Dec 2021
(FSU, full CV)

# HENRY (HANK) WYMAN BASS
## Curriculum Vitae


**Address:** Department of Biological Science
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**WWW:**

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|---|---|---|
| Lab: | http://bio.fsu.edu/bass | |
| Projects: | http://www.cytomaize.org | Cytogenetic Map of Maize |
| | http://www.maizenucleosome.org | Maize Chromatin Profiling |
| Resources: | http://www.genomaize.org/ | Maize genomes on UCSC browser |
| | http://omero.bio.fsu.edu/ | Microscopy image client-server |


**Research Interests:**

Maize (corn, *Zea mays* L.) is used as a model genetic system to investigate fundamental questions of inheritance and the nature of genetic material at the cellular and molecular level. Research areas include the role of telomeres and the nuclear envelope-associated LINC complex in meiotic chromosome dynamics and segregation, the functional genomics of chromatin structure using genome-wide profiling, and G-quadruplex/G4 DNA and guanine modification in gene regulation associated with energy stress, and meiotic chromosome behavior in hop. Experimental approaches include genetics, molecular biology, 3D fluorescence microscopy, structural and functional genomics, epigenomics, and bioinformatics.

**Education:**

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| A.A. 1982 | Oxford College of Emory University, Oxford, GA |
| B.S. 1985 | Plant Pathology, University of Georgia, Athens, GA |
| 1985 – 1987 | Non-Program Research Technician & Student, Univ. of Georgia, Athens, GA |
| Ph.D. 1992 | Botany/Plant Physiology, North Carolina State University, Raleigh, NC |

**Employment:**

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|---|---|
| 2016 – | Professor of Biological Science,<br>Florida State University, Tallahassee, FL, USA. |
| 2005 – 2016 | Associate Professor of Biological Science,<br>Florida State University, Tallahassee, FL, USA. |
| 1997 – 2005 | Assistant Professor of Biological Science,<br>Florida State University, Tallahassee, FL, USA. |
| 1998 – | Molecular Biophysics Graduate Faculty,<br>Florida State University, Tallahassee, FL, USA. |

1998 – Courtesy Assistant Professor, Horticultural Sciences Department, University of Florida, Gainesville, FL, USA.

1994 – 1997 Postdoctoral Fellow of the Life Sciences Research Foundation, D.O.E.

1992 – 1997 Postdoctoral research, with W. Zacheus Cande and John W. Sedat UC Berkeley and UCSF, San Francisco, CA, USA.
*3D molecular cytology of meiosis in maize.*

1987 – 1992 Graduate Research Assistantship, with Dr. Rebecca S. Boston, Botany Department, North Carolina State University, Raleigh, NC, USA.
Ph.D. Thesis: *Plant molecular biology and biochemistry of maize ribosome-inactivating proteins.*

1985 – 1987 Research Scientist and Lab Technician; with Dr. Glenn A. Galau, Botany Department, University of Georgia, Athens, GA, USA.
*Molecular biology of cotton* LEA *genes*.

## RESEARCH

### Grants received as PI or co-PI at FSU:

**1998**
Amount: **$ 10,000** (Project Period: 05/1998 – 08/1998)
Source: **FSU-FYAP**
Award Info.: FSU - First-Year Assistant Professor award.

**1999 – 2001**
Amount: **$ 100,000** (Project Period: 08/1999 – 08/2001)
Source: **FSU, PEG-1999**
Title: *Creation of a New Cytogenetic Map for Maize*
Award Info.: FSU Research Foundation Cornerstone Program Enhancement Grant (PEG) award.

**2000 – 2001**
Amount: **$ 10,000** (Project Period: 11/2000 – 11/2001)
Source: **FSU, CRC-PG**
Title: *DNA Microarray Project*
Award Info.: FSU Council on Research and Creativity – Planning Grant.

**2001 – 2002**
Amount: **$ 20,000** (Project Period: 05/2001 – 04/2002)
Source: **DOE, CPBR** (Award # OR22072-102)
Title: *Fellowship for Development of Map-based Cloning for Maize*
Award Info.: Dept. of Energy, via The Consortium for Plant Biotechnology Research Inc. (CPBR), for Graduate Fellowship (GL Koumbaris).

**2001 – 2005**
Amount: **$ 360,000** (Project Period: 04/2001 – 03/2005)
Source: **NSF, MCB** (NSF MCB Award #0091095)
Title: *Analysis of Meiotic Telomere Functions*
Award Info.: plus REU (Research Experience for Undergraduates) supplements
#0139115, **$ 6,995**, 09/2001 – 08/2002 (Hay & Steele)
#0244008, **$ 15,000**, 10/2002 – 9/2003 (Figueroa, Hay, & Jones).

**2003 – 2009**
Amount: **$ 1,602,452** (9/2003 – 8/2009)
Source: **NSF, PGRP** (NSF DBI Award #0321639)
Title: *Cytogenetic Map of Maize*

Project URL: http://www.cytomaize.org
Award Info.: NSF Plant Genome Research Program – Individual Small Grant Award (ISGA). Includes two supplemental funding awards:
$46,720 (3/2006 – 8/2007), RFLP probe sequence project
$6,750 (7/2007 – 8/2008), NSF-REUs (Davis & Beckham).

**2008 – 2009** Amount: **$ 12,000** (Project Period: 04/2008 – 05/2009)
Source: **FSU, CRC-PG**
Title: *New Reagents for Localization of Maize SMH1 Protein In Vivo*
Award Info.: FSU Council on Research and Creativity – Planning Grant.

**2010 – 2013** Amount: **$ 1,529,900** (Project Period: 09/2010 – 08/2013)
Source: **NSF, PGRP** (NSF IOS Award #1025954)
Title: *Chromatin Structure and Genome Response in Maize*
Project URL: http://www.maizenucleosome.org
Award Info.: NSF Plant Genome Research Program – Genome Enabled Plant Research (GEPR) award.
Lead PI: HW Bass
FSU Co-PIs: JH Dennis, KM McGinnis
FAMU Co-PI: OU Onokpise.

**2012 – 2015** Amount: **$ 230,248** (Project Period: 10/2012 – 09/2015)
Source: **NSF, OCI** (NSF OCI Award #1245758)
Title: *NoleNet Express Lane -- a private network path for research data transmission at Florida State University and beyond.*
Award Info.: NSF CC-NIE Network Infrastructure award
Lead PI: MG Barrett
Co-PIs: HW Bass, AR Lemmon, SM Stagg, and JC Wilgenbusch

**2013 – 2014** Amount: **$ 12,000** (Project Period: 12/2013 – 12/2014)
Source: **FSU, CRC-PG**
Title: *G-Quadruplex Tools for Plant Energy Crisis Research*
Award Info.: Council on Research and Creativity (CRC) / Cornerstone Planning Grant (PG) Program.

**2015** Amount: **$ 8,500** (Project Period: 03/2015 – 09/2015)
Source: **Danforth Foundation**
Title: *Chromatin Profile of W22 Maize Seedling Shoot by DNS-SEQ*
Award Info.: Lead PI: HW Bass
Co-PI: DL Vera (FSU CGPM)

**2015 – 2021** Amount: **$ 2,133,825** (Project Period: 08/2015 – 07/2021)
Source: **NSF PGRP** (NSF IOS Award #1444532)
Title: *Nuclease Profiling as an Integrative Resource for Maize Epigenomics*
Award Info.: NSF Plant Genome Research Program – Resource Development Award
Lead PI: HW Bass
FSU co-PIs: JH Dennis, J Zhang, DL Vera
FAMU co-PIs: OU Onokpise, V Tsolova

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| **2016** | Amount: | **$11,540** (Project Period: 2016) |
| | Source: | **FSU, Tech-Fee** |
| | Title: | *OMERO Image Analysis Server for Biology Classes* |
| | Award Info.: | Student Technology Fee Funding to Enhance Instructional Technology, for Biological Science (Fund 615-TFBIOS16167) HW Bass, A Stuy, K Hawkins, J McCoy (Biological Science) |
| **2017** | Amount: | **$134,310** (Project Period: 2017-2019) |
| | Source: | **Hopsteiner - S.S. Steiner, Inc.** (FSU OMNI ID: 0000030675) |
| | Title: | *Cytogenetic Analysis of Humulus lupulus*. |
| | Award Info.: | Award to support graduate research hops chromosome research HW Bass & KA Easterling (FSU), Paul Matthews (Hopsteiner) |
| **2017 – 2018** | Amount: | **$ 12,910** (Project Period: 12/2017 – 2/2019) |
| | Source: | **FSU, CRC-PG** |
| | Title: | *Cytogenetic FISH Probes for Hop Genome Diagnostics* |
| | Award Info.: | Council on Research and Creativity (CRC) / Planning Grant (PG) Program. |
| **2020** | Amount: | **€ 10,000** (Project Period: 2020) |
| | Source: | Bayer Grants4traits program. |
| | Title: | *Maize epigenomic response to flooding-induced hypoxia* |
| | Award Info.: | Appl. No.: 2019-01-057 approved November 22nd, 2019 |
| **2020** | Amount: | **$ 20,000** (Project Period: 5/2020 – 8/2020) |
| | Source: | FSU Collaborative Collision Seed Fund COVID. |
| | Title: | *CCSF Covid: siRNAs for Coronavirus Gene Knock-Out Research* |
| | Award Info.: | 045686, FSU intramural pilot grant for coronavirus research Awardees: PI HW Bass; Co-PIs JH Dennis, J Guan, J Ali |
| **2020** | Amount: | **$1,825,302** (Project Period: 9/2021 – 8/2023) |
| | Source: | NSF Plant Genome Research Program (HW Bass, a co-PI) |
| | Title: | *Comparative genomic and spatial organization of DNA replication in Maize and Sorghum* |
| | Award Info.: | PI L Hanley-Bowdoin (NCSU), NSF IOS 2025811 |

**Awards and Patents:**

Awards

1989 Sigma Xi Annual Award for Group Research, University of Georgia Sigma X

2002 Performance-based bonus award for Arts and Sciences Faculty for 2001 – 2002.

2008 Beta Beta Beta Biological Honor Society Honorary Professor of the Year

Patents

1994 Co-inventor, U.S. Patent No. 5,332,808 issued 07/26/1994,
DNA encoding a ribosome inactivating protein. Boston, Bass, and OBrian.

1996 Co-inventor, U.S. Patent No. 5,552,140 issued 09/03/1996,
DNA encoding a ribosome-inactivating protein. Boston, Bass, and OBrian.

2006 Co-inventor, U.S. Patent No. 7,074,985 issued 07/11/2006
Development of a Stress-Responsive promoter from maize.
Helentjaris, Bass, and Boston

## Refereed Publications:

**Online Publication Lists:**

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|---|---|
| Bass' FSU pubs page: | http://fla.st/2G6ax5K |
| *Google Scholar*: | https://scholar.google.com/citations?user=upavIREAAAAJ&hl=en |
| *NCBI PubMed*: | https://www.ncbi.nlm.nih.gov/pubmed/?term=Bass+HW%5BAuthor%5D |
| *ORCID*: | http://orcid.org/0000-0003-0522-0881 |
| *Research Gate*: | https://www.researchgate.net/profile/Hank_Bass |

Galau GA, Bass HW, and Hughes DW. (**1988**) Restriction fragment length polymorphisms in diploid and allotetraploid *Gossypium*: assigning the late embryogenesis-abundant (*Lea*) alloalleles in *G. hirsutum*. ***Molecular and General Genetics*** **211**:305–314.

Wyatt R, Odrzykoski IJ, Stoneburner A, Bass HW, and Galau GA (**1988**) Multiple origins of *Plagiomnium medium*. ***Proceedings National Academy Sciences, USA*** **85**:5601–5604.

Bass HW, Webster C, OBrian GR, Roberts JKM, and Boston RS (**1992**) A maize ribosome-inactivating protein is controlled by the transcriptional activator *Opaque-2*. ***Plant Cell*** **4**:225–234.

Bass HW, Goode JH, Greene TW, and Boston RS (**1994**) Control of ribosome-inactivating protein (RIP) RNA levels during maize seed development. ***Plant Science*** **101**:17–30.

Bass HW, OBrian GR, and Boston RS (**1995**) Cloning and sequencing of a second ribosome-inactivating protein gene from maize (*Zea mays* L.). ***Plant Physiology*** **107**:661–662.

Gillikin JW, Zhang F, Coleman CE, Bass HW, Larkins BA, and Boston RS (**1997**) A defective signal peptide tethers the *floury-2* zein to the ER-membrane. ***Plant Physiology*** **114**:345–352.

Bass HW, Marshall WF, Sedat JW, Agard DA, and Cande WZ(**1997**) Telomeres cluster *de novo* before the initiation of synapsis: a three-dimensional spatial analysis of telomere positions before and during meiotic prophase. ***Journal Cell Biology*** **137**:5–18.

Wein H, Bass HW, and Cande WZ (**1998**) DSK1, a kinesin-related protein involved in anaphase spindle elongation, is a component of the mitotic spindle matrix. ***Cell Motility Cytoskeleton*** **41**:214–224.

Bass HW, Nagar S, Hanley-Bowdoin L, and Robertson D (**2000**) Chromosome condensation induced by geminivirus infection of mature plant cells. ***Journal Cell Science*** **113**(7):1149–1160.

Bass HW, Riera-Lizarazu O, Ananiev EV, Bordoli SJ, Rines HW, Phillips RL, Sedat JW, Agard DA, and Cande WZ (**2000**) Evidence for the coincident initiation of homolog pairing and synapsis during the telomere-clustering (bouquet) stage of meiotic prophase. ***Journal Cell Science*** **113**(6):1033–1042.

