

CURRICULUM VITAE

Personal information

Name and surname: **Prof. Siniša Volarević**

Title: Full Professor / Head of the Department of Molecular Medicine and Biotechnology

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Working Experience and Education

2006 - present	University of Rijeka, Faculty of Medicine - Full Professor
1997 - 2000	Fridrich Miescher Institute, Basel, Switzerland - Senior Posdoctor
1993 - 1994	Institute for Tumor Biology, Freiburg, Germany - Visiting Scientist
1988 - 1992	National Cancer Institute, Bethesda, USA – Visiting Fellow, Research Associate
1990 - 1994	University of Zagreb, Faculty of Medicine - Ph.D.
1982 - 1987	University of Zagreb, Faculty of Medicine - M.D.

Focus of the Research Group

Our group studies the consequences of ribosomal protein deficiencies in mammals. Initially, we demonstrated that inducible deletion of the ribosomal protein S6 gene in the liver of adult mice inhibits the synthesis of the 40S ribosomal subunit as well as proliferation of liver cells following partial hepatectomy, despite seemingly unaffected protein synthesis. These observations suggested the existence of a novel checkpoint, downstream of the deficiency in ribosome biogenesis. We and several other research groups have recently provided convincing evidence for the existence of this checkpoint and demonstrated that the p53 tumor suppressor is its critical component. Our research interests focus on understanding the molecular basis of this checkpoint response and determining its role in pathogenesis of various diseases, including developmental abnormalities and cancer.

Selected Recent Publications

1. Barkić M, Crnomarković S, Panić L, Grabušić K, Cokarić M, Tamarut S, Bogetić I, Volarević S. The p53 tumor suppressor causes congenital malformations in RPL24-deficient mice and promotes their survival. *Mol. Cell. Biol.*, 2009; 29:2489-2504
2. Panić L, Tamarut S, Sticker-Jantscheff M, Barkić M, Solter D, Uzelac M, Grabušić K, Volarević S. Ribosomal Protein S6 gene haploinsufficiency is associated with activation of a p53-dependent checkpoint during gastrulation. *Mol. Cell. Biol.*, 2006; 26:8880-8891
3. Šulić S, Panić L, Barkić M, Merćep M, Uzelac M, Volarević S. Inactivation of S6 ribosomal protein gene in T lymphocytes activates a p53-dependent checkpoint response. *Genes Dev.*, 2005; 19:3070-3082
4. Volarević S, Steward M, Ledermann B, Zilberman F, Terracciano L, Montini E, Grompe M, Kozma S, Thomas G. Proliferation, but not growth, blocked by conditional deletion of 40S ribosomal protein S6. *Science.*, 2000; 288:2045-2047