional patient experience
(\$7,000)
Role: Principal Investigator

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- 2012 Development of a mobile Wireless Laparoscope (renewal)
Utah—*Governor's Office of Economic Development TCIP Grant*
(\$40,000)
Role: Principal Investigator
- 2012 NASA-EPSCOR Collaborative Investigator grant, Laparoscope for
Space-based Surgery
NASA-EPSCOR
(\$2,500)
Role: Principal Investigator
- 1999 Transplantation immunology educational grant
American Society of Transplant Physicians
(\$500)
Role: Principal Investigator
- 1998 Antisense Ribozyme-Mediated Cleavage of the α -1,3-Galactosyl
Epitope
Society for Vascular Surgery
(\$5,000)
- 1998 Role: Principal Investigator
- Characterization of preformed antibody-mediated Hyperacute
Rejection in the Porcine to Human Xenotransplantation Model
American Heart Association
(\$30,000)
Role: Principal Investigator
- 1997-1999 Ribozyme-Mediated Suppression of the alpha-Galactosyl
Carbohydrate xenogeneic antigen.
Society for Vascular Surgery/Lifeline
Role: Principal Investigator
- 1996 Deletion of the Alpha-Gal Xenotope Through the Expression of the
Coffee Bean Alpha-1,3-Galactosidase
Society of Sigma XI
Role: Principal Investigator

National Grant Reviewer/Study Section

- 2016 National Science Foundation, Engineering Directorate, Innovation Corps
Node Program Study Section
- 2015 National Science Foundation, Engineering Directorate, Innovation Corps
Site Program Study Section

2014 National Science Foundation, Engineering Directorate, Innovation Corps
Site Program Study Section

TEACHING AND EDUCATIONAL PROGRAM DEVELOPMENT

Educational Program and Curriculum Development

2020-Present Intensive Care Medicine Course,
Northeast Ohio Medical University

2016-Present LEAN-Six Sigma Healthcare Operations Physicians Course,
Veterans Administration Health Care System

2015-Present Life Science-Focused MBA Degree,
University of Utah School of Business

2015-Present BioVentures—Life Sciences Leadership Development Course
Executive Education Program
University of Utah School of Business

2014-Present Lean Healthcare Operations and Innovation Curriculum
Physician Leadership Program
University of Utah School of Business

2014-Present FDA Regulatory Course for Physician and Scientists
Physician Leadership Program
University of Utah School of Business

2014-Present Intellectual Property Protection for Faculty Entrepreneurs
Physician Leadership Program
University of Utah School of Business

2014-Present Innovation Corps (I-Corps) Faculty Training Curriculum
University of Utah

2014-2016 Combined MD-MBA Dual Degree Program
Innovation Pathway
University of Utah School of Medicine and School of Business

2012-2016 BioImmersion—NIH Sponsored Bioengineering Clinical Internship
University of Utah College of Engineering

2011-Present Bench to Bedside—Multidisciplinary Medical Technology and
Entrepreneurship Program
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2010-Present	BioInnovate Master of Bioengineering Degree Track University of Utah College of Engineering
2008-2015	Surgery Educational Curriculum General Surgery Residency Training Program Veterans Administration Clinical Rotation University of Utah School of Medicine
2006-2012	Acute Care Surgery Educational Curriculum General Surgery Residency Training Program University of Utah School of Medicine
2006-2012	Surgery Honors Program Curriculum Development--4th year Medical Student Clerkship University of Utah School of Medicine
Course Director 2018	BioVentures II—Life Science Industry Leadership Course University of Utah School of Business Executive Education
2017-Present	BioVentures I—Life Science Industry Leadership Course University of Utah School of Business Executive Education
2016-Present	Life Science Technology Commercialization Strategy I (Strat 6010) University of Utah School of Business
2016-Present	Life Science Technology Commercialization Strategy II (Strat 6020)
2016-Present	LEAN and Six Sigma Healthcare Operations for Physicians Course Veterans Administration Health Care System
2014-Present	Innovation Corps (I-Corps) Faculty Training Program University of Utah Center for Medical Innovation
2013-Present	Intellectual Property Forum for University Faculty and Industry Partners University of Utah Center for Medical Innovation
2012-Present	Clinical Problem Solving Through Strategic Analysis I (Bioen 6181) University of Utah Department of Bioengineering
2012-Present	Clinical Problem Solving Through Strategic Analysis II (Bioen 6182) University of Utah Department of Bioengineering

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- 2011-Present Bench to Bedside—Multidisciplinary Medical Technology and Entrepreneurship Program
University of Utah Center for Medical Innovation
- 2010-2011 Seminars in Bioengineering—Clinical Innovation I (Bioen 6901)
University of Utah Department of Bioengineering
- 2010-2011 Seminars in Bioengineering— Clinical Innovation II (Bioen 6902)
University of Utah Department of Bioengineering

Teaching (courses and educational preceptorships)

- 2015-Present Government Regulation of Digital Healthcare
- 2012-Present Lean Healthcare Operations to reduce Waste and increase Value
- 2012-Present Application of Lean and Six Sigma Principles in Healthcare
- 2010-Present Clinical Immersion and Discovery in Medical Tech Innovation
- 2010-Present Need Statement Development in Clinical Innovation
- 2010-Present Disease State Fundamentals and Treatment Options
- 2010-Present Stakeholder and Market Analysis in the Life Science Sector
- 2010-Present The Value Analysis Committee in Technology Adoption
- 2010-Present Coding, Coverage and Payment for New Technologies
- 2010-Present Intellectual Property Basics
- 2010-Present Business Model Development
- 2010-Present The Business Model Canvass and Value Proposition
- 2010-Present Market and Competitive Landscape Analysis
- 2010-Present Solution Concept Screening in Technology Innovation
- 2010-Present Design Thinking, Ideation and Brainstorming
- 2010-Present Healthcare Technology Regulatory Basics
- 2010-Present Basic Financial Accounting Principles
- 2010-Present Healthcare Leadership and Management
- 2010-Present Marketing Strategy in the Life Science Industry
- 2010-Present Technology Reimbursement Strategies
- 2010-Present Business Competition and Strategy
- 2010-Present Clinical Research Strategies for Medical Device Development
- 2010-Present Intellectual Property Strategy