Ring BC, Bass HW, and Garza D (**2000**) Construction and transposition of a 100-kilobase "extended" P element in *Drosophila*. ***Genome Research*** **10**:1605–1616

Bass HW, Bordoli SJ, and Foss EM (**2003**) The *desynaptic* (*dy*) and *desynaptic1* (*dsy1*) mutations in maize (*Zea mays* L.) cause distinct telomere-misplacement phenotypes during meiotic prophase. ***Journal Experimental Botany*** **54**(380):39–46

Franklin AE, Golubovskaya IN, Bass HW, and Cande WZ (**2003**) Improper chromosome synapsis is associated with elongated Rad51 structures in the maize *desynaptic2* mutant. ***Chromosoma*** **112**:17–25.

Koumbaris GL and Bass HW (**2003**) A new single-locus cytogenetic mapping system for maize (*Zea mays* L.): overcoming FISH detection limits with marker-selected sorghum (*S. propinquum* L.) BACs clones. ***Plant Journal*** **35**:647–659.

Marian CO, Bordoli SJ, Goltz M, Santarella RA, Jackson LP, Danilevskaya O, Beckstette M, Meeley R, and Bass HW (**2003**) The maize *Single myb histone 1* Gene, *Smh1*, belongs to a novel gene family and encodes a protein that binds telomere DNA repeats in vitro. ***Plant Physiology*** **133**:1336–1350.

Bass HW (**2003**) Review: Telomere dynamics unique to meiotic prophase: formation and significance of the bouquet. ***Cellular and Molecular Life Sciences (CMLS)*** **60:**2319–2324.

Palko L, Bass HW, Beyrouthy MJ, and Hurt MM. (**2004**) The Yin Yang-1 (YY1) protein undergoes a DNA replication-associated switch in location from the cytoplasm to the nucleus at the onset of S phase. ***Journal Cell Science*** **117**:465–476.

Anderson LK, Salameh N, Bass HW, Harper LC, Cande WZ, Weber G, and Stack SM. (**2004**) Integrating genetic linkage maps with pachytene chromosome structure in maize. ***Genetics*** **166**(4):1923 – 1933.

Bass HW, Krawetz JE, OBrian GR, Zinselmeier C, Habben JE, and Boston RS. (**2004**) Maize ribosome-inactivating proteins (RIPs) with distinct expression patterns have similar requirements for proenzyme activation. ***Journal Experimental Botany*** **55**(406)2219–2233.

Marian CO and Bass HW (**2005**) The *Terminal acidic SANT 1* (*Tacs1*) gene of maize is expressed in tissues containing meristems and encodes an acidic SANT domain similar to some chromatin-remodeling complex proteins. ***Biochemica Biophysica Acta – Gene Structure and Expression*** **1727**(2):81–86.

Lawrence CJ, Seigfried TE, Bass HW, and Anderson LK. (**2006**) Predicting chromosomal locations of genetically mapped loci in maize using the *Morgan2McClintock* translator. ***Genetics*** 173(3):2007–2009.

Amarillo FE and Bass HW. (**2007**) A transgenomic cytogenetic sorghum (*Sorghum propinquum*) BAC FISH map of maize (*Zea mays* L.) pachytene chromosome 9, evidence for regions of genome hyperexpansion. ***Genetics*** (Nov)177:1509–1526.

Okagaki RJ, Jacobs MS, Stec AO, Kynast RG, Buescher E, Rines HW, Isabel Val es MI, Riera-Lizarazu O, Schneerman M, Doyle G, Friedman KL, Staub RW, Weber DF, Kamps TL, Amarillo IFE, Chase CD, Bass HW, and Phillips RL. (**2008**) Maize centromere mapping: A comparison of physical and genetic strategies. ***Journal Heredity*** 99(2):85–93.

Beyrouthy MJ, Alexander KE, Baldwin A, Whitfield ML, Bass HW, McGee D, and Hurt MM. (**2008**) Identification of G1-Regulated Genes in Normally Cycling Human Cells. ***PLoS ONE*** 3(12): e3943. DOI: 10.1371/journal.pone.0003943.

Figueroa DM and Bass HW. (**2010**) Review: A Historical and Modern Perspective on Plant Cytogenetics. ***Briefings in Functional Genomics*** 9(2):95–102. DOI: 10.1093/bfgp/elp058.

Murphy SP, Simmons C, and Bass HW. (**2010**) Structure and expression of the maize (*Zea mays* L.) SUN-domain protein gene family: evidence for the existence of two divergent classes of SUN proteins in plants. ***BMC Plant Biology*** 10:269. DOI: 10.1186/1471-2229-10-269.

Figueroa DM, Davis JD, Strobel CE, Conejo MS, Beckham KD, Ring BC, and Bass HW. (**2011**) The Selection and Use of Sorghum (*Sorghum propinquum*) Bacterial Artificial Chromosomes as Cytogenetic FISH Probes for Maize (*Zea mays* L.)." ***Journal Biomedicine and Biotechnology*** Article ID 386862, 16 pages. DOI: 10.1155/2011/386862.

Huang H, Stvilia B, Jörgensen C, and Bass HW. (**2011**) Prioritization of Data Quality Dimensions and Skills Requirements in Genome Annotation Work. ***Journal Society for Information Science and Technology*** 63(1):195–207. DOI: 10.1002/asi.21652.

Brown AN, Lauter N, Vera DL, McLaughlin-Large KA, Steele TM, Freddete NC, and Bass HW. (**2011**) QTL mapping and candidate gene expression analysis of telomere length control factors in maize (*Zea mays* L.). ***G3: Genes, Genomes, Genetics*** 1(6):437–450. DOI: 10.1534/g3.111.000703. 10.1534/g3.111.000703.

Murphy SP and Bass HW. (**2012**) The maize (*Zea mays* L.) *desynaptic* (*dy*) mutation defines a pathway for meiotic chromosome segregation linking nuclear morphology, telomere distribution, and synapsis. ***Journal Cell Science*** 125(15):3681–3690. DOI: 10.1242/jcs.108290.

Figueroa DM and Bass HW. (**2012**) Development of pachytene FISH maps for six maize chromosomes and their integration with other maize maps for insights into genome structure variation. ***Chromosome Research*** 20(4):363–380. DOI: 10.1007/s10577-012-9281-4. DOI: 10.1007/s10577-012-9281-4)

Howe EH, Clemente TE, and Bass HW. (**2012**) Maize histone H2B-mCherry, a new fluorescent chromatin marker for somatic and meiotic chromosome research. ***DNA and Cell Biology*** 31(6):925-938. DOI: 10.1089/dna.2011.1514. DOI: 10.1089/dna.2011.1514.

Graumann K, Bass HW, and Parry G. (**2013**) Review: SUNrises on the International Plant Nucleus Consortium: SEB Salzburg 2012. ***Nucleus*** 4(1):3–7. DOI: 10.4161/nucl.23385.

Fincher JA, Vera DL, Hughes DD, McGinnis KM, Dennis JH, and Bass HW. (**2013**) Genome-wide prediction of nucleosome occupancy in maize (*Zea mays* L.) highlights chromatin structural features at multiple scales. ***Plant Physiology*** 162(2):1127–1141 DOI: 10.1104/pp.113.216432.

Bass HW, Wear EE, Lee T-J, Hoffman GG, Gumber HK, Allen GC, Thompson WF, and Hanley-Bowdoin L. (**2014**) A maize root tip system to study DNA replication programmes in somatic and endocycling nuclei during plant development. ***Journal Experimental Botany*** 65:2747–2756. DOI: 10.1093/jxb/ert470

Murphy SP, Gumber HK, Mao YY, and Bass HW. (**2014**) A dynamic meiotic SUN belt includes the zygotene-stage telomere bouquet and is disrupted in chromosome segregation mutants of maize (*Zea mays* L.). ***Frontiers in Plant Science*** 5:314 DOI: 10.3389/fpls.2014.00314.

Andorf CM, Kopylov M, Dobbs D, Koch KE, M. Stroupe ME, Lawrence CJ, and Bass HW. (**2014**) G-quadruplex (G4) motifs in the maize (*Zea mays* L.) genome are enriched at specific locations in thousands of genes coupled to energy status, hypoxia, low sugar, and nutrient deprivation. ***Journal of Genetics and Genomics (JGG)*** 41(12):627–647 DOI: 10.1016/j.jgg.2014.10.004.

Vera DL, Madzima TF, Labonne JD, Alam MP, Hoffman GG, Girimurugan SB, Zhang J, McGinnis KM, Dennis JH, and Bass HW. (**2014**) Differential nuclease sensitivity profiling of maize chromatin reveals biochemical footprints coupled to gene expression and functional DNA elements. ***Plant Cell*** 26(10):3883–3893 DOI: 10.1105/tpc.114.130609.

Kopylov M, Bass HW, and Stroupe ME. (**2015**) The maize (*Zea mays* L.) *nucleoside diphosphate kinase1* (*ZmNDPK1*) gene encodes a human NM23-H2 homolog that binds and stabilizes G-quadruplex DNA. ***Biochemistry*** 54(9):1743–1757 DOI: 10.1021/bi501284g.

Bass HW, Hoffman GG, Lee T-J, Wear EE, Joseph SR, Allen GC, Hanley-Bowdoin LK, and Thompson WF. (**2015**) Defining multiple, distinct, and shared spatiotemporal patterns of DNA replication and endoreduplication from 3D image analysis of developing maize (*Zea mays* L.) root tip nuclei. ***Plant Molecular Biology*** 89(4):339–351 DOI: 10.1007/s11103-015-0364-4.

Rodgers-Melnick E, Vera DL, Bass HW, and Buckler ES. (**2016**) Open chromatin reveals the functional maize genome. ***Proceedings of the National Academy of Sciences, U.S.A.*** 113(22): E3177–E3184 DOI: 10.1073/pnas.1525244113.

Savadel SD and Bass HW. (**2017**) Review: Take a Look at Plant DNA Replication: Recent Insights and New Questions. ***Plant Signaling & Behavior*** 12:4, e1311437 DOI: 10.1080/15592324.2017.1311437.

Zhang D, Easterling KA, Pitra NJ, Coles MC, Buckler ES, Bass HW, and Matthews PD. (**2017**) Non-Mendelian SNP inheritance and atypical meiotic configurations are prevalent in hop (*Humulus lupulus* L.) ***The Plant Genome*** 10(3):14pp DOI: 10.3838/plantgenome2017.04.0032.

Griffin BD and Bass HW. (**2018**) Review: Plant G-quadruplex (G4) motifs in DNA and RNA; abundant, intriguing sequences of unknown function. ***Plant Science*** 269:143–147 DOI: 10.1016/j.plantsci.2018.01.011.

Girimurugan S, Liu Y, Lung P-Y, Vera DL, Dennis JH, Bass, HW, and Zhang J. (**2018**) iSeg: an efficient algorithm for segmentation of genomic and epigenomic data. ***BMC Bionformatics*** 19(131):(15 pp) DOI: 10.1186/s12859-018-2140-3.

Springer NM, Anderson SN, Andorf CM, Ahern KR, Bai F, Barad O, Barbazuk WB, Bass HW, Baruch K, Ben-Zvi G, Buckler ES, Bukowski R, Campbell MS, Cannon EKS, Chomet P, Dawe RK, Davenport R, Dooner HK, Du LH, Du C, Easterling KA, Gault C, Guan JC, Hunter CT, Jander G, Jiao Y, Koch KE, Kol G, Kollner TG, Kudo T, Li Q, Lu F, Mayfield-Jones D, Mei W, McCarty DR, Noshay JM, Portwood JL, 2nd, Ronen G, Settles AM, Shem-Tov D, Shi J, Soifer I, Stein JC, Stitzer MC, Suzuki M, Vera DL, Vollbrecht E, Vrebalov JT, Ware D, Wei S, Wimalanathan K, Woodhouse MR, Xiong W, Brutnell TP. (**2018**) The maize genome provides a foundation for functional genomics and transposon biology. ***Nature Genetics*** 50 (9):1282–1288 DOI: 10.1038/s41588-018-0158-0.

Turpin ZM, Vera DL, Savadel SD, Lung P-Y, Wear EE, Mickelson-Young L, Thompson WF, Hanley-Bowdoin L, Dennis JH, Zhang J, and Bass, HW. (**2018**) Chromatin Structure Profile Data from DNS-seq: Differential Nuclease Sensitivity Mapping of Four Reference Tissues of B73 Maize (*Zea mays* L). ***Data in Brief*** 20:358–363 DOI: 10.1016/j.dib.2018.08.015.

Easterling KA, Pitra NJ, Jones RJ, Lopes LG, Aquino JR, Dong Z, Matthews PD, and Bass HW. (**2018**) 3D Molecular Cytology of Hop (*Humulus lupulus*) Meiotic Chromosomes Reveals

Non-disomic Pairing and Segregation, Aneuploidy, and Genomic Structural Variation. ***Frontiers in Plant Science*** 9:1501(13pp) DOI: 10.3389/fpls.2018.01501.

Gumber HK, McKenna JF, Estrada AL, Tolmie AF, Graumann K, and Bass HW. (**2019**) Identification and characterization of genes encoding the nuclear envelope LINC complex in the monocot species *Zea mays*" ***Journal of Cell Science*** 132(3):jcs221390 (10.1242/jcs.221390). With associated feature article: *First Person - Hardeep Gumber*. ***Journal of Cell Science*** 132(3):jcs221390. DOI: 10.1242/jcs.230219.

Gumber HW, McKennna JF, Tolmie AF, Jalovec AM, Kartick AC, Graumann K, and Bass HW. (**2019**) MLKS2 is an ARM domain and F-actin-associated KASH protein that functions in stomatal complex development and meiotic chromosome segregation. ***Nucleus*** 10(1):144-166. DOI: 10.1080/19491034.2019.1629795.

Dumur T, Duncan S, Graumann K, Desset S, Randall RS, Mittelsten Scheid O, Bass HW, Prodanov D, Tatout C, and Baroux C. (**2019**) Probing the 3D architecture of the plant nucleus with microscopy approaches: challenges and solutions. ***Nucleus*** 10(1):181-212. DOI: 10.1080/19491034.2019.1644592.

