

CURRICULUM VITAE N. LOUISE GLASS

ACADEMIC CREDENTIALS

B.Sc. 1978 Colorado State University, Biology

Ph.D. 1986 University of California, Davis, Plant Pathology

Major Professor: Dr. Tsune Kosuge

Title of thesis: Cloning of the IAA-lysine synthetase gene and its role in regulating IAA pool size and virulence of *Pseudomonas syringae* subsp. *savastanoi*.

PROFESSIONAL EXPERIENCE

1986-1989 Post-doctoral associate, Department of Physiological Chemistry, The University of Wisconsin-Madison (with Dr. Robert L. Metzenberg)

1989-1995 Assistant Professor, Department of Botany and The Biotechnology Laboratory, University of British Columbia

1995-1999 Associate Professor, Department of Botany and The Biotechnology Laboratory, University of British Columbia

1999-2004 Associate Professor, Plant and Microbial Biology Department, University of California, Berkeley

2004-present Professor, Plant and Microbial Biology Department, University of California, Berkeley

2012-current, Associate Chair, Microbial Biology Division, Associate Chair PMB, University of California, Berkeley

FELLOWSHIPS and AWARDS

2012 Miller Professorship

2012 Elected Division Chair X, American Society of Microbiology

2011 Visiting Professor for Senior International Scientists, Chinese Academy of Scientists (CAS)

2011 Elected to Committee on Elections, American Academy of Microbiology

2010 Elected as a Fellow of the American Academy of Microbiology

2005 Elected as a Fellow of the American Society for the Advancement of Science (AAAS)

2005 Karling lecturer, Mycological Society of America

1994 Visiting Professor Fellowship, Universite Paris-Sud

1986-1989 American Cancer Society Postdoctoral Fellowship

PATENTS

UCB: B11-162 Kinase deletion prevents expression of cellulases in *Neurospora crassa*

UCB: B11-184 Essential transcription factors for cellulosic enzyme production in *Neurospora crassa*

UCB: B09-108 Systems analysis of plant cell wall degradation by the model filamentous fungus, *Neurospora crassa*

US8431360 Methods and compositions for improving sugar transport, mixed sugar fermentation, and production of biofuels

UCB: B11-102 Mutant cells for lignocellulose degradation and cellulase production

INVITED PRESENTATIONS (2008-2012)

2012 European Fungal Genetics Meeting, Concurrent Session Speaker
2012 European Neurospora Conference, Keynote Speaker
2012 Joint Genome Institute, Plenary Session Speaker
2012 University of California-Riverside, Institute for Microbiology/Computational Biology
2011 University of British Columbia, Biotechnology Laboratory
2011 Genencor, Inc.
2011 GRC Cellulosomes, Cellulases and Carbohydrate Modifying Enzymes
2011 The 26th Fungal Genetics Conference, Concurrent Session Speaker
2011 Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences, China
2011 University of Kansas Medical Center. Plenary speaker for Midwestern Fungal Genetics Conference
2011 University of California-San Francisco, Department of Microbiology
2011 Bay Area Mycological Society (BAMS)
2010 University of California-Davis, Plant Pathology Department
2010 GRC Cellular and Molecular Fungal Biology
2010 International Mycological Conference
2010 International Mycological Conference, Symposium organizer
2010 Vienna University of Technology, Vienna, Austria
2010 Genencor, Inc.
2009 University of California-Riverside, Department of Microbiology and Plant Pathology
2009 Kobe University, Japan. Plenary speaker for “Programmed Cell Death” symposium
2009 International Fungal Biology Conference, Ensenada, Mexico
2008 Cornell University, Department of Plant-Microbe Interactions and Plant Pathology
2008 European Fungal Genetics Conference, Edinburgh, UK
2008 University of Arizona, Microbiology Department
2008 Neurospora Conference

POLICY COMMITTEES

2011-present Division Chair X, American Society of Microbiology
2008 Member of External Committee to evaluate Plant-Microbe/Plant Pathology Department, Cornell University
2006-present Organizing Committee, International Fungal Biology Conference
2002-present International Fungal Biology Steering Committee

GRANT PANELS

2000-2011 National Science Foundation
2008, 2010-11 National Institutes of Health
2011 Joint Genome Institute
2012 NIH National Advisory General Medicine Science Council

