

CURRICULUM VITAE

May 2015

Susan Margaret GASSER

- Present position:* Director, Friedrich Miescher Institute
for Biomedical Research, and
Professor of Molecular Biology, University of Basel
Maulbeerstrasse 66
CH-4058 Basel, Switzerland
tel +41 61 697 7255 / fax +41 61 697 3976
susan.gasser@fmi.ch
- Date of birth:* 29 March 1955
- Civil status:* married to James Gasser; son, Marc (b. 1986)
- Citizenship:* Switzerland (Lungern, Obwalden)
- Higher education:*
- | | |
|---|-------------|
| St. John's College, Santa Fe NM/Annapolis, MD, USA | 1974 - 1976 |
| University of Freiburg, Freiburg, Germany | 1976 - 1977 |
| University of Chicago, Illinois, USA | 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 (thesis in Biochemistry; G. Schatz, Biozentrum)</i> | |
- Research positions:*
- | | |
|---|----------------|
| University of Basel, Postdoctoral assistant, Dept. of Biochemistry (G. Schatz) | 1982 |
| Univ. of Geneva, Maître assistante, Dept. of Molecular Biology (U. Laemmli) | 1983 - 1986 |
| Swiss Institute for Experimental Cancer Research (ISREC; Junior Group leader) | 1986 - 1990 |
| Swiss Institute for Experimental Cancer Research (ISREC; Senior Group leader) | 1991 - 2001 |
| University of Geneva, Full Professor, Department of Molecular Biology | 2001 - 2004 |
| University of Basel, Full Professor in Molecular Biology | since Jan 2005 |
| Friedrich Miescher Institute for Biomedical Research, Director and Group leader | since Dec 2004 |
- Honors :*
- | | |
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| 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 |
| Elected to the Académie de France, Institut de science | 2005 |
| Otto Naegeli Prize for Medical Research (Swiss) | 2006 |
| Gregor Mendel Medal of the Czech Academy of Science | 2006 |
| Elected to the Swiss Academy of Medical Sciences | 2006 |
| Elected to 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, France | 2011 |
| EMBO/FEBS Women in Science Award | 2012 |
| Weizmann Institute Women in Science Award, Rehovot, Israel | 2013 |
- Visiting professorships and honorary doctorate:*
- | | |
|---|--------------|
| Institute of Protein Science, Osaka University, Japan, Prof A. Shinohara, host | Apr-May 2011 |
| Graduate School of Adv Integration Science, Chiba University, Japan, Prof A. Matsuura, host | 2012-2013 |
| Institute of Protein Science, Osaka University, Japan, Prof A. Shinohara, host | 2014-2016 |
| Dr Honoris causa in Molecular Biology, University of Lausanne, Switzerland | 2014 |
- Research or advisory boards, community service:*
- | | |
|---|-----------|
| 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, Gebert Rüd Foundation, Basel	since 2005
Advisory Board Cancer Research UK, London Research Institutes	2005-2010
Advisory Group on Health Research FP7, European Commission	2006-2012
Advisory Board, Max Planck Institute for Dev. Biology, Tübingen	2006-2008
Advisory Board, Center for Integrative Genomics, Lausanne	2006-2011
European Research Council "Starting Grants" review panel Chair	2007
Advisory Board for Wellcome Trust Centre for Research, Dundee	2007-2015
Advisory Board for Max Planck Institute for Immunology, Freiburg	2007-2014
Scientific Executive Board of the SystemsX.ch initiative	2007-2009
Member of the Nestlé Nutrition Council, Nestlé SA	since 2008
Coordinator, Swiss EuroBioimaging initiative	2009-2014
Member of Foundation Board, Brupbacher Foundation	2010-2014
Member, Scientific Committee of BioSysNet, Munich	2010-2014
Member, Wissenschaftliches Beirat of the Institute of Advanced Study, Berlin	since 2012
Member, Crick Institute Review Board, London	since 2012
Advisory Board for Max Planck Institut for Biophysical Chemistry, Göttingen	since 2012
President's Science and Technology Advisory Council (STAC) of the European Commission	2013-2014
Selection committee of the Royal Netherlands Academy of Arts and Science Prize	2012-2015
Delivery of the "Rektorsrede" Dies academicus, University of Basel	Nov 2013
Scientific Review Board of Netherlands Cancer Institute	Mar 2014
Member, Scientific Advisory Board for IGBMC, Strasbourg	since 2014
Member, Career Development Grant Review Committee HFSP, Strasbourg	since 2014
Member, Executive Board of Genomics Institute of the Novartis Research Foundation	since 2014
Chairwoman, Gender Commission of the Swiss National Science Foundation	since 2014

Selected organizational 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-chair and Chairman of the EMBO Council	2000-2005
Chair of the organizing committee, USGEB Meeting, Basel	2006-2007
Co-organizer of the EMBO Nuclear structure and dynamics meeting series	2005-2011
Organizing committee, ASCB meeting, San Francisco 2008	2007-2008
Co-organizer, Keystone meeting "DNA damage response"	2013
Co-organizer, Joint FEBS/EMBO 50 th anniversary conference, Paris, France	2014
Lead organizer, EMBO workshop "Cell and Developmental Systems" Arolla	2015

