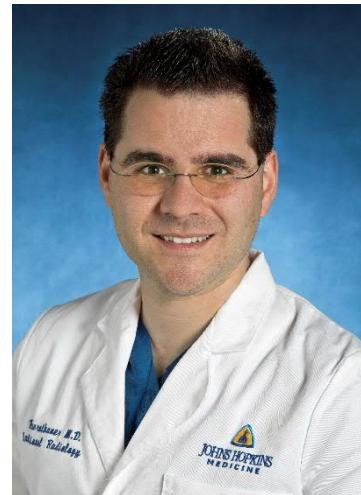


Ruediger Egbert Schernthaner, MD
Associate Professor of Radiology

Personal data

Born July 24th, 1980 in Vienna, Austria
Married to Marie Helene Schernthaner-Reiter, MD, PhD
Two sons, Emil Constantin (*2016) & Nils Alexander (*2019)
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Education & professional experience

1990-1998 Highschool "Schottengymnasium", Vienna
1998 – 2003 Medical School (N201), University of Vienna
04/2004 - 09/2004 resident at the internal department of the hospital "Barmherzige Brüder", Vienna
10/2004 – 03/2007 research fellow at the Division of Cardiovascular and Interventional Radiology, Department of Radiology, Medical University of Vienna
04/2006 – 03/2007 research fellow in the interdisciplinary AngioVis II project (www.angiovis.org)
12/2006 research visit of the Stanford Medical Center, California for 1 month
04/2007 – 03/2012 resident at the Department of Radiology, Medical University of Vienna
09/2010 – 09/2013 board member of the Austrian Roentgen Society (www.oerg.at)
10/2010 - 09/2013 national delegate of the ESR Radiology Trainees Forum (<http://www.myesr.org/rtf>)
04/2012 – 06/2012 resident at the Department of Surgery, Division of Vascular Surgery, Medical University of Vienna
07/2012 -10/2012 resident at the Department of Radiology, Division of Cardiovascular and Interventional Radiology, Department of Radiology, Medical University of Vienna

Since 10/2012 board certified radiologist

Since 01/2013 Assistant Professor and attending radiologist at the Division of Cardiovascular and Interventional Radiology, Department of Radiology, Medical University of Vienna
Since 2013 member of the Control Committee of the medical specialist examination for radiology in Austria
10/2013 – 04/2015 Visiting Scientist at the Russell H. Morgan Department of Radiology and Radiological Science, Section of Vascular and Interventional Radiology, The Johns Hopkins Hospital, Baltimore, Maryland
05/2014 – 09/2015 Co-Principal Investigator of the AngioVis III project (www.angiovis.org)

05/2017 habilitation

Since 11/2017 Principal Investigator of the Somatom Force projects

02/2018 Associate Professor of Radiology

Main research focus

Cardiovascular Radiology and Interventional Oncology

<https://radnuk.meduniwien.ac.at/viio>

Congress activities

Several abstracts and poster presentations at RNSA, ECR, CIRSE, SIR, WCIO, ESGAR, ESHNR, ICIS and OERG

Invited speaker at ESHNR 2010, OERG 2012, WRS 2015, WRS 2016 and ECR 2017

Session moderator at ECR 2012 and OERG 2012

Research Grants

Austrian Science Fund, 2010, TRP 67 Translational-Research-Programm, Co-Principal Investigator

MAX KADE Fellowship 2013, Principal Investigator

Siemens Research Grant 2017, Principal Investigator

Awards

Daily Bulletin of RSNA 2014

Poster award at the SIR meeting 2015

Dr. Franz Holeczke award 2016

Reviewer activities

European Radiology

European Journal of Radiology

Cardiovascular and Interventional Radiology

Academic Radiology

Editorial board member

Minimally Invasive Therapy & Allied Technologies

Book Chapters

"Management of Peripheral Arterial Disease" in "Managing Cardiovascular Complications in Diabetes",

