

CURRICULUM VITAE

John R. Pringle - - January, 2013

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PERSONAL: Married Beverly S. Mitchell, M.D., September 5, 1971. (Currently George E. Becker
Professor of Medicine and Director, Stanford Cancer Institute.)
Two children: Robert M. Pringle, Ph.D. (Biology); Elizabeth G. Pringle,
Ph.D. (Biology).

EDUCATION:

1960-1963 Harvard University, Cambridge, MA (A.B. in Mathematics, *cum laude*).
1964 (summer) Marine Biological Laboratory, Woods Hole, MA (Embryology Course).
1963-1970 Harvard University, Cambridge, MA [A.M. (1967) and Ph.D. (1970) in Biology].
Thesis title: Studies of Yeast Malate Dehydrogenase and of Proteases.

RESEARCH AND PROFESSIONAL EXPERIENCE:

2009-present Associate Chair, Department of Genetics, Stanford University School of Medicine.
2008-2009 Interim Chair, Department of Genetics, Stanford University School of Medicine.
2006-2011 Senior Associate Dean for Graduate Education and Postdoctoral Affairs, Stanford
University School of Medicine.
2005-present Professor of Genetics, Stanford University School of Medicine
1999-2005 Investigator, Program in Molecular Biology and Biotechnology, The University of North
Carolina, Chapel Hill.
1991-2005 William Rand Kenan, Jr., Professor, Department of Biology, The University of
North Carolina, Chapel Hill.
1975-1991 Assistant, Associate, and Full Professor of Biology, The University of Michigan,
Ann Arbor.
1973-1975 Research Associate, Institut für Mikrobiologie, Swiss Federal Institute of
Technology, Zürich (studies of reserve carbohydrate metabolism and nutritional
control of the cell cycle and sporulation in yeast with Prof. A. Fiechter).
1970-1973 Postdoctoral Fellow, Dept. of Genetics, University of Washington, Seattle (studies
of yeast cell cycle with Prof. L.H. Hartwell).
1968-1970 Graduate Student Research Assistant, Dept. of Biology, Harvard University,
Cambridge, MA (studies of yeast protein chemistry with Prof. G. Guidotti).
1964-1967 Resident Tutor in Biology, Dunster House, Harvard College, Cambridge, MA.
1964-1966 Teaching Fellow in Genetics, Harvard University, Cambridge, MA.
1965 (summer) Research Assistant in Ornithology, Laboratory of Zoophysiology, University of
Alaska, College, AK (field studies of ptarmigan ecology and passerine nesting
behavior with Prof. L. Irving).
1963 (summer) Research Assistant in Marine Biology, Woods Hole Oceanographic Institution,
Woods Hole, MA (field studies of bioluminescence with Prof. G.L. Clarke).

FELLOWSHIPS; ACADEMIC AND PROFESSIONAL HONORS; PROFESSIONAL SERVICE:

- 1960-1963 Harvard National Scholarship; General Motors National Scholarship.
- 1963-1964 Richmond Fellowship for Students of Animal Migration.
- 1964-1968 NSF Graduate Fellowship.
- 1970-1972 NIH Postdoctoral Fellowship.
- 1979 The University of Michigan Faculty Recognition Award.
- 1980-2000 Editorial Board, *Molecular and Cellular Biology*.
- 1982 NIH Special Study Section.
- 1983 & 1984 NIH Genetics Study Section (*ad hoc* member for Fall, 1983, and Spring, 1984, meetings).
- 1984 NIH Special Study Sections (two).
- 1984-1999 Editorial Board, *Yeast*.
- 1985 NIH Special Study Sections (two; chairman once).
- 1986, 1987 ACS Scientific Advisory Committee on Microbiology and Virology (*ad hoc* member for Winter, 1986, and Spring, 1987, meetings).
- 1987 NIH Genetics Study Section (*ad hoc* member for Fall, 1987, meeting).
- 1988 Genetics Society of America Travel Grants Review Committee.
- 1988-1991 Editor, Cell Multiplication Section, *Current Opinion in Cell Biology*.
- 1988 NIH Postdoctoral Fellowship Study Section (*ad hoc* member for Fall, 1988, meeting).
- 1988-1991 Editorial Board, *Developmental Genetics*.
- 1989-1990 ACS Scientific Advisory Committee on Microbiology and Virology.
- 1989 & 1991 Co-organizer, Cold Spring Harbor Laboratory Meeting on Yeast Cell Biology.
- 1990 & 1991 NIH Special Study Sections (two).
- 1991-1992 Vice-Chairman (1991) and Chairman (1992), ACS Scientific Advisory Committee on Microbiology and Virology.
- 1993-1996 ACS Advisory Committee on Personnel for Research.
- 1994 NIH Cellular and Molecular Basis of Disease Study Section (*ad hoc* member for Spring, 1994, meeting); NIH Special Study Section.
- 1996 NIH Special Study Section.
- 1997 NIH Cell Biology and Physiology II Study Section (*ad hoc* member for Winter, 1997, meeting).
- 1997-1999 Council, American Society for Microbiology.
- 1998-2002 NIH Cell Development and Function 3 Study Section.
- 1998-present Fellow, American Academy of Microbiology.
- 1999-2002 Council, American Society for Cell Biology.
- 1999-present NIH MERIT Award.
- 2000 Member of Cancer Research Campaign (U.K.) site visit team, University of Manchester.
- 2000 External Ph.D. dissertation examiner, University of Amsterdam (The Netherlands).
- 2000-2006 Associate Editor, *Molecular Biology of the Cell*.
- 2001 NIH Special Study Section.
- 2002 Member of a "quinquennial review" team for Cancer Research UK.
- 2003 Member, NIH Special Emphasis Panel for review of Centers of Excellence in Complex Biomedical Systems Research.
- 2004 *Ad hoc* reviewer of Senior Research Fellow application for The Wellcome Trust (U.K.).
- 2006 Nominating Committee, American Society for Cell Biology.
- 2010 *Ad hoc* member, NIH Postdoctoral Fellowship Review Panel.
- 2010 *Ad hoc* reviewer of a grant proposal for the Wellcome Trust, UK.
- 2011 Reviewer of "Idea Proposals" for the Marine Microbiology Initiative, Gordon and Betty Moore Foundation.
- 2011 Elected Fellow, AAAS.
- 2011-2012 *Ad hoc* reviewer of grant proposals for NSF and the Gordon and Betty Moore Foundation.
- 2012 Lifetime Achievement Award, Yeast Genetics Group, Genetics Society of America.

CURRENT RESEARCH SUPPORT:

- 10/10-present Gordon and Betty Moore Foundation #2629: "Coral resilience investigated in the field and via a sea anemone model system" (with co-PIs Stephen Palumbi and Arthur Grossman).
- 8/11-present NSF EAGER grant #1138275: "Development of a model system for study of dinoflagellate-cnidarian symbiosis."

TEACHING AT THE UNIVERSITY OF MICHIGAN:

- Fall Terms, 1975 & 1976 Lectured and supervised laboratories in the "Plant Biology" section of Biology 106 (Introductory Biology for Majors), enrollment ca. 650 per term.
- Winter Terms, 1976-1982 Sole lecturer and supervisor of discussion sections in Biology 100 (Biology for Nonscientists), enrollment ca. 200 per term.
- Fall Terms, 1977-1981 Lectured and ran laboratories in a "Yeast Physiology" section of Biology 512 (Microbial Physiology), enrollment ca. 15 per term.
- Winter Terms, 1978-1981 Lectured and ran laboratories in a "Yeast Genetics" section of Biology 513 (Microbial Genetics), enrollment ca. 15 per term.
- Winter Terms, 1979 & 1981 Co-coordinated Biology 615 (Advanced Topics in Cell Physiology), enrollment ca. 25 per term.
- Spring Term, 1982 Coordinated and lectured in Cellular & Molecular Biology 594 (The Molecular Biology of Yeast), enrollment 16.
- 1982-1983 Sabbatical Leave.
- Fall Term, 1983 Taught Biology 615 (Advanced Topics in Cell Biology), enrollment 8.
- Fall Term, 1984 Shared teaching and coordination of Biology 306 (Introductory Genetics Laboratory), enrollment 40.
- Fall Terms, 1984-1988 Shared teaching and coordination of Biology 615 (Topics in Cellular & Molecular Biology), enrollment ca. 20 per term..
- Winter Term, 1985 Shared teaching and coordination of Biology 415 (Lectures in Cell and Molecular Biology), enrollment 110.
- Winter Terms, 1986-1989 Shared teaching and coordination of Biology 428 (Cell Biology), enrollment ca. 80 per term.
- Winter Terms 1990 & 1991 Sole lecturer and course coordinator of Biology 428 (Cell Biology), enrollment ca. 75 per term.

TEACHING AT THE UNIVERSITY OF NORTH CAROLINA:

- Spring Term, 1992 Shared teaching of Biology 264, Seminar in Molecular Biology.
- Fall Term, 1992 & Winter Terms, 1994, 1995, 1997 & 1998 Shared lecturing and course coordination in Biology 52 (Cell & Developmental Biology), enrollment ca. 140 per term.
- Spring Term, 1993 & Fall Terms 1993-2004 Shared lecturing and course coordination in Biology 161/Genetics 112 (Principles of Genetic Analysis), enrollment 20-35 per term.

TEACHING AT STANFORD UNIVERSITY:

- Fall Terms, 2005 & 2007 Taught discussion sections in Genetics 203, "Advanced Genetics" (core genetics course for first-year graduate students from multiple programs).
- Winter Terms, 2010 - 2012 Co-taught Genetics 222, "Methods and Logic" (core course for first-year Genetics graduate students; emphasizes close reading of classic and current papers).
- Fall Term, 2012 Co-taught Genetics 215, "Frontiers in Biology" (core course for first-year Genetics graduate students that is linked to the major departmental seminar series).

