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EDUCATION

1973	Abitur	Goethe Oberschule (Gymnasium), Berlin-Lichterfelde
1976	Vordiplom	Chemistry, Freie Universität Berlin
1977	M.Sc.	Organic Chemistry, Vanderbilt University, Nashville, TN
1981	Ph.D.	Cell Biology, The Rockefeller University, New York, NY

RESEARCH EXPERIENCE

1976-1977	Direct Exchange Fellow, Vanderbilt University, Laboratory of Dr. T.M. Harris
1977-1981	Graduate Fellow, The Rockefeller University, Laboratory of Dr. G. Blobel
1981-1982	Postdoctoral Fellow, The Rockefeller University, Laboratory of Dr. G. Blobel
1982-1983	Assistant Professor, Laboratory of Cell Biology, The Rockefeller University
1983-1986	Assistant Professor, Department of Biochemistry & Biophysics, University of California, San Francisco (UCSF)
1986-1991	Associate Professor, Department of Biochemistry & Biophysics, UCSF
1991- present	Professor, Department of Biochemistry & Biophysics, UCSF
1997-present	Investigator, Howard Hughes Medical Institute
2001-2008	Chair, Department of Biochemistry & Biophysics Department, UCSF

HONORS & AWARDS

1983	Searle Scholar Award
1988	Eli Lilly Award for Fundamental Research in Biological Chemistry
1988	Passano Award
1989	Alfred P. Sloan Award
1993	NIH MERIT Award
1996	Harvey Lecturer, Rockefeller University, New York
1998	American Academy of Microbiology (elected Fellow)
1998	Feodor-Lynen-Lecture, Mosbach Kolloquium, Germany
2001	American Academy of Arts & Sciences (elected Fellow)
2004	National Academy of Sciences (elected Member)
2004	European Molecular Biology Organization (elected Associate Member)
2004	Virchow Medal and Lecture, Universität Würzburg
2005	Wiley Prize in Biomedical Sciences (with Kazutoshi Mori)
2006	George E. Palade Distinguished Lecture, Wayne State University School of Medicine
2006	47th Stadtler Lecture, University of Texas
2006	Leopoldina Academy of Scientists (elected member)
2007	50th Faculty Research Lecturer, University of California, San Francisco
2009	Stein and Moore Award, The Protein Society
2009	Gairdner International Award (with Kazutoshi Mori)
2009	E.B. Wilson Award, American Society for Cell Biology
2010	Chilton Lecturer, University of Texas
2011	Chiron Lecturer, University of California, Berkeley
2011	Otto Warburg Medal, The German Society for Biochemistry and Molecular Biology
2011	Glenn Award for Research in Biological Mechanisms of Aging
2012	Ernst Jung Prize for Medicine (with Eliza Izauralde)
2012	Paul Ehrlich and Ludwig Darmstaedter Prize

2012 Detlev Bronk Alumni Lecturer, Rockefeller University
2013 George E. Palade Memorial Lecturer, Yale University
2013 Mendel Lecturer, Brno, Czech Republic
2014 Shaw Prize (with Kazutoshi Mori)
2014 Lasker Award for Basic Medical Research (with Kazutoshi Mori)
2015 Vilcek Prize in Biomedical Science
2015 Vallee Visiting Professorship
2015 Auswärtiges Wissenschaftliches Mitglied at the Max-Planck-Instituts für Biophysics

PROFESSIONAL ACTIVITIES

NIH Study Section on Molecular Cytology
1992: ad hoc member, 2 sessions;
1993-1997: full member

1998 NIH Intramural Review Committee,
2002-2004 ASCB Council (elected Counselor)
2003 NAS and IOM Committee to consider potential routes to the development of antiviral drugs against variola and other poxviruses
2014-2016 ERC Consolidator Grant (CoG) LS3 Panel - Cellular and Developmental Biology -
2015 Auswärtiges Wissenschaftliches Mitglied at the Max-Planck-Instituts für Biophysics
2016 ASCB President-Elect

