

## CURRICULUM VITAE

September 2011

**Susan Margaret GASSER**

- Present position:* Director, Friedrich Miescher Institute  
for Biomedical Research, and  
Professor of Molecular Biology, University of Basel  
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- Date of birth:* 29 March 1955
- Civil status:* married to James Gasser; son, Marc (b. 1986)
- Citizenship:* Swiss
- Higher education:*
- |   |             |
|---|-------------|
| St. John's College, Annapolis, Maryland   | 1974 - 1976 |
| University of Freiburg, Freiburg, Germany   | 1976 - 1977 |
| University of Chicago, Illinois   | 1977 - 1979 |
| <i>B.A. with Honors in Biological Sciences (thesis in Biophysics; M. Makinen)</i> |             |
| University of Basel, Switzerland  | 1979 - 1982 |
| <i>Ph.D., Magna cum laude (Biochemistry; G. Schatz)</i>                           |             |
| <i>The Import of Proteins by Isolated Yeast Mitochondria</i>                      |             |
- Research positions:*
- |  |                |
|--|----------------|
| University of Basel, Postdoctoral assistant, Dept. of Biochemistry (G. Schatz) | 1982           |
| Univ. of Geneva, Maître assistante, Dept. of Mol. Biology (U. Laemmli)         | 1983 - 1986    |
| Swiss Inst for Experimental Cancer Research (ISREC; Junior group leader)       | 1986 - 1990    |
| Swiss Inst for Experimental Cancer Research (ISREC; Senior group leader)       | 1991 - 2001    |
| University of Geneva, Full Professor, Department of Molecular Biology          | 2001 - 2004    |
| Friedrich Miescher Institute for Biomedical Research, Director                 | since Dec 2004 |
| University of Basel, Full Professor in Molecular Biology                       | since Jan 2005 |
- Honors*
- |  |      |
|--|------|
| National Latsis Prize (Swiss)  | 1991 |
| Election to EMBO   | 1993 |
| Friedrich Miescher Prize (Swiss Biochemical Society)                       | 1994 |
| Election to Academia Europaea  | 1998 |
| Medal of Honor from the 3rd Medical Faculty of Charles University (Prague) | 1999 |
| Member of the Académie de France, Institut de science                      | 2005 |
| Otto Naegeli Prize for Medical Research (Swiss)                            | 2006 |
| Gregor Mendal Medal of the Czech Academy of Science                        | 2006 |
| Member of the Swiss Academy of Medical Sciences, Switzerland               | 2006 |
| Member of the German Academy of Sciences, Leopoldina                       | 2007 |
| Fellow of the American Association for the Advancement of Science (USA)    | 2008 |
| Nucleic Acid Award of the Royal Academy of Chemistry (UK)                  | 2009 |
| Prix International de l'INSERM (Academie de France)                        | 2011 |
- Research or advisory board memberships*
- |   |           |
|---|-----------|
| Member, Research Council of the Swiss National Science Foundation     | 1993-2002 |
| Member, Career Development Committee of ELSO                          | 2000-2003 |
| Member, Selection Committee, SNF Career Professorship Program         | 2000-2009 |
| Member, Grant Review Committee HFSP, Strasbourg                       | 2003-2005 |
| Member, Selection Jury, Institut Universitaire de France (IUF), Paris | 2002-2003 |
| Member, Search Committee, Körber-Foundation, Hamburg                  | 2004-2007 |

Review Board, DFG-Sonderforschungsbereich "Chromatin"	2004-2008
Board of Directors Gerbert R�f Foundation, Basel	since 2005
Advisory Board Cancer Research UK, London Research Inst	2005-2010
Advisory Group on Health Research, European Commission	since 2006
Advisory Board, Max Planck Institute for Dev. Biology, T�bingen	2006-2008
Advisory Board, Center for Integrative Genomics, Lausanne	since 2006
Panel Chairperson, European Research Council "Starting Grants"	2007
Advisory Board for Wellcome Trust Center for Research, Dundee	since 2007
Advisory Board for Max Planck Institute for Immunology, Freiburg	since 2007
Scientific Executive Board of the SystemsX.ch initiative	2007-2009
Member of the Nestl� Nutrition Council, Nestl� SA	since 2008
Coordinator, Swiss EuroBioimaging initiative	since 2009
Member of Foundation Board, Brubacher Foundation	since 2010

