Curriculum Vitae

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Ladislav Valkovič

CONTACT DETAILS

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EDUCATION AND QUALIFICATIONS

2009 – 2012 **Slovak Academy of Sciences / Slovak Technical University (Doctoral Degree)**
Doctor of Philosophy (PhD) in Measurement Technology

2004 – 2009 **University of Žilina (Masters Degree)**
Ing. (Equal to MSc) in Biomedical Engineering (with highest honours)

ACADEMIC POSITIONS

Slovak Academy of Sciences (Institute of Measurement Science)
Dec 2015 – present Post-Doctoral Researcher (Category IIa)
Dec 2012 – Dec 2015 Post-Doctoral Researcher (Category IIb)
Sep 2009 – Dec 2012 Doctoral Researcher

University of Oxford (OCMR, RDM Cardiovascular Medicine)
May 2021 – present University Research Lecturer and Sir Henry Dale Fellow
Jul 2020 – May 2021 University Research Lecturer and Post-Doctoral Research Assistant
Oct 2015 – Jul 2020 Post-Doctoral Research Assistant

Medical University of Vienna (MR Centre of Excellence)
Sep 2012 – Sep 2015 Post-Doctoral Research Assistant
Apr 2011 – Sep 2012 Doctoral Research Assistant

ETH & University of Zürich (Institute of Biomedical Technology)
Sep 2010 – Dec 2010 Guest Doctoral Researcher

Medical University of Vienna (MR Centre of Excellence)
Jan 2009 – Mar 2009 Guest Undergraduate Researcher

AWARDS & HONOURS

- Young Scientist of the SAS Competition (2021 – finalist expecting results, 2017 – 1st place, 2015 – 3rd place)
- University Research Lecturer Title – University of Oxford (2020)
- NMR in Biomedicine Distinguished Reviewer Award (2018-20)
- Most Significant Result of Scientific Work of the SAS (Top 3 in Basic Science Research – 2014, 2019)
- British Chapter of the ISMRM Mansfield Research Innovation Award (2018)
- International Society for Magnetic Resonance in Medicine (ISMRM) “Summa Cum Laude” Merit Award (2016, 2017)
- ISMRM “Magna Cum Laude” Merit Award (2012, 2016)
- Slovak Academy of Sciences Award for an excellent young scientific team (2015)
- Medical University of Vienna Award for an excellent scientific performance in previous year (2015)
- Young Investigator Award for best oral presentation at the international conference Measurement (2013)
- University of Žilina Chancellor Merit Award for extraordinary study results (2009)

GRANTS

- Wellcome Trust/Royal Society Sir Henry Dale Fellowship (01/05/2021 – 30/04/2026): "Novel multi-nuclear MRS for the assessment of cardiac energetics". **L.Valkovič**. £993k. (#221805/Z/20/Z)
- Oxford BRC3 Cluster: Technology and Big Data Pump Priming (12/2019 – 03/2020): "Cardiac Acetyl-Carnitine as a Potential Therapeutic Marker in Diabetes". **L.Valkovič**. £15k.
- Oxford BHF Centre for Research Excellence Equipment Fund (11/2019): "MR Compatible Ergometer to Facilitate Dynamic Physiological Imaging". A.Lewandowski, **L.Valkovič**, D.Holdsworth, J.Rayner, B.Raman, O.Rider. £35k.
- Annual Fund of the Austrian National Bank (01/10/2013 – 31/07/2017): "Muscle-specific oxidative metabolism of patients with peripheral arterial disease. Dynamic ^{31}P MRS at 7 Tesla". **L.Valkovič**. €197k. (#15455)
- Bilateral Cooperation [AT – SVK] Research Grant (01/2014 – 06/2015): "Effect of exercise on pathophysiology of type 2 diabetes: Focus on MRI and MRS in skeletal muscle". J.Ukropec, **L.Valkovič**. €3k. (#2013-10-15-0004)
- Bilateral Cooperation [AT – CZE] Research Grant (02/2013 – 12/2013): "Dynamic ^{31}P MR spectroscopy using MR ergometers". P.Kršek, **L.Valkovič**. €5k. (#66p3)

TEACHING AND SUPERVISION

Teaching

ISMRM Educational Courses (part of Annual Meetings or Workshops):
Lecturer on Cardiac MRS (2018 – present)

University of Oxford Wellcome Centre for Clinical Neurosciences MRI Graduate Program:
Lecturer on X-nuclei MRS outside of brain (2017 – present)

Medical University of Vienna Clinical Neurosciences PhD Program:
Lecturer on Advanced MR Neuroimaging – MR Spectroscopy (2015)

Supervision

Doctoral (DPhil) Projects at the University of Oxford:

- *James Kent*, "Rapid B1 mapping for cardiac applications at 7T pTx systems", (co-supervisor, 2021-present, funded by the MRC iCASE studentship with Siemens Ltd)
- *Andrew Tyler*, "New acquisition and reconstruction techniques for studies of cardiac metabolism", (co-supervisor, 2019-present, funded by the EPSRC via the ONBI CDT)
- *Moritz Hundertmark*, "Modifying cardiac metabolism in Heart failure with preserved ejection fraction", (co-supervisor, 2018-present, funded by the EMPA trial of Boeringer Ingelheim)
- *Jane Ellis*, "Cardiac ^{31}P MRS at ultra-high fields", (co-supervisor, 2016-2020, funded by the MRC iCASE studentship with Rapid Biomedical)
- *Lucian Purvis*, "Human In Vivo ^{31}P Magnetic Resonance Spectroscopy", (co-supervisor, 2015-2018, funded by the EPSRC)

Other Projects:

- *Alison Farrar*, "Measuring Changes in Human Carnosine Physiology Non-Invasively", (short DPhil rotation project, primary supervisor, 01/2021 – 04/2021, University of Oxford)
- *Stanislav Fryštik*, "Absolute Quantification of Concentration of Heart Energetic Metabolites using ^{31}P MRS", (Masters [Ing] project, supervisor, 09/2019 – 06/2020, University of Žilina)
- *Ina Hanninger*, "Finding New Ways to Analyse the Heart using Machine Learning", (Masters [MSc] project, co-supervisor, 09/2019 – 06/2020, University of Oxford)
- *Joe Pollacco*, "New Ways of Non-invasively Probing Cardiac Metabolism", (2nd year physics project, co-supervisor, 06/2019 – 09/2019, University of Oxford)
- *Ján Ivančík*, "Measurement of muscle specific oxidative metabolism in human calf by ^{31}P MRS", (Masters [Mgr] project, supervisor, 09/2017 – 06/2018, Commenius University Bratislava)
- *Ján Ivančík*, "Analysis software for the assessment of muscle oxidative metabolism in vivo", (Undergraduate [BSc] project, supervisor, 09/2014 – 06/2016, Commenius University Bratislava)
- *Monika Kipfelsberger*, "Measurement of oxidative muscle metabolism at ultra-high fields", (Masters [MSc] project, primary supervisor, 09/2013 – 06/2014, Technical University of Vienna