

Timothy W. Lyden, Ph.D.

Department of Biology, University of Wisconsin-River Falls

Phone: 715-425-4384

E-mail: timothy.lyden@uwrf.edu

Education:

- 1992 Ph.D., Biological Sciences, University of Maine-Orono, "Membrane Factors Associated with Trophoblast Cellular Differentiation and Normal Human Placental Development".
 -Thesis focused on membrane lipids and endogenous retroviral expression.
- 1986 B.Sc., Microbiology, University of Maine-Orono, Graduated with Distinction
 -Primary focus of study was eukaryotic cell biology and differentiation.
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Research and Faculty Experience:

- 2011-current Professor, Anatomy and Physiology, Biology Department, University of Wisconsin-River Falls, River Falls, Wisconsin
- 2007-2011 Associate Professor, Anatomy and Physiology, Biology Department, University of Wisconsin-River Falls, River Falls, Wisconsin
- 2001-2007 Assistant Professor, Anatomy and Physiology, Biology Department, University of Wisconsin-River Falls, River Falls, Wisconsin
- 1997-2001 Senior Post-Doctoral Fellow and Research Scientist, Division of Immunology, Department of Internal Medicine, Heart/Lung Institute and Division of Molecular Medicine, Wexner Institute for Pediatric Research, Children's Hospital, The Ohio State University Columbus, Ohio
- 1996-97 Course Director, Human Physiology, Hillel Academy, Dayton, Ohio and Adjunct-Assistant Professor, Department of Biology, Wright State University, Dayton, Ohio
- 1992-95 Research Assistant Professor, Department of Microbiology and Immunology, Wright State University, Dayton, Ohio
- 1990-92 Research Assistant / Lab Coordinator, Department of Microbiology and Immunology, Wright State University Dayton, Ohio
- 1989-90 Visiting Scientist Research Fellow, Reproductive Immunology Laboratory, University of Liverpool, England

Adjunct Faculty Experience:

2019-2022	Adjunct Instructor/Workshop presenter, Century College, ` Bio-fabrication Program
2006	Adjunct Professor, Biology Department, University of Wisconsin-Stout, Menomonee, Wisconsin
2002-2018	Adjunct Professor/Instructor, Chippewa Valley Technical College, Nursing and Nanotechnology Programs

Teaching Experience:

2001-current	<u>Course Director, University of Wisconsin-River Falls, Biology</u> Anatomy and Physiology I and II, BIO 341/342 (2001-current, Fall/Spring 2001-current and Summer 2011-current) Animal Cell Culture, BIO 463 (2001-current) Biology Independent Study, Bio 499 (2001-current) Stem Cells and Tissue Engineering (Regenerative Medicine), BIO 464 (2009-current) Anatomy of Europe: Germany, Bio 389 Study Abroad (J-Term 2015 and 2017) Histology, BIO 353 (2002) Human Biology, BIO 253 (2001-2010) Biology Seminar, BIO 481 (2001-02, 2010) Biology Research, BIO 495 (2001-2003, 2009) Microbiology, BIO 324 (2010) Neurobiology, BIO 356 (2018) <u>Instructor, University of Wisconsin-River Falls (2001-02), Biology</u> Introduction to Biology, BIO 100 (2001-02) Biological Latin and Greek, BIO 243 (2001-2010)
2004-current	<u>UWRF Graduate Teaching Faculty, Masters Level, Biology</u> Course Director, Cardiac Physiology, Bio 700 (2013-14, in support of HHP Cardiac Rehabilitation Masters Degree) Course Director, Image Analysis in the Laboratory and Classroom, BIO 789 (Summer 2004) Course Director, Neuroscience, Bio 701 (Summer 2006 and 2009)

Adjunct Teaching Experience:

2019-current	<u>Guest Instructor, Century College</u> Artificial tissues and Bio-printing workshop (2019) Internship Mentor (2021)
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2002-2018	<u>Course Director, Chippewa Valley Technical College</u> Nursing Program, Anatomy and Physiology II (2004) Nursing Program, Anatomy and Physiology I (2005-06) <u>Instructor, Chippewa Valley Technical College</u> Nursing Program, Anatomy and Physiology I Lab (2002-2004) <u>Guest Instructor, Chippewa Valley Technical College</u> NanoBiotechnology Program (2008-2018)
2006	<u>Course Director, UW-Stout, Biology</u> Introduction to Biology, Bio101 (Summer 2006)
1997	<u>Course Director, Wright State University, Biology</u> Biology of Disease, BIO 107 (Fall 1997)

Graduate Thesis/Project Committee Membership

Graduate Faculty, University of Wisconsin-River Falls 2009-current:

Master of Science Education, Successful Instructional Strategies for Online PBL, Graduated 2021

Master of Science Education, Reading Comprehension and Analysis, Graduated 2015

Master of Science Education, Analysis of Outreach Education, Graduated 2013

Master of Science Education Committee Member, "Integrating Technology in Science Curriculum using Moodle", Graduated 2010

Master of Science Education Committee Member, "Science-Based Agricultural Education Curriculum for Chippewa Falls Unified School District", Graduated 2010

Master of Science Education Committee Member, Curricular Development in Agricultural Education, Graduated 2009

Associate Graduate Faculty, Wright State University 1992-95:

Masters Degree Co-Advisor, Placental APA epitope localization. Graduated 1995

Masters Degree Committee Member, Mouse model of APA syndrome. Graduated 1995

Masters Degree Committee Member, Siberian Hamster epididymal ultrastructure. Graduated 1994

Masters Degree Committee Member, Gestational distribution of cytokines.
Graduated 1993

Awards and Honors:

2023	University of Wisconsin-River Falls, Dr. Keith G. Wurtz Award for Innovative Teaching, Technology Application and Collaboration in Bioprinting
2015	University of Wisconsin-System, Regents Scholar Award
2014	Member of Phi Kappa Phi Honor Society-UWRF Chapter
2011-12	UWRF College of Arts and Sciences, Excellence in Research, Scholarly, and Creative Activity Annual Award (Science Division)
2009-10	UWRF Kettlekamp Faculty Research Fellowship
2008-09	UWRF Foundation Dykstra Faculty Excellence in Research Award.
2008-09	UWRF College of Arts and Sciences, Teacher-of-the Year (Science Division).
2008-09	McNair Program, "Above and Beyond", Mentor-of-the-Year Award.
2005-06	UWRF College of Arts and Sciences, Academic Advisor-of the-Year (Science Division).
2002	UWRF Chancellor's Appreciation Award (Faculty advising of SURSCA).

Grants and Funding History: (Career Total Grants Participation: ~\$6,639,683)

External: (Career Total Funded: ~\$5,954,228)

2021	NSF Major Equipment Grant- Scanning Electron Microscope Collaborative Grant- \$300,000
2015	University of Wisconsin-System, Regents Scholar Award, \$50,000
2013	Karolinska Institute/Zierath Lab Grant-in-Aid, UWRF Student Summer Research Internship Travel Awards (two students) ~\$6000
2013	UW-Madison Grant-in-Aid, WID Bionates/UWRF Student Summer Internship Stipend, \$3000

2013	University of Minnesota Stem Cell Institute Grant-in-Aid, UWRF Student Summer Internship Stipend, ~\$1500
2012	Karolinska Institute/Zeirath Lab Grant-in-Aid, UWRF Student Summer Research Internship Travel Awards (two students) ~\$6000
2012	UW-Madison Grants-in-Aid, WID Bionates/UWRF Student Summer Internship Stipends, \$3000 each (\$6000 total)
2012	UW System Economic Development Proposal, UWRF Center for Innovation and Business Development \$1,150,000 (participating applicant)
2009	UW-System Grants for Grants Program, ARRA Area Grant Competition, \$11,500
2008	ARG Grant, "Tumor Stem Cell Modeling in 3-D Cultures.", \$23,000 Prototype Development Fund, "Practical Testing of Artificial Tissue Methods for Vaccine Production." \$15,000.
2007	ARG-WiTAG Grant , "Applications of tissue engineering and artificial tissues in vaccine development", \$100,000.
2005	Merck Grant, Fostering Collaborative Undergraduate Research, Participating Co-Investigator, \$4200.
2002	UW System Collaborative Curriculum Design Grant, \$25,000 (UWRF portion ~\$6000).
2001-06	How FcRn prolongs IgG lifespan. NIH RO1, Co-Investigator, \$1,642,500 (5 years).
2000-05	IgG placental transport: Endothelial caveolae and FcR2. NIH RO1 , Co-Investigator, \$1,825,000 (5 years). RO1 HD38764,
1998-99	The mechanism of IgG transport across human placental endothelium. Pharmacia & Upjohn, \$50,000 (OSURF 735514)
1992	Antiphospholipid antibodies and pregnancy loss. NIH, HD23697 (05-08), Co-Investigator, \$767,528.
1994-95	Cellular biology of heparin/endothelial cell interactions. Bristol-Myers Grant-In-Aid of Research, Co-Investigator, \$10,000.

Internal: (Career Total Funded: ~\$685,455)

2022	FASDB Faulty Research Grant. \$3000
2022	UWRF Faculty Travel Grant Award, 2022 (\$1500)
2020	UWRF Faculty Travel Grant Award, 2020 (\$1500)

2020	URSCA Student Group Travel Grant (\$1500)
2019	UWRF Faculty Travel Grant Award, Spring 2019 (\$1000)
2018	UWRF Faculty Travel Grant Award, Spring 2018 (\$1000)
2017	UWRF Falcon Summer Scholars (USE) Research Grant-Summer, 2017 (\$3000)
2017	UWRF Falcon Summer Scholars (USE) Research Grant-Summer, 2017 (\$3000)
2016	UWRF Falcon Summer Scholars Research Grant-Summer, 2016 (\$4000)
2015	UWRF Falcon Summer Scholars Research Grant-Summer, 2015 (\$4500)
2014	UWRF Student Research Stipend Grant-Summer, 2014 (\$2800)
2014	UWRF Falcon Summer Scholars Research Grant-Summer, 2014 (\$4500)
2014	UWRF Student Research Stipend Grant-Spring, 2014 (\$2000)
2013	UWRF CAS Student Travel Stipend Awards, Karolinska Institute/UWRF Student Internship Stipends, \$500 each (\$1000 total)
2013	UWRF Foundation Grant-in-Aid, Karolinska Institute/UWRF Student Summer Internship Stipends, \$1500 each (\$3000 total)
2013	UWRF Faculty Development Travel Grant, WSTS 2012 Meeting, \$1000
2013	UWRF Falcon Grants Group Travel Award, WSTS 2012 Meeting Student Travel, \$2000
2012	UWRF CAS Student Travel Stipend Awards, Karolinska Institute/UWRF Student Internship Stipends, \$600 each (\$1200 total)
2012	UWRF Grant in Aid, Karolinska Institute/UWRF Student Summer Internship Stipends, \$2400 each (\$4800 total)
2012	UWRF Faculty Development Travel Grant, AAAS 2012 Meeting, \$1000
2012-current	UWRF Campus Budget, TCIC Annual Supply Budget, \$12,500 annually.
2011	UWRF Human Anatomy and Physiology Course Series Redesign, Educational Materials and Supply Funding, \$42,000.
2011	UWRF Faculty Development Travel Grant, \$1000
2010-2011	Mid-Year Campus Funding Request, TCIC Supply Budget

	\$25,000
2011	UWRF Foundation Kettlekamp Faculty Research Fellowship, \$2900
2011	UWRF Faculty Development Travel Grant, WSTS 2010 Meeting, \$1000
2009	UWRF Faculty Development Travel Grant, CUR National Meeting 2009, \$1000
2008	UWRF Lab Modernization Grant, Redesign of Biotechnology and Tissue Culture Classroom Lab, CAS ~\$125,000.
2008	UWRF Foundation Faculty Research Grant, "A Proposal to Enhance Research and Teaching Microscopy in Support of the Newly Proposed UWRF Tissue and Cellular Innovation Center". \$27,400.
2007	UWRF Faculty Development Travel Grant, IFPA 2007, \$1000.
2006	UWRF Foundation Grant, Cellular Imaging and Analysis in the Classroom Laboratory, \$11,000.
2006	UWRF Faculty Development Travel Grant, CUR National Meeting 2006 \$900.
2006	UWRF Laboratory Modernization Grant, Collaborator, Cell Culture/Biotechnology Research and Teaching Lab Grant, \$108,000.
2005	UWRF Faculty Development Travel Grant, \$1000.
2004	UWRF Foundation Grant, Cellular Imaging and Analysis Center, \$30,000.
2004	UWRF Lab Modernization Grant, Collaborative Redesign of Biotechnology Lab, CAS and CAFES. Phase 2, \$82,080.
2004	UWRF Faculty Research Grant, \$900.
2004	UWRF Student Summer Stipend, Collaborative Project. \$2,500.
2003	UWRF Lab Modernization Grant, Collaborative Redesign of Biotechnology Lab, CAS and CAFES. Phase 1, \$72,708.
2003	UWRF Foundation Student Summer Stipend 2003, \$2,500.
2003	UWRF Collaborative Faculty Incentive Grant, \$1,500.
2003	UWRF Improvement of Classroom Instruction (End-of-year Funding Program), \$500.

