Anca-Ligia Grosu, MD

Professor and Chair, Department of Radiation Oncology
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Research Focus

- **Biological imaging for radiation therapy planning and monitoring:** BioMarkers – BioImaging – biological radiotherapy planning (Bio-RTx)
- **High precision radiation therapy:** Radiosurgery, stereotactic radiotherapy, dose painting, intraoperative radiotherapy, brachytherapy
- **Radiotherapy and immunotherapy:** Combination of radiotherapy and immunotherapy, radiotherapy and immune system, visualizing immunological processes in PET
- **Digital data management in radiation oncology:** Electronic patient file, data management, administration

Academic Activity

- Chair of the Department of Radiation Oncology, Medical Center – University of Freiburg
- Speaker of the Center for Diagnostic and Therapeutic Radiology, Medical Center – University of Freiburg (Departments of Radiology, Radiation Oncology, Nuclear Medicine, Neuroradiology)

- Member of the Senate of the Albert-Ludwigs-University Freiburg
- Vice Dean and Associate Dean (Dean Prof. Dr. Dr. h.c. mult. Hubert E. Blum) of the Faculty of Medicine, University of Freiburg (2010-2013)
- Deputy of the Equal Opportunities Officer, Albert-Ludwigs-University Freiburg
- Personal tutor of scholars, appointed by German Academic Scholarship Foundation – Studienstiftung des deutschen Volkes

- Advisory Board Member of German Cancer Aid (Deutsche Krebshilfe, DKH)
- Deputy Chair of the German Cancer Aid (Deutsche Krebshilfe, DKH) Expert Panel *Care Provisions and Research*
- Deputy Speaker of the German Cancer Consortium for Translational Cancer Research, partner site Freiburg (DKTK), Medical Center – University of Freiburg
- Member of the Executive Board and Speaker (2012-2016) of the Neuro-Oncological Center, Comprehensive Cancer Center, Medical Center – University of Freiburg (CCCF)

- Adjunct Professor, Department of Radiation Oncology, Ohio State University, Columbus OH, USA

Career

- Chair of the Department of Radiation Oncology, Medical Center – University of Freiburg (since 2007)
- Speaker of Department of Radiological Diagnostics and Therapy, Medical Center – University of Freiburg (Departments of Neuroradiology, Nuclear Medicine, Radiology, Radiation Oncology) (since 2017)
- Researcher at Harvard Medical School, Massachusetts General Hospital, Department of Radiation Oncology, Proton Therapy Center (Chair: Prof. T. F. DeLaney), Boston, USA (2006-2007)
- Assistant Medical Director (Oberärztin), Department of Radiation Oncology (Chair: Prof. Dr. med. M. Molls), Rechts der Isar Hospital, Technical University, Munich (2000-2006)
- Habilitation (Postdoctoral lecture qualification): “Innovative techniques for high precision radiotherapy in brain tumors” (2003)
- Board Certification: Radiotherapy and Radiation Oncology, additional designation: Stereotactic Radiation Therapy and Radiosurgery (2000)
- Resident: Department of Radiation Oncology, Rechts der Isar Hospital, Technical University, Munich (1995-2000)
- Resident: Institute of Diagnostic and Interventional Radiology (Chair: Prof. Dr. med. P. Gerhardt), Department of Neuroradiology (Head: Prof. Dr. med. Gräfin von Einsiedel), Rechts der Isar Hospital, Technical University, Munich (1991-1995)
- Resident: Department of Neurology (Chair: Prof. Dr. med. G. Pall), Harlaching Hospital, Munich (1990-1991)
- Academic Studies, Junior Doctor, Faculty of Medicine and Pharmacy, Medical University of Cluj-Napoca (Klausenburg), Romania (1981-1989)

Memberships

- Member of the German National Academy of Sciences “Leopoldina”
- Member of the German Society of Radiation Oncology (DEGRO)
- Member of the European Society for Therapeutic Radiology and Oncology (ESTRO)
- Member of the Executive Committee of the German Neuro-Oncology Working Group (NOA)
- Member of the Independent Expert Panel of the German Society of Radiation Oncology (DEGRO)
- Founder and member of the Nuclear Medicine / Radiation Therapy Working Group of DGN and DEGRO
- Member of the Imaging Committee of the EORTC Brain Tumor Group
- Member of the supervisory board of Furtwangen College (2008-2011)
- Member of the International Association of Surgeons, Gastroenterologists & Oncologists (IASGO)
- Advisory Board Member of the Comprehensive Cancer Center Graz (CCC Graz), Austria
- Member of the Board of Trustees of the Clotten Foundation, Freiburg

