

Ajay Srivastava

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My Bibliography:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/45290837/?sort=date&direction=descending>

POSITIONS AND EMPLOYMENT

- 2010 -** *Assistant Professor in the tenure track*, Western Kentucky University, Bowling Green, KY, USA
- 2010 -** *Member of the Graduate Faculty* at Western Kentucky University, Bowling Green, KY, USA
- 2010** *Associate Research Scientist*, Yale University School of Medicine, New Haven, CT, USA
- 2004 - 2009** *Manager* of the Xu Lab Confocal Microscopy Facility at Yale University, New Haven, CT
- 2003 - 2010** *Post-Doctoral Fellow* in the Department of Genetics, HHMI at Yale University School of Medicine, New Haven, CT, USA
- 1998 - 2002** *Graduate Research Assistant*, Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada
- 1997 - 2002** *Graduate Teaching Assistant*, Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada

EDUCATION AND TRAINING

- 2012 - 2013** *Master of Business Administration with Distinction*, University of Louisville, Louisville, KY, USA
- 2010** *Associate Research Scientist*, Department of Cell Biology, Yale University School of Medicine, New Haven, CT, USA
- 2003 - 2010** *Post-Doctoral Fellow*, Department of Genetics, HHMI at Yale University School of Medicine, New Haven, CT, USA
Project: 1) A genetic screen for metastatic behavior in *Drosophila melanogaster*.
Project: 2) Understanding the role of Matrix Metalloproteases in development and tumor invasion.
Project Advisor: Dr. Tian Xu
- 1997 - 2003** *Doctor of Philosophy* (Ph.D in Molecular Biology and Genetics.), Department of Biological Sciences, University of Alberta, Edmonton, Alberta, Canada
Thesis: Understanding the Roles of *scalloped* and *vestigial* during wing development in *Drosophila melanogaster*.
Thesis Advisor: Dr. John Bell
- 1991 - 1993** *Master of Science* (Zoology, Specialization in Genetics and Molecular Biology), Center for Advanced Study in Zoology, Banaras Hindu University, Varanasi, India
Achieved a first division with second rank in the order of merit.
- 1988 - 1991** *Bachelor of Science (Honors in Zoology)*, Center for Advanced Study in Zoology, Banaras Hindu University, Varanasi, India
Achieved a first division.

AWARDS AND HONORS

2015	Awarded a WKU RISE Fellowship for excellence in research. Sponsored by the WKU office of sponsored programs.
2014 - 2016	Awarded funds to recruit a postdoctoral fellow to my laboratory for two years. Sponsored by the WKU office of diversity.
2014	Awarded a Research and Creative Activities Category-1 grant. Sponsored by the WKU office of research.
2011 - 2014	Awarded the KBRIN – AREA grant. Sponsored by the Kentucky Biomedical Research Infrastructure Network.
2011	Received the “First Time Grant Awardee” award from the WKU office of sponsored programs.
2011	Elected Cell and Molecular Biology section Chair , Kentucky Academy of Science.
2011	Awarded a Research and Creative Activities Category-1 grant. Sponsored by the WKU office of research.
2010	Elected Cell and Molecular Biology section Secretary , Kentucky Academy of Science.
2004	Awarded the Anna Fuller Fund Postdoctoral Fellowship in Molecular Oncology at Yale University.
2002	Received the Pansy and George Strange Graduate Scholarship at the University of Alberta. Awarded to one graduate student in a University wide open competition.
2001	Awarded the “Development Travelling Fellowship”, sponsored by the Company of Biologists Limited, United Kingdom.
2001	Received Mary Louise Imrie graduate student award and the Department of Biological Sciences, University of Alberta travel award.
2001	Received the best poster award in Molecular Biology and Genetics category at the Annual Graduate Student Research Days, sponsored by the Department of Biological Sciences, University of Alberta, Edmonton, Canada.
1999 - 2002	Received graduate tuition supplements from the Department of Biological Sciences, University of Alberta, Edmonton, Canada.
1997 – 2002	Received graduate teaching assistantships from the Department of Biological Sciences, University of Alberta, Edmonton, Canada.
1993	Awarded a Junior Research Fellowship by the Department of Science and Technology, Government of India.
1993	Secured second position in the order of merit at the MSc examination, Banaras Hindu University, Varanasi, India

CURRENT RESEARCH INTERESTS

My training is in the field of Developmental Biology, Genetics and Molecular Oncology. My current research interests are reflective of my training and are provided below.

- Mechanisms of invasive behavior during normal development and tumor progression using *Drosophila* as a genetic model.
- Cathepsins, Protease Inhibitors, Matrix metalloproteases, Extracellular Matrix and their contributions to normal development and tumor progression.
- Inhibitory molecule suppression of invasive behavior.
- Wing and general development in *Drosophila melanogaster*.

