

PUBLICATIONS
January 2010
Susan Margaret GASSER-Wilson

Original Publications:

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.M. 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.

15. . Amati, B.B. and Gasser, S.M. (1988) "Chromosomal ARS and CEN Elements Bind Specifically to the Yeast Nuclear Scaffold" **Cell**, 54, 967 - 978.
16. . 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.
17. 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.
18. . Cardenas, M.E., Laroche, T. and Gasser, S.M. (1990)
"The Composition and Morphology of Yeast Nuclear Scaffolds"
J. Cell Sci., 96, 439 -450.
19. . 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.
20. . 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.
21. . 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.
22. . 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.
23. . Raska, I., Michel, L.S., Jarnik, M., Dundr, M., Fakan, S., Gasser, S., Gassmann, M., Hübscher, U., Izaurrealde, E., Martinez, E., Richter, A., Dubochet, J. (1991) "Ultrastructural cryo-immunocytochemistry is a convenient tool for the study of DNA replication in cultured cells."
J. Electron Micro. Techniques, 18, 91 - 105.
24. . 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.
25. . 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.
26. Roberge, M. and Gasser, S.M. (1992)
"DNA Loops: Structural and Functional Properties of Scaffold-attached Regions"
Mol. Microbiology, 6, 419 - 423.
27. . 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 Sci., 104, 533 - 543.
28. 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.

29. 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.
30. 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.
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36. 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.
37. 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.
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42. 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.
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and Sir protein concentration in silencer-mediated repression”
Genes & Dev. 10, 1796 - 1811.

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45. 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.
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- interaction with casein kinase 2 β subunit."
- Mol. Cell. Bioch.** 191, 85 -95.
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Yeast, 25, 235-239. *corresponding author
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