#### *Other major responsibilities*

Chairperson, EMBO Course Committee	1994-1998
Staff representative, ISREC Executive Board	1995-2001
Organizer, Gordon Research Conf. "Chromatin Structure and Function"	1998-2000
Vice-President then President of the EMBO Council	2000-2005
Organizing committee and Chair, USGEB Meeting	2006-2007
Organizing committee, ASCB meeting 2008	2007-2008

#### *Selected Research networks:*

SNF National Center for Competence in Research "Frontiers in Genetics"	since 2001
EU Network of Excellence "Epigenome", Member of executive board	2003-2010
Swiss SystemsX RTD, "Cell Plasticity in Health and Disease", Coordinator	since 2009
Epigenesys, NOE on epigenetics, Associate member	since 2011

#### *Editorial Boards:*

<i>Journal of Cell Biology</i>	1990-1994
<i>Trends in Cell Biology</i>	since 1990
<i>Genes to Cells</i>	since 1995
<i>Journal of Cell Science</i>	since 1996
<i>Molecular Cell</i>	since 1997
<i>Biosis (Methods Finder)</i>	1998-2001
<i>EMBO Journal/ EMBO Reports</i>	since 1999
<i>Journal of Biology</i>	since 2001
<i>PLOS Biology</i>	since 2002
<i>Faculty of 1000</i>	2003-2006
BioMed Central	since 2003
<i>Epigenetics and Chromatin</i>	since 2008
<i>The Nucleus</i>	since 2009
<i>Current Opinion in Genetics and Development</i>	since 2011

#### **Short summary in words:**

*Susan Gasser studied at the University of Chicago and completed her PhD at the University of Basel, developing an assay for the import of mitochondrial proteins with G. Schatz. During a postdoctoral studies with Uli Laemmli she identified topoisomerase II and noncoding ATrich sequences as structural components of mammalian metaphase chromosomes. From 1986-2001, as a research group leader at the Swiss Institute for Experimental Cancer Research, Susan pioneered a combined genetic and fluorescence microscopy analysis of nuclear organization in budding yeast and examined its impact on heritable gene repression. Her group identified mechanisms that position yeast telomeres and silent chromatin at the nuclear envelope. In parallel, they have identified novel roles for RecQ helicases, checkpoint kinases, chromatin remodelers and ORC in genome stability. With live fluorescence imaging, she has examined the subnuclear dynamics of chromatin and its role in DNA repair pathways, and more recently in differentiation and degenerative disease, using the nematode, C. elegans. She leads a Systems Biology network on Epigenetic changes in Cell Plasticity and participates in multiple EU networks on genetics, genome stability and gene expression. From 2001-2004, Susan Gasser was Professor of Molecular Biology at the U. of Geneva, and since December 2004, is Director of the Friedrich Miescher Institute, Basel, with a parallel appointment as Professor of Molecular Biology at the University of Basel. She has served on multiple boards and advisory councils, including Chairperson of the EMBO Council and a member of the Swiss National Research Council.*

