

HENRY (HANK) WYMAN BASS

Curriculum Vitae

Address: Department of Biological Science
3074 KIN, 319 Stadium Drive
King Life Sciences Bldg.
The Florida State University
Tallahassee, FL 32303-4370, U.S.A.

Phone: Office, (850) 644-9711
Laboratory, (850) 644-8058

FAX: (850) 644-0481

E-mail: bass@bio.fsu.edu, hbass@fsu.edu

WWW: Lab: <http://bio.fsu.edu/bass>
Projects: <http://www.cytomaize.org>, <http://www.maizenucleosome.org>
Resources: <http://greenomebrowser.com/> <http://cytomaize.org/outreach/>

Research Interests:

Our research makes use of maize (corn, *Zea mays* L.) 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. Experimental approaches include genetics, molecular biology, 3D fluorescence microscopy, structural and functional genomics, epigenomics, and bioinformatics.

Education:

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:

2016 – Professor of Biological Science,
Florida State University, Tallahassee, FL, USA.
2005 – 2016 Associate Professor of Biological Science,
Florida State University, Tallahassee, FL, USA.
1997 – 2005 Assistant Professor of Biological Science,
Florida State University, Tallahassee, FL, USA.
1998 – Molecular Biophysics Graduate Faculty,
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 – 2019** Amount: **\$ 2,133,825** (Project Period: 08/2015 – 07/2019)
 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
- 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)
 Project Team HW Bass, A Stuy, K Hawkins, J McCoy (Biological Science)

2017 Amount: **\$36,473** (Project Period: 2017)
 Source: **Hopsteiner - S.S. Steiner, Inc.**
 Title: *Cytogenetic Analysis of Humulus lupulus.*
 Award Info.: Award to support graduate research hops chromosome research
 Project Team HW Bass & KA Easterling (FSU), Paul Matthews (Hopsteiner)

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:

List at HW Bass' FSU page: <http://www.bio.fsu.edu/bass/publications/>
 List at Google Scholar: <https://scholar.google.com/citations?user=upavIREAAA&hl=en>
 Research Gate Profile: https://www.researchgate.net/profile/Hank_Bass
 ORCID: <http://orcid.org/0000-0003-0522-0881>

- Galau, G.A., H.W. Bass, and D.W. Hughes. (1988) Restriction fragment length polymorphisms in diploid and allotetraploid *Gossypium*: assigning the late embryogenesis-abundant (*Lea*) alleles in *G. hirsutum*. *Molecular and General Genetics* **211**:305–314.
- Wyatt, R., I.J. Odrzykoski, A. Stoneburner, H.W. Bass, and G.A. Galau (1988) Multiple origins of *Plagiomnium medium*. *Proceedings National Academy Sciences, USA* **85**:5601–5604.
- Bass, H.W., C. Webster, G.R. OBrian, J.K.M. Roberts and R.S. Boston (1992) A maize ribosome-inactivating protein is controlled by the transcriptional activator *Opaque-2*. *Plant Cell* **4**:225–234.
- Bass, H.W., J.H. Goode, T.W. Greene and R.S. Boston (1994) Control of ribosome-inactivating protein (RIP) RNA levels during maize seed development. *Plant Science* **101**:17–30.
- Bass, H.W., G.R. OBrian, and R.S. Boston (1995) Cloning and sequencing of a second ribosome-inactivating protein gene from maize (*Zea mays* L.). *Plant Physiology* **107**:661–662.