Wiley-Blackwell, 05/2014

Peer-reviewed publications of the last 5 years

1. Schreiner MM, Platzgummer H, Unterhumer S, Weber M, Mistelbauer G, Groeller E, Loewe C, Schernthaner RE. Multipath Curved Planar Reformations of Peripheral CT Angiography: Diagnostic Accuracy and Time Efficiency. *Cardiovasc Intervent Radiol*. 2018;41(5):718-25.
2. Schernthaner RE, Haroun RR, Nguyen S, Duran R, Sohn JH, Sahu S, Chapiro J, Zhao Y, Radaelli A, van der Bom IM, Mauti M, Hong K, Geschwind JH, Lin M. Characteristics of a New X-Ray Imaging System for Interventional Procedures: Improved Image Quality and Reduced Radiation Dose. *Cardiovasc Intervent Radiol*. 2018;41(3):502-8.
3. Sohn JH, Duran R, Zhao Y, Fleckenstein F, Chapiro J, Sahu S, Schernthaner RE, Qian T, Lee H, Zhao L, Hamilton J, Frangakis C, Lin M, Salem R, Geschwind JF. Validation of the Hong Kong Liver Cancer Staging System in Determining Prognosis of the North American Patients Following Intra-arterial Therapy. *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*. 2017;15(5):746-55 e4.
4. Schreiner MM, Platzgummer H, Unterhumer S, Weber M, Mistelbauer G, Loewe C, Schernthaner RE. A BMI-adjusted ultra-low-dose CT angiography protocol for the peripheral arteries-Image quality, diagnostic accuracy and radiation exposure. *Eur J Radiol*. 2017;93:149-56.
5. Sahu S, Schernthaner R, Ardon R, Chapiro J, Zhao Y, Sohn JH, Fleckenstein F, Lin M, Geschwind JF, Duran R. Imaging Biomarkers of Tumor Response in Neuroendocrine Liver Metastases Treated with Transarterial Chemoembolization: Can Enhancing Tumor Burden of the Whole Liver Help Predict Patient Survival? *Radiology*. 2017;283(3):883-94.
6. Gorodetski B, Chapiro J, Schernthaner R, Duran R, Lin M, Lee H, Lenis D, Stuart EA, Nonyane BA, Pekurovsky V, Tamrazi A, Gebauer B, Schlachter T, Pawlik TM, Geschwind JF. Advanced-stage hepatocellular carcinoma with portal vein thrombosis: conventional versus drug-eluting beads transcatheter arterial chemoembolization. *Eur Radiol*. 2017;27(2):526-35.
7. Duran R, Mirpour S, Pekurovsky V, Ganapathy-Kanniappan S, Brayton CF, Cornish TC, Gorodetski B, Reyes J, Chapiro J, Schernthaner RE, Frangakis C, Lin M, Sun JD, Hart CP, Geschwind JF. Preclinical Benefit of Hypoxia-Activated Intra-arterial Therapy with Evofosfamide in Liver Cancer. *Clinical cancer research : an official journal of the American Association for Cancer Research*. 2017;23(2):536-48.
8. Zhao Y, Duran R, Chapiro J, Sohn JH, Sahu S, Fleckenstein F, Smolka S, Pawlik TM, Schernthaner R, Zhao L, Lee H, He S, Lin M, Geschwind JF. Transarterial Chemoembolization for the Treatment of Advanced-Stage Hepatocellular Carcinoma. *Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract*. 2016;20(12):2002-9.
9. Wielandner A, Beitzke D, Schernthaner R, Wolf F, Langenberger C, Stadler A, Loewe C. Is ECG triggering for motion artefact reduction in dual-source CT angiography of the ascending aorta still required with high-pitch scanning? The role of ECG-gating in high-pitch dual-source CT of the ascending aorta. *The British journal of radiology*. 2016:20160174.