EDITORSHIPS

2011-present Editor, *Eukaryotic Cell*
2009-present Editor, *Microbiology*

2001-present F1000, Co-editor of *Growth and Development Section*
2005-2010 Editorial Board, *Annual Review of Microbiology*
2005-2009 Editorial Board, *Microbiology*
2005-2010 Editorial Board, *Eukaryotic Cell*
2000-2004 Editor-in-Chief, *Fungal Genetics and Biology*

REFEREED RESEARCH ARTICLES (1988 to present)

1. Glass, N.L., Vollmer, S.J., Staben, C., Grotelueschen, J., Metzberg R.L. and Yanofsky, C. 1988. DNAs of the two mating-type alleles of *Neurospora crassa* are highly dissimilar. **Science** 241:570-573.
2. Glass, N.L., Metzberg, R.L. and Raju, N.B. 1990. Homothallic Sordariaceae from nature: The absence of strains containing only the a mating-type sequence. **Exptl Mycol** 14:274-289.
3. Glass, N.L., Grotelueschen, J. and Metzberg, R.L. 1990. The *Neurospora crassa* A mating-type region. **Proc Natl Acad Sci USA** 87:4912-4916.
4. Glass, N.L. and Lee, L. 1992. Isolation of A mating-type mutants in *Neurospora crassa* by repeat-induced point mutation (RIP). **Genetics** 132:125-133.
5. Arnaise, S., Zickler, D. and N. L. Glass, 1993. Heterologous expression of mating-type genes in filamentous fungi. **Proc Natl Acad Sci USA** 90:6616-6620.
6. Vellani, T.S., Griffiths, A.J.F. and N. L. Glass, 1994. New mutations that suppress mating-type vegetative incompatibility in *Neurospora crassa*. **Genome** 37:249-255.
7. Beatty, N.P., Smith, M.L. and N. L. Glass, 1994. Molecular characterization of mating-type loci in selected homothallic species of *Neurospora*, *Gelasinospora* and *Anixiella*. **Mycol Res** 98:1309-1316.
8. Glass, N.L. and Smith, M.L. 1994. Structure and function of a mating-type gene from the homothallic species, *Neurospora Africana*. **Mol Gen Genet** 244:401-409.
9. Grotelueschen, J., Peleg, Y., Glass, N.L. and Metzberg, R.L. 1994. Cloning and molecular characterization of the pho-2 gene encoding for a repressible alkaline phosphatase from *Neurospora crassa*. **Gene** 144:147-148.
10. Glass, N.L. and Donaldson, G.C. 1995. The development of primer sets designed for use with the polymerase chain reaction to amplify conserved genes from filamentous ascomycetes. **Appl Environ Microbiol** 61:1323-1330.
11. Donaldson, G.C., Bull, L.A., Axelrood, P.E. and N. L. Glass, 1995. Primer sets developed to amplify conserved genes from filamentous ascomycetes are useful in differentiating species of *Fusarium* associated with conifers. **Appl Environ Microbiol** 61:1331-1340.
12. Smith, M.L. and N. L. Glass, 1996. Mapping translocation break points by Orthogonal Field Agarose Gel Electrophoresis. **Curr Genet** 29:301-305.
13. Saupe, S., Steinberg, L., Shiu, K.T., Griffiths, A.J.F. and N. L. Glass, 1996. The molecular nature of mutations in the *mt A-1* gene of *Neurospora crassa* A idiomorph and their relation to mating-type function. **Mol Gen Genet** 250:115-122.
14. Ferreira, A.V.B., Saupe, S. and N. L. Glass, 1996. Transcriptional analyses of the *mt A* idiomorph of *Neurospora crassa* identifies two genes in addition to *mt A-1*. **Mol Gen Genet** 250:767-774.
15. Ferreira, A.V.B. and N. L. Glass, 1996. PCR from fungal spores after microwave treatment. **Fungal Gen NewsI** 43:25-26.

