

## CURRICULUM VITAE

Barbara Knäusl

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### PERSONAL DATA

Date of birth August 14<sup>th</sup>, 1984  
Place of birth Munich (Germany)  
Nationality German  
Family Daughter (born 2018)  
Academic degree Magister (Physics) (Mag.rer.nat with distinction)  
Doctor of Philosophy (Medical Physics) (PhD)  
Languages German (native language)  
English (fluently spoken and written)  
Dutch (basic)  
French (basic)

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### PROFESSIONAL EXPERIENCE

since 09/2014 **PostDoc research associate**, Department of Radiation Oncology, Medical University of Vienna  
(*Maternity leave: 11/2018-07/2019*)  
since 11/2020 **Medical physicist** at the Department of Radiation Oncology, Medical University of Vienna  
09/2014-10/2020 **Medical physicist** (proton and carbon ion therapy) at the MedAustron Center for Ion Therapy and Research, Wiener Neustadt  
02/2012-09/2014 **PostDoc research associate**, Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology, Medical University of Vienna  
11/2008-01/2012 **Scientific assistant**, Department of Radiology and Nuclear Medicine and Department of Radiation Oncology, Medical University of Vienna

### RESEARCH STAYS

02/2018-06/2018 **Research fellow and external advisor**, Holland Proton Therapy Center (Holland PTC), Delft, Netherlands  
05/2014 **Research fellow**, Center for Proton Radiotherapy, Paul-Scherrer Institut, Villigen PSI, Switzerland

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### EDUCATION

10/2008-03/2015 **Postgraduate course in Medical Physics**, Medical University of Vienna  
“*Akademisch geprüfter Medizophysiker*” (Fachanerkennung für Medizinische Physik)  
10/2008-06/2012 **PhD in Medical Physics**, Medical University of Vienna  
PhD thesis: *Biologically adapted radiotherapy - medical physics aspects for quantitative PET analysis and treatment planning* (supervisor: Univ-Prof. Georg D)  
10/2004–06/2008 **Diploma Study in Physics**, University of Vienna  
Master thesis: *Dosimetric Characteristics of a Flattening Filter Free Photon Beam* (supervisor: Univ-Prof. Georg D)  
10/03–10/2004 **Diploma Study in Meteorology and Geophysics**, University of Vienna  
06/2003 **Graduation (Abitur)** from grammar school, Albrecht-Altdorfer-Gymnasium, Regensburg, Germany

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## LIST OF PUBLICATIONS

Manuscripts	First, senior or corresponding author	Co-author	Hirsch-Index (Scopus, 03/2021)
23	11	12	12