REFEREED MANUSCRIPTS IN REVISION

*Denotes WKU Student Authors

§Denotes Corresponding Author

Publications From WKU

- 2015** **12.** Qian Dong*, Breanna Brenneman*, Christopher Fields*, **Ajay Srivastava§**. A Cathepsin-L is required for invasive behavior during Air Sac Primordium development in *Drosophila melanogaster*. *FEBS Letters*, **2015**

REFEREED PUBLICATIONS

*Denotes Student Author

§Denotes Corresponding Author

- 2015 11. **Srivastava, Ajay§**. A novel link between FMR gene and The JNK pathway provides clues to possible role in Malignant Pleural Mesothelioma. *FEBS Open Bio*, 2015 (in press)
- 2015 10. **Srivastava, Ajay§** and Qian Dong*. Regulation of a Serine Protease Homolog by the JNK pathway during thoracic development of *Drosophila melanogaster*. *FEBS Open Bio*, 2015 Feb 7;5:117-23. doi: 10.1016/j.fob.2015.01.008. eCollection 2015
- 2014 9. Gillian E. Jones* and **Ajay Srivastava§**. Understanding Lunasin's Biology and Potential as a Cancer Therapeutic by utilizing *Drosophila* Genetics. *Experimental Biology and Medicine* 2014; 239: 519–528. DOI: 10.1177/1535370214522180
- 2013 8. **Srivastava, Ajay§**. A Protocol for Genetic Induction and Visualization of Benign and Invasive Tumors in Cephalic Complexes of *Drosophila melanogaster*. *Journal of Visualized Experiments* 2013. (79), e50624, doi:10.3791/50624

Publications Prior to WKU

- 2007 7. **Ajay Srivastava**, Jose Carlos Pastor-Pareja, Tatsushi Igaki, Raymond Pagliarini and Tian Xu§. Basement membrane remodeling is essential for *Drosophila* disc eversion and tumor invasion. *Proceedings of the National Academy of Sciences, USA*. 2007 Feb 20; 104(8):2721-6. Epub 2007 Feb 14
- 2007 6. Garg A, **Srivastava A**, Davis MM, O'Keefe S, Chow L, Bell JB§. Antagonizing Scalloped with a Novel Vestigial Construct Reveals an Important role for Scalloped in Leg, Eye and Optic Lobe Development of *Drosophila melanogaster*. *Genetics* 2007 Feb;175(2):659-69. Epub 2006 Nov 16
- 2004 5. **Srivastava A**, Simmonds AJ, Garg A, Fossheim L, Campbell SD, Bell JB§. Molecular and functional analysis of scalloped lethal alleles in *Drosophila melanogaster*. *Genetics* 2004, 166(4):1833-43.
- 2003 4. MacKay JO, Soanes KH, **Srivastava A**, Simmonds AJ, Brook WJ, Bell JB§. An in vivo analysis of the vestigial gene in *Drosophila melanogaster* confirms domains required for VG function. *Genetics* 2003, 163-4; 1365-73.
- 2003 3. **Srivastava A**, Bell JB§. Further developmental roles of the vestigial / scalloped transcription complex during wing development in *Drosophila melanogaster*. *Mechanisms of Development* 2003, 120(5); 587-96.
- 2002 2. **Srivastava A**, Heise C, Garg A, Bell JB§. The relationship between the dominant Additional vein mutant in *Drosophila melanogaster* and engrailed. *Genome* 2002, 45;1077-1082.
- 2002 1. **Srivastava A**, MacKay JO, Bell JB§. A Vestigial:Scalloped TEA domain chimera rescues the wing phenotype of a scalloped mutation in *Drosophila melanogaster*. *Genesis* 2002, 33(1);40-47.

MANUSCRIPTS IN PREPARATION

*Denotes WKU Student Author

§Denotes Corresponding Author

1. Christopher Fields*, Qian Dong*, **Ajay Srivastava§**. Functional analysis of a putative basement membrane degrader in *Drosophila melanogaster*.
2. Jessica Ross and **Ajay Srivastava§**. Understanding the Sphingolipids and Cancer connection using *Drosophila*.

