

Daniel Zhi Liang Kor

DPhil Student, University of Oxford

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| EDUCATION | <p>Doctor of Philosophy Clinical Neurosciences University of Oxford</p> <p>Bachelor of Applied Science (With Distinction) Engineering Physics (Cumulative Average: 85%) University of British Columbia</p> <p>University Transfer Program Science (GPA: 4.18/4.30) Columbia College</p> | <p>Expected graduation in Oct. 2023</p> <p>Sep. 2014 – May 2018</p> <p>Jan. 2011– May 2012</p> |
| ACADEMIC EXPERIENCE | <p>Researcher, UBC MRI Research Center <i>University of British Columbia</i> Supervised by Dr. Alexander Rauscher on microstructural imaging and biophysical modelling.</p> <ul style="list-style-type: none"> Quantitative modelling of brain's white matter for usage of myelin and ferritin as biomarkers in multiple sclerosis monitoring. <p>Researcher, Canadian Hydrogen Mapping Experiment (CHIME) <i>University of British Columbia</i> Supervised by Dr. Mark Halpern on signal processing in radio astronomy.</p> <ul style="list-style-type: none"> Modelling the contributions of temperature to radio signals in experiment acquisition pipeline. | <p>May – Sep. 2017, May – Sep. 2018 2,000 CAD/month</p> <p>May – Sep. 2016 2,000 CAD/month</p> |
| NON-ACADEMIC EXPERIENCE | <p>Graduate Student Ambassador, St. Peter's College <i>University of Oxford</i></p> <ul style="list-style-type: none"> Introduce science research to promising secondary and sixth form students. <p>Military Infantry Officer, Singapore Armed Forces Officer Cadet School <i>Singapore Armed Forces</i></p> <ul style="list-style-type: none"> Instructed officer cadets on military tactics and fieldwork. | <p>Oct. 2021 – present</p> <p>Jun. 2012 – Jun. 2014</p> |
| JOURNAL PUBLICATIONS | <p>Kor DZL., S. Jbabdi, I. N. Huszar, J. Mollink, B. C. Tandler, S. Foxley, C. Wang, C. Scott, A. Smart, O. Ansoorge, M. Pallegage-Gamarallage, K.L. Miller, and A.F.D. Howard. An automated pipeline for extracting histological stain area fraction for voxelwise quantitative MRI-histology comparisons. (under revision)</p> <p>Kor DZL, C. Birkl, S. Ropele, J. Doucette, T. Xu, E. Hernandez-Torres, V. Wiggermann, S. Hametner, A. Rauscher. The role of iron and myelin in orientation dependent R2* of white matter. <i>NMR in Biomedicine</i>. 2019;32:e4092. https://doi.org/10.1002/nbm.4092</p> | |

