

CURRICULUM VITAE

SYLVIA ADAMS OLIVER

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EDUCATION:

8/78 M.S. Animal Sciences (Reproductive Physiology), Washington State University, Pullman, Washington.
11/93 Ph.D., Genetics and Cell Biology, Washington State University, Pullman, Washington.

FACULTY APPOINTMENTS

2014-present Director, WSU Health Science STEM Education Research Center
2013-2014 Director of STEM Education Outreach, WSU Spokane
2012-present Affiliate Faculty, Department of Teaching and Learning, College of Education, WSU
2007-2013 Director of Health Science Laboratory Operations and Education Outreach, Office of Research, WSU Spokane
1998-2007 Assistant Director, Health Research and Education Center, WSU Spokane
1990-1998 Director of Laboratory Operations and Research Coordinator, Health Research and Education Center, WSU Spokane

PROFESSIONAL POSITIONS HELD

2015-present Co-chair, Education Committee, Mobius Science Center
2014-present Member, Board of Directors, Mobius Science Center, Spokane, WA
2013-present Member, Operations Team, Exelerate Success, Spokane County United Way
2011-2012 Member, Spokane Mobius Science Center, Program Council
2010-present PLTW Biomedical Sciences Affiliate Director, Northwest Region
2009-2010 Co-Chair, Board of Directors, Spokane Math Engineering Science Achievement (MESA) Program, WSU Spokane
2003-present Private consultant, S Oliver Consulting; specializing in program development and grant writing.
2001-2005 Member, Board of Directors, Inland Northwest Technology Education Center (INTEC), Spokane, WA.
1999-2010 Member, Board of Directors; Spokane MESA, WSU Spokane
1995-present Director, WSU Spokane CityLab Science Enrichment Teaching and Learning Program
1994-2002 Founder, Executive Vice President and Research Scientist, Bio~OriGyn Technologies LLC, Spokane, WA
1989-1990 Research Associate, Program in Genetics and Cell Biology, WSU, Pullman, WA.
1987-1989 Coordinator, University Government Assurances (human subjects, laboratory animals, biosafety concerns), Office of Grant and Research Development, WSU, Pullman, WA

CURRENT SUPPORT

07/01/12-06/30/16	Department of Education, Indian Education Demonstration Grant. <i>STEM Pipeline to the Future</i> . Grant writer and PLTW Consultant. \$1.2M.
07/01/11-current	Project Lead The Way Biomedical Science Program (2014: \$160,000)
01/01/05-current	Private funding (Rotary Clubs, Na-ha-shnee Summer Nursing Institute)

PREVIOUS SUPPORT

01/01/12-12/31/12	Empire Health Foundation. <i>PLTW Rural School Models</i> , Co-PI. \$15,000
07/01/11-06/30/12	Empire Health Foundation. <i>PLTW Rural Schools Assistance</i> , Co-PI. \$10,000.
06/15/06-05/31/10	National Science Foundation. Advanced Technological Education Program. <i>Biotechnology Education Infusion Program</i> . Project # 0757292. Principal Investigator. \$900,000.
02/01/09-08/31/09	Washington State OSPI Non-Traditional Fields Competitive Grant. <i>Health Careers Afterschool Science and Research Program for Middle School Girls</i> . . Principal Investigator. \$29,000.
03/01/06-07/31/07	Group Health Community Foundation. <i>Full Court Press: Creating Health Champions</i> . Principal Investigator. \$29,000.
07/01/05-06/30/07	Lance Armstrong Foundation. <i>A Pediatric Oncology Outreach Education Program</i> . Primary grant writer and Program Coordinator. \$38,500.
03/01/05-02/29/07	Health Resources and Services Administration. <i>Upper Primary/Middle School Science/Health Career Camps</i> . Principal Investigator. \$40,578.
9/01-04/05	Department of Education 21 st Century Community Learning Centers Grant awarded to Spokane School District 81, Subcontract to <i>WSU Spokane CityLab After-School Science Camps for Elementary School Students</i> ; \$90,000 (total grant=\$5.0M); Subcontract Project Director.
01/02-08/03	Eisenhower Mathematics and Science Act, Washington State Office of the Superintendent of Public Instruction, <i>Teaching and Counseling in Career Pathways</i> , Co-PI, \$59,000.
01/01-08/02	National Science Foundation, <i>Afterschool and Summer Science Camps for Young Women</i> , Project # 0086440, Principal Investigator, \$87,822.
09/99-08/02	Department of Education 21 st Century Community Learning Centers Grant awarded to Spokane School District 81, Subcontract to <i>WSU Spokane CityLab After-School Science Camps for Middle School Students</i> ; \$150,000 (total grant=\$2.1M); Subcontract Project Director.
01/00-08/01	Eisenhower Mathematics and Science Act, Office of the Superintendent of Public Instruction, <i>Implementing Inquiry and Assessment Strategies in the Classroom</i> , Co-PI, \$59,000.
09/99-08/00	Environmental Protection Agency, <i>WSU Spokane CityLab After-School Environmental Science Camps</i> ; Principal Investigator. \$11,500.
01/98-08/99	Eisenhower Mathematics and Science Act, Office of the Superintendent of Public Instruction, <i>Authentic Research Experience, Inquiry and Implementing the Washington Science Essential Academic Learning Requirements</i> , Co-PI, \$59,000 total costs.
1998-2001 (summers)	Murdock Foundation. High School-College Research Partnerships. Co-PI, \$14,000.
11/96-08/97	Eisenhower Mathematics and Science Act, Washington State Office of the Superintendent of Public Instruction, <i>Implementing the Washington Science Essential Academic Learning Requirements: From Pedantic to Inquiry Teaching</i> , Co-PI, \$59,000.
06/96-10/96	Eisenhower Mathematics and Science Act, State Demonstration Special Project, <i>Development of a Science Teaching Laboratory for Secondary Students</i> , Co-PI, \$10,000.

