

Neurospora Bibliography

This bibliography represents my attempt to collect all works dealing substantially with *Neurospora*. Please let me know of anything published in 2003 or 2004 that is not included here or in the previous bibliography, so that it might be mentioned next year. I would be especially happy to hear of chapters from books, and articles from journals not indexed in major bibliographic services. Please also let me know of any errors in citation. Please send reprints or copies of articles to the Fungal Genetics Stock Center.

Craig Wilson, 15236 Ashworth Ave. N., Shoreline WA 98133, USA (chwilson@blarg.net)

1. **Aguirre, J., M. Rios-Momberg, D. Hewitt, and W. Hansberg.** 2005. Reactive oxygen species and development in microbial eukaryotes. *Trends Microbiol.* **13**:111-118.
2. **Alcantara-Sanchez, F., C. G. Reynaga-Pena, R. Salcedo-Hernandez, and J. Ruiz-Herrera.** 2004. Possible role of ionic gradients in the apical growth of *Neurospora crassa*. *Antonie Van Leeuwenhoek* **86**:301-311.
3. **Alvarez Baron, C. P.** 2004. Circadian rhythm in succinate dehydrogenase activity in *Neurospora crassa*. *Acta Biologica Colombiana* **9**:47-56.
4. **Ambra, R., B. Grimaldi, S. Zamboni, P. Filetici, G. Macino, and P. Ballario.** 2004. Photomorphogenesis in the hypogeous fungus *Tuber borchii*: isolation and characterization of Tbwc-1, the homologue of the blue-light photoreceptor of *Neurospora crassa*. *Fungal Genet. Biol.* **41**:688-697.
5. **Arnett, D. R.** 2005. The quinic acid gene cluster in *Neurospora*: Sequence comparison and gene expression. Thesis (Ph. D.)--Kent State University. x, 155 leaves.
6. **Badgett, J. T. C.** 2004. Characterization of the *Neurospora crassa mat a-1* idiomorph. Thesis (Ph. D.)--University of Kentucky. v, 128 leaves.
7. **Banno, S., N. Ochiai, R. Noguchi, M. Kimura, I. Yamaguchi, S. Kanzaki, T. Murayama, and M. Fujimura.** 2005. A catalytic subunit of cyclic AMP-dependent protein kinase, PKAC-1, regulates asexual differentiation in *Neurospora crassa*. *Genes Genet. Syst.* **80**:25-34.
8. **Barnes, V. R.** 2004. Iso-orotate decarboxylase: purification, isolation and the rate of the enzymatic and non-enzymatic reaction. Thesis (M.S.)--Youngstown State University. x, 62, 9, 8, 3 leaves.
9. **Bathe, F., K. Hahlen, R. Dombi, L. Driller, M. Schliwa, and G. Woehlke.** 2005. The complex interplay between the neck and hinge domains in kinesin-1 dimerization and motor activity. *Mol. Biol. Cell* **16**:3529-3537.
10. **Becker, L., M. Bannwarth, C. Meisinger, K. Hill, K. Model, T. Krimmer, R. Casadio, K. N. Truscott, G. E. Schulz, N. Pfanner, and R. Wagner.** 2005. Preprotein translocase of the

outer mitochondrial membrane: Reconstituted Tom40 forms a characteristic TOM pore. *J. Mol. Biol.* **353**:1011-1020.

11. **Bell-Pedersen, D., V. M. Cassone, D. J. Earnest, S. S. Golden, P. E. Hardin, T. L. Thomas, and M. J. Zoran.** 2005. Circadian rhythms from multiple oscillators: lessons from diverse organisms. *Nat. Rev. Genet.* **6**:544-556.
12. **Beltrao, P., and L. Serrano.** 2005. Comparative genomics and disorder prediction identify biologically relevant SH3 protein interactions. *PLoS Comput. Biol.* **1**:e26.
13. **Berkeley, L. Y.** 2004. Phenotypic, biochemical and phylogenetic characterization of *HU-Biol-1*: An antifungal producing bacterium. Thesis (Ph. D.)--Howard University. 185 leaves.
14. **Bhat, A., and D. P. Kasbekar.** 2004. Why are *Neurospora crassa* crosses that are homozygous for a large duplication barren? *Fungal Genet. Newslett.* **51**:15-16.
15. **Bhat, A., R. Tamuli, and D. P. Kasbekar.** 2004. Genetic transformation of *Neurospora tetrasperma*, demonstration of repeat-induced point mutation (RIP) in self-crosses and a screen for recessive RIP-defective mutants. *Genetics* **167**:1155-1164.
16. **Boeck, P., P. C. Leal, R. A. Yunes, V. C. Filho, S. Lopez, M. Sortino, A. Escalante, R. L. Furlan, and S. Zacchino.** 2005. Antifungal activity and studies on mode of action of novel xanthoxylone-derived chalcones. *Arch. Pharm. (Weinheim)* **338**:87-95.
17. **Bowman, S. M., A. Piwowar, M. Ciocca, and S. J. Free.** 2005. Mannosyltransferase is required for cell wall biosynthesis, morphology and control of asexual development in *Neurospora crassa*. *Mycologia.* **97**:872-879.
18. **Brody, S.** 2005. Genetics and kinetics. *Fungal Genet. Biol.* **42**:81-96.
19. **Bugala, K., M. Zywicki, E. Wyszko, M. Z. Barciszewska, and J. Barciszewski.** 2005. [Riboswitches]. *Postepy Biochem.* **51**:111-119.
20. **Bystrova, E. Y., L. K. Panina, and G. B. Belostotskaya.** 2005. Investigation of oscillatory apical growth of imperfect fungi mycelium. *Mikologiya i Fitopatologiya* **39**:41-48.
21. **Cahan, P., and J. C. Kennell.** 2005. Identification and distribution of sequences having similarity to mitochondrial plasmids in mitochondrial genomes of filamentous fungi. *Mol. Genet. Genomics.* **273**:462-473.
22. **Campbell, D. O.** 2004. Structural investigation of the effect of magnesium-ion binding on stem-loop V of the *Neurospora* VS ribozyme. Thesis (Ph. D.)--University of Georgia. viii, 207 leaves.
23. **Campbell, D. O., and P. Legault.** 2005. Nuclear magnetic resonance structure of the Varkud satellite ribozyme stem-loop V RNA and magnesium-ion binding from chemical-shift mapping. *Biochemistry* **44**:4157-4170.

