

Deborah Bell-Pedersen

Title: Thomas Professor of Biology and Distinguished Professor

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Education: State University of New York at Albany, Albany NY, B.S. (Biology) 1983
State University of New York at Albany, Albany NY, M.S. (Biology) 1987
State University of New York at Albany, Albany NY, Ph.D. (Molecular Biology) 1991

Research and Professional Experience:

1984 - 1991 Graduate Research Assistant, New York State Health Department

1991 - 1997 Postdoctoral Research Fellow, Department of Biochemistry, Dartmouth Medical School

1997 - 2002 Assistant Professor of Biology, Texas A&M University

1997 - 2022 Member of the Genetics Faculty, Texas A&M University

1997 - 2010 Member of the Program for the Biology of Filamentous Fungi (PBoFF), Texas A&M University

1999 - 2001 Advisory Board Member, Journal of Biological Rhythms

2000 - 2003 Co-chair, Neurospora Transcriptional Profiling Working Group

2000 - 2006 Panel Member, NSF Predoctoral Fellowship

2000 - 2001 Panel Reviewer, NASA Life Sciences Grant (Ground and Flight Based)

2000 - 2001 Scientific Session Organizer, Chronobiology and Photobiology, 21st Fungal Genetics Conference

2002 - 2003 Panel Member, OCAST

2002 - 2004 Program Committee Member, Society for Research on Biological Rhythms

2002 - 2006 Elected Member, Neurospora Policy Committee

2002 - 2004 Elected Chair, Neurospora Policy Committee

2003 - 2004 Scientific Meeting Co-Organizer, Neurospora 2004 Meeting

2003 - 2005 NIH Panel Member, Neurogenesis and Cell Fate

2003 - 2007 Associate Professor of Biology, Texas A&M University

2003 - 2007 Member of the Center for Environmental and Rural Health, Texas A&M University

2003 - present Executive Member of the Center for Research on Biological Clocks, Texas A&M University

2004 - 2005 Scientific Session Organizer, Photobiology and Circadian Clocks, 23rd Fungal Genetics Conference

2004 - present Associate Editor, Fungal Genetics and Biology

2004 - 2010 Developed and published a Neurospora Methods Manual
(<http://www.fgsc.net/Neurospora/NeurosporaProtocolGuide.htm>)

2006 - 2009 Special Emphasis Panel Member, NIH Neurogenesis and Cell Fate

2007 - present Professor of Biology, Texas A&M University

2008 - 2015 Editorial Board, Eukaryotic Cell

2009 - 2010 Co-organizer, 2010 MBI workshop on Circadian Clocks in Plants and Fungi, Ohio State University

2009 Co-organizer, 9th Mycological Congress IMC9: The Biology of Fungi; Edinburg Scotland

2009 - 2010 Program Committee Member, Society for Research on Biological Rhythms

2009 - 2010 Panel Reviewer, NIH Cell Biology IRG

2010 - 2011 Invited editor, Special edition of Fungal Genetics and Biology

2010 - 2014 Panel Member, NIH Cellular Signaling and Regulatory Systems Study Section

2011 - 2012 Program Committee Chair, Society for Research on Biological Rhythms
 2012 - 2014 Fundraiser, Society for Research on Biological Rhythms
 2013 - 2015 Elected Board Member, Society for Research on Biological Rhythms
 2012 - 2014 Review Editor, Fungal Genetics and Biology
 2014 - present Associate Editor, Journal of Biological Rhythms
 2014 - 2022 Associate Department Head, Biology Department
 2016 - 2018 Panel Reviewer, NIH NIGMS MIRA
 2016 - 2017 Co-organizer, Time of Our Life Symposium, Dartmouth College
 2017 - 2024 Elected Board Member, Fungal Genetics Policy Committee
 2018 External Program Review, Department of Biology, Texas Tech University
 2018 - 2019 Editor in Chief Search Committee, Journal of Biological Rhythms
 2018 - 2022 NIH P41 Internal Advisory Board, "Resource for Native Mass Spectrometry Guided Structural Biology" OSU, TAMU, and WVU
 2019 - present Director's Award Committee, Society for Research on Biological Rhythms
 2018 - 2022 Organizer for Poster Award Judging, Fungal Genetics Society Meetings
 2020 - 2021 Panel Member, NIH NIGMS MIRA CBJ-55
 2020 - present Nominating Committee, Society for Research on Biological Rhythms
 2021 - 2022 Slide Session Organizer and Co-chair, 31st Fungal Genetics Conference
 2022 Travel Award Committee, 31st Fungal Genetics Conference
 2022 Editorial Board Member, Frontiers in Physiology, Chronobiology Specialty Section
 2022 - 2024 Fungal Genetics Policy Committee, Chair
 2022 NIH RM1 Panel Reviewer
 2023 Center for Research on Biological Clocks, Director
 2023 Distinguished Professor of Biology

