Prof. Dr. Wolfgang Schlegel
Head Division Medical Physics in Radiation Oncology, DKFZ

24.2.1945

Deutsches Krebsforschungszentrum
Div. Med. Physics in Radiation Oncology
Im Neuenheimer Feld 280
69120 Heidelberg

06221 42 2551 (phone)
06221 42 2561 (fax)
w.schlegel@dkfz.de

SCIENTIFIC VITA:

1964-1968	study of Physics, Free University of Berlin,
1970	Diploma in Physics, University of Heidelberg
1972	Ph.D., University of Heidelberg (magna cum laude)
1972-1973	Research Assistant, Max-Planck-Institute for Nuclear Physics, Heidelberg
1972-1976	Research Assistant, DKFZ Heidelberg
1987	Habilitation, Faculty of Medicine, University of Heidelberg
1976-1988	Group leader, Institute for Nuclear Medicine, DKFZ Heidelberg
since 1988	Division Head at the DKFZ, Professor at the Faculty of Medicine,
since 2003	co-opted member at the Faculty of Physics
since 2004	Leader of the clinical research group „Medical Physics“ at the Radiological University Clinics, Heidelberg
since 2006	Coordinator of the research program “Innovative Diagnostics and Therapy” of the German Cancer Resaerch Center (dkfz)

AWARDS and HONOURS

Beckurts-Prize of the German Ministry of Education and Research (BMBF, 1996); Nomination for the Future Award of the German President (Zukunftspreis des Bundespräsidenten)(2001); Grand-IST-Award (Information Science Technologies) of the EC (2003), German Cancer Award (Deutscher Krebspreis) (2003); Elected reviewer (Fachgutachter) for Medical Physics and Medical Engineering, German Research Foundation (DFG) (2004); Member and chairman of the Advisory Board on Medical Engineering (Medizin-Technischer Ausschuss), German Ministry of Research and Education (BMBF) (2005), President of the European Federation of Associations in Medical Physics (EFOMP) (2006-2008); President of the World Conference for Medical Physics and Biomedical Engineering, Munich (2009)

FIELDS OF INTEREST

Medical Physics in Radiation Oncology, Medical Physics in Neurosurgery

SELECTED PUBLICATIONS (SINCE 2000)

Kyas I; Hof H; Debus J; Schlegel W; Karger CP (2007). Prediction of radiation-induced changes in the lung after stereotactic body radiation therapy of non-small-cell lung cancer. **Int J Radiat Oncol Biol Phys** 67, 768-774

Anderson JW, Symonds-Tayler R, Hartmann G, Echner G, Lang C, Schlegel W, Webb S (2006). Comparative efficiency of the multi-leaf collimator and variable-aperture collimator in intensity-modulated radiotherapy. **Phys Med Biol** 51, 1725-1736

Levegrun S, Hof H, Essig M, Schlegel W, Debus J (2004). Radiation-induced changes of brain tissue after radiosurgery in patients with arteriovenous malformations: correlation with dose distribution parameters. **Int J Radiat Oncol Biol Phys** 59, 796-808

Milker-Zabel S, Zabel A, Huber P, Schlegel W, Wannenmacher M, Debus J (2004). Stereotactic conformal radiotherapy in patients with growth hormone-secreting pituitary adenoma. **Int J Radiat Oncol Biol Phys** 59, 1088-1096

Pavel-Mititean LM, Rowbottom CG, Hector CL, Partridge M, Bortfeld T, Schlegel W (2004). A geometric model for evaluating the effects of inter-fraction rectal motion during prostate radiotherapy. **Phys Med Biol** 49, 2613-2629

Webb S, Hartmann G, Echner G, Schlegel W (2003). Intensity-modulated radiation therapy using a variable-aperture collimator. **Phys Med Biol** 48, 1223-1238

Levegrun S, Jackson A, Zelefsky MJ, Skwarchuk MW, Venkatraman ES, Schlegel W, Fuks Z, Leibel SA, Ling CC (2001). Fitting tumor control probability models to biopsy outcome after three-dimensional conformal radiation therapy of prostate cancer: pitfalls in deducing radiobiologic parameters for tumors from clinical data. **Int J Radiat Oncol Biol Phys** 51, 1064-1080

Milker-Zabel S, Debus J, Thilmann C, Schlegel W, Wannenmacher M (2001). Fractionated stereotactically guided radiotherapy and radiosurgery in the treatment of functional and nonfunctional adenomas of the pituitary gland. **Int J Radiat Oncol Biol Phys** 50, 1279-1286

Zabel A, Debus J, Thilmann C, Schlegel W, Wannenmacher M (2001). Management of benign cranial nonacoustic schwannomas by fractionated stereotactic radiotherapy. **Int J Cancer** 96, 356-362

Schneider W, Bortfeld T, Schlegel W (2000). Correlation between CT numbers and tissue parameters needed for Monte Carlo simulations of clinical dose distributions. **Phys Med Biol** 45, 459-478