

## CURRICULUM VITAE

ANA M. CALVO, Professor of Biological Sciences

DATE: January, 2016

### EDUCATION:

Ph.D., *Apto Cum Laude*, CIB-CSIC/University of Alcalá de Henares, Madrid, Spain (Microbiology) 1995  
M.S., University of Alcalá de Henares, Madrid, Spain (Microbiology and Parasitology) 1989  
B.S., University of Alcalá de Henares, Madrid, Spain (Biological Science) 1987)

### AREAS OF SPECIALIZATION:

Microbiology, Molecular Biology, Fungal Genetics, Pathogenic fungi, Biotechnology

### PROFESSIONAL EXPERIENCE:

- Presidential Research Professor in the Department of Biological Sciences at Northern Illinois University, July 2014- present
- Professor in the Department of Biological Sciences at Northern Illinois University, August 2010-June 2014
- Associate Professor in the Department of Biological Sciences at Northern Illinois University, August 2007-August 2010
- Assistant Professor in the Department of Biological Sciences at Northern Illinois University, January 2002-August 2007
- Postdoctoral Research Associate in the department of Human Nutrition and Microbiology, Michigan State University, Sept.-Dec. 2001
- Visiting Scientist in the department of Biological Sciences, Texas A&M University, July-Aug. 2001
- Assistant Research Scientist in the department of Plant Pathology and Microbiology, Texas A&M University, 1999-June 2001
- Postdoctoral Research Associate in the department of Plant Pathology and Microbiology, Texas A&M University, 1996-1998

### MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

- Genetic Society of America
- American Society of Microbiology
- Sigma Xi
- NIU Center for Biochemical and Biophysical Studies
- NIU Graduate School Program

## HONORS AWARDED

- NIU Presidential Research Professor Award
- NIU Mortar Board Award for Outstanding Faculty
- Ministry of Education Scholarship "Formation of Research Personnel." Madrid, Spain

## PUBLICATIONS:

- Zhuang Z., Lohmar J.M., Satterlee T., Cary J.W., **Calvo A.M.** 2016. The Master Transcription Factor mtfA Governs Aflatoxin Production, Morphological Development and Pathogenicity in the Fungus *Aspergillus flavus*. *Toxins* (Basel). Jan 20;8(1). pii: E29. doi: 10.3390/toxins8010029
- Calvo AM**, Lohmar JM, Ibarra B, Satterlee T. (2016) Mycota Series. Volume I. 3rd Edition. Velvet Regulation of Fungal Development. Ed.: J Wedland. Springer International Publishing. 475-497.
- Cary J.W., Han Z, Yin, Y., Lohmar J.M., Shantappa S., Harris-Coward, P. Y., Mack, B., Ehrlich, K. C., Wei, Q., Arroyo-Manzanares N., Uka V., Vanhaecke L., Bhatnagar, D., Yu, J., Nierman W. C., Johns M.A., Sorensen D., Shen H., De Saeger S., Diana Di Mavungu J., and **Calvo A.M.** Transcriptome analysis of *Aspergillus flavus* reveals veA-dependent regulation of secondary metabolite gene clusters, including the novel aflavarin cluster. 2015. *Eukaryotic Cell*. 14:983-97
- Cary JW, Uka V, Han Z, Buyst D, Harris-Coward PY, Ehrlich KC, Wei Q, Bhatnagar D, Dowd PF, Martens SL, **Calvo AM**, Martins JC, Vanhaecke L, Coenye T, De Saeger S, Di Mavungu JD. [An \*Aspergillus flavus\* secondary metabolic gene cluster containing a hybrid PKS-NRPS is necessary for synthesis of the 2-pyridones, leporins.](#) *Fungal Genet Biol*. 2015 Jun 4;81:88-97. doi: 10.1016/j.fgb.2015.05.010.
- Lind AL, Wisecaver JH, Smith TD, Feng X, **Calvo AM**, Rokas A. [Examining the evolution of the regulatory circuit controlling secondary metabolism and development in the fungal genus \*Aspergillus\*.](#) *PLoS Genet*. 2015 Mar 18;11(3):e1005096. doi: 10.1371/journal.pgen.1005096. eCollection 2015 Mar
- Calvo AM**, Cary JW. [Association of fungal secondary metabolism and sclerotial biology.](#) *Front Microbiol*. 2015 Feb 16;6:62. doi: 10.3389/fmicb.2015.00062. eCollection 2015.
- Baidya S, Duran R, Lohmar JM, Harris-Coward PY, Cary JW, Hong SY, Roze LV, Linz JE, **Calvo AM**. VeA is associated with the response to oxidative stress in the aflatoxin-producer *Aspergillus flavus*. *Eukaryot Cell*. 2014. 13:1095-103
- Heddergott C, **Calvo AM**, Latgé JP. The volatome of *Aspergillus fumigatus*. *Eukaryot Cell*. 2014 Jun 6. pii: EC.00074-14. [Epub ahead of print].
- Lan N, Zhang H, Hu C, Wang W, **Calvo AM**, Harris SD, Chen S, Li S. Coordinated and Distinct Functions of Velvet Proteins in *Fusarium verticillioides*. *Eukaryot Cell*. 2014 Jul;13(7):909-18. doi: 10.1128/EC.00022-14. Epub 2014 May 2.
- Smith TD and **Calvo AM**. The mtfA Transcription Factor Gene Controls Morphogenesis, Gliotoxin Production and Virulence in the Opportunistic Human Pathogen *Aspergillus fumigatus*. *Eukaryot Cell*. 2014 Apr 11. [Epub ahead of print]

- Duran RM, Gregersen S, Smith TD, Bhetariya PJ, Cary JW, Harris-Coward PY, Mattison CP, Grimm C, **Calvo AM**. The role of *Aspergillus flavus* *veA* in the production of extracellular proteins during growth on starch substrates. *Appl Microbiol Biotechnol*. 2014 Mar 4. [Epub ahead of print]
- Lin H, Tsunematsu Y, Dhingra S, Xu W, Fukutomi M, Chooi YH, Cane DE, **Calvo AM**, Watanabe K, Tang Y. Generation of Complexity in Fungal Terpene Biosynthesis: Discovery of a Multifunctional Cytochrome P450 in the Fumagillin Pathway. *J Am Chem Soc*. 2014 Feb 26. [Epub ahead of print]
- Cary JW, Harris-Coward PY, Ehrlich KC, Di Mavungu JD, Malysheva SV, De Saeger S, Dowd PF, Shantappa S, Martens SL, **Calvo AM**. Functional characterization of a *veA*-dependent polyketide synthase gene in *Aspergillus flavus* necessary for the synthesis of asparosone, a sclerotium-specific pigment. *Fungal Genet Biol*. 2014 Mar;64:25-35.
- Ramamoorthy V, Dhingra S, Kincaid A, Shantappa S, Feng X, **Calvo AM**. 2013. The Putative C2H2 Transcription Factor *MtfA* Is a Novel Regulator of Secondary Metabolism and Morphogenesis in *Aspergillus nidulans*. *PLoS One*. 2013 Sep 16;8(9):e74122. doi: 10.1371/journal.pone.0074122.
- Shantappa S, Dhingra S, Hernández-Ortiz P, Espeso EA, **Calvo AM**. 2013. Role of the zinc finger transcription factor *SltA* in morphogenesis and sterigmatocystin biosynthesis in the fungus *Aspergillus nidulans*. *PLoS One*. 2013 Jul 1;8(7):e68492. doi: 10.1371/journal.pone.0068492. Print 2013.
- Dhingra, S, Lind, AL, Lin H-C, Tang Y, Rokas A and **Calvo AM**. 2013. The fumagillin gene cluster, an example of hundreds of genes under *veA* control in *Aspergillus fumigatus*. *PLoS One*. 07 Oct 2013 | PLOS ONE 10.1371/journal.pone.0077147
- Lin HC, Chooi YH, Dhingra S, Xu W, **Calvo AM**, Tang Y. 2013. The fumagillin biosynthetic gene cluster in *Aspergillus fumigatus* encodes a cryptic terpene cyclase involved in the formation of  $\beta$ -trans-bergamotene. *J. Am. Chem. Soc*. 135:4616-9.
- Palmer J.M. Theisen JM, Duran RM, Grayburn WS, **Calvo AM**. Keller NP. 2013. Secondary metabolism and development is mediated by LImF control of *VeA* subcellular localization. *PLoS Genetics*. 9(1):e1003193. doi: 10.1371/journal.pgen.1003193. Epub 2013 Jan 17
- Dhingra S., Andes D., **Calvo AM**. 2012. Role of *veA* in *Aspergillus fumigatus*. *Eukaryotic Cell*. 11:1531-43
- Ramamoorthy V, Shantappa S, Dhingra S, **Calvo AM**. 2012. *veA*-dependent RNA-pol II transcription elongation factor-like protein, *RtfA*, is associated with secondary metabolism and morphological development in *Aspergillus nidulans*. *Mol. Microbiol*. 85:795-814.
- Laskowski-Peak MC, **Calvo AM**, Rohrssen J, Smulian GA. 2012 *VEA1* is required for cleistothecial formation and virulence in *Histoplasma capsulatum*. *Fungal Genet. Biol*. [Epub ahead of print].
- Cary JW, Harris-Coward PY, Ehrlich KC, Mack BM, Kale SP, Larey C, **Calvo AM**. 2012 *NsdC* and *NsdD* Affect *Aspergillus flavus* Morphogenesis and Aflatoxin Production. *Eukaryot Cell*. 11:1104-11

