# **CURRICULUM VITAE**

# Jannette M. Dufour, Ph D

# **OFFICE ADDRESS**

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#### **EDUCATION**

Degree	Institute	Discipline	Year
PhD	Washington State University	Genetics and Cell Biology	1999
BSc	Central Washington University	Chemistry	1994 (Summa Cum Laude, President's Scholar)
BA	Central Washington University	Biology	1994 (Summa Cum Laude, President's Scholar)
AS	Olympic College	Science	1992 (Honors)

#### POSITIONS AND EMPLOYMENT

2023-present	<b>Professor and Chair (with tenure),</b> Cell Biology and Biochemistry, School of Medicine and Graduate School of Biomedical Sciences, Texas Tech University
	Health Sciences Center, Lubbock, TX.
2018-2023	Professor (with tenure), Cell Biology and Biochemistry, School of Medicine and
	Graduate School of Biomedical Sciences, Texas Tech University Health Sciences
	Center, Lubbock, TX.
2012-2018	Associate Dean for Research, School of Medicine, Texas Tech University Health
	Sciences Center, Lubbock, TX.
2012-2018	Associate Professor (with tenure), Cell Biology and Biochemistry, School of
	Medicine and Graduate School of Biomedical Sciences, Texas Tech University
	Health Sciences Center, Lubbock, TX.
2005-2012	Assistant Professor, Cell Biology and Biochemistry, School of Medicine and
	Graduate School of Biomedical Sciences, Texas Tech University Health Sciences
	Center, Lubbock, TX.
2000-2005	Co-Director of Islet Histology Laboratory, Surgical-Medical Research Institute,

	University of Alberta, Edmonton, AB.		
	Director: Dr. Gregory S. Korbutt		
1999-2005	Postdoctoral Fellow, Islet Transplantation Laboratory, Surgical-Medical Research		
	Institute, University of Alberta, Edmonton, AB.		
	Postdoctoral Mentors: Dr. Ray V. Rajotte, Dr. Gregory S. Korbutt		
	The Alberta Heritage Foundation for Medical Research Postdoctoral Fellow,		
	2004/10-2005/02		
	The Alberta Heritage Foundation for Medical Research Postdoctoral Fellow		
	Incentive Award, 2003/10-2004/09		
	Canadian Institutes of Health Research Postdoctoral Fellow, 2003/10-2004/09		
	Canadian Diabetes Association Postdoctoral Fellow, 2003 (Declined)		
	Juvenile Diabetes Research Foundation Postdoctoral Fellow, 2001/10-2003/09		
	Honorary Izaak Walton Killam Postdoctoral Fellow, 2001/09-2003/08		
	Izaak Walton Killam Postdoctoral Fellow, 2001 (Declined)		
1999-1999	Postdoctoral Fellow, Center for Reproductive Biology, School of Molecular		
	Biosciences, Washington State University, Pullman, WA.		
	Postdoctoral Mentor: Dr. Kwan Hee Kim		
1994-1999	Graduate Research Assistant, Department Genetics and Cell Biology,		
	Washington State University, Pullman, WA.		
	Graduate Assistant Mentor: Dr. Kwan Hee Kim		
	Dissertation: Retinoid receptor expression and regulation in the testis.		
1991-1994	Laboratory Assistant, Naval Supply Center, Fleet Industrial Supply Center,		
	Manchester Fuel Depot, Manchester, WA.		

#### **CURRENT GRANT SUPPORT**

CH Foundation Seed Grant, "The role of TGF-Beta and retinoic acid in Sertoli cell induction of Tregs." (\$72,400, 1/2022-12/2022)

Supervisor: Ken Patterson

**Dufour** (Principal Investigator), Kaur (Co-Investigator)

Research and Extension Experiences for Undergraduates, Agriculture and Food Research Initiative, (NIFA, USDA), "Nutrition Bench-to-Community Engaged Scholars in Texas (Nutrition BEST) REEU Program." (\$500,000, 5/2021 to 4/2026)

**Dufour** (Collaborating Mentor), Moustaid-Moussa (Director)

#### **PAST GRANT SUPPORT**

CBB Women's Health and Sex and Gender Differences Seed Grant, "Sertoli cell induction of Tregs in female recipients." (\$15,000, 12/01/2020-11/30/2021)

**Dufour** (Principal Investigator), Kaur (Co-Investigator)

CH Foundation Seed Grant, "Investigating Sertoli cell immune regulation to improve islet survival as a treatment for diabetes." (\$60,000, 1/2021-12/2021)

Kaur (Principal Investigator), **Dufour** (Co-Investigator)

The Jasper L. and Jack Denton Wilson Foundation, "Genetically engineered Sertoli cells as a vehicle for cell based gene therapy." (\$490,000, 12/01/2014-11/30/2020, no cost extension to 5/30/2021)

**Dufour** (Principal Investigator), Kaur (Co-Investigator)

Ted Nash Long Life Foundation, "Reducing cardiovascular risks using Sertoli cell-based gene therapy." (\$300,000, 12/01/2016-11/30/2019)

**Dufour** (Principal Investigator), Kaur (Co-Investigator)

Laura W. Bush Institute for Women's Health and University Medical Center Women's Health Seed Grant Award, "Utilizing tocotrienols to prevent the formation of islet amyloid deposits – a novel treatment for diabetes mellitus.," (\$20,000, 11/1/2017-10/31/2019) Kaur (Principal Investigator), **Dufour**, Shen, Cornwall (Co- Investigators)

NIH R15AI109398, "Regulatory T cells to improve Sertoli cell protection of transplanted islets." (\$448,871, 07/01/2014 – 06/30/2017, no cost extension to 6/30/2018) **Dufour** (Principal Investigator)

South Plains Foundation "Examining the mechanism of porcine Sertoli cell survival to improve xenotransplantation." (\$15,0000 Total, 9/01/2017–08/31/2018)

Kaur (Principal Investigator), **Dufour (**Co- Investigators)

American River Nutrition, Inc. "Effects of Bioactive Compounds (Tocotrienols and Geranylgeraniol) on Type 2 diabetic rats." (\$99,830, 4/2015 – 07/31/2017, no cost extension to 12/31/2017)

Shen (Principal Investigator), **Dufour**, Chung, Moustaid-Moussa (Co-Investigators

Obesity Research Cluster Pilot and Feasibility Grant, "Identification of Novel Pathways and miRNA Targets Mediating Effects of Angiotensin in Obesity-related Diabetes pancreatic function" (\$8,000, 9/1/2016-7/31/2017)

**Dufour** (Principal Investigator), Ramalingam, Moustaid-Moussa and Kottapali (Co-Investigators)

Laura W. Bush Institute for Women's Health and University Medical Center Women's Health Seed Grant Award, "Hltf in gender biased neonatal survival." (\$20,000, 2/1/2016-1/31/2017)

Chilton (Principal Investigator), **Dufour**, Smith (Co-Investigators)

American Heart Association Predoctoral Fellowship, "Sertoli cells secreting processed proinsulin: A unique therapy for reducing cardiovascular risks in diabetes." (\$50,000, January 1, 2015-December 31, 2016)

**Dufour** (Mentor), Lea Ann Thompson, PhD Student

Obesity Research Cluster Pilot and Feasibility Grant, "Maternal supplementation of omega-3 poly unsaturated fatty acids alleviates obesity-associated inflammation in the offspring" (\$8,000, 10/1/2015-7/31/2016)

Ramalingam (Principal Investigator), **Dufour** and Dawson (Co-Investigators)

TTUHSC SOM Collaborative Research Grant Program, "Hltf regulates the placental source of serotonin for fetal pancreMouas." (\$20,000, 3/15/2015-3/14/2016)

Chilton (Principal Investigator), **Dufour**, Smith and Wachtel (Co-Investigators)

Texas Tech University Transdisciplinary Research Academy, "System-based transdisciplinary approaches by "omics and bioinformatics" tools to identify biomarkers of at risk and progression of type I diabetes." (\$4,000, 4/2014-4/2015)

**Dufour, J.M.** (Team Member)

Diabetes Action Research & Education Foundation, "Importantce of regulatory T cells in Sertoli cell immune protection of transplanted pancreatic islets." (\$10,000, 1/2014-12/2014) **Dufour (**Principal Investigator)

NIH R01HD067400, "Transplantation of genetically modified, immune-privileged Sertoli cells." (\$681,462, 9/28/2010-6/30/2013, no cost extension to 6/30/2014)

**Dufour** (Principal Investigator)

Laura W. Bush Institute for Women's Health, "Sex and Gender-Based Medicine Triad - Diabetes." (\$19,200, 5/2013-5/2014)

**Dufour** (Principal Investigator)

CH Foundation Seed Grant, "A treatment for diabetes using immune-privileged Sertoli cells." (\$50,000, 12/2012-12/2013)

**Dufour** (Principal Investigator)

Laura W. Bush Institute for Women's Health and University Medical Center Women's Health Seed Grant Project, "Examining the immune-privileged abilities of Sertoli cells." (\$20,000, 02/2010-01/2011)

**Dufour** (Principal Investigator)

TTUHSC Preliminary Data Grant Program, "Transplantation of genetically modified immune-privileged Sertoli cells." (\$20,000, 01/2010-12/2010)

**Dufour** (Principal Investigator)

American Diabetes Association, Junior Faculty Award "Harnessing the immunoprotective properties of Sertoli cells for islet transplantation" (\$412,254 Total, 01/2006–12/2008, no cost extension to 06/2009)

**Dufour** (Principal Investigator)

Texas Advanced Research Program "Genetically Engineered Sertoli Cells as a Vehicle for Gene Therapy." (\$83,200 Total, 05/2006–05/2008, no cost extension to 01/2009)

**Dufour** (Principal Investigator)

TTUHSC Internal Medicine Department Seed Grant, "Autologous Buccal Keratinocytes to Promote Healing After Esophageal Mucosal Resection in Barrett's esophagus." (\$10,000 Total, 01/2008-12/2008)

Parupudi (Principal Investigator), **Dufour** (Co-investigator), Variyam (Co-investigator)

TTUHSC School of Medicine Clinical Basic Sciences Seed Grant, "Autologous cultured buccal keratinocyte cell sheets versus autologous buccal mucosal grafts after circumferential endoscopic mucosal resection to prevent stricture formation in Barrett's esophagus." (\$20,000 Total, 01/2008-12/2008)

Parupudi (Principal Investigator), **Dufour** (Co-investigator), Variyam (Co-investigator)

Helen Jones Foundation "Diabetes: Harnessing The Immunoprotective Properties of Sertoli Cells For Treatment." (\$28,000 Total, 01/2006–12/2006)

**Dufour** (Principal Investigator)

South Plains Foundation "Harnessing The Immunoprotective Properties Of Sertoli Cells" (\$10,0000 Total, 9/2005–08/2006)

**Dufour** (Principal Investigator)

Texas Tech University Health Sciences Center, School of Medicine Seed Grant "Genetically Engineered Sertoli Cells as a Vehicle for Gene Therapy." (\$19,790 Total, 09/2005–08/2006) **Dufour** (Principal Investigator)

Alberta Livestock Industry Development Fund, Ontario Hatching Egg Producers Association, Saskatchewan Chicken Industry Development Fund, Poultry Industry Council, and Aviagen "The impact of Growth Pattern on Reproductive Efficiency in Male Broiler Breeders." (\$201,009 Total, 05/2004-04/2006)

Robinson (Principal Investigator), Renema, Fasenko, **Dufour**, Wilson, Inglis, Zuidhof (Co-Investigators).

Johnson & Johnson, Focused Giving Program "Creation of an ectopic site to co-localize Sertoli cells and islets for treatment of diabetes." (\$200,000 Total, 04/2001-03/2003)

Korbutt (Principal Investigator), **Dufour** (Co-Investigator).

#### **HONORS AND AWARDS**

2023	Cover Photo, Biomedicines		
2023	Women in Andrology Lecture. American Society for Andrology		
2021	Dr. Yves Clermont Lecture in Reproduction at the 12th Annual Research Day of the		
	McGill Centre for Research in Reproduction and Development		
2020	President's Excellence in Team Teaching Award, SOM COA course		
2019	President's Team Teaching Award, SOM FMAT1 course		
2018	Cover Photo, DNA and Cell Biology		
2018	Research highlighted in <i>Nature Medicine</i>		
2018	Keynote Lecture, GSBS Student and Faculty Retreat		
2018	Clinical Research Institute Award		
2017	Dean's Basic Science Teaching Award		
2017	TTUHSC SOM Teaching Academy membership		
2017	President-Elect, TTUHSC Chapter Phi Kappa Phi Honor Society		
2016-2017	Block Teaching Award for Clinically Oriented Anatomy		

2016 mmagamt	Hairyangity Digtin guide of Due fagger
2016-present 2015-2018	University Distinguished Professor
	American Society of Andrology Executive Council Member
2016	Plenary Speaker, Texas Forum for Reproductive Sciences
2015-2016	Executive Leader in Academic Medicine (ELAM) Program
2016	Mentor, Trainee-Mentor Luncheon, Society for the Study of Reproduction
2015	Research highlighted in Pulse, TTUHSC Alumni magazine
2014	Research highlighted in a commentary in Biology of Reproduction
2014	Top Rated Educator, School of Medicine Teaching Award
2013	Dr. Harry M. Weitlauf Anatomy Teaching Award
2013	Closing Remarks, GSBS Convocation Ceremony
2013	Outstanding Women Leader (OWL), West Texas Association for Women in Science
2012	Cover Photo, Spermatogenesis
2012	Mentor, Trainee-Mentor Luncheon, Society for the Study of Reproduction
2011	President's Young Investigator Award, TTUHSC
2011	Unsung Hero Award, CBB, TTUHSC
2011	Nominated for Young Andrologist Award, American Society of Andrology
2010	Recognized at Board of Regents Meeting as an "up-and-coming" Investigator, TTU
	System
2008	Cover Photo, Cell Transplantation
2006-2009	American Diabetes Association, Junior Faculty Award
2005	Travel Grant Award, The Transplantation Society
2004	Travel Award, British Columbia Research Institute for Children's and Women's
	Health
2004	Canadian Trainee Travel Award, Society for the Study of Reproduction
	Canadian Institutes of Health Research
2004	Larry Ewing Memorial Trainee Travel Award, Society for the Study of Reproduction
2004-2005	Alberta Heritage Foundation for Medical Research Postdoctoral Fellowship
2003-2004	Alberta Heritage Foundation for Medical Research Postdoctoral Fellowship, Incentive
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2003-2004	Canadian Institutes of Health Research Postdoctoral Fellowship
2003	Canadian Diabetes Association Postdoctoral Fellowship, Declined
2003	Western Regional Islet Study Group Travel Award
2003	Transplantation Society Travel Award, International Pancreas and Islet Transplant
2003	Association
2001-2003	Postdoctoral Fellowship, Juvenile Diabetes Research Foundation International
2002	Canadian Trainee Travel Award, Society for the Study of Reproduction
2002	Canadian Institutes of Health Research
2002	Larry Ewing Memorial Trainee Travel Award, Society for the Study of Reproduction
2002	Winner Abstract Competition at ImmuNet Retreat, Department of Immunology,
2002	University of Alberta
2001-2003	Honorary Izaak Walton Killam Memorial Postdoctoral Fellowship,
2001-2003	University of Alberta
2001	Izaak Walton Killam Memorial Postdoctoral Fellowship, University of Alberta,
2001	Declined
2001	Lalor Foundation Postdoctoral Travel Fellowship, Society for the Study of
2001	Reproduction
2001	Larry Ewing Memorial Trainee Travel Award, Society for the Study of Reproduction
2001	Larry Ewing Memorial Trainee Travel Award, Society for the Study of Reproduction