CONFERENCE PRESENTATIONS

*Denotes Student Author

Presenting Student Authors Are Underlined

From WKU

- 2015 25. Talk presented at the WKU REACH week titled: Involvement of a protease in the development of dorsal Air Sac Primordium (ASP) of *Drosophila melanogaster*. Qian Dong*, Breanna Brenneman*, Christopher Fields*, **Ajay Srivastava**
- 2015 24. Talk presented at the WKU REACH week titled: Genetic characterization of a basement membrane degrader in *Drosophila melanogaster*. Christopher Fields*, Qian Dong*, Elizabeth Oates*, **Ajay Srivastava**
- 2015 23. Poster presented at the WKU REACH week titled: A *Drosophila melanogaster* Model to Study Silver Nanoparticle Toxicity. Ananya Sharma* and **Ajay Srivastava**
- 2015 22. Poster presented at the 56th Annual Drosophila Research Conference, Chicago, Illinois titled: Evaluating Toxicity of Silver Nanoparticles in *Drosophila melanogaster*. Ananya Sharma* and **Ajay Srivastava**
- 2015 21. Poster presented at the 56th Annual Drosophila Research Conference, Chicago, Illinois titled: Role of a soy protein Lunasin in A β 42 mediated neurodegeneration in Alzheimer's disease. Angela Giaquinto, Michael Moran, Ankita Sarkar, Gillian Jones*, **Ajay Srivastava**, Maduri Kango-Singh, Amit Singh
- 2014 20. Poster presented at the 100th Kentucky Academy of Science Annual Meeting at University of Kentucky, Lexington, Kentucky titled: Evaluating toxicity of silver nanoparticles in *Drosophila melanogaster*. Ananya Sharma* and **Ajay Srivastava**
- 2014 19. Poster presented at the 7th Annual BSURE Symposium, Biology Department, WKU titled: Evaluating toxicity of silver nanoparticles in *Drosophila melanogaster*. Ananya Sharma* and **Ajay Srivastava**
- 2014 18. Poster presented at the 7th Annual BSURE Symposium, Biology Department, WKU titled: Creation of constructs capable of expressing different domains of a novel basement membrane degrader in *Drosophila melanogaster*. Elizabeth Oates* and **Ajay Srivastava**
- 2014 17. Poster presented at the 55th Annual Drosophila Research Conference in San Diego, CA titled: Functional and Expression Analysis of a Putative Basement Membrane degrader in *Drosophila melanogaster*. Christopher Fields* and **Ajay Srivastava**
- 2013 16. Poster Presented at the 99th KAS Annual Meeting at Morehead State University, Morehead, KY titled: Preliminary characterization of a novel gene identified in a genetic screen for basement membrane degraders in *Drosophila melanogaster*. Christopher Fields* and **Ajay Srivastava**
- 2013 15. Poster presented at the 6th Annual BSURE Symposium, Biology Department, WKU titled: Initial Characterization of a Novel Putative Basement Membrane Degradar in *Drosophila melanogaster*. Christopher Fields* and **Ajay Srivastava**
- 2013 14. Talk presented at the 43rd WKU Student Research Conference titled: Understanding the Effects of Lunasin Overexpression on Normal Development and Tumor Progression in *Drosophila melanogaster*. Gillian Jones* and **Ajay Srivastava**
- 2013 13. Talk presented at the 43rd WKU Student Research Conference titled: Creation of Transgenic UAS-NC1*Drosophila melanogaster*. Jordan Olberding* and **Ajay Srivastava**. (This talk won the best talk award in its section)
- 2013 12. Talk presented at the 43rd WKU Student Research Conference titled: Functional and Expression Analysis of a Novel Basement Membrane Degradar in *Drosophila melanogaster*. Christopher Fields* and **Ajay Srivastava**.
- 2012 11. Poster presented at the Council for Undergraduate Research Conference titled: Functional analysis of a Cathepsin-L in *Drosophila melanogaster*. Breanna Brenneman* and **Ajay Srivastava**
- 2012 10. Poster presented at the 42nd WKU Undergraduate Research Conference titled: Identification of Genetic Suppressors of a scalloped wing mutation in *Drosophila*. Samantha Hawtrey* (Gatton Academy Student) and **Ajay Srivastava**

- 2011 9. Poster presented at the Kentucky Academy of Science annual meeting held at Murray State University, Murray, KY and titled: Identification of Basement Membrane degraders in *Drosophila*. Shannon Sean* and **Srivastava Ajay**. (This poster won the best poster award in its category)
- 2011 8. Poster presented at the 41st WKU Undergraduate Research Conference titled: Identification of Candidate Basement Membrane degraders using *Drosophila* Genetics. Sean Shannon* and **Ajay Srivastava**. (This poster won the best poster award in the category)
- 2010 7. Talk presented at the Annual meeting of the Kentucky Academy of Science held in Bowling Green, KY titled: A novel protease inhibitor regulates tumorigenesis by suppressing apoptosis in *Drosophila melanogaster*. **Ajay Srivastava**