- Si H, Rittenour WR, Xu K, Nicksarlian M, **Calvo AM**, Harris SD. 2012. Morphogenetic and developmental functions of the *Aspergillus nidulans* homologues of the yeast bud site selection proteins Bud4 and Axl2. *Mol Microbiol.* 85:252-70.
- Chettri P, **Calvo AM**, Cary JW, Dhingra S, Guo Y, McDougal RL, Bradshaw RE. 2012. The veA gene of the pine needle pathogen *Dothistroma septosporum* regulates sporulation and secondary metabolism. *Fungal Genet. Biol.* 49:141-51.
- Myung, K., N. C. Zitomer, M. Duvall, A. E. Glenn, R. T. Riley and **A. M. Calvo**. 2012. The conserved global regulator VeA is necessary for symptom production and mycotoxin synthesis in maize seedlings by *Fusarium verticillioides*. *Plant Pathology.* 61:152-160.
- Padamsee M, Arun Kumar TK, Riley R, Binder M, Boyd A, **Calvo AM**, Furukawa K, Hesse C, Hohmann S, James TY, Labutti K, Lapidus A, Lindquist E, Lucas S, Miller K, Shantappa S, Grigoriev IV, Hibbett DS, McLaughlin DJ, Spatafora JW, Catherine Aime M. 1. The genome of the xerotolerant mold *Wallemia sebi* reveals adaptations to osmotic stress and suggests cryptic sexual reproduction. 2012. *Fungal Genet Biol.* Feb 4. [Epub ahead of print].
- Baidya S, Cary JW, Grayburn WS, **Calvo AM**. 2011. Role of nitric oxide and flavohemoglobin homolog genes in *Aspergillus nidulans* sexual development and mycotoxin production. *Appl. Environ. Microbiol.* 77:5524-8.
- Calvo AM** and Dhingra S. 2011. Conserved regulatory mechanisms controlling aflatoxin and sterigmatocystin biosynthesis. In: *Aflatoxin-Biochemistry and Molecular Biology*. Ed.: Ramon G. Guevara-Gonzalez. pg 67-89. ISBN 978-953-307-395-8.
- Atoui A, Kastner C, Larey CM, Thokala R, Etxebeste O, Espeso EA, Fischer R, **Calvo A.M.** 2010. Cross-talk between light and glucose regulation controls toxin production and morphogenesis in *Aspergillus nidulans*. *Fungal Genet. Biol.*47: 962-972.
- Duran R.M., Cary J.W, **Calvo A.M.** 2010. Role of the Osmotic Stress Regulatory Pathway in Morphogenesis and Secondary Metabolism in Filamentous Fungi. *Toxins*, 2: 367-381
- Chanda A., Roze, L., Kang S., Hicks G., Railhel., N., **Calvo A.**, Linz J. A key role for vesicles in fungal secondary metabolism. *Proceedings of the National Academy of Sciences of the United States of America.* Proc Natl Acad Sci U.S.A. 2009. 106:19533-8.
- Myung K, Li S, Butchko RAE, Busman M, Proctor RH, Abbas HK, **Calvo AM**. FvVE1 regulates biosynthesis of the mycotoxins fumonisins and fusarins in *Fusarium verticillioides*. *J. Agric. Food Chem.* 2009. 57:5089-94.
- Araújo-Bazán L, Dhingra S, Chu J, Fernández-Martínez J, **Calvo AM**, Espeso EA. 2009. Importin alpha is an essential nuclear import carrier adaptor required for proper sexual and asexual development and secondary metabolism in *Aspergillus nidulans*. *Fungal Genet Biol.* 46(6-7):506-15.

- Duran, RM, Cary JW and **Calvo AM**. 2009. The Role of veA on *Aspergillus flavus* Infection of Peanuts, Corn and Cotton. *Open Mycology journal*. 3, 27-36.
- Cary J, Szernzen L, and **Calvo AM**. 2009. Regulation of *Aspergillus flavus* aflatoxin biosynthesis and development. *Mycotoxin Prevention and control in Agriculture* (submitted). Eds.: David Kendra and Michael Appell. (I am the senior and corresponding author of this article).
- Li S., **Calvo AM**, Yuen GY, Du L Harris SD. 2009. Induction of Cell Wall Thickening by the Antifungal Compound Dihydromaltophilin Disrupts Fungal Growth and Is Mediated by Sphingolipid Biosynthesis. *Journal of Eukaryotic Microbiology*. Volume 56:182-187.
- Calvo A.M.** 2008. The VeA regulatory system and its role in morphological and chemical development in fungi. *Fungal Genetics and Biology* 45:1053-61.
- Atoui A, Bao D, Kaur N., Grayburn WS, **Calvo AM**. 2008. The MAP-kinase mpkB is necessary for normal secondary metabolism in *Aspergillus nidulans*. *Appl. Environ. Microbiol.* 74:3596-600.
- Purschwitz J, Müller S, Kastner C, Schöser M, Haas H, Espeso EA, Atoui A, **Calvo AM**, Fischer R. 2008. Functional and Physical Interaction of Blue- and Red-Light Sensors in *Aspergillus nidulans*. *Current Biology*. 18:255-9.
- Cary J and **Calvo AM**. 2008. Regulation of Aflatoxin Biosynthesis. *Journal of Toxicology: Toxin Reviews*. Volume 27, Numbers 3-4, November pp. 347-370(24).
- Roze LV, Beaudry RM, Arthur AE, **Calvo AM**, Linz JE. 2007. *Aspergillus volatiles* regulate aflatoxin synthesis and asexual sporulation in *Aspergillus parasiticus*. *Appl Environ Microbiol*73:7268-76.
- Stinnet S., Espeso E., Cobeno L., Arujo-Bazan L. and **Calvo A.M.** 2007. VeA subcellular localization is dependent on the importin alpha carrier and on light in the filamentous fungus *Aspergillus nidulans*. *Molecular Microbiology*. 63:242-55.
- Duran R.M., Cary J. W. and **Calvo A.M.** 2007. Production of Cyclopiazonic acid, Aflatrem and Aflatoxin by *Aspergillus flavus* is regulated by veA, a gene necessary for sclerotial formation. *Applied Microbiology and Biotechnology*. 73:1158-68.
- Li S, Bao D, Yuen G, Harris SD, **Calvo AM**. 2007. basA regulates cell wall organization and asexual/sexual sporulation ratio in *Aspergillus nidulans*. *Genetics*. 2007. 176:243-53.
- Cary JW, Obrian GR, Nielsen DM, Nierman W, Harris-Coward P, Yu J, Bhatnagar D, Cleveland TE, Payne GA, **Calvo AM**. 2007. Elucidation of veA-dependent genes associated with aflatoxin and sclerotial production in *Aspergillus flavus* by functional genomics. *Appl Microbiol Biotechnol*. 76: 1107-1118.
- Paoletti M., Seymour F.A., Alcocer M.J.C., Kaur N., **Calvo A.M.**, Archer D.B. and Dyer P.S. 2007. Mating type and the genetic basis of self-fertility in the model fungus *Aspergillus nidulans*. *Current Biology* 2007. 17: 1384-1389