24. **Campbell, T. N., and F. Y. M. Choy.** 2005. RNA interference: Past, present and future. *Curr. Issues Mol. Biol.* **7**:1-6.
25. **Cheng, P., Q. He, Q. Y. He, L. X. Wang, and Y. Liu.** 2005. Regulation of the *Neurospora* circadian clock by an RNA helicase. *Genes Dev.* **19**:234-241.
26. **Chicas, A., E. C. Forrest, S. Sepich, C. Cogoni, and G. Macino.** 2005. Small interfering RNAs that trigger posttranscriptional gene silencing are not required for the histone H3 Lys9 methylation necessary for transgenic tandem repeat stabilization in *Neurospora crassa*. *Mol. Cell. Biol.* **25**:3793-3801.
27. **Cobine, P. A., R. T. McKay, K. Zangger, C. T. Dameron, and I. M. Armitage.** 2004. Solution structure of Cu-6 metallothionein from the fungus *Neurospora crassa*. *Eur. J. Biochem.* **271**:4213-4221.
28. **Collins, R. E., M. Tachibana, H. Tamaru, K. M. Smith, D. Jia, X. Zhang, E. U. Selker, Y. Shinkai, and X. Cheng.** 2005. *In vitro* and *in vivo* analyses of a Phe/Tyr switch controlling product specificity of histone lysine methyltransferases. *J. Biol. Chem.* **280**:5563-5570.
29. **Colot, H. V., J. J. Loros, and J. C. Dunlap.** 2005. Temperature-modulated alternative splicing and promoter use in the circadian clock gene *frequency*. *Mol. Biol. Cell.* **16**: 5563-5571
30. **Cultrone, A., C. Scazzocchio, M. Rochet, G. Montero-Moran, C. Drevet, and R. Fernandez-Martin.** 2005. Convergent evolution of hydroxylation mechanisms in the fungal kingdom: molybdenum cofactor-independent hydroxylation of xanthine via α -ketoglutarate-dependent dioxygenases. *Mol. Microbiol.* **57**:276-290.
31. **D'Souza, A. D., H. Bertrand, and R. Maheshwari.** 2005. Intramolecular recombination and deletions in mitochondrial DNA of senescent, a nuclear-gene mutant of *Neurospora crassa* exhibiting "death" phenotype. *Fungal Genet. Biol.* **42**:178-190.
32. **D'Souza, A. D., S. Sultana, and R. Maheshwari.** 2005. Characterization and prevalence of a circular mitochondrial plasmid in senescence-prone isolates of *Neurospora intermedia*. *Curr. Genet.* **47**:182-193.
33. **de Paula, R. M., W. A. Wilson, P. J. Roach, H. F. Terenzi, and M. C. Bertolini.** 2005. Biochemical characterization of *Neurospora crassa* glycogenin (GNN), the self-glucosylating initiator of glycogen synthesis. *FEBS Lett.* **579**:2208-2214.
34. **de Paula, R. M., W. A. Wilson, H. F. Terenzi, P. J. Roach, and M. C. Bertolini.** 2005. GNN is a self-glucosylating protein involved in the initiation step of glycogen biosynthesis in *Neurospora crassa*. *Arch. Biochem. Biophys.* **435**:112-124.
35. **de Souza, A. M. F., and J. A. Lopez.** 2004. Insulin or insulin-like studies on unicellular organisms: a review. *Braz. Arch. Biol. Technol.* **47**:973-981.

36. **Descheneau, A. T.** 2004. Isolation and characterization of mutations affecting alternative oxidase regulation in *Neurospora crassa*. Thesis (Ph.D.)--University of Alberta. [17], 234 leaves.
37. **Descheneau, A. T., I. A. Cleary, and F. E. Nargang.** 2005. Genetic evidence for a regulatory pathway controlling alternative oxidase production in *Neurospora crassa*. *Genetics* **169**:123-135.
38. **Dettman, J. R.** 2003. Phylogenetic divergence and reproductive isolation in *Neurospora*: comparing methods of species recognition in a model microbial eukaryote. Thesis (Ph.D.)--University of California. vi, 242 leaves.
39. **Dettman, J. R., and J. W. Taylor.** 2004. Mutation and evolution of microsatellite loci in *Neurospora*. *Genetics* **168**:1231-1248.
40. **Diaz, A., R. A. Munoz-Clares, P. Rangel, V. J. Valdes, and W. Hansberg.** 2005. Functional and structural analysis of catalase oxidized by singlet oxygen. *Biochimie* **87**:205-214.
41. **Diernfellner, A. C., T. Schafmeier, M. W. Merrow, and M. Brunner.** 2005. Molecular mechanism of temperature sensing by the circadian clock of *Neurospora crassa*. *Genes Dev.* **19**:1968-1973.
42. **Duarte, M., U. Schulte, A. V. Ushakova, and A. Videira.** 2005. *Neurospora* strains harboring mitochondrial disease-associated mutations in iron-sulfur subunits of complex I. *Genetics* **171**:91-99.
43. **Duffield, G., J. J. Loros, and J. C. Dunlap.** 2005. Analysis of circadian output rhythms of gene expression in *Neurospora* and mammalian cells in culture. *Methods Enzymol.* **393**:315-341.
44. **Dunlap, J. C., and J. J. Loros.** 2005. Analysis of circadian rhythms in *Neurospora*: overview of assays and genetic and molecular biological manipulation. *Methods Enzymol.* **393**:3-22.
45. **Dunlap, J. C., and J. J. Loros.** 2004. The *Neurospora* circadian system. *J. Biol. Rhythms* **19**:414-424.
46. **Ebbole, D. J., Y. Jin, M. Thon, H. Q. Pan, E. Bhattarai, T. Thomas, and R. Dean.** 2004. Gene discovery and gene expression in the rice blast fungus, *Magnaporthe grisea*: Analysis of expressed sequence tags. *Mol. Plant Microbe Interact.* **17**:1337-1347.
47. **Elvin, M., J. J. Loros, J. C. Dunlap, and C. Heintzen.** 2005. The PAS/LOV protein VIVID supports a rapidly dampened daytime oscillator that facilitates entrainment of the *Neurospora* circadian clock. *Genes Dev.* **19**:2593-2605.
48. **Etienne, O., C. Gasnier, C. Taddei, J. C. Voegel, D. Aunis, P. Schaaf, M. H. Metz-Boutigue, A. L. Bolcato-Bellemin, and C. Egles.** 2005. Antifungal coating by biofunctionalized polyelectrolyte multilayered films. *Biomaterials* **26**:6704-6712.