2003	UWRF Foundation Grant, Anatomy and Physiology Laboratory Equipment, \$16,010.
2002	UWRF Foundation Grant, Anatomy and Physiology Models, \$5457.
2002	UWRF Faculty Development Travel Grant, \$800.
2002	UWRF Improvement of Classroom Instruction, \$750.
2001	UWRF Improvement of Classroom Instruction, \$500.
1994-95	Effect of heparin on vascular endothelial cell cytoskeleton. Biomedical Research Support Grant, Wright State University, \$7,500.
1993-94	Placental HIV-1 cross-reactive proteins. Research Incentive Award, Wright State University, \$25,000.
1986-89	Association of Graduate Students, University of Maine-Orono; Travel Grant, \$1000, Major Grant, \$750, Research Grant \$500.

Peer-reviewed publications:

1. Goodman, S., Lyden, T., Li, W.-J., Yen, T.. 3D Culture and Microscopy in a Capsule with Scaffolds, Tumors and Stem Cells. *Microscopy and Microanalysis*, 2016, 22 (suppl 3), 998-999.
2. Lyden TW, Anderson CL, Robinson JM. The endothelium but not the syncytiotrophoblast of human placenta expresses caveolae. *Placenta*, 2002 23:640-652
3. Lyden TW, Robinson JM, Tridandapani S, Teillaud JL, Garber SA, Osborne JM, Frey J, Budde P, Anderson CL. The Fc receptor for IgG expressed in the villus endothelium of human placenta is FcγRIIb2. *Journal of Immunology* 2001 166:3882-3889.
4. Tridandapani S, Lyden TW, Smith JL, Carter JE, Coggeshall KM, Anderson CL. The adapter protein LAT enhances FcγII receptor-mediated signal transduction in myeloid cells. *Journal of Biological Chemistry* 2000 27:20480-20487
5. Lyden TW, Johnson PM, Mwenda J, Rote NS. Immunolocalization of anti-HIV-1 crossreactive antigens within normal non-infected decidual trophoblast cells. *Journal of Reproductive Immunology*, 28:233-245, 1995

6. Menon R, Fortunato SJ, Swan KF, Lyden TW, Rote NS. IL-1 beta and IL-6 expression in amniochorionic membrane by polymerase chain reaction, *in situ* hybridization and immunocytochemistry. *American Journal of Obstetrics and Gynecology*, 172:493-500, 1995
7. Mandal AV, Lyden TW, Colvin R., Taylor A., Saklayen MG. Heparin induced endothelial cell responses related to vascular relaxation and blood pressure regulation. *Kidney International*, 48:1508-1516, 1995
8. Lin L, Shroyer L, Walter A, Lyden TW, Ng AK, Rote NS. IgM Antiphospholipid antibodies react against cytoskeleton-like structures in cultured endothelial cells. *American Journal of Reproductive Immunology*, 33:97-107, 1995
9. Mwenda JM, Maher PM, Melling GC, Lyden TW, Johnson PM. Production and characterization of antibodies against isolated placental retroviral-like particles. *Afr J Health Sci*. 1995 2(2):287-295.
10. Rote NS. Chang J, Katsuragawa H, Ng AK, Lyden TW, Mori T. Expression of phosphatidylserine-dependent antigens on the surface of differentiating BeWo choriocarcinoma cells. *American Journal of Reproductive Immunology*, 33:114-121, 1995
11. Lyden TW, Johnson PM, Mwenda J, Rote NS. Ultrastructural characterization of endogenous retroviral particles isolated from normal human placentas. *Biology of Reproduction*, 51:152-157, 1994
12. Lyden TW, Johnson PM, Mwenda J, Rote NS. Anti-HIV monoclonal antibodies cross-react with normal human trophoblast. *Trophoblast Research*, 8:19-32, 1994
13. Mwenda JM, Maher PM, Melling GC, Lyden TW, Johnson PM. A murine monoclonal antibody (RV3-27) to human placental endogenous retroviral protein. *Journal of Reproductive Immunology*, 26:75-95, 1994
14. Fortunato SJ, Menon R, Swan KF, Lyden TW. Organ culture of amniochorionic membrane *in vitro*. *American Journal of Reproductive Immunology*, 32:184-187, 1994
15. Lyden TW, Rote NS. Modulation of phosphatidylserine epitope expression on BeWo cells during forskolin treatment. *Placenta*, 14:1-10, 1993
16. Lyden TW, Vogt E, Ng AK, Johnson PM, Rote NS. Monoclonal antiphospholipid antibody reactivity against human placental trophoblast. *Journal of Reproductive Immunology*, 22:1-14, 1992

Review papers and chapters:

1. Lyden TW, Johnson PM. Significance of endogenous retroviruses in reproductive

tissues. In *Reproductive Immunology*. (eds Bronson, Alexander, Anderson, Branch and Kutteh), Blackwell Scientific Publications, Cambridge, Ma, Chapter 24, pg 560-584, 1996

2. Mandal AV, Lyden TW, Saklayen MG. Heparin lowers blood pressure: biological and clinical perspectives. *Kidney International*, 47:1017-1022, 1995
3. Rote NS, Lyden TW, Vogt E, Ng AK. Antiphospholipid antibodies and placental development. *Immunobiology of Reproduction* (ed JS Hunt) Serono Symposia, Springer-Verlag New York, Inc., pg 285-302, 1994
4. Rote NS, Lyden TW, Vogt E, Adler RR, Chang J, Katsuragawa H, Lin L, Ng AK, Nicholson S, Patel PN, Shoyer L, Ponder D. Expression of phosphatidylserine epitopes during trophoblast membrane fusion: an alternative hypothesis for antiphospholipid antibody associated pregnancy disorders. *Reproductive Immunology*, (ed WD Billington) Serono Symposia, Vol. 97, Raven Press Book Ltd., pg 281-284, 1993
5. Rote NS, Walter A, Lyden TW. Antiphospholipid antibodies--lobsters or red herrings? *American Journal of Reproductive Immunology*, 28:31-37, 1992
6. Johnson PM, Lyden TW, Mwenda JM. Endogenous retroviral expression in the human placenta. *American Journal of Reproductive Immunology*, Vol. 23, #4, pg 115-120, 1990
7. Lyden TW. Characterization of normal and carcinogen induced neoplastic cells of teleost origin. *Explorations*, Volume III #3 pages 3-5, 1987

Research Manuscripts in Planning and Preparation:

1. Martin MJ and Lyden TW, Acetylsalicylic acid (aspirin) alters melanogenesis and melanosome function in B16F10 cells grown as tumoroids in a 3D scaffold-free hanging drop format. ***Prepared for submission***
2. Plautz,E, Archambault,M, Williams,K, Kehoe,S, Lyden,T, Spontaneous differentiation and organotypic tissue formation in 2D and 3D cultures of bovine mammary ductal stem-like cells isolated directly from fresh bovine milk samples. **In preparation**

Education-related Abstract Presentations:

17 Total, Asterisk indicates primary presenter and major presentations are highlighted.

Lyden TW*. UWRF TCIC/Century College 2021 Biofabrication Internship Program: A Regional Undergraduate Campus Collaboration Focused on Bioprinting Tumor Models to Study Cancer Biology, [UWRF Fall Gala 2021 \(PP\)](#), [Experimental Biology 2022 \(PP\)](#)

Lyden TW*. Biomedical Undergraduate Research at UWRF: An Innovative Educational Practice with Significant “High Impact” Outcomes for both Students and the

**BioSciences. Wisconsin Society for Science Teachers 2013 Meeting Keynote Address
Wausau, WI (OP). 2013**

Lyden TW*. The Tissue and Cellular Innovation Center (TCIC): A unique high impact educational experiment at the University of Wisconsin-River Falls involving undergraduate students in cutting edge biotechnology. *National Conference on Undergraduate Research (NCUR 2011), Ithaca NY (OP)*

Lyden TW and Campbell W*. Building a research culture using the student organized and administered campus-wide group, SURSCA. *International Perspectives on Undergraduate Research and Inquiry: A Scholarly Discussion: Pre-ISSOTL Seminar, Liverpool, UK, 2010*

Palladino, MA*, Ghosh S, Lyden TW, Spell RM, Temple L. Involving undergraduate students in biological research: Practices from the Biology Division of the Council on Undergraduate Research (CUR). *International Perspectives on Undergraduate Research and Inquiry: A Scholarly Discussion: Pre-ISSOTL Seminar, Liverpool, UK, 2010*

Agarwal VJ, Lyden TW*, Andrews K, Sudhakaran GR. Sustaining undergraduate research in fiscally challenging times: The Wisconsin Way. *Council on Undergraduate Research (CUR), Ogden, UT, 2010 (OP)*

Temple GG, Harriger D, Fink A, Hanson P, Lyden TW*. Update on BIO2010: Progress, Barriers and Next Steps. *Council on Undergraduate Research (CUR), Ogden, UT, 2010 (OP)*

Lyden TW*, Campbell W*, Graef A*, Colbeth F*, Morris T*, Gordon R*, Casper P*. SURSCA enters the 21st century by utilizing "Facebook" as a contact tool and peer-reviewed grants to build the UWRF UG research culture. *National Conference on Undergraduate Research (NCUR 2010), Missoula, MT (OP)*

Lyden TW*. Perspective Matters: A Scholar-scientist's view from a regional undergraduate university in the 21st Century. *Oklahoma State Research Day Keynote Address Broken Arrow, OK (OP). 2009*

Agarwal VJ*, Monte A*, Lyden T*, John M*, Campbell W*. Intellectual property protection at predominantly undergraduate institutions: The Wisconsin Way. *Council on Undergraduate Research (CUR), St. Joseph, MN. 2008 (OP)*

Lyden TW*, Campbell W* and Robak A*. Challenges and rewards of developing an undergraduate culture of research. *Council on Undergraduate Research (CUR), St. Joseph, MN. 2008 (OP)*

Lyden TW* and Campbell W. Developing an undergraduate culture of research, scholarship and creative activities. *Council on Undergraduate Research (CUR), St. Joseph, MN. 2008 (PP)*

Lyden TW* and Campbell W. The Society for Undergraduate Research, Scholarly and Creative Activities (SURSCA), a student organization sustaining the development of a research culture at UWRF. *National Conference on Undergraduate Research (NCUR), Salisbury, MD. 2008 (OP)*

