**Leslie Wickman, Ph.D.**
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3603 W. Hidden Ln. #114, Rolling Hills Estates, CA 90274
Website: www.lesliewickman.com

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**Highlights of Qualifications:**

- Excellent technical, communications, and interpersonal skills
- Extensive international/intercultural education and training experience
- Strong experimental and analytical R&D background
- Proven success across multiple disciplines
- Trained EVA/IVA test astronaut, pilot, athlete, and musician

**Education**

Doctor of Philosophy, Human Factors and Biomechanics (Mechanical Engineering), Stanford University
Master of Science, Engineering (Aero/Astro), Stanford University
Bachelor of Arts, Political Science, Willamette University; concentration in international relations, math and science; magna cum laude

**Professional Experience:**

**American Scientific Affiliation**
***Executive Director, March 2016 to present***
Guide and direct the strategy and operation of the ASA in its mission to provide a fellowship of support for Christians in the sciences. Set the direction and tone for civil dialog among those with diverse opinions on all issues relating to science and Christian faith. Oversee the operations of ASA in order to ensure fiscal stability. Establish strategic relationships with members, foundations, and donors to provide adequate funding for the mission of the ASA.

**California Baptist University**
***Professor of Aerospace/Industrial/Mechanical Engineering, July 2017 to present***
Develop research and internship opportunities for students. Initiate and foster collaboration with industry and government partners. Teach undergraduate engineering courses. Evaluate student performance. Provide academic and career counseling. Advise and mentor student Aerospace Club on high altitude balloon project.

**The Aerospace Corporation**
***Senior Engineering Specialist, January 2008 to present (flexible part-time basis)***
Develop and evaluate space systems architectures and performance in support of civil, commercial and National Security Space customers. Analyze technical, cost, schedule and risk issues for military and civil space projects. Perform systems engineering analyses for human spaceflight vehicles and life support systems. Review NASA's human spaceflight program goals and capabilities for the Augustine Congressional Commission and the National Research Council. Serve on Concept Design Center teams for NOAA, NASA and DoD projects. Calculate rocket trajectories and sensor look angles. Evaluate impacts of various climate change parameters on national security issues as PI on IRAD project. Organize Climate Change Research conference. Write and edit technical articles on climate change. Support annual Arctic Shipping Forum on issues involving space-based support for maritime operations. Perform studies of polar communications options and architectures. Guest editor for Crosslink Magazine Summer 2011 issue.

**Wickman Enterprises**
***Consultant, April 1996 to present (part-time basis)***
Human factors, biomechanics, and systems work for aerospace, entertainment, and forestry industries. Recent projects include Mars vs. lunar human spaceflight mission analyses, spacesuit design development and evaluation, environmentally controlled life support systems (ECLSS) research, crew cabin design layouts, anthropometric analyses, spaceflight training curriculum development, reduced-gravity energetics studies, pilot training analyses. VP of Engineering for aerospace start-up. Technical writing for NASA/USAF projects.

**Azusa Pacific University (APU), College of Liberal Arts and Sciences**
***Faculty member, January 1999 to December 2015 (Full Professor as of April 2008)***
***Department Chair/Program Director, Engineering and Computer Science, July 2014 to December 2015***
***Director, Center for Research in Science (CRIS), July 2000 to December 2015***
Develop engineering curriculum and initiate degree program. Organize annual "Science, Faith and Culture" seminar series featuring internationally renowned scholars. Develop on-campus research programs for students and faculty in various STEM disciplines. Mentor research interns. Provide research services, such as literature searches, links to funding sources, grant-writing, and technical consultation. Develop and teach physical and life science courses.