49. **Faou, P., and M. Tropschug.** 2004. *Neurospora crassa* CyPBP37: a cytosolic stress protein that is able to replace yeast Thi4p function in the synthesis of vitamin B1. *J. Mol. Biol.* **344**:1147-1157.
50. **Fleissner, A., S. Sarkar, D. J. Jacobson, M. G. Roca, N. D. Read, and N. L. Glass.** 2005. The so locus is required for vegetative cell fusion and postfertilization events in *Neurospora crassa*. *Eukaryot. Cell* **4**:920-930.
51. **Franchi, L., V. Fulci, and G. Macino.** 2005. Protein kinase C modulates light responses in *Neurospora* by regulating the blue light photoreceptor WC-1. *Mol. Microbiol.* **56**:334-345.
52. **Francis, K., B. Russell, and G. Gadda.** 2005. Involvement of a flavosemiquinone in the enzymatic oxidation of nitroalkanes catalyzed by 2-nitropropane dioxygenase. *J. Biol. Chem.* **280**:5195-5204.
53. **Francois, P.** 2005. A model for the *Neurospora* circadian clock. *Biophys. J.* **88**:2369-2383.
54. **Francois, P., and V. Hakim.** 2005. Core genetic module: The mixed feedback loop. *Phys. Rev. E* **72**.
55. **Freitag, M., and E. U. Selker.** 2005. Controlling DNA methylation: many roads to one modification. *Curr. Opin. Genet. Dev.* **15**:191-199.
56. **Freitas, F. Z., and M. C. Bertolini.** 2004. Genomic organization of the *Neurospora crassa* *gsn* gene: possible involvement of the STRE and HSE elements in the modulation of transcription during heat shock. *Mol. Genet. Genomics* **272**:550-561.
57. **Fuchs, F., and B. Westermann.** 2005. Role of Unc104/KIF1-related motor proteins in mitochondrial transport in *Neurospora crassa*. *Mol. Biol. Cell* **16**:153-161.
58. **Fuks, F.** 2005. DNA methylation and histone modifications: teaming up to silence genes. *Curr. Opin. Genet. Dev.* **15**:490-495.
59. **Gabaldon, T., D. Rainey, and M. A. Huynen.** 2005. Tracing the evolution of a large protein complex in the eukaryotes, NADH: Ubiquinone oxidoreductase (Complex I). *J. Mol. Biol.* **348**:857-870.
60. **Gabriela Roca, M., N. D. Read, and A. E. Wheals.** 2005. Conidial anastomosis tubes in filamentous fungi. *FEMS Microbiol. Lett.* **249**:191-198.
61. **Garcia, D., A. M. Stchigel, J. Cano, J. Guarro, and D. L. Hawksworth.** 2004. A synopsis and re-circumscription of *Neurospora* (syn. *Gelasinospora*) based on ultrastructural and 28S rDNA sequence data. *Mycol. Res.* **108**:1119-1142.
62. **Gasch, A. P., A. M. Moses, D. Y. Chiang, H. B. Fraser, M. Berardini, and M. B. Eisen.** 2004. Conservation and evolution of *cis*-regulatory systems in ascomycete fungi. *PLoS Biol.* **2**:e398.

63. **Gavric, O., and A. J. Griffiths.** 2004. Another inconsistency in the pedigree of the Oak Ridge wild types of *Neurospora crassa*. *Fungal Genet. Newslett.* **51**:9-11.
64. **Gibbs, C. C.** 2004. Nonsel self recognition in *Neurospora crassa* and *Cryphonectria parasitica*. Thesis (M.Sc.)--Carleton University. xv, 168 leaves.
65. **Goldoni, M., G. Azzalin, G. Macino, and C. Cogoni.** 2004. Efficient gene silencing by expression of double stranded RNA in *Neurospora crassa*. *Fungal Genet. Biol.* **41**:1016-1024.
66. **Goll, M. G., and T. H. Bestor.** 2005. Eukaryotic cytosine methyltransferases. *Annu. Rev. Biochem.* **74**:481-514.
67. **Gooch, V. D., L. Freeman, and P. L. Lakin-Thomas.** 2004. Time-lapse analysis of the circadian rhythms of conidiation and growth rate in *Neurospora*. *J. Biol. Rhythms* **19**:493-503.
68. **Gowher, H., X. Zhang, X. Cheng, and A. Jeltsch.** 2005. Avidin plate assay system for enzymatic characterization of a histone lysine methyltransferase. *Anal. Biochem.* **342**:287-291.
69. **Haghighi, N.** 2004. Characterization of the genes encoding tropomyosin and ARP4 in *Neurospora crassa*. Thesis (M.Sc.)--Carleton University. xiii, 131 leaves.
70. **Harris, S. D., N. D. Read, R. W. Roberson, B. Shaw, S. Seiler, M. Plamann, and M. Momany.** 2005. Polarisome meets Spitzenkorper: Microscopy, genetics, and genomics converge. *Eukaryot. Cell* **4**:225-229.
71. **He, G. P., and S. Z. Zhang.** 2004. [Advances in the molecular mechanism of RNA interference]. *Zhonghua Yi Xue Yi Chuan Xue Za Zhi* **21**:161-165.
72. **He, Q., P. Cheng, Q. He, and Y. Liu.** 2005. The COP9 signalosome regulates the *Neurospora* circadian clock by controlling the stability of the SCFFWD-1 complex. *Genes Dev.* **19**:1518-1531.
73. **He, Q., and Y. Liu.** 2005. Degradation of the *Neurospora* circadian clock protein FREQUENCY through the ubiquitin-proteasome pathway. *Biochem. Soc. Trans.* **33**:953-956.
74. **He, Q., and Y. Liu.** 2005. Molecular mechanism of light responses in *Neurospora*: from light-induced transcription to photoadaptation. *Genes Dev.* **19**:(23)
75. **He, Q., H. Shu, P. Cheng, S. Chen, L. Wang, and Y. Liu.** 2005. Light-independent phosphorylation of WHITE COLLAR-1 regulates its function in the *Neurospora* circadian negative feedback loop. *J. Biol. Chem.* **280**:17526-17532.
76. **Hickey, P. C., S. R. Swift, M. G. Roca, and N. D. Read.** 2005. Live-cell imaging of filamentous fungi using vital fluorescent dyes and confocal microscopy. *Microbial Imaging*, vol. 34. p. 63-87,