Prior to WKU

- 2006 6. Presented a poster at the 47th Annual Drosophila Research Conference held in Houston Texas titled: A genetic screen for mutations that cause tumor progression and metastatic behaviour. Gaurang Daftary, Tatsushi Igaki, Rui Li, Jinyu (Jim) Lu, **Ajay Srivastava**, Congwu Chi, Xiangxiang Kong, Zhisheng Ye, Huanhu Zhu, Xiao-Hui Wu, Tian Xu.
- 2002 5. Presented a poster at the 43rd Annual Drosophila Research Conference held in San Diego, CA, titled: Molecular characterization of scalloped lethal alleles reveal domains important for its biological function. **Ajay Srivastava** and John Bell.
- 2001 4. Presented a talk at the Canadian Fly Meeting held in Canmore, Alberta, Canada titled: Analysis of scalloped and vestigial functions during *Drosophila* wing development. **Ajay Srivastava** and John Bell
- 2001 3. Presented a poster at the 42nd Annual Drosophila Research Conference held in Washington D.C. titled: Rescue of a scalloped wing mutation by a VG::SD TEA domain chimera. **Ajay Srivastava**, Julie McKay, John Bell
- 2001 2. Presented a poster at the Annual Student Research Day, Department of Biological Sciences, University of Alberta, Alberta, Canada titled: A VG::SD TEA domain chimera mimics the native transcription complex. **Ajay Srivastava**, Julie McKay, John Bell.
- 2000 1. Presented a poster at the VISION 2000 conference held in Vancouver, BC, Canada and organized by the Genetics Societies of America and Canada titled: Molecular Characterization of lethal alleles of scalloped. **Ajay Srivastava**, Shelagh Campbell, John Bell

INVITED TALKS

Since Joining WKU

- 2014 November 13th Department of Biological Sciences, University of Kentucky, Lexington, KY
- 2014 October 31st Department of Biological Sciences, Murray State University, Murray, KY
- 2012 April 8th STEM Academy, Greenville, KY
- 2011 October 10th KBRIN – EAC Meeting, Louisville, KY
- 2010 April 15th Department of Biology, Western Kentucky University, Bowling Green, KY

Prior to WKU

- 2010 March 26th Department of Biological Sciences, Vanderbilt University, Nashville, TN
- 2010 March 10th Department of Biological Sciences, Columbia University, New York City, NY
- 2001 June Canadian Fly Meeting, Canmore, Alberta, Canada

GRANTS AND CONTRACTS

FUSE – Faculty Undergraduate Student Engagement

RCAP – Research and Creative Activities Program

BSURE – Biology Summer Undergraduate Research Experience

KBRIN – Kentucky Biomedical Infrastructure Network

AREA – Academic Research Enhancement Awards

Funded

Year	Description/Type	Internal/External	Amount	My Role
2015	Awarded BSURE grants with my students Nathan Powers and Joy Fan	Internal , sponsored by WKU Department of Biology	\$2,900	Role – Principal Investigator/Mentor
2015	Awarded a FUSE Grant with my Honors thesis student Nathan Powers	Internal , sponsored by WKU office of sponsored programs	~\$5,000	Role – Principal Investigator/Mentor
2015	Awarded a FUSE Grant with my Gatton Academy student Ananya Sharma	Internal , sponsored by WKU office of sponsored programs	~\$5,000	Role – Principal Investigator/Mentor
2014-2016	Awarded funds to recruit an Underrepresented Minority Postdoctoral Fellow to my Laboratory	Internal , sponsored by WKU office of diversity	\$90,000	Role – Postdoctoral mentor
2014	Awarded BSURE grants with my Gatton Academy students Ananya Sharma, Paige Kington and my Honors student Elizabeth Oates	Internal , sponsored by WKU Department of Biology	\$2,700	Role – Principal Investigator/Mentor
2014	Awarded a FUSE Grant with my Honors thesis student Elizabeth Oates	Internal , sponsored by WKU office of sponsored programs	~\$5,000	Role – Principal Investigator/Mentor
2014-2015	Awarded a RCAP1 Grant	Internal , sponsored by WKU office of research	~\$15,000	Role – Principal Investigator
2013-2014	Awarded the KBRIN – AREA Grant	External , sponsored by the KBRIN/NIH	\$26,000	Role – Principal Investigator
2013	Awarded a FUSE grant along with my Honors thesis student Christopher Fields	Internal , sponsored by WKU office of sponsored programs	~\$5,000	Role – Principal Investigator/Mentor
2012	Awarded a FUSE grant along with my Honors thesis student Jordan Olberding	Internal , sponsored by WKU office of sponsored programs	~\$5,000	Role – Principal Investigator/Mentor
2011-2013	Awarded the KBRIN – AREA Grant	External , sponsored by the KBRIN/NIH	\$52,000	Role – Principal Investigator
2011	Awarded a RCAP1 Grant	Internal , sponsored by WKU office of research	\$20,000	Role – Principal Investigator

Submitted Grants in Review

Year	Description/Type	Internal/External	Amount Requested	My Role
2015	Submitted a NIH – R21 Grant titled: Developmental Profiling of Basement Membrane Associated Proteins in <i>Drosophila melanogaster</i>	External , National Institutes of Health	\$375,800	Role – Principal Investigator