03/92-02/94 Gustavas and Louise Pfeiffer Foundation, Collaborating Investigator with H.L. Hosick, *A New Theory of Estrogen Action During First Steps Towards Breast Cancer*, \$55,000.

INDUSTRIAL RESEARCH SUPPORT

06/01-09/01 Spokane Intercollegiate Research and Technology Institute, Grant Awarded to Bio~OriGyn LLC. *Prototype and Market Assessment of an Improved Storage Medium for Human Platelets*. Principal Investigator. Total Costs: \$57,500.

05/01-06/02 Washington Technology Center, Grant awarded to Bio~OriGyn LLC. *Development of an Improved Medium for Human Platelet Storage*. Principal Investigator. Total Costs: \$33,615.

12/95-06/96 Spokane Intercollegiate Research and Technology Institute, Grant awarded to ART, Inc. *A Novel Sperm Freezing Product*, Co-PI with J.E. Ellington. Direct Costs: \$141,000.

01/95-04/95 Advanced Reproduction Technologies, Inc., Private Industry Contract. *Use of P2 to decrease post-thaw trauma in cells*. Co-PI with J.E. Ellington. Direct Costs: \$35,000.

01/95-04/95 Advanced Reproduction Technologies, Inc., Private Industry Contract. *Novel method to separate out motile sperm*. Co-PI with JE Ellington. Direct Costs: \$100,000.

PATENTS

- **Oliver S.** and Ellington J. US Patent #6,593,138. Cryopreserving somatic cells with an arabinogalactan containing cryopreservation medium. (7/15/03).
- Ellington J. and **Oliver S.** US Patent #6,593,309. Methods and compositions to improve germ cell and embryo survival and function (7/15/03)
- Ellington J. and **Oliver S.** Australian Patent #723,170. Methods and compositions to improve germ cell and embryo survival and function. (01/09/01)
- Ellington J. and **Oliver S.** US Patent 6,171,778. Use of arabinogalactan in a sperm wash product. (01/09/01)
- Ellington J. and **Oliver S.** US Patent #6,140,121. Methods and compositions to improve germ cell and embryo survival and function. (10/31/00)
- **Oliver S.** and Ellington J. US Patent #5,897,987. Use of arabinogalactan in cell cryopreservation medium. (04/27/99)
- Ellington J. and **Oliver S.** US Patent #5,879,877. Use of arabinogalactan in a sperm wash product. (03/09/99)

AWARDS AND HONORS

- Outstanding Woman Leader, Women's Leadership Conference of the Inland Northwest. April 2007.
- WSU Presidential Nominated Speaker, WSU Innovators Lecture Series, 2007.
- Woman of Distinction Award, 2000, Girl Scouts Inland Empire Council, Spokane, WA
- YWCA Spokane Woman of the Year Achievement Award, Professional Category, November, 1999
- Faculty Excellence Award for Teaching, WSU Spokane, 1998
- Harriet B. Rigas Award, Outstanding Woman in Graduate Studies (Doctoral Candidate), Association of Faculty Women, WSU, 1993