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2010-Present	Intellectual Property Valuation
2010-Present	Regulatory Strategy in the Medical Technology Sector
2010-Present	Strategic Research and Development of Healthcare Technologies
2010-Present	Sales and Distribution Strategies for Healthcare Technologies
2010-Present	Capital Acquisition Models and Licensing Pathways
2006-2016	The Diagnosis and Treatment of Diverticulitis
2006-2016	The Diagnosis and Treatment of the Acute Abdomen
2006-2016	The Diagnosis and Treatment of Acute Appendicitis
2006-Present	The Diagnosis and Treatment of Biliary Disease
2006-2016	The Diagnosis and Treatment of Acute Pancreatitis

Small Group Teaching

2006-Present	Clinical teaching on the general surgery service at the Salt Lake City VA medical center. Topics are in the evaluation and management of general surgical patients. Teaching is conducted through daily teaching rounds, clinic encounters, weekly morbidity and mortality conferences, preoperative planning conferences and operating room instruction
2008-2016	Clinical teaching on the gastrointestinal and endocrine surgery service. Topics are in the evaluation and management of endocrine and gastrointestinal disorders. Teaching is conducted through daily teaching rounds, clinic encounters, weekly morbidity and mortality conferences, preoperative planning conferences and operating room instruction
2006-2013	Clinical teaching on the University of Utah acute care surgery service. Topics are in the evaluation and management of emergency and acute surgical patients. Teaching is conducted through daily teaching rounds, clinic encounters, weekly morbidity and mortality conferences, preoperative planning conferences and operating room instruction

Small Group Teaching

2006-Present	Surgical mock oral examination preparation and simulation. Small group teaching and evaluation to the 3rd, 4th and 5th year surgical residents
2008-2016	Surgical honors program lectures
2006-2016	Lectures in surgery, 3 rd -year medical clerkship

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2007-2013 Surgical Professor's Rounds

Teaching Awards

2018 University of Utah College of Engineering Top Instructor

ADVISING AND MENTORING

Postgraduate Students

2016-2017 Research Advisor and Academic Mentor, Erik Weissner, MD
General Surgery Resident

2016-2017 Research Advisor and Academic Mentor, Luke Martin, MD
General Surgery Resident

2015-2017 Research Advisor and Academic Mentor, Jennwood Chen, MD
General Surgery Resident

2013-2015 Research Advisor and Academic Mentor, Alice Chung, MD
General Surgery Resident

2011-2012 Research Advisor and Academic Mentor, Molly Gross, MD
General Surgery Resident

2010-2012 Research Advisor and Academic Mentor, Nicholas Berge, MD
General Surgery Resident

2008-2010 Research Advisor and Academic Mentor, Bethany White, MD
General Surgery Resident

2007-2008 Research Advisor and Academic Mentor, Dihn Kim Le, MD
General Surgery Resident

Doctoral Students

2017-Present Thesis Committee Chair/Advisor, Travis Neuberger, Bioengineering
University of Utah

2016-Present Thesis Committee/Advisor, Ahmad Saleem, Bioengineering
University of Utah

2014-2017 Thesis Committee/Advisor, Spencer Madsen, Bioengineering
University of Utah

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Masters Students

2018-2019	Thesis Committee/Advisor, Tanner Lesueur, Bioengineering University of Utah
2018-2019	Thesis Committee/Advisor, Jonathan Poulson, Bioengineering University of Utah
2018-2019	Thesis Committee/Advisor, Robert Walker, MD, Bioengineering University of Utah
2018-2019	Thesis Committee/Advisor, Rachael Palmer, Bioengineering University of Utah
2018-2019	Thesis Committee/Advisor, Tarek S. Marrouche, Bioengineering University of Utah
2018-2019	Thesis Committee/Advisor, Daniel Spicer, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, David Crosland, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, Elizabeth Einarson, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, Christine Henry, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, Arash Poursaid, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, Trevor Hafer, Bioengineering University of Utah
2017-2018	Thesis Committee/Advisor, Joseph Illingsworth, Bioengineering University of Utah
2016-2018	Thesis Committee/Advisor, Kapil Sharma, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Alexandra Eisenbiess, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, William Eccles, Bioengineering University of Utah

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2016-2017	Thesis Committee/Advisor, Laura Gardner, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Brian Kirk, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Kellen Hilton, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Kapil Sharma, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, James Morgan, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, David Williams, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Jacob Whittle, Bioengineering University of Utah
2016-2017	Thesis Committee/Advisor, Sarah Broderick, Bioengineering University of Utah
2015-2016	Thesis Committee/Advisor, Paul Holman, Bioengineering University of Utah
2015-2016	Thesis Committee/Advisor, Tyson Schwab, Bioengineering University of Utah
2015-2016	Thesis Committee/Advisor, Benjamin Fogg, Bioengineering University of Utah
2015-2016	Thesis Committee/Advisor, Adam Meese, Medical Sciences University of Utah
2015-2016	Thesis Committee/Advisor, Kristopher Loken, Bioengineering University of Utah
2014-2015	Thesis Committee/Advisor, Samuel Thomas, Bioengineering University of Utah
2014-2015	Thesis Committee/Advisor, Thomas Russell, Bioengineering University of Utah

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2013-2014	Thesis Committee/Advisor, Jordan Baczuk, Bioengineering University of Utah
2013-2014	Thesis Committee/Advisor, Michael Fogarty, Bioengineering University of Utah
2013-2014	Thesis Committee/Advisor, Michael Bobbe, Bioengineering University of Utah
2013-2014	Thesis Committee/Advisor, Alice Chung, MD, Bioengineering University of Utah
2013-2014	Thesis Committee/Advisor, Chris Bowen, Bioengineering University of Utah
2013-2014	Thesis Committee/Advisor, Nate Rhodes, Bioengineering University of Utah
2012-2013	Thesis Committee/Advisor, William Huang, Bioengineering University of Utah
2012-2013	Thesis Committee/Advisor, Paul Johnson, Bioengineering University of Utah
2012-2013	Thesis Committee/Advisor, Rita Pingree, MD, Bioengineering University of Utah
2011-2012	Thesis Committee/Advisor, Nicholas Blickenstaff, Bioengineering University of Utah
2011-2012	Thesis Committee/Advisor, Garrett Coman, Bioengineering University of Utah
2011-2012	Thesis Committee/Advisor, Molly Gross, MD, Bioengineering University of Utah
2011-2012	Thesis Committee/Advisor, John Peeler, Bioengineering University of Utah
2011-2012	Thesis Committee/Advisor, Curtis Olsen, Bioengineering University of Utah
Program Mentor	
2013-2014	United States Society for Presidents and Congress Fellowship Advisor Spencer Madsen, PhD Candidate

PUBLICATIONS AND RESEARCH DISSEMINATION

Journal Publications

Langell J, Evidence-based medicine: A Validated Tool for Lean Healthcare Implementation. Accepted for publication, *International Journal of Healthcare Management*, Jan 2019

Schwab T, Langell J, Human Factors Based Mobile Application Design for Global Health. *Journal of Surgical Innovation*. 2018 Nov 22:1553350618814643.