Meetings Organized
1989 Gordon Conference: Molecular Membrane Biology (Vice Chair)
1991 Gordon Conference: Molecular Membrane Biology (Chair)
1991 ASCB Annual Meeting (Program Chair)
1999 Gordon Conference for Molecular Cell Biology (Vice Chair)
2001 Gordon Conference for Molecular Cell Biology (Chair)
2005 Gordon Conference on Stress Proteins in Growth, Development & Disease (Vice Chair)
2007 Gordon Conference on Stress Proteins in Growth, Development and Disease (Chair)
2016

Scientific Advisory Boards
2002-2007 MPI für Biochemie Martinsried
2002-2007 Institut für Genetik, Universität zu Köln
2003-2008 MPI für Biophysikalische Chemie, Göttingen
2006-present Zentrum für Molekulare Biologie der Universität Heidelberg

UCSF – Selected Administrative Service
1995-1999 Director, UCSF Cell Biology Program
1995-1999 Vice Chair, Department of Biochemistry & Biophysics
1995-present Graduate Adviser, Programs in Biological Sciences (Biochemistry & Molecular Biology, Cell Biology, Developmental Biology, and Genetics)
1995-1997 Co-Director, Science & Health Education Partnership (SEP)
Principal Investigator, City Science NSF Grant
1997-present Science and Health Education Partnership Faculty Advisory Committee
1998-present UCSF Mission Bay Campus Site Planning & Design Committee
2001-2008 Chair, Department of Biochemistry & Biophysics Department
2001-present UC Institute for Bioengineering, Biotechnology & Quantitative Biomedical Research (QB3)
2003-2008 Chair, UCSF Mission Bay Campus-Genentech Hall Governance Committee

Editorial Boards
1987 - 1996 *Molecular and Cellular Biology*, member
1992 - 1995 *Protein Science*, member
1994 - 2000 *Biological Chemistry*, member

1994 - 2002 *Current Biology*, member
1992 - 2009 *Molecular Biology of the Cell* (Associate Editor, 1996-)
1999 - 2009 *Genome Biology*, Advisory Board member
2001 - present *Faculty 1000* (Section Head)
2003 - present *Public Library of Science (PLOS), Biology*, Editorial Board Member
2004 - 2009 *Proceedings of the National Academy of Sciences*, Editorial Board Member
2008 - present *BMC Biology* (formerly *Journal of Biology)*