UNIVERSITY SERVICE, WSU

- Chair, Search Committee, Program Coordinator, WSU Spokane, 2015
- Member, Search Committee, Ed Psych Faculty, WSU Spokane, 2015
- Member, Search Committee, Science Ed Faculty, WSU Spokane, 2015
- Member, Non-thesis Masters Committee, Susannah Schmidt, 2014
- Content expert, Doctoral Committee, Gesa Capers, Grand Canyon University, 2014.
- Member, Spokane STEMposium Planning Committee, 2013-present. (Science, technology, engineering and math symposium for middle and high school students throughout eastern Washington, Idaho and western Montana).
- Member, Search Committee, STEM Coordinator, Spokane Public Schools, 2014
- Member, Search Committee, Laboratory Operations Manager, WSU Spokane, 2013-2014.
- Member, Health Science Advisory Committees, Spokane Public Schools and Spokane Valley Schools, 2011-present.
- Reviewer, WSU Foundation Faculty Travel Grant Competition. 2005-2012
- Reviewer, WSU Foundation New Faculty Seed Grant Competition, Biological/Health Sciences. 2004-2013.
- Member, WSU Spokane Health Sciences Lab Operations Committee. 2005-2012.
- Member, Spokane Skill Center General Advisory Committee. 2010-2011
- Member, Spokane Skill Center Health Science Academy Committee. 2009.
- Chair, Search Committee, WSU Spokane MESA High School Coordinator, 2009.
- Member, Search Committee, WSU Spokane WWAMI Medical Program Research Assistant. 2008.
- Member, Master's Thesis Committee, Nicole Munoz, Exercise Physiology and Metabolism Program, 2007.
- Chair, Search Committee, Laboratory Operations Manager, WSU Spokane, 2007.
- Member, Search Committee, WSU Intercollegiate College of Nursing Dean, 2007.
- Member, Spokane Skill Center Advisory Board, Clinical & Scientific Investigations Medical Laboratory Program, 2006 – 2011.
- Coordinator, Science Field Trips, Washington Science Teachers Association/Washington Organization for Reading Development Annual Conference, Spokane, WA., October 2006.
- Chair, Search Committee, WSU Spokane Communication and Events Manager, 2005.
- Member, Search Committee, WSU Biological Safety Officer, 2005.
- Member, Northwest Association for Biomedical Research Regional Council, 2005-2010.
- Member, Chancellor's Academic Council, WSU Spokane. 2004-2008.
- WSU Spokane consultant for development of laboratory infrastructure (design of research laboratory facilities at four sites, purchase of major equipment, oversight of operations) including design of research laboratories for the new \$39M WSU Spokane Health Science Building, 2001; review committee, laboratory infrastructure, Nursing Building, WSU Spokane, 2005-2006.
- Chair, Laboratory Utilization Committee, Health Research and Education Center, 1995-2009.
- Member, Cancer Prevention and Research Center, 2000-2009.
- Member, Safety Committee, WSU Spokane, 1998-2002.
- Member, Coordinating Committee, Inland Northwest Cancer Conference, 1999-2001.
- Member, Gender Equity Team, College of Education, 1999-2001
- Chair, Equal Opportunity in Science Committee, Washington Science Teachers' Association. 1997-1999

TEACHING EXPERIENCE

1994-present	Biotechnology workshops and summer science camps for middle and high school students. WSU Spokane CityLab.
1994-present	Professional development workshops related to science education pedagogy and national standards for middle and high school teachers.
2006	ExSci 589 Research Techniques.
2003-2004	Selected lectures and labs for <i>Understanding New Developments in Biotechnology</i> , a professional development workshop, Spokane Community College Biotechnology Academy.
2002-2007	Special lectures on sex determination. Spokane Falls Community College, Sociology Department.
2002	Selected lectures for P/T 572, Fundamentals of Oncology, WSU Pharmacy, Genetics and Cell Biology.
1997-2003	Seminars on breast disorders to the University of Washington Physicians Assistant Program.
1994-2005	Seminars on topics related to women's health issues

PROFESSIONAL MEMBERSHIPS

- Washington Association for Career and Technical Education (WA ACTE)
- Washington Science Teachers' Association
- National Science Teachers' Association
- American Association of University Women
- American Indian Science and Engineering Society (AISES)