16. Saupe, S.J., Kuldau, G.A., Smith, M.L. and N. L. Glass, 1996. The product of the *het-c* heterokaryon incompatibility gene of *Neurospora crassa* has characteristics of glycine-rich cell wall protein. **Genetics** 143:1589-1600.
17. Smith, M.L., Yang, C.J., Metzberg, R.L. and N. L. Glass, 1996. Escape from *het-6* incompatibility in *Neurospora crassa* partial diploids involves preferential deletion within the ectopic segment. **Genetics** 144:523-531.
18. Saupe, S.J. and N. L. Glass, 1997. Allelic specificity at the *het-c* heterokaryon incompatibility locus of *Neurospora crassa* is determined by a highly variable domain. **Genetics** 146:1299-1309.
19. Ferreira, A.V.B., An, Z., Metzberg, R.L. and N. L. Glass, 1998 Characterization of *mat A-2*, *mat A-3* and Δ *matA* mating-type mutants of *Neurospora crassa*. **Genetics** 148:1069-1079.
20. Kuldau, G.A., Raju, N.B. and N. L. Glass, 1998 Repeat-induced point mutations in *Pad-1*, a putative RNA splicing factor from *Neurospora crassa*, confer dominant lethal effects on ascus development. **Fungal Genet Biol** 23:169-180.
21. Wu, J., Saupe, S.J. and N. L. Glass, 1998 Evidence for balancing selection operating at the *het-c* heterokaryon incompatibility locus in a group of filamentous fungi. **Proc Natl Acad Sci USA** 95:12398-12403.
22. Shiu, P.K.T. and N. L. Glass, 1999 Molecular characterization of *tol*, a mediator of mating-type associated vegetative incompatibility in *Neurospora crassa*. **Genetics** 151:545-555.
23. Smith, M.L., Hubbard, S.P., Jacobson, D.J., O.C. Micali and N. L. Glass, 2000. An osmotic-remedial, temperature-sensitive mutation in the allosteric activity site of ribonucleotide reductase in *Neurospora crassa*. **Mol Gen Genet** 262:1022-1035.
24. Smith, O. C. Micali, S. P. Hubbard, N. Mir-Rashed, D. J. Jacobson and N. L. Glass, 2000. Vegetative incompatibility in the *het-6* region of *Neurospora crassa* is mediated by two linked genes. **Genetics** 155:1095-1104.
25. Wu, J. and N. L. Glass, 2001. Identification of specificity determinants and the generation of alleles with novel specificity at the *het-c* heterokaryon incompatibility locus of *Neurospora crassa*. **Mol Cell Biol** 21:1045-1057.
26. Xiang, Q., Rasmussen, C. and N. L. Glass, 2002. The *ham-2* locus, encoding a putative transmembrane protein, is involved in hyphal fusion in *Neurospora crassa*. **Genetics** 160:169-180.
27. Muirhead, C. A., N. L. Glass and M. Slatkin, 2002. Multi-locus self-recognition systems in fungi as a cause of trans-species polymorphism. **Genetics** 161:633-641.
28. Hickey, P.C., D. J. Jacobson, N. D. Read and N. L. Glass, 2002. Live-cell imaging of vegetative hyphal fusion in *Neurospora crassa*. **Fungal Genet Biol** 37:109-119
29. Xiang, Q. and N. L. Glass, 2002. Identification of *vib-1*, a locus involved in vegetative incompatibility mediated by *het-c* in *Neurospora crassa*. **Genetics** 162:89-101.
30. Sarkar, S., G. Iyer, J. Wu and N. L. Glass, 2002. Nonself recognition is mediated by HET-C heterocomplex formation during vegetative incompatibility. **EMBO J** 18: 4841-4850.
31. Galagan, J. et al., 2003. The genome sequence of the filamentous fungus *Neurospora crassa*. **Nature** 422: 859-868.