2015	Submitted a Kentucky NSF – EPSCOR Research Enhancement Grant	External , Kentucky National Science Foundation EPSCOR	\$25,000	Role – Principal Investigator
2015	Submitted a Kentucky NSF – EPSCOR Research Scholars Program Grant	External , Kentucky National Science Foundation EPSCOR	\$7,500	Role – Principal Investigator

Declined Grants

Year	Description/Type	Internal/External	Amount Requested	My Role
2015	Submitted a NSF-MRI grant for Acquisition of a Confocal Microscope	External , National Science Foundation, Major Research Instrumentation	\$375,270	Role – Principal Investigator
2015	Submitted a RCAP1S grant for Creation of reagents for characterization of SNUTS.	Internal , sponsored by WKU office of research	\$16,000	Role – Principal Investigator
2015	Submitted a KBRIN-IDEA grant for Identification of Basement Membrane associated proteins.	External , sponsored by the KBRIN/NIH	\$113,600	Role – Principal Investigator
2014	Submitted a Special Research Grant for creation of antibodies against a novel Basement Membrane degrader.	External , sponsored by the Kentucky Academy of Science	\$5,000	Role – Principal Investigator
2014	Submitted a KBRIN-IDEA Grant.	External , sponsored by the KBRIN/NIH	\$40,000	Role – Principal Investigator
2014	Submitted a RCAP1I Grant.	Internal , sponsored by WKU office of research	\$8,000	Role – Principal Investigator
2013	Submitted a NSF-MRI grant for Acquisition of a Confocal Microscope	External , National Science Foundation, Major Research Instrumentation	\$378,132	Role – Principal Investigator
2012	Submitted a NIH-R15 grant for identification and characterization of putative Basement Membrane degraders in Drosophila.	External , National Institutes of Health	\$425,995	Role – Principal Investigator
2012	Submitted a RCAP1I Grant for identification of Basement Membrane associated proteins.	Internal , sponsored by WKU office of research	\$19,696	Role – Principal Investigator
2012	Submitted a RCAP1I Grant for understanding the <i>in vivo</i> effects of Canstatin.	Internal , sponsored by WKU office of research	\$7,978	Role – Principal Investigator
2012	Submitted a RCAP1I Grant for understanding the <i>in vivo</i> effects of Lunasin.	Internal , sponsored by WKU office of research	\$5,240	Role – Principal Investigator
2012	Submitted a NSF-MRI grant for Acquisition of a Confocal Microscope	External , National Science Foundation, Major Research Instrumentation	\$425,205	Role – Principal Investigator
2011	Submitted a NSF-MRI grant for Acquisition of a Confocal Microscope	External , National Science Foundation, Major Research Instrumentation	\$501,400	Role – Principal Investigator

Declined Collaborative Grants

Year	Description/Type	Internal/External	Amount Requested	My Role
2014	Part of a Summer Research Experience for Undergraduates proposal. PI – Dr. Rodney King	External , National Science Foundation, Research Experience for Undergraduates	\$405,230	Role – Senior Personnel
2014	Part of a BRIDGES to Baccalaureate, NIH-R25 grant. PI: Dr. Raja Dakshinamurthy	External , National Institutes of Health	\$1,527,530	Role – Senior Personnel
2013	Part of a proposal to acquire Next Generation Sequencing Apparatus. PI – Dr. Robert Wyatt	Internal , sponsored by WKU office of research	\$75,270	Role – Senior Personnel

STUDENT SUPERVISION AND TRAINEES*Masters Students at WKU (Thesis Advisor)*

Student's Name	Year	Status	My Role	Current Occupation
Dane Flinchum	2015-2017	Current	Primary Thesis Advisor	Graduate Student at WKU
Mayank Kapadia	2014-2016	Current	Primary Thesis Advisor	Graduate Student at WKU
Christopher Fields	2014-2016	Current	Primary Thesis Advisor	Graduate Student at WKU
Qian Dong	2013-2015	Completed	Primary Thesis Advisor	Looking for a job in China
Gillian Jones	2011-2013	Completed	Primary Thesis Advisor	Research Technician at Virginia Technological University

Masters Students at WKU (Member, Graduate Thesis Advisory Committee)

Student's Name	Year	Status	Primary Advisor	My Role
Julia Freeman	2011-2013	Completed	Dr. Nancy Rice	Member, Thesis Committee
Olivia Boyd	2013-2015	Completed	Dr. Keith Philips	Member, Thesis Committee

Undergraduate Honors Thesis Students at WKU (Thesis Advisor)

Student's Name	Year	Status	My Role	Current Occupation
Sayo Aromiwura	2015-	Current	Primary Thesis Advisor	Honors Student at WKU
Nathan Powers	2015-	Current	Primary Thesis Advisor	Honors Student at WKU
Elizabeth Oates	2014-	Current	Primary Thesis Advisor	Honors Student at WKU
Christopher Fields	2012-2014	Completed	Primary Thesis Advisor	MS Student and Graduate Research Fellow at WKU
Jordan Olberding	2011-2013	Completed	Primary Thesis Advisor	Ph.D. Student at Yale University