Gresens W.*, Campbell W*., Lyden TW*., Freed L*. The Evolution of three undergraduate research programs within the University of Wisconsin System. *National Conference on Undergraduate Research (NCUR)*, Ashville, NC. 2006 (OP)

Lyden TW*., Campbell W*., Coombs V. Student participation in the development of an enhanced “research, scholarly and creative activities” culture at UWRF: SURSCA in its third year. *National Conference on Undergraduate Research (NCUR)*, Lexington, Va. 2005 (OP) ., *UW System RSCA Day 2005*, Oshkosh, WI (PP)

Lyden TW*., Campbell W*., Coombs V.* Organizing the “Society for Undergraduate Research, Scholarly and Creative Activities” (SURSCA): A student organization to support undergraduate research. *Council on Undergraduate Research (CUR) Conference*, La Crosse, WI. 2004 (OP)

Lyden TW*., Campbell W., Coombs V. Development of an enhanced “research, scholarly and creative activities” culture at UWRF through a student-based organization (SURSCA). *National Conference on Undergraduate Research (NCUR)*, Indianapolis, IN. 2004 (PP)

Lyden TW*, Campbell, W. Developing and fostering a “culture of undergraduate RSCA” through a student motivated organization, SURSCA. *National Conference of Undergraduate Research (NCUR)*, Salt Lake City, UT 2003 (OP)

Scientific Abstract Presentations:

137 Total, Asterisk indicates primary presenter and major presentations are highlighted.

Lyden, T.* 3D Bioprinted Artificial Breast Cancer Tumor Disks: A New Tool for Understanding Intra-tumor Heterogeneity? [Experimental Biology 2022 \(PP\)](#)

Lyden, T.* Comparison Between Bioprinted Tumor Disks and Pre-cast Hydrogels or Decellularized Natural ECM as 3D Models to Study Artificial Melanoma In-vitro. [Experimental Biology 2022 \(PP\)](#)

Scheunemann J.*, Lyden T. The Evolution of Occupational Therapy. [UWRF Fall Gala 2021 \(PP\)](#), [Florida International University \(FIU\) McNair Conference, 2021 \(PP\)](#)

Albu, G.*, Jewett, S., Lozano, A., Vue, L., Lyden, T., MCF-7 derived cell spheres and clusters generated during the long-term progression of 3D artificial tumors yield distinctive colonies and monolayer populations potentially reflective of relative malignant stage. [FASEB Journal, 34, Issue 1 Supplement 2020 \(Meeting cancelled, but abstract published\)](#)

Williams, K.*, Lyden, T., Monolayers of bovine milk-derived stem cells present with distinctive multinucleated syncytial cells following self-induced differentiation. [FASEB Journal, 34, Issue 1 Supplement 2020 \(Meeting cancelled, but abstract published\)](#)

Topel S.*, Thueson H., Lyden T. Cell strains derived from long-term 3D tumor models of MCF-7 display characteristics and phenotypes consistent with expanded stem cell populations. [FASEB Journal, 33, Issue 1 Supplement 2019, FASEB Experimental Biology 2019, Tampa, FL. \(PP\)](#)

Klinkhammer K.*, Landaeta L., Leopold M., Lyden, T. Modeling tumor development, progression and metastasis in 3D artificial tissues: Characterization of structure and labeling patterns in breast cancer hanging drop spheroid cultures. [FASEB Journal, 33, Issue 1 Supplement 2019, FASEB Experimental Biology 2019, Tampa, FL. \(PP\)](#)

Lyden T.*, Martin M. Modeling of melanoma in 3D uGel™-based cultures demonstrate tumor initiation, progression and metastatic processes in vitro. [FASEB Journal, 33, Issue 1 Supplement 2019, FASEB Experimental Biology 2019, Tampa, FL. \(PP\)](#)

Lyden T.*, Dahlberg D, Martin M. Generating 3D artificial melanoma tumor tissues using CellMate™ hydrogels. [FASEB Journal 32, Issue 1 Supplement 2018, FASEB Experimental Biology 2018, San Diego, CA. \(PP\)](#)

Lyden, T., Topel, S., Thueson, H*. Characterization of artificial tumor-derived monolayers from long-term MCF-7 breast adenocarcinoma constructs using flow cytometry and immunocytological analysis. [FASEB Journal 32, Issue 1 Supplement 2018, FASEB Experimental Biology 2018, San Diego, CA. \(PP\)](#)

Martin M.*, Lyden T. Effects of aspirin on melanogenesis in B16F10 cells grown as 3D hanging drop tumor organoids. [FASEB Journal 32, Issue 1 Supplement 2018 FASEB Experimental Biology 2018, San Diego, CA. \(PP\),](#)

Lyden, T., Topel, S.*, Thueson, H. Long-term development and culture of artificial breast tumor tissue using natural decellularized ECM scaffold materials and the adenocarcinoma cell line MCF-7. [FASEB Journal, 31, Issue 1 Supplement 2017, FASEB Experimental Biology 2017, Chicago, Ill. \(PP\)](#)

Lyden, T., Kehoe, S., Plautz, E.*, Archambault, M. Spontaneous differentiation and organotypic tissue formation in 2D and 3D cultures of bovine. [FASEB Journal, 31, Issue 1 Supplement 2017, FASEB Experimental Biology 2017, Chicago, Ill. \(PP\)](#)

Goodman, S.*, Lyden, T., Li, W.-J., Yen, T. 3D Culture and Microscopy in a Capsule with Scaffolds, Tumors and Stem Cells. [Microscopy and Microanalysis, 22 \(suppl 3\), 998-999. Microscopy and Microanalysis 2016, Columbus, OH. \(PP\)](#)

Lyden, T., Cole, K.*, Goodman, S. Application of a new miniature bioreactor system to generate and test artificial tumor and normal breast ductal tissues using MCF-7/MCF10A cells. [FASEB Journal, 30, 1300.18. Wisconsin Science and Technology Symposium \(WSTS 2015\), River Falls WI, Legislative Information Poster Session 2016, River Falls WI, National Conference on Undergraduate Research \(NCUR\) 2016, Ashville, NC, MidWest Tumor Microenvironment Meeting 2015, Madison WI \(PP\). FASEB Experimental Biology 2016, San Diego, CA. \(PP\),](#)

Lyden, T., Stilpen-Justen, B.*, Loureiro, R. Application of Cell-Mate™ 3D matrix in modeling artificial breast ductal cancer as well as control “normal” tissues. *FASEB Journal*, 30, 1300.17. *FASEB Experimental Biology 2016, San Diego, CA. (PP)*, Midwestern Tumor Microenvironment Meeting (TME 2016), Minneapolis, MN. (PP)

Lyden, T.*, Martin, M. Modeling melanoma as in-vitro artificial tumor tissues using natural 3D matrix materials. *FASEB Journal*, 30, 697.1, *FASEB Experimental Biology 2016, San Diego, CA. (PP)*, Midwestern Tumor Microenvironment Meeting (TME 2016), Minneapolis, MN. (PP).

Lyden, T.*, Strohbeen, S. Generation and comparative analysis of choriocarcinoma tumor organoids using a new hanging drop culture method. *Placenta*, 45, 105: P2.6. *Wisconsin Science and Technology Symposium (WSTS 2015), River Falls WI (PP), UWRF Fall UGRSCA Gala 2015 River Falls, WI (PP)*.

Pessoa L.*, Duellmann B., Haselby R., Kudva I., Zuelke K. and Lyden T.* , Modeling intestinal epithelial lining with the CaCo2 cell line in 3D scaffold cultures. *MidWest Tumor Microenvironment Meeting 2015, Madison WI (PP)*.

Robinson J, Stanford C, Valder E, Rixmann K, Haselby R, and Lyden TW*, Modeling breast cancer metastatic behavior using MCF-7 spheroids coupled with 3D fibroblastic (3T3-Swiss) and adipogenic (3T3-L1) artificial stromal tissues. *MidWest Tumor Microenvironment Meeting 2015, Madison WI (PP)*.

Pessoa L*, Silva A, Timmers A, Robinson J, Haugen R, Stanford C, Valder E, Rixmann K, Haselby R, and Lyden, TW, Comparative Analysis of Breast Cancer Mammospheres Derived from Induced 3D Artificial Tissues and Hanging Drop Cultures. *Wisconsin Science and Technology Symposium (WSTS 2015), River Falls WI (PP), National Conference on Undergraduate Research (NCUR) 2015, Seattle WA (PP) UWRF Fall UGRSCA Gala 2015 River Falls, WI (PP)*.

Silva A*, Timmers A, Robinson J, Haugen R, Stanford C, Valder E, Rixmann K, Haselby R and Lyden TW, Modeling Breast Cancer Metastasis using MCF-7 Hanging Drop Spheroid Cultures. *Regional Regenerative Medicine Symposium 2014 Minneapolis MN (PP), Wisconsin Science and Technology Symposium (WSTS 2015), River Falls WI (PP), National Conference on Undergraduate Research (NCUR) 2015, Seattle WA (PP), UWRF Fall UGRSCA Gala 2015 River Falls, WI*.

Robinson J*, Stanford C, Rixmann K, Haselby R, Chibalin A, Zierath J, and Lyden TW, Comparative modeling of breast cancer metastasis in fibroblastic versus adipogenic artificial stromal tissues. *Wisconsin Science and Technology Symposium (WSTS 2014), Eau Claire WI (PP), National Conference on Undergraduate Research (NCUR) 2014, Lexington KY (PP)*.

Rodriguez R*, Jaques B, Overby K, Suljic R, Chibalin A, Zierath J, and Lyden TW, Modeling Skeletal Muscle Development in C2C12 Myoblast Cells 3D Culture. *Wisconsin Science and Technology Symposium (WSTS 2014), Eau Claire WI (PP), National Conference on Undergraduate Research (NCUR) 2014, Lexington KY (PP)*.

Jaques B, Suljic R*, Overby K*, Chibalin A, Zierath J, and Lyden TW, Characterization of specialized C2C12 myoblast cell morphologies relevant to artificial muscle tissue development in 2D and 3D cultures. *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP), *National Conference on Undergraduate Research (NCUR) 2013*, LaCrosse WI (PP), *University of Minnesota Imaging Center Annual Poster Session 2013* (PP), *American Association for the Advancement of Science Annual Meeting 2013*, Boston, Mass (PP).

Valder E*, Chibalin A, Zierath J, and Lyden TW, Establishment and characterization of 3D artificial tissue models of adipose using the 3T3-L1 pre-adipocyte cell line. *World Stem Cell Summit (WSCS) 2012*, West Palm Beach, FL (PP), *National Conference on Undergraduate Research (NCUR) 2012*, Ogden, UT (PP), *UW System "Posters in the Rotunda" 2012*, Madison, WI (PP). *Wisconsin Science and Technology Symposium (WSTS2012)*, Marshfield WI (PP). *UWRF RSCA Day 2012* (PP), *University of Minnesota Imaging Center Annual Poster Session 2013* (PP).

Stanford C*, Rixmann K*, Rukamp C, Dahlberg P, Haselby R, Chibalin A, Zierath J, and Lyden TW, Exploring the dynamic role of adipose tissues in breast cancer using 3D artificial tissue models of adipocyte and MCF-7 cells. *National Conference on Undergraduate Research (NCUR) 2012*, Ogden, UT (PP), *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP). *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP), *American Association for the Advancement of Science Annual Meeting 2013*, Boston, Mass (PP).

Servent B*, Graef A, Lee B and Lyden TW. In-vitro 3D "artificial tumor tissues" or ATTs developed from the cervical carcinoma cell line, Hela, show clear evidence of regional differentiation and cellular specialization. *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP), *University of Minnesota Imaging Center Annual Poster Session 2012* (PP). *UWRF RSCA Day 2012* (PP), *American Association for the Advancement of Science Annual Meeting 2013*, Boston, Mass (PP).