Selected Research networks:

SNF National Centre for Competence in Research "Frontiers in Genetics"	2001-2012
EU Network of Excellence "Epigenome", Member of Executive board	2003-2010
Swiss SystemsX RTD, "Cell Plasticity in Health and Disease", Coordinator	2009-2014
Epigenesis, 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>	1996-2015
<i>Molecular Cell</i>	since 1997
<i>EMBO Journal/ EMBO Reports</i>	since 1999
<i>PLOS Biology</i>	since 2002
<i>Faculty of 1000</i>	2003-2006
<i>BioMed Central</i>	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
<i>Trends in Genetics</i>	since 2013

Short summary in words: Susan Gasser studied biology and biophysics at the University of Chicago and completed her PhD at the University of Basel, establishing in vitro mitochondrial protein import with G. Schatz. As a postdoctoral fellow with U.K. Laemmli, she identified topoisomerase II as a structural component of metaphase chromosomes and a role for AT rich sequences in long-range chromatin organization. Joining the Swiss Institute for Experimental Research in Cancer as a group leader in 1986, she initiated a combined genetic and fluorescence microscopy approach to understand the functional organization of the nucleus. Her laboratory identified mechanisms that position telomeres and silent chromatin in the yeast nucleus, and demonstrated the functional impact of this spatial organization, as well as of interphase chromatin dynamics. This has now been extended to effects during development in *C. elegans*. In parallel, Susan pioneered the study of RecQ helicases and chromatin remodellers in the repair of double-strand breaks and fork-associated damage, applying quantitative microscopy to examine DNA repair in the context of the nucleus. Dr Gasser held a professorship at the University of Geneva from 2001-04, and at the U. of Basel since 2005. In November 2004, she was appointed the Director of the Friedrich Miescher Institute for Biomedical Research. She served on and chaired a number of boards and advisory councils, including the Swiss National Research Council, the EC Presidents Science and Technology Advisory Council, and the EMBO Council. Among other distinctions, she received the Otto Nägeli Prize in 2006, the International INSERM award in 2011, the FEBS/EMBO Women in Science award in 2012 and the Weizmann Institute Science Award in 2013.

Original Publications (most important papers are 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. Biochemistry, 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. Molecular Biology, 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 Research, 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. Molecular Biology, 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 Science, 96, 451 - 458.
17. Cardenas, M.E., Laroche, T. and Gasser, S.M. (1990)
"The Composition and Morphology of Yeast Nuclear Scaffolds"
J. Cell Science, 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 Research, 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. Molecular Biology, 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 Research, 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, β -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. Molecular Biology, 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 Research, 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. Biol. Research, 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, 109, 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."
British 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. Billaud, 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 Research, 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. Molecular 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 Biol. *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 β 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 b₅ tail can anchor and stabilize subdomains of human DNA topoisomerase II α in the cytoplasm of retrovirally infected mammalian cells."
Exp. Cell Research, *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 Research, *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.
63. Stone, E.M., Heun, P., Laroche, T., Pillus, L. and Gasser, S.M. (2000)
"MAP kinase signaling induces nuclear reorganization in budding yeast."
Current Biol. *10*, 373 – 382.
64. Laroche, T., Martin, S.G., Tsai-Pflugfelder, M. and Gasser, S.M. (2000)
"The Dynamics of Yeast Telomeres and Silencing Proteins through the Cell Cycle."
J. Struct. Biology, *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 α 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.
67. Leroy, D., Kajava, A.V., Frei, C. and Gasser, S.M. (2001)
"Analysis of etoposide binding to subdomains of human DNA topoisomerase II α 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."
J. Cell Biology, *152*, 385 - 400.
69. Maillet, L., Gaden, F., Brevet, V., Fourel, G., Martin, S.G., Dubrana, K., Gasser, S.M. and Gilson, E. (2001)
"Ku deficient strains exhibit alternative states of silencing competence."
EMBO Reports, *2*, 203 - 210.
70. Heun, P., Laroche, T., Shimada, K., Furrer, P., and Gasser, S.M. (2001)
"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.
73. Hediger, F., Neumann, F.R., Van Houwe, G., Dubrana, K. and Gasser, S.M. (2002) "Live imaging of yeast
telomeres: yKu and Sir mutations define independent but redundant anchoring pathways."
Current Biol. *12*, 2076 - 2089.
74. Duncker, B., Shimada, K., Tsai-Pflugfelder, M., Pasero, P. and Gasser, S.M. (2002) "An N-terminal domain of
Dbf4p mediates interaction with both ORC and Rad53p and can deregulate late origin firing."
Proc. Natl. Acad. Sci. USA, *99*, 16087 - 16092.
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. Biology, *140*, 79 - 91.
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