**Orchid No: 0000-0003-4031-1711**

## ACCEPTED IN INTERNATIONAL PEER-REVIEWED JOURNALS:

### First, senior or corresponding\* author in Top Journals<sup>1</sup>

1. Hranek A, Resch A, Georg D, **Knäusl B\*** (2020) Investigation of the Bragg peak degradation caused by homogeneous and heterogeneous lung tissue substitutes: Proton beam experiments and comparison to current clinical dose calculation. *Physics in Medicine and Biology*, 65: 245036. DOI: 0.1088/1361-6560/ABC938 (IF: 2.883)
2. Kostiukhina N, Palmans H, Stock M, Knopf A, Georg D, **Knäusl B\*** (2020) Time-resolved dosimetry for validation of 4D dose calculation in PBS proton therapy *Physics in Medicine and Biology* 65:125015. DOI: 10.1088/1361-6560/AB8D79 (IF: 2.883)
3. Kostiukhina N, Palmans H, Stock M, Georg D, **Knäusl B** (2019) Dynamic lung phantom commissioning for 4D dose assessment in proton therapy. *Physics in Medicine and Biology* 64:235001. DOI: 10.1088/1361-6560/AB5132 (IF: 2.883)
4. Kostiukhina N, Georg D, Rollet S, Kuess P, Sipaj A, Andrzejewski P, Furtado H, Rausch I, Lechner W, Steiner E, Kertész H, **Knäusl B** (2017) Advanced Radiation DOSimetry phantom (ARDOS): a versatile breathing phantom for 4D radiation therapy and medical imaging. *Physics in Medicine and Biology* 62:8136-8153. DOI: 10.1088/1361-6560/AA86EA (IF: 2.883)
5. **Knäusl B\***, Fuchs H, Dieckmann K, Georg D (2016) Can particle beam therapy be improved using helium ions? - A modelling study focusing on paediatric patients. *Acta Oncologica* 55:751-759. DOI: 10.3109/0284186X.2015.1125016 (IF: 3.701)
6. Mock U, Georg D, Sölkner L, Suppan C, Vatnitsky SM, Flechl B, Mayer R, Dieckmann K, **Knäusl B** (2014) Assessment of improved organ at risk sparing for meningioma: light ion beam therapy as boost versus sole treatment option. *Radiotherapy and Oncology*, 111: 451-456. DOI: 10.1016/J.RADONC.2014.05.018 (IF: 4.853)
7. **Knäusl B\***, Lütgendorf-Caucig C, Hopfgartner, Dieckmann K, Kurch L, Pelz T, Pötter R, Georg D (2013) Can treatment of Pediatric Hodgkin's Disease be improved by PET imaging and proton therapy? *Strahlentherapie und Onkologie*, 189:54-61. DOI: 10.1007/S00066-012-0235-8 (IF: 2.899)

### First, senior or corresponding\* author in Standard Journals

1. Ruangchan S, **Knäusl B\***, Fuchs H, Georg D, Clausen M (2020) Experimental benchmarking of proton dose calculation algorithms inside and outside the target region in complex geometries. *Physica Medica* 76: 182-193. DOI: 10.1016/J.EJMP.2020.07.010 (IF: 2.485)
2. Witoszynskij S, Andrzejewski P, Georg D, Hacker M, Nyholm T, Rausch I, **Knäusl B\*** (2019) Attenuation correction of a flat table top for radiation therapy in hybrid PET/MR using CT- and <sup>68</sup>Ge/<sup>68</sup>Ga transmission scan-based  $\mu$ -maps. *Physica Medica* 65:76-83. DOI: 10.1016/J.EJMP.2019.08.005 (IF: 2.485)
3. **Knäusl B\***, Rausch IF, Bergmann H, Dudczak R, Georg D (2013) Influence of PET reconstruction parameters on the TrueX algorithm: A combined phantom and patient study. *Nuklearmedizin*, 52:28-35. DOI: 10.3413/NUKMED-0523-12-07 (IF: 1.085)
4. **Knäusl B\***, Hirtl A, Dobrozemsky G, Bergmann H, Kletter K, Dudczak R, Georg D (2012) PET based volume segmentation with emphasis on the iterative TrueX algorithm. *Zeitschrift für Medizinische Physik*, 22:29-39. DOI: 10.1016/J.ZEMEDI.2010.12.003 (IF: 2.000)

<sup>1</sup> Agreement between Univ. Prof. Dr. Widder and Rektor Univ.-Prof. Dr. med. univ. Müller in the frame of the "Zielvereinbarungsgespräch" on 11.07.2019