Publications (selection; additional publications: see PubMed)

1. *Radiomic features from PSMA PET for non-invasive intraprostatic tumor discrimination and characterization in patients with intermediate- and high-risk prostate cancer - a comparison study with histology reference.* Zamboglou C, Carles M, Fechter T, Kiefer S, Reichel K, Fassbender TF, Bronsert P, Koeber G, Schilling O, Ruf J, Werner M, Jilg CA, Baltas D, Mix M, **Grosu AL**. Theranostics. 2019;9(9):2595-2605 **(IF 8.7)**

2. *Diffusion-weighted MRI and ADC versus FET-PET and GdT1w-MRI for gross tumor volume (GTV) delineation in re-irradiation of recurrent glioblastoma.* Popp I, Bott S, Mix M, Oehlke O, Schimek-Jasch T, Nieder C, Nestle U, Bock M, Yuh WTC, Meyer PT, Weber WA, Urbach H, Mader I, **Grosu AL**. Radiotherapy and Oncology. 2019 Jan;130:121-131 **(IF 5,2)**

3. *Clinical outcome after high-precision radiotherapy for skull base meningiomas: Pooled data from three large German centers for radiation oncology.* Combs SE, Farzin M, Boehmer J, Oehlke O, Molls M, Debus J, **Grosu AL**. Radiotherapy and Oncology. 2018 May;127(2):274-279 **(IF 5,2)**

4. *Molecular-Based Recursive Partitioning Analysis Model for Glioblastoma in the Temozolomide Era: A Correlative Analysis Based on NRG Oncology RTOG 0525.* Bell EH, Pugh SL, McElroy JP, Gilbert MR, Mehta M, Klimowicz AC, Magliocco A, Bredel M, Robe P, **Grosu AL**, Stupp R, Curran W Jr, Becker AP, Salavaggione AL, Barnholtz-Sloan JS, Aldape K, Blumenthal DT, Brown PD, Glass J, Souhami L, Lee RJ, Brachman D, Flickinger J, Won M, Chakravarti A. JAMA Oncol. 2017 Jun 1;3(6):784-792 **(IF 44.4)**

5. *Comparison of ^{68}Ga-HBED-CC PSMA-PET/CT and multiparametric MRI for gross tumour volume detection in patients with primary prostate cancer based on slice by slice comparison with histopathology.* Zamboglou C, Drendel V, Jilg CA, Rischke HC, Beck TI, Schultze-Seemann W, Krauss T, Mix M, Schiller F, Wetterauer U, Werner M, Langer M, Bock M, Meyer PT, **Grosu AL**. Theranostics. 2017 Jan 1;7(1):228-237 **(IF 8.7)**

6. *Short-Course Radiation plus Temozolomide in Elderly Patients with Glioblastoma.* Perry JR, Laperriere N, O'Callaghan CJ, Brandes AA, Menten J, Phillips C, Fay M, Nishikawa R, Cairncross JG, Roa W, Osoba D, Rossiter JP, Sahgal A, Hirte H, Laigle-Donadey F, Franceschi E, Chinot O, Golfinopoulos V, Fariselli L, Wick A, Feuvret L, Back M, Tills M, Winch C, Baumert BG, Wick W, Ding K, Mason WP; Trial Investigators (EORTC: **A. Grosu** et.al.) N Engl J Med. 2017 Mar 16;376(11):1027-1037 **(IF 72.4)**

7. *(68)Ga-HBED-CC-PSMA PET/CT Versus Histopathology in Primary Localized Prostate Cancer: A Voxel-Wise Comparison.* Zamboglou C, Schiller F, Fechter T, Wieser G, Jilg CA, Chirindel A, Salman N, Drendel V, Werner M, Mix M, Meyer PT, **Grosu AL**. Theranostics. 2016 Jun 18;6(10):1619-28 **(IF 8.7)**