PUBLICATIONS**ORIGINAL ARTICLES AND REVIEWS:**

- 1970 Pringle, J.R. The molecular weight of the undegraded polypeptide chain of yeast hexokinase. *Biochem. Biophys. Res. Commun.* **39**: 46-52.
- 1971 Wilgus, H., J.R. Pringle & E. Stellwagen. The molecular weight of the polypeptide chains of yeast phosphofructokinase. *Biochem. Biophys. Res. Commun.* **44**: 89-93.
- 1972 Weber, K., J.R. Pringle & M. Osborn. Measurement of molecular weights by electrophoresis on SDS-acrylamide gel. *Methods Enzymol.* **26**: 3-27.
- 1974 Hartwell, L.H., J. Culotti, J.R. Pringle & B.J. Reid. Genetic control of the cell division cycle in yeast. *Science* **183**: 46-51.
- 1974 Wilkinson, L.E. & J.R. Pringle. Transient G1 arrest of *S. cerevisiae* cells of mating type α by a factor produced by cells of mating type a . *Exp. Cell Res.* **89**: 175-187.
- 1974 Pringle, J.R. The yeast cell cycle. *Proceedings of the Fourth International Symposium on Yeasts*, pp. 61-71.
- 1974 Pringle, J.R. The yeast proteases: Technical problems in yeast biochemistry, and puzzles in yeast physiology. *Proceedings of the Fourth International Symposium on Yeasts*, pp. 73-87.
- 1975 Pringle, J.R. & J.-R. Mor. Methods for monitoring the growth of yeast cultures and for dealing with the clumping problem. *Methods Cell Biol.* **11**: 131-168.
- 1975 Pringle, J.R. Methods for avoiding proteolytic artefacts in studies of enzymes and other proteins from yeasts. *Methods Cell Biol.* **12**: 149-184.
- 1975 Pringle, J.R. Induction, selection, and experimental uses of temperature-sensitive and other conditional mutants of yeast. *Methods Cell Biol.* **12**: 233-272.
- 1977 Johnston, G.C., J.R. Pringle & L.H. Hartwell. Coordination of growth with cell division in the yeast *Saccharomyces cerevisiae*. *Exp. Cell Res.* **105**: 79-98.
- 1978 Pringle, J.R. The use of conditional lethal cell cycle mutants for temporal and functional sequence mapping of cell cycle events. *J. Cell. Physiol.* **95**: 393-405.
- 1978 Sloat, B.F. & J.R. Pringle. A mutant of yeast defective in cellular morphogenesis. *Science* **200**: 1171-1173.
- 1979 Pringle, J.R. Proteolytic artifacts in biochemistry. In *Limited Proteolysis in Microorganisms* (G.N. Cohen and H. Holzer, eds.), pp. 191-196. U.S. Government Printing Office, Washington, D.C.
- 1979 Walton, E.F., B.L.A. Carter & J.R. Pringle. An enrichment method for temperature-sensitive and auxotrophic mutants of yeast. *Mol. Gen. Genet.* **171**: 111-114.
- 1980 Walton, E.F. & J.R. Pringle. Effect of growth temperature upon heat sensitivity in *Saccharomyces cerevisiae*. *Arch. Microbiol.* **124**: 285-287.
- 1980 Lillie, S.H. & J.R. Pringle. Reserve carbohydrate metabolism in *Saccharomyces cerevisiae*: responses to nutrient limitation. *J. Bacteriol.* **143**: 1384-1394.
- 1980 Water, R.D., J.R. Pringle & L.J. Kleinsmith. Identification of an actin-like protein and of its messenger ribonucleic acid in *Saccharomyces cerevisiae*. *J. Bacteriol.* **144**: 1143-1151.
- 1981 Sloat, B.F., A. Adams, & J.R. Pringle. Roles of the *CDC24* gene product in cellular morphogenesis during the *Saccharomyces cerevisiae* cell cycle. *J. Cell Biol.* **89**: 395-405.
- 1981 Pringle, J.R. The genetic approach to the study of the cell cycle. In *Mitosis/Cytokinesis* (A.M. Zimmerman and A. Forer, eds.), pp. 3-28. Academic Press, New York.
- 1981 Pringle, J.R. & L.H. Hartwell. The *Saccharomyces cerevisiae* cell cycle. In *Molecular Biology of the Yeast Saccharomyces: Life Cycle and Inheritance* (J.N. Strathern, E.W. Jones, and J.R. Broach, eds.), pp. 97-142. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- 1983 Paris, S. & J.R. Pringle. *Saccharomyces cerevisiae*: heat and glusulase sensitivities of starved cells. *Ann. Microbiol. (Inst. Pasteur)* **134B**: 379-385.
- 1984 Adams, A.E.M. & J.R. Pringle. Relationship of actin and tubulin distribution to bud growth in wild-type and morphogenetic-mutant *Saccharomyces cerevisiae*. *J. Cell Biol.* **98**: 934-945.
- 1984 Kaback, D.B., P.W. Oeller, H.Y. Steensma, J. Hirschman, D. Ruezinsky, K.G. Coleman & J.R. Pringle. Temperature-sensitive lethal mutations on yeast chromosome I appear to define only a small number of genes. *Genetics* **108**: 67-90.