PUBLICATIONS

JOURNALS ARTICLES

1. Walter P & Harris TM. (1978) Annelation of ethyl propiolate with ethyl pipecolate. *J. Org. Chem*. **43**, 4250-4252.
2. Clevestine EC, Walter P, Harris TM, & Broquist HP. (1979) Biosynthesis of slaframine, (1S,6S,8aS)-l-Acetoxy-6-aminoctahydroindolizine, a parasympathomimetic alkaloid of fungal origin. 4. Metabolic fate of ethyl pipecolylacetate, 1,3-Dioxooctahydroindolizine, and l-Hydroxyoctahydroindolizine in *Rhizoctonia leguminicola*. *Biochemistry* **18**, 3663-3667.
3. Walter P, Jackson RC, Marcus MM, Lingappa VR, & Blobel G. (1979) Tryptic dissection and reconstitution of translocation activity for nascent presecretory proteins across microsomal membranes. *Proc. Nat. Acad. Sci. USA* **76**, 1795-1799. PMCID: PMC383478
4. Jackson RC, Walter P, & Blobel G. (1980) Secretion requires a cytoplasmically disposed sulfhydryl of the RER membrane. *Nature* **286**, 174-176.
5. Walter P & Blobel G. (1980) Purification of a membrane-associated protein complex required for protein translocation across the endoplasmic reticulum. *Proc Natl Acad Sci USA* **77**, 7112-7116. PMCID: PMC350451
6. Walter P, Ibrahimi I, & Blobel G. (1981) Translocation of proteins across the endoplasmic reticulum. I. Signal recognition protein (SRP) binds to in-vitro-assembled polysomes synthesizing secretory protein. *J Cell Biol* **91**, 545-550.
7. Walter P & Blobel G. (1981) Translocation of proteins across the endoplasmic reticulum. II. Signal recognition protein (SRP) mediates the selective binding to microsomal membranes of in-vitro-assembled polysomes synthesizing secretory protein. *J Cell Biol* **91**, 551-556.
8. Walter P & Blobel G. (1981) Translocation of proteins across the endoplasmic reticulum. III. Signal recognition protein (SRP) causes signal sequence-dependent and site-specific arrest of chain elongation that is released by microsomal membranes. *J Cell Biol* **91**, 557-561.
9. Stoffel W, Blobel G, & Walter P. (1981) Synthesis *in vitro* and translocation of apolipoprotein AI across microsomal vesicles. *Eur J Biochem* **120**, 519-522.
10. Anderson DJ, Walter P, & Blobel G. (1982) Signal recognition protein is required for the integration of acetylcholine receptor delta subunit, a transmembrane glycoprotein, into the endoplasmic reticulum membrane. *J Cell Biol* **93**, 501-506.
11. Müller M, Ibrahimi I, Chang CN, Walter P, & Blobel G. (1982) A bacterial secretory protein requires signal recognition particle for translocation across mammalian endoplasmic reticulum. *J Biol Chem* **257**, 11860-11863.
12. Gilmore R, Blobel G, & Walter P. (1982) Protein translocation across the endoplasmic reticulum. I. Detection in the microsomal membrane of a receptor for the signal recognition particle. *J Cell Biol* **95**, 463-469.
13. Gilmore R, Walter P, & Blobel G. (1982) Protein translocation across the endoplasmic reticulum. II. Isolation and characterization of the signal recognition particle receptor. *J Cell Biol* **95**, 470-477.
14. Walter P & Blobel G. (1982) Signal recognition particle contains a 7S RNA essential for protein translocation across the endoplasmic reticulum. *Nature* **299**, 691-698.
15. Erickson AH, Walter P & Blobel G. (1983) Translocation of a lysosomal enzyme across the microsomal membrane requires signal recognition particle. *Biochem Biophys Res Commun* **115**, 275-280.
16. Walter P & Blobel G. (1983) Disassembly and reconstitution of signal recognition particle. *Cell* **34**, 525-533.