Rixmann K*, Rukamp C, Dahlberg P, Haselby R, and Lyden TW. Modeling the effects of insulin on breast cancer artificial tissue models. *National Conference on Undergraduate Research (NCUR) 2012*, Ogden, UT (PP), *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP). *UWRF RSCA Day 2012* (PP), *American Association for the Advancement of Science Annual Meeting 2013*, Boston, Mass (PP).

Jacques B*, Suljic R*, Overby K*, Chibalin A, Zierath J, and Lyden TW. Establishment and characterization of 3D artificial skeletal muscle tissues using the myoblast cell line C2C12. *World Stem Cell Summit (WSCS) 2012*, West Palm Beach, FL (PP), *National Conference on Undergraduate Research (NCUR) 2012*, Ogden, UT (PP), *UW System "Posters in the Rotunda" 2012*, Madison, WI (PP). *Wisconsin Science and Technology Symposium (WSTS 2012)*, Marshfield WI (PP). *UWRF RSCA Day 2012* (PP), *University of Minnesota Imaging Center Annual Poster Session 2013* (PP).

Rixmann K*, Dahlberg P, Haselby R and Lyden TW. Modeling and Characterization of Artificial Breast Cancer Tissues Using 3D Culture Methods. *American Association for the Advancement of Science Annual Meeting 2012*, Vancouver, BC (PP).

McDonald N*, Piazza V, and Lyden TW. A structural and ultrastructural study of artificial cardiac tissue models. *National Conference on Undergraduate Research (NCUR) 2012, Ogden, UT (PP)*, *UWRF RSCA Day 2012 (PP)*.

Stewart J*, Jacobson B, and Lyden TW. Modeling Neurodevelopment of Tobacco Hornworm (*Manduca sexta*) in Relation to Holometabolic Metamorphosis. *National Conference on Undergraduate Research (NCUR) 2012, Ogden, UT (PP)*,

Hout R*, Wood E, Cordie T, Wenig C, Willette M and Lyden TW. Characterization of avian fetal artificial-tissues (ATs) and monolayer cultures of mesenchymal origin derived from early long bone rudiments. *Wisconsin Science and Technology Symposium (WSTS 2012), Marshfield WI (PP)*, *University of Minnesota Imaging Center Annual Poster Session 2012 (PP)*. *UWRF RSCA Day 2012 (PP)*.

Wagner S*, Gould S* and Lyden TW, Development and characterization of “artificial” brain tumor tissues using 3D tissue engineering approaches with both primary human tumors as well as glioblastoma cell lines. *National Conference on Undergraduate Research (NCUR) 2011, Ithaca, NY (PP)*, *UW System RSCA Day 2011 (PP)*, *System “Posters in the Rotunda” 2011, Madison, WI*, *University of Minnesota Imaging Center Annual Poster Session 2012 (PP)*, *UWRF RSCA Day 2010 (PP)*.

Morris TA*, Wenig C, Cordie T, Talsness S, and Lyden TW*, Characterization of Human Embryonic Stem Cell-Derived 3D Artificial Tissue Structures Produced Using Natural ECM Scaffolding Materials. *World Stem Cell Summit 2010, Detroit, MI*, *National Conference on Undergraduate Research (NCUR) 2011, Ithaca, NY (PP)*, *UW System RSCA Day 2011 (PP)*, *System “Posters in the Rotunda” 2011, Madison, WI (PP)*, *UWRF RSCA Day 2010 (PP)*, *University of Minnesota Imaging Center Annual Poster Session 2012 (PP)*.

Graef A*, Lee B, and Lyden TW, Characterization of complex in-vitro 3D “artificial tumor tissue” models using the cervical carcinoma cell line, Hela. *National Conference on Undergraduate Research (NCUR) 2011, Ithaca, NY (PP)*, *UW System RSCA Day 2011 (PP)*, *System “Posters in the Rotunda” 2011, Madison, WI*, *UWRF RSCA Day 2010 (PP)*. .

Kuen R*, and Lyden TW, The effects of electromagnetic fields on the Hela cancer cell line. *National Conference on Undergraduate Research (NCUR) 2011, Ithaca, NY (PP)*, *UW System RSCA Day 2011 (PP)*, *UWRF RSCA Day 2010 (PP)*.

Lyden TW*. In-vitro 3D artificial tumor microenvironments as potential models of clinical disease. *Wisconsin Science and Technology Symposium (WSTS 2010), UW-Green Bay, WI (OP)*.

Rixmann K*, Dahlberg P, Haselby R, and Lyden TW, Modeling and characterization of primary and cell-line derived artificial breast cancer tissues produced using 3D culture methods. *National Conference on Undergraduate Research (NCUR) 2011, Ithaca, NY (PP)*, *UW System RSCA Day 2011 (PP)*, *System “Posters in the Rotunda” 2011, Madison, WI (PP)*, *Wisconsin Science and Technology Symposium, UW-Green Bay WI (PP)*, *UWRF RSCA Day 2010 (PP)*, *University of Minnesota Imaging Center Annual Poster Session 2012 (PP)*.

Lee B, Lyden TW, Modeling complex cervical carcinoma cell-derived structures in 3D “artificial tissue” cultures. *National Conference on Undergraduate Research (NCUR) 2010, Missoula MT. (PP), UW System RSCA Day 2010 (PP), System “Posters in the Rotunda” 2010, Madison, WI (PP), Wisconsin Science and Technology Symposium (WSTS 2010), UW-Green Bay WI (PP), UWRF RSCA Day 2010 (PP).*

Morris TA, Lifton S, Lyden TW, Seeking to generate “induced pluripotent stem” (IPS) cells from the cervical cancer cell line, HeLa. *National Conference on Undergraduate Research (NCUR) 2010, Missoula MT. (PP), UW System RSCA Day 2010 (PP), Wisconsin Science and Technology Symposium (WSTS 2010), UW-Green Bay WI (PP), UWRF RSCA Day 2010 (PP).*

Lyden TW, Haselby R, Pickert M. and Dahlberg P, Modeling human cancer cell behavior within complex 3D cultures using rudimentary tissue engineering methods. *JCB / New York Academy of Sciences Meeting “Cell Biology of Disease: Chromosomes, Cancer and Stem Cells”, 2009, Wisconsin Science and Technology Symposium (WSTS 2010), UWGreen Bay WI (PP), UWRF RSCA Day 2010 (PP), University of Minnesota Imaging Center Annual Poster Session 2012 (PP).*

Piazza V, Lyden TW, Tissue and cellular characterization of long-term cardiac artificial tissues cultured in 3D using natural ECM materials. *National Conference on Undergraduate Research (NCUR) 2010, Missoula MT. (PP), UW System RSCA Day 2010 (PP), System “Posters in the Rotunda” 2010, Madison, WI (PP), Wisconsin Science and Technology Symposium (WSTS 2010), UW-Green Bay WI (PP), UWRF RSCA Day 2010 (PP).*

Besso M, Johnson M, Martin C and Lyden TW, Long-term 3-dimensional cultures of HEK-293 cells demonstrate clear evidence of tissue-like differentiation. *Wisconsin Science and Technology Symposium (WSTS 2010), UW-Green Bay WI (PP).*

Lyden TW*. “Modeling Primary Human Tumors in 3D Artificial Tissue (AT) Cultures.”, *Wisconsin Science and Technology Symposium (WSTS 2009), UW-LaCrosse, WI (OP).*

Piazza P*, Sams P and Lyden TW, The application of natural extracellular matrix materials to generate cardiac artificial tissues. *16th Annual California McNair Scholars Symposium, Berkeley, CA (PP), National Conference on Undergraduate Research (NCUR) 2009, LaCrosse WI. (PP), System “Posters in the Rotunda” 2009, Madison, WI (PP), UWRF RSCA Day 2009 (PP), Wisconsin Science and Technology Symposium (WSTS 2009), UWLaCrosse WI (PP), UWRF RSCA Day 2009 (PP).*

Tallsness S*, Helton D., Sams P., and Lyden TW, Characterization of a surface epithelial cell line derived from long-term culture of human embryonic stem cell based 3D structures. *National Conference on Undergraduate Research (NCUR) 2009, LaCrosse WI. (PP), UWRF RSCA Day 2009 (PP), System “Posters in the Rotunda” 2009, Madison, WI (PP), Wisconsin Science and Technology Symposium (WSTS 2009), UW-LaCrosse WI (PP), UWRF RSCA Day 2009 (PP).*

Helton D*, Tallsness S., Sams P., and Lyden TW, Structural and biochemical characterization of 3D artificial tissues developed from a human choriocarcinoma cell line, BeWo. *National Conference on Undergraduate Research (NCUR) 2009, LaCrosse WI. (PP), UWRF RSCA Day 2009 (PP) UWRF RSCA Day 2009 (PP).*

Score L*. and Lyden TW, Isolation and morphologic characterization of potential stem and other cell populations from human breast milk. *UWRF RSCA Day 2009 (PP)*, System “Posters in the Rotunda” 2009, Madison, WI (PP), *Wisconsin Science and Technology Symposium (WSTS 2009)*, LaCrosse WI (PP), *UWRF RSCA Day 2009 (PP)*.

Yang C*, Sams P and Lyden TW, Influences of Human Sera on Cultured Cells, *National Conference on Undergraduate Research (NCUR) 2009*, LaCrosse WI. (PP), System “Posters in the Rotunda” 2009, Madison, WI (PP), *UWRF RSCA Day 2009 (PP)*.

Lyden TW*. UWRF Tissue and Cellular Innovation Center, Applications of Tissue Engineering and Stem Cells. *Wisconsin Science and Technology Symposium (WSTS 2008)*, *UW-Stout, Menomonee, WI (OP)*.

Wenig C.*, Cordie T., Cote R., and Lyden TW. Use of 3D scaffolds to produce EMB-like structures with Human Embryonic Stem Cells. *National Conference on Undergraduate Research (NCUR) 2008*, Salisbury, MD. (PP), *UW System RSCA Day 2008*, River Falls, WI. (PP), *UW System “Posters in the Rotunda” 2008*, Madison, WI (PP), *UWRF RSCA Day 2008 (PP)*, *Wisconsin Science and Technology Symposium (WSTS 2008)*, *UW-Stout (PP)*.

Helton D.* and Lyden TW. Structural analysis of “artificial tissues” produced in 3D cultures of the human placental cell line, BeWo. *National Conference on Undergraduate Research (NCUR) 2008*, Salisbury, MD. (PP), *UW System RSCA Day 2008*, River Falls, WI. (PP), *UW System “Posters in the Rotunda” 2008*, Madison, WI (PP), *UWRF RSCA Day 2008 (PP)*.

Wenig C.*, Cordie T. and Lyden TW. Localization, micro-dissection and 3D culture of the substantia nigra from early chicken embryo. *Oklahoma Research Day 2007, Oklahoma City, OK. UWS BOR Meeting Oct. 2007, River Falls, WI., National Conference on Undergraduate Research (NCUR) 2008*, Salisbury, MD. (PP), *UW System RSCA Day 2008*, River Falls, WI. (PP), *UW System “Posters in the Rotunda” 2008*, Madison, WI (PP), *UWRF RSCA Day 2008 (PP)*, *Wisconsin Science and Technology Symposium (WSTS 2008)*, *UWStout, Menomonee, WI (PP)*.