- 1984 Pringle, J.R., K.G. Coleman, A.E.M. Adams, S.H. Lillie, B.K. Haarer, C.W. Jacobs, J.S. Robinson, & C. Evans. Cellular morphogenesis in the yeast cell cycle. In *Molecular Biology of the Cytoskeleton* (G.G. Borisy, D.W. Cleveland, and D.B. Murphy, eds.), pp. 193-209. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.
- 1986 Pringle, J.R., S.H. Lillie, A.E.M. Adams, C.W. Jacobs, B.K. Haarer, K.G. Coleman, J.S. Robinson, L. Bloom & R.A. Preston. Cellular morphogenesis in the yeast cell cycle. In *Yeast Cell Biology* (J. Hicks, ed.), pp. 47-80. Alan R. Liss, New York.
- 1986 Coleman, K.G., H.Y. Steensma, D.B. Kaback & J.R. Pringle. Molecular cloning of chromosome I DNA from *Saccharomyces cerevisiae*: isolation of the *CDC24* gene and adjacent regions of the chromosome. *Mol. Cell. Biol.* **6**: 4516-4525.
- 1987 Pringle, J.R. The gene-number paradox and the complexity of the cell-division cycle and other cellular processes. In *Modern Cell Biology*, Vol. 5, *Molecular Mechanisms in the Regulation of Cell Behavior* (C. Waymouth, ed.), pp. 299-306. Alan R. Liss, New York.
- 1987 Johnson, D.I., C.W. Jacobs, J.R. Pringle, L.C. Robinson, G.F. Carle & M.V. Olson. Mapping of the *S. cerevisiae* *CDC3*, *CDC25*, and *CDC42* genes to chromosome XII by chromosome blotting and tetrad analysis. *Yeast* **3**: 243-253.
- 1987 Haarer, B.K. & J.R. Pringle. Immunofluorescence localization of the *Saccharomyces cerevisiae* *CDC12* gene product to the vicinity of the 10-nm filaments in the mother-bud neck. *Mol. Cell. Biol.* **7**: 3678-3687.
- 1988 Jacobs, C.W., A.E.M. Adams, P. Szaniszlo & J.R. Pringle. Functions of microtubules in the *Saccharomyces cerevisiae* cell cycle. *J. Cell Biol.* **107**: 1409-1426.
- 1989 Pringle, J.R. Cell multiplication in overview. *Curr. Opin. Cell Biol.* **1**: 237-240.
- 1989 Pringle, J.R., R.A. Preston, A.E.M. Adams, T. Stearns, D.G. Drubin, B.K. Haarer & E.W. Jones. Fluorescence microscopy methods for yeast. *Methods Cell Biol.* **31**: 357-435.
- 1989 Bender, A. & J.R. Pringle. Multicopy suppression of the *cdc24* budding defect in yeast by *CDC42* and three newly identified genes including the *ras*-related gene *RS1*. *Proc. Natl. Acad. Sci. USA* **86**: 9976-9980.
- 1990 Pringle, J.R. Yeast cell biology: the wave of the present. *New Biol.* **2**: 37-43.
- 1990 Pringle, J.R. Cell multiplication overview. *Curr. Opin. Cell Biol.* **2**: 239-240.
- 1990 Adams, A.E.M., D.I. Johnson, R.M. Longnecker, B.F. Sloat & J.R. Pringle. *CDC42* and *CDC43*, two additional genes involved in budding and the establishment of cell polarity in the yeast *Saccharomyces cerevisiae*. *J. Cell Biol.* **111**: 131-142.
- 1990 Johnson, D.I. & J.R. Pringle. Molecular characterization of *CDC42*, a *Saccharomyces cerevisiae* gene involved in the development of cell polarity. *J. Cell Biol.* **111**: 143-152.
- 1991 Pringle, J.R., A.E.M. Adams, D.G. Drubin & B.K. Haarer. Immunofluorescence methods for yeast. *Methods Enzymol.* **194**: 565-602.
- 1991 Adams, A.E.M. & J.R. Pringle. Staining of actin with fluorochrome-conjugated phalloidin. *Methods Enzymol.* **194**: 729-731.
- 1991 Pringle, J.R. Staining of bud scars and other cell-wall chitin with Calcofluor. *Methods Enzymol.* **194**: 732-735.
- 1991 Jamieson, D.J., B. Rahe, J.R. Pringle & J.D. Beggs. A suppressor of a yeast splicing mutant (*prp8-1*) encodes a putative ATP-dependent RNA helicase. *Nature* **349**: 715-717.
- 1991 Pringle, J.R. Cell multiplication overview. *Curr. Opin. Cell Biol.* **3**: 235-236.
- 1991 Chant, J., and Pringle, J.R. Budding and cell polarity in *Saccharomyces cerevisiae*. *Curr. Opin. Genet. Devel.* **1**: 342-350.
- 1991 Harris, S.D. & J.R. Pringle. Genetic analysis of *Saccharomyces cerevisiae* chromosome I: on the role of mutagen specificity in delimiting the set of genes identifiable using temperature-sensitive-lethal mutations. *Genetics* **127**: 279-285.
- 1991 Diehl, B.E. & J.R. Pringle. Molecular analysis of *S. cerevisiae* chromosome I: identification of additional transcribed regions and demonstration that some encode essential functions. *Genetics* **127**: 287-298.