2000	First Place in Poster Competition at ImmuNet Retreat, Department of Immunology,
	University of Alberta
1998	Summer Graduate Research Assistantship, Washington State University
1997	Larry Ewing Memorial Trainee Travel Award, Society for the Study of Reproduction
1997	R. A. Nilan Travel Award, Washington State University
1994	President's Scholar
1993	Financial Aid Office Scholarship, Central Washington University

# MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

2022-present	American Society of Reproductive Immunology
2020-present	American Association for Anatomy
2015-2022	American Heart Association
2013-present	American Society of Transplantation
2005-present	American Diabetes Association
2003-present	International Pancreas and Islet Transplant Association
2002-present	American Association for the Advancement of Science
2002-present	American Society of Andrology
1997-present	Endocrine Society
1996-present	Society for the Study of Reproduction
1993-present	Phi Kappa Phi Honor Society (Inaugural TTUHSC President Elect 2016-
	2018, President 2018-2020, Past President 2020-2022)
1993-1994	Beta Beta Biological Honor Society (Secretary 1994)

# PROFESSIONAL SERVICE

<b>Grant reviewer</b>	
2023	ZRG1 EMS-K (10) B NIH Study Section
2022	Deutsche Forschungsgemeinschaft (German Research Foundation),
	Grant Reviewer
2022	The Dutch Duchenne Parent Project Grant Reviewer
2018	National Health and Medical Research Council Australia Grant Reviewer
2017, 2018, 2019	Agriculture and Food Research Initiative Animal Reproduction Program,
	NIFA, USDA
2016	National Health and Medical Research Council Australia Grant Reviewer
2016	The Italian Parent Project Onlus
2016	Telethon Italy Grant Reviewer
2015	University of Michigan Pilot/Feasibility Grant Proposal Reviewer
2015, 2017, 2019,	Czech Science Foundation Grant Reviewer
2023	
2014	American Diabetes Association Research Grant Review Committee
2014	Collaborative Faculty Research Investment Program Grant Reviewer,
	Baylor University
2013	Lalor Foundation Postdoctoral Fellow Grant Reviewer
2013	Istituto Pasteur Fondazione Cenci Bolognetti Grant Reviewer
2011, 2013	Association Française contre les Myopathies Grant Reviewer
2011	Allard Foundation, Review Alberta Diabetes Institute Projects

2011-2013	American Diabetes Association Research Grant Review Committee
2010-2011	Telethon Italy Grant Reviewer
2009-2010	National Sciences and Engineering Research Council of Canada Discovery
	Grant Reviewer
2009	Emtech Bio Collaborative Seed Grant Proposal Reviewer, Emory University
	and Georgia Tech
2008-2010	American Diabetes Association Research Grant Review Committee
2008-2009	American Diabetes Association, Outstanding Scientific Achievement Award
	Selection Committee
2006	Southwest Cancer and Treatment Center Seed Grants, TTUHSC

# **External Reviewer**

2022	Department of Animal, Dairy and Veterinary Sciences, College of Agriculture and Applied Sciences, Utah State University, External Reviewer for promotion
	to Professor
2022	Department of Medical Education, School of Medicine, Texas Tech University
	Health Sciences Center, Reviewer for promotion to Professor
2021	Neuromuscular Sertoli cell Application Review, TREAT-NMD Advisory
	Committee for Therapeutics, United Kingdom
2021	Department of Animal, Dairy and Veterinary Sciences, School of Veterinary
	Medicine, Utah State University, External Reviewer for tenure and promotion
	to Associate Professor
2021	Department of Biology, College of Sciences, The University of Texas at San
	Antonio, External Reviewer for promotion to Full Professor
2020	Department of Animal, Dairy and Veterinary Sciences, School of Veterinary
	Medicine, Utah State University, External Reviewer for promotion to Research
	Associate Professor
2019	Department of Tropical Medicine, Medical Microbiology and Pharmacology,
	John A Burns School of Medicine, University of Hawaii at Manoa, External
	Reviewer for promotion to Full Professor
2019	Paul Foster School of Medicine, TTUHSC El Paso, External Post-tenure
	Reviewer
2017	Monash University and Justus Liebig University Giessen, External PhD Thesis
	Reviewer
2015	University of Calgary, External PhD Thesis Reviewer

# **Editorial Board Member**

2023-present	Nutrients
2017-present	Annals of Diabetes Research
2013-present	International Journal of Stem Cell Research and Transplantation
2012-present	Tissue Barriers
2011-2017	Spermatogenesis
2011-2015	Journal of Pediatric Biochemistry (Review Board Member)

# Ad hoc Reviewer

2022-2023 Andrology, PNAS

2003-2021

Reproductive Immunology, Andrologia, Annals of Diabetes Research, Archives of Biochemistry and Biophysics, Biocell, Biology of Reproduction, Biotechnology Progress, BMC Gastroenterology, Cancer Immunology and Immunotherapy, Cell & Bioscience, Cell and Tissue Research, Cell Biochemistry and Function, Cell Communication and Signaling, Cell Cycle, Cell Proliferation, Cell Transplantation, Current Diabetes Reviews, Domestic Animal Endocrinology, Endocrine, Endocrinology, Endocrinology and Metabolism, Environmental Epigenetics, European Journal of Immunology, Experimental Biology and Medicine, Expert Opinion On Biological Therapy, Frontiers in Endocrinology, Frontiers in Immunology, Human Reproduction, Immunology, International Journal of Case Reports and Therapeutic Studies, Iranian Journal of Applied Animal Science, Journal of Andrology, Journal of Cell and Animal Biology, Journal of Cell Science, Journal of Clinical Medicine, Journal of Endocrinology, Journal of Immunology, Journal of Reproductive Immunology, Journal of Visualized Experiments, Molecular and Cellular Endocrinology, Molecular Reproduction and Development, PNAS, Reproduction, Research and Reports in Urology, Scientific Reports, Seminars in Cell and Developmental Biology, The FASEB Journal, Tissue Barriers, Tissue Engineering, Tissue Engineering-Methods, Tissue Engineering and Regenerative Medicine, Transgenic Research, Trends in Molecular Medicine, Trends in Pharmacological Sciences, Ultrastructural Pathology, Xenotransplantation

Acta Neurobiologiae Experimentalis, American Journal of

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Tradional Sci vice	
2022-present	North American Testis Workshop Executive Committee
2022-2025	Journal Committee, American Society of Andrology
2022-2024	Nominating Committee, American Society of Andrology
2019-2022	Constitution and By-laws Committee, American Society of Andrology
2020-2022	Program Committee, 55th Annual Meeting of the Society for the Study of
	Reproduction
2021	Platform Session Judge, 2021 Texas Forum for Reproductive Sciences
2019-2021	Nominating Committee, American Society of Andrology
2018-2021	Program Committee, 54th Annual Meeting of the Society for the Study of
	Reproduction (Co-Chair)
2021	Abstract Reviewer for the 54 <sup>th</sup> Annual Meeting of the Society for the Study of
	Reproduction
2020-2020	Program Committee, 53 <sup>rd</sup> Annual Meeting of the Society for the Study of
	Reproduction (Co-Chair)
2020	Abstract Reviewer for the 53 <sup>rd</sup> Annual Meeting of the Society for the Study of
	Reproduction
2018-2019	Program Committee, 52 <sup>th</sup> Annual Meeting of the Society for the Study of
	Reproduction

2019	Session Chair, Session 14: In and Out of the Testis Through the Blood-Testis
2019	Barrier. 52 <sup>th</sup> Annual Meeting of the Society for the Study of Reproduction Abstract Reviewer for the 52 <sup>th</sup> Annual Meeting of the Society for the Study of
2010	Reproduction, Lead Reviewer
2018	Session Chair, Session 5: 52 <sup>nd</sup> Gene Families and Isozymes Conference
2017-2019	Program Committee. XXV North American Testis Workshop
2017	Session Chair, Session 17: Immunobiology of Male Reproductive Function.
	50 <sup>th</sup> Annual Meeting of the Society for the Study of Reproduction
2017	Abstract Reviewer for the 50 <sup>th</sup> Annual Meeting of the Society for the Study of
	Reproduction
2017-2018	Pubic Affairs and Policy Committee, American Society of Andrology (Co-
	Chair 2017-2018)
2017-2018	Communication and Media Committee, American Society of Andrology (Co-
	Chair 2017-2018)
2017	Session Chair, Women in Andrology Lecture, 42 <sup>nd</sup> Annual American Society
	of Andrology Meeting
2017	Session Chair, Session III: Testis Development & Differentiation. XXIV North
	American Testis Workshop
2017	Abstract Reviewer for XXIV North American Testis Workshop
2015-2018	Executive Council Member, American Society of Andrology
2016-2018	Women in Andrology, American Society of Andrology (Chair 2016-2017;
	Past Chair 2017-2018)
2016-2017	Program Committee, 50 <sup>th</sup> Annual Meeting of the Society for the Study of
	Reproduction
2006-2017	Constitution and By-laws Committee, American Society of Andrology (Chair
	2012-2015; Co-Chair 2011, 2015-2017)
2016	Abstract Reviewer for Testicular Function for the 49 <sup>th</sup> Annual Meeting of the
	Society for the Study of Reproduction
2006-2014	Bylaws Committee, Society for the Study of Reproduction (Chair 2011-2014)
2014	Abstract Reviewer for the Reproductive Toxicology: Male category for the 47 <sup>th</sup>
	Annual Meeting of the Society for the Study of Reproduction
2010-2013	Awards Committee, Society for the Study of Reproduction
2012	Abstract Reviewer for the Testis Platform Session for the 45th Annual Meeting
	of the Society for the Study of Reproduction
2006	Session Chair, Gametes and Embryo Development Platform Session, 39th
	Annual Meeting of the Society for the Study of Reproduction
2006	Abstract Reviewer for the Fertilization and Early Embryogenesis Platform
	Session for the 39 <sup>th</sup> Annual Meeting of the Society for the Study of
	Reproduction
2005	Abstract Reviewer for the Genomics and Proteomics Platform Session for the
	38th Annual Meeting of the Society for the Study of Reproduction
2004	AHFMR Postdoctoral Representative for AHFMR International Board of
	Review

TTUHSC University Service
2022-present West Texas Geriatrics Consortium (2023-present) (Garrison

Coordinating Council 2022-2023)

2022	Community Engagement President's Award Committee
2021	Faculty Senate Faculty Awards Task Force, Evaluator
2021	TTUHSC Limited Submission Grant Reviewer
2020-present	External Affairs Council, Supporting Council Member
2018-2022	Phi Kappa Phi Honor Society, TTUHSC Past-President 2018-2022
2018-2020	Phi Kappa Phi Honor Society, TTUHSC President 2018-2020
2017-2018	SVP for Research, Research Council, Committee Member
2017-2018	Clinical Research Institute, Seed Grant Selection Committee
2017	TTUHSC Senior Vice President for Research Search Committee
2016-2018	Phi Kappa Phi Honor Society, TTUHSC President-Elect 2016-2018
2016-2018	TTUHSC Limited Submission Committee
2014-2018	TTUHSC Institutional Research Grant Review Committee
2014-2015	SVP for Research, Research Council, Strategic Planning Committee
2014-2015	SVP for Research Core Facility Subcommittee, Chair
2014-2015	TTUHSC CORE Laboratory Advisory Committee, Chair
2014	SVP for Research, Animal Care Cost Committee
2013	SVP for Research, Research Advisory Committee
2012-2013	TTUHSC Senior Vice President for Research Search Committee
2011	TTU Task Force on Undergraduate Research
2011	TTUHSC Preliminary Data Grant Reviewer

# School of Medicine 2021 present Introduction to Resear

2021-present	Introduction to Research, SOM Medical Student Elective, Course
	Director
2021-2022	Department of Cell Physiology and Biophysics Chair Search
	Committee
2020-2022	System Disorders I, Endocrine Unit Director
2019-2022	Faculty Appointments Committee
2019-2022	American Physician Scientist Association TTUHSC SOM Student
	Organization, Advisor
2018-2019	SOM Medical Student Summer Research Program, Co-Director
2018	Center of Host-Microbe Interactions in Health and Disease Evaluation
	Committee, Chair
2017-2018	Center for Integrative Health Evaluation Committee, Chair
2016	Center for Super Heroes Evaluation Committee, Chair
2016-2018	Continuous Improvement Committee
2016-present	Dean's ELUM Advisory Committee
2015-2016	Diabetes and Endocrinology Center of Excellence Evaluation Committee,
	Chair
2015-2017	LCME Task Force on Faculty Affairs and Development Committee
2014-2015	SimCentral Center of Excellence Evaluation Committee, Chair
2014	Center for Translational Neuroscience and Therapeutics Evaluation
	Committee, Chair
2014-2017	LCME Assessment Team
2014-2016	Faculty Networking Group, SOM mentoring program, Facilitator
2014-2015	Faculty Forward Task Force, Clinical Research Committee

Endocrinology Faculty Appointment Search Committee
Anesthesiology Faculty Search Committee
Department of Pharmacology and Neuroscience Chair Search Committee
Department of Cell Biology and Biochemistry Chair Search Committee
SOM Medical Student Summer Research Program, Director
Faculty Council Executive Committee, Ex-Officio
Faculty Research Committee, Ex-Officio
Burn Research Center of Excellence Evaluation Committee, Chair
LCME Site Visit, Junior Faculty Representative
Permian Basin Diabetes Center Evaluation Committee
Department of Physiology Chair Search Committee
School of Medicine Seed Grants, TTUHSC

# **Graduate School of Biomedical Sciences**

2021-2023	GSBS Graduate Council Faculty Chair
2020-present	Graduate Council, GMES Representative
2013-present	Graduate Medical Education Sciences Program Committee, Associate
	Program Advisor, 2020-2023
2020	Dean's Representative, Bojana Ristic, PhD defense
2019	Dean's Representative, C. Riccay Elizondo, PhD defense
2013	GSBS Dean Scholar Selection Committee
2012	GSBS Dean Search Committee
2010-2012	GSBS Graduate Faculty and Graduate Council Secretary
2010-2011	GSBS Dean Search Committee
2010-2012	GSBS Graduate Student Admissions Committee
2009-2010	Microbiology Program Review Committee
2009	MD/PhD Applicant Interviewer
2009	Dean's Representative, Heather Schultz, MS defense
2008-2013	Graduate Council, CMB Representative
2007-2008, 2010	Outstanding Graduate Student Selection Committee
2005-2007, 2009-	Poster Judge for the Annual Student Research Week
2012, 2014-2022	at TTUHSC
2005	Physiology Preliminary Exam, Outside Grader, August 2005
2005	Selection Committee, Distinguished Alumni Awards