Cordie T.*, Wenig C. and Lyden TW. Comparison of stage specific protein expression patterns between long-term 3D cultures and native samples of chicken embryonic cardiac tissues. *Oklahoma Research Day 2007, Oklahoma City, OK. UWS BOR Meeting Oct. 2007, River Falls, WI., National Conference on Undergraduate Research (NCUR) 2008*, Salisbury, MD. (PP), *UW System RSCA Day 2008*, River Falls, WI. (PP), *UW System “Posters in the Rotunda” 2008*, Madison, WI (PP), *UWRF RSCA Day 2008 (PP)*, *Wisconsin Science and Technology Symposium (WSTS 2008)*, *UW-Stout, Menomonee, WI (PP)*.

Cote R.* and Lyden TW*. In vitro Modeling of Early Embryonic Hematopoiesis. *Penn State University McNair Program Summer Conference 2007, University Park, PA., Oklahoma Research Day 2007, Oklahoma City, OK. UWS BOR Meeting Oct. 2007, River Falls, WI., National Conference on Undergraduate Research (NCUR) 2008*, Salisbury, MD. (PP), *UW System RSCA Day 2008*, River Falls, WI. (PP), *UW System “Posters in the Rotunda” 2008*, Madison, WI (PP), *UWRF RSCA Day 2008 (PP)*.

Lyden TW*, Phenotypic changes in trophoblast cells following dimensional culture on natural scaffolding materials. *International Federation of Placental Associations (IFPA 2007)*, Kingston Ontario (PP)

Cordie T.*, Wenig C., Willette M., Schaff T. and Lyden TW. Development of artificial-tissues (ATs) from early avian embryonic cardiac tissues strongly implies a contribution from fetal stem cell populations. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP), UWRF RSCA Day 2007 (PP).*

Willette M.*, Cordie T., Wenig C., Schaff T. and Lyden TW. The culture of early avian embryonic lung samples in 3-D artificial tissue (ATs) cultures. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP),*

Wenig C.*, Cordie T., Willette M., Schaff T. and Lyden TW. The study of early avian thoracic neural crest cells and neural tube region tissues in 3-D artificial tissue (ATs) cultures. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP), UWRF RSCA Day 2007 (PP).*

Wood E.*, Schaff T., Willette M., Cordie T., Wenig C. and Lyden TW. Characterization of avian embryonic artificial-tissues (ATs) and monolayer cultures of mesenchymal origin derived from early long bone rudiments. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP), UWRF RSCA Day 2007 (PP).*

Schaff T.*, Willette M., Cordie T., Wenig C., and Lyden TW. Artificial-tissues (ATs) from early avian embryonic neural tissues: Studies to examine the presence and potential role of early neural stem cells within this new in-vitro tissue model system. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP), UWRF RSCA Day 2007 (PP).*

Tucker D.*, Miller A., Nelson T., Martin C., Salwasser N., Lyden, TW. Evidence of the "Mitotic Catastrophe" Programmed Cell Death Pathway in Testing of Synthetic Compounds. *National Conference on Undergraduate Research (NCUR) 2007, San Raphael, CA. (PP), UW System RSCA Day 2007, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2007, Madison, WI (PP), UWRF RSCA Day 2007 (PP).*

Johnson M.*, Lyden TW. Longterm 3-dimensional cultures of HEK-293 cells demonstrate clear evidence of tissue-like differentiation. *National Conference on Undergraduate Research (NCUR), Ashville, NC. 2006 (PP), UW System RSCA Day 2006, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2006, Madison, WI (PP), UWRF RSCA Day 2006 (PP).*

Schaaf T.*, Peterson T.*, Walters B., Lyden TW. Primary nervous tissue growth and potential development in 3D cultures. *UWRF Evening RSCA Gala 2005 (PP), National Conference on Undergraduate Research (NCUR), Ashville, NC. 2006 (PP), UW System RSCA Day 2006, Menomonee, WI. (PP), UW System "Posters in the Rotunda" 2006, Madison, WI (PP), UWRF RSCA Day 2006 (PP).*

Grosek J.*, Lyden, TW. Artificial tissue development in 3D cultures leads to stable phenotypic changes in trophoblast cells. *UWRF Evening RSCA Gala 2005 (PP)*, *National Conference on Undergraduate Research (NCUR)*, Ashville, NC. 2006 (PP), *UW System RSCA Day 2006*, Menomonee, WI. (PP), *UW System "Posters in the Rotunda" 2006*, Madison, WI (PP), *UWRF RSCA Day 2006 (PP)*.

Nelson T., Martin C.*, Salwasser N., Lyden, TW. Testing of synthetic compounds for apoptosis inducing capacity reveals a specific cell-death pathway. *UWRF Evening RSCA Gala 2005 (PP)*.

Nelson T.*, Schaff T., Majeske M., Gunderson A., Schimmel S., Salwasser N., Lyden TW. Development of a 3-dimensional cell culture system for the growth and study of epithelial "pseudo-tissues". *National Conference on Undergraduate Research (NCUR)*, Lexington, Va. 2005 (PP), *UW System RSCA Day 2005*, Oshkosh, WI. (PP), *UW System "Posters in the Rotunda" 2005*, Madison, WI (PP), *UWRF RSCA Day 2005 (PP)*.

Nelson T.*, Schaff T., Majeske M., Gunderson A., Schimmel S., Salwasser N., Lyden TW. Morphometric analysis of "tissue-engineered" 3-dimensional epithelial cell cultures. *UW System "Posters in the Rotunda" 2005*, Madison, WI (PP), *UWRF RSCA Day 2005 (PP)*.

Salwasser N.*, Lyden, TW, (Collaborators, Peterson K., Zemke B.) Biological testing of synthetic organic compounds for potential activity inducing apoptosis. *UWRF Evening RSCA Gala 2004 (Abs.) and National Conference on Undergraduate Research (NCUR)*, Lexington, Va. 2005 (PP), *UW System RSCA Day 2005*, Oshkosh, WI. (PP), *UWRF RSCA Day 2005 (PP)*.

Gunderson A.*, Lyden TW. Establishment of GFP-tubulin expressing stable epithelial cell lines. *UWRF Evening RSCA Gala 2004 (Abs.) and National Conference on Undergraduate Research (NCUR)*, Lexington, Va. 2005 (PP), *UW System RSCA Day 2005*, Oshkosh, WI. (PP), *UWRF RSCA Day 2005 (PP)*.

Schimmel S.*, Lyden TW. Establishment of GFP-ERV env expression vector using trophoblast cell cultures as the target gene source. *UWRF Evening RSCA Gala 2004 (Abs.) and National Conference on Undergraduate Research (NCUR)*, Lexington, Va. 2005 (PP), *UW System RSCA Day 2005*, Oshkosh, WI. (PP), *UWRF RSCA Day 2005 (PP)*.

Salmela M.*, Lyden TW. Observations from syncytial cell formation provide evidence in support of the "tensegrity" model of cellular architecture. *UWRF Evening RSCA Gala 2003 (PP) and National Conference on Undergraduate Research (NCUR)*, Indianapolis, IN. 2004 (PP), *UW System RSCA Day 2004*, Oshkosh, WI. (PP), *UW System "Posters in the Rotunda" 2004*, Madison, WI (PP), *UWRF RSCA Day 2003. (PP)*

Salmela M.*, Lyden TW. Microtubule cytoskeletal changes observed during retroviral envelope protein-mediated syncytial cell formation. *UWRF Evening RSCA Gala 2003 (PP) and National Conference on Undergraduate Research (NCUR)*, Indianapolis, IN. 2004 (PP), *UW System RSCA Day 2004*, Oshkosh, WI. (PP), *UW System "Posters in the Rotunda" 2004*, Madison, WI (PP), *UWRF RSCA Day 2004. (PP)*

Genal E.*, Lyden TW. Application of immunoassay techniques to address the question of retroviral envelope protein immuno-crossreactivity. *UWRF Evening RSCA Gala 2003 (PP) and National Conference on Undergraduate Research (NCUR)*, Indianapolis, IN. 2004 (PP), *UW System RSCA Day 2004*, Oshkosh, WI. (PP), *UW System "Posters in the Rotunda" 2004*, Madison, WI (PP), *UWRF RSCA Day 2004*. (PP)

Lyden TW.*, Salmela M. Tubulin cytoskeletal changes observed during retroviral envelope mediated syncytial cell formation. *1st Annual Chicago Cytoskeleton Conference, Northwestern University Medical School. Chicago, Ill. 2003. (PP)*

Knoop C.*, Lyden TW. Determination of placental trophoblast cellular differentiation state through DAPI staining and image analysis. *National Conference on Undergraduate Research (NCUR)*, Salt Lake City, UT 2003 (PP), *UWRF RSCA Day 2003 (PP)*, *UW System RSCA Day 2003*, UW Eau Claire (PP) and *UWRF Evening RSCA Gala 2003. (PP)*

Thacker C.*, Lyden TW. Co-localization of caveolin and cytoskeletal elements within isolated placental endothelial cells. *National Conference on Undergraduate Research (NCUR)*, Salt Lake City, UT 2003 (PP), *UWRF RSCA Day 2003 (PP)* and *UW System RSCA Day 2003*, UW Eau Claire (PP) and *UWRF Evening RSCA Gala 2003. (PP)*

Aggarwal H.*, Lyden TW. The functional relationship between endogenous retroviral envelope proteins and normal human placental development. *National Conference on Undergraduate Research (NCUR)*, Whitewater WI, 2002 (PP), *UWRF RSCA Day 2002. (PP)*

Robinson JM.*, Lyden TW., Anderson CL. The Distribution of Caveolin and Caveolae in Human Placenta. *American Society of Cell Biology Meeting*; San Francisco, CA., 2000. (PP)

Lyden TW.*, Robinson JM., Anderson CL. Placental endothelial cell expression of FcRII: Distribution and subcellular localization suggest a potential role in IgG transport. *14th Rochester Trophoblast Conference; Rochester, N.Y., 2000. (OP)*

Lyden TW.*, Robinson JM., Anderson CL. Fc γ RII distribution in the human placenta correlates with a potential role in transplacental IgG transport. *FASEB Summer Conference on Biology of Immunoreceptors; Saxton's River Vermont, 1999. (PP,OP)*

Robinson JM.*, Lyden TW, Anderson CL. Distribution of FcRn in human cells. *American Society of Cell Biology Meeting*; Washington DC, 1999. (PP)

McKenzie T., Hoff C.*, Miller T., Lyden TW., Moore RB. The role of molecular mimicry in AIDS. *Southern Society for Pediatric Research/American Federation for the Medical Research Meetings*; New Orleans, 1998. (OP)

Hoff C*, Moore RB., Miller T., Lyden TW., McKenzie T. Evidence for molecular mimicry as an etiologic factor in AIDS. *4th Internet World Congress, Internet Association for Biomedical Sciences (INABIS)*; Japan 1997. (EP)

Lyden TW.*, Johnson PM., Mwenda J., Rote NS., Ray PA., Mandal AK. Immunolocalization of retroviral cross reactive epitopes during trophoblast differentiation. *6th International Congress of Reproductive Immunology; Washington DC, 1995. (PP)*

Lyden TW*, Johnson PM, Mwenda J. Placental endogenous retroviral expression: Molecular symbiosis or evolutionary artifact? *Wright State University School of Medicine 1st Annual Central Research Forum*; Dayton Ohio, 1995. (PP)

Mandal AV, Lyden TW*, Colvin R., Taylor A., Saklayen MG. Heparin induced endothelial cell responses related to blood pressure regulation. *Wright State University School of Medicine, 1st Annual Central Research Forum*; Dayton Ohio, 1995. (PP)

Mandal AV*, Lyden TW, Colvin RJ, Saklayen MG. Heparin causes vascular relaxation by inducing endothelial cell cytoskeletal reorganization. *13th International Congress of Nephrology*; Madrid, Spain, 1995. (PP)

Mandal AV*, Lyden TW, Saklayen MG. Heparin-induced endothelial cell cytoskeletal reorganization: A Mechanism for vascular relaxation. *28th Annual Meeting of the American Society of Nephrology*, 1995. (PP)