## Co-Author

1. Hatamikia S, Oberoi G, Unger E, Kronreif G, Kettenbach J, Buschmann M, Figl M, **Knäusl B**, Moscato F, Birkfellner W (2020) Additively Manufactured Patient-Specific Anthropomorphic Thorax Phantom With Realistic Radiation Attenuation Properties *Frontiers Bioengineering and Biotechnology* 8:385. DOI: 10.3389/FBIOE.2020.00385 (IF: 4.2100)
2. Clausen M, Khachonkham S, Gruber S, Kuess P, Seemann R, **Knäusl B**, Mara E, Palmans H, Dörr W, Georg D (2019) Phantom design and dosimetric characterization for multiple simultaneous cell irradiations with active pencil beam scanning *Radiation and Environmental Biophysics* 58:563-573. DOI: 10.1007/S00411-019-00813-1 (IF: 1.321)
3. Trnková P, **Knäusl B**, Actis O, Bert C, Biegun AK, Boehlen TT, Furtado H, McClelland J, Mori S, Rinaldi I, Rucinski A, Knopf AC (2018). Clinical implementations of 4D pencil beam scanned particle therapy: Report on the 4D treatment planning workshop 2016 and 2017. *Physica Medica* 54:121-130. DOI: 10.1016/J.EJMP.2018.10.002 (IF: 2.485)
4. Hirtl A, Bergmann H, **Knäusl B**, Beyer T, Figl M, Hummel J (2017) Fully-automated analysis of Jaszczak phantom measurements as part of routine SPECT quality control. *Medical Physics* 44:1638-1645. DOI: 10.1002/MP.12150 (IF: 3.317)
5. Layer T, Blaickner M, **Knäusl B**, Georg D, Neuwirth J, Baum RP, Schuchardt Ch, Wiessalla St, Matz G (2015) PET image segmentation using a Gaussian mixture model and Markov random fields, *EJNMMI Physics Dec* 2:9. DOI: 10.1186/S40658-015-0110-7 (IF: 2.574)
6. Andrzejewski P, Kuess P, **Knäusl B**, Pinker K, Georg P, Knoth J, Berger D, Kirisits C, Goldner G, Helbich T, Pötter R, Georg D (2015) Feasibility of dominant intraprostatic lesion boosting using advanced photon-, proton- or brachytherapy. *Radiotherapy and Oncology* 117: 509-514. DOI: 10.1016/J.RADONC.2015.07.028 (IF: 4.853)
7. Gora J, Kuess P, Stock M, Piotr Andrzejewski, **Knäusl B**, Paskeviciute B, Altorjai G, Georg D (2015) ART for head and neck patients: On the difference between VMAT and IMPT. *Acta Oncologica Oct* 54: 1166-1174. DOI: 10.3109/0284186X.2015.1028590 (IF: 3.701)
8. Lohr F, Georg D, Cozzi L, Eich HT, Weber DC, Koeck J, **Knäusl B**, Dieckmann K, Abo-Madyan Y, Fiandra C, Mueller RP, Engert A, Ricardi U (2014) Novel radiotherapy techniques for involved-field and involved-node treatment of mediastinal Hodgkin lymphoma. *Strahlentherapie und Onkologie*, 190: 864-871. DOI: 10.1007/S00066-014-0719-9 (IF: 2.899)
9. Hopfgartner J, Stock M, **Knäusl B**, Georg D (2013) Dosimetric robustness of IMPT treatment plans with respect to inter-fractional set-up uncertainties: Impact of various beam arrangements for cranial targets. *Acta Oncologica*, 52:570-9. DOI: 10.3109/0284186X.2012.744874 (IF: 3.701)
10. Lütendorf-Caucig C, Fotina I, Gallop-Evans E, Claude L, Lindh J, Pelz T, **Knäusl B**, Georg D, Pötter R, Dieckmann K (2012) Multicenter evaluation of different target volume delineation concepts in pediatric Hodgkin's lymphoma: A case study. *Strahlentherapie und Onkologie* 188:1025-30. DOI: 10.1007/S00066-012-0182-4 (IF: 2.899)
11. Philippe C, Mien L, Salar-Behzadi S, **Knäusl B**, Wadsak W, Dudczak R, Kletter K, Viernstein H, Mitterhauser M (2010) Label and go – a fast and easy radiolabelling method for pellets. *Applied Radiation and Isotopes*, 68:399-403. DOI: 10.1016/J.APRADISO.2009.11.040 (IF: 1.270)
12. Kragl G, af Wetterstedt S, **Knäusl B**, Lind M, McCavana P, Knöös T, McClean B, Georg D (2009) Dosimetric characteristics of 6 and 10MV unflattened photon beams. *Radiotherapy and Oncology*, 93:141-6. DOI: 10.1016/J.RADONC.2009.06.008 (IF: 4.853)