Gardner LJ, Brunson J, McIntyre M, Langell J, Use of an Interdisciplinary Student Medical Innovation and Entrepreneurship program to Create Affordable Healthcare Solutions Tailored to the Global Environment. *Journal of Surgical Innovation*. 2018 Nov 21:1553350618813437.

Schwab T, Fassl B, Langell J, The Importance of Design Validation in Global Health Surgical Innovation. *Journal of Surgical Innovation*. 2018 Nov 21:1553350618814644.

Langell A, Pickett T, Mangum C, Chen J, Langell J, Thermal Coagulation Device for Treating Cervical Dysplasia. *Journal of Surgical Innovation*. 2018 Dec 20: doi: 10.1177/1553350618819521

Langell J, Martin L, Improving on Time Surgical Starts: The Impact of Implementing Pre-OR Timeouts and Performance Pay, *J Surg Research* November 2017;219:222-225.

Barneck M, Rhodes N, de la Presa M, Poursaid A, Nourian M, Firpo M, Langell J, Violet 405-Nm Light: A Novel Therapeutic Agent Against Common Pathogenic Bacteria, *J Surg Res*. 2016 Dec;206(2):316-324.

Chen J, Pickett T, Langell A, Trane A, Charlesworth B, Loken K, Lombardo S, Langell J, Industry –Academic Partnership: An Approach to Accelerate Innovation, *J Surg Res*. 2016 Sep;205(1):228-33.

Smiley K, Malhotra R, Peche W, Langell J, Unresectable Pancreatic Adenocarcinoma, Eight Years Later, *World J Oncol*. 2016;7(1):17-20.

Gardner G, Langell A, Loftus P, Elder C, D'Ambrosio T, Langell J, Fostering Student Success in Biomedical Technology Entrepreneurship Competitions: The University of Utah Bench-to-Bedside Medical Device Design Competition. J. Engineering and Entrepreneurship, 2016;7:1

Rhodes N, de la Presa M, Barneck M, Poursaid A, Firpo M, Langell J, Violet 405-nm Light Kills β -lactam Resistant Escherichia Coli in Vitro, *Lasers Surg Med*. 2016 Mar;48(3):311-7.

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Gardner G, Langell A, Loftus P, Elder C, D'Ambrosio T, Langell J, Fostering Student Success During and After a Medical Technology Entrepreneurship Competition: The University of Utah Bench-to-Bedside Medical Device Design Competition, *Proceedings of the NCIIA*. 2015 <http://venturewell.org/open/wp-content/uploads/2013/10/GARDNER.pdf>

Millar D, Langell JT, Intrathoracic and Pelvic Migration of Humeral Fixation Wires, *Journal of Trauma and Clinical Orthopedics*. 2016 Jun; 1(1):1-3.

Madsen S, Thorup K, Baczuk J, Patwari N, Barton R, Langell J, Development of a contact-free RF-based respiratory sensor: Results of a clinical pilot study, *J Surg Res*. 2016 Jun 1;203(1):1-5.

Langell J, Zimmerman J, Sathya V, Implementation of Practice Guidelines to Reduce Waste and Optimize Patient Value, *J Surg Res*. 2016 Jun 15;203(2):287-92.

Loftus P, Elder C, D'Ambrosio T, Langell J, Training a New Generation of Clinician Innovators Through a Multidisciplinary Medical Technology Design Competition, *Journal of Clinical and Translational Medicine*, 2015;4:15.

Glasgow RE, Hawn MT, Hosokawa PW, Henderson WG, Min SJ, Richman JS, Tomeh MG, Campbell D, Neumayer LA, Langell J; DS3 Study Group Comparison of prospective risk estimates for postoperative complications: human vs computer model. *J Am Coll Surg*. 2014 Feb;218(2):237-45.

Loftus P, Elder C, Sorenson M, Shipman J, D'Ambrosio T, Petelenz T, Hitchcock R, Langell J, Creating a Benchmark Medical Technology Entrepreneurship Competition: The University of Utah Bench-to-Bedside Medical Device Design Competition, *Proceedings of the NCIIA*. 2014 <http://nciia.org/open/wpcontent/uploads/2013/10/LANGELL.pdf>

Langell JT, Mulvihill SJ. (2008). Gastrointestinal perforation and the acute abdomen. *Med Clin North Am*, 92(3), 599-625, viii-ix.

Le D, Rusin W, Hill B, Langell JT. (2009). Post-operative antibiotic use in nonperforated appendicitis. *Am J Surg*, 198(6), 748-52.

Langell J, Jennings R, Clark J, Ward JB Jr. (2008). Pharmacological agents for the prevention and treatment of toxic radiation exposure in spaceflight. *Aviat Space Environ Med*, 79(7), 651-60.

Reiss GR, Langell JT, DiSesa VJ, Prockop DJ. (1998). Rescue from Lethal Total Body Irradiation by Allogeneic Marrow Stromal Cells. *Surgical Forum*, (49), 392-394.

Langell JT, Lehmann J. (1996). The Effect of 5-Hydroxytryptophan on Intraocular Pressure. *Invest Ophthalmol Vis Sci*, 37(3), 3831.