**The RAND Corporation**
***Physical Scientist, February 1999 to December 2007***
Evaluate Air Force $C^3I$ objectives and examine resource allocations for cost-effectivity. Develop decision-making methodology to identify candidate activities for commercialization. Using Satellite Tool Kit and other analytical methods, investigate satellite launch and orbital operations for potential ground or in-situ intervention opportunities to mitigate anomalies and failures. Analyze post-Cold War security threats and determine new intelligence-gathering schemes and priorities. Compare robotic, biological, and biotechnology capabilities for military operations. Model USAF fighter pilot skill requirements versus training activities and resources to enhance pilot proficiency levels as well as flight training program efficiency and cost-effectiveness.

**WET Labs, division of WET Enterprises, Universal City, CA**
***Chief Research Scientist/Director of Technology Development, April 1996 to September 1998***
Responsible for directing R&D and Product Design Departments. Introduce innovative applications of new technologies for use in high technology hydrodynamic systems. Develop fluid dynamics and particle system computer models for use as design, analytical, and programming tools. Emulate and analyze various dynamic water effects. Develop state-of-the-art electro-mechanical control and remote monitoring systems. Incorporate new manufacturing technologies. Identify and resolve systemic problems. Manage product development work, from research through test phases. Direct value-engineering efforts. Schedule, budget, and track priorities and milestones. Recruit engineering and scientific talent. Support project technology requirements and troubleshoot technical challenges. Study materials properties and chemical reactions; formulate engineering solutions to associated problems. Investigate water chemistry and treatment issues. Instrumental in development and programming of the *Fountains of Bellagio* in Las Vegas, Nevada.

**Lockheed Martin Missiles & Space, Sunnyvale, CA**
***Senior Staff Engineer/Engineering Manager, October 1990 to April 1996***

International Space Station (ISS) Program

Support programs as Lockheed Corporate Astronaut. Responsible for technical management, crew and systems engineering. Perform requirements management, design, analysis, test, and verification of space systems and support equipment. Direct hardware design efforts for extravehicular activity (EVA) compatibility. Evaluate feasibility and efficiency of proposed tasks and procedures. Perform fault tolerance/maintainability analyses. Conduct simulations and analyses of orbital EVA scenarios to ensure operability, safety, and optimization of human-machine interfaces. Develop new EVA technologies. Train simulation personnel. Develop working relationships with international participants in ISS Program.

***Senior Crew Systems Engineer/Engineering Specialist, August 1983 to May 1989***

ISS and Hubble Space Telescope (HST) Programs

Crew trainer for HST deployment and repair activities. EVA test crewmember for Lockheed, McDonnell-Douglas and Air Force neutral buoyancy and one-g simulations. Astronaut interface engineer for HST program. Evaluate flight hardware designs for on-orbit maintainability. Develop procedures and timelines for crew operations. Participate in crew tools/aids development process. Responsible engineer for new-generation EVA astronaut portable foot restraint. Contribute to design of EVA helmet-mounted display. Perform orbital mechanics calculations for on-orbit visual capabilities and satellite repair opportunities. Identify potential satellite servicing missions. Participate in design and mockup development of ISS crew quarters. Spokesperson for space project media events.

**Stanford University, Stanford, CA**
**NASA Ames Research Center, Moffett Field, CA**
***Graduate Research Fellow, May 1989 to August 1994***
Dissertation Topic: The Influence of Reduced Gravity on Human Load-Carrying Capability and Preferred Load Placement. Investigate reduced gravity human load-carrying biomechanics and design issues. Perform human biomechanics experiments in the ARC Neutral Buoyancy Test Facility, and aboard KC-135 Research Aircraft. Develop prediction models and spacesuit design recommendations. Analyze spacesuit and EVA equipment design problems to enhance EVA operations in zero-gravity and planetary environments. Perform research on the physiological effects of extended weightlessness, with special attention to bone demineralization. Conduct analysis of the effects of implementing progressive levels of automation into orbital operations on the characteristics of work in space. Participate in design of smart end-effector for NASA's Flight Telerobotic Servicer.