- Gillikin, J.W., F. Zhang, C.E. Coleman, H.W. Bass, B.A. Larkins, and R.S. Boston (1997) A defective signal peptide tethers the *floury-2* zein to the ER-membrane. *Plant Physiology* **114**:345–352.
- Bass, H.W., W.F. Marshall, J.W. Sedat, D.A. Agard, and W.Z. Cande (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., H.W. Bass, and W.Z. Cande (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, H.W., S. Nagar, L. Hanley-Bowdoin, and D. Robertson (2000) Chromosome condensation induced by geminivirus infection of mature plant cells. *Journal Cell Science* **113**(7):1149–1160.
- Bass, H.W., O. Riera-Lizarazu, E.V. Ananiev, S.J. Bordoli, H.W. Rines, R.L. Phillips, J.W. Sedat, D.A. Agard, and W.Z. Cande (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, B. C., H.W. Bass, and D. Garza (2000) Construction and transposition of a 100-kilobase "extended" P element in *Drosophila*. *Genome Research* **10**:1605–1616
- Bass, H.W., S.J. Bordoli, and E.M. Foss (2003) The *desynaptic* (*dy*) and *desynaptic1* (*dys1*) mutations in maize (*Zea mays* L.) cause distinct telomere-misplacement phenotypes during meiotic prophase. *Journal Experimental Botany* **54**(380):39–46
- Franklin A.E., I.N. Golubovskaya, H.W. Bass, and W.Z. Cande (2003) Improper chromosome synapsis is associated with elongated Rad51 structures in the maize *desynaptic2* mutant. *Chromosoma* **112**:17–25.
- Koumbaris, G.L. and H.W. Bass (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, C.O., S.J. Bordoli, M. Goltz, R.A. Santarella, L.P. Jackson, O. Danilevskaya, M. Beckstette, R. Meeley, and H.W. Bass (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, H.W. (2003) Telomere dynamics unique to meiotic prophase: formation and significance of the bouquet. *Cellular and Molecular Life Sciences (CMLS)* **60**:2319–2324.
- Palko, L., H.W. Bass, M.J. Beyrouthy, and M.M. Hurt (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, L.K., N. Salameh, H.W. Bass, L.C. Harper, W.Z. Cande, G. Weber, and S.M. Stack. (2004) Integrating genetic linkage maps with pachytene chromosome structure in maize. *Genetics* **166**(4):1923 – 1933.
- Bass H.W., J.E. Krawetz, G.R. OBrian, C. Zinselmeier, J.E. Habben, and R.S. Boston (2004) Maize ribosome-inactivating proteins (RIPs) with distinct expression patterns have similar requirements for proenzyme activation. *Journal Experimental Botany* **55**(406)2219–2233.

- Marian C.O. and H.W. Bass (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 C.J., T.E. Seigfried, H.W. Bass, and L.K. Anderson. (2006) Predicting chromosomal locations of genetically mapped loci in maize using the *Morgan2McClintock* translator. *Genetics* 173(3):2007–2009.
- Amarillo F.E. and H.W. Bass. (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)
- Figuroa DM and Bass HW. (2010) 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, [LINK](#))
- Figuroa DM, Davis JD, Strobel CE, Conejo MS, Beckham KD, Ring BC, and Bass HW. (2011) 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, [LINK](#))
- 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, [LINK](#))
- 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, [LINK](#))
- 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, [LINK](#))
- Figuroa 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, [LINK](#))

- 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, [LINK](#))
- Graumann K, Bass HW, and Parry G. (2013) SUNrises on the International Plant Nucleus Consortium: SEB Salzburg 2012. *Nucleus* 4(1):3-7. ([LINK](#))
- 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) Take a Look at Plant DNA Replication: Recent Insights and New Questions. *Plant Signaling & Behavior* (in press) DOI: [10.1080/15592324.2017.1311437](#)).

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

- Bass, H.W., P.H. Sisco, D.L. Murray, and R.S. Boston (1990). Probes for the b-32 protein hybridize to loci on 7L and 8L. *Maize Genetics Newsletter* **64**:97.
- Shank, B.B., H.W. Bass, P.H. Sisco, E. Wurtzel, and R.S. Boston (1990). Isolation and mapping of a cDNA probe for the b-70 protein. *Maize Genetics Newsletter* **64**:97.
- Bass, H.W. (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, A.F., J.W. Sedat, W.Z. Cande, and H.W. Bass (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, H.W. (2001) Chromosomes. In *Plant Sciences for Students* (ed. R. Robinson), MacMillan References, USA.
- Bass, H. W., L. C. Kang, A. Eyzaguirre (2001) Tom Thumb, a useful popcorn. *Maize Genetics Newsletter* **75**:62–63.
- Bass, H.W., and S.J. Bordoli (2001) Variable distribution of meiotic homologs; on-line spinning projections of 3D data from chromosome painting and telomere FISH analysis of OMA9.2. *Maize Genetics Newsletter* **75**:63.
- Koumbaris, G., and H.W. Bass (2002). Pachytene arm ratios for maize chromosome 9 in OMA9.2, a maize chromosome addition line of oat. *Maize Genetics Newsletter* **76**:62–63.
- Bass, H.W. (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, Y.R., O.U. Onokpise, W.E. Odland, and H.W. Bass (2004) FISH analysis of retroelement distribution patterns along mitotic chromosomes. *Maize Genetics Newsletter* **78**:59.
- Figuroa, D.M. and H.W. Bass (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, J.A. and H.W. Bass (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**.
- Figuroa 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.