Major Awards: Texas A&M University Women Former Students' Network Eminent Scholar Award, 2013 (nominations by TAMU faculty, selected by committee)

Elected Fellow, American Academy of Microbiology, 2014 (nominations by current AAM fellows, selected by committee)

Texas A&M University Association of Former Students Distinguished Achievement Award for Research, 2015 (nominations by TAMU faculty, selected by committee)

Texas A&M University Honorary Professorship, 2019 (nominations by TAMU faculty, selected by committee)

Elected Fellow of the American Association for the Advancement of Science, 2021 (nominations from current AAAS fellows, selected by committee)

Other Awards: Student Research Award, American Society for Microbiology, 1990
 Sigma Xi, 1990
 Distinguished Doctoral Dissertation Award, SUNY Albany, 1991
 NIH NRSA Postdoctoral Research Fellowship, 1992-1995
 Texas A&M University Howdy Camp Namesake, 2001
 Jo Ann Treat Award for Excellence in Research, Texas A&M Research Foundation, 2005
 Distinguished Achievement Award in Teaching from the Association of Former Students, College of Science, Texas A&M University, 2007
 Invited Fellow, Kavli Institute for Theoretical Physics workshop on Biological Switches and Clocks, Santa Barbara, CA, 2007
 University Distinguished Lecturer, "How Organisms Tell Time" Texas A&M University, 2010
 Sigma Xi Distinguished Lecture, Texas A&M University, 2010

Ethel Ashwood Tsutsui Memorial Award Lecture, Texas A&M University, 2010
 Davidson Award Lecture, Baylor College, 2011
 TAMU ADVANCE Administrative Fellow, 2014-2015
 Biology Department Heroes of the On-line Revolution Award, 2020

Academic Service Committees:

1998 Department of Plant Pathology Fungal Ecology Faculty Search Committee
 1998 - 2000 Program for the Biology of Filamentous Fungi Student Recruiting and Admissions Committee Chair
 1998 - 2001 Biology Department Seminar Committee
 1999 - 2001 Genetics Faculty Membership Committee
 1999 - 2004 Judge and Chair for Undergraduate Honors Research Competitions
 Judge for Graduate Student Research Competitions
 2000 - 2006 Biology Graduate Programs Committee Chair
 2000 - 2004 Program in Microbial Genetics and Genomics Student Recruiting and Admissions Committee Chair
 2001 - 2003 Biology Department Faculty Search Committee
 2002 - 2004 Department of Plant Pathology Fungal Biology Faculty Search Committee (2 terms)
 2002 - 2008 Genetics Recruiting and Admissions Committee
 2004 Chair Biology Search Committee
 2004 Tenure and Promotion Committee, Brian Shaw Plant Pathology Dept.
 2003 - 2011 Executive Committee, Biology Department, Texas A&M University
 2005 - 2009 Elected Member Council of Principal Investigators, Texas A&M University
 2005 - present Biology Graduate Student Association Faculty Advisor, Texas A&M University
 2006 Biology Department Faculty Search Committee, Texas A&M University
 2007 - 2010 College of Science Faculty Advisory Committee
 2007 - 2010 Council of Principal Investigators Executive Committee
 2008 Department of Biology Prokaryotic Biology Search Committee
 2008 - 2010 Time and Effort Committee
 2008 - 2009 Research Roadmap Committee
 2008 - 2009 Council of Principal Investigators elected Vice Chair
 2009 - 2009 Council of Principal Investigators, elected Chair
 2011 - 2015 Biology Seminar Committee
 2011 - 2022 Biology Dept. Awards Committee, Chair
 2011 - 2015 NSF ADVANCE Speaker Committee
 2013 - 2021 Biology Dept. Annual Review Committee, Chair
 2013 - 2016 Biology Dept. Executive Committee
 2014 - 2015 College of Science Dean Search Committee
 2014 - present Faculty Mentor, 6 Biology Assistant Prof., 1 Biology Associate Prof., and 1 APT faculty
 2016 - 2017 Faculty of Genetics Interdisciplinary Program Membership Committee
 2016 - 2017 Association of Former Students Awards Committee
 2017 - 2018 Executive Committee Faculty of Genetics Interdisciplinary Program
 2017 RetainU Faculty Mentor, College of Science
 2018 AFS Guidelines Committee Member
 2018 - 2020 Co-chair TAMU Biological Sciences Strategic Planning Team
 2020 - 2021 Texas A&M University Professorships Selection Committee, Chair
 2020 Chemistry Department Strategic Planning Committee, Member
 2020 Tenure and Promotion Committee Review, Dean of Faculties
 2020 - 2021 University Professorship Awards Committee
 2020 - 2021 Biology Building Planning Committee
 2020 - 2021 Biology Department Faculty Search Committee, Chair
 2020 - present Biology Department SOAR Committee, Chair

2021 - present Biology Department Executive Committee, Member

Teaching:

New Courses Developed

BIOL 682	1 cr	Graduate Student Research Seminar Series
BIOL 601	3 cr	Biological Clocks
BIOL 491	3 cr	Fungal Functional Genomics Research Lab (with Dr. Matthew Sachs)
BIOL 489	3 cr	Biological Clocks

Courses Taught

MICR 445	3 cr	The Biology of Viruses
BIOL 681-602	1 cr	Seminar in Departmental Colloquium
BIOL 681-604	1 cr	Seminar in Circadian Clocks
MICR 614	3 cr	Microbial Development
MICR 689-602	3 cr	Special Topics in Signaling
BIOL489	3 cr	Biological Clocks
BIOL 601	3 cr	Biological Clocks
MICR 351	3 cr	Microbiology

Leadership Positions:

2003 - present Executive Member and current Chair of the Center for Research on Biological Clocks, TAMU

2008 - 2009 Council of Principal Investigators (CPI) Vice Chair and Chair.

2011-present I have held several leadership positions in the Society for Research on Biological Rhythms (SRBR) and the Fungal Genetics Society, with a mission of increasing diversity in the field. I was the program director for the 2012 biannual SRBR Meeting, and in this role, I emphasized diversity in the speakers for the plenary and concurrent sessions. While serving on the SRBR board, I initiated an awards program to recognize the achievements of junior faculty in the field. I also served as co-chair of the 2017 biannual Fungal Genetics meeting, and again I emphasized representation of women and minorities speaking at the meeting. In addition, I established training workshops and mixers for our students and postdocs. I now serve as an elected board member and Chair of the Fungal Genetics Policy Committee.

2014-2015 TAMU ADVANCE Fellow. I was selected as an ADVANCE Administrative Fellow, which was a program to help women in STEM fields succeed in administrative positions.

2014 - 2021 Associate Department Head of Operations, Biology Department

I developed and oversaw our faculty mentoring program, which assists junior and mid-career faculty. I chaired our Tenure and Promotion and Annual Review Committees. I also started a Microbiology Masters Program with opportunities for internships in companies to help students interested in careers in Biotechnology, or to help prepare students for medical and other professional schools. I also served as the co-Chair of the Biology Strategic Planning committee to develop an aggressive 10 year hiring plan, and a new Biology Building that was approved by the upper administration.