17. Walter P & Blobel G. (1983) Subcellular distribution of signal recognition particle and 7SL-RNA determined with polypeptide-specific antibodies and complementary DNA probe. *J Cell Biol* **97**, 1693-1699.
18. Bonatti S, Migliaccio G, Blobel G, & Walter P. (1984) Role of signal recognition particle in the membrane assembly of Sindbis viral glycoproteins. *Eur J Biochem* **140**, 499-502.
19. Andrews DW, Walter P, & Ottensmeyer FP. (1985) Structure of the signal recognition particle by electron microscopy. *Proc Natl Acad Sci USA* **82**, 785-789. PMCID: PMC397131
20. Siegel V & Walter P. (1985) Elongation arrest is not a prerequisite for secretory protein translocation across the microsomal membrane. *J. Cell Biol*. **100**, 1913-1921.
21. Lauffer L, Garcia PD, Harkins RN, Coussens L, Ullrich A, & Walter P. (1985) Topology of the SRP receptor in endoplasmic reticulum membrane. *Nature* **318**, 334-338.
22. Siegel V & Walter P. (1986) Removal of the Alu structural domain from signal recognition particle leaves its translocation promoting activity intact. *Nature* **320**, 81-84.
23. Hansen W, Garcia PD, & Walter P. (1986) *In vitro* protein translocation across the yeast endoplasmic reticulum: ATP-dependent post-translational translocation of the prepro-a-factor. *Cell* **45**, 397-406.
24. Krieg UC, Walter P, & Johnson AE. (1986) Photocrosslinking of the signal sequence of nascent preprolactin to the 54-kilodalton polypeptide of the signal recognition particle. *Proc Natl Acad Sci USA* **83**, 8604-8608. PMCID: PMC386979
25. Tajima S, Lauffer L, Rath V, & Walter P. (1986) The signal recognition particle receptor is a complex that contains two distinct polypeptide chains. *J Cell Biol* **103**, 1167-1178.
26. Rapoport TA, Heinrich R, Walter P, & Schulmeister T. (1987) Mathematical modeling of the effects of the signal recognition particle on translation and translocation of proteins across the endoplasmic reticulum membrane. *J Mol Biol* **195**, 621-636.
27. Garcia PD, Ghrayeb J, Inouye M, & Walter P. (1987) Wild type and mutant signal peptides of *E. coli* outer membrane lipoprotein interact with equal efficiency with mammalian signal recognition particle. *J Biol Chem* **262**, 9463-9468.
28. Andrews DW, Walter P, & Ottensmeyer FP. (1987) Evidence for an extended 7SL RNA structure in the signal recognition particle. *EMBO J*. **6**, 3471-3477. PMCID: PMC553805
29. Walter P. (1987). Signal recognition: Two receptors act sequentially. *Nature* **328**, 763-764.
30. Garcia PD, Ou J-H, Rutter WJ, & Walter P. (1988) Targeting of the hepatitis B virus precore protein to the ER membrane: after signal peptide cleavage translocation can be aborted and the product released into the cytoplasm. *J. Cell Biol.* **106**, 1093-1104.
31. Hansen W & Walter P. (1988) Prepro-carboxypeptidase Y and a truncated form of pre-invertase, but not full-length pre-invertase, can be posttranslationally translocated across microsomal vesicle membranes from *S. cerevisiae*. *J. Cell Biol.* **106**, 1075-1081.
32. Siegel V & Walter P. (1988) Each of the activities of signal recognition particle (SRP) is contained within a distinct domain: analysis of biochemical mutants of SRP. *Cell* **52**, 39-49.
33. Siegel V & Walter P. (1988) Binding sites of the 19-kDa and 68/72-kDa signal recognition particle (SRP) proteins on SRP RNA as determined by protein-RNA "footprinting". *Proc Natl Acad Sci USA* **85**, 1801-1805. PMCID: PMC279867
34. Garcia PD & Walter P. (1988) Full-length prepro-a-factor can be translocated across the mammalian microsomal membrane only if translation has not terminated. *J. Cell Biol.* **106**, 1043-1048.
35. Siegel V & Walter P. (1988) The affinity of signal recognition particle for presecretory proteins is dependent on nascent chain length. *EMBO J.* **7**, 1769-1775. PMCID: PMC457167
36. Kassenbrock CK, Garcia PD, Walter P, & Kelly RB. (1988) Heavy chain binding protein recognizes aberrant polypeptides translocated *in vitro*. *Nature* **333**, 90-93.
37. Poritz MA, Siegel V, Hansen WJ, & Walter P. (1988) Small ribonucleoproteins in *Schizosaccharomyces pombe* and *Yarrowia lipolytica* homologous to signal recognition particle. *Proc Natl Acad Sci USA* **85**, 4315-4319. PMCID: PMC280419
38. Wolin SL & Walter P. (1988) Ribosome pausing and stacking during translation of a eukaryotic mRNA. *EMBO J* **7**, 3559-3569. PMCID: PMC454858
39. Poritz MA, Strub K, & Walter P. (1988) Human SRP RNA and E. coli 4.5S RNA contain a highly homologous structural domain. *Cell* **55**, 4-6.