Mandal AV, Lyden TW, Saklayen MG*, Colvin RJ, Taylor CA. Heparin-induced vascular relaxation by endothelial cell cytoskeletal reorganization. *Association of American Physicians Clinical Research Meeting*; San Diego, CA 1995. (PP)

Lyden TW*, Mandal AK, Colvin RJ, Awaloei H, Wright D, Saklayen MG. Detection and immunolocalization of angiotensin-converting enzyme (ACE) expression in normal human trophoblast. *1st International Meeting of World Placenta Associations*; Sydney, Australia, 1994. (PP)

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Retroviral crossreactivity of trophoblast sub-populations within human placental cell isolates. *1st International Meeting of World Placenta Associations*; Sydney, Australia, 1994. (PP)

Lyden TW*, Johnson PM, Mwenda J. Immunolocalization of HIV-1 crossreactive epitopes in normal baboon placental trophoblast. *1st International Meeting of World Placenta Associations*, Sydney, Australia, 1994. (OP)

Huang Y, Lyden TW*, Xu B, Lu L. Chloride conductance regulated by intracellular signaling system in trophoblastic cells. *1st International Meeting of World Placenta Associations*; Sydney, Australia, 1994. (OP)

Rote NS*, Vogt E, Lyden TW, Ng AK. Monoclonal antiphosphatidylserine antibody induces intrauterine growth retardation in pregnant mice. *1st International Meeting of World Placenta Associations*, Sydney, Australia, 1994. (PP)

Mwenda JM*, Pollard A, Lania L, Johnson PM, Lyden TW, Flanagan BF. Molecular characterization of a putative endogenous proviral (ERV9) cDNA isolated from baboon placental expression library. *2nd International Union of Immunological Societies, African Immunology Conference*; Nairobi, Kenya, 1994. (OP)

Mwenda JM*, Lyden TW, Mumtz V. Johnson PM. Expression in normal baboon and human placental tissues of antigens reactive with anti-gp120 and p17 monoclonal antibodies. *2nd International Union of Immunological Societies, African Immunology Conference*; Nairobi, Kenya, 1994. (OP)

Vogt E*, Lyden TW, Ng AK, Rote NS. Monoclonal antiphosphatidylserine antibody induces intrauterine growth retardation in pregnant mice. *Sixth International Symposium on Antiphospholipid Antibodies*; Leuven, Belgium, 1994. (OP)

Lyden TW, Mandal AK, Colvin RJ, Saklayen MG. Heparin induced modification of angiotensin converting enzyme (ACE) expression in cultured endothelial cells. *Journal of the American Society of Nephrology*, 5:722, 1994.

Mandal AV, Lyden TW, Colvin RJ, Taylor CA, Saklayen MG. Heparin causes vascular relaxation by inducing endothelial cell remodeling. *Journal of the American Society of Nephrology*, 5:585, 1994.

Lyden TW*, Johnson PM, Rote NS. Definition and retroviral cross-reactivity pattern of trophoblast subpopulations within placental cell isolates. *14th Annual Meeting of the American Society for the Immunology of Reproduction*; Philadelphia, Pa., 1994. (PP)

Rote NS*, Vogt E, Lyden TW, Ng AK. Antiphosphatidylserine antibody induces intrauterine growth retardation in BALB/C mice. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (PP)

Rote NS*, Menon R, Swan KF, Lyden TW, Fortunato SJ. Expression of IL-1 beta and IL-6 protein and mRNA in amniochorionic membrane. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (OP)

Rote NS*, Vogt E, Lyden TW, Lin L, Ng AK. Human IgM antiphospholipid antibodies react with human placental trophoblast. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (PP)

Rote NS*, Lin L, Shroyer L, Lyden TW, Ng AK. Reactivity of endothelial cell intermediate filaments with human and mouse monoclonal IgM antiphospholipid antibodies. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (PP)

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Immunolocalization and *in situ* hybridization of HIV-1 cross-reactive proteins and hERV-3 mRNA in choriocarcinoma cells (BeWo) during forskolin treatment. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (PP)

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Immunolocalization of HIV-1 cross-reactive placental proteins in the normal non-infected human decidua and basal plate. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference*; Manchester, England, 1993. (OP)

Lyden TW*, Johnson PM, Rote NS. Differentiation-related expression of HIV-1 crossreactive proteins in human placenta and choriocarcinoma cells. *Serono Symposium on Immunobiology of Reproduction*; Boston, Mass, 1993. (PP)

Rote NS*, Lyden TW, Vogt E, Ng AK. Antiphospholipid antibodies and placental development. *Serono Symposium on Immunobiology of Reproduction*; Boston, Mass, 1993. (OP)

Lyden TW*, Johnson PM, Mwenda JM, Rote NS. HIV-1 crossreactive protein expression in choriocarcinoma cell lines. *IXth International Conference on AIDS; Berlin, Germany, 1993. (PP)*

Lyden TW*, Johnson PM, Mwenda JM, Rote NS. Immunolocalization of endogenous placental proteins crossreactive with HIV-1. *IXth International Conference on AIDS; Berlin, Germany, 1993. (PP)*

Johnson RM*, Peoples JB, Rote NS, Lyden TW, Apesos J. Tumor necrosis factor levels measured by sandwich ELISA in an experimental wound infection. *38th Meeting of the Plastic Surgery Research Council*; Houston, TX, 1993. (OP)

Lyden TW*, Johnson PM, Mwenda JM, Rote NS. Localization of anti-HIV monoclonal antibody reactivity in normal human placental trophoblast during differentiation. *12th Rochester Trophoblast Conference; Rochester, NY, 1992. (OP)*

Vogt E, Lyden TW, Ng AK, Rote NS*. Monoclonal antiphosphatidylserine antibody induces intrauterine growth retardation in BALB/C mice. *5th International Symposium on Antiphospholipid Antibodies*; San Antonio, TX, 1992. (OP)

Lyden TW, Vogt E, Rote NS*. Phosphatidylserine antigen expression and modulation associated with *in vitro* cytotrophoblast differentiation. *5th International Symposium on Antiphospholipid Antibodies*; San Antonio, TX, 1992. (OP)

Lyden TW, Vogt E, Ng AK, Rote NS*. Human and mouse monoclonal IgM antiphospholipid antibodies react with human placental trophoblast. *5th International Symposium on Antiphospholipid Antibodies*; San Antonio, TX, 1992. (OP)

Rote NS*, Lyden TW, Vogt E, Ng AK, Chang J. Expression of phosphatidylserine epitopes during trophoblast membrane fusion: an alternative hypothesis for antiphospholipid antibody associated pregnancy disorders. *5th International Congress of Reproductive Immunology*; Rome, Italy, 1992. (PP)

Lyden TW, Vogt E, Ng AK, Rote NS*. IgM antiphospholipid antibodies differentiate between human placental cytotrophoblast and syncytiotrophoblast. *5th International Congress of Reproductive Immunology*; Rome, Italy, 1992. (PP)

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Computer analysis of potential glucocorticoid binding sites within the placental-associated endogenous retrovirus proviral sequences HERV-3 and BaEV. *5th International Congress of Reproductive Immunology; Rome, Italy, 1992. (PP)*

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Localization of anti-retroviral antibody reactivity in normal non-infected human placenta. *5th International Congress of Reproductive Immunology; Rome, Italy, 1992. (PP)*

Lyden TW*, Ng AK, Rote NS. Expression and modulation of phosphatidylserine on BeWo cells during forskolin treatment. *5th International Congress of Reproductive Immunology; Rome, Italy, 1992. (PP)*

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Anti-HIV monoclonal antibody reactivity during forskolin induced differentiation of BeWo choriocarcinoma cells. *5th International Congress of Reproductive Immunology; Rome, Italy, 1992. (PP)*

Lyden TW*, Johnson PM, Mwenda J, Rote NS. Anti-HIV monoclonal antibodies react with normal human trophoblast. *12th Annual Meeting of the American Society for the Immunology of Reproduction; Charleston, SC, 1992. (OP)*

Vogt E*, Lyden TW, Rote NS. Reactivity of human IgM antiphospholipid antibodies against placental trophoblast. *12th Annual Meeting of the American Society for the Immunology of Reproduction; Charleston, SC, 1992. (OP)*

Lyden TW*, Ng AK, Rote NS. Modulation of phosphatidylserine epitope expression on BeWo cells during forskolin treatment. *12th Annual Meeting of the American Society for the Immunology of Reproduction; Charleston, SC, 1992. (OP)*

Lyden TW*, Vogt E, Rote NS. Antiphosphatidylserine antibodies react with human trophoblast. *33rd Annual National Student Research Forum; Galveston, TX, 1992. (OP)*

Mwenda JM*, Maher PM, Melling GC, Flanagan BF, Lyden TW, Johnson PM. Immunohistochemical characterization of endogenous retroviral expression in human placental tissue. *NCRR 2nd International Conference on Advances in Reproductive Research in Man and Animals; Nairobi, Kenya, 1992. (OP)*

Mwenda JM*, Flanagan BF, Lyden TW, Johnson PM. Critical appraisal for detection of endogenous retroviruses in human placental tissues. *NCRR 2nd International Conference on Advances in Reproductive Research in Man and Animals; Nairobi, Kenya, 1992. (OP)*

Mwenda JM*, Maher PM, Melling GC, Lyden TW, Flanagan BF, Johnson PM. Immunological characterization of endogenous retroviral expression in the human placental tissue. *1st International Union of Immunological Societies, African Immunology Conference; Harare, Zimbabwe, 1992. (OP)*

Mwenda JM*, Maher PM, Melling GC, Lyden TW, Johnson PM. A monoclonal antibody reactive with endogenous retroviral particles in the human placenta. *BSI/SFI Maternal-Fetal Immunology Group Meeting; London, England, 1991. (OP)*

Mwenda JM*, Maher PM, Melling GC, Lyden TW, Johnson PM. Murine monoclonal antibody to placental endogenous retroviral protein. *11th European Immunology Meeting; Helsinki, Finland, 1991. (PP)*

Rote NS*, Lyden TW, Ng AK, Dostal-Johnson DA. Platelet, endothelial cell, and trophoblast reactivity of mouse monoclonal antiphospholipid antibodies that differentiate between phosphatidylserine and cardiolipin. *NIH Sponsored Workshop on Antiphospholipid Antibodies; Bethesda, MD, 1991. (OP)*

Rote NS, Lyden TW*, Vogt E. Monoclonal antiphospholipid antibodies react with human trophoblast. *European Placenta Group Joint Meeting with the Rochester Trophoblast Conference; Gwatt, Switzerland, 1991. (PP)*

Lyden TW*, Rote NS, Johnson PM, Mwenda J. Structural characterization of a placental endogenous retrovirus. *11th Meeting of the American Society for the Immunology of Reproduction; Charlottesville, VA, 1991. (OP)*

Rote NS*, Lyden TW. Monoclonal antiphospholipid antibody reactivity with human trophoblast. *11th Meeting of the American Society for the Immunology of Reproduction; Charlottesville, VA, 1991. (OP)*

Johnson PM*, Mwenda JM, Maher PM, Melling GC, Lyden TW, Flanagan BF. Characterization of endogenous retroviral expression in the human placenta. *11th Meeting of the American Society for the Immunology of Reproduction; Charlottesville, VA. 1991. (OP)*

Rote NS*, Lyden TW, Ng AK, Dostal-Johnson D. Platelet, endothelial cell and trophoblast reactivity of mouse monoclonal antiphospholipid antibodies that differentiate between phosphatidylserine and cardiolipin. *10th Meeting of the American Society for the Immunology of Reproduction; Chicago, Ill, 1990. (OP)*

Lyden TW*, Ng AK, Rote NS. Ultrastructural localization of antigenic sites in human term placenta for a monoclonal antibody (Three SB9b) directed against phosphatidylserine. *9th Meeting of the American Society for the Immunology of Reproduction; Portland, Me, 1989. (OP)*

Professional Presentations:

Invited Scientific Seminars and Keynote Addresses:

- 2019 "A Decade of Experience and Insights Modeling 3D Artificial Tumor Tissues." Cell Series UK, Cell Culture and Bioprocessing, Stem Cell and Regenerative Medicine, Cell and Gene Therapy, London United Kingdom.
- 2018 8th Annual Congress of Nano Science and Technology 2018, "Generation of 3D artificial tissues using natural and synthetic bio-scaffolds as tools to model cancer development, local invasion and metastasis." Potsdam, Germany.
- 2018 2nd Annual Summit on Stem Cell Research, Cell and Gene Therapy, "Development and Application of Bioengineered Artificial Tumor Tissues to Effectively Model Breast Cancer Generation, Progression and Metastasis." Atlanta, Georgia.
- 2018 UMinn Stem Cell Center Research Conference, "3D Artificial Tissue Models of Tumor Generation, Progression and Metastasis." UMinn, Minneapolis, Minnesota
- 2017 Cell Culture & Cell Therapy: Bioprocessing Conference, "Development of a Miniature Bioreactor and 3D Matrix System: Culture of Short and Long-term

Artificial Tissues, both Normal and Pathologic.," Markets and Markets, Philadelphia, PA.