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Publications Pending/Submitted

Hopf H, Stark LA, Hobson-Rohrer W, Byington C, Lee V, Langell J, et al, Defining Fundamental and Variable Components of Faculty Professional Activity for Appointment, Review, and Advancement at a School of Medicine, Submitted to *Academic Medicine*, in revision 2019

Manuscripts in Preparation

Loftus PD, Zhang X, Elder CT, D'Ambrosio T, Langell J, Designing Medical Education Programs that Incentivize Translational Science and High-risk Innovation. Manuscript in preparation for submission to *Academic Medicine*

Fogg B, Langell J, Transforming Medical Student Education Through Interdisciplinary and Experiential Education to Foster Medical Innovation. Manuscript in preparation for submission to *Academic Medicine*

Langell A, Pickett T, Dodson M, Mangum C, Chen J, Wallace D, Langell J, Clinical trial of Cervical Thermo-Coagulation on Cervical Epithelial Coagulative Necrosis. Manuscript in Preparation for submission to *Obstetrics and Gynecology*

Langell J, D'Ambrosio T, Petelenz T, *The National Science Foundation I-Corps Program: An Important Resource to Promote Technology Innovation in Surgery.* Manuscript in Preparation for submission to *Journal of Surgical Research*

Langell J, Young MJ, Ferraro J, Development of an Automated Digital Surgical Safety Checklist to Reduce Surgical Errors. Manuscript in Preparation for submission to *Journal of the American College of Surgeons*

Langell J, Walker S, Pickett T, Accelerated Medical Technology Development and Commercialization Using The DesignBox™ Process. Manuscript in Preparation for submission to *Journal of Innovation and Entrepreneurship*

Weisner E, Martin L, Peche W, Langell J, Variations in HIDA Scan-based Gallbladder Ejection Fractions Over Time in Suspected Biliary Dyskinesia. Manuscript in Preparation for submission to *J. Surgery*

Weisner E, Martin L, Peche W, Langell J, Impact of Narcotic Analgesic Use on HIDA Scan-based Gallbladder Ejection Fractions. Manuscript in Preparation for submission to *J Surgical Research*

Book Chapters

Langell J, Mulvihill S. (2013). Gastric Adenocarcinoma and Other Gastric Neoplasms (EXCEPT Gist). In Zinner (Ed.), *Maingot's Abdominal Operations*. Stamford: Appleton and Lang

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Langell JT, Miniati D, Greco R. (2003). Postoperative Bleeding. In *Surgery Clerkship Guide*. St. Louis, MO: Mosby Publishing

Maggard M, Schmit P, Langell JT. (2003). Gastrointestinal Surgery. In *Surgery Clerkship Guide*. St. Louis, MO: Mosby Publishing

Visiting Professor—Invited Speaker—Session Chair (Selected)

- 2021 Research Keynote Speaker, Association of Indian Physicians of Northern Ohio, 38th Annual Gala and 30th *Fundraiser “Chiraag” with Research Showcase*, Cleveland
- 2021 Keynote Speaker, Employers Health, Canton
- 2021 Featured Speaker, Healthcare Roundtable Discussion, Rootstown
- 2021 Featured Speaker, U.S. National Brain Bee, Virtual Event
- 2021 *Moderator, “Crisis Command: Lessons in Leadership,” Greater Akron Chamber, Virtual Event*
- 2021 *Featured Speaker, “Creating an Academic Ecosystem for Innovating, Translating and Commercializing Disruptive Healthcare Solutions,” Western Reserve Health Education Trumbull Grand Rounds, Virtual Event*
- 2020 *Featured Speaker, “Creating an Academic Ecosystem to Drive Innovation, Translation and Commercialization of Disruptive Health Care Solutions,” Texas Children’s Hospital Department of Surgery Grand Rounds, Virtual Event*
- 2020 *Featured Speaker, “Creating an Academic Ecosystem to Drive Innovation, Translation and Commercialization of Disruptive Health Care Solutions,” SWPDC Annual Symposium – Pediatric Device Innovation, Virtual Event*
- 2020 Featured Speaker, Entrepreneurship Speaker Series, Hiram College, Virtual Event
- 2020 Session Leader, “Leveraging Academic-Industry Partnerships to Accelerate Medical Device Commercialization,” MPO Symposium, Virtual Event
- 2020 Keynote Speaker, AOA Induction Dinner, Rootstown, OH
- 2020 *Panelist, “Health Care Executives Round Table,” Akron, OH*

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- 2020 *Pediatric Rounds, "Creating an Ecosystem for Innovating, Translating and Commercializing Disruptive Healthcare Solutions," Akron Children's Hospital, Akron, OH*
- 2019 *Visiting Professor and Keynote Speaker, "Creating an interdisciplinary healthcare transformation program," Virginia Commonwealth University, Department of Surgery.*
- 2019 *Keynote Speaker, "Market-creating Innovations in Global Health," National Global Health Symposium, Virginia Commonwealth University*
- 2019 *Keynote Speaker, "Accelerating Healthcare Innovation through academic-Industry Partnerships," Silicon Slope Summit, Salt Lake City, UT*
- 2018 *Visiting Professor, University of Beijing, Capital medical Hospital, "Transforming Healthcare Delivery Through Innovation," Beijing, China*
- 2018 *Session Chair-Healthcare Innovation, West African Extreme Affordability Conference, Kpong Ghana*
- 2017 *Expert Panelist, World Health Organization Medical Device Summit, Geneva, SUI*
- 2017 *Keynote Speaker, Stanford Medicine-X 2017, Stanford CA*
- 2017 *Visiting Professor, National University of Singapore Medical Grand Challenge, Singapore*
- 2017 *Keynote Speaker, J.P Morgan Innovations in Healthcare Summit, Salt Lake City, UT*
- 2017 *Visiting Professor, "Creating an Innovative and Adaptable Interdisciplinary Ecosystem," University of Hawaii School of Medicine Innovation Center, Honolulu HI*
- 2017 *Keynote Speaker, Innovation Expo, "Inspire, Imagine and Inform," Vacaville Chamber of Commerce*
- 2017 *Session Moderator, "Innovating in the medical Device Space," Translational Medicine Symposium, Salt Lake City, Utah*
- 2016 *Keynote Speaker, Park City Rotary, "Bench to Bedside and Beyond: Creating the Medical Innovator of the Future," Park City, Utah*