40. Lingelbach K, Zwieb C, Webb JR, Marshallsay C, Hoben PJ, Walter P, & Dobberstein B. (1988) Isolation and characterization of a cDNA clone encoding the 19 kDa protein of signal recognition particle (SRP): expression and binding to 7SL RNA. *Nucl Acids Res* **16**, 9431-9442. PMCID: PMC338754
41. Andrews DW, Lauffer L, Walter P, & Lingappa VR. (1989) Evidence for a two-step mechanism involved in assembly of functional signal recognition particle receptor. *J Cell Biol* **108**, 797-810.
42. Krieg U, Johnson AE, & Walter P. (1989) Protein translocation across the endoplasmic reticulum membrane: Identification by photocross-linking of a 39-kD integral membrane glycoprotein as part of a putative translocation tunnel. *J Cell Biol* **109**, 2033 - 2043.
43. Bernstein HD, Poritz M, Strub K, Hoben PJ, Brenner S, & Walter P. (1989) Model for signal sequence recognition from amino-acid sequence of the 54K subunit of the signal recognition particle. *Nature* **340**, 482-486.
44. Wolin SL & Walter P. (1989) Signal recognition particle mediates a transient elongation arrest of preprolactin in reticulocyte lysate. *J Cell Biol* **109**, 2617-2622.
45. Chung K-N, Walter P, Aponte GW, & Moore H-PH. (1989) Molecular sorting in the secretory pathway. *Science* **243**, 192-197.
46. Strub K & Walter P. (1989) Isolation of a cDNA clone of the 14-kDa subunit of the signal recognition particle by cross-hybridization of differently primed polymerase chain reactions. *Proc Natl Acad Sci USA* **86**, 9747 - 9751. PMCID: PMC298578
47. Ngsee JK, Hansen W, Walter P, & Smith M. (1989) Cassette mutagenesis of the yeast invertase signal peptide. Effects on protein translocation. *Mol Cell Biol* **9**, 3400-3410. PMCID: PMC362386
48. Hann BC, Poritz MA, & Walter P. (1989) *Saccharomyces cerevisiae* and *Schizo-saccharomyces pombe* contain a homologue to the 54 kD subunit of the signal recognition particle that in *S. cerevisiae* is essential for growth. *J Cell Biol* **109**, 3223-3230.
49. Zimmerman DL & Walter P. (1990) Reconstitution of protein translocation activity from partially solubilized microsomal vesicles. *J. Biol. Chem*. **265**, 4048-4053.
50. Strub K & Walter P. (1990) Assembly of the Alu domain of the signal recognition particle (SRP): Dimerization of the two protein components is required for efficient binding to SRP RNA. *Mol Cell Biol* **10**, 777-784. PMCID: PMC360878
51. Poritz MA, Bernstein HD, Strub K, Zopf D, Wilhelm H, & Walter P. (1990) An *E. coli* ribonucleoprotein containing 4.5S RNA resembles mammalian signal recognition particle. *Science* **250**, 1111-1117.
52. Zopf D, Bernstein HD, Johnson AE, & Walter P. (1990) The methionine-rich domain of the 54 kd protein subunit of the signal recognition particle contains an RNA binding site and can be crosslinked to a signal sequence. *EMBO J* **9**: 4511-4517. PMCID: PMC552245
53. Thrift RN, Andrews DW, Walter P, & Johnson AE. (1991) A nascent membrane protein is located adjacent to ER membrane proteins throughout its integration and translation. *J Cell Biol* **112**: 809-822.
54. Strub K, Moss J, & Walter P. (1991) Binding sites of the 9- and 14-kilodalton heterodimeric protein subunit of the signal recognition particle (SRP) are contained exclusively in the *Alu* domain of SRP RNA and contain a sequence motif that is conserved in evolution. *Mol Cell Biol* **11**: 3949-3959. PMCID: PMC361190
55. Nunnari J, Zimmerman DL, Ogg S, & Walter P. (1991) Characterization of the ribosome binding activity of the endoplasmic reticulum membrane. *Nature* **352**: 638-640.
56. Brennwald PJ, Siegel V, Walter P, & Wise JA. (1991) Sequence and structure of Tetrahymena SRP RNA. *Nucl Acids Res* **19**: 1942. PMCID: PMC328128
57. Hann BC *&* Walter P. (1991) The signal recognition particle in *Saccharomyces cerevisiae*. *Cell* **67**: 131-144.
58. Zimmerman DL & Walter P. (1991) An ATP-binding membrane protein is required for protein translocation across the endoplasmic reticulum membrane. *Cell Reg* **2**: 851-859. PMCID: PMC361880
59. Green N & Walter P. (1992) C-terminal sequences can inhibit the insertion of membrane proteins into the endoplasmic reticulum of *S. cerevisiae*. *Mol Cell Biol* **12**: 276-282. PMCID: PMC364098
60. Green N, Fong H,& Walter P. (1992) Mutants in three novel complementation groups inhibit membrane protein insertion into and soluble protein translocation across the endoplasmic reticulum membrane of *Saccharomyces cerevisiae.* *J Cell Biol*. **116**: 597-604.