10. Schernthaner RE, Haroun RR, Duran R, Lee H, Sahu S, Sohn JH, Chapiro J, Zhao Y, Gorodetski B, Fleckenstein F, Smolka S, Radaelli A, van der Bom IM, Lin M, Geschwind JF. Improved Visibility of Metastatic Disease in the Liver During Intra-Arterial Therapy Using Delayed Arterial Phase Cone-Beam CT. *Cardiovasc Intervent Radiol*. 2016;39(10):1429-37.
11. Fleckenstein FN, Schernthaner RE, Duran R, Sohn JH, Sahu S, Zhao Y, Hamm B, Gebauer B, Lin M, Geschwind JF, Chapiro J. 3D Quantitative tumour burden analysis in patients with hepatocellular carcinoma before TACE: comparing single-lesion vs. multi-lesion imaging biomarkers as predictors of patient survival. *Eur Radiol*. 2016;26(9):3243-52.
12. Fleckenstein FN, Schernthaner RE, Duran R, Sohn JH, Sahu S, Marshall K, Lin M, Gebauer B, Chapiro J, Salem R, Geschwind JF. Renal Cell Carcinoma Metastatic to the Liver: Early Response Assessment after Intraarterial Therapy Using 3D Quantitative Tumor Enhancement Analysis. *Translational oncology*. 2016;9(5):377-83.
13. Duran R, Sharma K, Dreher MR, Ashrafi K, Mirpour S, Lin M, Schernthaner RE, Schlachter TR, Tacher V, Lewis AL, Willis S, den Hartog M, Radaelli A, Negussie AH, Wood BJ, Geschwind JF. A Novel Inherently Radiopaque Bead for Transarterial Embolization to Treat Liver Cancer - A Pre-clinical Study. *Theranostics*. 2016;6(1):28-39.
14. Chockalingam A, Duran R, Sohn JH, Schernthaner R, Chapiro J, Lee H, Sahu S, Nguyen S, Geschwind JF, Lin M. Radiologic-pathologic analysis of quantitative 3D tumour enhancement on contrast-enhanced MR imaging: a study of ROI placement. *Eur Radiol*. 2016;26(1):103-13.
15. Wang Z, Chen R, Duran R, Zhao Y, Yenokyan G, Chapiro J, Schernthaner R, Radaelli A, Lin M, Geschwind JF. Intraprocedural 3D Quantification of Lipiodol Deposition on Cone-Beam CT Predicts Tumor Response After Transarterial Chemoembolization in Patients with Hepatocellular Carcinoma. *Cardiovasc Intervent Radiol*. 2015;38(6):1548-56.
16. Wang Z, Chapiro J, Schernthaner R, Duran R, Chen R, Geschwind JF, Lin M. Multimodality 3D Tumor Segmentation in HCC Patients Treated with TACE. *Acad Radiol*. 2015;22(7):840-5.
17. Schernthaner RE, Wolf F, Mistelbauer G, Weber M, Sramek M, Groeller E, Loewe C. New hybrid reformations of peripheral CT angiography: do we still need axial images? *Clin Imaging*. 2015;39(4):603-7.
18. Schernthaner RE, Lin M, Duran R, Chapiro J, Wang Z, Geschwind JF. Delayed-Phase Cone-Beam CT Improves Detectability of Intrahepatic Cholangiocarcinoma During Conventional Transarterial Chemoembolization. *Cardiovasc Intervent Radiol*. 2015;38(4):929-36.
19. Schernthaner RE, Duran R, Chapiro J, Wang Z, Geschwind JF, Lin M. A new angiographic imaging platform reduces radiation exposure for patients with liver cancer treated with transarterial chemoembolization. *Eur Radiol*. 2015;25(11):3255-62.
20. Schernthaner RE, Chapiro J, Sahu S, Withagen P, Duran R, Sohn JH, Radaelli A, van der Bom IM, Geschwind JF, Lin M. Feasibility of a Modified Cone-Beam CT Rotation Trajectory to Improve Liver Periphery Visualization during Transarterial Chemoembolization. *Radiology*. 2015;277(3):833-41.