- 2017 BRTI LLC. Collaboration Meeting, "Application of Cell-Mate 3D matrix to modeling artificial normal and pathological tissues.," BRTI Lifesciences, LLC., Two Harbors, MN.
- 2016 Cancer Moonshot 2016, "Applications of Cell-Mate Matrix Material to Generate 3D Artificial Tumor Tissues.," University of Minnesota-Duluth Medical School, Duluth, MN.
- 2014 Keynote Speaker, "The basic science of artificial tumor tissues: Toward developing applications of "tissue engineering" for personalized cancer medicine" Conversations of the Valley, Stillwater, MN
- 2013 "Biomimetic Histogenesis as a Modeling System for Normal Developmental and Pathologic Tissues In-vitro", University of Minnesota Stem Cell Institute, Minneapolis Mn.
- 2013 Keynote Speaker, "Biomedical Undergraduate Research at UWRF: An Innovative Approach to Educational Practices with Significant "High Impact" Outcomes for both Students and the BioSciences." Wisconsin Society for Science Teachers (WSST) 2013 Meeting
- 2012 "Artificial Tissue Modeling and Biomimetic Histogenesis", USDA National Animal Disease Center, Ames IA.
- 2012 "3-D Artificial Tissues: In-vitro Developmental and Pathological Modeling", BIONATES Laboratory, Wisconsin Institute for Discovery, UW-Madison Bioengineering Program, Madison WI
- 2011 "Biomimetic Histogenesis: Developmental and Pathological Artificial Tissue Modeling". Clinical Investigative Physiology, Karolinska Institute, Stockholm Sweden.
- 2011 Webinar Presentation, "Nanotechnology Approaches to Translational and Personalized Cancer Medicine: The UWRF TCIC Context", Nanotechnology Applications and Career Knowledge Center (NACK), Penn State University.
- 2010 "3D Cultures to Model Developmental Processes." University of Wisconsin-Whitewater, Biological Sciences Colloquium 2010, Whitewater WI
- 2010 "3D Modeling of Normal and Tumor Tissues in-vitro." Marshfield Clinic/USDA Collaboration Meeting, Marshfield Clinic, Marshfield, WI
- 2010 "In-vitro 3D Artificial Tumor Microenvironments as Potential Models of Clinical Disease.", 3rd Annual Wisconsin Science and Technology Symposium, Green Bay, WI

- 2009 Keynote Speaker, "A Scholar-scientist's View in the 21st Century: Perspective Matters.", Oklahoma State Research Day, Broken Arrow, OK.
- 2009 "Modeling human tumors in 3D culture.", Second Annual Wisconsin Science and Technology Symposium (WSTS 2009), La Crosse, WI.
- 2009 "UWRF/Marshfield Collaborations in 3D Modeling of Human Tumors.", Marshfield Clinic Research Foundation Board of Directors Meeting, Marshfield, WI.
- 2009 "Modeling human tumors in 3D cultures.", Clinical Staff Seminar Series, Marshfield Clinic, Marshfield, WI.
- 2009 "UWRF/River Falls Cancer Center Collaboration in 3D Modeling of Human Tumors.", Rivers Cancer Center, Founding Board of Directors Meeting, River Falls, WI.
- 2008 "Applications of Tissue Engineering at the UWRF TCIC.", Marshfield Clinic, Marshfield, WI.
- 2008 "Applications of Tissue Engineering and Stem Cell Biology at UWRF.", 1st Annual Wisconsin Science and Technology Symposium, UW-Stout, Menomonee, WI.
- 2008 "Applications and Potential Collaborations in Tissue Engineering and Stem Cell Biology at UWRF.", Phillips Plastics Inc., Prescott, WI.
- 2007 "Tissue Engineering at UWRF.", Marshfield Clinic / WiSys Collaboration Symposium
- 2006 "Tissue Engineering and the Study of Developmental Biology at UWRF.", UW System Research Collaboration Symposium, UW-Milwaukee
- 2005 Keynote Speaker, Annual UWRF Foundation Meeting. "Campus RSCA Update and Overview."
- 2005 Keynote Speaker, UWRF Foundation Regional Alumni Event, Washington D.C., "Undergraduate Research and Laboratory Activities at UWRF".
- 2004 Keynote Speaker, UWRF Foundation Scholarship Dinner
- 2003 "Trophoblast differentiation and HERV-w expression." Wisconsin Alumni Research Foundation (WARF), Madison, WI.
- 2002 "Human Placental Endogenous Retroviruses, hERVs.", Biotechnology Program Fall Seminar Series, University of Wisconsin-River Falls, WI.
- 2001 "Placental IgG transport: Definition and Characterization of Potential Pathways.", Department of Biology, University of Wisconsin-River Falls, WI.
- 2000 "Placental endothelial FcγRII.", Immunology Group Seminar Series, The Ohio State University School of Medicine, Columbus, Ohio.

- 2000 "Localization of Fcγ receptors in placenta.", Cell Biology and Physiology Seminar Series, The Ohio State University School of Medicine, Columbus, Ohio.
- 1999 "Placental Fcγ receptors and IgG transport.", Immunology Group Seminar Series, The Ohio State University School of Medicine, Columbus, Ohio.
- 1996 "Human Placental ERVs: Normal Placental Retrovirus Functions", University of South Florida, Division of Allergy and Immunology, Tampa, Florida.
- 1996 "Human Placental ERV Expression", Southern Illinois University, Department of Obstetrics and Gynecology, School of Medicine, Springfield, Illinois.
- 1994 "Human Placental ERV Expression and Function", Immunology Seminar Series, The Ohio State University School of Medicine, Columbus, Ohio.
- 1994 "ERV proteins in placental cell fusion.", Institute of Primate Research, Karen, Kenya.
- 1994 "Cell culture in clinical research.", Professors' Rounds, VA Medical Center, Dayton, Ohio.

Workshop Presentations:

- 2019 Bioprinting/Biofabrication Workforce Needs, Century College Panel presentation, Century College Bioprinting Symposium, White Bear Lake, MN.
- 2012 "Cellular tensegrity and mechanotransduction: Mediators of gene expression and cellular phenotype", Scientists without Borders Teaching Program, UWRF Summer Education Program
- 2009 "A Virtual Tour of the UWRF TCIC.", Tissue and Cellular Innovation Center Opening Event Symposium, UWRF, River Falls, WI
- 2008 "Biomedical and Biotechnology Applications of Engineered Materials.", Innovation and Collaboration Center, UWRF, River Falls, WI
- 2008 "Success in Obtaining Tenure at UWRF.", Panel Discussion, January Faculty Development Day
- 1999 "Placental endothelial FcγRII.", FASEB Summer Conference on Immunoreceptors, Saxton's River, Vermont.
- 1994 "Human placental ERVs.", 14th Annual Meeting of the American Society for the Immunology of Reproduction. Philadelphia, PA.
- 1991 "Placental ERV ultrastructure.", IVth Meeting of the European Placental Group. Gwatt, Switzerland.

- 1990 "Human placental ERVs.", 10th Annual Meeting of the American Society for the Immunology of Reproduction. Chicago, Ill.

Legislative and UW System Presentations (Statewide):

- 2016 UW-System Regents Visit, "Stem Cell Laboratory Course Presentation and Overview," UWRF.
- 2016 WISYS Board of Trustee's Meeting, "Applications and Future Potential of 3D Artificial Tissues," Wisconsin Science and Technology Foundation, UWRF.
- 2016 UW-System President, TCIC Research Overview Presentation, UWRF, River Falls, WI
- 2015 Visiting Legislator STEM Poster Session Presentation, UWRF, River Falls, WI
- 2012 "UWRF Tissue and Cellular Innovation Center as an economic development engine.", University of Wisconsin System, Board of Regents, Economic Development Meeting, Madison, WI
- 2011 "Impact of state budgetary cuts on undergraduate research efforts on the comprehensive campuses.", State Senate Education Committee, Madison, WI.
- 2010 "Nanotechnology applications of 3D cell culture at UWRF.", CVTC NanoRite Center / WiSys Collaboration Symposium.
- 2009 "Core Jobs Act: A legislative tool to couple undergraduate research efforts at the comprehensive campuses with state-wide economic development.", State Assembly Jobs, Economy and Small Business Committee and the Senate Economic Development Committee, Madison, WI.
- 2009 "Undergraduate research efforts at the UWRF TCIC and potential economic development impacts.", State Assembly/Senate Joint-Finance Subcommittee, Madison, WI.
- 2008 "Developing an undergraduate research culture at UWRF.", UW System Legislative Symposium, Posters in the Rotunda, Madison, WI
- 2008 "RSCA at the comprehensive campuses.", Panel Discussion, 2008 UW System Research Administrators Meeting, Madison, WI.
- 2008 "UWRF TCIC and nanobiotechnology in western Wisconsin.", University of Wisconsin-Platteville, Platteville, WI.
- 2008 "UWRF Tissue and Cellular Innovation Center.", WiSys Technology Foundation, Inc., Madison, WI.