61. Koppelman B, Zimmerman D, Walter P, & Brodsky FM. (1992) Evidence for peptide transport across microsomal membranes. *Proc Natl Acad Sci USA* **89**: 3908-3912. PMCID: PMC525600
62. Hann BC, Stirling C & Walter P. (1992) *SEC65* gene product is a subunit of the yeast signal recognition particle. *Nature* **356**: 532-533.
63. Ogg S, Poritz MA, & Walter P. (1992) Signal recognition particle receptor is important for cell growth and protein secretion in *S. cerevisiae*. *Mol. Biol. Cell* **3**: 895-911. PMCID: PMC275647
64. Janiak F, Walter P, & Johnson AE. (1992) Fluorescence-detected assembly of the signal recognition particle: The binding of the two SRP protein heterodimers to SRP RNA is non-cooperative. *Biochemistry* **31**: 5830-5840.
65. Walter P. (1992) Protein translocation: Travelling by TRAM. *Nature* **357**: 22-23.
66. Bernstein HD, Zopf D, Freymann D & Walter P. (1993) Functional substitution of the signal recognition particle 54-kD subunit by its *Escherichia coli* homolog. *Proc Natl Acad Sci USA* **90**: 5229-5233. PMCID: PMC46689
67. Zopf D, Bernstein HD, & Walter P. (1993) GTPase domain of the 54-kD subunit of the mammalian signal recognition particle is required for protein translocation but not for signal sequence binding. *J Cell Biol* **120**: 1113-1121.
68. Wolin SL & Walter P. (1993) Discrete nascent chain lengths are required for the insertion of presecretory proteins into microsomal membranes. *J Cell Biol* **121**: 1211-1220.
69. Cox JS, Shamu CE, & Walter P. (1993) Transcriptional induction of genes encoding endoplasmic reticulum resident proteins requires a transmembrane protein kinase. *Cell* **73**: 1197-1206.
70. Miller JD, Wilhelm H, Gierasch L, Gilmore R, & Walter P. (1993) GTP binding and hydrolysis by the signal recognition particle during initiation of protein translocation. *Nature* **366**: 351-354.
71. Nunnari J, Fox T, & Walter P. (1993) A mitochondrial protease with two catalytic subunits of non-overlapping specificities. *Science* **262**: 1997-2004
72. Miller JD, Bernstein HD, and Walter P. (1994) Interaction of *E. coli* Ffh/4.5S ribonucleoprotein and FtsY mimics that of mammalian signal recognition particle and its receptor. *Nature* **367**: 657-659.
73. Brown JD, Hann BC, Medzihradszky KF, Niwa M, Burlingame AL ,& Walter P. (1994) Subunits of the *Saccharomyces cerevisiae* signal recognition particle required for its functional expression. *EMBO J*. **13**: 4390-4400. PMCID: PMC395366
74. Selinger D, Brennwald P, Althoff S, Reich C, Hann B, Walter P, & Wise JA. (1994) Genetic and biochemical analysis of the fission yeast ribonucleoprotein particle containing a homolog of Srp54p. *Nucleic Acids Res* **22**: 2557-2567. PMCID: PMC308210
75. Matlack KE & Walter P. (1995) The 70 carboxyl-terminal amino acids of nascent secretory proteins are protected from proteolysis by the ribosome and the protein translocation apparatus of the endoplasmic reticulum membrane. *J Biol Chem* **270**: 6170-6180.
76. Miller JD, Tajima S, Lauffer L & Walter P. (1995) The b-subunit of the signal recognition particle receptor is a transmembrane GTPase that anchors the a-subunit, a peripheral membrane GTPase, to the endoplasmic reticulum membrane. *J Cell Biol* **128**: 273-282.
77. Young JC, Ursini J, Legate KR, Miller JD, Walter P, & Andrews DW. (1995) An amino-terminal domain containing hydrophobic and hydrophilic sequences binds the signal recognition particle receptor a subunit to the b subunit on the endoplasmic reticulum membrane. *J Biol Chem* **270**: 15650-15657.
78. Ogg SC & Walter P. (1995). SRP samples nascent chains for the presence of signal sequences by interacting with ribosomes at a discrete step during translation elongation. *Cell* **81**: 1075-1084.
79. Powers T & Walter P. (1995) Reciprocal stimulation of GTP hydrolysis by two directly interacting GTPases. *Science* **269**: 1422-1424.
80. Ng DTW & Walter P. (1996). ER membrane protein complex required for nuclear fusion. *J Cell Biol* **132** (4): 499-509. PMCID: PMC2199862
81. Powers T & Walter P. (1996) The nascent polypeptide-associated complex modulates interactions between the signal recognition particle and the ribosome. *Curr Biol* **6**: 331-338.
82. Shamu CE & Walter P. (1996) Oligomerization and phosphorylation of the Ire1p kinase during intracellular signaling from the endoplasmic reticulum to the nucleus. *EMBO J* **15**: 3028-3039. PMCID: PMC450244
83. Ng DTW, Brown JD, & Walter P. (1996) Signal sequences specify the targeting route to the endoplasmic reticulum membrane. *J Cell Biol* **134**: 269-278.