77. **Hiley, S. L.** 2003. Structure and folding of the *Neurospora* VS ribozyme: hydroxyl radical footprinting and photocrosslinking analyses. Thesis (Ph.D.) -- University of Toronto. 152 leaves.
78. **Howe, K. A.** 2004. Two distinct aspects of sexual development in *Neurospora crassa*: Peroxisomal function and gene silencing. Thesis (Ph. D.)-- University of New Mexico. xi, 167 leaves.
79. **Hu, G., and R. J. Leger.** 2004. A phylogenomic approach to reconstructing the diversification of serine proteases in fungi. *J. Evol. Biol.* **17**:1204-1214.
80. **Iigusa, H., Y. Yoshida, and K. Hasunuma.** 2005. Oxygen and hydrogen peroxide enhance light-induced carotenoid synthesis in *Neurospora crassa*. *FEBS Lett.* **579**:4012-4016.
81. **Jacobson, D. J.** 2005. Blocked recombination along the mating-type chromosomes of *Neurospora tetrasperma* involves both structural heterozygosity and autosomal genes. *Genetics* **171**:839-843.
82. **Kajander, T. A.** 2003. Structural evolution of function and stability in muconate lactonizing enzymes. Thesis (Ph.D.)--Helsingin Yliopisto (Finland). 81, [76].
83. **Karaoglu, H., C. M. Lee, and W. Meyer.** 2005. Survey of simple sequence repeats in completed fungal genomes. *Mol. Biol. Evol.* **22**:639-649.
84. **Kasuga, T., J. P. Townsend, C. Tian, L. B. Gilbert, G. Mannhaupt, J. W. Taylor, and 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**:6469-6485.
85. **Kato, A., and H. Inoue.** 2005. Growth defect and mutator phenotypes of RecQ-deficient *Neurospora crassa* mutants separately result from homologous recombination and nonhomologous end joining during repair of DNA double-strand breaks. *Genetics*. doi:10.1534/genetics.105.041756
86. **Kawano, C. Y., and S. Said.** 2005. Hyperbranching induced by cold-shock or *snow-flake* mutation in *Neurospora crassa* is prevented by addition of exogenous calcium. *J. Basic Microbiol.* **45**:199-206.
87. **Kim, H., and M. A. Nelson.** 2005. Molecular and functional analyses of *poi-2*, a novel gene highly expressed in sexual and perithecial tissues of *Neurospora crassa*. *Eukaryot. Cell* **4**:900-910.
88. **Kim, Y. J., and H. Uyama.** 2005. Tyrosinase inhibitors from natural and synthetic sources: structure, inhibition mechanism and perspective for the future. *Cell. Mol. Life Sci.* **62**:1707-1723.
89. **Kiran, I., T. Akar, A. Gorgulu, and C. Kazaz.** 2005. Biotransformation of racemic diisophorone by *Cephalosporium aphidicola* and *Neurospora crassa*. *Biotechnol. Lett.* **27**:1007-1010.