NSF-REU Students at WKU

Student's Name	Year	Current Occupation	Comments
Breanna Brennehan	2012	Ph.D. Student at University of Virginia, Charlottesville	Honorable mention at the NSF Graduate Fellowship Competition
Kevin Colon-Negron	2011	Ph.D. Student at University of California, San Francisco	Recipient of the NSF Graduate Fellowship
Rebecca Ray	2011	Ph.D. Student in Forensics	

Gatton Academy Summer Research Students at WKU

Student's Name	Year	Current Occupation	Comments
Joy Fan	2015	Undergraduate Student at WKU	BSURE, Gatton Research Internship Grant Recipient

Ananya Sharma	2014	Undergraduate Student at Vanderbilt University	FUSE, BSURE, Gatton Research Internship Grant Recipient
Paige Kington	2014	Undergraduate Student	BSURE, Gatton Research Internship Grant Recipient

Other Students Mentored in Research at WKU

Student's Name	Year	Type	Current Occupation	Comments
Joy Fan	2015	BIOL399	Gatton Academy Student	
Nathan Powers	2015	BIOL399	Honors College Student at WKU	FUSE, BSURE Recipient
Sayo Aromiwura	2015	BIOL399	Honors College Student at WKU	-
Elizabeth Oates	2014	BIOL399	Honors College Student at WKU	FUSE Recipient
Noel Maxwell	2014-2015	BIOL399	Undergraduate Student at WKU	
Ananya Sharma	2014-2015	BIOL399	Undergraduate Student at Vanderbilt University	Ex Gatton Academy Student
Paige Kington	2014	BIOL399	Undergraduate Student	Ex Gatton Academy Student
Noah Maikranz	2014	BIOL399	Undergraduate Student	Ex Gatton Academy Student
Aiste Dobrovolskaite	2013-2014	BIOL399	MS Student at WKU	
Rachel Huffman	2013	BIOL369	Dental School at University of Louisville	-
Dixa Patel	2013	Volunteer	Not Known	Ex Gatton Academy Student
Bradley Blankenship	2013	BIOL399	Not Known	
Kelsey Kaetzel	2013	BIOL399	Not Known	
Taylor Billings	2012-2013	BIOL399	Undergraduate Student at WKU	
Taylor Johnson	2012	BIOL399	MD Student at University of Louisville	
Sibi Rajendran	2012	BIOL399	MD Student	Ex Gatton Academy Student
Linda Cruz	2012	BIOL399	Undergraduate Student at WKU	Ex Gatton Academy Student
Cecily Allen	2012	BIOL399	Not Known	Ex Gatton Academy Student
Samantha Hawtrey	2011-2012	BIOL399	MD Student at University of Louisville	Ex Gatton Academy Student
Karlee Driver	2011-2012	BIOL399	Not Known	
Patrick Webb	2011	Volunteer	Not Known	
Katie Melton	2011	Volunteer	Not Known	
Alex Lee Compton	2011	Volunteer	Attending Optometry School	
Cheryl Onwu	2011	Volunteer	Not Known	
Meliha Hrustanovic	2011	BIOL399	MD Student at University of Louisville	
Chelsey Faulk	2011	BIOL399	Not Known	
Jordan Olberding	2011	BIOL199 BIOL399	Ph.D. Student at Yale University	
Sean Shannon	2010-2011	BIOL399	MD Student at University of Louisville	

Completed Theses at WKU

Student's Name	Year	Type	Title of Thesis	Comments
Qian Dong	2015	MS	Functional Analysis of a Cathepsin L in <i>Drosophila melanogaster</i> .	

Gillian Jones	2013	MS	Development of Tools to Assess the Effects of Lunasin on Normal Development and Tumor Progression in <i>Drosophila melanogaster</i>	Outstanding Biology Graduate Student at WKU
Christopher Fields	2014	Honors	Functional and Expression Analysis of SNUTS in <i>Drosophila melanogaster</i>	Gleason Award Winner at WKU for Excellence in Undergraduate Research
Jordan Olberding	2013	Honors	Creation of Tools to Assess the effects of α 2NC1 on Normal Development and Tumor Progression in <i>Drosophila melanogaster</i> .	Outstanding Biology Undergraduate Student at WKU

