

## CURRICULUM VITAE

University of Pittsburgh  
School of Medicine

### BIOGRAPHICAL

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### EDUCATION and TRAINING

#### UNDERGRADUATE:

<i>Dates Attended</i>	<i>Name and Location of Institute</i>	<i>Degree Received</i>	<i>Major Subject</i>
1987 - 1991	Massachusetts Institute of Technology Cambridge, MA	B.S. 1991	Biology

#### GRADUATE:

1993 - 1999	Princeton University Princeton, NJ	Ph.D. 1999	Molecular Biology
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#### POSTGRADUATE:

<i>Dates Attended</i>	<i>Name and Location of Institute</i>	<i>Name of Program Director and Discipline</i>
1999 - 2003	Department of Embryology Carnegie Institution for Science Baltimore, MD	Dr. Andrew Fire

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### APPOINTMENTS and POSITIONS

#### ACADEMIC:

<i>Years Inclusive</i>	<i>Name and Location of Institution</i>	<i>Rank/Title</i>
2010 to present	Dept. of OB/GYN and Reproductive Sciences Magee-Womens Research Institute and University of Pittsburgh School of Medicine Pittsburgh, PA	Assistant Professor
2009 to 2010	Dept. of OB/GYN and Reproductive Sciences University of Pittsburgh School of Medicine Pittsburgh, PA	Visiting Assistant Professor
2003 to 2009	Department of Embryology Carnegie Institution for Science Baltimore, MD	Staff Associate

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### MEMBERSHIPS in PROFESSIONAL and SCIENTIFIC SOCIETIES

<i>Organization</i>	<i>Year</i>
Association for Women in Science	1994 - present
Genetics Society of America	1995 - present
Society for Developmental Biology	1998 - present
Sigma Xi	1999 - present
New York Academy of Sciences	2000 - present
American Society for Cell Biology	2007 - present

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## PUBLICATIONS

### *Referred Articles:*

1. Meneely PM, McGovern OL, Heinis FI, and **Yanowitz J.** 2012. Crossover distribution and frequency is regulated by *him-5* in *C. elegans*. *Genetics* Apr;190(4):1251-66. (Epub ahead of print). PMID: PMC3316641
2. Graham PL, **Yanowitz JL**, Penn JKM, Deshpande G, Schedl P. 2011. The translation initiation factor eif4e regulates the Sex-Specific expression of the master switch gene *Sxl* in *Drosophila melanogaster*. *PLoS Genetics* 7(7): e1002185. PMID: PMC3145617
3. Vogel BE, Wagner C, Paterson JM, Xu X, **Yanowitz J.** 2011. An extracellular matrix protein prevents cytokinesis failure and aneuploidy in the *C. elegans* germline. *Cell cycle*, 10(12): 1916 – 1920. PMID: PMC3154414
4. Wagner C, Kuervers L, Baillie D, and **Yanowitz J.** 2010. *xnd-1* Regulates the Global Recombination Landscape in *C. elegans*. *Nature*, 467(7317):839-43. PMID: PMC3045774
5. **Yanowitz J.** 2010. Meiosis: Making a Break for It. *Current Opinion in Cell Biology*, 22(6):744-51. PMID: PMC3003294
6. Lim JG, Stine RR, and **Yanowitz J.** 2008. Domain-specific regulation of recombination in *C. elegans* in response to temperature age, and sex. *Genetics*, Oct;180(2): 715-26. \*Issue highlight PMID: PMC2567375
7. **Yanowitz J.** 2008. Genome integrity is regulated by the *C. elegans* Rad51D homolog, *rfs-1*. *Genetics*, May;179(1): 249-62. PMID: PMC2390604
8. Hochheiser H and **Yanowitz J.** 2007. If I only had a brain: exploring mouse brain images in the Allen Brain Atlas. *Biol. Cell*, Jul;99(7): 403-9.
9. Ward JD, Barber LJ, Petalcorin MIR, **Yanowitz J**, and Boulton, SJ. 2007. Replication blocking lesions present a unique substrate for homologous recombination. *Embo J.*, Jul;26(14): 3384-96. PMID: PMC1933397
10. Foehr ML, Lindy AS, Fairbank RC, Amin NM, Xu M, **Yanowitz J**, Fire AZ, and Liu J. 2006. An antagonistic role for the *C. elegans* Schnurri homolog SMA-9 in modulating TGFbeta signaling during mesodermal patterning. *Development*, Aug;133(15): 2887-96.
11. **Yanowitz J** and Fire AZ. 2005. Cyclin D involvement demarcates a late transition in *C. elegans* embryogenesis. *Dev Biol.*, Mar,1;279(1): 244-51.
12. **Yanowitz J**, Shakir MA, Hedgecock E, Fire AZ and Lundquist EA. 2004. *UNC-39*, the *C. elegans* homolog of the human myotonic dystrophy-associated homeodomain protein *Six5*, regulates cell motility and differentiation. *Dev Biol.*, Aug,15;272(2): 389-402.
13. Greenberg T, **Yanowitz J**, and Schedl P. 2004. The *Drosophila* GAGA factor is required for dosage compensation in males and for the formation of the MSL complex chromatin entry site at 12DE. *Genetics*, Jan;166(1): 279-89. PMID: PMC1470682
14. Deshpande G, Calhoun G, **Yanowitz J**, and Schedl P. 1999. Novel functions of nanos in downregulating mitosis and transcription during the development of the *Drosophila* germline. *Cell*, Oct,29;99(3):271-81.
15. **Yanowitz J**, Deshpande G, Calhoun G, and Schedl P. 1999. An N- terminal truncation uncouples the sex-transforming and dosage compensation functions of *Sex-lethal*. *Mol Cell Biol.*, Apr;19(4): 3018-28.
16. Hanish J, **Yanowitz J**, and de Lange T. 1994. Stringent sequence requirements for the formation of human telomeres. *Proc Natl Acad Sci USA*. Sept,13;91(19):8861-65. PMID: PMC44706