2015-2018 Executive Member of the Interdisciplinary Program in Genetics and Genomics TAMU

2021 – 2022 Associate Department Head for Research. Implementation of the Biology Strategic Plan and to help identify new resources for the department to support the research infrastructure.

Research Support:

Current Funding

NIH GM R35 GM126966 (Bell-Pedersen, PI)

05/01/18-04/30/23

Mechanisms of Circadian Clock Control of mRNA Translation

Annual Direct/Year \$487,872 direct/year

This grant combined 3 NIH grants into a MIRA award.

The major goals of this project are to determine the fundamental mechanisms for how the clock controls rhythms in mRNA translation initiation and ribosome composition, and the impact of this regulation on rhythmic gene expression.

WoodNext Foundation (Bell-Pedersen, PI)

01/01/2022-12/31/2026

Total Funds \$2,136,500 (no IDC)

The goal of this funding is to identify new therapies for jetlag, metabolic disorder, and aging associated with the circadian clock by manipulating circadian amplitude.

Past Funding:

- 10/01/20-09/30/22 Environmental Molecular Sciences Laboratory (Glass, PI; Bell-Pedersen, collaborator).
- 08/01/18-07/31/19 NIH/GM R35 GM126966 Administrative Supplement (Bell-Pedersen, PI)
Mechanisms of Circadian Clock Control of mRNA Translation
Direct \$58,209
- 08/01/99-07/31/19 NIH/GM R01 GM058529 (Bell-Pedersen, PI)
Molecular Genetic Analysis of Fungal Circadian Rhythms
Annual Direct \$237,500
- 01/01/15-12/31/19 NIH/GM R01 GM113673 (Bell-Pedersen, PI)
Systems Biology of the Circadian Clock Output Network
(coPI James Galagan, Boston University)
Annual Direct \$326,596
- 01/15/18-01/14/19 CoS STRP (Bell-Pedersen, PI)
Chronotherapeutics in glioblastoma: leveraging circadian rhythms in p38
MAPK activity
Total Direct \$50,000
- 08/01/16-07/31/17 NIH/GM R01 GM058529 Administrative Supplement (Bell-Pedersen, PI)
Molecular Genetic Analysis of Fungal Circadian Rhythms
Direct \$28,175
- 08/01/16-07/31/17 NIH/GM R01 GM113673 Administrative Supplement (Bell-Pedersen, PI)
Systems Biology of the Circadian Clock Output Network
Annual Direct \$71,657
- 07/01/13 – 4/30/18 NIH/GM R01 GM106426 (Bell-Pedersen, PI)
Determining the Mechanism of Temperature Compensation of the Circadian Clock
- 10/01/15-09/30/17 JGI-EMSL Collaborative Science Initiative (JECSI)
Specialized Ribosomes: A New Frontier in Gene Regulation
- 09/01/16-08/31/17 TAMU Strategic Areas Interdisciplinary Research Seed Grants
New tools for mining transcriptomics data: Identification of light- and clock-regulated.
- 09/01/10-08/31/15 NSF DUE (J. Walton, PI)
UBM Integrated Undergraduate Research Experiences in Biological and Mathematical Sciences
Co- PIs Deborah Bell-Pedersen, A. Dabney, M. Fujiwara, K. Fu, M. Boggess

04/01/09-03/31/15 NIH P01 GM068087 (Dunlap, PI)
Functional Analysis and Systems Biology of Filamentous Fungi
 Co-PIs Katherine A. Borkovich, James Galagan, Louise N. Glass,
 Heather Hood, Stephen Osmani, Michael Plamann, Matthew Sachs, Eric
 Selker, Jeffery Townsend, Deborah Bell-Pedersen, Michael Freitag.

07/1/00 – 06/30/12 NIH/NINDS PO1 HL114576
Coordination of Circadian Physiology of Diverse Species.
 PI Deborah Bell-Pedersen, Co-PI's Vincent Cassone, Susan Golden,
 David Earnest, Terry Thomas, and Mark Zoran.