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)

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 Seigfried, & 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 Bulk-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 Bulk-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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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.
- 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, 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, Maize Genetics, St. Louis, MO, USA, March 9-12, 2017.

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

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:

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
 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 –	Biology Major, WIMSE student; Scholarships for FE Fisher, KL McKeown, Vaughn-Jordan; 2017 MaGNET Awardee, NSF-URA
Savannah D. Savadel	2014 –	Biology Major, UROP student/assistantship, DIS, Scholarships for CRE IDEA grant, McAllister; HITM NSF-URA
Akram E Farran	2015 –	Biology Major, DIS
Morgan N Winn	2015 –	Math Major, DIS
Jacob M Rosenfield	2015 –	Biology Major, DIS
Bianca A Fox	2015 –	Biology Major, DIS
Chris J Hagemeyer	2016 –	Biology Major, DIS
Christopher K Nguyen	2016 –	Biology Major, UROP, DIS
Diana A Lacatusu	2016 –	Biology Major, FWS
Dylan M Allen	2016 –	Biology Major, FWS

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.

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
 Current position: Director Center for Genomics and Personalized Medicine, FSU
- Hardeep K. Gumber**, Doctoral Student, Biology/MCB (2012 – present),
 Research area: *Plant meiosis and the SUN-bouquet pathway in maize.*
- Katherine A. Easterling**, Doctoral Student, Biology/MCB (2013 – present),
 Research area: *Meiotic Chromosome Segregation and Pharmacogenosy.*
- Zachary M. Turpin**, Doctoral Student, Biology/MCB (2015 – present),
 Research area: *DNA oxidation in gene regulation.*

Member Graduate Committees

Current	Degree/Prog	Major Professor	Dept./Program	University
Cole, LA	Ph.D./CMB	Dennis, JH	Biological Science	FSU
Darrow, EM	Ph.D./CMB	Chadwick, BP	Biological Science	FSU
Daykin, KL	Ph.D./CHEM	Zhu, L	Chemistry	FSU
Dileep, V	Ph.D./CMB	Gilbert, DM	Biological Science	FSU
Fan, J.	Ph.D./CMB	Yu, H	Biological Science	FSU
Huang, J	Ph.D./CMB	McGinnis, KM	Biological Science	FSU
Hoffman, BJ	Ph.D./CMB	Dennis, JH	Biological Science	FSU
Jackson, S	Ph.D./CMB	Cui, H	Biological Science	FSU
Jarrett, AM	Ph.D./Math	Cogan, N	Mathematics	FSU
Klein, KN	Ph.D./CMB	Gilbert, DM	Biological Science	FSU
Koch	Ph.D./CMB	Yu, H	Biological Science	FSU
Kopylov, M	Ph.D./MOB	Stroupe, ME	Molecular Biophysics	FSU
Lynn, J	Ph.D./CMB	McGinnis, KM	Biological Science	FSU
Riskowski, R	Ph.D./MOB	Strouse, GF	Molecular Biophysics	FSU
Row, S	Ph.D./CMB	Deng, W	Biological Science	FSU
Schulte, LM	Ph.D./CMB	McGinnis, KM	Biological Science	FSU
Sotolongo, M	Ph.D./CMB	Fadool, J	Biological Science	FSU
Spetman, BD	Ph.D./CMB	Dennis, JH	Biological Science	FSU
Stroud, LK	Ph.D./CMB	McGinnis, KM	Biological Science	FSU
Tesfazghi, MT	Ph.D./BMS	Hurt, MM	Biomedical Sciences	FSU
Vendramin Alegre S	Ph.D. /CMB	McGinnis, KM	Biological Science	FSU
Williams, DS	Ph.D.	Onokpise, OU	Ag & Life Science	FAMU
Wilson, K	Ph.D. /CMB	Gilbert, DM	Biological Science	FSU
Wu, F	Ph.D.			