- Roze LV, Beaudry RM, Arthur AE, **Calvo AM**, Linz JE. 2007. *Aspergillus* volatiles regulate aflatoxin synthesis and asexual sporulation in *Aspergillus parasiticus*. *Appl Environ Microbiol.* 73:7268-76.
- Li S., Myung K., Guse D., Donkin B., Proctor RH, Grayburn W.S. and **Calvo A.M.** 2006. FvVE1 regulates filamentous growth, the ratio of microconidia to macroconidia and cell wall formation in *Fusarium verticillioides*. *Molecular Microbiology.* 62:1418-32.
- Cary JW, Ehrlich K, Kale SP, **Calvo AM**, Bhatnagar D, Cleveland TE. 2006 Regulatory Elements in Aflatoxin Biosynthesis (Abstract format). *Mycotoxin Research* 22:105-109.
- Calvo A.M.**, Bok J.W., Brooks W. and Keller N.P. 2004. veA is required for toxin and sclerotial production in *Aspergillus parasiticus*. *Appl. Environ. Microbiol.* 70:4733-9.
- Wilson R.A., **Calvo A.M.**, Chang P-K and Keller N.P. 2004. Characterization of the *Aspergillus parasiticus*  $\Delta 12$ -desaturase gene: a role for lipid metabolism in the *Aspergillus*/plant interaction. *Microbiology*, 150:2881-8.
- Calvo A.M.** 2004. Mycotoxins. In: *Toxins in Food*. Dabrowsky W. and Sikorski Z. (Eds.) CRC Press. Boca Raton, Florida, pg 215-237.
- Roze L.V., **Calvo A.M.**, Gunterus A., Beaudry R., Kall M., and Linz J.E. 2004. Ethylene modulates development and toxin biosynthesis in *Aspergillus* likely via an ethylene sensor-mediated signaling pathway. *Journal of Food Protection*, 67: 438-447.
- Kato N., Brooks W. and **Calvo A.M.** 2003. The expression of sterigmatocystin and penicillin genes in *Aspergillus nidulans*. *Eukaryotic Cell*, 2: 1178-1186.
- Calvo A.M.**, Wilson R.A., Bok J. and Keller N.P. 2002. Relationship between natural product metabolism and fungal development. *Microbiology and Molecular Biology Reviews*, 66:447-59.
- Calvo A.M.**, Gardner H.W. and Keller N.P. 2001. Genetic connection between fatty acid metabolism and sporulation in *Aspergillus nidulans*. *Journal of Biological Chemistry*, 276:25766-74
- Calvo A.M.**, Hinze L.L., Gardner H.W. and Keller N.P. 1999. Sporogenic effect of polyunsaturated fatty acids on development of *Aspergillus* spp. *Applied and Environmental Microbiology*, 65:3668-3673.
- Calvo A.M.**, Copa-Patiño J.L., Alonso A. and González A.E. 1998. Studies of the production and characterization of laccase activity in the basidiomycete *Coriopsis gallica*, an efficient decolorizer of alkaline effluents. *Archives of Microbiology*, 171:31-36.
- Calvo A.M.**, Copa-Patiño J.L., Fernández-Larrea J.L. and González A.E. 1996. Improvements in decolorization of paper effluents using ligninolytic fungi and possible enzymes involved. *Biotechnology in the Pulp and Paper Industry: Advances in Applied and Fundamental Research*. Eds. E. Srebotnik and K. Messner. Austria. pp 253-257.
- Mansur M., Fernández J.B., Hedenmo M., **Calvo A.M.**, Copa-Patiño J.L. and González A.E. 1996. Detection and partial characterization of laccases produced by a *Pleurotus* genus strain. *Biotechnology in the Pulp*

and Paper Industry: Advances in Applied and Fundamental Research. Eds. E. Srebotnik and K. Messner. Viena, Austria. pp 377-380.

**Calvo A.M.**, Terrón M.C., Fidalgo M.L., Pelayo J.M., Galletti G.C. and González A.E. 1995. Py-GC-MS Characterization of wheat straw alkaline-cooking effluents after biological treatment with the fungi *Phanerochaete chrysosporium* and *Ganoderma australe*. *Analytical Chimica Acta*, 309:145-152.

**Calvo A.M.**, Galletti G.C. and González A.E. 1995. Paper wastewater analyses by Py/GC/MS during biological treatment with the fungi *Coriopsis gallica* and *Paecilomyces variotii*. *Journal of Analytical and Applied Pyrolysis*, 33:39-50.

Pal M., **Calvo A.M.**, Terrón M.C. and González A.E. 1995. Changes produced in the integral sugarcane bagasse after SSF by the edible mushroom *Flammulina velutipes* and the white-rot fungus *Trametes versicolor*. *World Journal of Microbiology and Biotechnology*, 11:541-545.

Terron M.C., **Calvo A.M.**, Fidalgo M.L., Manzanares P., Ballesteros M., Martinez A.T., Martin C. and Gonzalez A.E. 1992. Chemical characterization and biological decolorization of straw soda pulping effluents. Eds. M. Kuwahara and M. Shimada. *Biotechnology in Pulp and Paper Industry*, Uni Publishers Co., Ltd., Kyoto, Japan. pp 51-56.

**Calvo A.M.**, Martinez A.T. and Gonzalez A.E. 1991. Biological decolorization of effluent from paper industry by fungi. *Med. Fac. Landbouww. Rijksuniv, Gent*. 56: 1565-1567.

Jimenez A., Rodriguez F., **Calvo A.M.** and Casado N. 1989. A comparative study of malate dehydrogenase in the genus *Trichinella*. *Trichinellosis-ITC 7*, Ed. C. Tanner, CSIC Press, Madrid, Spain. pp 53-58.

#### PATENT APPLICATIONS

- **Calvo AM and V. Ramamorthy**. Effects of Alteration of Expression of the *mtfA* Gene and its Homologs on the Production of Fungal Secondary Metabolites. U.S. Patent 8927255
- **Calvo AM**. Fumagillin gene cluster and its use for the biosynthesis of fumagillin, fumagillin intermediates, or compounds derived from fumagillin. Submitted Invention Disclosure Form 2012.
- **Calvo AM**. Use of nitric oxide or nitric oxide generating compounds to increase the production of beneficial fungal secondary metabolites. Submitted Invention Disclosure Form 2011.