**SRI International, Foreign Technology Center, Menlo Park, CA**
***Research Assistant, September 1981 to December 1982***
Research the development of tactical and strategic foreign defense technologies. Investigate the role of various academic and governmental institutions, as well as significant individuals, in important technological achievements.

**Honors & Awards**

Aerospace Medical Association (AsMA) presentation award, 1995; elected AsMA Associate Fellow, 2010
Aerospace Corporation Internal Research and Development grant awards, 2008, 2009, 2010
Aerospace Corporation Team Award for Review of US Human Space Flight Plans Committee, 2009
Alpha Kappa Nu Honor Society, election to membership, 1980
Alpha Lambda Delta Honor Society recognition, 1980
American Association of University Women's Award, 1980
American Scientific Affiliation Fellow, 2013
Astronauts 4 Hire (A4H) Senior Technical Advisory Board Member, 2011
Azusa Pacific University Transformational Scholarship Champion Award, 2004
Azusa Pacific University Center for Research in Science Board of Fellows, 1999
BioLogos Advisory Board Member, 2016
California Quake Football Team Spirit and Head Coach's Awards, 2003-2004
California Quake Women's Professional Football World Championship, 2002
California Space Grant awards for Aerospace Workforce and STEM Pipeline Development, 2008-2015
Christian Scholars Foundation Grants, 2003-2006
*Coach and Athlete Magazine* Prep Track and Field "Athlete of the Year" Award, 1976
Designated as Lockheed Corporate Astronaut, 1988
Faculty Research Council Grant, 2004
Fulbright Senior Specialist Candidate, 2007-2012
International Society for Science and Religion Fellow, 2017
Jet Propulsion Laboratory Mars Science Lander Review Panel, 2004
Local Societies Initiative Metanexus Grant, 2006, 2007, 2008
Lockheed Director's and Manager's Commendations for Space Station Program, 1986
Mark O. Hatfield Prize in Political Science, 1980
Mars Desert Research Station Crew Biologist, 2006
McDonnell Douglas Commendation for Space Station EVA Simulations, 1986
NASA-ARC Joint Research Grant with Stanford University, 1990-94
NASA and Lockheed Commendations for Hubble Space Telescope Program, 1990
National Science Foundation Guest Lecturer at Whitworth College on "Life in Space", 2003
Nominated to Technical Advisory Committee for the US Secretary of Defense, 1990
Omicron Delta Kappa Honor Society induction, 1978
Sigma Rho Phi Science and Theology Honor Society membership, 1999
Seaside High School Hall of Fame inductee, 2003
Society of Automotive Engineers' Arch T. Colwell Merit Award, 1997
Stanford Honors Cooperative Graduate Program Scholarship, 1981-83; 1988-1990
"Stanford on the Moon" Project Advisory Board Member
Teaching Learning Technology Roundtable Grant, 2001
TEDx talk, "Is the Conflict between Science and Religion Real?" 2015
Templeton Religion Trust Advisory Board Member, 2016
Templeton STEAM grant award, 2016
US Volleyball Association Women's 30's Grass Doubles National Championship, 1994
Willamette University Distinguished Alumni Award, 2000
Willamette University Athletic Hall of Fame inductee, 2016
Willamette University Pentathlon All-Time Record Holder, 1980
Women's Affiliated Football Conference All-Star Team, 2002
Women's Conference of Independent Colleges All-Star Track and Field Team, 1980

**Specialized Training**

Extensive space simulation experience (300+ hours)
100+ hours of test time in Space Shuttle Extravehicular Mobility Unit (spacesuit)
FAA Private Pilot
Ordained Minister, National Association of Christian Ministers
Theology Coursework:

- GRAD 501: Faith Integration and Curriculum Development
- GRAD 521: Theological Research in Academic Disciplines
- JUC SS: Geographical and Historical Settings of the Bible

Other: T-33 jet training, KC-135 reduced-gravity, High Altitude Physiology, Parachute, SCUBA, Water Safety, Forestry Operations, California Basic Educational Skills certificate, California Motorcycle Safety Course, CPR, First Aid, CAD, STK, office/statistics software.