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- 2016 Keynote Speaker, “Global Health Innovation: Creating Cost-effective and Sustainable Healthcare Solutions for the Global Population,” Department of Public Health, University of Utah
- 2016 Session Moderator, Thin AIR Innovation: Innovation in the Life Sciences, Governor’s Office of Economic Development, Park City, Utah
- 2016 *Session Chair, “Global Surgery,” Academic Surgical Congress, Feb 2016*
- 2015 *Keynote Speaker, Medical Product Outsourcing Summit, “Accelerating Medical Technology commercialization: The Critical Role of Academic-Industry Partnerships,” Park City, UT*
- 2015 *Session Chair, “Breast and Endocrine Research,” Academic Surgical Congress, 2015*
- 2014 *Invited Speaker, “mHealth and the Challenge of Physician Adoption,” International mHealth Summit, Washington DC*
- 2014 *Keynote Speaker, “Top 10 Lessons Learned by Successful Innovators,” Midwest Medical Device Conference, Milwaukee MN*
- 2014 *Keynote Speaker, “Lean Healthcare Operations and Organizational Innovation,” Quintessential Congress, Denver CO*
- 2014 Surgical Grand Rounds, “University Faculty resources for Medical Technology Innovation,” University of Utah
- 2014 Visiting Professor, “Creating Sustainable Medical Innovations for Resource Poor Regions,” University of Hawaii School of Medicine, Honolulu HI
- 2014 *Keynote Speaker, Utah Winter Operations Conference, “Medical Innovations and Transforming Healthcare Through Lean Operational Initiatives,” Snowbird, UT*
- 2014 Presidential Session Speaker, “Digital Medicine,” Academic Surgical Congress, San Diego, CA
- 2014 *Keynote Speaker, Translational Medicine Symposium, “Clinical Immersion, a Tool to Identify the Clinical Need for Technology Commercialization,” Salt Lake City, Utah*
- 2013 Medicine Grand Rounds, Innovation and Entrepreneurship in the Academic Setting, University of Utah, Salt Lake City, UT

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- 2013 *Keynote Speaker, Medical Product Outsourcing Summit, "Academic Programs in Medical Device Commercialization: The Critical Role of Industry Partnerships," Salt Lake City, UT*
- 2013 *Expert Panelist, European Economic Summit, Innovation and Commercialization, Utah Governor's Office of Economic Development*
- 2013 *Keynote Speaker, Intellectual Property Forum, "What Academic Faculty Need to Know about Intellectual Property Protection," Salt Lake City, UT*
- 2013 *Keynote Speaker, "Identifying the Clinical Problem for Commercialization," Translational Medicine Symposium, Salt Lake City UT*
- 2013 *Invited Lecturer, "Developing a Medical Device Innovation Program, An Academic Partnership," Utah Governor's Office of Economic Development Citizen Diplomacy Program Lectureship*
- 2013 *Surgical Grand Rounds, "Creating the future Innovator," University of Utah*
- 2013 *Invited Lecturer, Extreme Affordability Summit, "Medical Device Development for Developing regions," Salt Lake City, UT*
- 2012 *Invited Speaker, "The Lean Prescription" LEAN Healthcare Operations Summit, Salt Lake City UT*
- 2012 *Expert Panelist, "Regulatory Device," Entrepreneurial Faculty Scholars FDA regulatory Forum, Salt Lake City, UT*
- 2012 *Surgical Grand Rounds Speaker, "BioInnovation," University of Utah*
- 2011 *Invited Speaker, "Acute Care Surgery in the Academic Setting-A Debate," Southwest Surgical Congress, Oahu, HI*
- 2011 *Surgical Grand Rounds Speaker, "The Practice of Medicine in Challenging Environments," University of Utah*
- 2010 *Surgical Grand Rounds Speaker, "Healthcare Policy in the United States: An Historical Perspective," University of Utah*
- 2009 *Surgical Grand Rounds Speaker, "Contemporary Surgical Management of Hyperparathyroidism," University of Utah*
- 2008 *Surgical Grand Rounds Speaker, "Gene-Directed Therapy in Surgery," University of Utah*

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- 2007 Keynote Speaker, “*Medical Support on Mount Everest*,” Salt Lake Surgical Society, Salt Lake City, UT
- 2006 Grand Rounds Speaker, “*High Altitude Medicine, lessons from the Everest Base Camp*,” Santa Clara Valley Medical Center
- 2005 Surgical Grand Rounds Speaker, “*Reaching New Heights in Medicine: The Mount Everest Experience*,” Stanford University Department of Surgery.
- 2005 *Keynote Speaker, “From the Top of the World: Medical Support on Mount Everest,” Medicine in Challenging Environments—Pushing the Envelope V Conference, Galveston, TX*
- 1997 Visiting Professor, “*Transgenic Suppression of the Alpha-Gal Xenotope*,” Thomas E. Starzl Transplantation Institute, University of Pittsburgh

Competitive Abstracts and Platform Presentations

- 2019 *United Nations workshop “Employing technical innovations to improve global health,” Langell JT, D’Ambrosio T, Gay G, Alder S, United Nations 2019 Civil Society Conference, Salt Lake City UT*
- 2019 Langell J, Ferraro J, Young M, Mi C, Deng Y, Swensen C, Development of an Automated Digital Surgical Safety Checklist to Reduce Surgical Errors, Academic Surgical Congress, Houston TX
- 2019 *Whittle J, Petelenz T, D’Ambrosio T, Langell J, The National Science Foundation I-Corps Program: A Tool to Promote Technology Innovation in Surgery, Academic Surgical Congress, Houston TX*
- 2019 Fogg B, Langell J, BioInnovate: Medical Student Experiential Education in Technology Innovation and Entrepreneurship, Academic Surgical Congress, Houston TX
- 2019 Langell A, Pickett T, Mangum C, Chen J, Dodson M, Langell J, Evaluation of a Model to Evaluate the Efficacy of Thermocoagulation on Cervical Coagulative Necrosis, Academic Surgical Congress, Houston TX
- 2019 Rich B, Eisenbeiss A, Brunson, Langell J, Shaping the Healthcare Innovators of the Future Through Early Education in Medical Innovation, American Medical Student Association, Houston, TX
- 2018 Langell J, Designing High Quality Global Health Technologies, Consortium of Universities for Global Health Conference, New York, NY