#### PRESENTATIONS AT PROFESSIONAL MEETINGS

- XXVIII International Fungal Genetics Conference. Characterization of the *rtfA* gene in *Aspergillus fumigatus*. Pacific Grove, California, March 17-22, 2015
- XXVIII International Fungal Genetics Conference. *rtfA*, a putative RNA-pol II transcription elongation factor gene, is necessary for normal morphological and chemical development, proper response to oxidative stress and pathogenicity in *Aspergillus flavus*. Pacific Grove, California, March 17-22, 2015.
- XXVIII International Fungal Genetics Conference. The putative polysaccharide synthase gene *cpsA* regulates mycotoxin production and morphogenesis in the fungus *Aspergillus nidulans*. Pacific Grove, California, March 17-22, 2015

- XXVIII International Fungal Genetics Conference. *rmtA*, a gene encoding a type I arginine methyltransferase involved in histone modifications, affects development and secondary metabolism in *Aspergillus flavus*. Pacific Grove, California, March 17-22, 2015.
- XXVIII International Fungal Genetics Conference. Transcriptome analysis of *Aspergillus flavus* reveals *veA*-dependent regulation of secondary metabolite gene clusters, including the novel aflavarin cluster. Pacific Grove, California, March 17-22, 2015.
- International 6th Advances Against Aspergillosis conference. Characterization of the *rtfA* gene in *Aspergillus fumigatus*. Madrid, Spain. February 27-March 1 2014
- International 6th Advances Against Aspergillosis conference. The *mtfA* Transcription Factor Gene Controls Morphogenesis, Gliotoxin Production and Virulence in the Opportunistic Human Pathogen *Aspergillus fumigatus*. Madrid, Spain. February 27-March 1 2014
- **INVITED SPEAKER.** XI Fungal Biology International Conference. Advances in the knowledge of fungal secondary metabolism. Karlsruhe, Germany 27 September- 3 October 2013.
- XXVII International Fungal Genetics Conference. A novel C2H2 type finger transcription factor, MtfA, regulates mycotoxin biosynthesis and development in *Aspergillus nidulans* Pacific Grove, California, March 12-17, 2013
- XXVII International Fungal Genetics Conference. Functional characterization of an *Aspergillus flavus* polyketide synthase gene necessary for the synthesis of a sclerotium-specific pigment. Pacific Grove, California, March 12-17, 2013
- XXVII International Fungal Genetics Conference. Secondary metabolism and development is mediated by LlmF control of VeA subcellular localization. Pacific Grove, California, March 12-17, 2013
- XXVII International Fungal Genetics Conference. XXVII International Fungal Genetics Conference. VeA regulates conidiation, gliotoxin production and protease activity in the opportunistic human pathogen *Aspergillus fumigatus*. Pacific Grove, California, March 12-17, 2013
- **INVITED SPEAKER** World Mycotoxin Forum. Conserved *veA*-dependent factors, RM3 and RM7, regulate mycotoxin production and morphological development in *Aspergillus nidulans*. Rotterdam, the Netherlands, 5-9 November 2012.
- 5th Advances against Aspergillosis Conference. Role of *veA* gene in *Aspergillus fumigatus*. 26-28 January 2012. Istanbul, Turkey,
- Gordon Conference - Cellular & Molecular Fungal Biology. *veA*-dependent RNA-pol II transcription elongation factor like protein, RtfA, is associated with secondary metabolism and morphological development in *Aspergillus nidulans*. June 17-22, 2012. Holderness, New Hampshire
- Gordon Conference - Cellular & Molecular Fungal Biology. Characterization of the *veA* gene in *Aspergillus fumigatus*. June 17-22, 2012, Holderness, New Hampshire



- Gordon Conference - Cellular & Molecular Fungal Biology. Role of zinc transcription factors CrzA and SltA in morphogenesis and sterigmatocystin biosynthesis in the fungus *Aspergillus nidulans*. June 17-22, 2012. Holderness, New Hampshire
- Identification of an *Aspergillus flavus* Polyketide Synthase Gene that Encodes a Sclerotia-Specific Pigment. 112th General Meeting, June 16 - 19, 2012, San Francisco, CA.
- **INVITED SPEAKER.** Regulatory mechanisms controlling mycotoxin production. Participation in the symposium "Mechanisms of toxin production and microbial drug resistance" in the 8th International Congress of Pharmaceutical Sciences (CIFARP 2011) August 21-24 in Ribeirao Preto, Brazil.
- Mycological Society of America 2011. The *Wallemia sebi* genome: small in size but reveals clues to surviving an osmotically challenging environment. August 3-5 Fairbanks, Alaska
- XXVI International Fungal Genetics Conference. Role of flavohemoglobin homologous genes and nitric oxide in *Aspergillus nidulans* morphogenesis and mycotoxin production. Pacific Grove, California, March 15-20, 2011
- XXVI International Fungal Genetics Conference. Identification and characterization of genetic regulatory elements downstream of veA controlling mycotoxin biosynthesis in *Aspergillus nidulans*. Pacific Grove, California, March 15-20, 2011
- XXVI International Fungal Genetics Conference. The LaeA-like methyltransferase plays a role in secondary metabolism and development in *Aspergillus nidulans*. Pacific Grove, California, March 15-20, 2011
- XXVI International Fungal Genetics Conference. Silencing of velvet gene homolog suppresses cleistothecia formation in *Histoplasma capsulatum*. Pacific Grove, California, March 15-20, 2011
- XXVI International Fungal Genetics Conference. Role of the zinc transcription factors CrzA and SltA in morphogenesis and sterigmatocystin biosynthesis in the fungus *Aspergillus nidulans*. Pacific Grove, California, March 15-20, 2011
- **INVITED SPEAKER** The VeA protein complex and its role in secondary metabolism Society for General Microbiology. Nottingham UK. September 2010
- American Society for Microbiology General Conference. Hydrolysis of plant polymers is *veA*-dependent in *Aspergillus flavus*. May 2010 San Diego, California
- The 9th International Mycological Congress. Transcriptional regulation of secondary metabolism, development and virulence in *Aspergillus flavus*. Edinburgh UK August 2010
- **INVITED SPEAKER** American Phytopathology Society (APS) Annual Meeting Regulation of morphogenesis, secondary metabolism, and pathogenicity by the VeA system in *Aspergillus* and *Fusarium* species. August 1-5 2009. Portland, Oregon
- XXV International Fungal Genetics Conference. Whole genome transcript analysis to identify *veA*-dependent genes in *Aspergillus flavus* associated with aflatoxin production and fungal morphogenesis. Pacific Grove, California March 17-22, 2009