**Selected Publications and Presentations**

***Aerospace Topics:***

*"Near Term Space Support for Arctic Operations,"* Center for Space Policy and Strategy, The Aerospace Corporation, 2017.

Book Chapter (*Hubble Telescope*, in *Science and Politics*, edited by Brent S. Steel), Sage Publications, 2014.

*"Comparing Crew Operations in Extreme Environments: Arctic Shipping vs. Outer Space,"* presented/published for ICETECH 2012 Conference, Banff, Canada.

*"Environmental Changes and National Security Space Programs,"* co-authored with M. Clayson, presented/published for 2012 IEEE Aerospace Conference, Big Sky, MT.

*"Feasibility of Space-Based Monitoring for Governance of Solar Radiation Management Activities,"* co-authored with P. Smith, I. Min, and S. Beck, presented/published for AIAA Space 2010 Conference, Anaheim, CA, and 2011 American Meteorological Society meeting, Seattle, WA; revised and re-published in *Crosslink Magazine's "Climate Science"* edition, Summer 2011.

*"Broadband Satellite Communications for Future US Military and Coast Guard Operations in an Ice-Free Arctic,"* co-authored with P. Smith and I. Min, published in *Crosslink Magazine's "Climate Science"* edition, Summer 2011.

*"Future Space System Support to US Military Operations in an Ice-Free Arctic: Broadband Satellite Communications Considerations,"* co-authored with P. Smith and I. Min, presented/published for AIAA Space 2009 Conference, Pasadena, CA; 2011 American Meteorological Society meeting, Seattle, WA; and as an invited lecture at the 2011 Arctic Shipping Summit, Helsinki, FIN.

*"Activity-Based Habitable Volume Estimating for Human Spaceflight Vehicles,"* co-authored with G. Anderson, presented/published for 2009 IEEE Aerospace Conference, Big Sky, Montana.

*"Orion Crew Exploration Vehicle Reusability Parametric Study,"* co-authored with M. Lobbia, T. Radcliffe, D. Bucher, J. Aguilar and D. Judnick, for NASA. The Aerospace Corporation, El Segundo, CA, 2008.

"*Unmanned aerial vehicle (UAV) ground station study*," co-authored with G. Buchan, M. Nixon, L. Stephenson, L. Sidor, R. Firpo, H. Iwata, A. Unell, and J. Arcos, for the Department of Defense. The Aerospace Corporation, Washington, D.C., 2008.

*"Isolation and Confinement Issues in Long Duration Spaceflight,"* paper co-authored with A. Tsai and R. Walters, presented/published for 2008 IEEE Aerospace Conference, Big Sky, Montana.

"*Eight Days in Inner Space: My Experience at the Moon Desert Research Station,"* paper presented/published for 2007 IEEE Aerospace Conference, Big Sky, Montana.

"*Absorbing and Developing Qualified Fighter Pilots: The Role of the Advanced Simulator*," RAND research report number MG-597, co-authored with R. Marken, W. Taylor, J. Ausink, L. Hanser, and C. Anderegg for USAF, 2007.

*"Inside NASA: A Female Engineer's Perspective on Humans in Space,"* presented at LA County Forum of Legal Secretaries and Whittier Chapter of AAUW, Whittier, CA, 2007.

**"***Human Performance Considerations for a Mars Mission*," paper presented/published for 2006 IEEE Aerospace Conference, Big Sky, Montana.

"*An Activity-Based Methodology and Tool for Determining Required Habitable Volume for Spacecraft*," co-authored with G. Anderson, poster presented/published for Habitation 2006 Conference, Orlando, FL.

"*Lunar Life Support System Study: Metabolic Energy and Water Considerations*," co-authored with B. Nota and S. Keates, paper presented/published for AIAA Space 2004 Conference, San Diego, CA.