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
Brown, M	Ph.D.	2008	Balkwill, D	Biomedical Sciences	FSU
Chamberlain, K	Ph.D.	2007	Keller, L	CMB/Biological Science	FSU

Chattopadhyay, M M.S.	2007	Bates, G	Biological Science	FSU
Desai, Kevin	Ph.D. 2010	Miller, B	Chemistry & Biochemistry	FSU
Drum, MJ	Ph.D. 2006	Johnson, A	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	Jørgensen, C	Library & Information Studies,	FSU
Imber, A	M.S. 2006	Gaffney, BJ	Biomedical Sciences	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
Klusza, S	Ph.D. 2011	Deng, W	CMB/Biological Science	FSU
Kuipers, M	Ph.D. 2010	Gilbert, DM	CMB/Biological Science	FSU
Kwon, B	Ph.D. 2008	Haupt, T	NEURO/Biological Science,	FSU
Li, J	M.S. 2015	Cui, H	CMB/Biological Science,	FSU
Li, X	M.S. 2007	Altmann	CMB/Biological Science,	FSU
Liang, B	Ph.D. 2009	Li, H	MOB/Chemistry,	FSU
Liu, H	Ph.D. 2009	Wang, Y	Biomedical Sciences, COM,	FSU
Lowenberg, M	M.S. 2009	Reeves, R	CMB/Biological Science,	FSU
Lu, J	Ph.D. 2010	Gilbert, DM	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
Palko, L	Ph.D. 2001	Hurt, MM	CMB/Biological Science,	FSU
Poduch, KN	M.S. 2010	Gilbert, DM	CMB/Biological Science,	FSU
Ring, BC	Ph.D.	Garza/Johnson	CMB/Biological Science,	FSU
Rizkallah, R	Ph.D. 2008	Hurt, MM	Biomedical Sciences COM,	FSU
Ryba, TR	Ph.D. 2012	Gilbert, DM	Biological Science,	FSU
Santollo, JC	Ph.D. 2010	Eckel, LA	NEURO/Psychology,	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
Wang, M	M.S. 2010	Outlaw, WH	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
Howe, Elizabeth S.	Honors Thesis	Biological Science (advisor)
Koerner, Josh	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 – 200	
Current position:		Director of Cell Culture, FSU College of Medicine, Tallahassee, FL, USA
Bobbye J. Hill,	2003 – 2006	Project Manager, <i>Cytogenetic Map of Maize</i>
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, <i>Chromatin Structure and Genome Response in Maize</i>
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, <i>Nuclease Profiling as an Epigenomic Resource for Maize</i>

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, Summer 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 – 2020.
 Faculty Advisor for RSO – FSU Ladies Ultimate Team, 2013 – .

SERVICE – EXTRAMURAL

PEER REVIEW

Manuscripts (ad hoc peer review): (~30 requests/year, able to accept/review ~10/year).
 Journals include: *Bioinformatics, Biological Plantarum, BioTechniques, Chromosoma, Genetics, Genome, Genome Research, Hereditas, Journal of Cell Biology, Journal of Cell Science, Journal of Experimental Botany, Maydica, Plant and Cell Physiology, Plant Cell, Plant Breeding Reviews, The Plant Journal, Plant Science, Plant Physiology, PLoS Computational Biology, PLoS Genetics, PLoS ONE, Science, Theoretical and Applied Genetics*

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 grant proposals for review/yr)
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)

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.

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/tgmw/	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/	Cytogenetic Map of Maize, Outreach,
http://www.cytomaize.org/outreach/	(mutant photo gallery, middle school, etc)

<http://www.cytomaize.org/outreach/MaizePics/ZmChrom-1/ZmChrom-1.html>

<http://www.genomaize.org>

<http://bio.fsu.edu/bass/mv/esh/>

<http://omero.bio.fsu.edu/>

UCSC genome browser with maize B73,
hosted from FSU HPC site

3D supplemental movies from Howe et al.,
2012. Fluorescent histone H2B in maize
meiosis.

OMERO public microscopy image server for
Teaching and Research