- XXV International Fungal Genetics Conference. The Role of *veA* on *Aspergillus flavus* Infection of Peanuts, Corn and Cotton. Pacific Grove, California March 17-22, 2009
- IX International Conference of Plant Pathology. Torino, Italy. August 24-29, 2008
- and X International Fusarium Workshop and Fusarium Genomics Workshop satellite meeting. Alghero, Sardinia Italy August 30- September 2, 2008. *FvVE1* Differentially Regulates the Biosynthesis of Fumonisin and Bikaverin in *Fusarium verticillioides*. Kyung Myung, Shaojie Li, Hamed K. Abbas and Ana M. Calvo
- **INVITED SPEAKER** 108<sup>th</sup> American Society for Microbiology, General Meeting. *VeA* Regulates Morphogenesis and Natural Product Biosynthesis in Filamentous Fungi Boston. June 1-5, 2008
- **INVITED SPEAKER** Gordon Research Conference: Cellular & Molecular Fungal Biology. The *VeA* regulatory mechanism controlling fungal morphogenesis, secondary metabolism and plant infection. Holderness, New Hampshire, June 29 - July 4, 2008
- XXIV International Fungal Genetics Conference *FvVE1* differentially regulates the biosynthesis of fumonisin and bikaverin in *Fusarium verticillioides*. Pacific Grove, California March 20-25, 2007
- XXIV International Fungal Genetics Conference. A putative MAP-kinase, *mpkB*, regulates natural product biosynthesis in *Aspergillus nidulans*. Pacific Grove, California March 20-25, 2007
- XXIV International Fungal Genetics Conference Effect of osmotic stress on sclerotial and aflatoxin production in *Aspergillus flavus*. Pacific Grove, California March 20-25, 2007
- **INVITED SPEAKER** XXIV International Fungal Genetics Conference. *FvVE1* differentially regulates the biosynthesis of fumonisin and bikaverin in *Fusarium verticillioides*. Pacific Grove, California March 20-25, 2007
- IV International Aspergillus Meeting. A putative MAP-kinase, *mpkB*, regulates natural product biosynthesis in *Aspergillus nidulans*. Pacific Grove, California March 18-19, 2007
- IV International Aspergillus Meeting. Effect of osmotic stress on sclerotial and aflatoxin production in *Aspergillus flavus*. Pacific Grove, California March 18-19, 2007
- American Society for Microbiology 106th General Conferences. Elucidation of regulatory mechanisms controlling sclerotial development and aflatoxin biosynthesis in *Aspergillus flavus* by Functional Genomics. Orlando, Florida, May 21 - 25, 2006.
- VIII European Conference of Fungal Genetics. The *FvveA* gene regulates filamentous growth and conidiation pattern in *Fusarium verticillioides*. Vienna, Austria, April 8-11, 2006
- VIII European Conference of Fungal Genetics. *VeA* subcellular localization is dependent on light in the filamentous fungus *Aspergillus nidulans*. Vienna, Austria, April 8-11, 2006
- **INVITED SPEAKER** III Aspergillus meeting. *VeA* subcellular localization is dependent on light in the filamentous fungus *Aspergillus nidulans*. Vienna, Austria, April 8, 2006

- **INVITED SPEAKER** XXVIII Annual Aflatoxin Elimination Workshop. Production of Cyclopiazonic acid, Aflatrem and Aflatoxin is regulated by *veA*, a gene necessary for sclerotial formation in *Aspergillus flavus*. North Carolina. October 24-26, 2005
- **INVITED SPEAKER** The 8<sup>th</sup> Annual Conference on New and Re-Emerging Infectious Diseases. The velvet gene, *veA*, is necessary for normal fungal development and biosynthesis of natural products. Urbana-Champaign Illinois. April, 2005
- XXIII Fungal Genetics Conference. " Characterization of the *mpkB* gene in the model fungus *Aspergillus nidulans*. Kaur N.\* and Calvo A.M.\* " Pacific Grove, California, March 15-20, 2005
- XXIII Fungal Genetics Conference. "Subcellular localization of velvet, a gene necessary for development and toxin production in *Aspergillus nidulans*" Pacific Grove, California, March 15-20, 2005
- **INVITED SPEAKER** The American Chemical Society (ACS). 36<sup>th</sup> Annual Great Lakes Regional Meeting. "The role of the *veA* gene in fungal secondary metabolism". Peoria, Illinois. October 17-20, 2004.
- XXII Fungal Genetics Conference. "*veA* is necessary for secondary metabolism in *Aspergillus nidulans*" Pacific Grove, California, March 18-23, 2003
- **INVITED SPEAKER** International Symposium on Fungal Biotechnology. "Genetic mechanism regulating morphogenesis and mycotoxin production in *Aspergillus* spp." Seville, Spain. 6-7 Mach, 2003
- Aflatoxin/Fumonisin Elimination Workshop 2000. "Role of lipid metabolism in *Aspergillus* development." Yosemite, California, October 25-27, 2000
- Society for Industrial Microbiology Annual Meeting 2000. "Regulation and requirement of the delta-12 desaturase in *Aspergillus nidulans* development." San Diego, California, July 23-27, 2000
- Eleventh Annual Aflatoxin Elimination Workshop. "Characterization of the delta-12 desaturase gene in *Aspergillus nidulans*." Atlanta, Georgia, October 22-24, 1999
- Gordon Research Conference. "Role of polyunsaturated fatty acids on *Aspergillus* developmental processes." Plymouth, New Hampshire, June 21-24, 1999
- Twentieth Fungal Genetics Conference. "Elucidating the role of linoleic acid on *Aspergillus* spp. development." Pacific Grove, California, March 23-28, 1999
- Tenth Annual Aflatoxin Elimination Workshop. "Role of polyunsaturated fatty acids on *Aspergillus* developmental processes." St. Louis, Missouri, October 25-27, 1998
- Fourth European Conference on Fungal Genetics. "Lipid Metabolites Regulate *Aspergillus* spp. development." Leon, Spain, April 4-7, 1998
- Ninth Annual Aflatoxin Elimination Workshop. "Plant metabolites alter *Aspergillus* development." Memphis, Tennessee, October 26-28, 1997

- American Phytopathological Society Conference (APS annual meeting). “Plant metabolites alter *Aspergillus* development through modulation of lipoxygenase expression.” Rochester, New York, September 9-13, 1997
- Twenty-ninth Annual Meeting American Peanut Research Education Society (APRES). “Plant metabolites alter *Aspergillus* development through modulation of lipoxygenase expression”. San Antonio, Texas, July 8-11, 1997
- Eighth Annual Aflatoxin Elimination Workshop. “Effects of plant lipoxygenases on mycotoxin production and development in *Aspergillus* spp.” Fresno, California, October 27-29, 1996
- Third "Congreso Iberico de Biotecnologia" (BIOTECH '96). “Study of the laccase activity in *Corioloropsis gallica*, a fungus capable of efficiently decolorizing the alkaline effluents of the paper industry.” University of Valladolid, Spain, September 21-23, 1995
- Sixth International Conference on Biotechnology in the Pulp and Paper Industry. “Improvements in decolorization of paper effluents using ligninolytic fungi and possible enzymes involved.” Vienna, Austria, June 11-15, 1995
- Eleventh International Symposium on Analytical and Applied Pyrolysis (PYROLYSIS 94). “Paper wastewater analyses by Py/GC/MS during biological treatment with the fungi *Corioloropsis gallica* and *Paecilomyces variotii*.” Nagoya University Symposium, Nagoya, Japan, May 30-June 3, 1994
- Fourth International Symposium on Analytical Techniques for Industrial Process Control (ANATECH 94). “Monitoring paper wastewater quality by Py/GC/MS during biological treatment with the fungi *Phanerochaete chrysosporium* and *Ganoderma australe*.” Mandelieu la Napoule, France. April 10-13, 1994
- Third Latin-American/National Conference of Biotechnology. “Biodecolorization of paper industry effluents: Transformation or Degradation of lignin?” Universidad de Santiago, Santiago de Chile, November 16-19, 1993
- First National Congress on the Environment. “Treatment of paper industry effluents.” University of Alcalá de Henares, Madrid, October 19-22, 1993
- Sixth European Congress on Biotechnology. “Optimization, chemical characterization and kinetic of fungal decolorization process of alkaline effluents from paper industry.” Florence, Italy, June 13-17, 1993
- Fourth National/I Hispano-Luso Congress of Biotechnology. “Applicability of ligninolytic fungi in the biodecolorization of effluent from wheat straw soda cooking in the paper industry.” Santiago de Compostela, Spain, September 15-18, 1992
- Fifth International Conference on Biotechnology in the Pulp and Paper Industry. “Chemical characterization and fungal decolorization of straw soda pulping effluents.” Kyoto, Japan, May 27-30, 1992
- Agro-Industrial and Forestry Research, Technology Days. “Biopulping and biobleaching.” Palais des Congrès, Brussels, Belgium, March 11-12, 1992

- Fifth Forum for Applied Biotechnology. “Biological decolorization of effluents from paper industry by fungi.” State University of Gent, Belgium, September 25-27, 1991
- International Congress of Parasitology. “A comparative study of malate-dehydrogenase in the genus *Trichinella*.” Alicante, Spain, October 2-6, 1988

**Invited talks at other Universities:**

- Department of Biological Sciences at Western Illinois University, Macomb, Illinois, October 2013
- Department of Biological Sciences at Vanderbilt University, Nashville, Tennessee. October 2012
- Department of Microbiology at Southern Illinois University. September 2010.