"*Mars: Mission Possible?*" article published in APU Life Magazine, Summer 2004.

"*Absorbing Air Force Fighter Pilots: Parameters, Problems, and Policy Options*," RAND research report number MR-1550-AF, co-authored with W. Taylor, J. Bigelow, C. Moore, B. Thomas, and R. Marken for USAF, 2002.

"*Crew Volume Estimating*," Lockheed-Paragon research report number 092600-002NC, co-authored with G. Anderson for NASA, 2000.

"*Intervention and Correction of Launch Anomalies,"* RAND research briefing for USAF, 2000.

"*Comparing Animal and Robot Capabilities for Military Missions*," RAND research report co-authored with J. Brower, P. Bromley, and S. Resetar for DARPA, 1999.

"*Space Technology Transfer to Earth Health and Medical Applications*," paper presented/published for 1996 *Space of Service to Humanity Symposium* at International Space University, Strasbourg, France.

*"Load-Carrying in Reduced Gravities: Operational Considerations*," co-authored with B. Luna, paper presented/published for 1995 International Conference on Environmental Systems, San Diego, CA.

*"Locomotion while Load-Carrying in Reduced Gravities*," co-authored with B. Luna, paper presented/published for 1995 Aerospace Medical Association Annual Scientific Meeting, Anaheim, CA.

"*The Influence of Reduced Gravity on Human Load-Carrying and Preferred Load Placement*," dissertation submitted to Stanford University, 1994.

"*Zero-Gravity Induced Osteoporosis*," paper presented/published for 1990 International Astronautical Federation (IAF) Congress, Dresden, Germany.

*"The Effects of Automation on Work in Space*," paper presented/published for 1989 IAF Congress, Malaga, Spain; 1990 Society of Logistics Engineers Conference, Colorado Springs, CO; and 1990 Satellite Servicing Workshop, Sunnyvale, CA.

"*Hubble Space Telescope - Dawn of the Era of Serviceable Spacecraft*," paper presented/published for 1986 IAF Congress, Innsbruck, Austria, and 1987 Space Commercialization Conference, Taipei, Taiwan.

"*Space-Based Servicing*," paper presented/published for 1985 IAF Congress, Stockholm, Sweden.

***Environmental Topics:***
Guest editor, Crosslink Magazine's "Climate Science" edition, Summer 2011.
Organizer and co-chair, Climate Change Briefing Day, The Aerospace Corporation, El Segundo, CA, 21 July 2010.
*"Water Reclamation for Remote Environments: An Ecologically Sound Approach,"* paper presented/published for 45th AIAA Aerospace Sciences Meeting, Reno, NV, and OC AIAA Aerospace Science and Technology Meeting, Santa Ana, CA, 2007.
*"Cultivating a Personal Environmental Ethic,"* presented at American Scientific Affiliation Conference, Baylor University, Waco, TX, and Oral Roberts University School of Engineering, Tulsa, OK, 2009.