- 1991 Kim, H.B., B.K. Haarer & J.R. Pringle. Cellular morphogenesis in the *S. cerevisiae* cell cycle: localization of the *CDC3* gene product and the timing of events at the budding site. *J. Cell Biol.* **112**: 535-544.
- 1991 Bender, A. & J.R. Pringle. Use of a screen for synthetic-lethal and multicopy-suppressor mutants to identify two new genes involved in morphogenesis in *S. cerevisiae*. *Mol. Cell. Biol.* **11**: 1295-1305.
- 1991 Chant, J., K. Corrado, J.R. Pringle & I. Herskowitz. Yeast *BUD5*, encoding a putative GDP-GTP exchange factor, is necessary for bud site selection and interacts with bud formation gene *BEM1*. *Cell* **65**: 1213-1224.
- 1991 Ford, S.K. & J.R. Pringle. Cellular morphogenesis in the *S. cerevisiae* cell cycle: localization of the *CDC11* gene product and the timing of events at the budding site. *Dev. Genet.* **12**: 281-292.
- 1991 Healy, A.M., S. Zolnierowicz, A.E. Stapleton, M. Goebel, A.A. DePaoli-Roach & J.R. Pringle. *CDC55*, a *S. cerevisiae* gene involved in cellular morphogenesis: identification, characterization, and homology to the B subunit of mammalian type 2A protein phosphatase. *Mol. Cell. Biol.* **11**: 5767-5780.
- 1992 Ruggieri, R., A. Bender, Y. Matsui, S. Powers, Y. Takai, J.R. Pringle & K. Matsumoto. *RSR1*, a *ras*-like gene homologous to *Krev-1/sm21A/rap1A*: Role in the development of cell polarity and interactions with the Ras pathway in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **12**: 758-766.
- 1992 Chenevert, J., K. Corrado, A. Bender, J.R. Pringle & I. Herskowitz. A yeast gene (*BEM1*) necessary for cell polarization whose product contains two SH3 domains. *Nature* **356**: 77-79.
- 1992 Harris, S.D., J. Cheng, T.A. Pugh & J.R. Pringle. Molecular analysis of *Saccharomyces cerevisiae* chromosome I: On the number of genes and the identification of essential genes using temperature-sensitive-lethal mutations. *J. Mol. Biol.* **225**: 53-65.
- 1992 Bender, A. & J.R. Pringle. A Ser/Thr-rich multicopy suppressor of a *cdc24* bud emergence defect. *Yeast* **8**: 315-323.
- 1993 Ohya, Y., H. Qadota, Y. Anraku, J.R. Pringle & D. Botstein. The essential function of yeast geranylgeranyl transferase I is prenylation of two GTPases, Rho1p and Cdc42p. *Mol. Biol. Cell* **4**: 1017-1025.