# **Departmental Service**

2022-2023	CBB Mentoring Committee
2009-2013	CBB Seminar Series and Reproductive Seminar Series Coordinator
2008-2013	CMB Concentration Committee, Associate Program Advisor
2007-2013	Stipend Committee, Cell Biology and Biochemistry
2007-2011	Executive Committee, Cell Biology and Biochemistry
2007-2011	CBB Annual Departmental Party Coordinator
2007-2010	CBB Computer User Committee
2005-2014	Equipment Committee, Cell Biology and Biochemistry
2006	CBB Recruitment Brochure Committee
2005-2006	CBB Webpage Redesign Committee

2005, 2007	Poster Judge for the Cell Biology and Biochemistry Student Research Day at Texas Tech University Health Sciences Center
Other Service	
2019-present	Obesity Research Institute, Associate Director, TTU System Organized ORI Webinar "At the Intersection of Two Pandemics: COVID- 19 & Obesity, July 16, 2020 Organized ORI Webinar "Current Topics in Cancer Research" November 20, 2020
	Organized ORI 6 <sup>th</sup> Annual Meeting May 12, 2021 Organized ORI Webinar "Human-Animal Interactions in Health & Disease" November 15, 2021
	Organized ORI Webinar "A Celebration of Women's Health for Women's Day 2022" March 8, 2022
	Organized ORI 7 <sup>th</sup> Annual Meeting May 11, 2022
	Organized ORI Fall Webinar series on Sustainable Agriculture & Nutrition Security, Fall 2022
	Organized ORI Webinar "A Celebration of Women's Health for Women's Day 2023" March 8, 2023
	Organized ORI 8th Annual Meeting May 3, 2023
2019-present	Obesity Research Institute, Advisory Board, TTU System
2019-present 2020	Obesity Research Institute, Strategic Planning Committee, TTU System Department of Nutritional Sciences, Research Assistant/Associate Professor
2020	Search Committee Member, TTU American Diabetes Association, Lubbock Board Member
2014-2019	Obesity Research Cluster, Advisory Board, TTU System
2013-2019	Obesity Research Cluster, Strategic Planning Committee, TTU System
2019-2020	American Diabetes Association, Camp NoHiLo Volunteer
2005-2020	American Diabetes Association, Family Resource Network Volunteer
2008-2017	American Diabetes Association, Lubbock Board Member
2007-2020	American Diabetes Association, Step Out Walk for Diabetes (Team Captain 2007-2013, 2016, 2020)
2010	American Diabetes Association, Tour de Cure Bike Ride (Team Captain 2010)
2005-2006	American Diabetes Association, Walk for Diabetes (Team Captain 2005)
2016	2016 Gender-Specific Medicine & Women's Health Symposium Planning
2002	Committee Immunet Retreat Selection Committee, Department of Immunology, University of Alberta
1998-1999	University of Alberta Graduate Student Representative, Department of Genetics and Cell Biology, Washington State University
1996-1997	Invited Lecturers Committee, Department of Genetics and Cell Biology, Washington State University
	SCIENTIFIC CONSULTANT
2006-2013	Scientific Advisory Board, Sernova Corp.
1999-2005	Sertoli Technologies, Inc.
2004	Alberta Heritage Foundation for Medical Research Review Board

2000-2003

Johnson & Johnson

#### TEACHING EXPERIENCE

Educational Program Development

Sex and Gender-Based Medicine Education Curriculum: Interprofessional Web-based Student Module; "Diabetes" 2014 (access at www.sexandgenderhealth.org)

Texas Tech University, Lubbock, TX:

**Chronic Disease Course – Diabetes,** Nutrition: Diabetes, Islet Transplantation and Immune Privileged Sertoli Cells Lecture, Fall 2020

**Chronic Disease Course – Diabetes/Obesity**: Type 1 Diabetes and Islet Transplantation Lecture, Fall 2022

Science It's a Girl Thing, Heart ultrasonagraphy, (TTUHSC Simulation Center), Summer 2019

Lecturer, Texas Tech University Health Sciences Center, Lubbock, TX:

Clinically Oriented Anatomy, MSCI5201, Lab Section 1 (Back, Upper Limb, Thorax) – Fall 2010-2022

Clinically Oriented Anatomy, MSCI5201, Upper Extremity Lecture – Fall 2009-2022

Clinically Oriented Anatomy, MSCI5201, Unit 2 (Thyroid Ultrasound) – Fall 2019-2022

Clinically Oriented Anatomy, MSCI5201, Lab Section 3 (Abdomen, Pelvis/Perineum, Lower Limb) – Fall 2009-2022

Clinically Oriented Anatomy, MSCI5201, Muscles and Locomotion Lecture – Fall 2019-2022

FMAT, Endocrinology Block, FMAT6201, Diabetes – Summer 2011-2023

**Organ Systems 1,** Facilitator for cardiac ultrasound – 2022

Organ Systems 3, Small group sessions on: Cases in Rheumatology – Fall 2022

**Organ Systems 5,** Diabetes and Transplantation Immunology Lectures, Diabetes Case Studies, Transplantation Immunology Q&A – Spring 2023

**P3 Small Group**, Facilitator, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023

Systems Disorders I, MSCII6104, Pancreatic Islets and Diabetes Review – Spring 2015-2022

**Structure and Function of Major Organ Systems, Endocrine Section**, Pancreatic Islets, Metabolism and Diabetes – Spring 2011-2021

**Systems Disorders I,** MSCII6013, Ultrasound facilitator for extended focused assessment by sonography of trauma (eFAST procedure) – Spring 2018, 2019, 2020

**Systems Disorders I,** MSCII6013 Simulation: Acute cardiovascular distress – Spring 2019, 2020

Systems Disorders I, MSCII6013 Facilitator for auscultation of heart sounds – Spring 2020 Structure and Function of Major Organ Systems, Cardio Section, Facilitator for cardiac ultrasound and auscultation of heart sounds – Spring 2019, 2020

**Immunity, Multisystems Disorders and Cancer**, Transplantation Immunology – Fall 2018-2021

**Immunity, Multisystems Disorders and Cancer**, Small group sessions on: Cases in Rheumatology and Unit 3 Review – Fall 2021

Select Topics in Immunology/Infectious Diseases, GIID 5281, Sertoli cell nadventures in testis immune privilege and transplantation. – Spring 2021,

**Course Director** 

Select Topics in Immunology/Infectious Diseases, GIID 5381, Sertoli cell immune regulation and relevance to diabetes. – Spring 2020

**Course Director** 

The Human Microbiome in Health and Disease, GBTC 5210, The microbiome and diabetes. – Spring 2018-2022

Introduction to Research Elective, SOM, Overview of types of research, Fall 2021, 2022 Introduction to Research Elective, SOM, Project Development (Mentorship and Getting Started, hypothesis/objectives), Fall 2021, 2022

**Distinction in Medical Research, SOM**, Research question and hypothesis, Spring 2022 **The Diabetes Outreach and Counseling (DOC) club, SOM**, Diabetes Mellitus, Fall 2021, 2022

Culinary Medicine Elective, SOM, Diabetes & Nutrition, Fall 2020-2022

**Host Defense**, Transplantation Immunology – Spring 2012-2017

Molecular and Cellular Immunology, GMIB5340 – Spring 2007-2012, 2014, 2015

Structure and Function of Major Organ Systems, GI/Nutrition Section, Pancreatic Islets – Spring 2007-2010

**P3 Honors Project**, Faculty Mentor – 2013-2015, 2021, 2022

Early Clinical Experience I Honors Project, Faculty Mentor – Spring 2009

Special Topics, GANM 5313- Fall 2008 (Cloning), Spring 2009 (Histology)

CBB Seminar Review Committee, GCMB 7101, Spring 2010-2013

CBB Seminar Evaluator, GANM 7101, Spring 2008

Introduction to Biotechnology, GBTC/BTEC 6301 - Fall 2005

Lecturer, University of Alberta, Edmonton, Alberta:

**Surgery 520 - Fall 2004** 

Lecturer, Washington State University, Pullman, Washington:

General Genetics Laboratory, GenCB 402 - Fall 1998

General Genetics, GenCB 301 - Spring 1999

Teaching Assistant, Washington State University, Pullman, Washington:

General Genetics Laboratory, GenCB 402 - Fall 1998

General Genetics, GenCB 301 - Summer 1997, Fall 1997, Spring 1998, Spring 1999

**Introductory Biology**, Bio S 104 - Spring 1996

General Biology, Bio S 102 - Fall 1995

Chemistry Related to Live Sciences, Chem 102 - Spring 1995

**Introduction to Chemistry**, Chem 101 - Fall 1994

Teaching Assistant, Central Washington University, Ellensburg, Washington:

Introduction to Chemistry, Chem 112 - Winter 1994

Introduction to Chemistry, Chem 111 - Fall 1992, Winter, Spring, Fall 1993

# STUDENTS SUPERVISED

# **Graduate Students**

Graduate Sti	
2023-present	Graduate Student (PhD), Alexis Rodriguez
2019-2023	Graduate Student (PhD), Rachel Washburn, Wright Family ASCO Foundation
	Endowed Presidential Scholarship, 2019; SALUTE Gold Tier Scholarship, 2019;
	Second Place First and Second Year Graduate Student Division, TTUHSC Student
	Research Week Poster Competition, 2020; Mary Lou Clements Award, 2020; Third
	Place First and Second Year Graduate Student Division, TTUHSC Student Research
	Week Poster Competition, 2021; Mary Lou Clements Award, 2021; 2021 GSBS
	Dean's Scholar Awardee; Student Speaker, TTUHSC Student Research Week, 2022;
	Phi Kappa Phi Love of Learning Award, 2022; Mary Lou Clements Award, 2022.
2019-2023	Graduate Student (PhD), Taylor Hibler, Mary Lou Clements Award, 2020;
2017 2023	Second Place in the Third and Fourth Year Graduate Student Division,
	TTUHSC Student Research Week Poster Competition, 2021; 2021 American
	Association of Immunologists Trainee Abstract Award; Second Place 2021
	· · · · · · · · · · · · · · · · · · ·
	Texas Forum for Reproductive Sciences Platform Competition Award; Mary
	Lou Clements Award, 2021; Second Place Third and Fourth Year Graduate
	Student Division, TTUHSC Student Research Week Poster Competition,
	2022; 2022 American Association of Immunologists Trainee Poster Award;
2022 2022	Mary Lou Clements Award, 2022.
2022-2023	Graduate Medical Sciences Graduate Student (MS), Emily Bernstein
	Master's Project: Connecting the layers: Enhancing Medical Students
	Knowledge of Male and Female Perineum Anatomy.
2020-2021	Graduate Medical Sciences Graduate Student (MS), Kenneth Hardy
	Master's Project: The Effectiveness of High Yield Post-Lecture Quizzes on
	Preclinical Medical Student Study Efficiency and Stress Reduction.
2020-2021	Graduate Medical Sciences Graduate Student (MS), Riley Reich
	Master's Project: Focusing Medical Student Learning by Adding Lecture-
	Based Questions and a High-Yield Fact Sheets in Respiratory Physiology.
2020-2021	Graduate Medical Sciences Graduate Student (MS), Austin Rodgers
	Master's Project: Medical Education Through Differential Diagnosis: An
	Algorithmic Approach to Instructing Medical Students.
2019-2020	Graduate Medical Sciences Graduate Student (MS), Kenna Provost
	Master's Project: Studying the Effectiveness of "Bite-Size" Review Modules
	on Gastrointestinal Physiology Concepts in Medical School.
2019-2020	Graduate Medical Sciences Graduate Student (MS), Roald Credo
	Master's Project: Efficacy of learning modules with video clinical vignettes on
	diabetes for first year medical students.
2015-2019	Graduate Student (MD/PhD), Karl Mueller, Poster selected for display at TTUHSC
	Student Research Week Banquet, 2016; Student Speaker, TTUHSC Student Research
	Week, 2019.
	PhD Dissertation: Using genetically engineered immune privileged Sertoli
	cells secreted C-peptide to treat endothelial cell metabolic imbalances in
	hyperglycemic environments.
2015-2019	Graduate Student (MD/PhD), Kandis Wright, Third Place Medical Student Category,
2015 2017	Student Research Week Poster Competition, 2015; First Place Sex- and Gender-Based
	Medicine and Women's Health Symposium Poster Competition, 2015; Third Place
	reference and women's realin Symposium roster Competition, 2013, Tillia riace

Obesity Research Cluster Poster Competition, TTU, 2016; Mary Lou Clements Award, 2016. Platform Presentation, Society for Study of Reproduction, San Diego, California, 2016; Student Speaker, TTUHSC Student Research Week, 2017; Platform Presentation, Experimental Biology Meeting, Chicago, Illinois, 2017; Platform Presentation, Society for Study of Reproduction, Washington, D.C., 2017; GSBS Dean's Scholar Award, 2017; Phi Kappa Phi National Dissertation Fellowship, 2018; Best Poster Southern Regional Conference of the American Physician Scientist Association, 2018; Outstanding Student in Biochemistry Molecular and Cellular Biology, 2019; Student Speaker, TTUHSC Student Research Week, 2020; Second Place Third and Fourth Year Medical Student Division, TTUHSC Student Research Week Poster Competition, 2020.

PhD Dissertation: Macrophages and Tregs are important mediators of allogeneic and xenogeneic Sertoli cell survival.

- 2018-2019 Graduate Medical Sciences Graduate Student (MS), Rony Diaz Master's Project: Interactive online module to review topics of diabetes for the USMLE Step 1 exam.
- Oraduate Student (PhD), Lea Ann Thompson, Awarded Doctor of Philosophy Degree in Cell and Molecular Biology; AT&T Chancellor's Award 2012-2016; Second Place Basic Science Category, LWBWHI, Gender Specific Women's Health Symposium, TTUHSC, 2012; First Place, LWBWHI, Gender Specific Women's Health Symposium, TTUHSC, 2013; Awarded American Heart Association Predoctoral Fellowship, 2015-2016. PhD Dissertation: Immune privileged Sertoli cells: Vehicles for the delivery of insulin.
- 2014-2015 Graduate Medical Sciences Graduate Student (MS), Lillian (Ene) Cole, Awarded Master of Science Degree in Graduate Medical Sciences; Dean's Recognition Award, 2015. Second Place Graduate Medical Education Category, Student Research Week Poster Competition, 2015.