CONFERENCE AND MEETING PRESENTATIONS

- S. Oliver** *Project Lead The Way Biomedical Science Program*. PLTW National Summit, Nov. 2014.
- S. Oliver** *Project Lead The Way: A Successful Biomedical Science CTE/STEM Program*. WA-ACTE Fall Conference, Nov. 2013. Grand Mound, WA.
- M. Antonio, M. Schilling, J. LeBeau and **S. Oliver**. *Enhancing American Indian High School Student Success: A Work in Progress*. Northwest Association for Teacher Educators Conference. Pullman, WA. June 2013.
- S. Oliver**. *Project Lead The Way Biomedical Science Program*. National American Indian Science and Engineering Society (AISES) Conference, Anchorage, AK, November, 2012.
- S. Oliver**. *Project Lead The Way Biomedical Sciences: Preparing Rural Students for Healthcare Careers*. 25th Northwest Regional Rural Health Conference. Spokane, WA March, 2012.
- S. Oliver**. *Leveraging K-12 University Partnerships to Create Successful STEM Programs*. NSTA Regional Conference, Seattle, WA, Dec. 2011.
- S. Oliver**. *Project Lead The Way Biomedical Sciences Program*. Washington Association for Career and Technical Education Conference, Seattle, WA, August 2011
- S. Oliver**. *GMO's in Your Food*. Conference workshop. Teachers of Teachers of Science regional conference, Spokane, WA. May 2009,
- S. Oliver**. *Environmental afterschool program for middle school students*. Conference workshop. Teachers of Teachers of Science regional conference, Spokane, WA. May 2009.
- S. Oliver**. *Biotechnology in Your School*. Conference workshop. Washington Science Teachers Association Annual Conference. Tacoma, WA. October 2007.
- S. Oliver**. *SPARK P.E. – An inclusive physical activity program for all children*. WSU 2007 All Extension Conference. March 2007.
- S. Oliver**. *Biotechnology in Your Classroom*. Conference presentation. Washington Science Teachers Association Annual Conference. October, 2006.
- S. Oliver**. *Cancer Research at Washington State University*. Conference presentation. Washington Science Teachers Association Annual Conference. October, 2005.