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- 2018 Langell J, Sixth Sensing—Contact-free Vital Sign Monitoring Using Wi-Fi-based Movement Refraction, West African Extreme Affordability Conference, Kpong Ghana
- 2018 Langell J, UVAC—Development of a Global Solution for Post-Partum Hemorrhage, West African Extreme Affordability Conference, Kpong Ghana July 2018
- 2018 Langell J, Xenocor—A Global Technology Solution for Laparoscopic Surgery, West African Extreme Affordability Conference, Kpong Ghana
- 2018 Langell J and Fassl B, A Systematic Approach to Global Health Services Innovation, West African Extreme Affordability Conference, Kpong Ghana
- 2018 Thomas S and Langell J, Bench to Bedside: An interdisciplinary approach to global health technology innovation, West African Extreme Affordability Conference, Kpong Ghana
- 2018 Langell J and Pickett T, A Validated Approach to Global Health Technology Innovation, West African Extreme Affordability Conference, Kpong Ghana
- 2017 Langell J, Fassl B, Petelenz T, Innovating The Future of Healthcare, World Health Organization Medical Device Summit, Geneva, SUI
- 2017 Chen J, Pickett T, Langell A, Trane A, Charlesworth B, Loken K, Lombardo S, Langell J, Cinluma: A Novel Thermo-Coagulation Device to Treat Cervical Intraepithelial Neoplasms in Resource Poor settings, Society of American Gastrointestinal and Endoscopic Surgeons, Houston, TX
- 2017 Schwab T, Langell J, Mobile Application Design and Human Factors for Global Health Innovation, Academic Surgical Congress, Las Vegas, NV
- 2017 Langell J and Martin L, Improving On-Time Surgical Starts: The Impact of Implementing Pre-OR Timeouts and Performance Pay, Academic Surgical Congress, Las Vegas, NV
- 2017 Schwab T, Fassl B, Patel R, Langell J, The Importance of Design Validation in Global Health Surgical Innovation, Academic Surgical Congress, Las Vegas, NV
- 2017 Weisner E, Martin L, Peche W, Langell J, Impact of Narcotic Analgesic Use on HIDA Scan-based Gallbladder Ejection Fractions, Academic Surgical Congress, Las Vegas, NV

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- 2017 Weisner E, Martin L, Peche W, Langell J, Variations in HIDA Scan-based Gallbladder Ejection Fractions Over Time in Suspected Biliary Dyskinesia, Academic Surgical Congress, Las Vegas, NV
- 2017 Langell J, Price R, Development an Ultra Low-Cost Laparoscopic Platform for Global Surgery, Academic Surgical Congress, Las Vegas, NV
- 2016 Chen J, Pickett T, Langell A, Trane A, Charlseworth B, Loken K, Lombardo S, Langell J, Industry-Academic Partnerships, A Trans-Disciplinary Approach to Accelerate Surgical Innovation, Academic Surgical Congress, Jacksonville, FL
- 2016 Elder C, Loftus P, D'Ambrosio T, Langell J, Enhancing Medical Education and Innovation Through Industry Mentors and Experiential Programs, Academic Surgical Congress, Jacksonville, FL
- 2016 Madsen S, Thorup K, Baczuk J, Patwari N, Barton R, Langell J, Development of a contact-free RF-based respiratory sensor: Results of a Clinical Pilot Study, Academic Surgical Congress, Jacksonville, FL
- 2016 Langell J, Evidence Based Medicine: The Low Hanging Fruit of Lean Healthcare Implementation, Academic Surgical Congress, Jacksonville, FL
- 2016 Langell J, Bledsoe A, Vijayakumar S, Anderson T, Zawalski I, Zimmerman J, Standardized Implementation of National Practice Guidelines To Reduce Waste and Optimize Patient Value, Academic Surgical Congress, Jacksonville, FL
- 2016 Barneck M, Rhodes N, De La Presa M, Poursaid A, Nourian M, Firpo M, Langell J, Violet 405-Nm Light A Novel Therapeutic Agent Against Common Pathogenic Bacteria, Academic Surgical Congress, Jacksonville, FL
- 2015 Le Ber J, Shipman JP, Van Der Volgen J, Mowdood A, Stark L, Langell J, *"Accepting No Limits: Librarians Lead Sex and Gender Differences Research Efforts."* 2015 National Medical Library Association Annual Meeting and Exhibition, May 19, 2015, Austin, TX.
- 2015 Casucci T, Shipman JP, Langell J, McIntyre M, Altizer R. *"Opening New Doors: Innovation Partners Unite."* Presented at the 2015 VentureWell Conference, Washington, D.C.
- 2015 Van Der Volgen J, Shipman JP, Lake E, Langell J, *"Lean Process Improvement and Innovation Demystified."* National Medical Library Association, Continuing Education Program, Austin, TX

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- 2014 Elder C, Loftus P, Langell J, Bench-to-Bedside: A Model Program for Medical Device Design, American Association of Medical Colleges Meeting, Philadelphia, PA
- 2014 Shipman J, Casucci T, Langell J, Altizer R, *"Information Future: Partnering with Medical Therapeutic Devices & Apps Innovations."* Presented at the 2014 Annual Meeting of the National Medical Library Association, Chicago, IL
- 2014 Shipman P, Langell J, Rethlefsen M, Altizer R, Lee V, *"The Synapse Plus – Transformed Space Invites Innovation, Research, Teaching and Learning to Transpire Within a Health Sciences Library."* *Learn Serve Lead 2014: The American Association of Medical Colleges Meeting*, Chicago, IL
- 2014 Casucci T, Shipman JP, **Langell J**, Altizer R, *"Beyond Borders: Partnering with Medical Therapeutic Devices & Apps Innovations"* Special Libraries Association, Vancouver, CAN
- 2014 Casucci T, Shipman JP, Langell J, Altizer R, *"Convergence and Collaboration: Partnering with Medical Therapeutic Devices & Apps Innovations,"* Mid-continental Chapter of the Medical Library Association
- 2014 Loftus P, Langell JT, Shipman J, Hitchcock R, Petelenz T, *"Creating a Benchmark Medical Technology Entrepreneurship Competition,"* National Collegiate Inventors and Innovators Alliance (NCIIA) Open, San Jose, CA
- 2014 Langell JT, Hitchcock, Price R, Petelenz, T, *"Innovating for Resource Poor Regions,"* National Collegiate Inventors and Innovators Alliance (NCIIA) Open, San Jose, CA
- 2014 Langell JT, Hitchcock R, Petelenz T, *"Teaching Innovation and Entrepreneurship: A Multidisciplinary Approach,"* National Collegiate Inventors and Innovators Alliance (NCIIA) Open, San Jose, CA
- 2013 Agutter J, Hitchcock R, Langell JT, Broadhead K, Petelenz T, *"Design and Engineering Clinical Immersion Program,* National Collegiate Inventors and Innovators Alliance (NCIIA) Open, Washington D.C.
- 2011 Langell J, *"Creating the Optimal Executive Management Council,"* United States Air Force Health Services Executive Management Conference, Atlanta, GA
- 2009 Le DK, Rusin W, Langell JT, *"Postoperative Antibiotics Use in Non-Perforated Appendicitis,"* Southwest Surgical Congress, Sand Diego, CA