  Master's Project: Improving the effectiveness of USMLE Step 1 preparation through the development of a one-stop preparatory module on the pancreas and diabetes.
- Graduate Student (PhD), Payal Mital, Awarded Doctor of Philosophy Degree in Cell and Molecular Biology; Platform Presentation, Cell Transplantation Society and International Xenotransplantation Association Joint Conference, Miami, 2011; Third Place, Health Sciences Category 1, 10<sup>th</sup> Annual Graduate Student Research Poster Competition, Texas Tech University, 2011; Phonathon/Thankathon Scholarship, 2011; First Place, Basic Science Category, 11<sup>th</sup> Annual Graduate Student Research Poster Competition, Texas Tech University, 2012; Platform Presentation and Travel Award, Testis Workshop, San Antonio, 2013

  PhD Dissertation: A mechanisms for Sertoli cell survival of xenotransplantation: modulating the macrophages from cytotoxic to

regulatory.

2008-2012 Graduate Student (PhD), Gurvinder Kaur, Awarded Doctor of Philosophy Degree in Cell and Molecular Biology; Dean Finalist Abstract, Student Research Week, 2009; First Place, Basic Science Category 1, 9th Annual Graduate Student Research Poster Competition, Texas Tech University, 2010 and Poster selected for display at Plains

	Capital Bank, 2010; Platform Presentation, Society for Study of Reproduction, Milwaukee, Wisconsin, 2010; Lalor Award, Society for Study of Reproduction, Milwaukee, Wisconsin, 2010; Mary Lou Clements Award, 2010; Cell Transplantation Society Travel Award (only 5 awards given), 2011; Platform Presentation, Cell
	Transplantation Society and International Xenotransplantation Association Joint
	Conference, Miami, 2011; First Place Basic Science Senior Category, Student Research Week Poster Competition, 2012; Outstanding Graduate Student Award, 2013
	PhD Dissertation: Immune Privileged Sertoli cells survive allotransplantation by
	inhibiting adaptive immune response.
2011-2012	Graduate Student (MS), Lea Ann Thompson, Awarded Master of Science
	Degree in Cell and Molecular Biology
2008-2009	Graduate Student (MS), Payal Mital, Awarded Master of Science Degree in
	Biotechnology
2007-2009	Graduate Student (MD/PhD), James Stocks
2007-2008	Graduate Student (MS), Saroja Putrevu, Awarded Master of Science Degree in
	Cell and Molecular Biology, Dean's Recognition Award, 2009.
	Master's Thesis: Investigation of a Sertoli cell line, MSC-1, to elucidate the
	immune-privileged properties of Sertoli cells.
2005-2006	Graduate Student (PhD), Sherry Swift

# **Medical Students**

vicultal students		
2022-present	Medical Student Research Assistant (MD) 2023 present, Graduate Medical	
	Education Sciences Graduate Student (MS) 2022-2023, Hannah Curtis	
2021-2022	Medical Student Research Assistant (MD), Lewis Kelly	
2021-2022	Medical Student Research Assistant (MD), Anna Sabu-Kurian	
2020	Medical Student Research Assistant (MD), Arham Siddiqui	
2019-2020	Medical Student Research Assistant (MD), Michelle Harris	
2018-2021	Medical Student Research Assistant (MD), Tanir Moreno	
2018-2019	Medical Student Research Assistant (MD), Bhargavesh Gottam	
2017-2018	Medical Student Research Assistant (MD), Alan Gonzalez	
2016	Medical Student Research Assistant (MD), Colton McCoy	
2015-2017	Medical Student Research Assistant (MD), Lillian (Ene) Cole, Texas Medical	
	Association Minority Scholarship, 2015.	
2015-2016	Medical Student Research Assistant (MD), Brian Mallory	
2015-2016	Medical Student Research Assistant (MD), Scott Vadala	
2013-2015	Medical Student Research Assistant (MD), Karl Mueller	
2012-2013	Medical Student Research Assistant and Medical Student Summer Research	
	Fellowship (MD), Joanne Thambuswamy	
2012-2013	Medical Student Research Assistant and Medical Student Summer Research	
	Fellowship (MD), Avinash Alexander	
2011-2012	Medical Student Volunteer and Medical Student Summer Research Fellowship (MD),	
	William Barret Bowlin	
2009-2010	Medical Student Volunteer and Research Assistant (MD), Peter Uong	
2008-2010	Medical Student Volunteer and Medical Student Summer Research Fellowship	
	(MD/MBA), William McCunniff, Buessler Award 2012	

#### **Rotation Students**

2022	DLD Detection Charles Alonia Delicona
2022	PhD Rotation Student, Alexis Rodriguez
2019	PhD Rotation Student, Rachel Washburn
2019	PhD Rotation Student, Emily Vanderpool
2019	PhD Rotation Student, Taylor Hibler
2017	PhD Rotation Student, Josue Enriquez
2017	MD/PhD Rotation Student, Rebecca Gabrilska
2014	MD/PhD Rotation Student, Kandis Wright
Fall 2014	Biotechnology MS Rotation Student, Zeno Yeates
Spring 2014	Biotechnology MS Rotation Student, Jasper Nyandoto
Fall 2013	Biotechnology MS Rotation Student, Sangama Vemulapally
Spring 2011	MS Rotation Student, Lea Ann Thompson
Fall 2009	Biotechnology MS Rotation Student, Payal Mital
	PhD Rotation Student, Gurvinder Kaur
	PhD Rotation Student, Saroja Putrevu
Fall 2006	PhD Rotation Student, Tammy Carter
	MD/PhD Rotation Student, James Stocks
Winter 2006	MS Rotation Student, Aya Ito
Fall 2005	PhD Rotation Student, Sherry Swift
Undergradua	te Students
2023	UTSA NIH Summer Undergraduate Research Student, Mariana Suarez-Martinez
	TTU Undergraduate Student, Sarah White
2022	Undergraduate Volunteer, Bridger Sparks (University of Wyoming, National Bio-Agro
	Defense Facility National Laboratory Training Program Fellowship)
2022	SABR student, Deanna Hopkins
2021	SABR student, Alissa Landefeld
2019	SABR student, Nabeela Manal
2018-2019	TTU Undergraduate Student Scholar, Taru Bharadwaj
2017-2019	TTU Undergraduate Student Scholar, Hannah Daniel
	Undergraduate Thesis: The beneficial effects of tocotrienol in a type 2
	diabetes model.
2017	TTU Undergraduate Student Research Assistant, Cimron Kashyap
2017	
2017 2014-2018	TTU Undergraduate Student Research Assistant, Karishma Kashyap
2017 2014-2018	TTU Undergraduate Student Research Assistant, Karishma Kashyap TTU Undergraduate Student Scholar, Hannah Robin Greer, First Place Undergraduate
	TTU Undergraduate Student Research Assistant, Karishma Kashyap TTU Undergraduate Student Scholar, Hannah Robin Greer, First Place Undergraduate Division, Student Research Week Poster Competition, 2017. Presented at the Texas
	TTU Undergraduate Student Research Assistant, Karishma Kashyap TTU Undergraduate Student Scholar, Hannah Robin Greer, First Place Undergraduate

Wind Engineering and Medicine Summer Student, Nelson Ugobor HHMI Undergraduate Student Research Assistant and SABR Student, Rachel Dziuk, presented at the Texas Undergraduate Research Day at the Capital in Austin, 2015; The Julie Isom WE Fund Research Presentation Award (April 2015: TTU University Research Conference); Dr. Richard Blanton Endowment for Undergraduate Researchers (April 2015: TTU CISER Program); Barry Goldwater Honorable Mention, 2015; Christopher Rodrigues Research Presentation Award (October 2015: TTU Research Forum 2015); The Directors Award, CISER SSO (May 2016: TTU CISER Program); Dr. Allie Clinton-Smith Scholarship for Women

testicular health in mice.

2014

2013-2016

	in Sciences (March 2016: TTU CISER Program); Dr. Richard L. Blanton		
	Endowment for Undergraduate Researchers (March 2016: TTU CISER		
	Program)		
	Undergraduate Thesis: Loss of cell-cell contact induces Sertoli cells to		
	transiently reinitiate proliferation after ectopic transplantation.		
2012-2014	NIH Bridges Program Undergraduate Student Research Assistant, Nick Paniagua		
2012-2013	Undergraduate Student Research Assistant, Cullen Rudine		
2011-2012	SABR student, Kandis Wright		
2011	HHMI Undergraduate Student Research Assistant, Christina Rodriguez		
2010-2012	Undergraduate Microbiology Student Research Assistant, Matthew Saadidin, First		
	Place Undergraduate Division, Student Research Week Poster Competition, 2011		
2007	SABR Student, Allison Eudy		
2005-2006	Undergraduate Biochemistry Student Research Assistant and SABR Student, Katelyn		
	Halley		
2005	SABR Student, Tanuja Majeti		
2005	SABR Student, Meredith Hamilton		
	ident Advisory Committee Member		
-	Farzana Poppy, PhD Thesis Committee Member		
	Ganesh Acharya, PhD Thesis Committee Member		
	Alexis Rodriguez, PhD Thesis Committee Chairperson		
2022-present	Flavia Sardela de Miranda, PhD Thesis Committee Member		

Graduate Student Advisory Committee Member			
2023-present	Farzana Poppy, PhD Thesis Committee Member		
2023-present	Ganesh Acharya, PhD Thesis Committee Member		
2023-present	Alexis Rodriguez, PhD Thesis Committee Chairperson		
2022-present	Flavia Sardela de Miranda, PhD Thesis Committee Member		
2022-present	Geetha Boligala, PhD Thesis Committee Member		
2022-present	Marilyn Mathews, PhD Thesis Committee Member		
2021-present	Dalia Martinez-Marin, PhD Thesis Committee Member		
2021-present	Shadi Nejat, PhD Thesis Committee Member		
2020-present	Sarah Miller, PhD Thesis Committee Member (Qualifying Exam Chair)		
2019-2023	Rachel Washburn, PhD Thesis Committee Chairperson		
2019-2020	Rownock Afruza, PhD Thesis Committee Member		
2019-2021	Bimba Goonapienuwala, Thesis Committee Member		
2019-2023	Taylor Hibler, PhD Thesis Committee Chairperson		
2018-2021	Jonathan Kopel, PhD Thesis Committee Member		
2018-2019	Saju Akheruzzaman, PhD Thesis Committee Member		
2017-2020	Kalhara Menikdiwela, PhD Thesis Committee Member		
2017-2019	Megan Barnett, MS Thesis Committee Member		
2015-2019	Kandis Wright, MD/PhD Thesis Committee Chairperson		
2015-2019	Karl Mueller, MD/PhD Thesis Committee Chairperson		
2015-2018	Yujiao Zu, PhD Thesis Committee Member		
2015-2018	Zahid Khurshidul, PhD Thesis Committee Member		
2014-2017	Cynthia Reinoso, PhD Thesis Committee Member		
2013-2015	Michael Rogowski, PhD Thesis Committee Member		
2013-2016	Shannon Dunn, PhD Thesis Committee Member		
2012-2016	Lea Ann Thompson, PhD Thesis Committee Chairperson		
2012-2016	Eric Edwards, PhD Thesis Committee Member		
2012-2017	Monish Mokena, PhD Thesis Committee Member		
2012-2018	Sumit Mukherjee, PhD Thesis Committee Member		
2011-2015	Jill Wright, PhD Thesis Committee Member		

2011-2012	Lea Ann Thompson, MS Thesis Committee Chairperson
2010-2013	Chase Waters, PhD Thesis Committee Member
2009-2013	Payal Mital, PhD Thesis Committee Chairperson
2009-2011	Jeffrey McDonald, MS Thesis Committee Member
2008-2012	Gurvinder Kaur, PhD Thesis Committee Chairperson
2006-2009	Aruna Jahoor, MD/PhD Thesis Committee Member
2008-2009	Neha Kumari, MS Thesis Committee Member
2008	Patrick Dennis, PhD Thesis Committee Member
2007-2009	James Stocks, MD/PhD Thesis Committee Chairperson
2007-2008	Saroja Putrevu, MS Thesis Committee Chairperson
2006-2007	Aya Ito, MS Thesis Committee Member
2006-2007	Yi Seok Chang, MS Thesis Committee Member
2005-2006	Sherry Swift, PhD Thesis Committee Chairperson

#### **Technicians**

2017-present	Jonathan Miranda
2017-2019	Bilkis Mitu
2016-2018	Roger Quintana
2014-2015	Jennifer Bright
2010-2013	Mithun Pasham, MS
2006-2009	Emily Dyson, MS
2006-2008	Patricia Frisbie
2007-2008	Katelyn Halley
2005-2006	Brent Fossum

#### Postdoctoral Fellows/Senior Research Associate

2012-2016 Gurvinder Kaur, PhD, First Place Postdoctoral Fellow Category, Student Research Week Poster Competition, 2013; Platform Presentation, Society for Study of Reproduction, Grand Rapids, Michigan, 2014 (Postdoctoral Fellow 2012-2015; Senior Research Associate 2015-2016).

#### **Visiting Professor**

2013, 2014 Martha Patricia Nava Hernandez, PhD, Department of Biology of Reproduction, Faculty of Medicine, Universidad Autonoma de Coahuila, Torreon, Coahuila, Mexico.

#### PEER REVIEWED PUBLICATIONS

- 1. Akmal KM, **Dufour JM**, Kim KH. 1996 Region-specific localization of retinoic acid receptor-α expression in the rat epididymis. Biology of Reproduction 54:1111-1119.
- 2. Akmal KM, **Dufour JM**, Kim KH. 1997 Retinoic acid receptor α gene expression in the rat testis: potential role during the prophase of meiosis and in the transition from round to elongating spermatids. Biology of Reproduction 56:549-556.
- 3. \*Akmal KM, \***Dufour JM**, Vo M, Higginson S, Kim KH. 1998 Ligand-dependent regulation of retinoic acid receptor α in rat testis: *In vivo* response to depletion and repletion of vitamin A. Endocrinology 139:1239-1248.
- 4. Cupp AS, **Dufour JM**, Kim G, Skinner MK, Kim KH. 1999 Action of retinoids on embryonic and early postnatal testicular development. Endocrinology 140:2343-2352.
- 5. **Dufour JM**, Kim KH. 1999 Cellular and subcellular localization of six retinoid receptors in rat testis during postnatal development: identification of potential heterodimeric receptors. Biology of Reproduction 61:1300-1308.
- 6. Binette TM, **Dufour JM**, Korbutt GS. 2001 *In vitro* maturation of neonatal porcine islets: A novel model for the study of islet development and xenotransplantation. Annals of the New York Academy of Sciences 944: 47-61.
- 7. **Dufour JM,** Rajotte RV, Korbutt GS. 2002 Development of an in vivo model to study testicular morphogenesis. Journal of Andrology 23:635-644.
- 8. Kin T, Rajotte RV, **Dufour JM**, Korbutt GS. 2002 Development of an immunoprivileged site to prolong islet allograft survival. Cell Transplantation 11:547-552.
- 9. \*Dufour JM, \*Vo MN, Bhattacharya N, Okita J, Okita R, Kim KH. 2003 Peroxisome proliferators disrupt retinoic acid receptor alpha signaling in the testis. Biology of Reproduction 68:1215-1224.
- 10. **Dufour JM**, Rajotte RV, Korbutt GS, Emerlich D. 2003 Harnessing the immunomodulatory properties of Sertoli cells to enable xenotransplantation in type 1 diabetes. Immunological Investigations 32:275-297.
- 11. **Dufour JM,** Rajotte RV, Kin T, Korbutt GS. 2003 Immunoprotection of rat islet xenografts by co-transplantation with Sertoli cells and a single injection of antilymphocyte serum. Transplantation 75:1594-1596.
- 12. Rayat GR, Rajotte RV, Lyon J, **Dufour JM**, Korbutt GS. 2003 Immunization with streptozotocintreated NOD mouse islets inhibits the onset of autoimmune diabetes in NOD mice. Journal of Autoimmunity 21:11-15.