Wheeler E, Brooks AM, Concia L, Vera DL, Wear EE, LeBlanc C, Ramu U, Vaughn MW, Bass HW, Martienssen RA, Thompson WF, and Hanley-Bowdoin L. (**2020**) *Arabidopsis* DNA replication initiates in intergenic, AT-rich open chromatin. ***Plant Physiology*** 183:206-220. DOI: 10.1104/pp.19.01520.

Easterling KA, Pitra NJ, Morcol TB, Aquino JR, Lopes LG, Bussey KC, Matthews PD, and Bass HW. (**2020**) Identification of Tandem Repeat Families from Long-Read Sequences of *Humulus lupulus*. ***PLoS ONE*** 15(6): e0233971 DOI: 10.1371/journal.pone.0233971.

Parvathaneni RK, Bertolini E, Shamimuzzaman M, Vera DL, Lung P-Y, Rice BR, Zhang J, Brown PJ, Lipka AE, Bass HW, and Eveland AL. (**2020**) The regulatory landscape of early maize inflorescence development. ***Genome Biology*** Jul 6;21(1):165. DOI: 10.1186/s13059-020-02070-8.

McKenna* JF, Gumber* HK, Turpin ZM, Jalovec AM, Kartick AC, Graumann K, and Bass HW. (**2021**) Maize (*Zea mays* L.) nucleoskeletal proteins regulate nuclear envelope remodeling and function in stomatal complex development and pollen viability. (* equal contribution); ***Frontiers in Plant Science*** February 2021 | Volume 12 | Article 645218. DOI: 10.3389/fpls.2021.645218.

Park M, Williams DS, Turpin ZM, Wiggins ZJ, Tsolova VM, Onokpise OU, and Bass HW. (**2021**) Differential nuclease sensitivity profiling uncovers a drought responsive change in maize leaf chromatin structure for two large retrotransposon derivatives, *Uloh* and *Vegu*. ***Plant Direct*** 5(8), e337. DOI: doi.org/10.1002/pld3.337).

Savadel* SD, Hartwig* T, Turpin ZM, Vera DL, Lung P-Y, Sui X, Blank M, Frommer WB, Dennis JH, Zhang J, and Bass HW. (**2021**) The native cistrome and sequence motif families of the maize ear. (* equal contribution) ***PLOS Genetics*** 17(8): e1009689. DOI: 10.1371/journal.pgen.1009689.

**Books, Book Chapters, Newsletters, and other non-refereed Articles:**

Bass HW, Sisco PH, Murray DL, and Boston RS (**1990**) Probes for the b-32 protein hybridize to loci on 7L and 8L. *Maize Genetics Newsletter* **64**:97.

Shank BB, Bass HW, Sisco PH, Wurtzel E, and Boston RS (**1990**) Isolation and mapping of a cDNA probe for the b-70 protein. *Maize Genetics Newsletter* **64**:97.

Bass, HW (**1990**) A simple, efficient method for plaque purifying lambda phage clones by filter hybridizations. *The Plant Molecular Biology Promoter (N.C.)* **1**:24–25.

Dernburg AF, Sedat JW, Cande WZ, and Bass HW (**1995**) Cytology of telomeres. In *Telomeres* (ed. E. H. Blackburn and C. W. Greider), pp. 295 – 338. Cold Spring Harbor Lab Press, Plainview, N.Y.

Bass HW (**2001**) Chromosomes. In *Plant Sciences for Students* (ed. R. Robinson), MacMillan References, USA.

Bass HW, Kang LC, and Eyzaguirre A (**2001**) Tom Thumb, a useful popcorn. *Maize Genetics Newsletter* **75**:62–63.

Bass HW and Bordoli SJ (**2001**) Variable distribution of meiotic homologs; on-line spinning projections of 3D data from chromosome painting and telomere FISH analysis of OMAd9.2. *Maize Genetics Newsletter* **75**:63.

Koumbaris G and Bass HW (**2002**) Pachytene arm ratios for maize chromosome 9 in OMAd9.2, a maize chromosome addition line of oat. *Maize Genetics Newsletter* **76**:62–63.

Bass HW (**2003**) Multi-author review (MAR) introduction: The conservation and divergence of telomeric structures, effects, and functions. *Cellular and Molecular Life Science (CMLS)* **60**:2281-2282.

Bassie YR, Onokpise OU, WE Odland, and Bass HW (**2004**) FISH analysis of retroelement distribution patterns along mitotic chromosomes. *Maize Genetics Newsletter* **78**:59.

Figueroa DM and Bass HW (**2004**) The *Single myb histone* (*Smh*) gene family of maize; detection of two PCR products from maize with primers for *Smh1*. *Maize Genetics Newsletter* **78**:58-59.

Birchler JA and Bass HW (**2009**) Cytogenetics and chromosomal structural diversity. In *The Maize Handbook, Volume II: Domestication, Genetics and Genomics*, (eds. J Bennetzen and S Hake); Springer, USA. Pp. 163-177.

Bass HW (**2009**) editor for "Chapter 9. Chromosomes" in *Lewin's GENES X* (eds. JE Krebs, ES Goldstein, and ST Kilpatrick); Jones and Bartlett Publishers.

Forde AJ, Applewhite HS, and Bass HW (**2009**) A Laboratory and Field Survey of Leaf Feeding Resistance in Diverse Maize Inbred Lines. *Maize Genetics Newsletter* **83**:48-49.

Moore JM and Bass HW (**2010**) A recombinant C-terminal fragment of maize Initiator Binding Protein 2 (IBP2) binds to telomere-repeat DNA *in vitro*. *Maize Genetics Newsletter* **84**.

Figueroa DM, Amarillo FE, and Bass HW (**2012**) "Cytogenetic Mapping in Plants"; in Plant Cytogenetics (eds. HW Bass and JA Birchler); Plant Genetics and Genomics: Crops and Models, Springer New York, Volume 4, Part 1, 79-119, DOI: 10.1007/978-0-387-70869-0_4.

Murphy SP and Bass HW (**2012**) "Genetics and Cytology of Meiotic Chromosome Behavior in Plants"; in Plant Cytogenetics (eds. HW Bass and JA Birchler); Plant Genetics and Genomics: Crops and Models, Springer New York, Volume 4, Part 2, 193-229, DOI: 10.1007/978-0-387-70869-0_8.

Howe ES, Murphy SP, and Bass HW (**2013**) "Three-dimensional acrylamide fluorescence in situ hybridization (FISH) for plant cells"; in Methods in Molecular Biology: Plant Meiosis (eds. WP Pawlowski, M Grelon, and S Armstrong); Springer New York Volume 990, pp 53-66.

Bass HW and Onokpise OU (**2018, 2019**) *Crazy Lazy Corn!!!* (eds. HW Bass and OU Onokpise); Tallahassee, FL: Sokhechapke Publishing, Inc., 63 pg.

**Invited Seminars & Lectures (non-conference/meeting seminars), 1998 – present:**

Pioneer Hi-Bred, *3D Molecular Cytology of Meiotic Telomere Behavior in Maize.* Host Dr. Olga Danilevskaya, Des Moines, IA, (Apr. **2000**).

Annual Meeting of the American Society of Agronomy, Crop Science Society of America, and the Soil Science Society of America; Symposium on Plant Cytogenetics in the New Millennium, *3D cytogenetics of telomere behavior and chromosome pairing during meiosis*." Organizers Dr. B. Gill & Dr. J. Jiang, Minneapolis, MN, (Jan. **2001**).

Department of Agronomy, University of Florida, *Analysis of meiotic telomere functions; 3D cytogenetics in pollen mother cells.* Host M. Gallo-Meagher, Gainesville, FL (Mar. **2001**).

Trinity United Methodist Church, Lay Academy – Hot Topics in Science, *The Human Genome Project*, Host Liz Smith, Tallahassee, FL, (Apr. **2002**).

Annual meeting of the Society for Experimental Biology; *Analysis of meiotic telomere functions in maize.* Organizer Dr. N. Franklin-Tong, Swansea, Wales, (Apr. 8-12, **2002**)

Plant & Animal Genome XI Conference; *Telomere behavior at meiotic prophase in higher plants.* Organizer Dr. H. de Jong, San Diego, CA, (Jan. **2003**).

100th Annual Meeting of the Southern Association of Agricultural Scientists, Biochemistry and Biotechnology Division; *Meiotic Chromosomes in 3D: Structure and Function.* Organizer Dr. Jeffrey O. Boles, Mobile, AL, (Mar. **2003**)

University of Illinois, Dept. of Crop Sciences; *3D analysis of meiotic telomere functions in maize.* Host Dr. Stephen P. Moose, Urbana, IL, (Mar. **2003**)

Texas A & M University, Genetics; *3D FISH Analysis of Meiotic Telomere Clustering in Maize*. Host Dr. Dorothy Shippen, Texas A&M University, TX, (Feb. **2004**)

University of North Dakota, Dept. of Biology; *Analysis of the bouquet stage of meiosis in maize*. Host Dr. William F. Sheridan, Grand Forks, ND, (Apr. **2004**)

University of Nebraska, Lincoln; *Molecular cytology of telomeres and chromosomes during meiosis in maize.* Host Dr. Jim Alfano, Annual Plant Science Fall Retreat, Niobrara State Park; Niobrara, NE, (Sep. **2004**)

University of Florida, Gainesville; *Structure and Function of the Meiotic Prophase Chromosomes of Maize*. Host Dr. Kevin M. Folta, Department of Horticultural Sciences, Gainesville, FL, (Oct. **2006**)

Florida A&M University, Tallahassee; *Structure and Function of the Meiotic Prophase Chromosomes of Maize.* Host Dr. Jiang Lu, Center for Viticulture and Small Fruit Research, FAMU, Tallahassee, FL, (Oct. **2006**)

Florida A&M University, *NSF workshop on plant genetics*. Host CSHL (June **2007**)

University of Florida, *Plant Cytogenetics*, Guest Lecture, Host Dr. Quesenberry (Sep. **2007**)

University of Arizona; *Analysis of Telomeric Proteins in Maize*, Host Dr. Ravi Palanivelu, Department of Plant Sciences, Tucson, AZ, USA (Feb. **2009**)

Iowa State University; *Meiotic Telomere Functions; Lessons from Maize*, Host Dr. Erik Vollbrecht, Genetics Development and Cell Biology, Ames, IA, USA (Nov. **2010**)

North Carolina State University; *Chromatin Structure and Genome Response in Maize*, Host Dr. William F. Thompson, Plant Biology Departmental Seminar, Raleigh, NC (Sep. **2011**)

Instituto de Biología Molecular y Celular de Plantas (IBMCP); *Meiotic telomere behavior and nuclear envelope proteins in maize*, Host Dr. María Purificación Lisón Párraga, Seminario Extraordinario, IBMCP, Valencia, SPAIN (July **2013**)

Florida State University; *There they are! Enhanced chromatin landscape mapping using a new digest-linked variation (DLV) assay,* Host, Dr. Myra Hurt, Biomedical Sciences Departmental Seminar, College of Medicine, Tallahassee, FL, USA (Sep. **2013**)

University of Florida; *Differential Nuclease Sensitivity Mapping of Maize Chromatin*, Host Dr. Karen E. Koch, Interdepartmental Program in Plant Molecular and Cell Biology (PMCB), Gainesville, FL, USA (Jan. **2015**)

University of South Alabama College of Medicine: *Structure-Function Relationships in the Cell Nucleus: Insights from Maize Genomics at Multiple Spatial Scales,* Host Dr. Mark Gillespie, Department of Pharmacology, Mobile, AL, USA (July **2016**)

DOE Joint Genome Institute: *Open chromatin mapping in maize using differential nuclease sensitivity, DNS-seq*, Host Dr. Ronan O'Malley, Genomic Technologies, JGI, Walnut Creek, CA, USA (Dec. **2016**)

University of Illinois: *Structure-Function Relationships in the Plant Cell Nucleus*, Host Dr. Li-Qing Chen, Department of Plant Biology, University of Illinois at Urbana-Champaign, IL, USA (Feb. **2017**)

**Conference, Meeting, or Symposium Presentations:** 1998 – present
* indicates presenting author
TALK indicates Bass lab or group member speaking
**TALK** indicates Bass speaking

**1999**

Cande* WC, AE Franklin, C Cowan, E Kaszas, HW Bass, L Harper, & PM Carlton (TALK) *Meiotic prophase chromosome behavior in maize*. Plant & Animal Genome VII Conf**.,** San Diego; CA, Jan. 17-19, 1999

Bass* HW & D Garza (POSTER) *Development of map-based cloning for maize*. Symposium of the Consortium for Plant Biotechnology Research, Inc.; Washington, D.C. March 2, 1999.

Bass* HW (POSTER) *The development of map-based cloning tools for maize*. Cambridge Healthtech Institute's Second Annual Symposium on Impact of Molecular Biology on Crop Production and Crop Protection; Minneapolis, MN. August, 1999.

BC Ring*, HW Bass, & D Garza (TALK) *In vivo construction and transposition of a 100 Kb P element.* Southeast Drosophila Research Conference; Emory University. Atlanta, GA. Nov 13-14, 1999.

**2000**

D Garza*, BC Ring, S Khatri, C Trivigno, & HW Bass (POSTER) Development *of a new method for functional analysis of the Drosophila genome: In vivo construction and transposition of a 100kb P element*. 41st Annual Drosophila Research Conference; Pittsburgh, PA, March 22-26, 2000.

Bass* HW, MK Goltz, & G Koumbaris (**TALK**) *Analysis of meiotic telomere behavior*. 11th Annual Plant Molecular & Cellular Biology Workshop; Crystal River, FL. May 12-13, 2000.

Palko* L, HW Bass, & MM Hurt (POSTER I-136) *YY1 and histone gene regulation - Temporal changes in cellular localization*. Cell Cycle Meeting, Keystone Symposia, Taos, NM, November 5-9, 2000.