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- 2009 Langell, JT, "*The Dexon-Window: A Series Report of a New Method for Control of Enteroatmospheric Fistulas*," Southwest Surgical Congress, Sand Diego, CA
- 2007 Langell, JT, Jennings, R, Clark, J, Ward, J, "Pharmacological Countermeasures for the Prevention and Treatment of Toxic Radiation Exposure in Space Flight," Aerospace Medical Association Meeting, Washington, DC
- 2003 Langell JT, Gilmore, S, "*Aeromedical Status of an Air Transport Pilot with Suspected Multiple Sclerosis*," Aerospace Medical Association meeting, San Antonio, TX
- 1998 Langell JT, Reiss GR, Blankenhorn, EP, Kresh, JY, "3-Azido-3-Deoxythymidine Decreases Cell Surface Expression of the Alpha-1,3 Galactosyl Carbohydrate on Porcine Endothelial Cells," American Society of Transplant Physicians meeting, Chicago, IL
- 1998 Reiss GR, Langell JT, DiSesa VJ, Procko, DJ, "Rescue from Lethal Total Body Irradiation by Allogenic Marrow Stromal Cells," American College of Surgeons meeting, Chicago, IL
- 1998 Langell JT, Reiss GR, DiSesa VJ, "Antisense ribozyme degradation of alpha-1,3-galactosyltransferase mRNA: A Possible Mechanism for Reduction of Alpha-1,3Gal". American Society of Transplant Surgeons meeting, Chicago, IL
- 1998 Langell JT, Samuels LE, DiGregoria GJ, Barbieri EJ, Ferko AP, Pace J, Kozac JL, Mahoney T, Kutalek SP, Morris RJ, Brozena SC, "Amiodarone Distribution in Explanted Hearts from Cardiac Transplant Recipients," The Society of Heart and Lung Transplantation Annual Meeting, Boston MA
- 1998 Langell JT, GR, Strong J, Kresh JY, Blankenhorn EP, "Suppression of the alpha-1,3-Galactosidase Epitope by Golgi Expression of a Coffee Bean alpha-1,3-Galactosidase Transgene," American Society of Transplant Physicians Annual Meeting, Chicago, IL
- 1997 Langell JT, Strong JD, Kresh JY, Blankenhorn EP, "The Pig Kidney Epithelial Cell Line LLC-PK1 May Not be a Suitable Model for Characterizing Xeno-Antigens in Hyperacute Rejection," International Congress for Xenotransplantation, Nante, France
- 1997 Langell JT, Reiss GR, Blankenhorn EP, Kresh JY, "The Effects of Mycophenolic Acid and 3-Azido-3-Deoxythymidine on Porcine Endothelial Expression of the Alpha-Galactosyl Carbohydrate," International Congress for Xenotransplantation, Nante, France

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- 1997 Langell JT, Strong J, Kresh JY, Blankenhorn, EP, "Alpha-1,3-Galactosidase Transgene Suppression of the Alpha-Gal Xenotope," International Congress for Xenotransplantation Nante, France
- 1997 Langell JT, Strong J, Kresh VJ, Blankenhorn EP, "Intrinsic Suppression of Alpha-1,3-Galactosyl Xenogeneic Epitopes on Mammalian Cells by Golgi-Targeted Expression of a Coffee Bean Alpha-1,3-Galactosidase Transgene," Allegheny University Graduate Research Symposium
- 1997 Verma A, Langell JT, Kresh JY, "Isolation and Maintenance of Adult Rabbit Cardiac Myocytes In Vitro," Allegheny House Staff Research Symposium
- 1997 Reiss GR, Mohiuddin MM, Langell JT, Blankenhorn EP, DiSesa VJ, "The Use of Polymerase Chain Reaction to Detect Microchimerism after Intrathymic Injection in Experimental Heart Transplantation," Society of University Surgeons Research Symposium, Chicago, IL
- 1997 Reiss GR, Mohiuddin MM, Langell JT, Blankenhorn EP, DiSesa VJ, "PCR to Detect Microchimerism in Experimental Heart Transplantation After Intrathymic Pretreatment: Evidence That Donor Cells Do Not Re-enter the Thymus," Allegheny House Staff Research Symposium.
- 1996 Lehmann J, Langell JT, Sluck JM, Sinclair SH, "5-Hydroxytryptophan Induction of Intraocular Hypotension," ARVO Annual Meeting
- 1995 Langell JT, Blankenhorn EP, "Studies of Anti-Porcine Xenoreactive Antibody in Human Patients," Medical College of Pennsylvania and Hahnemann University Graduate Research Symposium
- 1994 Langell JT, Lehmann J, "Serotonin Induced Ocular Hypotension in Wistar Rats," Hahnemann University, Medical Research Symposium
- 1993 Langell JT, Lehmann J, "The Effect of 5-HTP on Intraocular Pressure in Wistar Rats," Eastern Student Research Forum, Miami FL
- 1993 Starkman S, Langell JT, "The Interaction of Neurologist with Emergency Physicians: A Survey of Emergency Medicine Programs," The Academy of Emergency Physicians, Detroit, MI

Competitive Abstract Submitted/Pending

- 2018 Fogg B, Langell J, Transforming Medical Student Education Through Interdisciplinary and Experiential Education to Foster Medical Innovation. Submitted to the 2019 Academic Surgical Congress, Houston, TX