*Original Publications (most highly cited in bold):*

1. Wilson, S.M. and Makinen, M.W. (1980)  
"An Electron Microscope Study of the Fiber-to-crystal Transition of Sickle Cell Hemoglobin"  
**Proc. Natl. Acad. Sci. USA**, 77, 944 - 948.
2. Gasser, S.M., Ohashi, A., Daum, G., Böhni, P., Gibson, J., Reid, G., Yonetani, T. and Schatz, G. (1982)  
"The Imported Mitochondrial Proteins Cytochrome  $b_2$  and Cytochrome  $c_1$  are processed in Two Steps"  
**Proc. Natl. Acad. Sci. USA**, 79, 267 - 271.
3. **Gasser, S.M., Daum, G. and Schatz, G. (1982)**  
**"Import of Proteins into Mitochondria: Energy-dependent Uptake of Precursors by Isolated Mitochondria"**  
**J. Biol. Chem.** 257, 13034 - 13041.
4. Daum, G., Gasser, S.M. and Schatz, G. (1982) "Import of Proteins into Mitochondria: Energy-dependent Two-step Processing of the Intermembrane Space Enzyme Cytochrome  $b_2$  by Isolated Mitochondria"  
**J. Biol. Chem.**, 257, 13075 - 13080.
5. Gasser, S.M. and Schatz, G. (1983)  
"Import of Proteins into Mitochondria: *In vitro* Studies on the Biogenesis of the Outer Membrane"  
**J. Biol. Chem.** 258, 3427 - 3431.
6. Riezman, H., Hay, R., Gasser, S.M., Daum, G., Schneider, G., Witte, C. and Schatz, G. (1983)  
"The Outer Membrane of Yeast Mitochondria: Isolation of Outside-out Sealed Vesicles"  
**EMBO J.** 2, 1105 - 1112.
7. Van Loon, A.P.G.M., Kreike, J., DeRonde, A., Van der Horst, G.T.J., Gasser, S. and Grivell, L.A. (1983)  
"Biosynthesis of the Ubiquinone: Cytochrome  $c_1$  Complex in Yeast"  
**Eur. J. Biochem.**, 135, 457 - 463.
8. Gasser, S.M. and Laemmli, U.K. (1986)  
"The Organization of Chromatin Loops: Characterization of a Scaffold Attachment Site"  
**EMBO J.** 5, 511 - 518.
9. **Gasser, S.M., Laroche, T., Falquet, J., Boy de la Tour, E. and Laemmli, U.K. (1986)**  
**"Metaphase Chromosome Structure: Involvement of Topoisomerase II"**  
**J. Mol. Biol.** 155, 613 - 629.
10. **Gasser, S.M. and Laemmli, U.K. (1986)** "Cohabitation of Scaffold Binding Regions with Upstream/Enhancer Elements of Three Developmentally Regulated Genes of *D. melanogaster*."  
**Cell**, 46, 521 - 530.
11. Gasser, S.M. and Laemmli, U.K. (1987)  
"Improved Methods for the Isolation of Individual and Clustered Mitotic Chromosomes"  
**Exp. Cell Res.**, 173, 85 - 98.
12. Mirkovitch, J., Gasser, S.M. and Laemmli, U.K. (1987) "Relationship of Chromosome Structure and Gene Expression" **Phil. Trans. Royal Soc. (London)**, B 317, 563 - 574.
13. Mirkovitch, J., Gasser, S.M. and Laemmli, U.K. (1988)  
"Scaffold Attachment of DNA Loops in Metaphase Chromosomes"  
**J. Mol. Biol.** 200, 101 -109.
14. **Amati, B.B. and Gasser, S.M. (1988)**  
**"Chromosomal ARS and CEN Elements Bind Specifically to the Yeast Nuclear Scaffold"**  
**Cell**, 54, 967 - 978.
15. Hofmann, J.F-X., Laroche, T., Brand, A.H. and Gasser, S.M. (1989)  
"RAP-1 is necessary for DNA loop formation *in vitro* at the silent mating type locus, *HML*."  
**Cell**, 57, 725 - 737.