90. **Kiran, I., T. Akar, and S. Tunali.** 2005. Biosorption of Pb(II) and Cu(II) from aqueous solutions by pretreated biomass of *Neurospora crassa*. *Process Biochem.* **40**:3550-3558.
91. **Kotierk, M.** 2004. *su(un-24)-1*, a suppressor of a temperature sensitive ribonucleotide reductase mutation in *Neurospora crassa*: Characterization and PCR-based mapping. Thesis (M.Sc.)--Carleton University. xii, 85 leaves.
92. **Kotierk, M., and M. L. Smith.** 2004. PCR-based markers for genetic mapping in *Neurospora crassa*. *Fungal Genet. Newslett.* **51**:26-29.
93. **Kovacheva, Y. S., S. B. Tzokov, I. A. Murray, and J. A. Grasby.** 2004. The role of phosphate groups in the VS ribozyme-substrate interaction. *Nucleic Acids Res.* **32**:6240-6250.
94. **Kozłowska, M., R. Kanski, and M. Kanska.** 2005. Enzymatic synthesis of tritium-labelled isotopomers of L-DOPA. *J. Labelled Comp. Radiopharm.* **48**:235-240.
95. **Kresge, N., R. D. Simoni, and R. L. Hill.** 2005. Launching the age of biochemical genetics, with *Neurospora*: the work of George Wells Beadle. *J. Biol. Chem.* **280**:683-690.
96. **Kritsky, M. S., T. A. Belozerskaia, V. Sokolovsky, and S. Filippovich.** 2005. [Photoreceptor apparatus of a fungus *Neurospora crassa*]. *Mol. Biol. (Mosk)* **39**:602-617.
97. **Krystofova, S., and K. A. Borkovich.** 2005. The heterotrimeric G-protein subunits GNG-1 and GNB-1 form a G $\beta\gamma$ dimer required for normal female fertility, asexual development, and G α protein levels in *Neurospora crassa*. *Eukaryot. Cell* **4**:365-378.
98. **Kuck, U.** 2005. A *Sordaria macrospora* mutant lacking the *leu1* gene shows a developmental arrest during fruiting body formation. *Mol. Genet. Genomics* **274**:307-315.
99. **Kumar, K. S., S. Dayananda, and C. Subramanyam.** 2005. Copper alone, but not oxidative stress, induces copper-metallothionein gene in *Neurospora crassa*. *FEMS Microbiol. Lett.* **242**:45-50.
100. **Kupfer, D. M., S. D. Drabenstot, K. L. Buchanan, H. Lai, H. Zhu, D. W. Dyer, B. A. Roe, and J. W. Murphy.** 2004. Introns and splicing elements of five diverse fungi. *Eukaryot. Cell* **3**:1088-1100.
101. **Lakamper, S., and E. Meyhofer.** 2005. The E-Hook of tubulin interacts with kinesin's head to increase processivity and speed. *Biophys. J.* **89**:3223-3234.
102. **Laurila, M. R., P. S. Salgado, E. V. Makeyev, J. Nettelship, D. I. Stuart, J. M. Grimes, and D. H. Bamford.** 2005. Gene silencing pathway RNA-dependent RNA polymerase of *Neurospora crassa*: yeast expression and crystallization of selenomethionated QDE-1 protein. *J. Struct. Biol.* **149**:111-115.
103. **Lew, R. R.** 2005. Mass flow and pressure-driven hyphal extension in *Neurospora crassa*. *Microbiology* **151**:2685-2692.

104. **Lew, R. R., N. N. Levina, S. K. Walker, and A. Garrill.** 2004. Turgor regulation in hyphal organisms. *Fungal Genet. Biol.* **41**:1007-1015.
105. **Lewis, Z. A.** 2004. Control of rhythmic output from the circadian clock in *Neurospora crassa*. Thesis (Ph. D.)--Texas A&M University. xi, 175 leaves.
106. **Li, D., P. Bobrowicz, H. H. Wilkinson, and D. J. Ebbole.** 2005. A mitogen-activated protein kinase pathway essential for mating and contributing to vegetative growth in *Neurospora crassa*. *Genetics* **170**:1091-1104.
107. **Lister, R., J. M. Hulett, T. Lithgow, and J. Whelan.** 2005. Protein import into mitochondria: origins and functions today. *Mol. Membr. Biol.* **22**:87-100.
108. **Liu, Y.** 2005. Analysis of posttranslational regulations in the *Neurospora* circadian clock. *Methods Enzymol.* **393**:379-393.
109. **Lombardi, L. M., and S. Brody.** 2005. Circadian rhythms in *Neurospora crassa*: Clock gene homologues in fungi. *Fungal Genet. Biol.* **42**:887-892.
110. **Loros, J.** 2005. A kinase for light and time. *Mol. Microbiol.* **56**:299-302.
111. **Lu, Y. K., K. H. Sun, and W. C. Shen.** 2005. Blue light negatively regulates the sexual filamentation via the Cwc1 and Cwc2 proteins in *Cryptococcus neoformans*. *Mol. Microbiol.* **56**:480-491.
112. **Maas, M. F., A. van Mourik, R. F. Hoekstra, and A. J. Debets.** 2005. Polymorphism for pKALLO based senescence in Hawaiian populations of *Neurospora intermedia* and *Neurospora tetrasperma*. *Fungal Genet. Biol.* **42**:224-232.
113. **Magalhaes de Paula, R., W. A. Wilson, H. F. Terenzi, P. J. Roach, and M. C. Bertolini.** 2005. GNN is a self-glucosylating protein involved in the initiation step of glycogen biosynthesis in *Neurospora crassa*. *Arch. Biochem. Biophys.* **435**:112-124.
114. **Maheshwari, R.** 2005. Fungal biology in the 21st century. *Curr. Sci.* **88**:1406-1418.
115. **Maheshwari, R.** 2005. Nuclear behavior in fungal hyphae. *FEMS Microbiol. Lett.* **249**:7-14.
116. **Malling, H. V.** 2004. History of the science of mutagenesis from a personal perspective. *Environ. Mol. Mutagen.* **44**:372-386.
117. **Maly, T., F. MacMillan, K. Zwicker, N. Kashani-Poor, U. Brandt, and T. F. Prisner.** 2004. Relaxation filtered hyperfine (REFINE) spectroscopy: A novel tool for studying overlapping biological electron paramagnetic resonance signals applied to mitochondrial complex I. *Biochemistry* **43**:3969-3978.
118. **Marques, I., M. Duarte, J. Assuncao, A. V. Ushakova, and A. Videira.** 2005. Composition of complex I from *Neurospora crassa* and disruption of two "accessory" subunits. *Biochim. Biophys. Acta* **1707**:211-220.