***Science and Theology Topics:***
*God of the Big Bang: How Modern Science Affirms the Creator*, Amazon best-seller in Science & Religion, Worthy Publishing, TN, 2015.
*"Breaking Barriers, Ministering in Relationships, and Exemplifying the Gospel: Tips for Using Science-Faith Dialogue as an Opportunity to Promote Discipleship and Strengthen Local Churches,"* co-authored with S. Contakes et al, God & Nature Magazine, Summer 2015.
*"Dietary Considerations for Christians,"* American Scientific Affiliation conference, Oral Roberts University, Tulsa, OK, 2015.
*"The Science of Creation,"* APU Life magazine, Fall 2014.
"Does Big Bang Breakthrough Offer Proof of God?" Op-Ed article for CNN's Belief Blog, 20 March 2014, at http://religion.blogs.cnn.com/2014/03/20/does-the-big-bang-breakthrough-offer-proof-of-god/.
Book Chapter (*12: Francis Bacon, Novum Organon*, in *Twelve Books that Shaped the University*, edited by Steve Wilkens & Don Thorsen), Cascade Press, 2014.
Book Review (*Alone Together: Why We Expect More from Technology and Less from Each Other* by S. Turkle), published in Perspectives on Science and Christian Faith, September, 2014.
*"Exploring the Wonders of Creation through the Lens of Science,"* presented at American Scientific Affiliation Conference, Point Loma Nazarene Univ., Oral Roberts Univ. School of Engineering, 2012, and Apologetics Canada Conference, 2013.
Book review (*The Wonder of the Universe: Hints of God in Our Fine-Tuned World* by K. Giberson), Inter-Varsity Press, 2012.
Book review (*Living at the Crossroads: An Introduction to Christian Worldview* by M.W. Goheen and C.G. Bartholomew), published in Religious Studies Review, 36 (3), 212-213, September, 2010.
*"Science and Faith: A Spectrum of Views on Origins,"* presented at Glendora Community Church, Glendora, CA, and Ocean View Baptist Church, San Pedro, CA 2010.
*"Does God Exist?"* presented at Reasons to Believe *Cosmic Fingerprints* conference at St. Andrew's Mt. Pleasant Church in South Carolina, 2006, and Ocean View Baptist Church, San Pedro, CA, 2010.
*"What does it mean to be Human? Contemporary Issues in Bioethics and Science Policy,"* panel moderator with Joni Eareckson Tada and Dr. Nigel Cameron, Common Day of Learning Conference, Azusa Pacific University, Azusa, CA, 2009.
*"Faith Integration in the Science Classroom,"* American Scientific Affiliation conference, George Fox College, Newberg, OR, 2008.
*"Planet Earth: Lucky Accident or Anthropic Purpose?"* presented at Reasons to Believe *Cosmic Fingerprints* conference at Kauai Community Church in Hawaii, 2005; St. Andrew's Mt. Pleasant Church in South Carolina, 2006; Ocean View Baptist Church, San Pedro, CA, 2007; California Baptist University, Riverside, CA, 2009; Southern California American Association of Physics Teachers conference at Azusa Pacific University, 2010.
*"The Scientific Method and Christian Apologetics,"* co-authored with J. Eriksen; presented at Common Day of Learning 2004, APU.
*"Are We Alone in the Universe? What about UFOs and ETs?"* co-authored with H. Ross; presented at Common Day of Learning 2003, APU; Ocean View Baptist Church, San Pedro, CA, 2008.

**Selected Interviews**
"Theistic Evolution," interviewed by Jeremy Livermore, KKLA Radio, 7/27/13.
"Christians and Climate Change," interviewed by Harry Edwards, KKLA Radio, 10/22/11.
"God and the Scientific Method," interviewed by Jeremy Livermore, KKLA Radio, 9/24/11.
"Philosophy of Science: How to Think About Science," interviewed by Lindsay Brooks, KKLA Radio, 7/10/10.
"Conversations with Masterful Women," interviewed by Portia Cohen, Manhattan Beach Women in Business, 4/17/10.
"40th Anniversary of Apollo Moon Landing Show," interviewed by Christy Pepper, with author Lee Strobel and astronaut Rick Husband, Moody Radio South, 7/31/09.
"The Astronaut Show," interviewed by Christopher Neiswonger, KKLA Radio, 9/27/08.
"Evangelicals Go Green – Will Conservative Candidates Follow Suit?" by C. Caron, ABCNews.com, 8/23/07.
"APU Weighs in on the Pluto Debate," by L. Croft, APU Clause newspaper, 9/15/06.
"Why Mars?" Reasons to Believe Webcast, www.reasons.org, June 2004.
"Professor Researches Life Support Systems for Astronauts," by B. Ott, APU Clause newspaper, 2/27/04.
"Mission to Mars: Beyond Jet Lag," by T. Webster, San Gabriel Valley Tribune, 2/10/04.
"Women of Space: Cool Careers on the Final Frontier," by Laura Woodmansee, Apogee Books, 2003.
"Science Meets Faith at University," by L. Hight, Highlander San Gabriel Valley Newspapers, 1/23/03.
"Gender Equity in the Sciences," by B. Mallay, Willamette Scene magazine, Winter 2002.
"Renaissance Woman," by L. Carson, Azusa Pacific University Art Show, "Profiles," February 2002.
"A Focused Force for Faith," by T. Trost, Facts for Faith magazine, Quarter 1-2002, Issue 8.
"Unlocking the Mystery of Mars," by M. Moisan, Willamette Scene magazine, Winter 1997.