84. Cox JS & Walter P. (1996) A novel mechanism for regulating activity of a transcription factor that controls the unfolded protein response. *Cell* **87**: 391-404.
85. Sidrauski C, Cox JS, & Walter P. (1996) tRNA ligase is required for regulated mRNA splicing in the unfolded protein response. *Cell* **87**: 405-413.
86. Schmitz U, Freymann D, James T, Keenan R, Vinayak R, & Walter P. (1996) NMR studies of the most conserved RNA domain of the mammalian signal recognition particle. *RNA* **2** (12): 1213-1227. PMCID: PMC1369449
87. Freymann DM, Keenan RJ, Stroud RM, & Walter P. (1997) Structure of the conserved GTPase domain of the signal recognition particle. *Nature* **385**: 361-364.
88. Nunnari J, Marshall W, Straight A, Murray A, Sedat J, & Walter P. (1997) Mitochondrial transmission during mating in *S.cerevisiae* is determined by mitochondrial fusion and fission and the intramitochondrial segregation of mitochondrial DNA. *Molecular Biology of the Cell* **8**: 1233-1242. PMCID: PMC276149
89. Powers T & Walter P. (1997) Co-translational protein translocation catalyzed by *E. coli* Signal Recognition Particle and its receptor. *EMBO J.* **16**: 4880-4886. PMCID: PMC1170123
90. Cox J, Chapman R, & Walter P. (1997) The unfolded protein response coordinates the production of ER protein and ER membrane. *Molecular Biology of the Cell* **8**:1805-1814. PMCID: PMC305738
91. Sidrauski C & Walter P. (1997) The transmembrane kinase Ire1p is a site-specific endoribonuclease that initiates regulated mRNA splicing in the unfolded protein response. *Cell* **90**: 1031-1039.
92. Chapman RE & Walter P. (1997) Translational attenuation mediated by an mRNA intron. *Current Biology* **7**: 850-859.
93. Kremerskothen J, Zopf D, Walter P, Cheng J-G, Nettermann M, Niewerth U, Maraia RJ, & Brosius J. (1998). Heterodimer SRP9/14 is an integral part of the neural BC200 RNP in primate brain. *Neuroscience Letters* **245**: 123-126.
94. Ogg S, Barz W, & Walter P. (1998) A functional GTPase domain, but not its transmembrane domain, is required for function of the SRP receptor b subunit. *J. Cell Biol.* **142**: 341-354. PMCID: PMC2133050
95. Keenan R, Freymann D, Walter P, & Stroud R. (1998) Crystal structure of the signal sequence binding subunit of the signal recognition particle. *Cell* **94**: 181-191.
96. Arvidson CG, Powers T, Walter P, & So M. (1999) *Neisseria gonorrhoeae* PilA is an FtsY homolog.: *J Bacteriol*. **181**(3): 731-739. PMCID: PMC93437