119. **Marx, F.** 2004. Small, basic antifungal proteins secreted from filamentous ascomycetes: a comparative study regarding expression, structure, function and potential application. *Appl. Microbiol. Biotechnol.* **65**:133-142.
120. **Matsuo, M.** 2004. Hydrophilic antimutagens in fermented defatted soybeans with *Neurospora intermedia* (D-oncom). *J. Nutr. Sci. Vitaminol. (Tokyo)* **50**:426-430.
121. **Matsuo, M.** 2004. Low-salt O-miso produced from Koji fermentation of oncom improves redox state and cholesterolemia in rats more than low-salt soybean-miso. *J. Nutr. Sci. Vitaminol. (Tokyo)* **50**:362-366.
122. **Matzke, M. A., and J. A. Birchler.** 2005. RNAi-mediated pathways in the nucleus. *Nat. Rev. Genet.* **6**:24-35.
123. **Mayrhofer, S., and S. Poggeler.** 2005. Functional characterization of an alpha-factor-like *Sordaria macrospora* peptide pheromone and analysis of its interaction with its cognate receptor in *Saccharomyces cerevisiae*. *Eukaryot. Cell* **4**:661-672.
124. **Merrow, M., and T. Roenneberg.** 2005. Enhanced phenotyping of complex traits with a circadian clock model. *Methods Enzymol.* **393**:251-265.
125. **Merrow, M., K. Spoelstra, and T. Roenneberg.** 2005. The circadian cycle: daily rhythms from behaviour to genes. *EMBO Rep.* **6**:930-935.
126. **Metzenberg, R. L.** 2004. Bird Medium: an alternative to Vogel Medium. *Fungal Genet. Newslett.* **51**:19-20.
127. **Micali, O. C.** 2003. On nonself recognition in *Neurospora crassa*: Macroscopic and genetic studies. Thesis (Ph.D.)--Carleton University. xvi, 228 leaves.
128. **Miller, A. N., and N. M. A. Andrew.** 2005. Multi-gene phylogenies indicate ascomal wall morphology is a better predictor of phylogenetic relationships than ascospore morphology in the Sordariales (Ascomycota, Fungi). *Mol. Phylogenet. Evol.* **35**:60-75.
129. **Motoyama, T., K. Kadokura, T. Ohira, A. Ichiishi, M. Fujimura, I. Yamaguchi, and T. Kudo.** 2005. A two-component histidine kinase of the rice blast fungus is involved in osmotic stress response and fungicide action. *Fungal Genet. Biol.* **42**:200-212.
130. **Nakayashiki, H.** 2005. RNA silencing in fungi: Mechanisms and applications. *FEBS Lett.* **579**:5950-5957.
131. **Ninomiya, Y., K. Suzuki, C. Ishii, and H. Inoue.** 2004. Highly efficient gene replacements in *Neurospora* strains deficient for nonhomologous end-joining (correction to vol 101, pg 12248, 2004). *Proc. Natl. Acad. Sci. U.S.A.* **101**:16391.
132. **Nolan, T., L. Braccini, G. Azzalin, A. De Toni, G. Macino, and C. Cogoni.** 2005. The post-transcriptional gene silencing machinery functions independently of DNA methylation to repress a LINE1-like retrotransposon in *Neurospora crassa*. *Nucleic Acids Res.* **33**:1564-1573.

133. **Nowrousian, M., and P. Cebula.** 2005. The gene for a lectin-like protein is transcriptionally activated during sexual development, but is not essential for fruiting body formation in the filamentous fungus *Sordaria macrospora*. *BMC Microbiol.* **5**:64
134. **Nowrousian, M., C. Ringelberg, J. C. Dunlap, J. J. Loros, and U. Kuck.** 2005. Cross-species microarray hybridization to identify developmentally regulated genes in the filamentous fungus *Sordaria macrospora*. *Mol. Genet. Genomics.* **273**:137-149.
135. **Padmanaban, G.** 2005. How I became a biochemist. *IUBMB Life* **57**:193-195.
136. **Pagel, P., H. W. Mewes, and D. Frishman.** 2004. Conservation of protein-protein interactions - lessons from ascomycota. *Trends Genet.* **20**:72-76.
137. **Park, C., B. Bennion, I. E. Francois, K. K. Ferket, B. P. Cammue, K. Thevissen, and S. B. Levery.** 2005. Neutral glycolipids of the filamentous fungus *Neurospora crassa*: altered expression in plant defensin-resistant mutants. *J. Lipid Res.* **46**:759-768.
138. **Park, S., and K. Lee.** 2004. Inverted race tube assay for circadian clock studies of the *Neurospora* accessions. *Fungal Genet. Newslett.* **51**:12-14.
139. **Paukstelis, P. J., R. Coon, L. Madabusi, J. Nowakowski, A. Monzingo, J. Robertus, and A. M. Lambowitz.** 2005. A tyrosyl-tRNA synthetase adapted to function in group I intron splicing by acquiring a new RNA binding surface. *Mol. Cell* **17**:417-428.
140. **Peng, C., C. Dong, Q. Hou, C. Xu, and J. Zhao.** 2005. The hydrophobic surface of PaAMP from pokeweed seeds is essential to its interaction with fungal membrane lipids and the antifungal activity. *FEBS Lett.* **579**:2445-2450.
141. **Perkins, D. D.** 2004. Wild type *Neurospora crassa* strains preferred for use as standards. *Fungal Genet. Newslett.* **51**:7-8.
142. **Pillonel, C.** 2005. Evaluation of phenylaminopyrimidines as antifungal protein kinase inhibitors. *Pest Manag. Sci.* **61**:1069-1076.
143. **Pineda-Krch, M., and R. J. Redfield.** 2005. Persistence and loss of meiotic recombination hotspots. *Genetics* **169**:2319-2333.
144. **Ponger, L., and W. H. Li.** 2005. Evolutionary diversification of DNA Methyltransferases in eukaryotic Genomes. *Mol. Biol. Evol.* **22**:1119-1128.
145. **Pratt, R. J., D. W. Lee, and R. Aramayo.** 2004. DNA methylation affects meiotic trans-sensing, not meiotic silencing, in *Neurospora*. *Genetics* **168**:1925-1935.
146. **Pregueiro, A. M., N. Price-Lloyd, D. Bell-Pedersen, C. Heintzen, J. J. Loros, and J. C. Dunlap.** 2005. Assignment of an essential role for the *Neurospora frequency* gene in circadian entrainment to temperature cycles. *Proc. Natl. Acad. Sci. U.S.A.* **102**:2210-2215.
147. **Pregueiro, A. M. M.** 2004. Temperature entrainment and DNA damage checkpoints in the *Neurospora crassa* circadian clock. Thesis (Ph.D.)--Dartmouth College. x, 194 leaves.