- S. Oliver.** *The Nature of Student Questions: Implementing the NRC Inquiry Model.* Workshop presented at the National Science Teachers Association Northwest Regional Conference, Seattle WA, Nov 18-20, 2004
- C.H. Mielke, R. Short, **S. Oliver**, C. Hooper, W. Schulte, D. Davis, M. Mielke, J. Hogan, B. Fuhs and P. Leimgruber. C-Reactive Protein as a Predictor of CAD in Asymptomatic Subjects. Abstract accepted for presentation at the 5th Annual Conference on Atherosclerosis, Thrombosis, and Vascular Biology. May 6-8, 2004. San Francisco, CA.
- C.H. Mielke, **S. Oliver**, W.E. Schulte, R. Short, M.R. Mielke, D. Davis, C. Hooper, J. Hogan, B.E. Fuhs, P.P. Leimgruber and J.P. Shields. Predicting Coronary Events in Asymptomatic Individuals. Abstract accepted for presentation at the 44th Annual Conference on Cardiovascular Disease, Epidemiology and Prevention, San Francisco, CA, March 3-6, 2004.
- C.H. Mielke, **S. Oliver**, D. Davis, et al. Negative Predictive Value of Coronary Artery Calcium in Asymptomatic Subjects: A Six-Year Prospective Study. Abstract accepted for presentation at the 4th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology, Washington DC, May 8-10, 2003
- S. Oliver.** *Understanding Science, Math, Engineering and Technology Career Choices.* Conference presentation. Washington Science Teachers' Association Annual Conference, Pullman WA. October, 2003.
- C.H. Mielke, **S. Oliver**, M. Mielke, D. Davis, P. Shields. Coronary calcium and risk factors as a predictor of asymptomatic coronary artery disease. Abstract and poster presented at the 6th International Symposium on Global Risk of Coronary Heart Disease and Stroke: Assessment, Prevention and Treatment. Florence, Italy, June, 2002.
- S. Oliver**, J.E. Ellington. Use of plant polysaccharides to improve gamete and somatic cell function. Western regional meeting of the American Chemical Society. June 2002.
- S. Oliver.** Biotechnology workshops, selected for presentation at the Washington Science Teachers' Association Annual Conference, October, 1999.
- S. Oliver.** Biotechnology workshop, requested by the National Science Teachers' Association, Seattle WA, October, 1998.
- C. H. Mielke, J. P. Shields, M.R. Mielke, **S. A. Oliver**, and L. D. Broemeling. Is cholesterol a significant risk factor for coronary artery disease in an asymptomatic non-clinical population? Abstract. *Advances in Electron Beam Computed Tomography*, Oct. 1998.
- J. Shields, C.H. Mielke, T. Yedinak, M. Mielke, N. Dagupta, **S. Oliver** and F. Viren. Detection of coronary artery disease in an asymptomatic population: cholesterol as a risk factor. Annual Meeting, *Advances in Electron Beam Computed Tomography*., Hilton Head, SC, October, 1997. Abstract.
- S.A. Oliver**, J.E. Ellington, Use of a plant polysaccharide to improve gamete and somatic cell function. Annual Meeting, Northwest Scientific Association, Cheney, WA, March 1997.
- S.A. Oliver**, P. Gavin, J. Granger and C.H. Mielke. Cytotoxicity of disodium decahydrodecaborate ($\text{Na}_2\text{B}_{10}\text{H}_{10}$) as measured by *in vitro* proliferation of human, rat and mouse cell lines. International Symposium on Neutron Capture Therapy for Cancer, Zurich, Switzerland, September 1996. Abstract.
- J.E. Ellington, J. Samper, A. Benson, **S. Oliver** and R. Wright. Improved motility and survival of stallion sperm cultured with oviductal secretory products. International Congress on Animal Reproduction, Sydney, Australia, 1996.
- J.E. Ellington., **S.A. Oliver**, R.W. Wright C.S. Schneider and A.J. Benson. Use of a plant polysaccharide gradient to wash bull sperm improves fertilization & embryonic development, Abstract #96-108, 1996 Annual Meeting, International Embryo Transfer Society.
- J. E. Ellington, **S.A. Oliver**, J. Fleming, A.J. Benson and R. Wright. Chemically-defined extender for bull sperm. Gamete Manipulation and Storage Symposium, Hamilton, New Zealand, 1996.
- S. A. Oliver** and H.L. Hosick. Production of growth factors by human mammary fibroblasts isolated from reduction mammoplasty and mastectomy tissue from pre- and postmenopausal women. Abstract #111. San Antonio Breast Cancer Symposium, December 1994, San Antonio, Texas.

- H.L.Hosick, T.G.Ram, **S.A.Oliver**, V.Venkateswaran and T.Kanazawa, Fetal stromal cells produce a TGF that elicits some preneoplastic traits in adult mammary epithelium, First International Symposium on Hormonal Carcinogenesis, Cancun, Mexico, 1991.
- T.G.Ram, A.N.Vasundara, **S.A.Oliver** and H.L.Hosick, Growth factor involvement in the stimulation of mouse mammary epithelial proliferation by salivary mesenchyme, Sixth International Conference on Differentiation of Normal and Neoplastic Cells, Vancouver, B.C., The International Society for Differentiation, 1990.
- K.W.Kelley, J.J.McGlone, **S.R.Becker (S.A.Oliver)** and M.R.Levy, 1977, Effect of lithium on biting behavior of growing swine: A preliminary report, Proceedings, 1977 Swine Days, Report #6.
- S.R.Becker (S.A.Oliver)**, G.K.Tarnavsky, T.E.Adams and J.J.Reeves, Competitive binding of iodinated versus unlabeled LHRH analog. Proceedings, Western Section American Society of Animal Sciences, Vol.27, 1976.

