

BERGS, JUDITH, PH.D.

GENERAL INFORMATION



Scientific Coordinator
University Hospital Heidelberg, Department of Neurology
Im Neuenheimer Feld 400
69120 Heidelberg, Germany

D03 / D04

ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
2002-2007	PhD, Medical Faculty of the University of Amsterdam, The Netherlands
1998-2002	MSc, Health Sciences, Maastricht University, The Netherlands

PROFESSIONAL EXPERIENCE

Year(s)	Experience
Since 2023	Scientific Coordinator, University Hospital Heidelberg (UKHD), Germany
2017-2023	Scientific Coordinator/Research Manager, Charité-Universitätsmedizin Berlin, Germany
2016-2017	Senior Scientist, Centre National de la Recherche Scientifique (CNRS), Université Paris-Saclay, France
2014-2016	Postdoc, German Cancer Research Center (DKFZ), Partner Location Frankfurt am Main (German Cancer Consortium, DKTK), Germany
2007-2012	Postdoc, Institute of Molecular Biology and Tumor Research (IMT), Philipps University Marburg, Germany

SELECTED PUBLICATIONS

1. [Bergs J](#), Morr AS, Silva RV, Infante-Duarte C, Sack I. The Networking Brain: How Extracellular Matrix, Cellular Networks, and Vasculature Shape the In Vivo Mechanical Properties of the Brain. **Adv Sci** 2024; 11(31): e2402338.
2. Meyer T, Kreft B, [Bergs J](#), Antes E, Anders MS, Wellge B, Braun J, Doyley M, Tzschätzsch H, Sack I. Stiffness pulsation of the human brain detected by non-invasive time-harmonic elastography. **Front Bioeng Biotechnol** 2023; 11: 1140734.
3. Prezado Y, Hirayama R, Matsufuji N, Inaniwa T, Martínez-Rovira I, Seksek O, Bertho A, Koike S, Labiod D, Pouzoulet F, Polledo L, Warfving N, Liens A, [Bergs J](#), Shimokawa T. A potential renewed use of very heavy ions for therapy: Neon minibeam radiation therapy. **Cancers** 2021; 13: 1356.
4. Kreft B, Tzschätzsch H, Schrank F, [Bergs J](#), Streitberger KJ, Wäldchen S, Hetzer S, Braun J, Sack I. Time-Resolved Response of Cerebral Stiffness to Hypercapnia in Humans. **Ultrasound Med Biol** 2020; 46(4): 936-943.
5. Prezado Y, Jouvion G, Guardiola C, Gonzalez W, Juchaux M, [Bergs J](#), Nauraye C, Labiod D, De Marzi L, Pouzoulet F, Patriarca A, Dendale R. Tumor Control in RG2 Glioma-Bearing Rats: A Comparison Between Proton Minibeam Therapy and Standard Proton Therapy. **Int J Radiat Oncol Biol Phys** 2019; 104(2): 266–271.
6. Tzschätzsch H, Kreft B, Schrank F, [Bergs J](#), Braun J, Sack I. In vivo time-harmonic ultrasound elastography of the human brain detects acute cerebral stiffness changes induced by intracranial pressure variations. **Sci Rep** 2018; 8(1): 17888.
7. Guardiola C, Prezado Y, Roulin C, [Bergs J](#). Effect of X-ray minibeam radiation therapy on clonogenic survival of glioma cells. **Clinical and Translational Radiation Oncology** 2018; 13: 7-13.
8. [Bergs JW](#), Wacker MG, Hehlhans S, Piiper A, Multhoff G, Rödel C, Rödel F. The role of recent nanotechnology in enhancing the efficacy of radiation therapy. **Biochim Biophys Acta Reviews on Cancer** 2015; 1856(1): 130-143.

9. [Bergs JW](#), Neuendorff N, van der Heijden G, Wassenaar E, Rexin P, Elsässer HP, Moll R, Baarends WM, Brehm A. Differential expression and sex chromosome association of CHD3/4 and CHD5 during spermatogenesis. **PLoS One** 2014; 9(5): e98203.
10. [Bergs JW](#), Krawczyk PM, Borovski T, ten Cate R, Rodermond HM, Stap J, Medema JP, Haveman J, Essers J, van Bree C, Stalpers LJ, Kanaar R, Aten JA, Franken NA. Inhibition of homologous recombination by hyperthermia shunts early double strand break repair to non-homologous end-joining. **DNA Repair** 2013; 12(1): 38-45.