148. **Price-Lloyd, N., M. Elvin, and C. Heintzen.** 2005. Synchronizing the *Neurospora crassa* circadian clock with the rhythmic environment. *Biochem. Soc. Trans.* **33**:949-952.
149. **Radford, A.** 2004. Metabolic highways of *Neurospora crassa* revisited. *Adv Genet* **52**:165-207.
150. **Radford, A., and R. H. Davis.** 2005. John R. S. Fincham (1926-2005): a life in microbial genetics. *Genetics* **171**:1-5.
151. **Rajyalaxmi, R. S., T. N. Sowjanya, P. Kiranmayi, and M. P. Mohan.** 2004. Mechanism of nickel resistance in a cobalt-resistant wall-less mutant of *Neurospora crassa* (*fz; sg; os-1*). *Indian J. Exp. Biol.* **42**:1117-1122.
152. **Rasmussen, C. G., and N. L. Glass.** 2005. A Rho-type GTPase, *rho-4*, is required for septation in *Neurospora crassa*. *Eukaryot. Cell* **4**:1913-1925.
153. **ReFalo P., and M. S. Sachs.** 2004. A precise size-estimate for the small RNA products arising from *Neurospora crassa* Dicer activity. *Fungal Genet. Newslett.* **51**:21-22.
154. **Rerngsamran, P.** 2004. Functional analysis of fluffy, a transcriptional regulator for conidial development in *Neurospora crassa*. Thesis (Ph. D.)--Texas A&M University. xi, 154 leaves.
155. **Rerngsamran, P., M. B. Murphy, S. A. Doyle, and D. J. Ebbole.** 2005. Fluffy, the major regulator of conidiation in *Neurospora crassa*, directly activates a developmentally regulated hydrophobin gene. *Mol. Microbiol.* **56**:282-297.
156. **Reynaga-Pena, C. G., and S. Bartnicki-Garcia.** 2005. Cytoplasmic contractions in growing fungal hyphae and their morphogenetic consequences. *Arch. Microbiol.* **183**:292-300.
157. **Roca, M. G., J. Arlt, C. E. Jeffree, and N. D. Read.** 2005. Cell biology of conidial anastomosis tubes in *Neurospora crassa*. *Eukaryot. Cell* **4**:911-919.
158. **Roenneberg, T., Z. Dragovic, and M. Merrow.** 2005. Demasking biological oscillators: properties and principles of entrainment exemplified by the *Neurospora* circadian clock. *Proc. Natl. Acad. Sci. U.S.A.* **102**:7742-7747.
159. **Roenneberg, T., and M. Merrow.** 2005. Circadian clocks: Translation lost. *Curr. Biol.* **15**:R470-R473.
160. **Rostovtseva, T. K., W. Z. Tan, and M. Colombini.** 2005. On the role of VDAC in apoptosis: Fact and fiction. *J. Bioenerg. Biomembr.* **37**:129-142.
161. **Ruoff, P., and L. Rensing.** 2004. Temperature effects on circadian clocks. *J. Therm. Biol.* **29**:445-456.
162. **Schafmeier, T., A. Haase, K. Kaldi, J. Scholz, M. Fuchs, and M. Brunner.** 2005. Transcriptional feedback of *Neurospora* circadian clock gene by phosphorylation-dependent inactivation of its transcription factor. *Cell* **122**:235-246.

163. **Schmitt, S., U. Ahting, L. Eichacker, B. Granvogl, N. E. Go, F. E. Nargang, W. Neupert, and S. Nussberger.** 2005. Role of Tom5 in maintaining the structural stability of the TOM complex of mitochondria. *J. Biol. Chem.* **280**:14499-14506.
164. **Schmitt, S., H. Prokisch, T. Schlunck, D. G. Camp, 2nd, U. Ahting, T. Waizenegger, C. Scharfe, T. Meitinger, A. Imhof, W. Neupert, P. J. Oefner, and D. Rapaport.** 2005. Proteome analysis of mitochondrial outer membrane from *Neurospora crassa*. *Proteomics*. doi 10.1002/pmic.200402084
165. **Selker, E. U.** 2004. Genome defense and DNA methylation in *Neurospora*. *Cold Spring Harb. Symp. Quant. Biol.* **69**:119-124.
166. **Selker, E. U., R. H. Davis, and D. D. Perkins.** 2005. The 2005 Thomas Hunt Morgan Medal. *Genetics* **169**:503-505
167. **Sherman, E. L., N. E. Go, and F. E. Nargang.** 2005. Functions of the small proteins in the TOM complex of *Neurospora crassa*. *Mol. Biol. Cell* **16**:4172-4182.
168. **Shevchuk, J.** 2004. Comparative sequence analysis of the *qa-2* gene of *Neurospora crassa* and *Neurospora africana*. Thesis (M.S.)--Youngstown State University. vii, 92 leaves.
169. **Silverman Gavrila, L. B.** 2003. The role of IP3-activated calcium ion channels in fungal growth. Thesis (Ph. D.)--York University. x, 163 leaves.
170. **Smiley, J. A., M. Kundracik, D. A. Landfried, V. R. Barnes, Sr., and A. A. Axhemi.** 2005. Genes of the thymidine salvage pathway: thymine-7-hydroxylase from a *Rhodotorula glutinis* cDNA library and iso-ornithine decarboxylase from *Neurospora crassa*. *Biochim. Biophys. Acta* **1723**:256-264.
171. **Sriram, K., and M. S. Gopinathan.** 2005. Stochastic resonance in circadian rhythms. *Theor. Chem. Acc.* **114**:46-51.
172. **Stancheva, I.** 2005. Caught in conspiracy: cooperation between DNA methylation and histone H3K9 methylation in the establishment and maintenance of heterochromatin. *Biochem. Cell Biol.* **83**:385-395.
173. **Steigle, S., and K. Nieselt.** 2005. Open reading frames provide a rich pool of potential natural antisense transcripts in fungal genomes. *Nucleic Acids Res.* **33**:5034-5044.
174. **Suzuki, K., A. Kato, Y. Sakuraba, and H. Inoue.** 2005. Srs2 and RecQ homologs cooperate in *mei-3*-mediated homologous recombination repair of *Neurospora crassa*. *Nucleic Acids Res.* **33**:1848-1858.
175. **Taylor, R. D.** 2004. Assembly, function and structure of Tom40, the pore-forming component of the TOM complex in *Neurospora crassa*. University of Alberta. [17], 240 leaves.