**2001**

Bass* HW, O Danilevskaya, M Goltz, & RA Santarella. (POSTER) *Towards analysis of meiotic telomere functions.* 43rd Annual Maize Genetics Conference; Lake Geneva, WI, February 1, 2001.

Koumbaris* GL & HW Bass. (TALK) *3D FISH analysis of the structure of maize chromosome 9*. Twelfth Annual Plant Molecular & Cellular Biology Workshop; Daytona Beach, FL, May 4-5, 2001.

**2002**

Koumbaris* GL, RD Swofford, & HW Bass. (POSTER) *3D FISH analysis of the structure of maize chromosome 9*. 44th Annual Maize Genetics Conference. Orlando, FL, March 14-17, 2002.

Goltz* MM, RA Santarella, O Danilevskaya, & HW Bass. (POSTER) *Identification of a telomere DNA binding protein in maize*. 44th Annual Maize Genetics Conference; Orlando, FL. March 14–17, 2002.

**2003**

Koumbaris G, RD Swofford, & HW *Bass. (POSTER) *Single-locus cytogenetic mapping in maize (Zea mays); Localization of three maize-RFLP-selected sorghum BACs by FISH with maize chromosome-addition lines of oat*. Plant & Animal Genome XI Conference; San Diego, CA. January 11–15 2003.

Koumbaris GL and HW Bass*. (POSTER) *Single-locus cytogenetic mapping in maize with marker-selected sorghum BACs as FISH probes on pachytene spreads from maize-chromosome-addition lines of oat*. 45th Annual Maize Genetics Conference. Lake Geneva, WI, March 13–15, 2003.

CO Marian*, M Goltz, RA Santarella, O Danilevskaya, R Meeley, & HW Bass (POSTER) *Isolation and characterization of a maize cDNA encoding a telomere repeat DNA oligonucleotide-binding protein*. 45th Annual Maize Genetics Conference. Lake Geneva, WI March 13–15, 2003.

MJ Beyrouthy*, L Palko, KE Alexander, HW Bass & MM Hurt. (POSTER) *Coordinate regulation of YY1 subcellular localization and DNA synthesis*. Cold Spring Harbor Laboratory Meeting; Mechanisms of Eukaryotic Transcription. Cold Spring Harbor, NY, August 27–31, 2003.

Bass* HW, GL Koumbaris, & CJ Lawrence (POSTER) *A Cytogenetic Map of Maize with Sorghum BAC FISH Probes.* NSF Plant Genome Research Program Awardee Meeting, Arlington VA, September 18–21, 2003.

CJ Lawrence*, GL Koumbaris, HW Bass, TE Seigrired, & V Brendel (POSTER B687) *Cytogenetic Mapping and Cellular Localization Data Available at MaizeGDB.* 43rd Annual Meeting of the American Society for Cell Biology, San Francisco, CA, December 13–17, 2003.

**2004**

MJ Beyrouthy*, HW Bass, L Palko, & MM Hurt (POSTER) *The Yin Yang-1 (YY1) protein undergoes a DNA-replication-associated switch in localization from the cytoplasm to the nucleus at the onset of S phase*. The Miami Nature Biotechnology Winter Symposia: The Cell Cycle, Chromosomes and Cancer; Miami Beach, FL; January 31–February 4, 2004**.**

HW Bass* HW, FE Amarillo, & CJ Lawrence (POSTER) *Cytogenetic Mapping of Maize with Sorghum BAC FISH Probes* 46th Maize Genetics Conference; Mexico City, Mexico; March 11–14, 2004**.**

LK Anderson*, N Salameh, HW Bass, L Harper, WZ Cande, G Weber, & S Stack. (POSTER) *Integrating genetic linkage maps with pachytene chromosome structure in maize.* 46th Maize Genetics Conference; Mexico City, Mexico; March 11–14, 2004**.**

CO Marian* & HW Bass (TALK) *The maize* Single Myb Histone 1 *gene,* Smh1*, encodes a protein that binds telomere DNA repeats in vitro and belongs to a new class of plant genes.* Fifteenth Annual Plant Molecular and Cellular Biology Workshop; Daytona Beach, FL, May 8-10, 2004.

Bass HW (INVITED PARTICIPANT) PlantGDB/MaizeGDB annotation tool and curation workshop, Iowa State University, Ames, IA, August 27, 2004.

Bass* HW, FE Amarillo, CJ Lawrence, & DM Figueroa (POSTER) *A Cytogenetic Map of Maize with Sorghum BAC FISH Probes*. NSF Plant Genome Research Program Awardee Meeting, Arlington VA, September 23-24, 2004**.**

**2005**

Bass* HW, MD Hay, RJ Hill, KA McLaughlin, CJ Hale, EH Jones, MS Conejo, K Graffius-Ashcraft, & K Onokpise (POSTER) *The Maize-10-Maze project, a public field replica the maize pachytene karyotype, decorated with mutants.* 47th Maize Genetics Conference; Lake Geneva, WI; March 10–13, 2005**.**

DM Figueroa*, CL Strobel, BR Ring, & HW Bass (POSTER) *Development of a Pachytene Cytogenetic FISH Map of the 90 Core Bin Marker Loci.* 47th Maize Genetics Conference; Lake Geneva, WI; March 10–13, 2005**.**

FE Amarillo*, CJ Lawrence, & HW Bass (POSTER) *Construction of a High-Density Cytogenetic Map of Maize Chromosome 9.* 47th Maize Genetics Conference; Lake Geneva, WI; March 10–13, 2005**.**

AN Brown*, N Lauter, & HW Bass (POSTER) *QTL Mapping of Telomere Length-Regulating Factors*. 47th Maize Genetics Conference; Lake Geneva, WI; March 10–13, 2005**.**

CO Marian* & HW Bass (POSTER) *The* Terminal acidic SANT 1 *(*Tacs1*) gene of maize is expressed in tissues containing meristems and encodes an acidic SANT domain similar to some chromatin-remodeling complex proteins.* 47th Maize Genetics Conference; Lake Geneva, WI; March 10–13, 2005**.**

Bass* HW, DM Figueroa, FE Amarillo, BC Ring, TE Seigfried, & CJ Lawrence (POSTER) *A Cytogenetic Map of Maize in Oats with Sorghum BAC FISH Probes*. NSF Plant Genome Research Program Awardee Meeting, Arlington VA, September 8-9, 2005**.**

**2006**

FE Amarillo* & HW Bass (TALK) *Construction Of A High-Density Cytogenetic Map Of Maize Chromosome 9.* Plant and Animal Genome XIV Conference; San Diego, CA; January 14-18, 2006.

DM Figueroa, FE Amarillo, BC Ring, CE Strobel, CJ Lawrence, & HW Bass* (POSTER) *A Cytogenetic Map Of Maize In Oat Addition Lines Using Sorghum BACs As FISH Probes.* Plant and Animal Genome XIV Conference; San Diego, CA; January 14-18, 2006.

CJ Lawrence*, FE Amarillo, TE Seigfried, HW Bass, & LK Anderson (POSTER) *Predict Chromosomal Locations Of Genetically Mapped Loci In Maize Using The Morgan2McClintock Translator.* Plant and Animal Genome XIV Conference; San Diego, CA; January 14-18, 2006.

JM Moore* & HW Bass (TALK) *Plant telomeric proteins.* 103rd Annual Meeting of the Southern Association of Agricultural Scientists, Biochemistry Division; Organizer Dr. Jeffrey O. Boles, Orlando FL, February, 2006

CO Marian & HW Bass* (**TALK**) *Identification of gene families encoding double-stranded telomere repeat DNA-binding and related proteins.* 48th Maize Genetics Conference; Asilomar Conference Grounds, Pacific Grove, CA March 9–12, 2006.

FE Amarillo*, HW Bass, & CJ Lawrence (POSTER**)** ***Construction of a High-Density Cytogenetic Map of Maize Chromosome 9 Using Sorghum BACs as FISH Probe*.** **48th Maize Genetics Conference; Asilomar Conference Grounds, Pacific Grove, CA March 9–12, 2006.**

DM Figueroa*, FE Amarillo, BC Ring, CL Strobel, CJ Lawrence, & HW Bass (POSTER) *Constructing a Cytogenetic Map of Maize Core Bin Markers in Oat Addition Lines Using Sorghum BACs as FISH Probes.* 48th Maize Genetics Conference; Asilomar Conference Grounds, Pacific Grove; CA March 9–12, 2006**.**

CJ Lawrence*, TE Seigfried, LK Anderson, FE Amarillo, HW Bass (POSTER) *Predicting Chromosomal Locations of Genetically Mapped Loci in Maize Using the* Morgan2McClintock *Translator.* 48th Maize Genetics Conference; Asilomar Conference Grounds, Pacific Grove; CA March 9–12, 2006**.**

R Okagaki*, M Jacobs, M Schneerman, R Kynast, E Buescher, FE Amarillo, CJ Lawrence, A Stec, T Kamps, C Chase, HW Rines, D Weber, HW Bass, & Phillips (POSTER) *A Comparison of Centromere Mapping Techniques.* 48th Maize Genetics Conference; Asilomar Conference Grounds, Pacific Grove, CA March 9–12, 2006**.**

Bass* HW, FE Amarillo, DM Figueroa, BC Ring, AT Morganti, NC Fredette, JD Davis, & CJ Lawrence (POSTER) *A Cytogenetic Map of Maize with Sorghum BAC FISH Probes.* NSF Plant Genome Research Program Awardee Meeting; Arlington VA, September 7–8, 2006.

KD Beckham*, DM Figueroa, FE Amarillo, CJ Lawrence, & HW Bass (POSTER, 3rd Place Award) *Isolation and Characterization of Sorghum BACs for Cytogenetic Mapping of Maize Genome.* Tri-Beta Biological Honor Society Second Annual Poster Board Competition; FSU College of Medicine, Tallahassee, FL, November 16, 2006.

JD Davis*, GL Koumbaris, DM Figueroa, & HW Bass (POSTER, 4th Place Award) *Sequence Analysis of Maize RFLP Markers for in Silico Screening*. Tri-Beta Biological Honor Society Second Annual Poster Board Competition; FSU College of Medicine, Tallahassee, FL, November 16, 2006.

NC Fredette*, SP Murphy, & HW Bass (POSTER) Mapping *a Meiosis-Specific Maize Mutant by Bulked-Segregant Analysis*. Tri-Beta Biological Honor Society Second Annual Poster Board Competition; FSU College of Medicine, Tallahassee, FL, Nov. 16, 2006.

LB Ritchey*, AN Brown, N Lauter, & HW Bass (POSTER, 1st Place Award) Analysis *of DNA for QTL Mapping of Genetic Factors That Control Telomere Length in Maize.* Tri-Beta Biological Honor Society Second Annual Poster Board Competition; FSU College of Medicine, Tallahassee, FL, November 16, 2006.

**2007**

DM Figueroa, FE (Ina) Amarillo, NC Fredette, AT Morganti, JD Davis, CJ Lawrence, & HW Bass* (POSTER) P349: *Constructing A Cytogenetic Map Of The Maize Genome* Plant & Animal Genomes XV Conference; San Diego, CA, January 13-17, 2007.

FE (Ina) Amarillo* & HW Bass. (TALK) T5: *Construction of a Sorghum BAC-based Cytogenetic Map of Maize Pachytene Chromosome 9*. 49th Annual Maize Genetics Conference; St. Charles, IL, March 22-25, 2007.

DM Figueroa*, FE Amarillo, CE Strobel, CJ Lawrence, & HW Bass. (POSTER) P60: *Constructing A Cytogenetic Map Of Maize Core Bin Markers In Oat Addition Lines Using Sorghum BACs As FISH Probes.* 49th Annual Maize Genetics Conference; St. Charles, IL, March 22-25, 2007.

KD Beckham*, DM Figueroa, FE Amarillo, & HW Bass. (POSTER) *Isolation and Characterization of Sorghum BACs for Cytogenetic Mapping of the Maize Genome.* FSU Undergraduate Research Symposium, Florida State University, Tallahassee, FL, April 5, 2007.

JD Davis*, GL Koumbaris, DM Figueroa, & HW Bass. (POSTER) *Analysis of Maize RFLP Markers: Enabling in Silico Screens for Sorghum BAC FISH probes.* FSU Undergraduate Research Symposium, Florida State University, Tallahassee, FL, April 5, 2007.

NC Fredette*, SP Murphy, & HW Bass. (TALK) *Mapping a Meiosis-Specific Mutant by Bulked-Segregant Analysis.* FSU Undergraduate Research Symposium, Florida State University, Tallahassee, FL, April 5, 2007.

SP Murphy* & HW Bass. (TALK) *Molecular Genetic and Cytological Characterization of Meiotic Chromosome Segregation Mutants in Maize.* 2007 Annual Workshop; Jacksonville Beach, FL, May 18-19, 2007.

**2008**

DM Figueroa*, FE Amarillo, KD Beckham, JD Davis, CJ Lawrence, & HW Bass. (POSTER) *Constructing A Cytogenetic Map Of Maize In Oat Addition Lines Using Sorghum BACs As FISH Probes.* 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

SP Murphy* and HW Bass. (POSTER) *Towards the Molecular Cloning of Meiotic Telomere Behavior Mutants in Maize.* 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

NC Fredette*, JD Davis, D. St. Jean, RE Gabriel, AT Morganti, MD Hay, K Graffius-Ashcraft, RJ Hill, J Doster, O Onokpise, & HW Bass. (POSTER) *The Maize-10-Maze Project, an Educational Public Chromosome Map Garden Featuring the Magnificent Mutants of Maize.* 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

JD Davis* DM Figueroa, BC Ring, MS Conejo, FIE Amarillo, CL Strobel, & HW Bass (POSTER) *RFLP Full-Length Insert Sequence (RFLP-FLIS) data for use in the cytogenetic map of maize project.* 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

KD Beckham*, DM Figueroa, CJ Lawrence, & HW Bass (POSTER) *Bioinformatic Selection of Syntenic Sorghum BACs with Maize Core Bin Markers for use as FISH Probes in the Development of a Cytogenetic Map of Maize*. 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

AN Brown*, NC Fredette, KA McLaughlin, JA Lorenzen, N Lauter, & HW Bass (POSTER) *Genetic Analysis of Telomere Length Regulation.* 50th Annual Maize Genetics Conference; Washington, DC, Feb 27 – Mar 2, 2008.