## SUBMITTED PUBLICATIONS CURRENTLY UNDER REVIEW

1. Burkner A, Bergauer T, Hirtl A, Irmeler C, Kaser S, **Knäusl B**, Pitters F, Ulrich-Pur F (2021) Single particle tracking uncertainties in ion imaging, *submitted to Physica Medica* 02/2021 (IF: 2.485)
2. Zimmermann L, **Knäusl B**, Stock M, Lütendorf-Caucig C, Georg D, Kuess P (2021) Using an MRI sequence independent Convolutional Neural Network for synthetic head CT generation in proton therapy. *submitted to Physics in Medicine and Biology* 02/2021 (IF: 3.298)

## MANUSCRIPTS TO BE SUBMITTED

1. **Knäusl B**, Kuess P, Stock M, Georg D, Fossati P, Georg P, Zimmermann L (2021) Challenges of MR only simulation for Carbon ion treatments. *to be submitted to Radiotherapy and Oncology in 04/2021*
2. Ruangchan S, Palmans H, **Knäusl B**, Georg D, Clausen M (2021) Comparative validation of carbon ion and proton dose calculations in a heterogeneous phantom. *to be submitted to Physica Medica 04/2021*

## ORAL AND INVITED CONFERENCE CONTRIBUTIONS

1. Are pencil beam models becoming obsolete for physical dose calculation? *1st ESTRO Physics Workshop*, Glasgow, United Kingdom, 17.-18. November 2017
2. Overview 4D research phantoms, *4D Treatment (planning) workshop*, Groningen, Netherlands, 08.-09. December 2016
3. Treatment of extremity sarcoma using protons - robustness considerations of single and matching fields, *Österreichische Gesellschaft für Medizinische Physik Jahrestagung 2015*, Wiener Neustadt, Austria, October 2015
4. MR guided radiotherapy, *Österreichische Gesellschaft für Radioonkologie Jahrestagung 2015*, Vienna, Austria, October 2015
5. Particle Therapy, *Vienna Summer School on Oncology*, Vienna, July 2015
6. Can particle beam therapy be improved using helium ions? - A treatment planning study focusing on pediatric patients, *PTCOG 53*, Shanghai, China, June 2014
7. Can particle beam therapy be improved using helium ions? - A treatment planning study focusing on pediatric patients, *ICTR-PHE 2014*, Geneva, Switzerland, February 2014
8. The devil is in the details – challenges and possibilities of modern radiotherapy techniques, *ÖGRO Jahrestagung*, Bregenz, Austria, September 2013
9. Gantry vs. Fixed beam techniques in ion beam therapy: impact on treatment plan quality and robustness, *ÖGRO Jahrestagung*, Bregenz, Austria, September 2013
10. Assessment of improved organ at risk sparing for meningioma for mixed or single photon and particle beam treatments, *ULICE Meeting*, Wiener Neustadt, Austria, July 2013
11. Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology, *ÖGMP Jahrestagung 2013*, Innsbruck, Austria, May 2013
12. Assessment of improved organ at risk sparing for meningioma for mixed or single photon and particle beam treatments, *ÖGMP Jahrestagung 2013*, Innsbruck, Austria, May 2013
13. Assessment of improved organ at risk sparing for meningioma for mixed or single photon and particle beam treatments, *2nd Estro forum*, Geneva, Switzerland, April 2013
14. GATE simulations of a dedicated SPECT system in order to perform benchmark test of a fully automated software for quality control, *Radioactive Isotopes in Clinical Medicine and Research*, Bad Hofgastein, Austria, January 2012; *Nuklearmedizin*, 50:A163, Abs.28
15. The impact of advanced radiotherapy techniques on secondary cancer probability and late effects in pediatric Hodgkin lymphoma, *3-Ländertagung 2011*, Vienna, Austria, September 2011
16. PET volume segmentation: influence of different reconstruction algorithms, volume sizes and SBRs, *ESTRO 29*, Barcelona, Spain, September 2010: Poster discussion; *Radiotherapy and Oncology* 95 (Suppl.1), Abs.248
17. PET Volumen Segmentierung: Einfluss unterschiedlicher Rekonstruktionsalgorithmen, Volumensgrößen und SBRs, *ÖGMP Jahrestagung*, Salzburg, Austria, April 2010
18. Automated and threshold based PET volume segmentation: influence of different reconstruction algorithms, volume sizes and SBRs, *Radioactive Isotopes in Clinical Medicine and Research*, Bad Hofgastein, Austria, January 2010; *Nuklearmedizin* 2009; 48: A151, Abs.27
19. Hodgkin - Impact of PET-CT and advanced RT techniques: a treatment planning study, *ÖGMP Workshop*, Vienna, Austria, November 2009