**Activities and Affiliations**

Aerospace Medical Association (AsMA) Associate Fellow
American Institute for Aeronautics and Astronautics (AIAA), Lifetime Senior Member
American Meteorological Society (AMS), Full Member
American Scientific Affiliation (ASA) Fellow; Founding Member of Southern California Chapter
Arctic Shipping Forum panelist on Space-Based Support for Arctic Operations
Athletes in Action Volleyball
AuSable Institute of Environmental Studies Faculty Member
Azusa Pacific University President's Circle Member
Azusa Pacific University Faith Integration Advisory Council and Faculty Mentor
Azusa Pacific University Executive Advisory Committee for Research
Azusa Pacific University Faculty Research Council Chairperson
Azusa Pacific University Administrative Search Committee
Azusa Pacific University Science Building Planning Committee
"APU Life" Magazine Advisory Committee
California Baptist University SEDS Club Advisor
California Beach Volleyball Association AAA Rating
California Space Grant Affiliate Campus Director
Founder, Starry Nights Café, Los Angeles County
Founding Member and Advisory Council, Academy of Evangelical Scientists and Ethicists, 2005
Founding Member and Chairperson, Science and Religion Association of Azusa, 2006
Human Factors and Ergonomics Society (HFES)
International Space University Visiting Faculty
KKLA Science & Faith radio show host
Los Angeles Adventurers Club "Night of High Adventure" Speaker
Noah Alliance for the protection of endangered species and biological diversity
Science Consortium of California Christian Universities Executive Committee
Sigma Rho Phi Honor Society Faculty Advisor
Stanford Professional Women in Los Angeles (SPWLA) Women in Leadership panel participant
Stanford University International Mars Mission Project
Vocalist, "*Prepare the Way*," Sunday Night Music, Brentwood Presbyterian Church
Western Science Education Consortium Curriculum Committee
Willamette University Alumni Admissions Counselor
Willamette University Letterwinners
Young Astronauts

**Courses Taught**

Astronomy, Department of Math and Physics, APU
Biosphere Science, AuSable Institute of Environmental Studies
Contemporary Mathematics, Department of Math and Physics, APU
Earth Science, Department of Math and Physics, APU
Engineering Christian Worldview, CBU
Extravehicular Activity Tutorial, Department of Life and Materials Sciences, ISU
Health for Life, Department of Athletics and Physical Education, APU
History of Spaceflight, Department of Life and Materials Sciences, ISU
Human Factors in Design, Department of Life and Materials Sciences, ISU
Humans and Computation, School of Education and Behavioral Studies, APU
Humans and Scientific Inquiry, School of Education and Behavioral Studies, APU
Living and Working in Space, Department of Life and Materials Sciences, ISU
Physical Science, Department of Math and Physics, APU; Department of Math and Sciences, Marymount College
Science and Faith Seminar, Department of Biology and Chemistry, APU
Senior Seminar in Bioethics, Department of Biology and Chemistry, APU
Space Physiology, Department of Biology and Chemistry, APU
Spacesuit Technologies, Department of Life and Materials Sciences, ISU
STEM as Vocation, Department of Engineering and Computer Science, APU

**Languages**

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| French: | 4 years of formal education |
| Spanish: | basic conversational |
| Russian: | beginning level coursework |