Curriculum Vitae

Dr. Lena NOHAVA

Postdoctoral researcher
High Field MR Center
Center for Medical Physics and Biomedical Engineering
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Google Scholar profile | MUV researcher profile | MUV Homepage

Personal information

Nationality: Austrian | **Date and place of birth:** June 11, 1993 in Oberpullendorf, Austria

Main areas of research

MR hardware engineering | innovative radiofrequency (RF) coils for (ultra-)high field MRI | wearable MR technology | RF safety | EM simulation | clinical studies and medical device certification

Professional record

Post Doc position

01/2021 – now

High Field MR Center at the CMPBME, Medical University of Vienna, Vienna, Austria
& IADI, Université de Lorraine, Nancy, France (08/2021-11/2021).

- Design and implementation of wearable MR technology for 3 T MRI
  - a modular system of flexible receive-only coil arrays
  - a flexible one-size-fits-all breast coil array for MR mammography
- Testing of motion correction strategies for supine breast MRI (beat pilot tones, on-coil sensors)
- Development of an optical wireless link for MR applications
- Documentation and testing of RF coils according to the EU Medical Device Regulation
- Clinical study management (breast cancer patients, healthy volunteers)
- Horizon Europe project "CITRUS": development of a TUS-MRI head coil system
- Citizen Science project organization involving high school students in research projects
- Patient comfort evaluation during supine and prone breast MRI with a flexible coil vest
- Co-organization of science communication activities of the HFMR Center Vienna
- Horizon Europe Twinning project "MRITwins" employment
- 10/2025-now: employment in the Christian Doppler Laboratory for Patient-Centered Breast Imaging (PI Prof. Pascal Baltzer): breast MR coil development and clinical translation
- Since 09/2025: Education on MRI for high school students within the science communication project "MagnetXplorers" (PI Dr. Roberta Frass-Kriegl).

PhD fellow

10/2017 – 12/2020

BioMaps (former IR4M) laboratory, Université Paris-Saclay, Orsay, France, in collaboration with the RF Lab at the CMPBME, Medical University of Vienna, Vienna, Austria.

- Design and implementation of lightweight flexible radio frequency coils for 3 and 7 T MRI
- Design of wearable MR technology (a flexible coil vest for MR mammography)
- Strategies for (optical) wireless data transmission in the MR environment

Diploma thesis internship

10/2016 – 06/2017

RF Lab at the CMPBME, Medical University of Vienna, Vienna, Austria

Internship

08/2015 – 09/2015

RF Lab at the CMPBME, Medical University of Vienna, Vienna, Austria

Educational record

Université Paris-Saclay, Orsay, France & Medical University of Vienna, Vienna, Austria

10/2017 – 12/2020

PhD studies "Medical Physics and Imaging" at the Université Paris-Saclay, registered in parallel at the Medical University of Vienna. Thesis: *"Concepts for Wearable Technology in MR: Lightweight Flexible Radio Frequency Coils and Optical Wireless Communication".* Available online: https://tel.archives-ouvertes.fr/tel-03141307. Supervisors: Dr. Jean-Christophe Ginefri and Assoc.-Prof. Dr. Elmar Laistler. Defense reviewers and examiners: Ass.-Prof. Irena Zivkovic, Ass.-Prof. Simon Lambert, Prof. Andrew Webb, Prof. Jacques Felblinger, Prof. Marie Poirier-Quinot, Prof. Maxim Zaitsev.

University of Vienna, Vienna, Austria

10/2012 – 08/2017

Diploma studies, teacher training in Physics and French, focus on MR Physics. Thesis: *"A parallel transmission pulse design framework for 7 T MRI with physical constraints and SAR minimization"*

International

Nancy, France

08/2021 – 11/2021

Research collaboration, IADI, Université de Lorraine

Paris, France

10/2017 – 12/2020

PhD studies, Orsay, France

01/2012 – 06/2012

French linguistics and civilization courses (CCFS, Fondation Robert de Sorbon)

08/2011 – 08/2012

Au-pair year

Nice, France

01/2016 – 07/2016

Erasmus semester, Université Sophia Antipolis

Language skills

German (native), English (fluent, C2), French (fluent, C2), Spanish (intermediate, A2)