**OTHER PROFESSIONAL INFORMATION:**

**Extramural Grants Awarded**

July 2014 – June 2017	USDA-ARS. Identification of Regulatory Genes in <i>Aspergillus flavus</i> and <i>Aspergillus nidulans</i> that are Involved in Mycotoxin Production, Morphogenesis, and Virulence. <u>\$90,703.00</u>
July 2012 – June 2016	NIH AREA. Role of the VeA-Dependent Genes and Proteins in Mycotoxin Production and Development. <u>\$354,735.00</u>
July 2009 – June 2014	USDA-ARS. Identification of Regulatory Genes in <i>Aspergillus flavus</i> and <i>Aspergillus nidulans</i> that are Involved in Mycotoxin Production, Morphogenesis, and Virulence. <u>\$75,097.00</u>
March 2011 – February 2013	NIH R03 Grant. Study of the veA Gene in the Human Pathogen <i>Aspergillus fumigatus</i> . <u>\$145,000.00.</u>
Nov. 2011 - November 2012	an Indo-US proposal “Study of the novel VeA protein complex in the fungus <i>Fusarium verticillioides</i> ” <u>\$36,000.00.</u>
Feb. 2009 – January 2012	NIH Grant (AREA). Characterizing VeA, a fungal-specific global regulator controlling secondary metabolism. P.I. A M. Calvo. <u>\$210,440.00.</u>
Starting 2005-ended March 2008	NIH Grant (AREA). "Study of the velvet gene, <i>veA</i> , in <i>Fusarium verticillioides</i> ".PI: A. M. Calvo. <u>\$217,500.00</u>
1999-2001	USDA/ARS Grant. Title: Targeting the oleate 12 desaturase to control <i>Aspergillus</i> growth and aflatoxin production. Co-Principal Investigator. <u>\$25,000.00</u>

**Other Grants Awarded**

Fall 2012- Spring 2013	NIU College of Liberal Arts and Sciences URAP Grant. CLP regulation of morphogenesis and natural product biosynthesis
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in the model fungus *Aspergillus nidulans*.

Fall 2012	URA. Undergraduate student hired Jessica Lohmar.
Fall 2011- Spring 2012	NIU College of Liberal Arts and Sciences URAP Grant. Identification of novel genetic elements involved in VeA control of sterigmatocystin toxin biosynthesis in the model fungus <i>Aspergillus nidulans</i> .
Fall 2011	NIU College of Liberal Arts and Sciences URAP Grant. Study of the VeA protein complex.
2008	NIU Graduate Fund Summer Research and Artistry Grant. Study of the <i>veA</i> in the pathogenic fungus <i>Aspergillus fumigatus</i>
2005	NIU Graduate Fund Summer Research and Artistry Grant. Study of the subcellular localization of VeA, a protein that is required for mycotoxin production and resistant structure formation in the model fungus <i>Aspergillus nidulans</i>
Spring 2005	NIU College of Liberal Arts and Sciences URAP Grant. Elucidation of the role of the velvet gene in <i>Fusarium verticillioides</i> through the study of deletion mutants
2004	NIU Graduate Fund Summer Research and Artistry Grant. Study of the velvet gene, <i>veA</i> , in <i>Fusarium verticillioides</i> , a common mycotoxigenic corn-infecting fungus
Fall 2004	NIU College of Liberal Arts and Sciences URAP Grant. Study of the regulator of c-AMP kinases on the velvet gene ( <i>veA</i> ), a gene that controls morphological development and secondary metabolism in <i>Aspergillus</i> spp.
2003	NIU Graduate Fund Summer Research and Artistry Grant. Characterization of the role of the velvet gene, <i>veA</i> , in <i>Aspergillus</i> development and mycotoxin production
Spring 2003	NIU College of Liberal Arts and Sciences URAP Grant. Learning and using DNA-technology to find the cellular localization of an important global regulator, velvet
Fall 2003	NIU College of Liberal Arts and Sciences URAP Grant. Study of the developmental role of the velvet gene in <i>Fusarium verticillioides</i> , a plant pathogenic fungus commonly found infecting Illinois corn
Fall 2002	NIU College of Liberal Arts and Sciences URAP Grant. Is sexual development genetically linked to toxin production in the fungus <i>Aspergillus nidulans</i> ?
1992-1995	Competitive Ministry of Education Scholarship "Formation of Research Personnel." Madrid, Government of Spain.
1991	ECLAIR Project (N°AGRE-CT90-0044) European Community

Teaching and Related Activities

A. Teaching Responsibilities:

1. Courses taught and independent studies

Fall 2015

BIOS 770 (Ryan Myers)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Arthur Hernandez)  
BIOS 770 (Jessica Lohmar)  
BIOS 770 (Timothy Sartterlee)  
BIOS 770 (Sandesh S Pandit)  
BIOS 370 (Tyler Stern)  
BIOS 499 H (Taylor Mc Donald)

Summer 2015

BIOS 770 (Jessica Lohmar)  
BIOS 770 (Sandesh S Pandit)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Tim Satterlee)  
BIOS 370 (Kara Kresanek)  
BIO 499H (Taylor McDonald)

Spring 2015

BIOS 493 Fungal Biology  
BIOS 700 Fungal Biology  
BIOS 770 (Ryan Myers)  
BIOS 770 (Xuehuan Feng)  
BIOS 699 (Beatriz Ibarra)  
BIOS 699 (Jessica Lohmar)  
BIOS 699 (Timothy Sartterlee)  
BIOS 770 (Sandesh S Pandit)  
BIOS 770 (Shawana Ahmed)  
BIOS 370 (Tyler Kotoswski)

Fall 2014

BIOS 313  
BIOS 770 (Ryan Myers)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Beatriz Ibarra)  
BIOS 770 (Jessica Lohmar)  
BIOS 770 (Timothy Sartterlee)  
BIOS 770 (Shawana Ahmed)  
BIOS 370 (Matthew van Cura)  
BIOS 370 (Betsy Wierseman)  
BIOS 370 (Haley Blackburn)  
BIOS 370 (Tyler Kotoswski)  
Volunteer (Brett Thompson)  
\*Postdoctoral student (Zhuang Zhenhong)

Summer 2014

BIOS 770 (Ryan Myers)

BIOS 770 (Xuehuan Feng)  
BIOS 770 (Beatriz Ibarra)  
BIOS 770 (Jessica Lohmar)  
BIOS 770 (Timothy Sartterlee)  
BIOS 370 (Matthew van Cura)  
BIOS 370 (Betsy Wierseman)  
Volunteer (Brett Thompson)  
\*Postdoctoral student (Zhuang Zhenhong)

Spring 2014

BIOS 488/588  
BIOS 770 (Timothy Smith)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Stacey Martens)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Beatriz Ibarra)  
BIOS 770 (Jessica Lohmar)  
BIOS 770 (Timothy Sartterlee)  
BIOS 370 (Owen Leu)  
BIOS 370 (Brett Thompson)  
\*Postdoctoral student (Zhuang Zhenhong)

Fall 2013

BIOS 313  
BIOS 770 (Timothy Smith)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Stacey Martens)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Beatriz Ibarra)  
BIOS 770 (Jessica Lohmar)  
BIOS 770 (Timothy Sartterlee)  
BIOS 495H (Justin Durancik) NIU Honors, Simons scholar  
BIOS 370 (Owen Leu)  
\*Postdoctoral student (Preetida Bethariya)  
\*Postdoctoral student (Zhuang Zhenhong)