16. Karwan, R.M., Laroche, T., Wintersberger, U., Gasser, S.M. and Binder, M. (1990)  
"Ribonuclease H(70) Is a Component of the Yeast Nuclear Scaffold"  
**J. Cell Sci.** *96*, 451 - 458.
17. Cardenas, M.E., Laroche, T. and Gasser, S.M. (1990)  
"The Composition and Morphology of Yeast Nuclear Scaffolds"  
**J. Cell Sci.**, *96*, 439 -450.
18. Amati, B. and Gasser, S.M. (1990) "*Drosophila* Scaffold-Attached Regions Bind Nuclear Scaffolds and Function as ARS Elements in Both Budding and Fission Yeast."  
**Mol. Cell. Biol.** *10*, 5442 - 5454.
19. Amati, B., Pick, L., Laroche, T. and Gasser, S.M. (1990) "Nuclear scaffold attachment stimulates but is not necessary for ARS activity in *S. cerevisiae*: Analysis of the *Drosophila ftz SAR*"  
**EMBO J.** *9*, 4007 - 4017.
20. Verdier, J.-M., Stalder, R., Roberge, M., Amati, B., Sentenac, A. and Gasser, S.M. (1990)  
"Preparation and Characterization of Yeast Nuclear Extracts for Efficient RNA Polymerase B(II)-Dependent Transcription *in vitro*"  
**Nucl. Acids Res.** *18*, 7033 - 7039.
21. Hofmann, J.F-X. and Gasser, S.M. (1991)  
"Identification and Purification of a Protein that Binds the Yeast ARS Consensus Sequence"  
**Cell**, *64*, 951 - 960.
22. Raska, I., Michel, L.S., Jarnik, M., Dundr, M., Fakan, S., Gasser, S., Gassmann, M., Hübscher, U., Izaurralde, E., Martinez, E., Richter, A., Dubochet, J. (1991) "Ultrastructural cryo-immunocyto-chemistry is a convenient tool for the study of DNA replication in cultured cells."  
**J. Electron Micr. Techniques**, *18*, 91 - 105.
23. Klein, F., Laroche, T., Cardenas, M.E., Hofmann, J.F.X., Schweizer, D. and Gasser, S.M. (1992)  
"Localization of RAP1 and Topoisomerase II in Nuclei and Meiotic Chromosomes of Yeast"  
**J. Cell Biology**, *117*, 935 - 948.
24. Cardenas, M.E., Dang, Q., Glover, C.V.C and Gasser, S.M. (1992)  
"Casein kinase II phosphorylates the eukaryote-specific C-terminus of topoisomerase II *in vivo*."  
**EMBO J.** *11*, 1785 - 1796.
25. Roberge, M. and Gasser, S.M. (1992)  
"DNA Loops: Structural and Functional Properties of Scaffold-attached Regions"  
**Mol. Microbiology**, *6*, 419 - 423.
26. Cardenas, M.E., Walter, R., Hanna, D.E. and Gasser, S.M. (1993) "Casein kinase II Co-purifies with Yeast DNA Topoisomerase II and Re-activates the Dephosphorylated Enzyme"  
**J. Cell Science**, *104*, 533 - 543.
27. Gilson, E., Roberge, M., Giraldo, R., Rhodes, D. and Gasser, S.M. (1993)  
"Distortion of the DNA Double Helix by RAP1 at Silencers and Multiple Telomeric Binding Sites"  
**J. Mol. Biol.** *231*, 293 - 310.
28. Palladino, F., Laroche, T., Gilson, E., Axelrod, A., Pillus, L. and Gasser, S.M. (1993)  
"SIR3 and SIR4 proteins are required for the positioning and integrity of yeast telomeres"  
**Cell**, *75*, 543 - 555.
29. Palladino, F., Laroche, T., Gilson, E., Pillus, L. and Gasser, S.M. (1993)  
"The positioning of yeast telomeres depends on SIR3, SIR4, and the integrity of the nuclear membrane."  
**Cold Spring Harbor Symp. Quant. Biol.** *58*, Cold Spring Harbor Press, New York, 733 - 746.