21. Savic LJ, Lin MD, Duran R, Schernthaner RE, Hamm B, Geschwind JF, Hong K, Chapiro J. Three-dimensional quantitative assessment of lesion response to MR-guided high-intensity focused ultrasound treatment of uterine fibroids. *Acad Radiol*. 2015;22(9):1199-205.
22. Lee H, Chapiro J, Schernthaner R, Duran R, Wang Z, Gorodetski B, Geschwind JF, Lin M. How I do it: a practical database management system to assist clinical research teams with data collection, organization, and reporting. *Acad Radiol*. 2015;22(4):527-33.
23. Duran R, Chapiro J, Schernthaner RE, Geschwind JF. Systematic review of catheter-based intra-arterial therapies in hepatocellular carcinoma: state of the art and future directions. *The British journal of radiology*. 2015;88(1052):20140564.
24. Chapiro J, Lin M, Duran R, Schernthaner RE, Geschwind JF. Assessing tumor response after loco-regional liver cancer therapies: the role of 3D MRI. *Expert review of anticancer therapy*. 2015;15(2):199-205.
25. Chapiro J, Duran R, Lin M, Werner JD, Wang Z, Schernthaner R, Savic LJ, Lessne ML, Geschwind JF, Hong K. Three-Dimensional Quantitative Assessment of Uterine Fibroid Response after Uterine Artery Embolization Using Contrast-Enhanced MR Imaging. *J Vasc Interv Radiol*. 2015;26(5):670-8 e2.
26. Chapiro J, Duran R, Lin M, Schernthaner RE, Wang Z, Gorodetski B, Geschwind JF. Identifying Staging Markers for Hepatocellular Carcinoma before Transarterial Chemoembolization: Comparison of Three-dimensional Quantitative versus Non-three-dimensional Imaging Markers. *Radiology*. 2015;275(2):438-47.
27. Chapiro J, Duran R, Lin M, Schernthaner R, Lesage D, Wang Z, Savic LJ, Geschwind JF. Early survival prediction after intra-arterial therapies: a 3D quantitative MRI assessment of tumour response after TACE or radioembolization of colorectal cancer metastases to the liver. *Eur Radiol*. 2015;25(7):1993-2003.
28. Chapiro J, Duran R, Lin M, Mungo B, Schlachter T, Schernthaner R, Gorodetski B, Wang Z, Geschwind JF. Transarterial chemoembolization in soft-tissue sarcoma metastases to the liver - the use of imaging biomarkers as predictors of patient survival. *Eur J Radiol*. 2015;84(3):424-30.
29. Adekanmi AJ, Schernthaner RE, Lammer J. PARKES WEBER SYNDROME: A Rare Vascular Malformation-Imaging And The Usefulness Of Intravascular Intervention. *The Internet Journal of Radiology*. 2015;18(1):1-5.
30. Duran R, Chapiro J, Frangakis C, Lin M, Schlachter TR, Schernthaner RE, Wang Z, Savic LJ, Tacher V, Kamel IR, Geschwind JF. Uveal Melanoma Metastatic to the Liver: The Role of Quantitative Volumetric Contrast-Enhanced MR Imaging in the Assessment of Early Tumor Response after Transarterial Chemoembolization. *Translational oncology*. 2014;7(4):447-55.
31. Chapiro J, Wood LD, Lin M, Duran R, Cornish T, Lesage D, Charu V, Schernthaner R, Wang Z, Tacher V, Savic LJ, Kamel IR, Geschwind JF. Radiologic-pathologic analysis of contrast-enhanced and diffusion-weighted MR imaging in patients with HCC after TACE: diagnostic accuracy of 3D quantitative image analysis. *Radiology*. 2014;273(3):746-58.

32. Beitzke D, Nolz R, Unterhumer S, Plank C, Weber M, Schernthaner R, Schopf V, Wolf F, Loewe C. Low-dose high-pitch CT angiography of the supraaortic arteries using sinogram-affirmed iterative reconstruction. *PloS one*. 2014;9(6):e99832.