32. Kroken, S., N. L. Glass, J. W. Taylor, O.C. Yoder and B. G. Turgeon, 2003. Phylogenomics of type I polyketide synthases in plant pathogenic and saprobic ascomycete fungi **Proc Natl Acad Sci USA** 100:15670-15675.
32. Marek, S. M., J. Wu, N. L. Glass, D. G. Gilchrist and R. M. Bostock, 2003. Nuclear DNA degradation during heterokaryon incompatibility in *Neurospora crassa*. **Fungal Genet Biol** 40:126-137.
34. Xiang, Q. and N. L. Glass, 2004. Chromosome rearrangements in isolates that escape from *het-c* heterokaryon incompatibility in *Neurospora crassa*. **Curr Genet** 44:329-38.
35. Jacobson, D. J., A. J. Powell, J. R. Dettman, G. S. Saenz, M. M. Barton, M. D. Hiltz, W. H. Dvorachek, Jr., N. L. Glass, J. W. Taylor and D. O. Natvig, 2004. *Neurospora* in temperate forests of western North America. **Mycologia** 96:66-74.
36. Pandey, A. M. G. Roca, N. D. Read and N. L. Glass, 2004. Role of a mitogen-activated kinase in hyphal fusion and conidial germination in *Neurospora crassa*. **Eukaryot Cell** 3:348-58.
37. Xiang, Q. and N. L. Glass, 2004. The control of mating type heterokaryon incompatibility by *vib-1*, a locus involved in *het-c* incompatibility in *Neurospora crassa*. **Fungal Genet Biol** 41:1063-1076. 1. Pandey, A. M. G. Roca, N. D. Read and N. L. Glass, 2004. Role of a mitogen-activated kinase in hyphal fusion and conidial germination in *Neurospora crassa*. **Eukaryot Cell** 3:348-58.
39. Xiang, Q. and N. L. Glass, 2004. The control of mating type heterokaryon incompatibility by *vib-1*, a locus involved in *het-c* incompatibility in *Neurospora crassa*. **Fungal Genet Biol** 41:1063-1076.
40. Fleißner, A., S. Sarkar, D. J. Jacobson, M. G. Roca, N. D. Read and N. L. Glass, 2005. Identification and characterization of *so*, a hyphal fusion mutant of *Neurospora crassa*. **Eukaryot Cell** 4:920-30.
41. Rasmussen C. G and N. L. Glass, 2005. A Rho-Type GTPase, *rho-4*, is required for septation in *Neurospora crassa*. **Eukaryot Cell** 4:1913-25.
42. Kasuga T., J. P. Townsend, C. Tian, L. B. Gilbert, G. Mannhaupt, J. W. Taylor, N. L. Glass, 2005. Long-oligomer microarray profiling in *Neurospora crassa* reveals the transcriptional program underlying biochemical and physiological events of conidial germination. **Nucleic Acids Res** 33:6469-85.
43. Kaneko, I., K. Dementhon, Q. Xiang and N. L. Glass, 2006. Non-allelic interactions between *het-c* and a polymorphic locus, *pin-c*, are essential for nonself recognition and programmed cell death in *Neurospora crassa*. **Genetics** 172:1545-55.
44. Shiu, P. K. T. and N. L. Glass, 2006. Sequences important for heterokaryon incompatibility function in MAT A-1 of *Neurospora crassa*. **Fungal Genet Newsl** 53:15-19.
45. Dementhon, K., G. Iyer and N. L. Glass, 2006. VIB-1 is required for expression of genes necessary for PCD in *Neurospora*. **Eukaryot Cell** 5:2161-2173.
46. Fleissner, A. and N. L. Glass, 2007. SO, a protein involved in hyphal fusion in *Neurospora crassa*, localizes to septal plugs. **Eukaryot Cell** 6:84-94.
47. Tian, C., T. Kasuga, M. S. Sachs and N. L. Glass, 2007. Transcriptional profiling of cross pathway control in *Neurospora crassa*: Comparative analysis of the Gcn4 and CPC1 regulons. **Eukaryot Cell** 6:1018-29.

