

Curriculum vitae – Dr. Ramtin Rahmanzadeh

EDUCATION/TRAINING INSTITUTION AND LOCATION	DEGREE	COMPLETION DATE	FIELD OF STUDY
Rheinische Friedrich-Wilhelms University Bonn, Germany	diploma	12/2002	Biology
Leibniz Research Center Borstel, Germany	Ph.D.	2/2007	Tumor biology
Massachusetts General Hospital, Harvard Medical School, MA, USA	Postdoc	12/2010	Photodynamic Therapy

PERSONAL STATEMENT

The focus of my work is the light-controlled manipulation of proteins and cells for the development of molecular targeted approaches for basic research and for photodynamic therapy. Driven by the idea to interfere on molecular level with cellular functions with light at high spatial and temporal precision, we have developed nanotechnology based approaches for the cell selective delivery of macromolecules, like antibodies to the nucleus of cells for light inactivation of nuclear proteins. This photochemical inactivation shows high selectivity on protein level. For manipulation on cellular level we investigate plasmonic effects after laser irradiation of colloidal and rod shaped gold nanoparticles for selective elimination of cells.

POSITIONS AND EMPLOYMENT

4.2003 - 2.2007	Research Scientist, Leibniz Research Center Borstel, Germany
3.2007 - 4.2008	Research Scientist, Institute for Biomedical Optics, University of Lübeck, Germany
5.2008 - 12.2010	Postdoctoral Research Fellow, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA
1.2011 - 2.2012	Senior Research Scientist, Institute for Biomedical Optics, University of Lübeck, Germany
3.2012 - present	Research Group Leader, same institution as above

SELECTED PUBLICATIONS

Wang S, Hüttmann G, Scholzen T, Zhang Z, Vogel A, Hasan T, **Rahmanzadeh R**
A light-controlled switch after Dual targeting of proliferating tumor cells via the membrane receptor EGFR and the nuclear protein Ki-67, *Sci Rep*. 2016 Jun 1;6:27032. doi: 10.1038/srep27032.

Wang S, Hüttmann G, Zhang Z, Vogel A, Tangutoori S, Birngruber R, Hasan T, **Rahmanzadeh R**
Light-controlled delivery of monoclonal antibodies for targeted photoinactivation of Ki-67.
Mol Pharm. 2015 Sep 8;12(9):3272-81

Rahmanzadeh R, Rai P, Celli J, Rizvi I, Baron-Lühr B, Gerdes J and Hasan T.
Ki-67 as a molecular target for therapy in an in vitro 3D model for ovarian cancer.
Cancer Res. 2010 Nov 15;70(22):9234-42

Rai P, Mallidi S, Zheng X, **Rahmanzadeh R**, Mir Y, Elrington S, Khurshid A, Hasan T.
Development and Applications of Photo-triggered Theranostic Agents.
Adv Drug Deliv Rev. 2010 Aug 30;62(11):1094-124.

Rahmanzadeh R, Hüttmann G, Gerdes J, Scholzen T
Chromophore-assisted laser inactivation of the nuclear protein pKi-67 leads to inhibition of ribosomal RNA synthesis. *Cell Prolif*. 2007 Jun; 40(3):422-30