Most important peer-reviewed publications

1. Duran R, Mirpour S, Pekurovsky V, Ganapathy-Kanniappan S, Brayton CF, Cornish TC, Gorodetski B, Reyes J, Chapiro J, Schernthaner RE, Frangakis C, Lin M, Sun JD, Hart CP, Geschwind JF. Preclinical Benefit of Hypoxia-Activated Intra-arterial Therapy with Evofosfamide in Liver Cancer. *Clinical cancer research : an official journal of the American Association for Cancer Research*. 2017;23(2):536-48. IF: 9.619
2. Duran R, Sharma K, Dreher MR, Ashrafi K, Mirpour S, Lin M, Schernthaner RE, Schlachter TR, Tacher V, Lewis AL, Willis S, den Hartog M, Radaelli A, Negussie AH, Wood BJ, Geschwind JF. A Novel Inherently Radiopaque Bead for Transarterial Embolization to Treat Liver Cancer - A Pre-clinical Study. *Theranostics*. 2016;6(1):28-39. IF: 8.766
3. Sohn JH, Duran R, Zhao Y, Fleckenstein F, Chapiro J, Sahu S, Schernthaner RE, Qian T, Lee H, Zhao L, Hamilton J, Frangakis C, Lin M, Salem R, Geschwind JF. Validation of the Hong Kong Liver Cancer Staging System in Determining Prognosis of the North American Patients Following Intra-arterial Therapy. *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*. 2017;15(5):746-55 e4. IF: 7.398
4. Schernthaner RE, Chapiro J, Sahu S, Withagen P, Duran R, Sohn JH, Radaelli A, van der Bom IM, Geschwind JF, Lin M. Feasibility of a Modified Cone-Beam CT Rotation Trajectory to Improve Liver Periphery Visualization during Transarterial Chemoembolization. *Radiology*. 2015;277(3):833-41. IF: 7.296
5. Sahu S, Schernthaner R, Ardon R, Chapiro J, Zhao Y, Sohn JH, Fleckenstein F, Lin M, Geschwind JF, Duran R. Imaging Biomarkers of Tumor Response in Neuroendocrine Liver Metastases Treated with Transarterial Chemoembolization: Can Enhancing Tumor Burden of the Whole Liver Help Predict Patient Survival? *Radiology*. 2017;283(3):883-94. IF: 7.296
6. Ringl H, Schernthaner RE, Schueller G, Balassy C, Kienzl D, Botosaneanu A, Weber M, Czerny C, Hajdu S, Mang T, Herold CJ, Schima W. The skull unfolded: a cranial CT visualization algorithm for fast and easy detection of skull fractures. *Radiology*. 2010;255(2):553-62. IF: 7.296
7. Ringl H, Schernthaner RE, Kulinna-Cosentini C, Weber M, Schaefer-Prokop C, Herold CJ, Schima W. Lossy three-dimensional JPEG2000 compression of abdominal CT images: assessment of the visually lossless threshold and effect of compression ratio on image quality. *Radiology*. 2007;245(2):467-74. IF: 7.296
8. Ringl H, Schernthaner R, Sala E, El-Rabadi K, Weber M, Schima W, Herold CJ, Dixon AK. Lossy 3D JPEG2000 compression of abdominal CT images in patients with acute abdominal complaints: effect of compression ratio on diagnostic confidence and accuracy. *Radiology*. 2008;248(2):476-84. IF: 7.296

9. Schernthaner RE, Duran R, Chapiro J, Wang Z, Geschwind JF, Lin M. A new angiographic imaging platform reduces radiation exposure for patients with liver cancer treated with transarterial chemoembolization. *Eur Radiol.* 2015;25(11):3255-62. IF: 3.967
10. Schernthaner R, Stadler A, Lomoschitz F, Weber M, Fleischmann D, Lammer J, Loewe C. Multidetector CT angiography in the assessment of peripheral arterial occlusive disease: accuracy in detecting the severity, number, and length of stenoses. *Eur Radiol.* 2008;18(4):665-71. IF: 3.967