8. *MRI versus ^{68}Ga-PSMA PET/CT for gross tumour volume delineation in radiation treatment planning of primary prostate cancer*. Zamboglou C, Wieser G, Hennies S, Rempel I, Kirste S, Soschynski M, Rischke HC, Fechter T, Jilg CA, Langer M, Meyer PT, Bock M, **Grosu AL**. Eur J Nucl Med Mol Imaging. 2016 May;43(5):889-97 **(IF 7.2)**

9. *Low Cancer Stem Cell Marker Expression and Low Hypoxia Identify Good Prognosis Subgroups in HPV(-) HNSCC after Postoperative Radiochemotherapy: A Multicenter Study of the DKTK-ROG*. Linge A, Löck S, Gudziol V, Nowak A, Lohaus F, von Neubeck C, Jütz M, Abdollahi A, Debus J, Tinhofer I, Budach V, Sak A, Stuschke M, Balermpas P, Rödel C, Avlar M, **Grosu AL**, Bayer C, Belka C, Pigorsch S, Combs SE, Welz S, Zips D, Buchholz F, Aust DE, Baretton GB, Thames HD, Dubrovska A, Alsner J, Overgaard J, Baumann M, Krause M; DKTK-ROG. Clin Cancer Res. 2016 Jun 1;22(11):2639-49 **(IF 9.6)**

10. *Serial [18F]-fluoromisonidazole PET during radiochemotherapy for locally advanced head and neck cancer and its correlation with outcome*. Wiedenmann NE, Bucher S, Hentschel M, Mix M, Vach W, Bittner MI, Nestle U, Pfeiffer J, Weber WA, **Grosu AL**. Radiother Oncol. 2015 Oct;117(1):113-7 **(IF 4.3)**

11. *Long-term outcome after highly advanced single-dose or fractionated radiotherapy in patients with vestibular schwannomas - pooled results from 3 large German centers.* Combs SE, Engelhard C, Kopp C, Wiedenmann N, Schramm O, Prokic V, Debus J, Molls M, **Grosu AL**. Radiother Oncol. 2015 Mar;114(3):378-83 **(IF 4.3)**

Total number of publications

577 (as of Sept. 2019) – h-index: 41

Evaluation by the Faculty of Medicine, Albert-Ludwigs-University Freiburg – Web of Science; Core collection

Patents

1. **MIRNA-based predictive models for diagnosis and prognosis of prostate cancer**
   (Prof. Dr. med. Anca-L. Grosu, Dr. med. Simon Kirste – Medical Center – University of Freiburg, together with Ohio State University, USA)

2. **Matrix for generating and cultivating uniform cell aggregations, method for producing a matrix and use of a matrix**
   (Prof. Dr. med. Anca-L. Grosu, Dr. med. Andreas Thomsen – Medical Center – University of Freiburg)

Cooperation

- Comprehensive Cancer Center Freiburg (CCCF)
- German Cancer Consortium for Translational Cancer Research (Deutsches Konsortium für Translationale Krebsforschung DKTK), an excellence initiative by the German Federal Ministry of Education and Research (BMBF) and participating German states; partner sites: Freiburg, Heidelberg, Berlin, Dresden, Essen/Dusseldorf, Frankfurt/Mainz, Munich, Tubingen
- Harvard Medical School/Massachusetts General Hospital, Boston, USA (Thomas Bortfeld)
- Edwin L. Steele Laboratory for Tumor Biology, Boston, USA (Dan Duda)
- Ohio State University (OSU), Columbus, USA (Arnab Chakravarti)
- Karolinska Institute, Stockholm, Sweden (Juliana Toma-Dasu)
- University of Maastricht, Netherlands (Philippe Lambin)
- Istituto Scientifico San Raffaele (IRCCS), Milan, Italy (Maria Picchio; Arturo Chiti)
- University of Oxford (Gillies McKenna)
- University Hospital Zurich, Switzerland (Matthias Guckenberger)
- Peter MacCallum Cancer Center, Melbourne, Australia
- University of California, Los Angeles, USA
- Fondazione Santa Lucia, Rome, Italy
- Various industrial partners