176. **Teotia, S., R. Lata, and M. N. Gupta.** 2004. Chitosan as a macroaffinity ligand purification of chitinases by affinity precipitation and aqueous two-phase extractions. *J. Chromatogr. A* **1052**:85-91.
177. **Tereshina, V. M.** 2005. Thermotolerance in fungi: The role of heat shock proteins and trehalose. *Microbiology* **74**:247-257.
178. **Tey, W. K., A. J. North, J. L. Reyes, Y. F. Lu, and G. Jedd.** 2005. Polarized gene expression determines Woronin body formation at the leading edge of the fungal colony. *Mol. Biol. Cell* **16**:2651-2659.
179. **Thakur, A.** 2004. RNA interference revolution. *Electron. J. Biotechnol.* **7**:39-49.
180. **Tunali, S., I. Kiran, and T. Akar.** 2005. Chromium(VI) biosorption characteristics of *Neurospora crassa* fungal biomass. *Minerals Engineering* **18**:681-689.
181. **Ushakova, A. V., M. Duarte, A. D. Vinogradov, and A. Videira.** 2005. The 29.9 kDa subunit of mitochondrial complex I is involved in the enzyme active/de-active transitions. *J. Mol. Biol.* **351**:327-333.
182. **Valencia, C. A.** 2004. Proteomic and immunological analysis of the *Neurospora crassa* cell wall. Thesis (Ph.D.)--Carleton University. xiv, 244 leaves.
183. **Venzke, D., I. Domgall, T. Kocher, J. Fethiere, S. Fischer, and B. Bottcher.** 2005. Elucidation of the stator organization in the V-ATPase of *Neurospora crassa*. *J. Mol. Biol.* **349**:659-669.
184. **Virag, A.** 2004. Genetic analysis reveals a key role for actin in tip growth in *Neurospora crassa*. Thesis (Ph.D.)--University of British Columbia. xxx, 210 leaves.
185. **Vitalini, M. W., L. W. Morgan, I. J. March, and D. Bell-Pedersen.** 2004. A genetic selection for circadian output pathway mutations in *Neurospora crassa*. *Genetics* **167**:119-129.
186. **Vyas, M., and D. P. Kasbekar.** 2005. Collateral damage: spread of repeat-induced point mutation from a duplicated DNA sequence into an adjoining single-copy gene in *Neurospora crassa*. *J. Biosci.* **30**:15-20.
187. **Wagner, A.** 2005. Circuit topology and the evolution of robustness in two-gene circadian oscillators. *Proc. Natl. Acad. Sci. U.S.A.* **102**:11775-11780.
188. **Wang Dan, Lin Jian-qiang, Zhang Zhi-hua, Qu Yin-bo, and Yu Shi-Yuan.** 2005. Modeling and simulation of ethanol fermentation using *Neurospora crassa* under oxygen limited conditions. *Shengwu Jiagong Guocheng* **3**:32-36.
189. **Winck, J. C., L. Delgado, R. Murta, M. Lopez, and J. A. Marques.** 2004. Antigen characterization of major cork moulds in Suberosis (cork worker's pneumonitis) by immunoblotting. *Allergy* **59**:739-745.

190. **Woodyer, R., M. Simurdiak, W. A. van der Donk, and H. Zhao.** 2005. Heterologous expression, purification, and characterization of a highly active xylose reductase from *Neurospora crassa*. *Appl. Environ. Microbiol.* **71**:1642-1647.
191. **Xiang, Q., and N. L. Glass.** 2004. The control of mating type heterokaryon incompatibility by *vib-1*, a locus involved in *het-c* heterokaryon incompatibility in *Neurospora crassa*. *Fungal Genet. Biol.* **41**:1063-1076.
192. **Xie, X.** 2003. Sugar sensing and regulation of conidiation in *Neurospora crassa*. Thesis (Ph. D.)--Texas A&M University. xi, 156 leaves.
193. **Xie, X., H. H. Wilkinson, A. Correa, Z. A. Lewis, D. Bell-Pedersen, and D. J. Ebbole.** 2004. Transcriptional response to glucose starvation and functional analysis of a glucose transporter of *Neurospora crassa*. *Fungal Genet. Biol.* **41**:1104-1119.
194. **Yamaguchi, I., and M. Fujimura.** 2005. Recent topics on action mechanisms of fungicides. *J. Pestic. Sci.* **30**:67-74.
195. **Yanofsky, C.** 2005. The favorable features of tryptophan synthase for proving Beadle and Tatum's one gene-one enzyme hypothesis. *Genetics* **169**:511-516.
196. **Youssar, L., T. J. Schmidhauser, and J. Avalos.** 2005. The *Neurospora crassa* gene responsible for the *cut* and *ovc* phenotypes encodes a protein of the haloacid dehalogenase family. *Mol. Microbiol.* **55**:828-838.
197. **Yu, J. H., Z. Hamari, K. H. Han, J. A. Seo, Y. Reyes-Dominguez, and C. Scazzocchio.** 2004. Double-joint PCR: a PCR-based molecular tool for gene manipulations in filamentous fungi. *Fungal Genet. Biol.* **41**:973-981.
198. **Zakharov, I. A.** 2005. [Intratetrad mating and its genetic and evolutionary consequences]. *Genetika* **41**:508-519.
199. **Zhang, B.** 2004. Two new genes involved in morphogenesis in *Neurospora crassa*. Thesis (M.Sc.)--Carleton University. 102 leaves.
200. **Zhang, Z. L., E. Cook, H. Y. Zhao, Y. R. Song, and Q. X. J. Shen.** 2004. Symmetrical directional cloning: An efficient method to prepare hairpin RNA interference constructs. *Prog. Nat. Sci.* **14**:1053-1059.