NC Fredette*, AN Brown, & HW Bass (POSTER) *Genetic Analysis of Telomere Length Variation in Maize (*Zea mays*, L.).* Beta Beta Beta 2008 Biennial National Convention; Highland Heights, KY, May 28 – 31, 2008.

KD Beckham*, DM Figueroa, & HW Bass. (POSTER – 3rd Place, John C. Johnson Award for Excellence in Student Research) *Bioinformatic Selection of Sorghum BACs for use as FISH probes in developing a Cytogenetic Map of Maize.* Beta Beta Beta 2008 Biennial National Convention; Highland Heights, KY, May 28 – 31, 2008.

**2009**

DM Figueroa*, KD Beckham, JD Davis, CJ Lawrence, & HW Bass. (POSTER) *Constructing a Cytogenetic Map Of Maize In Oat Addition Lines Using Sorghum BACs As FISH Probes.* 51st Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2009**.**

AN Brown*, N Lauter, KM Large, NC Fredette, EG Lastra, & HW Bass. (POSTER) *Mapping of Telomere Length Regulating Factors.* 51st Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2009**.**

SP Murphy* & HW Bass. (POSTER) *Molecular Analyses of a SUN (Sad1p/Unc-84) Domain-Containing Protein Gene in Maize (Zea mays L), a Candidate for the Desynaptic Gene.* 51st Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2009**.**

**2010**

ES Howe*, SP Murphy, and HW Bass. (POSTER) *Microscopic Analysis of Transgenic Maize Lines Expressing a Fluorescent Histone, H2B::mCherry.* Tri – Beta Biological Honors Society Poster Competition; FSU, Tallahassee, FL; February 18, 2010.

SP Murphy & HW Bass*. (POSTER) *Maize SUN Domain Proteins; A 5-Member Gene Family Encoding Two Distinct Classes (CCT and PM3 types) of Nuclear Envelope Proteins.* 52nd Annual Maize Genetics Conference; Riva del Garda, Italy; March 18-21, 2010**.**

JH Dennis, JA Fincher, KM McGinnis*, and HW Bass*. (POSTER) *Nucleosome Mapping and Chromatin Structure in Maize, a Novel Platform for Genome Response Assays.* 52nd Annual Maize Genetics Conference; Riva del Garda, Italy; March 18-21, 2010**.**

ES Howe*, SP Murphy, and HW Bass. (POSTER) *Microscopic Analysis of Transgenic Maize Lines Expressing a Fluorescent Histone, H2B::mCherry*. Beta Beta Beta Biological Honor Society, 2010 Biennial National Convention; Durango, Colorado, USA; May 19-22, 2010.

DL Vera*, AN Brown, and HW Bass. (TALK) *Analysis of the Genetic Control of Telomere Length in Maize (*Zea mays*, L.)*. Beta Beta Beta Biological Honor Society, 2010 Biennial National Convention; Durango, Colorado, USA; May 19-22, 2010.

CB Dieck*, AG Wood, HW Bass, KM Miller, YJ Im, and WF Boss. (POSTER) *Plant nuclear lipid signaling.* American Society for Biochemistry and Molecular Biology Annual Meeting; 2010.

Bass* HW, JH Dennis, KM McGinnis, OU Onokpise, & JA Fincher. (POSTER) *Nucleosome Mapping and Chromatin Structure in Maize, a Novel Platform for Genome Response Assays.* NSF Plant Genome Research Program Awardee Meeting. Arlington, VA, September, 2010.

**2011**

Bass* HW, JA Fincher, KM McGinnis, and JH Dennis. (POSTER) *Nucleosome Mapping And Chromatin Structure In Maize, A Novel Platform For Genome Response Assays*. Plant and Animal Genome XIX Conference; San Diego, CA; January 15-18, 2011.

SP Murphy, CR Simmons, and HW Bass*. (**TALK**) *Molecular Analysis Of SUN (*Sad1p/Unc-84*) Domain Genes Of Maize, Including A Candidate Gene For The* desynaptic *(*dy*) Mutation*. Plant and Animal Genome XIX Conference; San Diego, CA; January 15-18, 2011.

SP Murphy, CR Simmons, and HW Bass*. (POSTER) *Molecular Analysis Of SUN (*Sad1p/Unc-84*) Domain Genes Of Maize, Including A Candidate Gene For The* desynaptic *(*dy*) Mutation*. Plant and Animal Genome XIX Conference; San Diego, CA; January 15-18, 2011.

SP Murphy, CR Simmons, and HW Bass*. (**TALK**) *SUN (Sad1p/Unc-84) Domain Genes Of Maize: Evidence for a Small Gene Family of Two Ancient Isoforms*. 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

JA Fincher*, BL Bremen, TZ Sen, JH Dennis, and HW Bass. (POSTER) *Using a Support Vector Machine to Predict Nucleosome Occupancy Likelihood (NOL) in the Maize Genome*. 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

PM Alam, DL Vera, JA Fincher, KM McGinnis, HW Bass, and JH Dennis*. (POSTER) *Nucleosome distribution and promoter architecture at 400 genes in the maize genome*. 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

DM Figueroa*, CJ Lawrence, and HW Bass. (POSTER) *Construction Of A Cytogenetic Map Of Maize In Oat Addition Lines Using Sorghum Bacterial Artificial Chromosomes (BACs) As Fluorescent Probes.* 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

ES Howe*, SP Murphy, TE Clemente, and HW Bass. (POSTER) *Microscopic Analysis of Transgenic Maize Lines Expressing a Fluorescent Histone, H2B::mCherry*. 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

DL Vera*, KM McGinnis, JH Dennis, and HW Bass. (POSTER) *Analysis of Chromatin Accessibility in the Maize Interphase Nucleus*. 53rd Annual Maize Genetics Conference; St. Charles, IL; March 17-20, 2011.

JA Fincher*, DL Vera, HW Bass, JH Dennis. (POSTER) *Overlapping but distinct DNA sequence features drive nucleosome organization in maize and humans*. Dynamic DNA Packaging Across Kingdoms: Chromatin and Beyond; Biophysical Society; Asilomar, CA; July 5-5, 2011.

Bass* HW, JH Dennis, KM McGinnis, OU Onokpise, JA Fincher, DL Vera, JD Labonne, MP Alam, TF Madzima, and GG Hoffman (POSTER) *Nucleosome Mapping and Chromatin Structure in Maize, a Novel Platform for Genome Response Assays.* NSF Plant Genome Program (PGRP) Awardee meeting; Arlington VA; September 8-9, 2011.

AN Brown*, HW Bass. (POSTER) *QTL mapping and candidate gene analysis of telomere length control in maize (*Zea mays *L.).* Genetics Symposium, University of Florida, Gainesville, FL, USA, November 2011.

**2012**

DL Vera*, HW Bass, JH Dennis. (POSTER) *Chromatin accessibility is largely unaltered by the transition to mitotic chromosomes.* Keystone Symposia: Epigenomics; Keystone, CO; January 17-22, 2012.

TF Madzima*, JA Fincher, DL Vera, J Dorweiler, HW Bass, JH Dennis, & KM McGinnis. (TALK) *Genome-wide effect of the mop1-1 mutation on chromatin structure in maize.* 54th Annual Maize Genetics Conference; Portland, OR; March 15-18, 2012.

JDJ Labonne, DL Vera, PM Alam, TF Madzima, GG Hoffman*, JH Dennis, KM McGinnis, & HW Bass. (POSTER) *Development of a robust method for microscopic and molecular assays of nuclear architecture and chromatin structure in maize.* 54th Annual Maize Genetics Conference; Portland, OR; March 15-18, 2012.

DL Vera*, DD Hughes, JH Dennis, & HW Bass. (POSTER) *Defining the chromatin domain organization of the maize genome.* 54th Annual Maize Genetics Conference; Portland, OR; March 15-18, 2012.

Bass* HW, DL Vera, DD Hughes, JA Fincher, PM Alam, JDJ Labonne, TF Madzima, Z Wiggins, OU Onokpise, SP Moose, KM McGinnis, & JH Dennis. (POSTER) *Tissue-specific nucleosome occupancy in the promoter/TSS region of 400 classical maize genes*. 54th Annual Maize Genetics Conference; Portland, OR; March 15-18, 2012.

JA Fincher*, DL Vera, JH Dennis, HW Bass. (POSTER) *Using empirical maize chromatin data to train a support vector machine to predict nucleosome occupancy likelihood (NOL).* 54th Annual Maize Genetics Conference; Portland, OR; March 15-18, 2012.

Bass* HW and SP Murphy. (**TALK**) *Analysis of SUN domain proteins during meiosis in maize (*Zea mays*).* Society for Experimental Biology Meeting, SEB Salzburg 2012, Salzburg, AUSTRIA; June 29-July 2, 2012.

HW Bass* HW, DL Vera, DD Hughes, JA Fincher, MP Alam, JDJ Labonne, TF Madzima, ZJ Wiggins, OU Onokpise, GH Hoffman, KM McGinnis, & JH Dennis. (POSTER) *Chromatin Structure and Genome Response in Maize.* NSF Plant Genome Research Program Awardee Meeting; Arlington, VA; September 6-7, 2012.

**2013**

L Hanley-Bowdoin*, GG Hoffmann T-J Lee, EE Wear, PE Pascuzzi, GC Allen, WF Thompson, and HW Bass. (TALK) *Temporal and Spatial Patterns of DNA Replication.* Society for Experimental Biology Meeting, SEB 2013, Valencia, SPAIN; July 2 – 6, 2013.

HW Bass* HW, DL Vera , TF Madzima, JD Labonne, P Alam, GG Hoffman, JH Dennis, KM McGinnis. (**TALK**) *MNase Profiling of Chromatin Landscapes in Maize.* Society for Experimental Biology Meeting, SEB 2013, Valencia, SPAIN; July 2 – 6, 2013.

**2014**

Bass* HW, DL Vera, TF Madzima, JD Labonne, MP Alam, GG Hoffman, SB Girimurugan, J Zhang, JH Dennis, and KM McGinnis. (**TALK**) W282: *MNase Profiling of the Chromatin Landscapes in the Maize Genome.* Plant and Animal Genome XXII Conference; San Diego, CA; January 11-15, 2014.

SP Murphy*, Y Mao, HK Gumber, and HW Bass. (TALK) W582: *The Meiotic SUN Belt of Maize is Disrupted by Mutants Defective in Chromosome Segregation*. Plant and Animal Genome XXII Conference; San Diego, CA; January 11-15, 2014.

HK Gumber*, SP Murphy, Y Mao, and HW Bass. (TALK) *Analysis of SUN domain proteins in the maize nuclear envelope*. 27th Annual Plant Molecular and Cellular Biology (PMCB) Workshop; Daytona Beach Shores, FL; May 9-10, 2014.

DL Vera*, HW Bass, JH Dennis. (POSTER) *Targeted-enrichment of MNase-seq libraries reveals hypersensitive and hyper-resistant nucleosomes at important regulatory regions in the human genome.* Cold Spring Harbor Laboratory Meetings: Epigenetics and Chromatin; Cold Spring Harbor, NY; September 9-13, 2014.

KA Easterling*, V Somasundaram, R Harvey, ML Kearley, and HW Bass. (POSTER) *Production and use of Colchicine Derivatives to Study Mechanisms of Plant Meiosis*. Natural Sciences Graduate Symposium, Florida State University; Tallahassee, FL; Oct 10-11, 2014.

HK Gumber*, SP Murphy, and HW Bass. (POSTER) *LINC Complexes in the Maize Nuclear Envelope*. Natural Sciences Graduate Symposium, Florida State University; Tallahassee, FL; Oct 10-11, 2014.

**2015**

L Hanley-Bowdoin*, T-J Lee, GG Hoffman, EE Wear, GC Allen, WF Thompson, and HW Bass. (TALK) W679/W741: *A Spatiotemporal Analysis of Plant DNA Replication in Developing Root.* Plant and Animal Genome XXIII Conference; San Diego, CA; January 10-14, 2015.

Bass* HW, DL Vera, ZD Wiggins, J Zhang, KM McGinnis, JH Dennis, OU Onokpise, E Rodgers-Melnick, and ES Buckler. (**TALK**) *Linking Chromatin Structure to Genomic Function through Differential Nuclease Sensitivity (DNS-seq) and Nucleosome Occupancy Mapping*. 57th Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2015.

HK Gumber*, SP Murphy, and HW Bass. (POSTER) *Towards identifying SUN-interacting proteins in the maize nuclear envelope*. 57th Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2015.

M He*, CM Andorf, D Dobbs, KE Koch, HW Bass, and CJ Lawrence. (POSTER) *Assessing the prevalence and diversity of G-quadruplexes in regulatory regions of maize genes.* 57th Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2015.

KA Easterling*, V Somasundaram, R Harvey, ML Kearley, and HW Bass. (POSTER) *Production and use of colchicine derivatives to study mechanisms of plant meiosis*. 57th Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2015.

EB Rodgers-Melnick*, PJ Bradbury, DL Vera, HW Bass, and ES Buckler. (POSTER) *Open Chromatin Reveals the Functional Portion of the Maize Genome*. 57th Annual Maize Genetics Conference; St. Charles, IL; March 12-15, 2015.

Bass* HW, DL Vera, and JH Dennis. (POSTER) *Nuclease Profiling as an Epigenomic Resource for Five Reference Tissues of Maize.* NSF Plant Genome Research Program Awardee Meeting; Arlington, VA; September 10-11, 2015.