PROFESSIONAL TALKS AND WORKSHOPS

- *Project Lead The Way Biomedical Science Program*. Annual Information Conferences, Seattle (Nov 2014) and Spokane, WA (Dec, 2014)
- *Project Lead The Way Biomedical Science Program*. Annual Information Conferences, Spokane WA (Oct 2013) and Seattle (Nov 2013).
- *Project Lead The Way Biomedical Sciences: Educators Preparing Students for College and Careers in the Biomedical Sciences*. In collaboration with the Institute for Systems Biology, Seattle, WA April 2013.
- *Washington State University Spokane Health Science Programs*. Invited Talk, Spokane Rotary Club, April, 2012.
- *Project Lead The Way. A Biomedical Science Program for All Students*. PLTW Regional Informational Conference. Spokane, WA and Renton, WA. Oct. 2011.
- *Project Lead The Way Biomedical Sciences Program*. Invited talk, King County CTE Director's Meeting, North Bend, WA, April, 2011.
- *Project Lead The Way Biomedical Sciences Program*. Invited talk, University of Washington Medical School WWAMI Regional Meeting, Semiahmoo, WA. April, 2011.
- *Project Lead The Way Biomedical Sciences Program*. Invited talk, Spokane Rotary Club, April. 2011.
- *Project Lead The Way: A Biomedical Science Program for All Students*. PLTW Counselor Conference, Seattle, WA. Dec. 2010.
- *Project Lead The Way. A Biomedical Science Program for All Students*. PLTW Regional Informational Conference. Nov. 2010.
- *Building 21st Century Skills through Inquiry*. Central Valley SD Middle School Curriculum Adoption Committee, Spokane Valley, WA., Sept. 2010.
- *Pathways to Storytelling*. Gonzaga University Spokane Intercollegiate Research Conference, Spokane, WA. April 2010.
- *Creating a Foundation in Math and Science for All Students*. Invited talk. Spokane Rotary Club. Feb 2010.
- *Biotechnology Education in Spokane*. Invited talk. Spokane Skill Center Administrative Council Meeting. March 2009
- *Biotechnology in Your School*. Mentoring and Dissemination Conference program update. Carnegie Institute, Washington DC. February 2009.
- *Biotechnology in Your School*. Conference workshop. Advanced Technological Education national conference, October 2008, Washington DC.
- *Creating Community Collaborations*. Invited talk. Regional Grant Writing Workshop sponsored through Washington State University and Gonzaga University. September 2008.
- *Biotechnology in Your School*. Conference workshop. National Science Teachers Association national conference, March 2008, Boston, MA.

- *Creating a Foundation of Science and Math for All Students*. Presentation to the Washington State University Board of Trustees. October 2007.
- *Effective Strategies for Writing NSF Grants*. Invited talk, Regional Grant Writing Workshop sponsored through Washington State University and Spokane Community College. June 2007.
- *Biotechnology Education Infusion Program*. Invited talk. Washington State Life Science Industry Education Council. May 2007.
- *High Growth Careers: Biotechnology/NSF Grant*, “Community Colleges Connections”, a 15-minute informational television program about the Community Colleges of Spokane, its programs, services and special initiatives. April 2007.
- *Opening New Doors: CityLab Builds Math and Science Literacy among Underserved Children*. WSU Innovators Lecture Series. March 2007.
- *Effective Strategies for Writing NSF Grants*. Luncheon Talk, Regional NSF Grant Workshop sponsored through Washington State University. March 2007.
- Breast Cancer Updates. *Science on Tap* lecture series coordinated through the Northwest Association of Biomedical Research. Feb. 2007.
- *Science Enrichment Activities: What Works, What Doesn't*. Conference presentation. Washington Science Teachers' Association Annual Conference, Pullman, WA October, 2003.
- *Biotechnology Workshops I, II, III and IV*. Washington Science Teachers' Association Annual Conference, Pullman, WA October, 2003.
- *Bioscience Education: Year in Review*. Guest speaker. June 17, 2003. Sponsored by the Inland Northwest Technology Education Center, Spokane, WA.
- Biotechnology workshop, requested by a regional science teacher's conference, Prince George, British Columbia, October, 2000.
- Panelist on the KPBX Community Health Forum addressing heart disease, March, 2000, Spokane, WA.
- Commencement speaker at the March, 2000 graduation of ITT Technical Institute, Spokane, WA.
- Biotechnology workshop, requested by Bio '99, Bio Program for Teachers, International Biotechnology Meeting and Exhibition, Seattle, WA, May, 1999.