30. Cockell, M., Frutiger, S., Hughes, G. J. and Gasser, S.M. (1994)  
"The yeast protein encoded by PUB1 binds T-rich single-stranded DNA"  
**Nucl. Acids Res.** 22, 32 - 40.
31. Vassetzky, Y.S., Dang, Q., Benedetti, P. and Gasser, S.M. (1994) "Topoisomerase II forms multimers *in vitro*: effects of metals,  $\beta$ -glycerophosphate and phosphorylation of its C-terminal domain"  
**Mol. Cell. Biol.** 14, 6962 - 6974.
32. Dang, Q., Alghisi, G.-C. and Gasser, S.M. (1994) "Phosphorylation of the C-terminal domain of yeast topoisomerase II by casein kinase II affects DNA-protein interaction"  
**J. Mol. Biol.** 243, 10 - 24.
33. Müller, T., Gilson, E., Schmidt, R., Giraldo, R., Sogo, J., Gross, H. and Gasser, S.M. (1994) "Imaging an Asymmetric DNA bend induced by Repressor Activator Protein 1 with Scanning Tunnelling Microscopy"  
**J. Struct. Biology**, 113, 1 - 12.
34. Gilson, E., Müller, T., Sogo, J., Laroche, T. and Gasser, S.M. (1994) "RAP1 promotes single- to double-strand association of yeast telomeric DNA: implications for telomere-telomere interactions"  
**Nucl. Acids Res.** 22, 5310 - 5320.
35. Alghisi, G.-C., Roberts, E., Cardenas, M.E. and Gasser, S.M. (1994)  
"The regulation of DNA topoisomerase II by casein kinase II"  
**Cell. Mol. Biology Res.** 40, 563 - 571.
36. Cockell, M., Palladino, F., Laroche, T., Kyrion, G., Liu, C., Lustig, A.J. and Gasser, S.M. (1995)  
"The carboxy-termini of SIR4 and RAP1 affect SIR3 localization: Evidence for a multi-component complex required for yeast telomeric silencing"  
**J. Cell Biology**, 129, 909 - 924.
37. **Hecht, A., Laroche, T., Strahl-Bolsinger, S., Gasser, S.M. and Grunstein, M. (1995)**  
**"Histone H3 and H4 N-termini interact with SIR3 and SIR4 proteins: a molecular model for the formation heterochromatin in yeast."**  
**Cell**, 80, 583 - 592.
38. Grunstein, M., Hecht, A., Fisher-Adams, G., Wan, J., Mann, R.K., Strahl-Bolsinger, S., Laroche, T. and Gasser, S.M. (1995) "The regulation of euchromatin and heterochromatin by histones in yeast."  
**J. Cell Science**, 19, 29 - 36.
39. Vassetzky, Y.S., Alghisi, G.-C., Roberts, E. and Gasser, S.M. (1996) "Ectopic expression of inactive forms of yeast DNA topoisomerase II confers resistance to the anti-tumor drug, etoposide."  
**Brit. J. Cancer**, 73, 1201 - 1209.
40. Boscheron, C., Maillet, L., Marcand, S., Tsai-Pflugfelder, M., Gasser, S.M. and Gilson, E. (1996)  
"Cooperation at a distance between silencers and proto-silencers at the yeast *HML* locus"  
**EMBO J.** 15, 2184 - 2195.
41. Bilaud, T., Binet-Brasselet, E., Koering, C., Ancelin, K., Pollice, A., Gasser, S.M. and Gilson, E. (1996)  
"The Telobox, a Myb-related telomeric DNA binding motif found in proteins from yeast, plants and human"  
**Nucl. Acids Res.** 24, 1294 - 1303.
42. **Maillet, L., Boscheron, C., Gotta, M., Marcand, S., Gilson, E. and Gasser, S.M. (1996)**  
**"Evidence for silencing subcompartments within the yeast nucleus: a role for telomere proximity and Sir protein concentration in silencer-mediated repression"**  
**Genes & Dev.** 10, 1796 - 1811.
43. **Gotta, M., Laroche, T., Formenton, A., Maillet, L., Scherthan, H. and Gasser, S.M. (1996)**  
**"The clustering of telomeres and colocalization with Rap1, Sir3 and Sir4 proteins in wild-type *S. cerevisiae*."**  
**J. Cell Biology**, 134, 1349 - 1363.