48. Rasmussen, C. G. and N. L. Glass, 2007. Localization of RHO-4 indicates differential regulation of conidial versus vegetative septation in the filamentous fungus *Neurospora crassa* **Eukaryot Cell** 6:1097-107.
49. Wichmann G., J. Sun, K. Dementhon, N.L. Glass and S. E. Lindow, 2008. A novel gene, *phcA* from *Pseudomonas syringae* induces programmed cell death in the filamentous fungus *Neurospora crassa*. **Mol Microbiol** 68:672-689
50. Rasmussen, C. G., R. M. Morgenstein, S. Peck and N. L. Glass, 2008. Lack of the GTPase RHO-4 in *Neurospora crassa* causes a reduction in numbers and aberrant stabilization of microtubules at hyphal tips. **Fungal Genet Biol** 45:1027-1039.
51. Castro, A., C. Lemos, A. Falcão, N. L. Glass and A. Videira, 2008. Increased resistance to complex I mutants to phyto sphingosine-induced programmed cell death. **J Biol Chem** 283:19314-19321.
52. Kasuga, T. and N. L. Glass, 2008. Dissecting colony development of *Neurospora crassa* using mRNA profiling and comparative genomics approaches. **Eukaryot Cell** 7: 1549-1564.
53. Fleissner, A., Diamond, S. and N.L. Glass, 2009. The *Saccharomyces cerevisiae* PRM1 homolog in *Neurospora crassa* is involved in vegetative and sexual cell fusion events, but also has post-fertilization functions. **Genetics** 181:497-510.
54. Kasuga, T., G. Mannhaupt and N.L. Glass, 2009. Relationship between phylogenetic distribution and genomic features in *Neurospora crassa*. **PLoS One** 4:e5286.
55. Videira, A., T. Kasuga, C. Tian, C. Lemos, A. Castro and N.L. Glass. 2009. Transcriptional analysis of the *Neurospora crassa* response to phyto sphingosine reveals links to mitochondrial function. **Microbiol** 55:3134-41.
56. Hutchison E., S. Brown, C. Tian and N.L. Glass, 2009. Transcriptional profiling and functional analysis of heterokaryon incompatibility in *Neurospora crassa* reveals that ROS, but not metacaspases, are associated with programmed cell death. **Microbiol** 155:3957-70.
57. Fleißner, A., A.C. Leeder, M.G. Roca, N.D. Read and N.L. Glass, 2009. Oscillatory recruitment of signaling proteins to cell tips promotes coordinated behavior during cell fusion **Proc Natl Acad Sci USA** 106:19387-92.
58. Tian, C. W.T. Beeson, A.T. Iavarone, J. Sun, M.A. Marletta, J.H. Cate, N.L. Glass, 2009. Systems analysis of plant cell wall degradation by the model filamentous fungus, *Neurospora crassa* **Proc Natl Acad Sci USA** 106:22157-62.
59. Castro, A., C. Lemos, A. Falcão, A. S. Fernandes, N.L. Glass and A. Videira, 2010. Rotenone enhances the antifungal properties of staurosporine. **Eukaryot Cell** 9:906-14.
60. Hutchison, E. A and N. L. Glass, 2010. Meiotic regulators Ndt80 and Ime2 have different roles in *Saccharomyces* and *Neurospora*. **Genetics** 185:1271-1282.
61. Simonin, A., C. G. Rasmussen, M. Yang and N. L. Glass, 2010. Genes encoding a striatin-like protein (*ham-3*) and a forkhead associated protein (*ham-4*) are required for hyphal fusion in *Neurospora crassa*. **Fungal Genet Biol** 47:855-868.
62. Galazka, J.M. C. Tian, W. T. Beeson, B. Martinez, N. L. Glass and J. H. D. Cate, 2010. Cellodextrin transport in yeast for improved biofuel production. **Science** 330:84-86.
63. Li, S., J. Du, J. Sun, J. M. Galezka, N. L. Glass, J. D. H Cate H. Yang and H. Zhao,