- 13. **Dufour JM,** Rajotte RV, Seeberger K, Kin T, Korbutt GS. 2003 Long-term survival of neonatal porcine Sertoli cells in non- immunosuppressed rats. Xenotransplantation 10:577-586.
- 14. **Dufour JM**, Hemendinger R, Halberstadt CR, Gores P, Emerich DF, Korbutt GS, Rajotte RV. 2004 Genetically engineered Sertoli cells are able to survive allogeneic transplantation. Gene Therapy 11:694-700.
- 15. **Dufour JM,** Gores P, Hemendinger R, Emerich DF, Halberstadt CR. 2004 Transgenic Sertoli cells as a vehicle for gene therapy. Cell Transplantation 13:1-6.
- 16. Bhattacharya N, **Dufour JM**, Vo MN, Okita J, Okita R, Kim KH. 2005 Differential effects of phthalates on the testis and the liver. Biology of Reproduction 72:745-754.
- 17. Kin T, Korbutt GS, Kobayashi T, **Dufour JM**, Rajotte. 2005 Reversal of diabetes in pancreatectomized pigs after transplantation of neonatal porcine islets. Diabetes 54:1032-1039.
- 18. **Dufour JM,** Hamilton M, Rajotte RV, Korbutt GS. 2005 Neonatal porcine Sertoli cells inhibit human natural antibody mediated lysis. Biology of Reproduction 72:1224-1231.
- 19. **Dufour JM**, Rajotte RV, Zimmerman M, Rezania A, Kin T, Dixon DE, Korbutt GS. 2005 Development of an ectopic site for islet transplantation using biodegradable scaffolds. Tissue Engineering 9/10:1323-1331.
- 20. Seeberger K, **Dufour JM**, Shapiro AMJ, Lakey JRT, Rajotte RV, Korbutt GS. 2006 Expansion of mesenchymal stem cells from human pancreatic ductal epithelium. Laboratory Investigation 86:141-153.
- 21. Sipione S, Simmen KC, Lord SJ, Motyka B, Ewen C, Shostak I, Rayat GR, **Dufour JM**, Korbutt GS, Rajotte RV, Bleackley RC. 2006 Identification of a novel human granzyme B inhibitor secreted by cultured Sertoli cells. Journal of Immunology 177:5051-5058.
- 22. Harb G, Toreson J, **Dufour J**, Korbutt G. 2007 Acute exposure to streptozotocin but not human proinflammatory cytokines impairs neonatal porcine islet insulin secretion in vitro but not in vivo. Xenotransplantation 14:580-590.
- 23. \*Dufour JM, \*Lord SJ, Kin T, Rayat GR, Dixon DE, Bleackley RC, Korbutt GS, Rajotte RV. 2008 Comparison of successful and unsuccessful islet/Sertoli cell co-transplant grafts in streptozotocin induced diabetic mice. Cell Transplantation 16:1029-1038.
- 24. **Dufour JM**, Dass B, Halley K, Korbutt GS, Dixon DE, Rajotte RV. 2008 Sertoli cell line lacks the immunoprotective properties associated with primary Sertoli cells. Cell Transplantation 17:525-534. *Cover photo*
- 25. \*Mital P, \*Kaur G, **Dufour JM**. 2010 Immunoprotective Sertoli cells: Making allogeneic and xenogeneic transplantation feasible. Reproduction 139:495-504.

- 26. \*Halley KR, \*Dyson EL, Kaur G, Mital P, Uong P, Dass B, Crowell SN, **Dufour JM**. 2010 Delivery of a therapeutic protein by immune privileged Sertoli cells. Cell Transplantation 19:1645-1657.
- 27. Mital P, Hinton BT, **Dufour JM**. 2011 The blood-testis and blood-epididymal barriers are more than just their tight junctions. Biology of Reproduction 84:851–858.
- 28. \*Doyle TJ, \*Kaur G, Putrevu SM, Dyson EL, Dyson M, McCunniff WT, Pasham MR, Kim KH, **Dufour JM**. 2012 Immunoprotective properties of Sertoli cells in mice: potential functional pathways that confer immune privilege. Biology of Reproduction 86:1-14.
- 29. Kaur G, Long CR, **Dufour JM**. 2012 Genetically engineered immune privileged Sertoli cells a new road to cell based gene therapy. Spermatogenesis 2:23-31. *Cover photo*
- 30. Kaur G, **Dufour JM**. 2012 Editorial: Cell lines Valuable tools or useless artifacts. Spermatogenesis 2:1-5.
- 31. Franca LR, Auharek SA, Hess RA, **Dufour JM**, Hinton BT. 2012 Blood-Tissue Barriers: Morphofunctional and immunological aspects of the blood-testis and blood-epididymal barriers, Advances in Experimental Medicine and Biology, 763:237-259.
- 32. Kaur G, Mital P, **Dufour JM**. 2013 Testis immune privilege- Assumptions versus facts. Animal Reproduction 10:3-15.
- 33. \*Mital P, \*Kaur G, Bowlin B, Paniagua NJ, Korbutt GS, **Dufour JM**. 2014 Nondividing, post-pubertal rat Sertoli cells resumed proliferation after transplantation. Biology of Reproduction 90:1, 13.
- 34. Kaur G, Thompson LA, **Dufour JM**. 2014 Sertoli cells: Immunological sentinels of spermatogenesis. Seminars in Cell and Developmental Biology 30:36-44.
- 35. Kaur G, Thompson LA, Pasham M, Tessanne K, Long CR, **Dufour JM**. 2014 Sustained expression of insulin by a genetically engineered Sertoli cell line after allotransplantation in diabetic BALB/c mice. Biology of Reproduction 90:5, 109. *Selected for a Commentary* (Cupp AS, Sertoli cell based gene therapy. 2014 Biology of Reproduction)
- 36. \*Kaur G, \*Thompson LA, **Dufour JM**. 2015 Therapeutic potential of immune privileged Sertoli cells. Animal Reproduction 12:105-117.
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- 43. Kaur G, Wright K, Greer RH, Mueller K, Haynes A, **Dufour JM**. Chapter 6: Sertoli cell immune regulation within in the testis. In: C. Yan Cheng (Ed.) Spermatogenesis: Biology and Clinical Implications. CRC Press, Boca Raton, Florida. 2018
- 44. Kaur G, Thompson LA, Babcock RL, Mueller K, **Dufour JM**. 2018 Sertoli cells engineered to express insulin lower blood glucose in diabetic mice. DNA and Cell Biology doi: 10.1089/dna.2017.3937. *Cover photo*
- 45. Kaur G, **Dufour JM**. 2018 An update on the School of Medicine's Medical Student Research Program at Texas Tech University Health Sciences Center. The Southwest Respiratory and Critical Care Chronicles doi: 10.12746/swrccc.v6i24.471.
- 46. Kaur G, Helmer RA, Smith LA, Martinez-Zaguilan R, **Dufour JM**, Chilton BS. 2018 Alternative splicing of helicase-like transcription factor (Hlft): intron retention-dependent activation of immune tolerance at the feto-maternal interface. PLOS One 13(7) doi: 10.1371/journal.pone.0200211
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- 50. Chung E, Grue KA, Kaur G, Mallory B, Serrano CR, Ullevig SL, Kottapalli KR, Lee SC, **Dufour JM**, Shen CL, Umeda M. 2019 Maternal exercise before and during pregnancy alleviates metabolic dysfunction associated with high-fat diet in pregnant mice, without significant changes in gut microbiota. Nutrition Research 69: 42-57. DOI: 10.1016/j.nutres.2019.08.002
- 51. Chung E, Elmassry MM, Kottapalli P, Kottapalli KR, Kaur G, **Dufour JM**, Wright K, Ramalingam L, Moustaid-Moussa N, Wang R, Hamood AN, Shen CL. 2020 Metabolic benefits of annatto-extracted tocotrienol on glucose homeostasis, inflammation, and gut microbiome. Nutrition Research 77:97-107. *Selected for an Open Access Award* (\$3,000 for Special Issue of Nutrition Research).
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- 53. Kaur G, Wright K, Mital P, Hibler T, Miranda JM, Thompson LA, Halley K, **Dufour JM**. 2020 Neonatal pig Sertoli cells survive xenotransplantation by creating an immune modulatory environment involving regulatory T cells. Cell Transplantation 29:963689720947102. doi: 10.1177/0963689720947102.
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- 55. Kaur G, Wright K, Verma S, Haynes A, **Dufour JM**. 2021The good, the bad and the ugly of testicular immune regulation: a delicate balance between immune function and immune privilege. In: C. Yan Cheng (Ed.) Molecular Mechanisms in Spermatogenesis, Springer Nature, Basingstoke, United Kingdom. Adv Exp Med Biol. 1288:21-47. doi: 10.1007/978-3-030-77779-1 2.
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- 57. Helmer BA, Martinez-Zaguilan R, Kaur G, Smith LA, **Dufour JM**, Chilton BS. 2021 Helicase-like transcription factor-deletion from the tumor microenvironment in a cell line-derived xenograft model of colorectal cancer reprogrammed the human transcriptome-S-nitroso-proteome to promote inflammation and redirect metastasis. PLOS ONE doi.org/10.1371/journal.pone.0251132.

- 58. Washburn RL, Mueller K, Kaur G, Moreno T, Ramalingam L, Moustaid-Moussa N, **Dufour JM.** 2021 C-peptide as a therapy for type 1 diabetes. Biomedicines 9(3):270. doi: 10.3390/biomedicines9030270.
- 59. Shen CL, Ramamoorthy S, Kaur G, **Dufour JM**, Wang R, Mo H, Watkins BA. 2021 Dietary annatto-extracted tocotrienol reduces inflammation and oxidative stress, and improves macronutrient metabolism in obese mice: a metabolic profiling study. Nutrients 13(4):1267. doi: 10.3390/nu13041267.
- 60. Menikdiwela KR, Guimaraes JPT, Ramalingam L, Kalupahana NS, **Dufour JM**, Washburn RL, Moustaid-Moussa N. 2021 Mechanisms Linking Endoplasmic Reticulum (ER) Stress and microRNAs to Adipose Tissue Dysfunction in Obesity. Critical Reviews in Biochemistry & Molecular Biology 56(5):455-481. doi: 10.1080/10409238.2021.1925219.
- 61. Chung E, Elmassry MM, Cao JJ, Kaur G, **Dufour JM**, Hamood AN, Shen CL. 2021 Beneficial effect of dietary geranylgeraniol on glucose homeostasis and bone microstructure in obese mice is associated with suppression of proinflammation and modification of gut microbiome. Nutrition Research 93:27-37. doi: 10.1016/j.nutres.2021.07.001.
- 62. Washburn RL, Hibler T, Thompson LA, Kaur G, **Dufour JM.** 2022 Therapeutic application of Sertoli cells for treatment of various diseases. Seminars in Cell and Developmental Biology 121: 10-23. doi: 10.1016/j.semcdb.2021.04.007.
- 63. Washburn RL, Hibler T, Kaur G, **Dufour JM.** 2022 Sertoli cell immune regulation: a double-edged sword. Frontiers in Immunology 13:913502. doi: 10.3389/fimmu.2022.913502
- 64. Wang R, Santos JM, **Dufour JM**, Stephens E, Miranda JM, Washburn RL, Hibler T, Kaur G, Lin D, Shen CL. 2022 Ginger root extract improves GI health in diabetic rats via improving intestinal integrity and mitochondrial function. Nutrients (in press)
- 65. Washburn RL, Kaur G, **Dufour JM.** 2022 Mouse Sertoli cells inhibit humoral-based immunity. International Journal of Molecular Sciences (in press)
- 66. **Dufour JM.** 2022 What are the multiple roles of the Sertoli cell? Supporting spermatogenesis and immune regulation. Handbook of Andrology, American Society of Andrology (in press)
- 67. Washburn RL, Hibler T, Kaur G, Sabu-Kurian A, Landefeld A, **Dufour JM.** 2022 Immunoregulatory Sertoli cell allografts engineered to express human insulin survive humoral-mediated rejection. International Journal of Molecular Sciences *23*(24),

- 15894; https://doi.org/10.3390/ijms232415894 *Highlighted by ABclonal* (ABclonal in Action: Diabetes, Insulin, and Resisting Graft Rejection, Kin Leung).
- 68. Shen CL, **Dufour JM**, Miranda JM, Kaur G, Chung E, Ramalingam L, Moustaid-Moussa N, Cao JJ. 2022 Effect of dietary geranylgeraniol and green tea polyphenols on glucose homeostatasis, bone turnover biomarkers and bone microstructure in obese mice. International Journal of Molecular Sciences (in press)
- 69. Washburn RL, Martinez-Marin D, Korac K, Sniegowski T, Hibler T, Rodriguez AR, Chilton BS, Pruitt K, **Dufour JM.** 2023 The Sertoli cell complement signature: A suspected mechanism in xenograft survival. International Journal of Molecular Sciences (in press)
- 70. Washburn RL, **Dufour JM.** 2023 Complementing testicular immune regulation: The relationship between Sertoli cell, complement, and the immune response. International Journal of Molecular Sciences (in press)
- 71. Kaur G, Helmer BA, Martinez-Marin D, Sennoune SR, Washburn RL, Martinez-Zaguilan R, **Dufour JM**, Chilton BS. 2023 Pancreatic β cell-specific deletion of Helicase-like transcription factor (Hltf) activates the Hmgb1-Rage and granzyme A-mediated killing of pancreatic β cells resulting in neonatal lethality. PLOS ONE (in press)
- 72. Washburn RL, Martinez-Marin D, Sniegowski T, Korac K, Hibler T, Rodriguez AR, Miranda JM, Chilton BS, Bright RK, Pruitt K, Bhutia YD, **Dufour JM.** 2023 Sertoli cells express accommodation, survival and immunoregulatory factors when exposed to human serum. Biomedicines (in press) *Cover Photo*
- 73. Washburn RL, **Dufour JM.** Gene expression profiles of neonatal porcine Sertoli cells at baseline and after incubation in normal human serum as determined by RNA sequencing. Tissue Barriers (submitted)
- 74. Washburn RL, **Dufour JM.** Regulation of complement by Sertoli cells may contribute to the immune protective environment within the blood-testis barrier. Tissue Barriers (in prep)
- 75. Martinez-Marin D, Helmer BA, Kaur G, Washburn RL, Martinez-Zaguilan R, Sennoune SR, **Dufour JM**, Chilton BS. 2023 Helicase-like transcription factor (HLTF)-deleted CDX/TME model of colorectal cancer increased transcription of oxidative phosphorylation genes and diverted glycolysis to boost S-glutathionylation in intravascular metastatic niches. (in prep)

#### **BOOKS**

<sup>\*</sup>Co-First Authors

1. Dufour JM, Kaur G, Kruczek C, Mittal N, Peiris AN, Sleeper RB, Agrimor J, Calara A, Jaroudi S, Moon J, Raju S, Rice S, Wright K. 2018 Interesting Clinical Vignettes: 101 Ice Breakers for Medical Rounds. Texas Tech University Health Sciences Center, Lubbock, TX.