Summer 2013

BIOS 770 (Timothy Smith)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Stacey Martens)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Beatriz Ibarra)  
BIOS 495H (Justin Durancik) NIU Honors, Simons scholar  
Student-at-large (Jessica Lohmar)  
\*Postdoctoral student (Preetida Bethariya)  
\*Postdoctoral student (Zhuang Zhenhong)

Spring 2013

BIOS 493-BIOS593 Fungal Genetics  
BIOS 770 (Timothy Smith)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Stacey Martens)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Sourabh Dhingra) NIU Dissertation Completion Award  
BIOS 770 (Beatriz Ibarra)



BIOS 495H (Justin Durancik) NIU Honors, Simons scholar  
Student-at-large (Jessica Lohmar)  
BIOS 370 (Anna Roman-Pleschko)  
\*Postdoctoral student (Preetida Bethariya)  
\*Postdoctoral student (Baohua Wang)  
\*Postdoctoral student (Zhuang Zhenhong)

Fall 2012

BIOS 313  
BIOS 770 (Timothy Smith)  
BIOS 770 (Ryan Myers)  
BIOS 770 (Stacey Martens)  
BIOS 770 (Xuehuan Feng)  
BIOS 770 (Sourabh Dhingra) NIU Dissertation Completion Award  
BIOS 495H (Justin Durancik) NIU Honors, Simons scholar  
BIOS370 (Jessica Lohmar)  
BIOS 370 (Swati Sharma)  
Volunteer (Anna Roman-Pleschko)  
\*Postdoctoral student (Baohua Wang)  
\*Postdoctoral student (Zhuang Zhenhong)  
\*Visiting scientist (Sayaji Mehetre)  
\*Visiting scientist (V Ramamoorthy)

Summer 2012

BIOS 770 (Stacey Martens)  
BIOS 770 (Sourabh Dhingra) PMBC Award  
Volunteer (Timothy Smith)  
(Justin Durancik) NIU Rookie Simons scholar  
\*Postdoctoral students (Baohua Wang)  
\*Visiting scientist (Sayaji Mehetre)  
\*Visiting scientist (V Ramamoorthy)

Spring 2012

BIOS 488  
BIOS 588  
BIOS 770 (Timothy Smith)  
BIOS 770 (Sourabh Dhingra)  
BIOS 699 (Sourabha Shanpatta) Sidney Mittler Award for Genetics  
BIOS 770 (Scott Gregersen)  
BIOS 770 (Stacey Martens)  
(Justin Durancik) NIU Rookie Simons scholar  
BIOS 370 (Jessica Lohmar)  
BIOS 370 (Sean Johnson)  
BIOS 495H (Lauren Jurkowski) Honors  
BIOS 370 (Alexander Kincaid)  
Volunteer (Rocio Duran)  
Volunteer (Patrick Madura)  
\*Visiting scientist (Sayaji Mehetre)

Fall 2011

BIOS 313  
BIOS 313H  
BIOS 661A  
BIOS 699 (Christy Larey)  
BIOS 699 (Sachin Baydia)

BIOS 699 (Sourabha Shantappa)  
BIOS 770 (Bradley Czerniak)  
BIOS 770 (Sourabh Dhingra)  
BIOS 770 (Scott Broski)  
BIOS 770 (Scott Gregersen)  
BIOS 495H (Justin Durancik) Honors  
BIOS 370 (Karl Mamaat)  
BIOS 370 (Swati Sharma)  
BIOS 495H (Lauren Jurkowski) Honors  
BIOS 370 (Patrick Madura)  
BIOS 370 (Alexander Kincaid)  
\*Visiting scientist (Sayaji Mehetre)

Summer 2011

BIOS 699 (Christy Larey)  
BIOS 699 (Sourabha Shantappa)  
BIOS 770 (Sourabh Dhingra)  
BIOS 699 (Sachin Baydia)  
BIOS 370 Karl Mamaat  
\*Postdoctoral student (Nansalmaa Amarsaikhan)

Spring 2011

BIOS 313  
BIOS 205  
BIOS 770 (Christy Larey)  
BIOS 770 (Sachin Baydia)  
BIOS 699 (Sourabha Shantappa)  
BIOS 770 (Sourabh Dhingra)  
BIOS 370 (Swaty Patel)  
BIOS 370 (Patrick Madura)  
BIOS 370 (Lauren Jurkowski)  
BIOS 370 (Karl Mamaat)  
BIOS 370 (Andres Arellano)  
\*Postdoctoral student (Nansalmaa Amarsaikhan)

Fall 2010

BIOS 313  
BIOS 493  
BIOS 700  
BIOS 770 (Christy Larey)  
BIOS 699 (Sachin Baydia)  
BIOS 699 (Sourabha Shantappa)  
BIOS 699 (Jennifer Rohrsen)  
BIOS 770 (Sourabh Dhingra)  
Visiting student (Erika Herrero)  
BIOS 370 (Andres Arellano)  
BIOS 370 (Swati Sharma)  
BIOS370 (Shipa Sharma)  
BIOS 370 (Mark Nicksarlian)  
\*Postdoctoral student (V Ramammoorthy)  
\*Visiting scientist (Sayaji Mehetre)

Summer 2010

BIOS 699 (Christy Larey)

BIOS 699 (Sourabha Shantappa)  
BIOS 770 (Sourabh Dhingra)  
BIOS 699 (Jennifer Rohrssen)  
BIOS 770 (Sachin Baydia)  
BIOS 699 (Rocio Duran)  
Volunteer (Mark Nicksarlian)  
\*Postdoctoral student (V Ramammoorthy)

Spring 2010

BIOS 488  
BIOS 588  
BIOS 770 (Christy Larey)  
BIOS 699 (Sachin Baydia)  
BIOS 770 (Sourabha Shantappa)  
BIOS 770 (Sourabh Dhingra)  
BIOS 770 (Jennifer Rohrssen)  
BIOS 770 (Rocio Duran)  
BIOS 370 (Mark Nicksarlian)  
BIOS 370 (Maulik Patel)  
Volunteer (Urvish Desai)  
Volunteer (Leah Guerrero)  
\*Postdoctoral student (V Ramammoorthy)

Fall 2009

Sabbatical  
BIOS 699 (Sachin Baydia)  
BIOS 770 (Sourabha Shantappa)  
BIOS 770 (Sourabh Dhingra)  
BIOS 770 (Jennifer Rohrssen)  
BIOS 770 (Rocio Duran)  
BIOS 495H (Christy Larey) NIU Honors, U.S.O.A.R. Award  
BIOS 495H (Urvish Desai) NIU Honors, Phi Sigma Undergraduate Research Award  
BIOS 495H (Michael Kelly) NIU Honors, Jerrold H. Zar Award  
BIOS 370 (Mark Nicksarlian)  
BIOS 370 (Aubrey Mears)  
BIOS 370 (Michael Gibboney)

Summer 2009

BIOS770 (Rocio Duran)  
BIOS770 (Sourabh Dhingra)  
BIOS770 (Jennifer Rohrssen)  
BIOS370(Aubrey Mears)  
BIOS370 (Mark Nicksarlian)

Spring 2009

BIOS699 (Leanne Szerszen)  
BIOS770 (Rocio Duran) PMBC scholarship, Sidney Mittler Award for Genetics  
BIOS770 (Sourabh Dhingra)  
BIOS770 (Jennifer Rohrssen)  
BIOS770 (Radhika Thokala)  
BIOS495H (Christy Larey) Honors  
BIOS495H (Michael Kelly) Honors  
BIOS495H (Urvish Desai) Honors  
BIOS370 (Michael Gibboney)