09/01/04-03/31/06 Center for Environmental and Rural Health Pilot Program, Texas A&M
 University
A Circadian-Based Approach to Treating Aspergillus
 PI Deborah Bell-Pedersen

3/30/99 - 3/30/00 Interdisciplinary Research Initiative Grant, Texas A&M University.
Determination of Fungal Mating Pheromone Response and Function.
 Co-PI's Daniel Ebbole and Neal VanAlfen.

2001 Life Sciences Research Instrumentation. Texas A&M University 2001.
 Deborah Bell-Pedersen, PI

Past Trainer for the following:

2000-2003 Life Sciences Training Program, Texas A&M University
*Development of the Graduate Program in Microbial Genetics and
 Genomics.*
 Jim Hu, PI.

2001-2003 Life Sciences Training Program, Texas A&M University
Biological Clocks Training Program.
 Vincent Cassone, PI.

Invited Seminars (from 1998)

1998 6th Meeting of the Society for Research on Biological Rhythms, Amelia Island, FL
 6th International Mycological Congress, Jerusalem, Israel
 Genetics Department, Texas A&M University
 Heart of Texas Microbiology Meeting, UT Houston Medical School
 Lost Pines Molecular Biology Conference, Bastrop TX
 Southeastern Texas Clocks Meeting, College Station, TX

1999 British Mycological Society: Sensory responses of fungi. Manchester, U.K.
 Gordon Conference on Chronobiology, Barga Italy
 International Congress on Chronobiology, Washington DC
 PBoFF Symposium, Texas A&M University
 20th Fungal Genetics Conference, Asilomar, CA
 University of Texas, Houston Medical School

2000 University of Houston, Department of Biology and Biochemistry
 Mycological Society of America, Burlington VT
 Neurospora 2000, Asilomar, CA
 Complex Clocks, Edinburgh Scotland

2001 Department of Plant Pathology and Microbiology, Texas A&M University
 Genomics in Neurospora, Albuquerque, NM
 Chronobiology Gordon Conference, Newport RI
 21st Fungal Genetics Conference, Asilomar CA
 University of Texas, Houston, Microbiology and Molecular Genetics Department

2002 8th Meeting of the Society for Research on Biological Rhythms, Amelia Island FL
 Neurospora 2001, Asilomar, CA

PBoFF Symposium, Texas A&M University
 Southeastern Texas Clocks Meeting, Houston, TX
 SUNY Plattsburg, Plattsburg, NY, Biology Dept.
 Southwestern University, TX
 Regional Mycology Meeting, San Antonio TX
 Neurospora Sequence Analysis Workshop, Whitehead Institute MIT, Boston
 2003 University of Oklahoma, Dept of Zoology
 University of Wisconsin, Madison, Dept of Plant Pathology
 22nd Fungal Genetics Conference, Asilomar, CA
 Bradley University, Biology Department
 Texas A&M University, Department of Chemistry
 2004 9th Meeting of the Society for Research on Biological Rhythms, Amelia Island FL
 2005 Chronobiology Gordon Conference, Newport RI
 University of Michigan, East Lansing, Dept of Plant Pathology
 University of Oregon, Corvallis, Institute of Molecular Biology
 National Academy of Science 17th Annual Frontiers of Science Symposium, Irvine CA
 2006 University of Virginia, Dept of Biology Charlottesville VA Invited by Graduate Students
 UCLA, Los Angeles CA, Department of Chemistry and Biochemistry
 2007 XXIII Fungal Genetics Conference in 2007, Invited Plenary Speaker
 Cold Spring Harbor Symposium on Quantitative Biology May 30-June 4,
 KALVI Institute for Theoretical Physics –Clocks and Switches 3 weeks, July 2007
 University of Stavanger, Norway
 University of Oregon, Biochemistry Dept
 2008 York University
 Session Organizer, Fungal Genetics Gordon Conference Neurospora 2008, Asilomar CA
 2009 Plant Sensing, Response and Adaptation to the Environment, Keystone Meeting, MO
 Fungal Genetics Meeting, Asilomar, CA.
 Rice University, Biochemistry Dept
 Frontiers in Fungal Biology, Ensenada Mexico
 2010 Neurospora Meeting, Asilomar CA IMC9, Edinburg Scotland
 2011 Chronobiology Gordon Conference, Barga Italy
 UCSD, Chronobiology Conference
 2012 Neurospora 2012, Asilomar CAJ
 Molecular and Cellular Fungal Biology Gordon Conference
 Janelia Farms, Chronobiology Meeting
 EMSL, Pacific Northwest Labs
 University of Georgia, Dept. of Microbiology
 2013 Albert Einstein College of Medicine, Dept. of Genetics
 Virginia Tech, Molecular Cell Biology and Biotechnology
 UT Houston, Dept. of Biochemistry
 State University of New York at Albany
 2014 Society for Research on Biological Rhythms Meeting, Big Sky MT
 2015 University of Delaware
 CSH Asia Clock Meeting, Shouzhou China
 2016 Neurospora 2016, Asilomar CA
 Genetics Program, TAMU
 Society for Research on Biological Rhythms Meeting, Tampa FL
 TAMU Math Conference
 2017 North Carolina State, Biochemistry Dept.
 ASM Meeting, New Orleans
 European Microbiology Meeting, Edinburgh Scotland
 Fungal Stress Response Conference, Brazil
 Chronobiology Gordon Conference Discussion Leader, Stowe VT 2018 Photosensory