**2016**

Bass* HW, DL Vera, E Rodgers-Melnick, and ES Buckler. (**TALK**) *Functional Genomics in Maize using Differential Nuclease Sensitivity (DNS-seq) Chromatin Profiling.* Invited Speaker, Workshop #3288; New England Biolabs - *Recent advances in NGS sample prep*. Plant and Animal Genome XXIV Conference; San Diego, CA, USA; January 9-13, 2016.

Bass* HW, DL Vera, E Rodgers-Melnick, and ES Buckler. (**TALK**) *Investigating Chromatin Structure at Multiple Scales in Maize.* Invited Speaker, Workshop #3086; *EPIC: the Plant Epigenome Project*. Plant and Animal Genome XXIV Conference; San Diego, CA, USA; January 9-13, 2016.

E Rodgers-Melnick*, DL Vera, R Bradbury HW Bass, and ES Buckler. (TALK) *The Stability and Consequences of Recombination in Maize.* Workshop #3158; *Recombination - mechanisms*. Plant and Animal Genome XXIV Conference; San Diego, CA, USA; January 9-13, 2016.

M He*, D Dobbs, JW Walley, KE Koch, P Liu, HW Bass, and CJ Dill. (POSTER) Investigating Diversity and Possible Functions of G-Quadruplexes in Regulatory Regions of Maize. Plant and Animal Genome XXIV Conference; San Diego, CA, USA; January 9-13, 2016.

Bass*, HW, DL Vera, ZD Wiggins, K Yu, JH Dennis, J Zhang, and OU Onokpise. (POSTER) *DNS - NUPRIME: Differential Nuclease Sensitivity for Nuclease Profiling as an Integrative Resource for Maize Epigenomics.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Easterling* KA, HW Bass, DL Vera, and T. Brutnell (and the W22 Consortium). (POSTER). *W22 Chromosomes and Chromatin: A Pachytene FISH Karyotype and Genome-wide Differential Nuclease Sensitivity Profile.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Estrada* AL, IC Bass, OU Onokpise, and HW Bass. (POSTER) *Genome strolling through the Maize-10-Maze; a living museum outreach project exhibiting select mutants of maize.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Farran* AE, ZM Turpin, and HW Bass. (POSTER) *Does hypoxia signal transduction involve targeted ROS-mediated oxidative base modification (8-oxoG) at G4 DNA elements in maize?* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Griffin* BD, and HW Bass. (POSTER) *Producing Reporter Gene Constructs for Investigating the Role of G-Quadruplex (G4) DNA elements in Gene Regulation.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Gumber* HK, AL Estrada, and HW Bass (POSTER) *Identification of KASH and other SUN-interacting proteins in maize.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Hoffman* GG, T-J Lee, EE Wear, SR Joseph, GC Allen, WF Thompson, L Hanley-Bowdoin, and HW Bass. (POSTER) *The spatiotemporal patterns of DNA replication and endoreduplication as defined by 3D microscopy of nuclei from developing maize root tip nuclei.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Savadel* SD, and HW Bass. (POSTER) *Immunostaining of ZmNDPK1, a G4-DNA-binding protein, reveals various nuclear and cytoplasmic localization patterns in maize tissues before and after experimental flooding to induce hypoxia.* 58th Annual Maize Genetics Conference, Jacksonville, FL, USA, March 17-20, 2016.

Bass* HW. (**KEYNOTE LECTURE**) in Dynamic Organisation of the Nucleus session; *Exploring maize nuclear structure-function relationships operative at multiple scales*. Society for Experimental Biology, SEB Brighton 2016, Brighton, UK; July 4-7, 2016.

**2017**

Kyle* KE, Bass HW, and Vera DL. (POSTER) *gtracks: a framework for creating and maintaining UCSC track databases using google spreadsheets*. Plant and Animal Genome XXV Conference; San Diego, CA; January 13-17, 2017.

Parvathaneni* RK, Shamimuzzaman, Md, Kovar LL, Vera, DL, Bass HW, and A Eveland. (POSTER) *Defining gene regulatory networks controlling early inflorescence development in maize.* 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Mingze* H, Andorf C, Walley JW, Walia H, Koch K, Liu P, Bass HW, and CJ Lawrence-Dill (POSTER) *G4 quadruplexes in and near regulatory elements of maize genes involved in tissue development and altered transcriptional response to abiotic stresses*. 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Vera* DL, Kyle K, and H Bass (POSTER) *Genomaize, a UCSC genome browser for maize genomes*. 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Turpin* ZM, Vera DL, and HW Bass. (POSTER) *Chromatin structure profile (MNase DNS-seq) for 15-DAP endosperm, a B73 core reference tissue*. 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Gumber* HK, Estrada AL, and HW Bass. (POSTER) *Identification and characterization of maize LINC complex components.* 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Griffin* BD, Winn MN, and HW Bass. (POSTER) *Producing reporter gene constructs for investigating the role of G-Quadruplex (G4) DNA elements in gene regulation*. 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

Savadel* SD and HW Bass. (POSTER) *Taking a look at plant DNA replication: recent insights, new questions, and data sharing through OMERO.bio.fsu.edu*. 59th Annual Maize Genetics Conference, St. Louis, MO, USA, March 9-12, 2017.

**2018**

Bass* HW, Vera DL, Lung P-L, Liu Y, Girimurugan SB, Turpin ZM, Savadel SD, Kyle KE, Dennis JH, and J Zhang. (POSTER) *The NUPRIME Project: Nuclease Profiling of Four Reference Tissues as a Resource for Maize Epigenomics*. 60th Annual Maize Genetics Conference, Saint-Malo, France, March 22-25, 2018.

Gumber* HK. McKenna J, Estrada AL, Jalovec AM, Tolmie AF, Graumann K, and Bass HW. (POSTER) *Identification and characterization of LINC complex proteins in* Zea mays *L.* 60th Annual Maize Genetics Conference, Saint-Malo, France, March 22-25, 2018.

Savadel* SD, Vera, DL, Lung P-Y, Zhang J, and Bass HW. (POSTER) *MOA (MNase Open Access) Mapping: A New and Efficient Method for Genome-Wide Open Chromatin Profiling in Maize, Demonstrated with Developing Earshoots*. 60th Annual Maize Genetics Conference, Saint-Malo, France, March 22-25, 2018.

Bertolini* E, Parvathaneni R, Shamimuzzaman Md, Lipka A, Vera D, Bass HW, and Eveland AL (TALK T25) The regulatory landscape of developing maize inflorescences: linking phenotypic variation to the functional non-coding genome. 60th Annual Maize Genetics Conference, Saint-Malo, France, March 22-25, 2018.

Bass* HW, Gumber HK, McKenna J, Estrada AL, Jalovec AM, Tolmie AF, Buerk CA, and Graumann K. (**TALK**, Nuclear Dynamics and Periphery) *Identification and characterisation of maize LINC complex proteins: new tools for old questions.* Society for Experimental Biology, SEB Florence 2018, Florence, Italy, July 6-9, 2018.

Gumber* HK, McKenna JF, Tolmie AF, Estrada AL, Jalovec AM, Graumann K, and Bass HW. (POSTER). Nuclear envelope LINC complex proteins in *Zea mays* L. Plant Biology 2018; Montreal, Qc, Canada; July 14-18, 2018.

**2019**

Bass* HW, Savadel SD, Turpin ZM, Vera DL, Lung Pei-Yau, Sui X, Salihovic HF, Hartwig T, and Zhang J. (POSTER) *Mapping the Maize Cistrome using MOA-seq (MNase Open & Accessible): Motif Discovery and Annotation.* 61st Annual Maize Genetics Conference, Maize Genetics, St. Louis, MO, USA. March 14-17, 2019.

Gumber*, HK, McKenna, JF, Tolmie AF, Estrada AL, Jalovec AM, Kartick AC, Graumann K, & Bass HW. (TALK) The Maize LINC KASH AtSINE-like2 (MLKS2) gene encodes an ARM domain KASH protein that tethers the nucleus to actin and is required for normal development and meiotic chromosome segregation. 61st Annual Maize Genetics Conference, Maize Genetics, St. Louis, MO, USA. March 14-17, 2019.

Turpin *ZM, Vera DL, Savadel SD, Lung Pei-Yau, Liu Y, Girimurugan SB, Dennis JH, Zhang J, & Bass HW. (POSTER). DNS-seq maps of nucleosome occupancy and open chromatin in B73 root tip, coleoptilar nodes, earshoot, and 15-DAP endosperm. 61st Annual Maize Genetics Conference, Maize Genetics, St. Louis, MO, USA. March 14-17, 2019.

**Professional Society Memberships:**

| | |
|---|---|
| 1988 – 1992 | The American Society of Plant Physiologists |
| 1988 – 2005 | International Society for Plant Molecular Biology |
| 1989 – 1991 | The North Carolina Academy of Sciences |
| 1989 – | The Maize Genetics Cooperative |
| 1991 – 2008 | The American Society of Cell Biology |
| 1992 – | Sigma Xi, The Scientific Research Society |
| 1998 – 2008 | The American Association for the Advancement of Science |
| 1999 – 2008 | The American Society of Plant Biologists |
| 2006 – 2008 | The Genetics Society of America |
| 2012 – | The American Society of Plant Biology |

**TEACHING**

**Undergraduate Teaching:**

| | | |
|---|---|---|
| PCB 3063 | General Genetics | undergraduate lecture course (3h) |
| BOT 4394/5938 | Plant Molecular Biology | undergraduate lecture course (3h) |
| PCB 4931 | Directed Individual Study | undergraduate laboratory research (1-3h) |
| BSC 3402L | Plant Cytogenetics | undergraduate experimental lab course (3h) |

**Graduate Teaching:**

| | | |
|---|---|---|
| BOT 5938 | Plant Molecular Biology | graduate lecture (3h) |
| PCB 5595 | Advanced Molecular Biol. | graduate lecture course (3h) |
| BOT 6936 | Seminar in Botany | graduate seminar course (1h) |
| PCB 6936 | Seminar in Genetics | graduate seminar course (1h) |

**Undergraduate Supervision**

Activities, select award/support abbeviations:

ACS – American Cancer Society
DIS – Directed Individual Study, Lab or Field Research
FWS – Federal Work Study
HITM – Honors In the Major, Lab Research with Undergraduate Thesis
NSF-REU – NSF-sponsored Research Experience for Undergraduates
NSF-URA – NSF-sponsored Undergraduate Research Assistant
TECH – Laboratory or Field Technician
WIMSE – Women in Math, Science, and Engineering society at FSU
UROP – Undergraduate Research Opportunity Program
VOL – volunteer
**[**next position after time in Bass lab**]**

| **Student Name** | **Dates** | **Activities, positions, fellowships [next position]** |
|---|---|---|
| Regina P. Murray | 1999 | DIS |
| Stefano J. Bordoli | 1998 – 2001 | Fisher-ACS Fellow, DIS, TECH [Medical School] |
| Rachel A. Santarella | 1999 – 2001 | Fisher-ACS Fellow, DIS, TECH [Research Technician European Molecular Biology Laboratory – EMBL, Germany] |
| Kim P. Lindamood | 1999 | DIS [Veterinary School] |
| Amy K. Hughes | 1999 | DIS [Public Science Teacher, FL] |
| Eric M. Foss | 1999 – 2000 | DIS [Dental School] |
| Linda C. Kang | 1999 – 2000 | DIS [Medical School] |
| Tace M. Steele | 2000 – 2002 | DIS, Research Fellow, NSF-REU, [Medical School] |
| Sara J. Noyes | 2000 – 2001 | DIS, Undergraduate Fellow. [Graduate School] |
| Valerie Hernandez | 2000 | FWS |
| Leisa P. Jackson | 2000 – 2002 | DIS, TECH. [Research Technician, Duke University] |
| Marshawn D. Hay | 2000 – 2004 | FWS, Research Fellow, NSF-REU. |
| Eric H. Jones | 2002 – 2004 | Fisher - ACS Fellow Summer 2003, NSF-REU, DIS [Graduate School] |
| Debbie M. Figueroa | 2002 – 2004 | DIS, NSF-REU. [Graduate School] |
| Colette S. Burger | 2003 | DIS [NIH Lab Tech] |
| David St. Jean | 2004 – | TECH |
| Cheuk Fu | 2005 | DIS |
| Lisa P. Ritchey | 2005 – 2007 | TECH, DIS [Graduate School] |
| Ashley T. Morganti | 2006 | DIS |
| James D. Davis | 2006 – 2008 | DIS, TECH; NSF-REU. [Graduate School] |
| Natalie C. Fredette | 2006 – 2008 | TECH, DIS, FE Fisher Awardee [Graduate School] |
| Kate D. Beckham | 2006 – 2008 | DIS, HITM, NSF-REU, Bess Ward Awardee 2008, FSU 2008 Undergraduate Research and Creative Endeavors (URACE) Summer Awardee 2008 |
| Amy M. Win | 2006 – 2008 | DIS, TECH |
| Jason A. Lorenzen | 2007 – 2008 | Fisher-ACS Fellow – Summer 2007, DIS, McCallister Awardee – Spring 2008. |
| Eduardo G. Lastra | 2008 – | DIS, Fisher-ACS Fellow – Summer 2008 [Company Lab Technician] |