44. Kennedy, B.K., Gotta, M., Sinclair, D.A., Mills, K., McNabb, D.S., Murthy, M., Pak, S.M., Laroche, T., Gasser, S.M. and Guarente, L. (1997) "Redistribution of silencing proteins from telomeres to the nucleolus is associated with extension of life span in *S. cerevisiae*." **Cell**, *89*, 381 - 391.
45. Pasero, P., Braguglia, D. and Gasser, S.M. (1997) "ORC-dependent and Origin-specific initiation of DNA replication at defined foci in isolated yeast nuclei." **Genes & Dev.** *11*, 1504 - 1518.
46. Gotta, M., Strahl-Bolsinger, S., Renauld, H., Kennedy, B.K., Laroche, T., Grunstein, M. and Gasser, S.M. (1997) "Localization of Sir2p: the nucleolus as a compartment for Silent Information Regulators." **EMBO J.** *16*, 3243 - 3255.
47. Braguglia, D., Heun P., Pasero, P., Duncker, B. and Gasser, S.M. (1998) "Semi-conservative replication in yeast nuclear extracts requires Dna2 helicase and supercoiled template." **J. Mol. Biology**, *281*, 631 - 649.
48. Tsai-Pflugfelder, M., Gasser, S.M. and Wahli, W. (1998) "Functional Interaction Between the Estrogen Receptor and CTF1: Analysis of Vitellogenin B1 Promoter in Yeast." **Mol. Endocrinology**, *12*, 1525 - 1541.
49. Laroche, T., Martin, S.G., Gotta, M., Gorham, H.C., Pryde, F.E., Louis, E.J. and Gasser, S.M. (1998) "Mutation of yeast Ku genes disrupts the subnuclear organization of telomeres." **Current Biol.** *8*, 653 - 656.
50. Gotta, M., Palladino, F. and Gasser, S.M. (1998) "A functional characterization of the Silent Information Regulator 3 N-terminus." **Mol. Cell. Biol.** *18*, 6110 - 6120.
51. Cockell, M., Renauld, H., Watt, P. and Gasser, S.M. (1998) "Sir2p interacts with Sir4p N-terminal domain and antagonizes telomeric silencing in yeast." **Current Biol.** *8*, 787 - 790.
52. Akhmedov, A.T., Frei, C., Tsai-Pflugfelder, M., Kemper, B., Gasser, S.M. and Jessberger, R. (1998) "SMC protein C-terminal Domains Bind Preferentially to DNA with Secondary Structure." **J. Biol. Chem.**, *273*, 24088 - 24094.
53. Hayashi, A., Ogawa, H., Kohno, K., Gasser, S.M. and Hiraoka, Y. (1998) "Meiotic behaviors of chromosomes and microtubules in budding yeast: relocalization of centromeres and telomeres during meiotic prophase." **Genes to Cells**, *3*, 587 - 600.
54. Cockell, M., Gotta, M., Palladino, F., Martin, S.G. and Gasser, S.M. (1998) "Targeting SIR proteins to nuclear domains: a general mechanism for transcriptional repression." **Cold Spring Harbor Symp. Quant. Biology**, *63*, Cold Spring Harbor Press, New York, 401 - 412.
55. Duncker, B.P., Pasero, P., Braguglia, D., Heun. P., Weinreich, M. and Gasser, S.M. (1999) "Cyclin B/Cdk1 stimulates ORC- and Cdc6-independent steps of semiconservative plasmid replication in yeast nuclear extracts." **Mol. Cell Biology**, *19*, 1226 - 1241.
56. Leroy, D., Alghisi, C-A., Roberts, E., Filhol-Cochet, O. and Gasser, S.M. (1999) "Mutations in the C-terminal domain of topoisomerase II affect meiotic function and interaction with casein kinase 2 $\beta$  subunit." **Mol. Cell. Bioch.** *191*, 85 -95.
57. Soltermann, A., Ernst, A.I., Leroy, D., Stahel, R.A. and Gasser, S.M. (1999) "The cytochrome b<sub>5</sub> tail anchors and stabilizes subdomains of human DNA topoisomerase II  $\alpha$  in the cytoplasm of retrovirally infected mammalian cells." **Exp. Cell Res.** *248*, 308 - 319.