Awards and scholarships

2025

ISMRM Magna Cum Laude Merit Award, Honolulu, Hawai'i, USA

2024

Dora Brücke-Teleky Award, Alumni Club and College of Physicians, Medical University of Vienna

EUSOBI best abstract award, Lisbon, Portugal

Top 200 best-rated abstracts at the ECR (European Congress of Radiology) 2024

2023

EUSOBI best abstract award, Valencia, Spain

ISMRM Magna Cum Laude Merit Award, Toronto, Canada

2022-2024

ÖFG International Communication stipend

2021

SFRMBM PhD thesis award

Gorter Prize Finalist, German Chapter of the ISMRM

2019, 2020, 2021, 2022

ISMRM Educational Stipend

2019

SFRMBM stipend, Montréal, Canada

ISMRM Magna Cum Laude Merit Award, Montréal, Canada

2018

ISMRM New Entrant Stipend, Paris, France

2017

MESR (Ministère de l'Enseignement Supérieur et de la Recherche) PhD funding for 3 years, Orsay, France

2013, 2014, 2016
Erasmus+ scholarship, Nice, France
Excellent performance scholarship, University of Vienna, Austria

Memberships

2024
ESMRMB Medical Device Regulation (MDR) working group
2022-2024
European Society of Radiology (ESR)
European Society of Breast Imaging (EUSOBI)
2016-2024
International Society for Magnetic Resonance in Medicine (ISMRM)
MR Engineering Study Group (ISMRM)
2016-2020
IEEE Associate Member
Société Française de Résonance Magnétique en Biologie et Médecine (SFRMBM)
Young Scientist Association (YSA) of the Medical University of Vienna
European Society for Magnetic Resonance in Medicine and Biology (ESMRMB)

Workshops and Trainings

2025
Career Compass post-graduate curriculum, Medical University of Vienna
10/2021
Good Clinical Practice (GCP) training certificate by NIDA (https://gcp.nidatraining.org/).
2017-2023
Austrian-Czech Workshop on Magnetic Resonance
09/2018
ESMRMB Lectures on MR: Course on *RF coils: Design and build your own*. L'Aquila. Italy.
04/2018
Intellectual Property Rights and Project Management. Medical University, Vienna, Vienna, Austria.
02/2017
ESMRMB Lectures on MR: *Course on RF Simulation for MR systems: Coil design and safety.* Utrecht, NL.

Teaching & reviewing activities

Reviewer activity for *European Journal of Radiology Experimental, Journal of Magnetic Resonance, Magnetic Resonance in Medicine*
PhD student co-supervision at the Medical University of Vienna (2022-ongoing)
Supervision of FFG young talent internships for high school students (Medical University of Vienna, since 2021)
Practical course in Medical Physics for physicians (Medical University of Vienna, since 2021)

Outreach & committee activities

Co-organization of "KinderUni" (Kids' university) and "Lange Nacht der Forschung" (2022 – ongoing)
Science Board Member at the Center for Medical Physics and Biomedical Engineering (Medical University of Vienna), organizing internal and external events
ISMRM "MR Coils" Study group trainee representative
Young Scientist Association symposium chair (Medical University of Vienna)
ISMRM 2024 educational session chair
OeAD Science Ambassador (lectures for schools)
KURIER newspaper article (13.12.2024, wearable breast coil)
Physicsworld article (13.07.2023, wearable breast coil)
AUNTMINNIE Europe Top Story (05.02.2025, wearable breast coil)
The Imaging Wire report about our publication "Study Advances BraCoil Concept"
ORF TV report on Austrian television ORF/Mayrs Magazin - Wissen für alle: "MR-Untersuchung: Durchblick durch neue Technik" (30.5.2025)

Grants

Österreichische Gesellschaft für Senologie (Austrian Society for Senology) project funding 2022 (24k €)
FFG young talent internship funding (July/August 2021, 2.4k €)

Co-author of FWF and FFG projects (2025: PI Simon Robinson, “Improving Breast MRI with Novel Imaging Methods and RF Coils”, 460k€)
WP leader and co-author of Science Communication project “MagnetXplorers” (Austrian Business Agency, 70k€)

Patents

Laistler E, Obermann M, Nohava L, Roat S. *Coil module for magnetic resonance imaging applications*. EU Patent EP21020242.0, 2021 (filed).

18.12.2025