Receptors and Signal Transduction GRC, Barga Italy
Virginia Tech University, Biology Dept
University of Pennsylvania, Center for Sleep and Neurobiology Invited Seminar Society for
Research on Biological Rhythms Meeting, Amelia Island, FL Neurospora Meeting,
Asilomar CA

2019 International Symposium on Fungal Stress, Brazil

2020 Oregon State University, Biochemistry and Biophysics, Corvallis OR

Texas A&M University, Biology Dept.

2021 Neurospora Meeting, Camp Allen Texas

2022 University of California at Berkeley, Microbiology

Fungal Genetics Conference, Asilomar CA

Texas A&M University Biochemistry Department

Photosensory Receptors and Signal Transduction GRC

European Biological Rhythms Society Meeting, Presidential Symposia Speaker, Zurich,
Switzerland

Texas Society for Circadian Biology and Medicine, Houston Texas

Patents:

Co-inventor: PCT/US2022/77935

Professional Affiliations:

American Association for the Advancement of Science

Society for Research on Biological Rhythms (SRBR)

Genetics Society of America (GSA)

American Society for Microbiology (ASM)

Refereed Publications: Google Scholar h-index 42; i10 60 (Deborah Bell-Pedersen's graduate students underlined, postdoctoral students in italics, and undergraduate students in bold)

- 1) Gott, J.M., Zeeh, A., Bell-Pedersen, D., Ehrenman, K., Belfort, M., and Shub, D.A. (1988) Genes within genes: Independent expression of phage T4 intron ORF's and the genes in which they reside. *Genes Devel.* 2: 1791-1799.
- 2) Quirk, S.M., Bell-Pedersen, D., Tomaschewski, J., Ruger, W., and Belfort, M. (1989) The inconsistent distribution of introns in the T-even phages indicates recent genetic exchanges. *Nucl. Acid. Res.* 17: 301-325.
- 3) Quirk, S.M., Bell-Pedersen, D., and Belfort, M. (1989) Intron mobility in the T-even phages: High frequency inheritance of group I introns promoted by intron open reading frames. *Cell* 56: 455-465. *The first two authors contributed equally to this study.
- 4) Bell-Pedersen, D., Quirk, S.M., Aubrey, M., and Belfort, M. (1989) A site-specific endonuclease and coconversion of flanking exons associated with the mobile *td* intron of phage T4. *Gene* 82: 119-126.
- 5) Bell-Pedersen, D., Quirk, S.M., Clyman, J., and Belfort, M. (1990) Intron mobility in phage T4 is dependent upon a distinctive class of endonucleases and independent of DNA sequences encoding the intron core: mechanistic and evolutionary implications. *Nuc. Acid. Res.* 18: 3763-3770.
- 6) Bell-Pedersen, D., Quirk, S.M., Bryk, M., and Belfort, M. (1991) I-*TevI* endonuclease encoded by the mobile *td* intron recognizes binding and cleavage domains on its DNA target. *Proc. Natl. Acad. Sci. USA* 88: 7719-7723.
- 7) Bell-Pedersen, D., Galloway, J.G.S., and Belfort, M. (1991) A transcriptional terminator in the *thyA* structural gene of *Escherichia coli* and construction of a viable *thyA::KmR* deletion. *J. Bact.* 173: 1193-1200.
- 8) Bell-Pedersen, D., Dunlap, J.C., and Loros, J.J. (1992) The *Neurospora* circadian clock-controlled gene, *ccg-2*, is allelic to *eas* and encodes a fungal hydrophobin required for formation of the conidial rodlet layer. *Genes Devel.* 6: 2382-2394.