#### **INVITED SPEAKER**

#### 2002

1. From Sertoli cells to pancreatic islet transplantation.

Department of Animal Science, University of Nebraska (Lincoln, Nebraska, February 5, 2002)

2. Sertoli cells: Creation of an immunoprivileged site.

Department of Animal Science, University of Nebraska (Lincoln, Nebraska, February 6, 2002)

#### 2003

1. Spermatogenesis.

Department of Agricultural, Food and Nutritional Science, University of Alberta (Edmonton, Alberta, August 25, 2003)

2. Creation of an immunoprivileged site with Sertoli cells.

Department of Agricultural, Food and Nutritional Science, University of Alberta (Edmonton, Alberta, August 26, 2003)

#### 2004

1. Creation of an immunoprivileged site with Sertoli cells.

Department of Physiology, University of Alberta (Edmonton, Alberta, February 13, 2004)

2. Harnessing the immunoprotective properties of Sertoli cells.

Diabetes Research Group, University of British Columbia (Vancouver, British Columbia, August 3, 2004)

3. Harnessing the immunoprotective properties of Sertoli cells.

Department of Cell Biology and Biochemistry, Texas Tech University Health Sciences Center (Lubbock, Texas, August 12, 2004)

#### 2005

- 1. Harnessing the immunoprotective properties of Sertoli cells to prevent islet graft rejection. Helen Jones Foundation (Lubbock, Texas, March 23, 2005)
- 2. Development of an immune privileged site for islet transplantation.

American Diabetes Association Regional Group (Lubbock, Texas, March 31, 2005)

3. Islet transplantation: Past, present and future.

American Diabetes Association Family Resource Network (Science Spectrum, Lubbock, Texas, May 15, 2005)

4. Harnessing the immunoprotective properties of Sertoli cells for cancer treatment. Southwest Cancer Group Seminar Series (Lubbock, Texas, October 28, 2005)

### 2006

1. Diabetes and islet transplantation.

Lyon's Club South Plains (Lubbock, Texas, January 12, 2006)

2. The use of Sertoli cells to improve islet transplantation.

Department of Biology, New Mexico Highlands University (Las Vegas, New Mexico, March 31, 2006)

3. Sertoli cells and xenotransplantation.

Department of Pathology and Cell Biology, University of South Florida (Tampa, Florida, August 23, 2006)

4. Creation of an immunoprivileged site for islet transplantation.

Children's Research Institution, University of South Florida (St. Petersburg, Florida, August 24, 2006)

5. Sertoli cells and xenotransplantation.

Department of Physiology, Texas Tech University Health Sciences Center (Lubbock, Texas, November 2, 2006)

6. Clinical islet transplantation.

Medical Student Biotechnology Club, Texas Tech University Health Sciences Center (Lubbock, Texas, December 12, 2006)

#### 2007

1. Transplantation and Sertoli cells.

Scientific Advisory Board Meeting Sernova Corp. (Toronto, Ontario, January 31, 2007)

2. Extra-testicular Sertoli cell: Immunobiology and role in transplantation.

Symposium V – Intramural and extramural testis cell biology, 32<sup>nd</sup> Annual American Society of Andrology Meeting (Tampa, Florida, April 24, 2007)

3. Islet transplantation: An update.

American Diabetes Association Family Resource Network (Science Spectrum, Lubbock, Texas, April 28, 2007)

4. Genetically engineered Sertoli cells as a vehicle for gene therapy.

Scientific Advisory Board Meeting, Sernova Corp. (Toronto, Ontario, October 31, 2007)

#### 2008

1. Transplantation of immune privileged Sertoli cells.

School of Molecular Biosciences, Washington State University (Pullman, Washington, February 8, 2008)

2. Transplantation of immune privileged Sertoli cells.

Center for Animal Transgenesis and Germ Cell Research, New Bolton Center, University of Pennsylvania (Philadelphia, Pennsylvania, February 26, 2008)

3. Transplantation of immune privileged Sertoli cells.

Center for Research on Reproduction and Women's Health, University of Pennsylvania (Philadelphia, Pennsylvania, February 27, 2008)

4. Immune privileged Sertoli cells: Role in Transplantation.

Department of Cell Biology and Biochemistry, Texas Tech University Health Sciences Center (Lubbock, Texas, April 23, 2008)

5. Use of immunoprotective Sertoli cells for islet transplantation

Reproductive Tract Biology, Gordon Research Conference, Proctor Academy (Andover, New Hampshire, August 5, 2008)

6. Explaining the mystery of biomedical research: Type I diabetes mellitus Community Medical School, Texas Tech University Health Sciences Center (Lubbock, Texas, September 30, 2008)

#### 2009

1. How to succeed as a junior faculty member

Postdoctoral Association, Texas Tech University (Lubbock, TX, January 29, 2009)

2. Understanding Sertoli cell transplantation

College of Agriculture and Life Sciences, Department of Animal Science, Texas A&M University (College Station, TX, February 27, 2009)

3. Sertoli cells: Immune privilege and role in transplantation

5<sup>th</sup> International Workshop Molecular Andrology (Altes Schloss Giessen, Germany, May 9, 2009)

4. Transplantation of immune privileged Sertoli cells.

Biotechnology Program, Department of Chemical and Biological Engineering, Northwestern University (Evanston, IL, November 6, 2009)

#### 2010

1. Transplantation of Sertoli cells: Mechanism of immune-privilege and potential for gene therapy.

Alberta Diabetes Institute, University of Alberta (Edmonton, AB, March 22, 2010)

2. Career in Medical Research.

Science: It's a Girl Thing 2010 for 5<sup>th</sup> and 6<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, June 23, 2010)

3. Career in Medical Research.

Science: It's a Girl Thing 2010 for 7<sup>th</sup> to 11<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, July 21, 2010)

4. Transplantation of immune-privileged Sertoli cells: Modification of immune response and potential for gene therapy.

Department of Biology, Indiana State University (Terre Haute, IN, December 7, 2010)

#### 2011

1. Transplantation of immune-privileged Sertoli cells: Modification of cell-mediated immune response and potential for gene therapy.

Department of Biological Sciences, Texas Tech University (Lubbock, TX, February 16, 2011)

2. Career in Medical Research: Use of immune-privileged Sertoli cells to treat diabetes. Science: It's a Girl Thing 2011 for 5<sup>th</sup> and 6<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, June 22, 2011)

3. Career in Medical Research: Use of immune-privileged Sertoli cells to treat diabetes. Science: It's a Girl Thing 2011 for 7<sup>th</sup> to 11<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, July 20, 2011)

4. Immune privilege in the testis and epididymis.

Department of Immunology and Pharmacology, Federal University of São Paulo, University of São Paulo (São Paulo, Brazil, August 22, 2011)

5. Transplantation of immune-privileged Sertoli cells: Modification of cell-mediated immune response and potential for gene therapy.

Department of Morphology, Federal University of Minas Gerais. (Belo Horizonte, Brazil, August 23, 2011)

6. Transplantation of immune-privileged Sertoli cells: Use in cell therapy. Federal University of Rio de Janeiro. (Rio de Janeiro, Brazil, August 26, 2011)

7. Creation of an immune privileged site with testicular Sertoli cells.

XXVI Annual Meeting of the Brazilian Federation of Experimental Biology Societies (Rio de Janeiro, Brazil, August 27, 2011)

8. Immune-privileged Sertoli cells: Modification of the immune response and potential for cell therapy.

Department of Cell Biology and Biochemistry, Texas Tech University Health Sciences Center (Lubbock, TX, September 14, 2011)

#### 2012

1. Career in Medical Research: Choose a job you love and you will never have to work a day in your life.

Science: It's a Girl Thing 2012 for 5<sup>th</sup> and 6<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, June 20, 2012)

2. Career in Medical Research: Choose a job you love and you will never have to work a day in your life.

Science: It's a Girl Thing 2012 for 7<sup>th</sup> and11<sup>th</sup> Graders, Institute for the Development and Enrichment of Advanced Learners, Texas Tech University (Lubbock, TX, July 25, 2012)

- 3. Immune-privileged Sertoli cells: Induction of regulatory T cells and therapeutic potential. Testis Immune Function Minisymposium, Dynamics of Testicular Function Module, Society for the Study of Reproduction 45<sup>th</sup> Annual Meeting (State College, PA, August 13, 2012)
- 4. Transplantation of immune-privileged Sertoli cells: Modification of cell-mediated immune response and therapeutic potential.

Toxicology Seminar Series, Division of Pharmacology & Toxicology University of Texas (Austin, TX, September 6, 2012)

5. SACNAS Tour of Dr. Dufour's Research Lab.

SACNAS, Texas Tech University (Lubbock, TX, October 24, 2012)

6. A cure for diabetes – Are we there yet?

Osher Lifelong Learning Institute, Texas Tech University (October 25, 2012)

#### 2013

1. Creation of an immune-privileged site with testicular Sertoli cells.

Department Seminar Series, Department of Immunology and Molecular Microbiology (Lubbock, TX, March 13, 2013)

2. Clinical islet transplantation.

Nephrology Grant Rounds, Department of Internal Medicine (Lubbock, TX, May 21, 2013)

#### 2014

1. Relevance of immunoregulatory Sertoli cells for obesity research.

Obesity Research Cluster Workshop, Texas Tech University (Lubbock, TX, May 14, 2014)

2. Exploring the therapeutic potential of immune privileged Sertoli cells.

Nephrology Fellowship Conference, Department of Internal Medicine (Lubbock, TX, June 17, 2014)

3. Therapeutic and Immunoregulatory Potential of Sertoli Cells.

Fertility: from gametogenesis to embryo development, V International Symposium on Animal Biology of Reproduction (Campinas, Sao Paulo, Brazil, October 11, 2014)

4. Genetically engineered Sertoli cells as a vehicle for cell based gene therapy.

Wilson Foundation (Dallas, TX, October 13, 2014)

5. Diabetes Research Update.

3<sup>rd</sup> Annual Kids Living Healthy in the Real World, American Diabetes Association Family Link (Lubbock, TX, October 25, 2014)

6. Exploring the therapeutic potential of immune privileged Sertoli cells.

Obesity Research Cluster, Texas Tech University (Lubbock, TX, November 12, 2014)

#### 2015

1. A cure for diabetes – are we there yet?

Community Medical School, Texas Tech University Health Sciences Center (Lubbock, TX, January 20, 2015)

2. Sertoli cells- Immune privilege and novel roles in cell based gene therapy.

Session 5: Somatic Cells, "Healthy Sperm-Healthy Children" The XXIIIth North American Testis Workshop (Salt Lake City, Utah, April 17, 2015)

3. Exploring the therapeutic and immunoregulatory potential of immune privileged Sertoli cells.

Department of Comparative Biology & Experimental Medicine, University of Calgary (Calgary, Alberta, Canada, April 30, 2015)

4. Sertoli Cells: Therapeutic Potential in Cell Based Gene Therapy.

49<sup>th</sup> Annual Gene Families and Isozymes (GFI) Conference (Roberts Grove Resort Placencia, Belize, December 11, 2015)

#### 2016

1. Therapeutic potential of transplanted immune privilege Sertoli cells: unexpected revelations about Sertoli cell dogmas.

"Old Dogmas, New Ideas: The Changing Landscape in Andrology" American Society of Andrology 41st Annual Conference (New Orleans, LA, April 2-5, 2016)

2. Transplantation of Immune Privileged Sertoli cells: more than just testicular nurse cells. Texas Forum for Reproductive Sciences, M.D. Anderson Onstead Auditorium

(Houston, TX, April 21-22, 2016) (Plenary Speaker)

3. Sertoli cells – Master immune regulators.

Somatic cells and testicular function in the adult, Society for the Study of Reproduction 49<sup>th</sup> Annual Meeting (San Diego, CA, July16-20, 2016)

4. Relevance of Sertoli Cell Immune Privilege to Cell Transplantation

"Epigenetics/Reproduction/Environment" 2016 Africa Conference (Kenya, Africa, October 15-24, 2016)

5. Transplantation of Immune Privileged Sertoli cells: more than just testicular nurse cells.

Department Seminar Series, Department of Immunology and Molecular Microbiology (Lubbock, TX, November 2, 2016)

#### 2017

1. Transplantation of Immune Privileged Sertoli cells: more than just testicular nurse cells.

Department of Obstetrics and Gynecology, TTUHSC (Permian Basin, TX, February 13, 2017)

2. History, Accomplishments and the Future.

Women in Andrology Luncheon & Discussion, 42<sup>nd</sup> Annual American Society of Andrology Meeting (Miami, Florida, April 22-25, 2017).

3. Immune privileged Sertoli cells: More than just testicular nurse cells.

Department of Cell Biology and Biochemistry (Lubbock, TX, September 14, 2017)

4. Mechanisms of Sertoli cells immune privilege.

Molecular Mechanisms of Immune Consequences of Pathogen Reservoirs: Battling Unseen Enemies. National Institutes of Allergy and Infectious Disease (NIAID) (Rockville, MD, September 19-20, 2017)

5. Immune regulation by testicular Sertoli cells.

Advances in Andrology: The Basic Science Behind Fertility. National Institutes of Environmental Health Sciences (NIEHS) (Research Triangle Park, NC, October 13, 2017)

#### 2018

1. How to Translate Your Research Question into a Hypothesis and Specific Aims. Grant Writing Workshop for Physicians (TTUHSC at the Permian Basin, TX, September 13, 2018)

2. Using Sertoli Cells to Treat Diabetes.

Center of Emphasis in Diabetes and Metabolism, Biomedical Sciences, TTUHSC (El Paso, TX, September 12, 2018).