Several poster presentations during national and international meetings with published abstracts in the respective proceeding books

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## PROJECT LEAD AND GRANT ACTIVITIES

### Grants

10/2020 (under revision)	PAIR - Pre-clinicAl Ion beam Research, FWF Doc Funds Connect (faculty member)
09/2018-06/2022	<b>Co-PI and PhD Co-Supervisor</b> in the KWF INCONTROL (Clinical Control Infrastructure for Proton Therapy Treatment) research project in cooperation with the UMCG Groningen (Project lead: Prof. Dr. Stefan Both)
01/2012-12/2019	<b>Scientific management assistant</b> and <b>project coordinator</b> in the Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology
04/2017 (declined)	Realization and experimental validation of respiratory gated scanned ion beam therapy, Jubiläumsfond Österreichische Nationalbank
10/2017 (declined)	Towards scanned ion beam therapy for moving targets – optimization of pencil beam characteristics, Ingrid Shaker Nessmann Cancer Research Association

### Project lead and coordination activities

since 09/2020	Main organiser of the "4D treatment Planning Workshop for particle therapy"
since 01/2019	<b>Project leader</b> for " <b>Intrafraction motion management</b> " research at the MedAustron Center for Ion Therapy and Research
2017	Coordinator of the "4D treatment Planning Workshop for particle therapy" and chair of the National Organization Committee of the 8th workshop in Vienna, Austria

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## AWARDS

10/2020	Georg D (PI), Clausen M, Gruber S, Knäusl B, Kuess P, Fuchs H, Resch A - Science award of the Federal State of Lower Austria
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## RESEARCH AND CLINICAL ACTIVITIES

<u>Ion beam therapy:</u>	proton and carbon ion therapy, novel ion species, (4D) treatment planning
<u>Motion mitigation:</u>	surface scanning systems, implementation for ion beam therapy, experimental validation, rescanning
<u>Dosimetry:</u>	photons (kV and MV), protons and carbon ions, beam line commissioning, regular QA, flattening filter free dosimetry, detector calibration, equipment commissioning
<u>Image guidance:</u>	adaptive treatment concepts, deformable image registration, breathing motion implementation, 4D CT, MRI in Radiotherapy
<u>Treatment planning:</u>	TPS commission and beam model creation, intensity modulated photon and ion beam therapy, volumetric arc therapy (VMAT), single field uniform dose concepts for ion beam therapy, robust treatment planning and evaluation concepts, Pareto-front optimization, clinical implementation of margin concepts
<u>Nuclear Medicine:</u>	Positron emission tomography (PET), SPECT
<u>Paediatric radiotherapy</u>	

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## TEACHING ACTIVITIES

### Supervised PhD students (Junior supervisor)

1. Franciska Lebbink (MedUni Wien) "Fully integrated 4D dose calculation and beam delivery optimization in particle therapy" (ongoing)

### Co-Supervised PhD students

1. Natalia Kostiukhina (MedUni Wien) "4D framework implementation towards investigating ion beam treatment techniques for intra-fractionally moving targets" co-supervised with Univ-Prof. Dietmar Georg (07/2020)