- 1994 Cannon, J.F., J.R. Pringle, A. Fiechter & M. Khalil. Characterization of glycogen-deficient (*glc*) mutants of *Saccharomyces cerevisiae*. *Genetics* **136**: 485-503.
- 1995 Chant, J. & J.R. Pringle. Patterns of bud-site selection in the yeast *Saccharomyces cerevisiae*. *J. Cell Biol.* **129**: 751-765.
- 1995 Chant, J., M. Mischke, E. Mitchell, I. Herskowitz & J.R. Pringle. Role of Bud3p in producing the axial budding pattern of yeast. *J. Cell Biol.* **129**: 767-778.
- 1995 Simon, M.-N., C. De Virgilio, B. Souza, J.R. Pringle, A. Abo & S.I. Reed. Role for the Rho-family GTPase Cdc42 in yeast mating pheromone signal pathway. *Nature* **376**: 702-705.
- 1995 Cvrcková, F., C. De Virgilio, E. Manser, J.R. Pringle & K. Nasmyth. Ste20-like protein kinases are required for normal localization of cell growth and for cytokinesis in budding yeast. *Genes Dev.* **9**: 1817-1830.
- 1995 Fares, H.F., M.A. Peifer & J.R. Pringle. Localization and possible functions of *Drosophila* septins. *Mol. Biol. Cell* **6**: 1843-1859.
- 1995 Stevenson, B.J., B. Ferguson, C. De Virgilio, E. Bi, J.R. Pringle, G. Ammerer & G.F. Sprague, Jr. Mutation of *RGA1*, which encodes a putative GAP for the polarity establishment protein Cdc42p, activates the pheromone-response pathway in the yeast *S. cerevisiae*. *Genes Dev.* **9**: 2949-2963.
- 1995 Bender, A. & J.R. Pringle. Rsr1p. In Guidebook to the Small GTPases (M. Zerial and L. Huber, eds.), pp. 181-183. Oxford: Oxford University Press.
- 1995 Chant, J. & J.R. Pringle. Bud5p. In Guidebook to the Small GTPases (M. Zerial and L. Huber, eds.), pp. 193-196. Oxford: Oxford University Press.
- 1995 Johnson, D.I. & J.R. Pringle. Cdc42p. In Guidebook to the Small GTPases (M. Zerial and L. Huber, eds.), pp. 283-287. Oxford: Oxford University Press.
- 1995 Bender, A. & J.R. Pringle. Rsr1p. In Guidebook to the Small GTPases (M. Zerial and L. Huber, eds.), pp. 288-291. Oxford: Oxford University Press.
- 1995 Pringle, J.R., E. Bi, H.A. Harkins, J.E. Zahner, C. De Virgilio, J. Chant, K. Corrado & H. Fares. Establishment of cell polarity in yeast. *Cold Spring Harb. Symp. Quant. Biol.* **60**: 729-744.