3. Using Sertoli Cells to Treat Diabetes.

Student and Faculty Retreat, Graduate School of Biomedical Sciences (Lubbock, TX, September 21, 2018) (Keynote Lecture)

4. Mechanisms of Sertoli Cell Immune Regulation.

52<sup>nd</sup> Annual Gene Families and Isozymes (GFI) Conference (Bahia del Sol, Potrero, Costa Rica, December 6, 2018)

#### 2019

1. Mechanisms of Sertoli Cell Immune Regulation.

"Fertility and Men's Health" American Society of Andrology 44st Annual Conference (Chicago, IL, April 6-9, 2019)

#### 2021

1. Induction of Tregs and Complement Inhibition: Critical Components of Sertoli Cell Immune Regulation.

4<sup>th</sup> Dr. Yves Clermont Lecture in Reproduction at the 12th Annual Research Day of the McGill Centre for Research in Reproduction and Development. (Montreal, Quebec, Canada) (Moved due to COVID-19 from May 2020 to May 11, 2021)

#### 2022

1. Immunosuppressive functions of Sertoli cells.

Male Reproductive Immunology. American Society for Reproductive Immunology. (Nashville, TN, May 22-26, 2022).

2. The Sertoli cell immune microenvironment.

- "Immune Function in Reproductive Biology" 2022 Mammalian Reproduction, Gordon Research Conference, Mount Snow, West Dover, Vermont (Moved due to COVID-19 from August 2020 to August 14-19, 2022)
- 3. Sertoli Cell Immune Regulation and Collaborations with Bioactive Molecules and Diabetes.
  Obesity Research Institute Fall 2022 Seminar Series: Sustainable Agriculture &
  Nutrition Security, Texas Tech University, (Lubbock, Tx, October 28, 2022)

#### 2023

1. Immunoprotective Sertoli cells in Transplantation.

Women in Andrology Lecture, American Society for Andrology. (Boston, MA, April 19-23, 2023).

#### **ABSTRACTS**

- 1. **Dufour JM**, Kim KH. 1995 Immunolocalization of retinoic acid receptor- $\alpha$  (RAR- $\alpha$ ) in the rat testes. Molecular Biology of the Cell 6:316a (Abst. # 1838).
- 2. **Dufour JM**, Akmal KM, Vo M, Kim KH. 1997 Changes in the subcellular localization of RARα during Vitamin A depletion and induction in rat testis. Biology of Reproduction 56:217 (Abst. # 538) (Supp 1).
- 3. **Dufour JM**, Kim KH. 1999 Expression of six retinoid receptors in rat testis during postnatal development: study of potential heterodimeric partners. Biology of Reproduction 60:145 (Abst. # 166) (Suppl 1). (**Platform Presentation**)
- 4. **Dufour JM**, Rajotte RV, Korbutt GS. 2001 Xenogeneic transplantation of neonatal porcine Sertoli cells: A strategy to immunoprotect islet grafts. 8<sup>th</sup> World Congress of the International Pancreas and Islet Transplant Association (Innsbruck, Austria, June 12-15). Programme and Abstract Book, page 58, Abst. #03-63. (**Platform Presentation**)
- 5. Vo M, **Dufour JM**, Holden TD, Okita JR, Okita RT, Kim KH. 2001 Inhibition of retinoic acid receptor-mediated signaling by phthalates in the testis. Biology of Reproduction 64:349 (Abst. # 618) (Supp 1).
- 6. Kim KH, Braun KW, **Dufour JM**. 2001 A molecular role of FSH in the testis of developing rats: Regulation of retinoic acid receptor function. Biology of Reproduction 64:102 (Abst. # M40) (Supp 1).
- 7. **Dufour JM**, Rajotte RV, Korbutt GS. 2001 Genetically engineered Sertoli cells as therapy: Green fluorescent protein expressing Sertoli cells are able to survive transplantation. Biology of Reproduction 64:272 (Abst. # 423) (Suppl 1).
- 8. **Dufour JM**, Rajotte RV, Korbutt GS. 2001 Xenogeneic transplantation of neonatal porcine Sertoli cells: A strategy to immunoprotect islet grafts. VI Congress of the International Xenotransplantation Association (Chicago, IL, September 29-October 3) Abstract presented at meeting but not published in Xenotransplantation (Abst. #08). (**Platform Presentation**)

- 9. Rajotte RV, **Dufour JM**, Korbutt GS. Alginate microencapsulation: enhanced islet viability and co-encapsulation with Sertoli cells. Encapsulation& Immunoprotective Strategies of Islet Cell Workshop (Washington D.C., December 6-7, 2001).
- 10. **Dufour JM**, Rajotte RV, Korbutt GS. 2002 Development of a novel in vivo model to study porcine testicular morphogenesis. Biology of Reproduction 66:299 (Abst # 496) (Suppl 1).
- 11. **Dufour JM**, Rajotte RV, Kin T, Dixon D, Korbutt GS. 2003 Creation of an ectopic site for islet transplantation. 9<sup>th</sup> World Congress of the International Pancreas and Islet Transplant Association (Dublin, Ireland, July 8-11). Programme and Abstract Book, page 37, Abst. # 024. (**Platform Presentation**)
- 12. Kin T, Korbutt GS, Kobayashi T, **Dufour JM**, Lyon J, O'Hara J, Sekida S, Rajotte RV. 2003 Reversal of diabetes in totally pancreatectomized pigs after allografting neonatal porcine islets. 9<sup>th</sup> World Congress of the International Pancreas and Islet Transplant Association (Dublin, Ireland, July 8-11). Programme and Abstract Book, page 39, Abst. # 029.
- 13. **Dufour JM**, Rajotte RV, Harris CD, Korbutt GS. 2003 Neonatal porcine Sertoli cells do not express Galα(1,3)Gal and are resistant to human antibody/complement mediated lysis. 9<sup>th</sup> World Congress of the International Pancreas and Islet Transplant Association (Dublin, Ireland, July 8-11). Programme and Abstract Book, page 59, Abst. # 070. (**Platform Presentation**)
- 14. **Dufour JM**, Rajotte RV, Kin T, Dixon D, Korbutt GS. 2003 Creation of an ectopic site for islet transplantation using biodegradable scaffolds. Abstract presented at the Western Regional Islet Study Group Meeting (Seattle, WA, September 19-21). (**Platform Presentation**)
- 15. **Dufour JM**, Rajotte RV, Hamilton M, Eshpeter A, Korbutt GS. 2004 Neonatal porcine Sertoli cells prevent formation of the membrane attack complex and are therefore resistant to human antibody/complement mediated lysis. 37<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Vancouver, British Columbia, August 1-4) Abst. # 731.
- 16. Seeberger K, **Dufour JM**, Shapiro J, Lakey J, Korbutt GS. 2005 Isolation of mesenchymal stem cells from adult human pancreas. Keystone Symposia on Molecular Regulation of Stem Cells (Banff, AB, February 10-15).
- 17. **Dufour JM**, Seeberger K, Korbutt GS. 2005 Neonatal porcine Sertoli cells survive human natural antibody-mediated lysis by inhibiting complement. 38<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Quebec City, Quebec, July 24-27) Abst. # W552.
- 18. **Dufour JM**, Seeberger K, Hamilton M, Korbutt GS. 2005 Neonatal porcine Sertoli cells inhibit human natural antibody-mediated lysis by preventing formation of the membrane attack complex. 8th Congress of the International Xenotransplantation Association (Goteborg, Sweden, September 10-14) Xenotransplantation 12:408 Abst # P6:07.

- 19. **Dufour JM**, Rajotte RV, Dixon DE, Korbutt GS. 2006 Sertoli cell line lacks the immunoprotective properties associated with primary Sertoli cells. 31<sup>st</sup> Annual American Society of Andrology Meeting (Chicago, Illinois, April 8-11) Abst # 61.
- 20. **Dufour JM**, Rajotte RV, Griswold MD, Dixon DE, Korbutt GS. 2006 Examining the immunoprotective properties of Sertoli cells. 39<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Omaha, Nebraska, July 29-August 1) Abst. # 15. (**Platform Presentation**)
- 21. Halley KR, **Dufour JM**. 2007 Transplantation of neonatal porcine Sertoli cells to Lewis rats. 40<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (San Antonio, Texas, July 21-25) Abst. # 192.
- 22. Halley KR, **Dufour JM**. 2007 Xenotransplantation of porcine Sertoli cells to non-immuosuppressed rats. Cell Transplantation Society, International Pancreas and Islet Transplant Association and International Xenotransplantation Association Joint Conference (Minneapolis, MN, September 15-20) Xenotransplantation 14, 460 Abst. # P830.
- 23. Dufour JM, Rajotte RV, Dixon DE, Korbutt GS. 2007 The immunoprotective properties of primary Sertoli cells compared with a mouse Sertoli cell line. Cell Transplantation Society, International Pancreas and Islet Transplant Association and International Xenotransplantation Association Joint Conference (Minneapolis, MN, September 15-20) Xenotransplantation 14, 548 Abst. # P1149.
- 24. Halley KR, **Dufour JM**. 2007 Genetically engineered Sertoli cells as a vehicle for gene therapy. Cell Transplantation Society, International Pancreas and Islet Transplant Association and International Xenotransplantation Association Joint Conference (Minneapolis, MN, September 15-20) Xenotransplantation 14, 548 Abst. # P1150.
- 25. **Dufour JM,** Halley KR. 2008 Mouse and porcine Sertoli cells can be altered to secrete insulin at levels that reverse diabetes in SCID mice. Keystone Symposia on Islet and Beta Cell Development and Transplantation. (Snowbird, Utah, April 6-11) Abst. # 108.
- 26. Putrevu SM, TJ Doyle, KH Kim, **JM Dufour**. 2008 Investigating the mechanism involved in the immune protective ability of Sertoli cells. Keystone Symposia on Islet and Beta Cell Development and Transplantation. (Snowbird, Utah, April 6-11) Abst. # 217.
- 27. **Dufour JM**, Halley KR. 2008 Expression of insulin by Sertoli cells reverses diabetes in SCID mice. 33<sup>st</sup> Annual American Society of Andrology Meeting (Albuquerque, New Mexico, April 12-15) Journal of Andrology Supplement, 44 Abst. # 50.
- 28. **Dufour JM**. 2009 Sertoli cells: Immune privilege and role in transplantation. 5<sup>th</sup> International Workshop Molecular Andrology (Altes Schloss Giessen, Germany, May 8-10) Abst. pg. 15. (**Invited Speaker**)
- 29. **Dufour JM,** Mital P, Dyson E, Kaur G. 2009 Can transplantation jump-start the proliferative ability of Sertoli cells? 42<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Pittsburgh, Pennsylvania, July 18-22) Abst. # 681.

- 30. Kaur G, Putrevu SM, Doyle TJ, Kim KH, **Dufour JM**. 2010 Sertoli cells survive as allografts by inhibiting cell-mediated apoptosis. 43<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Milwaukee, Wisconsin, July 30-August 3) Abst. # 23. (**Platform Presentation**)
- 31. **Dufour JM**, Kaur G, Putrevu SM. 2011 Immune-privileged Sertoli cells survive allotransplantation by altering the cellular immune response. 44<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Portland, Oregon, July 31-August 4) Abst. # 73. (**Platform Presentation**)
- 32. **Dufour JM, Kaur G**. 2011 Creation of an immune-privileged site with testicular Sertoli cells. XXVI Annual Meeting of the Brazilian Federation of Experimental Biology Societies (Rio de Janeiro, Brazil, August 24-27). (**Mini-symposium**)
- 33. Mital P, **Dufour JM**. 2011 Role of immune modulation by Sertoli cells for surviving xenotransplantation. Cell Transplantation Society, and International Xenotransplantation Association Joint Conference (Miami, Florida, October 23-26). (**Platform Presentation**)
- 34. Kaur G, Saadidin M, Pasham M, Long CR, **Dufour JM**. 2011 Sustained expression of insulin by immune-privileged Sertoli cells. Cell Transplantation Society, and International Xenotransplantation Association Joint Conference (Miami, Florida, October 23-26).
- 35. Kaur G, Putrevu SM, **Dufour JM**. 2011 Immune-privileged Sertoli cells modulate the cellular immune response to survive as allografts. Cell Transplantation Society, and International Xenotransplantation Association Joint Conference (Miami, Florida, October 23-26). (**Platform Presentation**)
- 36. **Dufour JM**, Kaur G. 2012 Immune-privileged Sertoli cells: Induction of regulatory T cells and therapeutic potential. Testis Immune Function Minisymposium, Dynamics of Testicular Function Module, Society for the Study of Reproduction 45<sup>th</sup> Annual Meeting (State College, PA, August 13, 2012) Abst. # 26. (**Mini-symposium**)
- 37. Kaur G, Bowlin B, **Dufour JM**. 2012 Immune Privileged Sertoli cells Survive Allotransplantation by Increased Production of T Regulatory Cells. Society for the Study of Reproduction 45<sup>th</sup> Annual Meeting (State College, PA, August 14, 2012) Abst. # 614.
- 38. Mital P, Bowlin B, **Dufour JM**. 2012 Transplantation Can Reinitiate Proliferation of Terminally Differentiated Sertoli Cells, Society for the Study of Reproduction 45<sup>th</sup> Annual Meeting (State College, PA, August 14, 2012) Abst. # 612.
- 39. Kaur G, Bowlin B, **Dufour JM**. 2013 Immune privileged Sertoli cells survive as allografts by inducing an anti-inflammatory environment and regulatory T cells. XXII<sup>nd</sup> North American Testis Workshop "The Foundation of Male Fertility" (San Antonio, TX, April 10-13, 2013) Abst. # 67.
- 40. Thompson LA, Kaur G, Pasham P, **Dufour JM**. 2013 Optimized lentiviral vector carrying insulin cDNA can stably improve delivery of insulin by immune privileged