### Supervised MSc students

1. Matthieu Manni (ISIMA, Clermont Auvergne, France) Simulation of different spot sizes for proton and carbon beams for medical purposes using GATE (10/2020)
2. Andreas Hranek (TU Wien) "Bragg Peak spot spreading of proton beams within lung tissue" co-supervised with Univ-Prof. Dietmar Georg (11/2019)
3. Andrea Balz (TU Wien) "Implementation of adaptive treatment-planning strategies for proton and carbon ion" co-supervised with Univ-Prof. Dietmar Georg (11/2018)
4. Anna Huber (FH Wiener Neustadt) "Imaging Ring at MedAustron: Dosimetrical Considerations and Consistency Checks" (06/2017)
5. Sophie Kianek (FH Wiener Neustadt) "Alpha scope testing of the Monaco proton treatment planning system" (06/2017)
6. Gloria Mirescu (TU Wien) "Commissioning of the VERSA HD Linear Accelerator for the RayStation Treatment Planning System with Focus on Fallback Planning" co-supervised with Univ-Prof. Dietmar Georg (01/2017)
7. Kevin Forstner (TU Wien) "Robust treatment planning concepts for Ependymoma patients" co-supervised with Univ-Prof. Dietmar Georg (11/2016)
8. Fabian Schiegl (FH Technikum) "MR based treatment planning and clinical workflow for EBRT for prostate and HN patients" co-supervised with Dr. DI Wolfgang Birkfellner (05/2016)
9. Sandra Nemecek (TU Wien) "Monte Carlo versus pencil beam based dose calculation for scanned proton therapy: assessment of optimal calculation and user interface parameters" co-supervised with Univ-Prof. Dietmar Georg (11/2015)
10. Lukas Sölkner (TU Wien) "Dosimetric comparison of photon, proton and carbon ion therapy for meningioma patients" co-supervised with Univ-Prof. Dietmar Georg (10/2013)
11. Ivo Rausch (TU Wien) "Investigation of the Characteristics of Reconstruction Algorithms in Positron Emission Tomography" co-supervised with Univ-Prof. Dietmar Georg and Dr. Albert Hirtl (12/2011)

### Supervised BSc and project work students

1. Osman Cakir (BSc, TU Wien) Influence of accelerator time structure on the 4D dose distribution for moving tumors, co-supervised with Dr. Albert Hirtl (ongoing)
2. Thomas Schabhüttl (BSc, TU Wien) Accelerator log-file based dose rate extraction and the influence of dose rate variations on the 4D dose output, co-supervised with Dr. Albert Hirtl (ongoing)
3. Nina Sprengnagel (BSc, FH Campus Wien) Dosimetrische Validierungsmessung für den Kohlenstoffstrahl im nicht-klinischen Forschungsbereich bei MedAustron (05/2020)
4. Cornelia Wculek (BSc, FH Campus Wien) Spotcharakteristika von Kohlenstoff für die nicht-klinische Forschung (05/2020)
5. Birgit Zwiehlehner (BSc, TU Wien) Validation of matching fields at MedAustron (03/2019)
6. Andreas Balz (Project work, TU Wien) Commissioning of an antropomorphic phantom for proton dosimetry - focusing on surface dose measurements with passive detectors (11/2017)
7. Kevin Forstner (Project work, TU Wien) Inbetriebnahme des Raystation Treatment Planning Systems (08/2015)

8. Elisabeth Salomon (Project work, TU Wien) Analysis of ion beam treatment techniques: a literature research with focus on gantry angles, margin concepts and fractionation schemes (10/2014)
9. Sona Hrubá (Project work, TU Wien) Gantry vs. Fixed beam techniques in ion beam therapy: impact on treatment plan quality and robustness- a literature review (09/2013)

### **Lecturing**

#### *a) PhD programme "Medical Physics"*

2021S	860.011 Doctoral Students Seminar - SE: Ion Beam Therapy
2020S	860.034 Basic Seminar: Medical Physics VIII - Physical Fundamentals of Radio Oncology
2019W	860.031 Journal Club - SE: Advanced Radiotherapy Techniques
2019S	860.053 Doctoral Students Seminar - SE: Ion Beam Therapy
2017S	860.363 Doctoral Students Seminar - SE: Radiation Physics Applications in Radiation Oncology
2016W	860.322 Journal Club - SE: Advanced Radiotherapy Techniques
2015W	860.301 Journal Club - SE: Advanced Radiotherapy Techniques
2015S	860.213 Journal Club - SE: Advanced Radiotherapy Techniques