Postdoctoral Supervision at WKU

Name	Year
Dr. Jessica Ross	2014-2016

TEACHING EXPERIENCE

Courses Taught at WKU

F – Fall; SP – Spring; SU – Summer ; W – Winter
H – Honors; O – Online

Course Number	Course Description and Credit Hours	Semesters and Years Taught
BIOL120	Introduction to Cell Biology, Metabolism and Genetics, 3 credit hours	SP11,F12,F13,F14
BIOL120 (O)	Introduction to Cell Biology, Metabolism and Genetics, 3 credit hours	W15,SU15
BIOL327	Genetics and associated labs, 4 credit hours	F10,SP11,SP12,SP13,SP14
BIOL327	Genetics, 3 credit hours	SP15
BIOL327 (H)	Genetics Honors, 3 credit hours	SP15
BIOL337	Genetics labs, 1 credit hours	SP15
BIOL440	Developmental Genetics, 3 credit hours	F11
BIOL475	Techniques in Developmental Biology, 3 credit hours	F13
BIOL675	Drosophila Genetics and Cancer	F11,F14
BIOL675	Selected Topics in Development	SP12,SP14
BIOL675	Advanced Topics in Development	SP15

Teaching Experience and Supervision Prior to WKU

2004-2009	Yale University	Manager of the Xu Lab Confocal Microscopy Facility. I was responsible for the initial purchase, setup and subsequent training of students and Post-docs in the laboratory on how to use the Confocal Microscope as well as the administration of the facility.
1998-2002	University of Alberta	Supervised undergraduate project students in the laboratory of Dr. John Bell (8 in number) on various Biology 498 and Biology 499 research projects of one and two semester duration respectively. Instrumental in design and execution of experiments conducted by the students.
1997-2002	University of Alberta	Teaching Assistant for Biology 107 (introduction to cell biology, labs). I was responsible for successful completion of the labs as well as grading of the final exams for the course.

PROFESSIONAL SERVICE

Leadership Positions

- 2014-2015** **Chair**, Seminar Committee, WKU Biology Department
2013-2015 **Chair** of the WKU Ogden College Identity Committee
2011-2013 **President and Vice President** of Sigma Xi, WKU Chapter
2010-2012 **Chair and Secretary** of the Cell and Molecular Biology Section of the Kentucky Academy of Science

Reviewer

- 2014-** **Editorial Review Board**, Journal of Visualized Experiments (JOVE)
2014- **Member**, Community Advisory Group, FLYBASE
2014 **Reviewed Book Chapters** for Principles of Development by Lewis Wolpert and Others, Published by the Oxford University Press, London, England
2010- **Reviewed Journal Articles** for the following Journals: Experimental Biology and Medicine, Genome, PLOS One and Oncogene

Grant Reviewer, Internal

- 2014-2015** WKU FUSE Grants

Judge

- 2013** Judged posters at the Annual Meeting of the Kentucky Academy of Science held at Morehead, KY.
2012 Judged posters at the Annual Meeting of the Kentucky Academy of Science held at Richmond, KY.
2012 Judged posters and platform presentations for Undergraduate and Graduate students respectively at the 42nd WKU Research Conference and REACH week.
2011 Judged posters at the Sigma Xi International Conference, Raleigh, NC
2011 Judged "Cell and Molecular Biology Section" posters at the annual meeting of the Kentucky Academy of Science held in Murray, KY.
2011 Judged posters at the 41st WKU Undergraduate Research Conference.
2010 : Judged "Cell and Molecular Biology Section" posters at the annual meeting of the Kentucky Academy of Science held in Bowling Green, KY.

SERVICE TO UNIVERSITY, COLLEGE AND DEPARTMENT

University Service

- 2014-2015** **Member, WKU Graduate School Minority Assistantship Council**, Reviewed 15, 26 Minority Assistantship program Applications in Spring 2014 and 2015
2013-2014 **Member, Biotechnology Center Bylaws Review Committee**
2011-2013 **Member, WKU Student Research Council**. As an active member of this council I played an important role in the discussions leading up to the new research week. An acronym suggested by me for this new research week was accepted. This research week is now referred to as the REACH week or the Research Experiences and Creative Heights week.
2011-2013 **Vice President and President of Sigma Xi**, WKU Chapter. As part of my involvement with Sigma Xi I represented it at the WKU student research council and hosted the conference speakers during the REACH week in 2012, 2013.

- 2011-** **Faculty Co-Advisor to WKU Indian Students Association.** As a faculty advisor I help student leadership with the various aspects of student life. In addition, I am also responsible for conducting yearly elections for the position of officers of the association.
- 2010-** Attended WKU Commencement Ceremonies

College Related Service

- 2015** **Member,** Ogden College Marketing Committee
- 2014** **Invited** by the Dean to present a vision for “Branding and Marketing” of Ogden College
- 2013-2015** **Chair** of the WKU Ogden College Identity Committee