Fall 2008

BIOS313  
BIOS103  
BIOS699 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Sourabh Dhingra)  
BIOS670 (Jennifer Rohrssen)  
BIOS370 (Christy Larey)  
BIOS370 (Adam Estrada)  
BIOS370 (Cara Kjellesvik)  
BIOS370 (Urvish Desai)  
BIOS370 (Michael Kelly)

Summer 2008

BIOS699 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Sourabh Dhingra)  
BIOS670 (Regina Jahn)

Spring 2008

BIOS493  
BIOS600D  
BIOS670 (Leanne Szerszen)  
BIOS599 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Sourabh Dhingra)  
BIOS670 (Thao Le)  
BIOS670 (Jennifer Rohrssen)  
BIOS670 (Regina Jahn)  
\*Postdoctoral student Ali Atoui

Fall 2007

BIOS103  
BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Sourabh Dhingra)  
BIOS670 (Regina Jahn)  
BIOS670 (Jennifer Rohrssen)  
BIOS370 (John Chu)  
BIOS370 (Salina Arafat)  
\*Postdoctoral student Ali Atoui

Summer 2007

BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Regina Jahn)  
BIOS370 (John Chu)  
BIOS370 (Amanda Starleaf) NIU Marguerite Key Research Award  
\*Postdoctoral student (Dapeng Bao)

Spring 2007

BIOS313  
BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS370 (Agnieszka Markiewicz)  
BIOS370 (Emily Corkey)  
BIOS370 (Amanda Starleaf)

BIOS370 (Tamir Shelo)  
\*Postdoctoral student (Dapeng Bao)

Fall 2006

BIOS496  
BIOS600D  
BIOS661A  
BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS670 (Kevin Chen)  
BIOS670 (Jennifer Rohrsen)  
BIOS599 (Suzanne Stinnett)  
BIOS370 (Amanda Starleaf)  
BIOS370 (Anthony Kosiba)  
\*Postdoctoral student (Dapeng Bao)

Summer 2006

BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS599 (Suzanne Stinnett)  
BIOS599 (Navgeet Kaur)  
BIOS370 (Steve Sylwestrak)  
BIOS370 (Andrew Coyle)  
BIOS370 (Kevin Chen)

Spring 2006

BIOS313  
BIOS670 (Leanne Szerszen)  
BIOS670 (Rocio Duran)  
BIOS599 (Suzanne Stinnett)  
BIOS599 (Navgeet Kaur)  
BIOS370 (Faye Harris)  
BIOS370 (Brett Donkin) NIU Phi Sigma 2003  
BIOS370 (Samuel Jones)  
BIOS370 (Agnieszka Markiewiez)  
\*Postdoctoral student Shaojie Li  
\*Postdoctoral student Kyung Myung

Fall 2005

BIOS103  
BIOS670 (Rocio Duran)  
BIOS599 (Suzanne Stinnett)  
BIOS599 (Navgeet Kaur)  
BIOS370 (Leanne Szerszen)  
BIOS370 (Faye Harris)  
BIOS370 (Brett Donkin)  
\*Postdoctoral student Kyung Myung

Summer 2005

BIOS670 (Rocio Duran)  
BIOS670 (Suzanne Stinnett)  
BIOS599 (Navgeet Kaur)  
BIOS370 (Leanne Szerszen)  
BIOS370 (Faye Harris)

Spring 2005

BIOS313

BIOS670 (Rocio Duran)  
BIOS670 (Suzanne Stinnett)  
BIOS599 (Navgeet Kaur)  
URAP (Brett Donkin)  
BIOS370 (Greg Sonneson)

Fall 2004  
BIOS103  
BIOS670 (Janice Loring)  
BIOS599 (Navgeet Kaur)  
URAP (Tracy Golden)  
BIOS670 (Suzanne Stinnett)

Spring 2004  
BIOS103  
BIOS670 (Navgeet Kaur)  
BIOS370 (Suzanne Stinnett)  
BIOS495H (Maie Seif) NIU Honors  
BIOS370 (Irma Avila)  
BIOS370H (Diana Guse) NIU Honors

Fall 2003  
BIOS 313  
BIOS661A  
BIOS670 (Navgeet Kaur)  
URAP (Christopher Trimby)  
495H (Maie Seif)  
BIOS370 (Suzanne Stinnett)  
BIOS370 (Christopher Lee)

Summer 2003  
BIOS370H (Maie Seif)

Spring 2003  
BIOS103  
BIOS 670 (Navgeet Kaur)  
BIOS 670 (Mary Wilder)  
URAP (Suzanne Stinnett)  
BIOS370 (Courtney Jaeger)  
\*Postdoctoral student Naoki Kato

Fall 2002  
BIOS313  
BIOS670 (Navgeet Kaur)  
URAP (Wilhelmina Brooks) NIU Phi Sigma Award  
URAP (Jillian Loebach)  
\*Postdoctoral student Naoki Kato

Summer 2002  
BIOS370 (Wilhelmina Brooks)  
\*Postdoctoral student Naoki Kato

Spring 2002  
BIOS103  
BIOS370 (Guy Filwet)

BIOS 313. Introduction to Microbiology. It has a laboratory component aided by a lab coordinator.

BIOS488/588: Applied Microbial Biotechnology. This is a course for senior undergraduate students and graduate students. It has a laboratory component organized by me.

BIOS 493/593. Fungal Genetics course. This is a course for senior undergraduate students and graduate students.

BIOS 493/700. Fungal Biology course. This is a course for senior undergraduate students and graduate students.

BIOS 493/700: Plant Stress. This is a course for senior undergraduate students and graduate student.

BIOS 103: Introduction to Biology for non-Biology majors.

BIOS 205: Introduction to Biology.

BIOS 661: Microbiology seminar course.

\*Further details on these courses could be provided shortly upon request.

**Postdoctoral researchers and visiting scientists that have worked in my laboratory in the Dept of Biological Sciences at NIU**

- Naoki Kato
- Kyung Myung
- Shaojie Li
- Dapeng Bao
- Ali Atoui
- Velusami Ramamoorthy
- Nansalmaa Amarsaikhan
- Baohua Wang
- Zhuang Zhenhong
- Sayaji Mehetre
- Preetida Bhethariya

**Professional Services**

A. Scholarly Refereeing

- Editor of the Journal Toxins
- I have provided reviews for the following journals on numerous occasions:

Applied Environmental Microbiology  
PLOS One  
PLOS Pathogenes  
PLOS Genetics  
Eukaryotic Cell  
Fungal Biology  
Fungal Genetics and Biology  
Molecular Microbiology

Molecular Genetic and Genomics  
Canadian Journal of Microbiology  
Enzyme and Microbial Technology  
Microbiology  
Genetics  
Journal of Toxicology  
Mycological Research  
Mycologia  
Mycopathologia  
Microbiome Science and Medicine  
Toxins

- I have reviewed grants for the:

National Science Foundation Grant Program

USDA proposals

- Organizer of International scientific meetings:
  - American Society for Microbiology
  - International Fungal Biology Conference

#### B. Institutional Services

##### 1. Departmental committees

- Graduate Committee 2012- present
- NIU IBC Committee 2012- present
- PRP Selection Committee – Fall 2015 -present
- Faculty Senate Committee 2012
- Biology Dept. Governance Committee since Fall 2007-2011
- Seminar Committee (Microbiology) 2002-2007
- Library committee 2003- present (Chair during Spring 2007 and Spring 2014)
- Several search committees for new Faculty members

##### 2. Public Services

- Invited speaker at the New Ideas in Science Conference, Holmes Center NIU Spring 2004. Title " Fungi an Biotechnology". The audience included about 100 high school science teachers.
- Northern Stars interviews