| | | |
|---|---|---|
| Genevieve L. Price | 2008 – | DIS [Medical School] |
| Heather Applewhite | 2008 – | TECH [Medical School] |
| Ayesha F. Hussain | 2009 | DIS, NSF-REU |
| Tabatha M. McHill | 2009 | DIS [Pharmacy School] |
| Daniel L. Vera | 2009 – 2010 | Biology Major, DIS [Graduate School] |
| Elizabeth S. Howe | 2009 – 2010 | Biology Major; WIMSE fellow, HITM, Charles M. McAllister Scholarship, John Mark Caffrey Scholarship, [Instructor, Mag Lab TECH] |
| Jasmine J. Reaves | 2009 – 2013 | Biology Major, FWS, TECH, NSF-REU, DIS |
| Katherine A. Easterling | 2010 – 2013 | Biochemistry Major; FSU 2011 MRCE Awardee [Graduate School] |
| Tony A. Carmello | 2011 – 2012 | Biology Major, DIS [Graduate School] |
| Elizabeth D. Plumb | 2011 | Biology Major, DIS |
| David R. Davenport | 2011 – 2014 | Biology Major, DIS, HITM [Medical School] |
| Ashley R. Joseph | 2012 – | Biology Major, FWS, DIS |
| Cory E. Hearn | 2012 – 2014 | Biology Major, DIS [Graduate School] |
| Cynthia M. Habashy | 2013 – 2014 | Biology Major, DIS [Dental School] |
| Robert Harvey | 2014 | Biology Major, DIS |
| Samantha W. Ridgway | 2014 - 2015 | Psychology Major, DIS, lab tech, VOL [Graduate School] |
| Brianna D. Griffin | 2014 – 2017 | Biology Major, WIMSE student; Scholarships for FE Fisher (3) , KL McKeown, Vaughn-Jordan (3); 2017 MaGNET Awardee, NSF-URA, HITM [Graduate School] |
| Savannah D. Savadel | 2014 – 2018 | Biology Major, UROP student/assistantship, DIS, HITM, NSF-URA, Scholarships for CRE-IDEA, CM McAllister (2), JM Caffrey [Medical School] |
| Akram E Farran | 2015 | Biology Major, DIS [Medical School] |
| Morgan N Winn | 2015 – 2016 | Math Major, DIS |
| Jacob M Rosenfield | 2015 – 2016 | Biology Major, DIS |
| Bianca A Fox | 2015 – 2016 | Biology Major, DIS |
| Chris J Hagemeyer | 2016 – 2018 | Biology Major, DIS, HITM [Graduate School] |
| Christopher K Nguyen | 2016 – 2017 | Biology Major, UROP, DIS |
| Diana A Lacatusu | 2016 – 2017 | Biology Major, FWS |
| Dylan M Allen | 2016 – 2017 | Biology Major, FWS |
| Jenna R. Aquino | 2017 – 2018 | Biology Major, DIS [Medical MS] |
| Kristin C. Bussey | 2017 – 2019 | Biology Major, FWS, DIS [Graduate School] |
| Lauren G. Lopes | 2017 – 2018 | DIS, TECH |
| Renee V. Allison | 2018 | Exercise Science, DIS, TECH |
| Charles A. Buerk | 2017 – 2018 | Biology Major, DIS |
| Andre C. Kartick | 2018 – 2019 | B.S. Biology Major, Volunteer, DIS |
| Heidi F. Salihovic | 2018 – | Math Major, Volunteer, DIS, B&K Thrower scholarship |
| Emily N. Green | 2018 – 2019 | Biology Major, UROP, DIS |

| | | |
|---|---|---|
| Stefanie A. Boothe | 2019 | Biology Major, DIS, L&E Trott scholarship |
| Zehta S. Glover | 2019 – | Psychology Major, UROP, DIS, NSF-URA, McCallister and McCaffrey scholarships |
| Shivansh (Ayush) Singh | 2019 – | Biomedical Engineering Major, UROP, DIS, NSF-URA |

**Master's Students:**

**George L. Koumbaris**, M.S. in Biological Science (**2003**)
Thesis: *Development of a New Cytogenetic Mapping Strategy for Maize (*Zea mays *L.); Use of Marker-Selected Sorghum BACs as FISH Probes on Pachytene Chromosome-9 from a Chromosome Addition Line of Oat (*Avena sativa*)*.
Next position – Staff Scientist at The Cyprus Institute for Neurology and Genetics, Department of Cytogenetics, CYPRUS.

**Xianhui Li**, M.S. Biological Science (**2007**) (co-advised with C. Altmann)
*Gene expression and regulation in early vertebrate development*
http://purl.flvc.org/fsu/fd/FSU_migr_etd-1436

**Joel M. Moore**, M.S. Biological Science (**2009**)
*Investigating the DNA-binding properties of the initiator-binding protein 2 (IBP2) in maize (*Zea mays*)*. http://purl.flvc.org/fsu/fd/FSU_migr_etd-2306
Next & Current position – Instructor of Natural Sciences, Southwest GA Technical College, Department of Biology, Thomasville, GA

**Doctoral Students:**

**Calin O. Marian**, Ph.D. Biological Science (**2005**)
Dissertation: *Identification of Maize (*Zea mays *L.) Genes Encoding Telomere Repeat DNA-Binding Proteins.* http://purl.flvc.org/fsu/fd/FSU_migr_etd-2741
Next position: Department of Defense Postdoctoral Fellow - Prostate Cancer Training Award, Shay/Wright laboratory; UT Southwestern Medical Center, Dallas, TX, USA
Current position: Assistant Professor, Department of Biology, University of Central Conway, AR, USA. https://uca.edu/biology/facultystaff/calin-marian-ph-d/

**Matthew J. Drum**, Ph.D. Biological Science (**2006**) (initial advisor Dr. A. D. Johnson)
Dissertation: *Expression of Axdazl and Axvh in Axolotl Germ Cells, Suggest that Regulative Germ Cell Specification is a Primitive Trait conserved in the mammalian lineage.* http://purl.flvc.org/fsu/fd/FSU_migr_etd-0658
Next position: Teaching Faculty, Florida A & M University, Biology Dept.
Current position: Associate Professor, Department of Biological Science, Pensacola State College, Pensacola, FL, USA.

**F. Ina E. Amarillo**, Ph.D. Biological Science (**2007**)
Dissertation: *Construction and Analysis of a Transgenomic Cytogenetic Sorghum (*Sorghum propinquum*) BAC FISH Map of Maize (*Zea mays *L.) Pachytene Chromosome 9*. http://purl.flvc.org/fsu/fd/FSU_migr_etd-0189

Next position: Clinical Cytogenetics Program; Department of Pathology and Laboratory Medicine, David Geffen School of Medicine, UCLA, Los Angeles, CA.
Current position: Assistant Professor, Pathology and Immunology, Division of Laboratory & Genomic Medicine; Associate Medical Director, Cytogenomics and Molecular Pathology, Washington University School of Medicine in St. Louis, MO.

**Amber N. Brown**, Ph.D. Biological Science (**2011**)
Dissertation: *QTL mapping and candidate gene analysis of telomere length control in maize (Zea mays L.)*. http://purl.flvc.org/fsu/fd/FSU_migr_etd-4741
Next position: Postdoctoral research, College of Medicine, FSU, Tallahassee, FL, USA.
Current position: Molecular Cloning Facility, Genome Biologist, Bio Dept. FSU.

**Debbie M. Figueroa**, Ph.D. Biological Science (**2011**)
Dissertation: *Development of pachytene cytogenetic fluorescence in situ hybridization (FISH) maps for six maize chromosomes: insights into genome structure.*
http://purl.flvc.org/fsu/fd/FSU_migr_etd-4828
Next position: Postdoctoral research, Biological Science, FSU, Tallahassee, FL, USA.
Current position: Postdoctoral Fellow at the NIH National Heart, Lung, and Blood Institute, Washington DC, USA.

**Shaun P. Murphy**, Ph.D. Molecular Biophysics (**2011**)
AHA pre-doctoral Fellow (2005– 2007)
Dissertation: *3D molecular cytological and genetic analysis of the SUN-domain proteins in maize meiosis: discovery of a novel plant SUN family, including SUN3, a candidate gene for the desynaptic (dy) mutant*. http://purl.flvc.org/fsu/fd/FSU_migr_etd-5060
Next position: Postdoctoral research, UC Davis, Davis, CA

**Daniel L. Vera**, Ph.D. Biological Science (**2014**) (Co-advisor, JH Dennis)
Dissertation: *Nucleosome Fragility and Resistance: An Additional Dimension of Chromatin Structure Information in Eukaryotic Genomes*.
http://purl.flvc.org/fsu/fd/FSU_migr_etd-9263
Next position: Director Center for Genomics and Personalized Medicine, FSU
Current position: Post-Doc, Harvard Medical School.

**Hardeep K. Gumber,** Ph.D. Biological Science (**2019**)
Dissertation via ProQuest: *Identification And Characterization Of Linker Of Nucleoskeleton And Cytoskeleton (LINC) Complex Components In Maize (Zea Mays L.) Meiosis And Development*
Current Position: Postdoctoral Fellow, Research Scientist Biotechnology, Jersey City, NJ.

**Katherine A. Easterling**, Ph.D. Biological Science (**2019**)
Research area: *3D Cytogenetics of Meiotic Chromosome Segregation in Hop.*

**Zachary M. Turpin,** Doctoral Student, Biology/CMB (2015 – present),
Research area: *DNA oxidation in gene regulation.*

**Juan R. Reza,** Doctoral Student, Biology/CMB (2018 – 2021, withdrew)

**Sara Akram,** Doctoral Student, Biology/CMB (2021 – present),
Research area: *Maize DNA replication.*

**Member Graduate Committees**

| Current | Degree/Program | Major Professor | Department | University |
|---|---|---|---|---|
| Arambarri, LN | Ph.D./CMB | Dennis, JH | Biological Science | FSU |
| Benoit, JM | Ph.D./CMB | Dennis, JH | Biological Science | FSU |
| Bilodeau, KM | Ph.D./CMB | Jones, KM | Biological Science | FSU |
| Carroll, CR | Ph.D./CMB | Dennis, JH | Biological Science | FSU |
| Fisher, GT | Ph.D./CMB | Jones, KM | Biological Science | FSU |
| Garg, Y | Ph.D./CMB | Stroupe, ME | Biological Science | FSU |
| Han, Na-eun | Ph.D./ | Stvilia, B | School of Information | FSU |
| Hoq, MR | Ph.D./CMB | Dennis, JH | Biological Science | FSU |
| Koirtyohann, KM | Ph.D./CMB | McGinnis, KM | Biological Sciecne | FSU |
| Lee, K | Ph.D./BMS | Lee, C | Biomedical Sciences | FSU |
| Srinivasan, D | Ph.D./CMB | Fraser, P | Biological Science | FSU |
| Walia, N | Ph.D./CMB | Stroupe, ME | Biological Science | FSU |
| Williams, DS | Ph.D. | Onokpise, OU | Ag & Life Science | FAMU |
| Yang, R | Ph.D./CMB | Yin, Q | Biological Science | FSU |
| Yong, H J | Ph.D./BMS | Wang, J | Biomedical Sciences | FSU |

| Former | Degree | Year | Major Professor | Program | University |
|---|---|---|---|---|---|
| Beyrouthy, MJ | Ph.D. | 2007 | Hurt, MM | Biomedical Sciences | FSU |
| Boerner, S | M.S. | 2012 | McGinnis, KM | CMB, Biological Science | FSU |
| Booker, W | Ph.D. | 2020 | Lemmon E | Biological Science | FSU |
| Brown, M | Ph.D. | 2008 | Balkwill, D | Biomedical Sciences | FSU |
| Burris, GG | Ph.D. | 2021 | Elsner, JB | Geography | FSU |
| Chamberlain, K | Ph.D. | 2007 | Keller, L | CMB, Biological Science | FSU |
| Chattopadhyay, | M.S. | 2007 | Bates, G | Biological Science | FSU |
| Cole, LA | Ph.D. | 2020 | Dennis, JH | CMB, Biological Science | FSU |
| Darrow, EM | Ph.D. | 2018 | Chadwick, BP | CMB, Biological Science | FSU |
| Daykin, KL | Ph.D. | 2017 | Zhu L | CHEM/Chemistry | FSU |
| Desai, Kevin | Ph.D. | 2010 | Miller, B | Chemistry & Biochemistry | FSU |
| Dileep, V | Ph.D. | 2017 | Gilbert, DM | CMB, Biological Science | FSU |
| Drum, MJ | Ph.D. | 2006 | Johnson, A | CMB, Biological Science | FSU |
| Fan, J | Ph.D. | 2019 | Yu, H | CMB, Biological Science | FSU |
| Fincher, JA | Ph.D. | 2012 | Dennis, JH | CMB, Biological Science | FSU |
| Hereford, J | Ph.D. | 2005 | Winn, A | EE, Biological Science, | FSU |
| Huang, H | Ph.D. | 2010 | Jörgensen, C | Library & Inform. Studies | FSU |
| Huang, J | Ph.D. | 2018 | McGinnis, KM | CMB, Biological Science | FSU |
| Imber, A | M.S. | 2006 | Gaffney, BJ | Biomedical Sciences | FSU |
| Jackson, S | M.S. | 2018 | Lyons, L | Biological Science | FSU |
| Jarrett, AM | Ph.D. | 2016 | Cogan, N | Biomathematics, Math | FSU |
| Jiang, T | M.S. | 2003 | Outlaw, WH | CMB, Biological Science | FSU |
| Jones, EH | Ph.D. | 2012 | Mast, A | EE, Biological Science | FSU |
| Kang, Y | Ph.D. | 2005 | Outlaw, WH | CMB, Biological Science, | FSU |
| Kassardjian, Ari C, | Ph.D. | 2012 | Hurt, MM | Biomedical Sciences | FSU |
| Klein, KN | Ph.D. | 2021 | Gilbert, DM | Biological Science | FSU |