### *Published Abstracts:*

1. Yanowitz JL. Keystone Symposia Conference Genomic Instability and DNA Repair. March 3-9, 2013, Banff, Alberta, Canada (poster presentation).

## 2. PROFESSIONAL ACTIVITIES

### TEACHING:

Undergraduate Laboratory Mentor	3 Student	MWRI	2010
High School Student Mentor	1 Student	MWRI	2010
Undergraduate Laboratory Mentor	8 Students	Carnegie Institution	2003 – 2009
Ethics	faculty and staff	Carnegie Institution	2009
Introduction to Human Disease	30-40 non-majors	Rider University	1997

### RESEARCH:

#### 1. Current Grant Support

Grant Number (Funded)	Grant Title	Role in Project & % of Effort	Years	Source \$ Amount
CMRF (Internal Funding)	Dissection of Meiotic Crossover Checkpoint	PI, 5%	8/1/12 to 7/31/13	\$25,000
March of Dimes #5-FY12-40	Identification of Chromatin Modifying Complexes Required for Meiotic Crossover Formation	PI, 10%	2/1/2012 to 1/31/2014	150,000 Direct \$136,364 Indirect \$13,636
1R01GM104007-01	Characterization of Meiotic Crossover Surveillance System	PI, 25%	3/31/2013 to 2/28/2018	Direct \$1,189,309 Indirect \$202,604

#### Prior Grant Support:

Grant Number (Funded)	Grant Title	Role in Project & % of Effort	Years	Source \$ Amount
K01AG031296	Aging and Meiosis in the Nematode Germline	PI, 75%	3/15/2008 to 2/28/2013	553,018
PA Dept. of Health – Formula Funds	The Impact of Age on the Nematode Germline	PI, 25%	1/1/10 to 12/31/10	707,099
1F32HD00715 Ruth L. Kirschstein NRSA			2000-2003	

#### 2. Seminars and Invited Lectureships

University of Virginia School of Medicine, Department of Biochemistry and Molecular Genetics, Charlottesville, VA, Deciphering the Recombination Landscape, October 25, 2012  
 The Simons Center for Systems Biology, Institute for Advanced Study, Princeton, New Jersey, X and the Art of Crossover Maintenance, June 2012  
 University of Pittsburgh, Dept. of Genetics, X and the Art of Crossover Maintenance, January 2012  
 Rutgers, Dept. of Genetics, Research Seminar, December 2011  
 Case Western Reserve, Dept. of Genetics, Research Seminar, October 2011  
 University of Pittsburgh, Senior Vice-Chancellor's Research Series, September 2011  
 William and Mary, Dept. of Biology, Research Seminar, April 2011  
 Cleveland State University, Research Seminar, March 2011

The Hospital for Sick Children, Research Seminar, December 2010  
Max F. Perutz Laboratories, Dept. of Chromosome Biology, Research Seminar, December 2010  
Cold Spring Harbor Germ Cell Meeting, 2010  
Children's Hospital of Pittsburgh, Molecular Medicine Research Seminar, May 2010  
University of California, San Francisco, Center for Reproductive Sciences, May 2010  
University of Pittsburgh School of Medicine, Department of Microbiology & Molecular Genetics, April 2010  
Johns Hopkins University, Department of Biology, March 2009  
University of Iowa, Department of Biology, March 2009  
Johns Hopkins University School of Public Health, March 2009  
University of Maryland School of Medicine, February 2009  
Meiosis Gordon Conference, 2008  
Haverford College, Department of Biology, May 2008  
Southeast Regional SDB Meeting, Speaker and Session Chair, April 2008  
Baltimore Area Repair Symposium: DNA Repair in Cell Biology, Immunology and Cancer, March 2008  
GSA: Model Organisms to Human Biology, 2008  
Princeton University, Department of Molecular Biology, Developmental Colloquium, 2006  
Loyola College, Department of Biology, 2003, 2006  
International *C. elegans* research conference, plenary talk, 2003  
Bucknell University, Department of Biology, 1998  
Drosophila Research Conference, 1998

**3. Other Research Related Activities**

Meetings: Co-organizer, Mid-Atlantic Society for Developmental Biology Regional Meeting, 2011  
Journal Referee: Genetics, Molecular Biology of the Cell, Nature, Developmental Biology, DNA Repair  
Editorial Board of International Scholarly Research Network (ISRN) Genetics, August 2012 to current

**LIST of CURRENT RESEARCH INTERESTS:**

Understanding the underlying causes of chromosome missegregation during the formation of egg and sperm. Specific research interests include the role of chromatin factors in regulating chromosome behavior during the first meiotic division.