Departmental Service

- 2014-2015** **Chair,** Seminar Committee, WKU Biology Department
- 2012-** **Faculty Co-Advisor,** Association of Undergraduate Geneticists
- 2012-** **Hosted** one BASS session and attended several others
- 2012-** **Member,** Departmental Safety Committee
- 2011-** **Attended** ATP sessions
- 2010-** **Member,** Undergraduate Curriculum Committee
- 2010-** **Member,** Departmental Advising Committee
- 2010-** **Member,** Pre-Professional Advisors
- 2010-** **Member,** Thesis Advisory Committees for Undergraduate and Graduate Students
- 2010-** **Invited and Hosted** the following seminar speakers: Dr. Carl Hashimoto (could not make it); Dr. Jennifer Curtiss, Dr. Alexey Arkov, Dr. Amit Singh, Dr. Andrea Page-McCaw, Dr. Luke Bradley
- 2010-** **Wrote** several reference letters for Undergraduate and Graduate students applying to Medical, Dental, Optometry and Ph.D. programs

K-12 School Service

- 2013** Invited by Briarwood Elementary School to talk to their 4th grade students about cells.
- 2012** Presented a talk to STEM Academy students at Greenville, KY (04/08/12) titled: Understanding Development and Disease using Drosophila Genetics.
- 2013** Presented three one hour talks on Drosophila genetics and demonstrated Drosophila wild type and mutant strains to students at Drakes Creek Middle School, Bowling Green, KY

PROFESSIONAL DEVELOPMENT ACTIVITIES

Year	Description of Activity	Type
2015	Attended a WKU RISE Brown Bag Lunch	Research Related
2010-2015	Attended Annual Meetings of the Kentucky Academy of Science	Research Related
2012-2015	Attended the Annual Drosophila Research Conference held in Chicago, IL and San Diego, CA	Research Related
2012	Attended “Writing Winning Grants”: Workshop organized by WKU Office of Sponsored Programs.	Research Related
2011-	Attended Annual Department of Biology Safety Seminars	Research Related
2011	Attended the Sigma Xi annual international conference and ethics symposium held at Raleigh, NC	Research Related
2011	Attended the Sophomore Faculty Follow-up organized by the office of the Provost and VP-Research.	Research Related
2010	Attended the KBRIN-AREA grant writing workshop at the Annual Meeting of the KAS held in Bowling Green, KY.	Research Related

2010	NSF Grant writing workshop at NKU, Frankfort KY	Research Related
2010	Attended a workshop titled "Planning the Budget for Your Grant Proposal" organized by WKU Office of Sponsored Programs	Research Related
2010-	Met regularly with my mentoring committee and mentor	Research/Teaching Related
2014	Completed ADA compliance training on the web	Teaching Related
2013	Attended Academic Dishonesty Workshop hosted by Michael Crowe from WKU Judicial Affairs	Teaching Related
2013	Attended McGraw Hill Workshop on e-textbooks	Teaching Related
2013	Attended an information session for "Thesis Readers in Ogden College" organized by the WKU biology department	Teaching related
2012	Attended seminar conducted by Dr. Pam Petty, Professional Development mandated by the State of Kentucky	Teaching Related
2012	Attended workshop organized by WKU Information Technology department titled: Teaching with Turning Point Clickers	Teaching Related
2012	Workshop on Writing for The Sciences organized by the Dean's office	Teaching Related
2012	Attended a workshop titled: Electronics In The Classroom	Teaching Related
2012	Attended a curriculum development workshop organized by FACET and titled: "Escaping the Tyranny of Textbook Changes"	Teaching Related
2013	Attended a special meeting hosted by the head of the biology department for Pre-Tenure Faculty	General
2013	Attended a workshop titled: How to get promotion and tenure in Ogden college at WKU. Hosted by the Ogden College Dean	General
2012-2013	As part of an MBA degree from University of Louisville, I took for credit several courses in leadership, organizational behavior, business intelligence, managerial decision making, and managing in the future. All of these courses have relevance in helping me manage people, and resources at WKU in my role as an Assistant Professor.	General Management
2010-	Attended the Annual WKU President's Convocation	General
2010-	Attended the Annual Fall Ogden College Opening by the Dean	General

COMMUNITY OUTREACH

- Interviewed by Bowling Green Daily News about the Indian festival of colors, Holi.
- Invited by Briarwood Elementary School to talk to their 4th grade students about cells.
- Gave a talk on Drosophila genetics and demonstrated Drosophila wild type and mutant strains to students at Drakes Creek Middle School, Bowling Green, KY.
- Was interviewed by Bowling Green Daily News to offer my perspective on the controversy involving a Hindu celebration, Governor Beshear's position and the position of State Senator Williams.

PROFESSIONAL AFFILIATIONS

2014-2015	Member, Society for Experimental Biology and Medicine
2012-	Member, Society for Developmental Biology
2010-	Member, Kentucky Academy of Science
2002-	Member, Sigma Xi the scientific research society
1998-	Member, Genetics Society of America

MEDIA COVERAGE

2013	http://www.lanereport.com/25166/2013/10/wku-researchers-using-fruit-fly-to-study-growth-of-cancer-cells/
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