- 9) Dunlap, J.C., Loros, J.J., Aronson, B.D., Johnson, K.A., Liu, Q, Lindgren, K.M., Bell-Pedersen, D., Garceau, N. (1994) Genetic and Molecular Analysis of the *Neurospora* Clock. *Brain Res. Reviews* 18: 329-330.
- 10) Bell-Pedersen, D., Shinohara, M., Loros, J.J., and Dunlap, J. (1996) Clock-controlled genes isolated from *Neurospora crassa* are late night- to morning-specific. *Proc. Natl. Acad. Sci. USA.* 93: 13096-13101.
- 11) Bell-Pedersen, D., Dunlap, J.C., and Loros, J.J. (1996) Distinct cis-acting elements mediate clock, light and developmental regulation of the *Neurospora crassa eas (ccg-2)* gene. *Mol. Cell. Biol.* 16: 513-521.
- 12) Bell-Pedersen, D., Garceau, N., and Loros, J.J. (1996) Circadian rhythms in fungi. *J. Genet.* 75: 387-401.
- 13) Loros, J.J., Dunlap, J.C., Crosthwaite, S., Bell-Pedersen, D., Garceau, N., Shinohara, M., Cho, H. (1996) Light responsive genes, and the mechanism of the circadian clock in *Neurospora*, in Landmarks in Photobiology from Proceedings of the 12th International Congress on Photobiology: 129-133.
- 14) Bell-Pedersen, D. (1998) Keeping pace with *Neurospora* circadian rhythms. *Microbiology* 144: 1699-1711.
- 15) Bell-Pedersen, D. (2000) Circadian rhythmicity in *Neurospora crassa*. *Fungal Genet. Biol.* 29: 1-18.
- 16) Bell-Pedersen, D., Crosthwaite, S.K., Lakin-Thomas, P.L., Merrow, M., Vinsjevik, M. (2001) The *Neurospora* circadian clock-simple or complex. *Philos. Trans. R. Soc. Lond.* 356: 1697-1709.
- 17) Morgan, L., Feldman, J., and Bell-Pedersen, D. (2001) Genetic interactions between clock mutations in *Neurospora crassa*: can they help us to understand complexity. *Philos. Trans. R. Soc. Lond.* 356: 1717-1724.
- 18) Bell-Pedersen, D., Lewis, Z.A., Loros, J.J., and Dunlap, J.C. (2001) The *Neurospora* circadian clock regulates a transcription factor that controls rhythmic expression of the output *eas(ccg-2)* gene. *Mol. Micro.* 41: 897-909.
- 19) Shrode, L., Lewis, Z.A., White, L.C., Bell-Pedersen, D., Ebbole, D.J. (2001) *vvd* is required for light adaptation of conidiation-specific genes of *Neurospora crassa*, but not circadian conidiation. *Fungal Genet. Biol.* 32: 169-181.
- 20) Zhu, H., Nowrousian, M., Kupfer, D., Colot, H.V., Berrocal-Tito, G., Bell-Pedersen, D., Roe, B., Loros, J.J., and Dunlap, J.C. (2001) Analysis of ESTs from two starvation time of day-specific libraries of *Neurospora crassa* reveals novel clock-controlled genes. *Genetics* 157: 1057-1065.
- 21) Correa A., and Bell-Pedersen, D. (2002) Distinct signaling pathways from the circadian clock participate to regulate rhythmic conidiospore development in *Neurospora crassa*. *Euk. Cell* 1: 273-280.
- 22) Shinohara, M.L., Correa, A., Bell-Pedersen, D., Dunlap, J.C., and Loros, J.J. (2002) *Neurospora* clock-controlled gene-9 (*ccg-9*) encodes trehalose synthase: Circadian regulation of stress responses and development. *Euk. Cell* 1: 33-43.
- 23) Bobrowicz, P., Pawlak, R., Correa, A., Bell-Pedersen, D., and Ebbole, D. (2002) The *Neurospora crassa* pheromone precursor genes are regulated by the mating type locus and the circadian clock. *Mol. Micro.* 45: 795-804.
- 24) Lewis, Z.A., Correa, A., Schwerdtfeger, C., Link, K., Xie, X., Gomer, R., Thomas, T., Ebbole, D., and Bell-Pedersen, D. (2002) Overexpression of WHITE COLLAR-1 (WC-1) activates circadian clock-associated genes, but is not sufficient to induce most light-regulated gene expression in *Neurospora crassa*. *Mol. Micro.* 45: 917-931.
- 25) Greene, A.V., Keller, N., Haas, H., and Bell-Pedersen, D. (2003) A circadian oscillator in *Aspergillus spp.* regulates daily development and gene expression. *Euk. Cell* 2: 231-237.
- 26) Morgan, L., Greene, A.V., and Bell-Pedersen, D. (2003) Circadian and light-induced expression of luciferase in *Neurospora crassa*. *Fungal Genet. Biol.* 38: 327-332.
- 27) Galagan, J., Calvo, S.E., Borkovich, K., Selker, E., Read, N., FitzHugh W., Ma, L-M., Smirnov S., Purcell S., Rehman, B., Elkins, T., Engels, R., Wang, S., Nielsen, C.B., Roy, A., Ianakiev, P., Davis, R., Nelson, M.A., Werner-Washburne, M., Mewes, W., Kinsey, J., Braun, E., Zelter, A., Shulte, U., Kothe, G., Jedd, G., Bell-Pedersen, D., Staben, C., Marcotte, E., Greenberg, D., Selitrennikoff, C.P.,