- 1996 Fares, H.F., L. Goetsch & J.R. Pringle. Identification of a developmentally regulated septin and involvement of the septins in spore formation in *S. cerevisiae*. *J. Cell Biol.* **132**: 399-411.
- 1996 Longtine, M.L., D.J. DeMarini, M.L. Valencik, O.S. Al-Awar, H. Fares, C. De Virgilio & J.R. Pringle. The septins: roles in cytokinesis and other processes. *Curr. Opin. Cell Biol.* **8**: 106-119.
- 1996 Zahner, J.E., H.A. Harkins & J.R. Pringle. Genetic analysis of the bipolar pattern of bud-site-selection in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **16**: 1857-1870.
- 1996 Ohya, Y., B.E. Caplin, H. Qadota, M.F. Tibbetts, Y. Anraku, J.R. Pringle & M.S. Marshall. Mutational analysis of the β -subunit of yeast geranylgeranyl transferase I. *Mol. Gen. Genet.* **252**: 1-10.
- 1996 Mack, D., K. Nishimura, B.K. Dennehey, T. Arbogast, J. Parkinson, A. Toh-e, J.R. Pringle, A. Bender & Y. Matsui. Identification of the bud emergence gene *BEM4* and its interactions with Rho-type GTPases in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **16**: 4387-4395.
- 1996 Bi, E. & J.R. Pringle. *ZDS1* and *ZDS2*, genes whose products may regulate Cdc42p in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **16**: 5264-5275.
- 1996 De Virgilio, C., D.J. DeMarini & J.R. Pringle. *SPR28*, a sixth member of the septin gene family in *Saccharomyces cerevisiae* that is expressed specifically in sporulating cells. *Microbiology* **142**: 2897-2905.
- 1996 Mathias, N., S.L. Johnson, M. Winey, A.E.M. Adams, L. Goetsch, J.R. Pringle, B. Byers & M.G. Goebel. Cdc53p acts in concert with Cdc4p and Cdc34p to control the G1-to-S phase transition and identifies a conserved family of proteins. *Mol. Cell. Biol.* **16**: 6634-6643.
- 1997 Amberg, D.C., J.E. Zahner, J.W. Mulholland, J.R. Pringle & D. Botstein. Aip3p/Bud6p, a yeast actin-interacting protein that is involved in morphogenesis and the selection of bipolar budding sites. *Mol. Biol. Cell* **8**: 729-753.
- 1997 Evangelista, M., K. Blundell, M.S. Longtine, C.J. Chow, N. Adames, J.R. Pringle, M. Peter & C. Boone. Bni1p, a yeast formin linking Cdc42p and the actin cytoskeleton during polarized morphogenesis. *Science* **276**: 118-122.
- 1997 Park, H.-O., E. Bi, J.R. Pringle & I. Herskowitz. 1997. Two active forms of the Ras-related Bud1/Rsr1 protein bind to different effectors to determine yeast cell polarity. *Proc. Natl. Acad. Sci. USA* **94**: 4463-4468.
- 1997 Lew, D.J., T. Weinert & J.R. Pringle. Cell cycle control in *Saccharomyces cerevisiae*. In *The Molecular and Cellular Biology of the Yeast Saccharomyces. Cell Cycle and Cell Biology*. (J.R. Pringle, J.R. Broach & E.W. Jones, eds.), pp. 607-695. Cold Spring Harbor: Cold Spring Harbor Laboratory Press.
- 1997 DeMarini, D.J., A.E.M. Adams, H. Fares, C. De Virgilio, G. Valle, J.S. Chuang & J.R. Pringle. A septin-based hierarchy of proteins required for localized deposition of chitin in the *Saccharomyces cerevisiae* cell wall. *J. Cell Biol.* **139**: 75-93.
- 1998 Bähler, J. & J.R. Pringle. Pom1p, a fission yeast protein kinase that provides positional information for both polarized growth and cytokinesis. *Genes Dev.* **12**: 1356-1370.
- 1998 Bähler, J., J.-Q. Wu, M.S. Longtine, N.G. Shah, A. McKenzie III, A.B. Steever, A. Wach, P. Philippse & J.R. Pringle. Heterologous modules for efficient and versatile gene targeting in *Schizosaccharomyces pombe*. *Yeast* **14**: 943-951.
- 1998 Longtine, M.S., A. McKenzie III, D.J. DeMarini, N.G. Shah, A. Wach, A. Brachat, P. Philippse & J.R. Pringle. Additional modules for versatile and economical PCR-based gene deletion and modification in *Saccharomyces cerevisiae*. *Yeast* **14**: 953-961.
- 1998 Bi, E., P. Maddox, D.J. Lew, E.D. Salmon, J. McMillan, E. Yeh & J.R. Pringle. Involvement of an actomyosin contractile ring in *S. cerevisiae* cytokinesis. *J. Cell Biol.* **142**: 1301-1312.
- 1998 Longtine, M.S., H. Fares & J.R. Pringle. Role of the yeast Gin4p protein kinase in septin assembly and the relationship between septin assembly and septin function. *J. Cell Biol.* **143**: 719-736.
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