2010. Overcoming glucose repression in mixed sugar fermentation by co-expressing a cellobiose transporter and a β -glucosidase in *Saccharomyces cerevisiae*. **Molec BioSystems** 6:2129-2132.
64. Hall, C., J. Welch, D. J. Kowbel and N. L. Glass, 2010. Evolution and diversity of a fungal self/nonsel self recognition locus. **PLoS One** 5(11):e14055.
65. Greenwald, C. J., T. Kasuga, N. L. Glass, B. D. Shaw, D. J. Ebbole and H. H. Wilkinson, 2010. Temporal and spatial regulation of gene expression during asexual development of *Neurospora crassa*. **Genetics** 186:1217-1230.
66. Sun, J., C. M. Phillips, C. T. Anderson, W. T. Beeson, M. A. Marletta and N. L. Glass, 2011. Expression and characterization of *Neurospora crassa* endoglucanase GH5-1. **Protein Expr Purif** 75:147-154.
67. Ha, S.K. J.M. Galazka, S. R. Kim, J. H. Choi, X. Yang, J. H. Seo, N. L. Glass, J. H. D. Cate and Y. S. Jin, 2011. Engineered *Saccharomyces cerevisiae* capable of simultaneous cellobiose and xylose fermentation. **Proc Natl Acad Sci USA** 108:504-509.
68. Tian, C., J. Li and N.L. Glass, 2011. Exploring the bZIP transcription factor regulatory network in *Neurospora crassa*. **Microbiol** 157:747-759.
69. Ellison, C.E., C. Hall, D. Kowbel, J. Welch, R. B. Brem, N. L. Glass and J. W. Taylor, 2011. Population genomics and local adaptation in wild isolates of a model microbial eukaryote. **Proc Natl Acad Sci USA** 108:2831-2836.
70. Gilbert, L. B., T. Kasuga, N. L. Glass and J. W. Taylor, 2011. Array CGH Phylogeny: How accurate are comparative genomic hybridization-based trees? **BMC Genomics** 12:487.
71. Sun, J. and N. L. Glass, 2011. Identification of the CRE-1 cellulolytic regulon in *Neurospora crassa*. **PLoS One** 6:e25654.
72. Fernandes, A.S., A. P. Gonçalves, A. Castro, T. A. Lopes, R. Gardner, N. L. Glass and A. Videira, 2011. Modulation of fungal sensitivity to staurosporine by targeting proteins identified by transcriptional profiling. **Fungal Genet Biol** 48:1130-1138.
73. Richards, F., N. L. Glass and A. Pringle, 2012. Cooperation among germinating spores facilitates the growth of the fungus *Neurospora crassa*. **Biol Letts** 8:419-422.
74. Znameroski, E.A., S. T. Coradetti, C. M. Roche, J. C. Tsai, A. T. Iavarone, J. H.D. Cate and N. L. Glass, 2012. Induction of lignocellulose degrading enzymes in *Neurospora crassa* by cellodextrins. **Proc Natl Acad Sci USA** 109:6012-6017.
75. Sun, J., C. Tian, S. Diamond and N. L. Glass, 2012. Deciphering regulatory mechanisms associated with hemicellulose degradation in *Neurospora crassa*. **Eukaryot Cell** 11:482-493.
76. Schmoll, M., C. Tian, J. Sun, D. Tisch and N. L. Glass, 2012. Unraveling the molecular basis of light-modulated cellulase gene expression-the role of photoreceptors in *Neurospora crassa*. **BMC Genomics** 13:127.
77. Coradetti, S. T., J. P. Craig, Y. Xiong, T. Shock, C. Tian and N. L. Glass, 2012. Conserved and essential transcription factors for cellulase gene expression in ascomycete fungi. **Proc Natl Acad Sci USA** 109:7397-7402.
78. Hutchison, E.A, J. Bueche and N. L. Glass, 2012. Diversification of a protein kinase cascade: IME-2 is involved in nonself recognition and programmed cell death in *Neurospora crassa*. **Genetics** 192:467-482.

79. Simonin, A., J. Palma-Guerrero, M. Fricker and N. L. Glass, 2012. The physiological significance of network organization in fungi. **Eukaryot Cell** 11:1345-1352.
80. Coradetti, S.T., Y. Xiong and N. L. Glass, 2013. Analysis of a conserved cellulose transcriptional regulator reveals inducer-independent production of cellulolytic enzymes in *Neurospora crassa*. **Microbiologyopen** 2:595-609.
81. Palma-Guerrero, J., C. R. Hall, D. Kowbel, J. Welch, J. W. Taylor, R. B. Brem and N. L. Glass, 2013. Genome wide association identifies novel loci involved in fungal communication. **PLoS Genetics** 9:e1003669.
82. Roper, M., A. Simonin, P. C. Hickey, A. Leeder and N. L. Glass, 2013. Nuclear dynamics in a fungal chimera. **Proc Natl Acad Sci USA** 110:12875-12880.
83. Roche, C. M., H. W. Blanch, D. S. Clark and N. L. Glass, 2013. Physiological role of acyl-CoA synthetase homologs in lipid metabolism in *Neurospora crassa*. **Eukaryot Cell** 12:1244-1257.
84. Leeder, A. C., W. Jonkers, J. Li and N. L. Glass, 2013. PP1 and MAK2 dependent regulatory networks during germination and early colony establishment in *Neurospora crassa*. **Genetics** (in press).
85. Palma-Guerrero, J., A. C. Leeder, J. Welch and N. L. Glass. Identification and characterization of LFD1, a novel protein involved in membrane merger during cell fusion in *Neurospora crassa*. **Mol Microbiol** (in revision)
86. Benz, J. P., B. H. Chau, D. Zheng, S. Bauer, N. L. Glass and Cr. R. Somerville. A systems-level analysis of polysaccharide-elicited responses in *Neurospora crassa* reveals the importance of pectin for efficient plant cell wall degradation. **Mol Microbiol** (in revision).
87. Znameroski, E. A., X. li, J. C. Tsai, N. L. Glass and J. H. D. Cate. Evidence for transceptor function of cellodextrin transporters in *Neurospora crassa* (submitted).
88. Xue, Z., Q. Ye, S. R. Anson, J. Yang, G. Xiao, D. Kowbel, N. L. Glass, S. K. Crosthwaite and Y. Liu. Transcriptional interference by sense and antisense of *frequency* forms a double negative feedback loop that is required for circadian gene expression (submitted).
89. Roche, C. M., N. L. Glass, H. W. Blanch and D. S. Clark. Engineering the filamentous fungus *Neurospora crassa* for lipid production from lignocellulosic biomass (submitted).