- 2007 “UWRF Center for Advanced Cell Biology and undergraduate research.”, University of Wisconsin System, Board of Regents Meeting Presentation, River Falls, WI.
- 2006 “Library resources and undergraduate RSCA.”, Panel Discussion,
- 2006 UW System Librarians Meeting, Green Lake, WI
- 2006 “Faculty and Dean challenges and choices.”, Panel Discussion,
- 2006 UW System Research Administrators Meeting, Madison

Community Presentations (Campus and Regional):

- 2019 “Modeling 3D Artificial Tumor Tissues at UWRF, Past, Present and Future.” UWRF Regional Alumni Dinner, Woodbury, MN
- 2019 “Development and application of 3D tissue engineering for modeling cancer.” 5th Annual New Richmond High School STEM Night, New Richmond High School, New Richmond, WI.
- 2018 Soup, Salad and Science Talk, “Development and application of 3D tissue engineering at UW-RF for the purpose of modeling cancer cell behaviors including tumor tissue generation, progression and metastasis.” River Falls Library
- 2016 “Research Activities in cancer cell biology and 3D tissue engineering at the UWRF Tissue and Cellular Innovation Center” 2nd Annual New Richmond High School STEM Night, New Richmond, WI.
- 2015 Modeling cancer in in-vitro using 3D artificial tissues in the TCIC. Seminar Presentation, Intro to Biotech, UWRF, River Falls, WI.
- 2015 “Undergraduate research opportunities in stem cell biology at the UWRF Tissue and Cellular Innovation Center” 1st Annual New Richmond High School STEM Night, New Richmond, WI.
- 2014 Tissue engineering applications to in-vitro modeling of artificial tissues here at UWRF. Seminar Presentation, Intro to Biotech, UWRF, River Falls, WI.
- 2011 “TCIC applications of 3D in-vitro modeling of developmental and pathological processes for clinical development.”, UWRF “Morning with a Professor”, SOS Program, River Falls, WI
- 2011 “UWRF/RCC collaborative research projects: In-vitro 3D modeling of patient tumors to augment therapeutic treatment design.”, River Falls Regional Hospital Outreach Program, Fall 2011, River Falls, WI
- 2011 “Modeling cancer in 3D culture”, Rivers Cancer Center Grand Opening, River Falls Regional Hospital

- 2011 "TCIC and Artificial Tissue Systems, LLC: Tools for regional economic development.", River Falls Economic Development Corporation, Annual Meeting.
- 2010 "Approaches to personalized cancer medicine using 3D artificial tissues.", Morning with a Professor, Senior Outreach Seminar, UWRF, WI.
- 2009 "Tissue and Cellular Innovation Center: A virtual tour.", UWRF Foundation Alumni Event, Wausua WI,
- 2008 "Applications of tissue engineering and stem cell biology at UWRF.", Outreach and Graduate Studies Senior Citizen Community Outreach Seminar Series, UWRF, WI.
- 2007 "Undergraduate RSCA and tissue engineering at UWRF.", 2007 Summer Alumni Day, UWRF, River Falls, WI.
- 2007 "Undergraduate research at UWRF.", Panel Discussion, January Faculty Development Day
- 2006 Stem cell biology and tissue engineering at UWRF.", Community Classroom Seminar Series, October 2006
- 2006 "Student participation in the development of an undergraduate research culture at UWRF: SURSCA at four years.", Community Outreach Program, UWRF
- 2005 "Campus-wide presentation for partnering with 3M.". Co-presenter with Chancellor's delegation to 3M corporate executive finance group,
- 2005 "A faculty members view of RSCA at UWRF.", Featured Speaker, UWRF Foundation Alumni Day".
- 2003 "Engaging in RSCA at UWRF: A Faculty Discussion", Faculty Day Undergraduate Research Panel, UWRF
- 2002 "SURSCA fundraising activities.", UWRF Foundation, Board of Directors Meeting, University of Wisconsin-River Falls, WI.

Professional Service Activities and Experiences:

Research and Teaching-related:

- | | |
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| 2023-current | Member of WiSER (Wisconsin Science Education & Research) Consortium Annual Statewide Scientific Meeting Planning Committee |
| 2023-current | General Member of WiSER (Wisconsin Science Education & Research) Consortium |
| 2016-current | Reviewer, State of Minnesota Regenerative Medicine Education Grant Program. |

2013-2016	Founding Member of Statewide UWS WisCUR organization
2012	CUR/NSF Workshop Program on Institutionalizing Undergraduate Research Across UW-System. UWRF Committee Member
2012	Re-elected, National Council on Undergraduate Research, Biology Division (second 3 year term).
2011	Workshop organizer/host, 2011 CVTC/Gray Summer Institute, One Day Stem Cell and Tissue Engineering Workshop.
2010-2014	CUR Biology Division, Posters on the Hill (Washington DC), Division Coordinator and Abstract Reviewer
2009-2011	Elected, National Council on Undergraduate Research, Biology Division (3 year term).
2009-10	Member of the organizing Committee for 2010 UW-System Research Day
2008-current	Founding Director, UWRF Tissue and Cellular Innovation Center
2007-08	Member of the organizing Committee for 2008 UW-System Research Day
2006-07	Participant WiCell Human Stem Cell Courses, Basic Stem Cell Culture and Advanced Embryoid Bodies
2006-current	Founding Co-Organizer, Integrated Solutions Consortium (ISC) -1st Annual ISC Symposium, Co-organizer 01/09/07 -2nd Annual ISC Symposium, Organizer/host 01/11/08
2003-2008	Founding Director, UWRF Cellular Imaging and Analysis Center
2002-2012	Founding Faculty Advisor, UWRF Society for Undergraduate Research, Scholarly and Creative Activities (SURSCA) -NCUR 2002-current, participant -UWRF RSCA Day 2002-current, participant -UW System RSCA Day 2003-current, participant -UW System "Posters in the Rotunda" Day 2004-current, participant -UWRF Evening RSCA Gala 2002-2012, organizer

2001-current	Research Mentor, in excess of 75 undergraduate research projects (involving more than 200 students) on trophoblast differentiation, placental endothelial cell transport mechanisms, in-vitro tissue engineering and apoptosis. University of Wisconsin-River Falls.
2002-2016	Council on Undergraduate Research (CUR), UWRF representative.
2002-current	UWRF Biology Department Premedical Advisor
2004-05	Founding Co-Editor, Endeavor: The Online UWRF Undergraduate Research Journal.
2003	Participant, NSF-sponsored Workshop on flow cytometry in the undergraduate research lab. Wittenberg University, Springfield, Ohio.
2003	Invited "peer-editor" for review Endogenous Retrovirus manuscript by Francois Mallet and colleagues; Lyon, France.
2002	Ad-Hoc reviewer for <i>American Journal of Reproductive Immunology</i> .
2001	Ad-Hoc reviewer for <i>Journal of Assisted Reproduction and Genetics</i> .
1997-current	Peer-reviewer for the journal <i>Placenta</i> .
1996-2004	Biomedical Writer (Freelance) -Multimedia Publishing, Exam Master (CME and Board Certification Exam/Study Guide), Medical Microbiology and Obstetrics/Gynecology (1996-2004) -Association of American Medical Colleges, MCAT Standardized Exam, Biology Section (1996-2004)
1994-95	Research Mentor, 3rd year Medical Student, BRSB project: Heparins' effect on endothelial cell cytoskeleton (1995 National Student Research Forum, UTMB Internal Medicine Research Award).
1994	Research Mentor, Medical Resident Rotation Project, Quantification of endothelial cell cytoskeleton.
1994	Mentor, Summer Undergraduate Minority Science Student Research Program, Wright State University/Central State University.

1994	Mentor, Summer High School Student and Teacher Apprenticeship Program, Wright State University.
1994, 95	Moderator, Panel Discussion on Diversity. Wright State University/Central State University Minority Student Research Program.
1994	FASEB Meeting Presentation, High School Education Section. "What does an antibody say to a phagocyte? "Let's engulf!" Phagocytic engulfment of antibody-coated sheep red blood cells. Veasley D., Bigley N.J., Curiel R.E., Cruz P.E., Lyden T.W.

University and Other Professional Activities:

2022-current	SciTech Building Biology Department Representative-Planning and Implementation Committees
2022-23	UWRF Director of Grants and Research Search Committee.
2022	UWRF CAFES Dean Search Committee.
2020-21	Faculty Senator-CAS, At Large
2020	Member UWRF Campus COVID-19 FFIT Metrics Workgroup
2020	Member Provosts COVID-19 Advisory Group
2015-2020	Member, Faculty Compensation Committee.
2018-19	UWRF Director of Grants and Research Search Committee.
2015	Member, McNair Program Director Search Committee.
2010-11	Chair, UWRF Director of Grants and Research Search Committee.
2008-09	Member, Department of Health and Human Performance Anatomy and Physiology Faculty Search Committee.
2006-2013	Member, Biotechnology Steering Committee
2003-2015	Participant, UWRF Davies Library Research Accomplishments Reception and Presentation.
2006-07	Member, Differential Tuition Initiative Ad-hoc Committee
2006-07	Member, Instructional Improvement Committee

2003	Member, UWRF Development Office Major Gifts Officer, Search Committee.
2002	Participant, UWRF College of Arts and Sciences authors reception.
2001	Participant, University of Wisconsin System, Women in Science program.
1994-95	Member, Wright State University School of Medicine, Computers and Multimedia in Education Task Force
1993	Member, Wright State University, College of Science and Mathematics, Computer Committee
1988-89	Member, University of Maine Memorial Union Council
1987	Member, University of Maine Screening Committee for Vice-President of Research and Public Affairs.
1987-89	Member, University of Maine Student Conduct Committee.
1987	Member, University of Maine Public Relations Committee.

Departmental Activities:

2022-23	Member, Biology Department, Immunology and Virology faculty search.
2018	Member, Biology Department, Cell Biology faculty search.
2010-11	Member, Biology Department, Developmental Biology faculty search.
2009-10	Member, Biology Department, Microbiology faculty search.
2007-08	Chair, Biology Department, Developmental Biology, faculty search.
2006-2015	Biotechnology Program Library Liaison, UWRF.
2001-2015	Biology Department Library Liaison, UWRF.
2001-02	Member, UWRF Biotechnology Faculty Search Committee.
1994-95	Departmental Liaison, Computer and Telecommunications Network Application Task Force, Wright State University.

1994	Member, Microbiology and Immunology Department Faculty Search Committee, Wright State University.
1993	Member, Molecular Biology of Human Genetics Committee, Wright State University.
1993	Member, Task Force on Department Curriculum, Department of Microbiology and Immunology, Wright State University.
1987	Chairman, Microbiology Graduate Student Group fall seminar series, University of Maine.
1987	Co-organizer of 1987 University of Maine Conference on the Biomedical Aspects of AIDS.
1986-87	Co-chairman, Microbiology Graduate Student Group, University of Maine.

Community Activities:

2016-2020	UWRF Girls in Science Activity Day, Anatomy and Physiology Event Coordinator, "Thinking and Brain Waves". (temporarily suspended in 2020) (Suspended due to COVID-19)
2011-current	Regional Science Olympiad, Anatomy and Physiology Session Coordinator.
2016-17 and 2019	New Richmond HS STEM Night Presenter
2017 and 2018	Research Mentor for Summer High School Student internships.
2013	American Association for the Advancement of Science, 2013 Student Poster Session Judge.
2008	Presentation session Moderator, 2008 UWS Research Day.
2008	Presentation session Moderator, 2008 Penn State Annual McNair Conference.
2002-06	Presentation Session Moderator, National Conference on Undergraduate Research (NCUR); Whitewater, WI (2002), Salt Lake City, Utah (2003), Indianapolis, IN (2004), Asheville, NC (2006).
2001-2014	University of Wisconsin System, Eisenhower Program (ESEA Title II Program) "Improving Wisconsin Teachers", grant reviewer.

2002-2004	Liaison with Chippewa Valley Technical Institute Anatomy and Physiology Program.
1997	Central Ohio Regional Science Fair, Head Judge/CHRF Awards
1997	Children's Hospital "Discovery-day" Community Liaison
1995	Presentation Judge, 52nd Annual Joint Meeting, Beta Kappa Chi, National Institute of Science Brookhaven Semester Program.
1991-96	South Western Ohio Regional Science Fair Judge.
1987-90	Central Maine Science Fair Judge and Head Judge.
1985	Featured speaker at Eastern Maine Medical Center Conference on Hospice.
1983-85	Guest speaker for Ronald McDonald House; Bangor, Maine.

Student Government, University of Maine-Orono:

1989	President, Association of Graduate Students.
1987	Association of Graduate Students "Funding Opportunities Bulletin", founding editor.
1987-89	Chairman, Association of Graduate Students Grants Committee.
1986-89	Departmental Representative to the Association of Graduate Students.
1986-87	Member, Association of Graduate Students Grants Committee.

Non-Academic Employment:

1986-89	Master Control Operator, Maine Public Broadcasting Network; Bangor, Maine.
1977-86	Operating Engineer (Videotape and Master Control) WABI-TV; Bangor, Maine.