- Sertoli cells. XXII<sup>nd</sup> North American Testis Workshop "The Foundation of Male Fertility" (San Antonio, TX, April 10-13, 2013) Abst. # 51.
- 41. Mital P, Wright K, **Dufour JM**. 2013 Sertoli cells survive xenotransplantation by modulating the macrophages at the graft site to be regulatory versus cytotoxic. XXII<sup>nd</sup> North American Testis Workshop "The Foundation of Male Fertility" (San Antonio, TX, April 10-13, 2013) Short Talk # 40. (**Platform Presentation**)
- 42. **Dufour JM**, Kaur G, Paniagua N. 2014 Terminally differentiated, post-pubertal rat Sertoli cells resumed proliferation after transplantation. 39<sup>th</sup> Annual American Society of Andrology Meeting (Atlanta, Georgia, April 5-8) Andrology Volume 2, Supplement 1, Abst # 112.
- 43. Kaur G, Mital P, Bowlin B, Paniagua N, **Dufour JM**. 2014 Sertoli cell transplantation- an in vivo model to study resumption in proliferation of nondividing post-pubertal Sertoli cells. Society for the Study of Reproduction 46<sup>th</sup> Annual Meeting (Grand Rapids, MI, July, 2014). (**Platform Presentation**)
- 44. **Dufour JM**, Kaur G. Therapeutic and Immunoregulatory Potential of Sertoli Cells. Fertility: from gametogenesis to embryo development, V International Symposium on Animal Biology of Reproduction (Campinas, Sao Paulo, Brazil, October 11, 2014). (**Mini-symposium**)
- 45. Chilton B, Kaur G, **Dufour** JM. Helicase-like Transcription Factor (Hltf) Is a Key Regulator of Trophoblast Lineage Determination and Transcription of Related Placental Hormones. Pregnancy-Related Reproductive Endocrinology. ENDO 2015 (San Diego, California, March 8, 2015). (**Platform Presentation**)
- 46. **Dufour JM**, Kaur G Thompson La. Sertoli Cells Immune Privilege And Novel Roles In Cell Based Gene Therapy. Session 5: Somatic Cells, "Healthy Sperm-Healthy Children" The XXIIIth North American Testis Workshop (Salt Lake City, Utah, April 17, 2015) (**Mini-symposium**)
- 47. Kaur G, Thompson LS, Dziuk R, **Dufour JM.** Sertoli Cells Therapeutic Potential In Cell Based Gene Therapy. 49<sup>th</sup> Annual Gene Families and Isozymes (GFI) Conference (Placencia, Belize, December 11, 2015). (**Mini-symposium**)
- 48. Grue KA, Joiner HE, Shen CL, Kaur G, Ramalingam L, **Dufour JM**, Moustaid-Moussa N, and Chung E. Effects of high fat diet and exercise intervention before and during pregnancy on the hearts of C57BL/6 mothers. Experimental Biology Meeting (San Diego, California, April 2-6, 2016).
- 49. Ramalingam L, Allen L, Scoggin S, Shen CL, Tomison MD, Kaur G, **Dufour J**, Chung E, Moustaid-Moussa N. Tocotrienols regulate lipid metabolism in livers of high fat fed mice. Experimental Biology Meeting (San Diego, California, April 2-6, 2016).
- 50. Allen L, Ramalingam L, Shen CL, Tomison MD, Kaur G, **Dufour J**, Chung E, Moustaid-Moussa N.Tocotrienol dose-dependently improves adiposity and inflammation and increased markers of

- lipid oxidation in high fat fed mice. Experimental Biology Meeting (San Diego, California, April 2-6, 2016).
- 51. Shen CL, Kaur G, Ramalingam L, Tomison MD, Chung E, Moustaid-Moussa N, Guo C, Reinoso C, Mo H, **Dufour J.** Dietary tocotrienols improve glucose homeostasis and benefit bone turnover biomarkers in high-fat-diet induced obese male mice. Experimental Biology Meeting (San Diego, California, April 2-6, 2016).
- 52. **Dufour JM**, Berk SL. Increasing medical student research participation in the SOM at TTUHSC. Executive Leadership in Academic Medicine Leaders Forum (ACE Conference Center, Lafayette Hill, PA, April 13, 2016).
- 53. Wright K, Dziuk R, Kaur G, **Dufour JM.** Neonatal pig Sertoli cells inhibit complement mediated cell lysis after xenotransplantation in rats . 49<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (San Diego, CA, July16-20, 2016). (**Platform Presentation**)
- 54. Thompson LA, Chastain L, Hilliard T, Swartz L, Lado J, **Dufour JM.** Sex and Gender Based Medicine in Diabetes: an educational tool for healthcare students. The National Conference on Women's Health Research (Colorado Springs. CO, September 28-30, 2016).
- 55. Kaur G, Wright K, Mital P, **Dufour JM**. 2016 Neonatal porcine Sertoli cells survive as xenografts by inducing regulatory macrophages at the graft site. Basic Science in Transplantation Meeting (BEST 16) Ft. Lauderdale, FL November 10-12, 2016.
- 56. Wright K, Kaur G, Tomison MD, Ogunmokun G, Rodriguez A, **Dufour J**, Quintana R, Shen CL. Effect of delta-tocotrienols and statin on glucose homeostasis in high-fat-diet-induced obese mice. Experimental Biology Meeting (Chicago, IL, April 22-26, 2017). *FASEB J* April 2017 31:431.8. (**Oral Presentation; only top 15% selected**).
- 57. Shen CL, Kottapalli R, Tomison MD, Koboziev I, Web CR, Ramalingam L, Moustaid-Moussa N, Kaur G, **Dufour J**, Chung E, Mo H, Grisham M. Dietary delta-tocotrienol favors abundance and diversity of beneficial microbiomes in obese male mice. Experimental Biology Meeting (Chicago, IL, April 22-26, 2017). *FASEB J* April 2017 31:646.35.
- 58. Shen CL, Kaur G, Ramalingam L, Tomison MD, Chung E, Moustaid-Moussa N, **Dufour J**, Mo H, Watkins BA. Dietary delta-tocotrienol modifies serum metabolite profiles in diet-induced obese mice. Experimental Biology Meeting (Chicago, IL, April 22-26, 2017). *FASEB J* April 2017 31:800.10.
- 59. Shen CL, Tomison MD, Kaur G, Ramalingam L, **Dufour J**, Moustaid-Moussa N, Chung E, Mo H, Cao J. Effect of delta-tocotrienols and green tea polyphenols on high-fat-diet-induced bone deterioration in male C57BL/6J mice. Experimental Biology Meeting (Chicago, IL, April 22-26, 2017). *FASEB J* April 2017 31:800.10. (**Oral Presentation**; **only top 15% selected**).

- 60. Chung E, Grue KA, Kottapalli R, Kaur G, **Dufour J**, Shen CL. Effects of exercise before and during pregnancy on microbiomes in obese pregnant mice. Experimental Biology Meeting (Chicago, IL, April 22-26, 2017).
- 61. **Dufour JM,** Greer RH, Kaur G, Wright K, Tomison MD, Ramalingam L, Chung E, Moustaid–Moussa N, Shen CL. Effect of early type 2 diabetes on male fertility. XXIV North American Testis Workshop (Miami, Florida, April 19-22) (2017).
- 62. **Dufour JM,** Greer RH, Kaur G, Wright K, Tomison MD, Ramalingam L, Chung E, Moustaid–Moussa N, Shen CL. Effect of early type 2 diabetes on male fertility. 42<sup>nd</sup> Annual American Society of Andrology Meeting (Miami, Florida, April 22-25) (2017).
- 63. Wright K, Kaur G, Mital P, **Dufour JM**. Induction of Regulatory Macrophages after NPSC Xenotransplantation. 50<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (Washington DC, July13-16, 2017). (**Platform Presentation**; only top 13.3%)
- 64. Shen CL, Tomison MD, Ramalingam L, Chung E, Moustaid-Moussa N, **Dufour J.** Synergistic effect of dietary delta-tocotrienol and geranylgeraniol on bone properties in obese C57BL/6J mice with obesity-associated type 2 diabetes mellitus. International Congress on Integrative Medicine & Health (Baltimore, MD, May 8-11, 2018).
- 65. Wankhade U, Chintapalli S, Piccolo BD, Tomison MD, Wright K, Gabrilska R, Kaur G, **Dufour J**, Shankar K, Shen CL. Effects of tocotrienal and statin supplementation on microbiome and glucose homeostasis in inbred obese mice. Nutrition 2018. (Boston, MA, June 9-12, 2018). (**Oral Presentation**)
- 66. Mueller K, **Dufour J.** The Effects of Genetically Engineered Sertoli Cell produced C-peptide on Expression of Key Endothelial Cell Genes in Hyperglycemic Environments. 2018 American Physician Scientists Association South Regional Meeting (Houston, TX, September 29, 2018).
- 67. Wright K, Kaur G, Mital P, **Dufour J**. Induction of regulatory macrophages after Neonatal Pig Sertoli cell xenotransplantation. 2018 American Physician Scientists Association South Regional Meeting (Houston, TX, September 29, 2018). (**Best Poster**)
- 68. Kaur G, **Dufour JM.** Mechanisms of Sertoli Cell Immune Regulation. 52<sup>nd</sup> Annual Gene Families and Isozymes (GFI) Conference (Protrero, Costa Rica, December 6, 2018). (**Minisymposium**)
- 69. Kaur G, Helmer RA, **Dufour JM**, Chilton BS. Hltf-deletion causes immune destruction of pancreatic beta cells during development. ENDO 2019 (New Orleans, LA, March 23, 2019).
- 70. **Dufour JM**, Kaur G. Mechanisms of Sertoli Cell Immune Regulation. 44<sup>st</sup> Annual American Society of Andrology Meeting (Chicago, Illinois, April 6-9, 2019). (**Mini-symposium**)
- 71. Shen CL Kaur G, **Dufour JM**, Ramalingam L, Chung E, Moustaid-Moussa N, Chao JJ. Effect of geranylgeraniol and green tea polyphenols on high-fat-diet-induced bone deterioration in male B6 mice. Nutrition 2019 (Baltimore, MD June 8-11, 2019).

- 72. **Dufour JM**, Mueller K, Moreno T, Kaur G. Effects of Sertoli cell secreted C-Peptide on high glucose induced endothelial cell damage. 52<sup>th</sup> Annual Meeting for the Society for the Study of Reproduction (San Jose, CA, July18-21, 2019).
- 73. Wang R, Ji G, **Dufour JM**, Kaur G, Miranda JM, Washburn RL, Hibler T, Luk HY, Neugebauer V, Shen CL. Ginger Mitigates Pain Behaviors and Improves Colon Health in Obese Rats with Diabetic Neuropathy. ObesityWeek The Obesity Society Annual Meeting (Online conference due to COVID-19, November 2-6, 2020).
- 74. Washburn RL, Kaur G, **Dufour JM**. Xenogeneic Sertoli cells express complement inhibitory proteins necessary for their survival of hyperacute rejection. Annual Meeting for the American Association of Immunologists. Virtual Immunology2021 (May 10-15, 2021).
- 75. Taylor H, Kaur G, **Dufour JM**. Sertoli cell induced Tregs: a critical component of Sertoli cell immune-regulation in transplantation. 104<sup>th</sup> Annual Meeting for the American Association of Immunologists. Virtual Immunology2021 (May 10-15, 2021). (**Oral Presentation**) *2021 AAI Trainee Abstract Award*.
- 76. Washburn RL, Kaur G, **Dufour JM**. Expression of CD46 and CD55 are critical to testicular Sertoli cell survival of hyperacute rejection. Texas Forum for Reproductive Sciences 26<sup>th</sup> Annual Virtual Meeting. (June 17-18, 2021).
- 77. Taylor H, Kaur G, **Dufour JM**. Sertoli cell induced Tregs: Guardians against inflammatory immune response. Texas Forum for Reproductive Sciences 26<sup>th</sup> Annual Virtual Meeting. (June 17-18, 2021). (**Platform Presentation**) Second Place 2021 Texas Forum for Reproductive Sciences Platform Competition Award
- 78. Washburn RL, Kaur G, Reilly B, **Dufour JM**. Complement inhibition by immunoregulatory Sertoli cells: Paving the road to allograft and xenograft survival. 28<sup>th</sup> International Complement Virtual Workshop. (December, 6-10, 2021)
- 79. Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Interactive virtual small group sessions using Zoom breakout rooms with Google Slides. STFM 2022 Conference on Medical Student Education. (San Antonio, Texas, January 27-30, 2022)
- 80. Washburn RL, Kaur G, Chilton B, Reilly B, **Dufour JM**. Seq'ing the Sertoli cell complement inhibitory signature: Paving the pathway to prolong transplant survival. Innate Immunity: Complement and Beyond, Keystone Symposia, (Snowbird, UT, April, 3-6, 2022)
- 81. Jansen M, Pressley TA, Bobulescu IA, Villalobos A, **Dufour JM**. Design of virtual teambased learning sessions. 2022 SGEA Virtual Regional Meeting Finding Creativity for Complex Challenges (March 28-29,2022)

- 82. Taylor H, Kaur G, **Dufour JM**. Tregs: The Sertoli cell's secret weapon in transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR May 6-10, 2022).
- 83. Washburn RL, Kaur G, Chilton B, Reilly B, **JM Dufour**. Seeking the Sertoli cell complement inhibitory signature to prolong transplant survival. Annual Meeting for the American Association of Immunologists. Immunology2022 (Portland, OR May 6-10, 2022).
- 84. **Dufour JM**, Washburn RL, Taylor H, Kaur G. Immunosuppressive functions of Sertoli cells. Male Reproductive Immunology. American Society for Reproductive Immunology. (Nashville, TN, May 22-26, 2022).
- 85. Hussain S, Mccabe P, Lee V, Hewetson A, Webster D, **Dufour JM**, Schneider B, Kaur G. Highlighting key elements of the pre-med program at TTUHSC that prepares the students to be successful in Medical school. Virtual Pathway Programs and Bridges conference. (July 21, 2022).
- 86. Anna Sabu-Kurian, Hibler H, Washburn RL, Boothe K, Kaur G, **Dufour JM**. The Role of Macrophages in Sertoli Cell Transplant Survival Without the Use of Immunosuppressive Drugs. American College of Surgeons Clinical Congress 2022. (San Diego, CA October 16-20, 2022).
- 87. Kaur G, Bishop KN, Webster D, **Dufour J**, Schneider B. How a medical education master's program promotes student resiliency and success in medical school. Anatomy Connected 2023. (Washington DC, March 25-27, 2023) (**Oral talk**)
- 88. Chilton BS, Kaur G, Helmer RA, Martinez-Marin D, Sennoune SR, Washburn RL, Martinez-Zaguilan R, **Dufour JM**. Helicase-like transcription factor (Hltf) protein isoforms: a matter of life and death. 5<sup>th</sup> International Caparica Conference in Splicing (Caparica, Portugal, July 17-20, 2023).
- 89. Shen CL, Lovett J, Jones B, **Dufour J**, Dunn D, Berk S. Establishing a Distinction in Medical Research Program at Texas Tech University Health Sciences Center: Four-Year Structured Medical Research Curriculum for Medical Students. 2023 SGEA (Southern Group of Educational Affairs) Annual Conference (Nashville, TN, March 22-25, 2023).
- 90. Berk S, Rudder J, Lovett J, Stroever S, Jones B, **Dufour J**, Dunn D, Shen CL. The Medical Student Summer Research Program (MSSRP at Texas Tech University Health Sciences Center: Identifying Barriers and Providing Solutions to Build Research Foundations. 2023 SGEA (Southern Group of Educational Affairs) Annual Conference (Nashville, TN, March 22-25, 2023).
- 91. Bennett AI, Washburn RL, **Dufour JM**, Mechref Y. LC-MS/MS Characterization of Glycans in Pig Sertoli Cells to Understand Complement System Behavior. American Society for Mass Spectroscopy. (Houston TX, June 4-8, 2023) (submitted)

- 92. Hibler T, **Dufour JM**. Going with the flow: developing a multicolor flow cytometry panel for detection of immune cells in a reproductive setting. Basic Science Workshop, American Society for Andrology. (Boston, MA, April 19-23, 2023).
- 93. Bernstein E, Chilton B, **Dufour J**, Kaur G. Connecting the Layers: Enhancing Medical Students Knowledge of Male and Female Perineum Anatomy. 40th Annual Meeting of the American Association of Clinical Anatomists (Orlando FL July 9-12, 2023).