PUBLICATIONS

- M. Antonio, M Schilling, **S. Oliver** and J. LeBeau, Enhancing AI High School Student Success: A Work in Progress. Northwest Journal of Teacher Education. Vol. 11, No.2, pp. 103-113.
- **S. Oliver**, J. Kingrey and G. Sharratt, Washington Project Lead The Way: An Innovative Partnership that Strengthens STEM Student Learning. Washington State Kappan, Spring 2011.
- J. Kingrey and **S. Oliver**, Project Lead The Way Leading STEM Education. Curriculum in Context, Vol 37., No. 1, pp. 28-29. 2011.
- **S. Oliver** and G. Hull. Afterschool Science Enrichment Programs. Promising Practices in Afterschool (www.afterschool.org). June 2003.
- M. Trevisan, H. Waterman and **S. Oliver**. Using Evaluation Statistics for Evaluation of Teacher Workshops. Washington Science Teachers Association Journal. Sept 2002.
- C.H. Mielke, C.Starr, J. Klock, D. Devereaux, M. Mielke, D. Baker, L. Broemeling, M. Wacksman, J. White, **S. Oliver**, G. Ens, P. Gavin and W. Dittman, Direct measurement of unfractionated heparin using a biochemical assay. Clin. Appl. Thrombosis/Hemostasis. 5:267-276, 1999.
- J. Ellington, J. Samper, A. Jones, **S.A. Oliver**, K. Burnett, R.W. Wright. In vitro interactions of cryopreserved stallion spermatozoa and oviduct (uterine tube) epithelial cells or their secretory products. Animal Reprod. Sci 56:51-65, 1999.
- J. Ellington, J. Samper, A. Jones, **S. A. Oliver**, K. Burnett, R. W. Wright. Effects of bovine serum albumin on cryopreserved stallion sperm function during media culture and oviduct epithelial cell coculture. Am. J. Vet. Res. 60:363-367, 1999.

- **S. Oliver.** WSU Spokane CityLab Pilots a Camp for Young Women. Washington Science Teacher's Association Journal. Vol. 38. No. 3. 1998.
- **S. A. Oliver.** Breast Disorders and Breast Cancer. MaGill's Medical Guide: Health and Illness. Salem Press, Inc , April 1995.
- V. Venkateswaran, **S.A. Oliver**, T.G.Ram, and H.L. Hosick, Salivary mesenchyme cells that induce mammary epithelial hyperplasia up-regulate EGF receptors in primary cultures of mammary epithelium within collagen gels. Growth Regul. 3(2):138-45, 1993
- T.G.Ram, A.N. Venkateswaran, **S.A.Oliver**, and H.L. Hosick, A transforming growth factor related to epidermal growth factor is expressed by fetal mouse salivary mesenchyme cells in culture, Biochem, Biophys. Res. Comm., 175:37-43, 1991.
- **S.R.Becker** (S.A. Oliver), A.N. Vasundara and H.L.Hosick, Stimulation of mammary epithelium in collagen gel cultures by cell lines of fetal mesenchyme. J. Cell Biol., 109(4 pt2): 113a, 1989.
- D.L.Hamernik, S.Y.McFarland, D. de Avila, **S.R. Becker** (S.A.Oliver) and J.J. Reeves, 1987, Endocrine and body growth traits in heifers exposed to testosterone propionate during early fetal development, J. Anim. Sci., 64:1858-1866.
- W.G.Huber, B.P.Archer, and **S.R.Becker** (S.A.Oliver), Bioavailability of residues: Current status, J. Env. Path.Tox. 3:45-63, 1980.
- **S.R.Becker** (S.A.Oliver), C.T.Gaskins and J.J.Reeves, Pituitary uptake of LHRH-ethylamide in ovariectomized rats pretreated with oestradiol-17B, J.Reprod.Fert., 57:295-300.
- G.E.Moss, V.L.Estergreen, **S.R.Becker** (S.A.Oliver) and B.D.Grant, The source of the 5a-pregnanes that occur during gestation in mares. Equine Reproduction II, Proceedings, 2nd International Symposium on Equine Reproduction. I.W.Roland and W.R.Allen (eds), J. Reprod. Fert.Suppl. 27:511-519.

COMMUNITY SERVICE

1999-present	Volunteer and financial supporter, rock climbing activities for elementary, middle and high school youth.
2002-2007	Presenter, Expanding Your Horizons, one-day event offering young women hands-on experiences in math, science and technology professions.
2004	Member, Washington Assessment of Student Learning (WASL) Science Standard Setting Panel, 5th Grade Science.
2003-2004	Member, Organization Committee, Expanding Your Horizons, Girl Scouts Inland Empire Council, Spokane, WA
2000-2003	Co-Chair, K-12 Initiative Committee, Inland Northwest Technology Education Center, Spokane, WA
1999-2001	Member (grant writer), Fundraising Committee, Positive Image Center, Spokane, WA
1998	Member (fundraising committee), Children's Transition Health Center, CHAS and the YWCA

PERSONAL INFORMATION

Single, two adult children, five grandchildren. Outside interests: rock climbing, biking, reading.