REVIEW ARTICLES (1990-present) *New since last review

1. Glass, N.L. and Staben, C. 1990. Genetic control of mating in *Neurospora crassa*. **Sem Dev Biol** 1: 177-184.
2. Metzberg, R.L. and N. L. Glass, 1990. Mating-type and mating strategies in *Neurospora*. **BioEssays** 12: 53-59.
3. Glass, N.L. and Kulda, G.A. 1992. Mating type and vegetative incompatibility in filamentous ascomycetes. **Ann Rev Phytopathol** 30: 201-224.
4. Glass, N.L. and Lorimer, I. 1991. Ascomycete mating types. pp. 194-216. In: J.W. Bennett and L.S. Lasure (Eds.), *More Gene Manipulations in Fungi*. Academic Press, San Diego, CA.
5. Glass, N.L. and Nelson, M.A. 1994. Mating-type genes in Ascomycetes . pp. 295-306. In: *The Mycota, Volume I, "Growth Differentiation and Sexuality"*. Volume Eds.

- J.G.H. Wessels and F. Meinhardt, Series Eds. K. Esser and P. Lemke. Springer Verlag.
6. Losick, R. and N. L. Glass, 2000. Growth and Development: Conversing with the microbes. *Curr Opin Microbiol* 2:579-581.
 7. Shiu, P.K.T. and N. L. Glass, 2000. Cell and nuclear recognition mechanisms mediated by mating type in filamentous fungi. ***Curr Opin Microbiol*** 3:183-188.
 8. Glass, N.L., D.J. Jacobson and P.K.T. Shiu, 2000. The genetics of hyphal fusion and vegetative incompatibility in filamentous ascomycete fungi. ***Annu Rev Genetics*** 34:165-186.
 9. Glass, N.L. and S.J. Saupe, 2002. Vegetative incompatibility in filamentous ascomycetes. In *Molecular Biology of Fungal Development*. Ed. H.D. Osiewacz. Marcel Dekker, Inc. New York, NY., pp. 109-131.
 10. Glass, N.L. and K. Nordström, 2002. Growth and Development: The space/time continuum of microbial growth and development. ***Curr Opin Microbiol*** 5:545-7.
 11. Glass, N.L. and I. Kaneko, 2003. Fatal attraction: Nonsel self recognition and heterokaryon incompatibility in filamentous fungi. ***Eukaryot Cell*** 2:1-8.
 12. Glass, N. L., C. Rasmussen, M. G. Roca and N. D. Read, 2004 Hyphal homing, fusion and mycelial interconnectedness. ***Trends Microbiol*** 12:135-41.
 13. Fleißner, A. and N. L. Glass, 2006. Re-wiring the network: understanding the mechanism and function of anastomosis in filamentous ascomycete fungi. In *The Mycota I: Growth Differentiation and Sexuality*. Eds. U. Kües and R. Fischer, Springer-Verlag, Berlin Heidelberg, pp.123-139.
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