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- 2018 Langell A, Pickett T, Dodson M, Mangum C, Chen J, Wallace D, Langell J, Clinical trial of Cervical Thermo-Coagulation on Cervical Epithelial Coagulative Necrosis, Submitted to the 2019 Academic Surgical Congress, Houston, TX
- 2018 Langell J, *D'Ambrosio T, Petelenz T, The National Science Foundation I-Corps Program: An Important Resource to Promote Technology Innovation in Surgery*, Submitted to the 2019 Academic Surgical Congress, Houston, TX
- 2018 Langell J, Young MJ, Ferraro J, Development of an Automated Digital Surgical Safety Checklist to Reduce Surgical Errors, Submitted to the 2019 Academic Surgical Congress, Houston, TX
- 2018 Langell J, Walker S, Pickett T, Accelerated Medical Technology Development and Commercialization Using The DesignBox™ Process, Submitted to the 2019 Academic Surgical Congress, Houston, TX
-

INTELLECTUAL PROPERTY AND COMMERCIALIZATION ACTIVITIES

Patent Filings

Langell J, Johnson P, Fogarty M, Madsen S, Self-Contained Port Closure Trochar and Method of Use, United States Patent and Trademark Office Utility Patent Application, Filed April 25, 2018 Publication 20280303470

Langell J, Brooks L, Medical Boroscopes and Related Tip Assemblies, United States Patent and Trademark Office Utility Patent Application, Filed April 13, 2018 Publication 20180228344

Langell J, Straubhar A, Keenan K, Pickett T, Lackey J, Burton J, Monarch Intraperineal heating device, United States Patent and Trademark Office Provisional Patent, 04/2018

Langell J, Holman P, Broderick S, Eyre Z, Goates T, Peiper J, Uterine Contraction Device, United States Patent and Trademark Office, Utility Patent Filing 2016/62317028

Langell J, Gardner L, Fannesbeck A, Colposcopy Compatible Low-Profile Speculum, United States Patent and Trademark Office, Utility Patent Filing, 2016

Langell J, Brooks L, Medical Boroscopes and Related Methods and Systems, United States Patent and Trademark Office Utility Patent Granted # 9943214

Langell J, Holman P, Broderick S, Eyre Z, Goates T, Peiper J, Uterine Contraction Device, World Intellectual Property Organization. Patent No. WO/2017/173232 1A

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Langell J, *Young, J, Ruan, T, Passman J, O'Niel KJ, Nanoparticle based radiopaque marking device*, United States Patent and Trademark Office Utility Patent Granted #9861449

Langell J, Johnson P, Fogarty M, Madsen S, Laparoscopic Port Automatic Closure Device, United States Patent and Trademark Office Utility Patent Granted # 9962145

Langell J, Johnson, P, Fogarty, M, Madsen, S, Laparoscopic Port Automatic Closure Device, WIPO, Patent Cooperation Treaty International Filing

Langell J, Bowen C, Nambi, M, Mobile Pneumoperitoneal Pressure Device, United States Patent and Trademark Office, Utility Patent Filing 2016

Langell JT, Yates, B, K-wire modification with moveable fixation/anti-migration adapter. United States Patent and Trademark Office, Provisional Patent filing.

Prockop D, Reiss R, Langell J, Stromal Cell Use. World Intellectual Property Organization. Patent No. WO/2000/024261

Prockop D, Reiss R, Langell J, Utilization of Marrow Mesenchymal Stem Cells in Bone Marrow Transplantation. United States Patent and Trademark Office Patent Publication No. 2008/0102058 A1

Licensed Patent Filings

Langell J, Straubhar A, Keenan K, Pickett T, Lackey J, Burton J, Monarch Intra-perineal heating device—Licensed to Clinical Innovations Incorporated, 2018

Langell J, Holman P, Broderick S, Eyre Z, Goates T, Peiper J, Uterine Contraction Device— License Option to Clinical Innovations Incorporated, 2017

Langell J, Brooks L, Medical Boroscopes and Related Methods and Systems—Licensed to Xenacor Incorporated, 2013

Langell J, *Young, J, Ruan, T, Passman J, O'Niel KJ, Nanoparticle based radiopaque marking device*—License Option to Control Medical LLC, 2011

Langell JT, Johnson P, Fogarty M, Madsen S, Laparoscopic Port Automatic Closure Device—Licensed to 6S Medical LLC, 2013

Prockop D, Reiss R, Langell J, Utilization of Marrow Mesenchymal Stem Cells in Bone Marrow Transplantation—Licensed to Prochymal Incorporated, 1999

Software Copyright

Software-Based Platform for Patient-Centered Perioperative Care Management (2014)

Software application: Universal Electronic Health Record for Emergency Care (2014)

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Software application: Advanced Surgical Safety System (2018)

Company Formation

Cure Medical LLC, Founding Partner 2017

Sixth Sensing LLC, Founding Partner, 2017

Light Line Medical Incorporated (formerly Veritas Medical LLC), Founding Partner 2014

6S Medical, Founding Partner, 2013

Xenocor Inc, Founding Partner, 2012

OTHER ACTIVITIES

Membership in Professional Societies (Present and Past)

American College of Healthcare Executives

Association for Academic Surgery

American College of Surgeons

Aerospace Medical Association

Space Medicine Association

Southwestern Surgical Congress

Salt Lake Surgical Society

Utah Medical Association

American Association for the Advancement of Science

American Medical Association

American Military Surgeons of the United States

Alpha Omega Alpha Honors Society

Sigma XI Honors Society

Society for Experimental Medicine

Gold Key Honor Society

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Policy Activities

- 2017 BioUtah, Utah Life Science Industry Policy Committee, Salt Lake City Utah
- 2014 Brookings Institute for Healthcare Reform, Working Group for National Institutes for Health Study on the Future of FDA Regulatory Strategy and Medical Device Development
- 1993 American Medical Association Resolution Authorship. Smoking Van on Public Trains (Passed AMA House of Delegates)
- 1992 American Medical Association Resolution Authorship. Cadaveric Organ Procurement

Journal Referee/Reviewer (selected)

Acta Astronautica

Aviation, Space and Environmental Medicine

Journal of Infection

Journal of the American College of Surgeons

Internal Journal of Healthcare Management

Interests and Hobbies

Sailing, Competitive Horse Jumping, Skiing, Ironman Triathlon and Distance Running