- Foley, K., Naylor, J., Stange-Thomann, N., Barrett, R., Butler, J., Gnerre, S., Jaffe, D., Qui, D., Kamvyselis, M., Kamal, M., Metzenberg, R., Perkins, D., Dunlap, J.C., Glass, L., Yarden, O., Plamann, M., Seiler, S., Radford, A., Orbach, M., Berglund, J.A., Voelker, R., Mannhaupt, G., Natvig, D., Aramayo, R., Ebbole, D., Freitag, M., Paulsen, I., Sachs, M., Lander, E.S., Nusbaum, C., and Birren, B. (2003) The genome sequence of the filamentous fungus *Neurospora crassa*. *Nature* 422: 859-869.
- 28) Bailey, M.J., Beremand, P.D., Hammer, R., Bell-Pedersen, D., Thomas, T.L., and Cassone, V.M. (2003) Transcriptional profiling of the chick pineal gland, a photoreceptive circadian oscillator and pacemaker. *Mol. Endocrinol.* 17: 2084-2095.
 - 29) Correa, A., Lewis, Z.A., Greene, A.V., March I.J., Gomer, R., and Bell-Pedersen, D. (2003) Microarray profiling reveals multiple oscillators regulate circadian gene expression in *Neurospora*. *Proc. Natl. Acad. Sci. USA.* 100: 13597-602.
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- 1) Jung, J., Werry, M., Galagan, J., Sachs, M.S., Bell-Pedersen, D. (in preparation) A circadian clock-regulated transcription factor network determines rhythmic phase.
- 2) Lamb, T.M., Castillo, K., and Bell-Pedersen, D. (in preparation) Rhythmic association of RPL31 with translating ribosomes drives clock control of translation fidelity.

Refereed Invited Book Chapters:

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