| | | | | | |
|---|---|---|---|---|---|
| Klusza, S | Ph.D. | 2011 | Deng, W | CMB, Biological Science | FSU |
| Koch, B | Ph.D. | 2020 | Yu, H | CMB, Biological Science | FSU |
| Kopylov, M | Ph.D. | 2017 | Stroupe, ME | Molecular Biophysics, | FSU |
| Kuipers, M | Ph.D. | 2010 | Gilbert, DM | CMB, Biological Science | FSU |
| Kwon, B | Ph.D. | 2008 | Houpt, T | NEURO, Biological Science | FSU |
| Li, J | M.S. | 2015 | Cui, H | CMB, Biological Science | FSU |
| Li, X | M.S. | 2007 | Altmann, C | CMB, Biological Science | FSU |
| Liang, B | Ph.D. | 2009 | Li, H | MOB/Chemistry | FSU |
| Liu, H | Ph.D. | 2009 | Wang, Y | Biomedical Sciences | FSU |
| Lowenberg, M | M.S. | 2009 | Reeves, R | CMB, Biological Science | FSU |
| Lu, J | Ph.D. | 2010 | Gilbert, DM | CMB, Biological Science | FSU |
| Lynn, J | Ph.D. | 2020 | McGinnis, KM | CMB, Biological Science | FSU |
| Masi, T | Ph.D. | 2001 | Johnson, A | CMB, Biological Science | FSU |
| Mendis, BHC | Ph.D. | 2015 | Jones, KM | CMB, Biological Science | FSU |
| Meng, F | Ph.D. | 2007 | Outlaw, WH | CMB, Biological Science | FSU |
| Moriuchi, K | Ph.D. | 2008 | Winn, A | EE, Biological Science | FSU |
| Murray, DT | Ph.D. | 2021 | Stroupe, ME | Biological Science | FSU |
| Palko, L | Ph.D. | 2001 | Hurt, MM | CMB, Biological Science | FSU |
| Poduch, KN | M.S. | 2010 | Gilbert, DM | CMB, Biological Science | FSU |
| Riman, SF | Ph.D. | 2011 | Hurt, MM | Biomedical Sciences | FSU |
| Ring, BC | Ph.D. | | Garza/Johnson | CMB, Biological Science | FSU |
| Riskowski, R | Ph.D. | 2016 | Strouse, GF | Molecular Biophysics | FSU |
| Rizkallah, R | Ph.D. | 2008 | Hurt, MM | Biomedical Sciences | FSU |
| Row, S | Ph.D. | 2020 | Deng, W | Biological Science | FSU |
| Ryba, TR | Ph.D. | 2012 | Gilbert, DM | Biological Science | FSU |
| Santollo, JC | Ph.D. | 2010 | Eckel, LA | NEURO/Psychology | FSU |
| Schulte, LM | Ph.D. | 2021 | McGinnis, KM | Biological Science | FSU |
| Sexton, BS | Ph.D. | 2015 | Dennis, JH | CMB, Biological Science | FSU |
| Sharkey, JT | Ph.D. | 2009 | Olcese, J | Biomedical Sciences, COM | FSU |
| Sherdan, DM | Ph.D. | 2009 | Outlaw, WH | CMB, Biological Science | FSU |
| Shirk, K | M.S. | | Yu, H | CMB, Biological Science | FSU |
| Sotolongo, M | Ph.D. | 2016 | Fadool, J | CMB, Biological Science | FSU |
| Spetman, BD | M.S. | 2017 | Dennis, JH | CMB, Biological Science | FSU |
| Stroud, LK | Ph.D. | 2017 | McGinnis, KM | CMB, Biological Science | FSU |
| Tesfazghi, MT | Ph.D. | 2016 | Hurt, MM | Biomedical Sciences | FSU |
| Vendramin Alegre S | Ph.D. | 2019 | McGinnis, KM | Biological Science | FSU |
| Wang, M | M.S. | 2010 | Outlaw, WH | CMB, Biological Science | FSU |
| Wilson, K | Ph.D. | 2016 | Gilbert, DM | CMB, Biological Science | FSU |
| Wu, S | Ph.D. | 2014 | Stvilia, B | Information Studies | FSU |
| Yang, F | Ph.D. | 2010 | Tang, H | CMB, Biological Science | FSU |
| Zhang, Y | Ph.D. | 2014 | Liu, X | Computer Science | FSU |

**Undergraduate Committees (*current)**

| | | |
|---|---|---|
| Beckham, Katherine D. | Honors Thesis | Biological Science (advisor) |
| Damit, Michael | Honors Thesis | Biological Science |
| Daube, Gelvin | Honors Thesis | Biochemistry |

| | | |
|---|---|---|
| Davenport, David R. | Honors Thesis | Biological Science (advisor) |
| Elios, Megan C. | Honors Thesis | Biomedical Sciences |
| Freides, Cole | Honors Thesis | Biological Science |
| Gordon, Molly R. | Honors Thesis | Biological Science |
| Griffin, Brianna D. | Honors Thesis | Biological Science (advisor) |
| Griffin, Laura | Honors Thesis | Biochemistry |
| Hagemeyer, C.J. | Honors Thesis | Biological Science (advisor) |
| Howe, Elizabeth S. | Honors Thesis | Biological Science (advisor) |
| Koerner, Josh | Honors Thesis | Biological Science |
| Mahailovic, Sonja | Honors Thesis | Biological Science |
| Mari, David C. | Honors Thesis | Biological Science |
| Mills, E. Shannon | Honors Thesis | Biological Science |
| Savadel, Savannah D. | Honors Thesis | Biological Science (advisor) |
| Swetnam, Danielle | Honors Thesis | Biomedical Sciences |
| Toledo, Natalia | Honors Thesis | Biological Science |
| Tremblay, Nicholas | Honors Thesis | Biological Science |

**Post-Doctoral and Senior Biologist Researchers**

**Marion Goltz**, Ph.D., 1999 – 2000
Current position: Biotechnology, Germany

**Ruth Didier Swofford** 2002
Current position: Director of Cell Culture,
FSU College of Medicine, Tallahassee, FL, USA

**Bobbye J. Hill**, 2003 – 2006 Project Manager, *Cytogenetic Map of Maize*

**Ring, Brian C.**, Ph.D. 2004 – 2006 Cytogenetic mapping project
Current position: Assistant Professor of Biology, (Associate, starting Fall 2011)
Valdosta State University, Valdosta, GA, USA

**Hoffman, Gregg G.**, Ph.D. 2010 – 2012 Senior Project Manager, *Chromatin Structure and Genome Response in Maize*
Current position: Assistant-in Research, Psychology, FSU, Tallahassee, FL, USA.

**Mao, Yunyun**, Ph.D. 2011 – 2012 Maize Chromatin Research
Current position: Associate Research Professor/Fellow, University of Science and Technology of China, Hefei, China.

**Murphy, Shaun P.**, Ph.D. 2015 Project Manager, *Nuclease Profiling as an Epigenomic Resource for Maize*

**Hoffman, Gregg G.**, Ph.D. 2017 – 2019 Senior Project Manager, *Nuclease Profiling Nuclease Profiling as an Integrative Resource for Maize Epigenomics*

**SERVICE – INTRAMURAL**

Departmental Service (Biological Science, FSU):

Panelist, academic job workshop "Getting a job in academe & Compiling a teaching/research portfolio." Organizer Dr. L Gapp-Levi, FSU, March 1998.

Mentoring Committee, Dept. Biological Science, Fall 1999
MicroArray Facility Purchase Committee (chair), Biological Science, Spring 2000
Promotion & Tenure Criteria Review Committee; Biological Science, Sumer Fall 2001
CryoEM Search Committee, Fall 2002
Faculty Evaluation Committee, Spring 2002
FSU Representative for the Consortium for Plant Biotechnology Research, Inc.,
Cell & Molecular Biology graduate program area representative 2002 – 2003
J. Herbert Taylor Professorship Selection Committee 2003 – 2006.
Taylor Search – departmental advisory cabinet, 2003 – 2006.
Faculty Evaluation Committee, Spring 2004
Executive Committee, Dept. Biological Science, 2004 – 2005
Cell Molecular Biology (CMB) Faculty Search Committee, 2005 – 2006
Biological Science Chair Selection Committee, Fall 2005
Cluster Hire Genotype Phenotype (IGP) Action Committee, Spring 2006 – 2007.
IGP Cluster Hire, Core & Search Committee, Spring 2006 – 2009
Faculty Retreat on Undergraduate Curriculum Planning Committee, Spring 2006.
IGP Cluster Hire, Core & Search Committee, 2006 – 2009
Graduate Policy Committee, 2009 – Current
First Year Advisory Committee, CMB graduate program, 2008 – 2009
First Year Advisory Committee (Chair), CMB graduate program, 2009 – 2010
First Year Advisory Committee, CMB graduate program, 2010 – 2011
Executive Committee, 1998–99, 2004 - 2006–07, 2010–11, 2014–15.
Ad Hoc Committee, 2008/9 – current (for 6 assistant professors)
Area Representative, CMB graduate area (Chair), 2012 – 2013.
Faculty Evaluation Committee (FEC) Procedures Revision Committee (2013).
Chair Search Advisory Committee, 2015.
Promotion and Tenure Committee, 2016

University Service (Florida State University)
Faculty Search Committee, Biomedical Sciences Dept., Fall 2005.
University Biosafety Committee, 2006 – current.
FSU Computer and Information Resources Committee, 2006 – 2009.
Rodger's Chair Search Committee, Biomedical Sciences Dept., 2006 – 2007.
FSU Honors Policy Committee, 2012 – current.
Search Committee for Director for the FSU Honors Program, 2014.
FSU Faculty Senate, representing Biological Science, 2012 – 2018.
Faculty Advisor for RSO – FSU Ladies Ultimate Team, 2013 – current.
College of Arts & Sciences Study Abroad Applicants Review, 2018

## SERVICE – EXTRAMURAL

*PEER REVIEW*

**Manuscripts; ad hoc peer review (publons link):**
(~50 requests/year, able to accept/review ~12/year).
Journals include: *Bioinformatics, Biological Plantarum, BioTechniques, BMC Genomics, BMC Research Notes, Chromosoma, Chromosome Research, Genetics, Genome, Genome Biology, Genome Research, Hereditas*, *Journal of Cell Biology, Journal of Cell Science, Journal of Experimental Botany, Maydica, Nucleic Acids Research; Nucleus, Plant and Cell Physiology, Plant Cell, Plant Breeding Reviews, Plant Journal, Plant Physiology, Plant Science, PLoS Computational Biology, PLoS Genetics, PLoS ONE, PNAS USA, Protoplasma, Science, Science Advances, Theoretical and Applied Genetics, Trends in Plant Science.*

**Textbooks:** (average ~ 3 requests and ~ 1 accepted book or book sections to review/yr).
*Prentice Hall*, *John Wiley & sons, Inc.*

**Grant Proposal ad hoc reviews:** (~ 5 requests and ~ 5 accepted local, federal, or international grant proposals for review/yr)
Austrian Science Fund FWF, BBSRC, NSF, USDA

**Letters of Evaluation for Promotion and Tenure**
2006, 2008

*FEDERAL GRANT PANEL*

USDA, Plant Genetic Mechanisms; 2005, 2006, 2007.

*MEETING WORKSHOP ORGANIZER*

**Co-organizer for International Plant and Animal Genome Conference Workshop ('06-08)** PAG XIV, Plant Cytogenetics Workshop, Jan 2006, San Diego, CA

*EDITOR*

**Journal**

Guest Editor for Multi-Author Review series on Telomeres, 5 reviews in the November 2003 issue of *Cellular and Molecular Life Sciences*.

Editorial Board member, *The Journal of Molecular Imaging & Dynamics*, the OMICS publishing group, 2010-2014.

**Textbook**

*Plant Cytogenetics*
Eds. H.W. Bass and J.A. Birchler; Springer, (2012).
In *Plant Genetics and Genomics: Crops and Models* (Series editor R.A. Jorgensen)

**Kids Science Book**

*Crazy Lazy Corn!!!*
Eds. H.W. Bass and O.U. Onokpise (2018).
Tallahassee, FL, Sokhechapke Publishing, Inc.
ISBN: 978-09793451-9-7

**Other Extramural Service:**

2015 - Expert Review Meeting for FCAT 2.0 Science and Biology 1 EOC Assessment. Orlando, FL, January 28, 2015.

2016 - for FCAT 2.0 Science Grades 5 and 8 and the Biology 1 End-of-Course (EOC) Assessment. Orlando, FL, January 27, 2016.

2019 - Expert Review Meeting: FCAT 2.0 Sci & Bio 1 EOC, Orlando, FL, January 30, 2019.

2020 - Florida Expert Review Panel for Science Assessments, Orlando, FL, Jan 29, 2020.

2021 - Expert Review Meeting for the Florida Statewide Science Assessments—Grades 5 and 8 and the Biology 1 End-of-Course (EOC) Assessment, Tallahassee, FL, July 20, 2021.

2022 - Expert Review Meeting for the Florida Statewide Science Assessments—Grades 5 and 8 and the Biology 1 End-of-Course (EOC) Assessment, Tallahassee, FL, January 26, 2022.

WWW-distributed educational resources for teachers & students:

| WWW site: | Content: |
|---|---|
| http://bio.fsu.edu/bass/images2.html | DAPI images meiotic prophase nuclei |
| http://bio.fsu.edu/bass/mv/bq2/bq2-om9-JCS00.html | The "spinners" (spinning projections); supplemental 3D images, meiotic nuclei |
| http://bio.fsu.edu/~bass/mv/tgmv/ | Supplemental movies, intranuclear localization of geminivirus DNA by FISH |
| http://bio.fsu.edu/~bass/mv/bq3/ | 3D images meiotic mutant nuclei of maize |
| http://www.maizegdb.org/cgi-bin/displaymaprecord.cgi?id=892372 | Cytogenetic Map of Maize - Data (co-developed with CJ Lawrence, MaizeGDB) |
| http://www.cytomaize.org/<br>http://www.cytomaize.org/outreach/<br>http://www.cytomaize.org/outreach/MaizePics/ZmChrom-1/ZmChrom-1.html | Cytogenetic Map of Maize, Outreach, (mutant photo gallery, middle school, etc) |
| http://www.genomaize.org | UCSC genome browser with maize B73, hosted from FSU HPC site |
| http://bio.fsu.edu/bass/mv/esh/ | 3D supplemental movies from Howe et al., 2012. Fluorescent histone H2B in maize meiosis. |
| http://omero.bio.fsu.edu/ | OMERO public microscopy image server for Teaching and Research |