97. Barz W & Walter P. (1999) Two ER membrane proteins that facilitate ER-to-Golgi transport of GPI-anchored proteins. *Molecular Biology of the Cell* **10**: 1043-1059. PMCID: PMC25232
98. Powers T & Walter P. (1999) Regulation of ribosome biogenesis by the rapamycin-sensitive TOR-signaling pathway in *Saccharomyces cerevisiae*. *Molecular Biology of the Cell* **10**: 987-1000. PMCID: PMC25225
99. Freymann DM, Keenan RJ, Stroud RM, & Walter P. (1999) Functional changes in the structure of the SRP GTPase on binding GDP and Mg^{2+}GDP. *Nature Struct Biol* **6**: 793-801.
100. Schmitz U, James TL, Lukavsky P, & Walter P. (1999) Structure of the most conserved internal loop in SRP RNA. *Nature Struct Biol* **6**: 634-638.
101. Schmitz U, Behrens S, Freymann DM, Keenan RJ, Lukavsky P, Walter P, & James TL. (1999) Structure of the phylogenetically most conserved domain of SRP RNA. *RNA* **5**: 1419-1429. PMCID: PMC1369863
102. Gonzalez T, Sidrauski C, Dörfler S, & Walter P. (1999) Mechanism of non-spliceosomal mRNA splicing in the unfolded protein response pathway. *EMBO J* **18**: 3119-3132. PMCID: PMC1171393
103. Niwa M, Sidrauski C, & Walter P. (1999) A Role for presenilin-1 in nuclear accumulation of Ire1 fragments and induction of the mammalian unfolded protein response. *Cell* **99**: 691-702.
104. Travers KJ, Patil CK, Wodicka L, Lockhart DJ, Weissman JS & Walter P. (2000) Functional and genomic analyses reveal essential coordination between the unfolded protein response and endoplasmic reticulum-associated degradation. *Cell* **101**: 249-258.
105. Peluso P, Herschlag D, Nock S, Freymann D, Johnson AE & Walter P. (2000) Role of 4.5 S RNA in assembly of the bacterial signal recognition particle with its receptor. *Science* **288**: 1640-1643.
106. Ng D, Spear ED, & Walter P. (2000) The unfolded protein response regulates multiple aspects of secretory and membrane protein biogenesis and ER quality control. *J. Cell Biol* **150**: 77-88. PMCID: PMC2185565

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108 Mutka S & Walter P. (2001) Multifaceted physiological response allows yeast to adapt to the loss of the SRP-dependent protein targeting pathway. *Molecular Biology of the Cell* **12**: 577-588. PMCID: PMC30965
109. Dong B, Niwa M, Walter P, & Silverman RH. (2001) Basis for regulated RNA cleavage by functional analysis of RNase L and IRE1p. *RNA* **7**: 361-373. PMCID: PMC1370093
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