58. **Martin, S.G., Laroche, T., Suka, N., Grunstein, M. and Gasser, S.M. (1999)**  
**"Relocalization of telomeric Ku and SIR proteins in response to DNA strand breaks in yeast."**  
*Cell*, **97**, 621 - 633.
59. **Pasero, P., Duncker, B.P., Schwob, E. and Gasser, S.M. (1999)** **"A role for the Cdc7 kinase regulatory subunit Dbf4p in the formation of initiation competent origins of replication."**  
*Genes & Dev.* **13**, 2159 - 2176.
60. Vassetzky, N.S., Gaden, F., Brun, C., Gasser, S.M. and Gilson, E. (1999) "Taz1p and Teb1p, two telo-box proteins in *Schizosaccharomyces pombe*, recognize different telomeric-related DNA sequences."  
*Nucl. Acids Res.* **27**, 4687 – 4694.
61. Frei, C. and Gasser, S.M. (2000) "The yeast Sgs1 helicase acts upstream of Rad53p in the DNA replication checkpoint and colocalizes with Rad53p in S-phase specific foci."  
*Genes & Dev.* **14**, 81 - 96.
62. Cockell, M., Perrod, S. and Gasser, S.M. (2000)  
 "Analysis of Sir2p domains required for rDNA and telomeric silencing."  
*Genetics*, **154**, 1069 - 1083.
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 "MAP kinase signaling induces nuclear reorganization in budding yeast."  
*Current Biol.* **10**, 373 – 382.
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 "The Dynamics of Yeast Telomeres and Silencing Proteins through the Cell Cycle."  
*J. Struct. Biol.* **129**, 159 - 174.
65. Ernst, A.I., Soltermann, A., Sigrist, J.A., Widmer, L., Gasser, S.M. and Stahel, R.A. (2000)  
 "Ectopic expression of human topoisomerase II $\beta$  fragments and etoposide resistance in mammalian cells."  
*Int. J. Cancer*, **88**, 99 - 107.
66. Perrod, S., Cockell, M.M., Laroche, T., Renauld, H., Ducrest, A., Bonnard, C. and Gasser, S.M. (2001)  
 "A cytosolic NAD-dependent deacetylase, Hst2p, can modulate nucleolar and telomeric silencing in yeast."  
*EMBO J.* **20**, 197 - 209.
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 "Analysis of etoposide binding to subdomains of human DNA topoisomerase II $\alpha$  in the absence of DNA."  
*Biochemistry*, **40**, 1624 - 1634.
68. **Heun, P., Laroche, T., Raghuraman, M. K. and Gasser, S.M. (2001)** **"The positioning and dynamics of origins of replication in the budding yeast nucleus." (see also In Brief and Commentary, same issue)**  
*J. Cell Biology*, **152**, 385 - 400.
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 "Ku deficient strains exhibit alternative states of silencing competence."  
*EMBO Reports*, **2**, 203 - 210.
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 "Chromosomal dynamics in the yeast interphase nucleus."  
*Science*, **293**, 2181 - 2186.
71. **Gasser, S.M. (2002)** "Visualizing Chromatin Dynamics in Interphase Nuclei."  
*Science*, **296**, 1412 – 1416.
72. Teixeira, M.T., Forstemann, K., Gasser, S.M. and Lingner, J. (2002)  
 "Intracellular trafficking of yeast telomerase components."  
*EMBO Reports*, **3**, 652 - 659.

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75. Hediger, F., Dubrana, K. and Gasser, S.M. (2002) "Myosin-like proteins 1 and 2 are not required for silencing or telomere anchoring but act in the Tel1 pathway of telomere length control." *J. Struct. Biol.* **140**, 79 - 91.
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77. Cobb, J.A., Bjergbaek, L., Shimada, K., Frei, C. and Gasser, S.M. (2003) "DNA polymerase stabilization at stalled replication forks requires Mec1 and the RecQ helicase Sgs1." *EMBO J.* **22**, 4325 - 4336.
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