#### *b) Medicine degree programme*

2021W	801.006 BL3 – SK: Vom Molekül zur Zelle
2017W	801.006 BL3 – SK: Vom Molekül zur Zelle
2017S	806.005 BL18 – SK: Haut und Sinnesorgane
2017S	802.004 BL6 – VO: Der Mensch in Umwelt, Familie und Gesellschaft
2015W	801.006 BL3 – SK: Vom Molekül zur Zelle

#### *c) Post Graduate Master course "Medical Physics"*

WS 2015	Radiation Oncology Physics 1 - Seminar and Practical Training (1SE)
WS 2013	Radiation Oncology Physics 3 - Seminar and Practical Training (1SE)

#### *d) Courses at the University of Applied Sciences Wiener Neustadt*

including supervision and examination of MSc students

WS 2013 – 2017	Practical Training Ion Radiotherapy (MedTech-Functional Imaging)
WS 2013	Schwerionentherapie RT-Prozess (Radiologietechnologie)

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## MISCELLANEOUS

### Activities in working groups and memberships

- Member of the European Particle Therapy Network (EPTN) WP5 (Treatment Planning)
- Member of the European Society for Radiotherapy and Oncology (ESTRO), Österreichische Gesellschaft für Medizinische Physik (OEGMP)

### Reviewer of scientific papers for the following peer-reviewed Journals

- Radiotherapy and Oncology
- Zeitschrift für Medizinische Physik
- Physics in Medicine and Biology
- International Journal Radiation Oncology Biology Physics
- Radiation Oncology
- Acta Oncologica

### Advanced training in extracurricular courses

03/2015	<b>Particle Therapy</b> , Teaching Course of the European Society for Therapeutic Radiology and Oncology (ESTRO); Paris, France.
04/2014	<b>Current Advances in Treatment Planning and Optimization</b> , Teaching Course of the European Society for Therapeutic Radiology and Oncology (ESTRO); Vienna, Austria.
06/2013	<b>Educational workshop PTCOG52</b> , Particle Therapy CO-Operative Group (PTCOG); Essen, Germany.
09/2010	<b>Functional Imaging in Treatment Planning - Existing Standards and Future Developments</b> , Teaching Course of the European Society for Therapeutic Radiology and Oncology (ESTRO); Barcelona, Spain.
03/2010	<b>Medical Physics in Radiotherapy</b> , Winterschule Pichl, organized by the Austrian German and Swiss Society of Medical Physics (ÖGMP, DGMP, SGSMP); Pichl, Austria.
08/2009	<b>Biological Models and Optimisation</b> , Teaching Course of the European Society for Therapeutic Radiology and Oncology (ESTRO); Maastricht, Netherlands.
04/2009	<b>Clinical Radiobiology for Physicans and Physicists in Radiooncology</b> , 1st Austrian postgraduate Course; Vienna, Austria.
02/2009	<b>2nd Workshop on the Imaging of Hypoxia and Functional Image Guided Radiotherapy</b> ; Tübingen, Germany.
10/2007	<b>Basic in Biology of Cancer, Radiobiology, Radiation Physics and Radioprotection</b> , Postgraduate Teaching Course, Department of Radiotherapy, Medical University of Vienna; Vienna, Austria.

### PE Seminars and Mentoring

WS 2020	PE 2020/136 – §26 und §27-Projekte Teil 2: Von der Projektidee zur Projektabwicklung: Finanzen, Ethikkommission und Patente
WS 2020	PE 2020/134 – §26 und §27-Projekte Teil 1: Bedeutung, rechtliche und personelle Rahmenbedingungen von Drittmittelprojekten
WS 2015	PE 2015/002 – Personal Skills: Kompetenzen bei der Kommunikation mit Vorgesetzten entwickeln
SS 2015	PE 2015/194 – PE-Lehre: Betreuung von PhD-Studierenden
SS 2015	ScientMedNet Mentoring-Programm; Mentorin: Dr. Barbara Fügler