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| CONFERENCE PROCEEDINGS | <p>Kor DZL., S. Jbabdi, I. N. Huszar, J. Mollink, B. C. Tandler, S. Foxley, C. Wang, C. Scott, A. Smart, O. Ansorge, M. Pallegage-Gamarallage, K.L. Miller, and A.F.D. Howard. Disentangling the contributions of myelin, neurofilament and microglia to MR contrast: an automated pipeline for voxelwise MR-histology analysis. 30th Annual Meeting of the ISMRM, 2022.</p> <p>Kor DZL., S. Jbabdi, J. Mollink, I. N. Huszar, M. Pallegage-Gamarallage, C. Scott, A. Smart, O. Ansorge, K.L. Miller, and A.F.D. Howard. Automatic extraction of reproducible semi-quantitative histological metrics for MRI-histology correlations. 29th Annual Meeting of the ISMRM, 2021.</p> <p>Kor DZL., S. Jbabdi, J. Mollink, I. N. Huszar, M. Pallegage-Gamarallage, A. Smart, O. Ansorge, K.L. Miller, and A.F.D. Howard. Development of an automated processing pipeline for brain MRI-histology correlations. 26th Annual Meeting of the OHBM, 2020.</p> <p>Kor DZL., J. Doucette, T. Xu, A. Rauscher. The role of ferritin and myelin in orientation dependent R2* measured from susceptibility-weighted MR signal in white matter. 26th ISMRM, 2018.</p> | |
| TEACHING | <p>Teaching Assistant, UBC Department of Mechanical Engineering <i>University of British Columbia</i> Applied Science 100/101 - Introduction to Engineering I and II</p> | Sept. 2017 – May 2018 |
| PROJECTS | <p>Senior Design Project II: Model for Diffusion in Brain's White Matter <i>University of British Columbia</i></p> <p>Senior Design Project I: Optical Depth Measurement for Surgery <i>University of British Columbia</i></p> <p>15th UBC Engineering Physics Autonomous Robots Annual Competition <i>University of British Columbia</i></p> | <p>Sept. – Dec. 2017</p> <p>Sept. 2016 – Apr. 2017</p> <p>May – Aug. 2015</p> |
| AWARDS | <p>Magnetic Moments Winner <i>International Society for Magnetic Resonance in Medicine</i> Top entry in an international competition presenting science to a general audience.</p> <p>Goodger and Schorstein Research Scholarship in Medical Sciences <i>University of Oxford</i> Awarded to fund doctoral research.</p> <p>3 Minutes of Science Winner <i>University of Oxford</i> Top entry in a department-wide competition presenting science to a general audience.</p> <p>Clarendon Fund Scholarship <i>University of Oxford</i> Fully funded doctoral research with stipend.</p> <p>ISMRM Trainee Stipend Award <i>International Society for Magnetic Resonance in Medicine</i> Awarded for the Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM).</p> <p>NSERC Undergraduate Student Research Award <i>Natural Sciences and Engineering Research Council of Canada</i> Awarded by the Natural Sciences and Engineering Research Council of Canada (NSERC) on a competitive basis.</p> | <p>May 2022</p> <p>Mar. 2022</p> <p>Nov. 2019</p> <p>Oct. 2019</p> <p>Feb. 2018, 2021, 2022</p> <p>May 2016, 2017, 2018</p> |

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| | UBC Dean's Award for Design and Innovation | Apr. 2017 |
| | <i>University of British Columbia</i> | |
| | Award for outstanding and innovative final year engineering projects. Awarded for "Optical Depth Measurement Device and Method". | |
| | Coordinated International Exchange Award | Apr. 2016 |
| | <i>University of British Columbia</i> | |
| | Monetary award to fund international exchange at ETH Zurich. | |
| | UBC Chancellor's Scholar Award | Sept. 2014 |
| | <i>University of British Columbia</i> | |
| | Award for outstanding entry grades for UBC. | |
| | John Helm Memorial Scholarship | Mar. 2012 |
| | <i>Columbia College</i> | |
| | Yearly scholarship awarded to one outstanding student in the Physical Sciences. | |
| | Columbia College Academic Scholarship | Aug., Dec. 2011 |
| | <i>Columbia College</i> | |
| | Semester scholarship awarded to four outstanding students. Recipient for two semesters in 2011. | |
| VOLUNTEER EXPERIENCE | Public Engagement Ambassador | 2022 – present |
| | <i>Wellcome Centre for Integrative Neuroimaging</i> | |
| | Carried out talks, tours and plays for primary and secondary school students. | |
| | Science Tutor | 2021 – present |
| | <i>Oxford Hub</i> | |
| | Tutoring a secondary school student in GCSE physics and biology. | |
| | Patrol volunteer | 2020 – 2021 |
| | <i>Turl Street Homeless Action</i> | |
| | Brought hot drinks and food to those sleeping rough in central Oxford. | |
| | Multiple Sclerosis Research Consenting | 2017 – 2018 |
| | <i>UBC Djavad Mowafaghian Centre For Brain Health</i> | |
| | Consented patients for enrollment into MS/MRI research. | |
| | Multiple Sclerosis Clinic Shadowing | 2017 – 2018 |
| | <i>UBC Djavad Mowafaghian Centre For Brain Health</i> | |
| | Shadowed resident neurologist, Dr. Robert Carruthers, in his clinic sessions. | |
| | Engineering Physics Mentor | 2017 – 2018 |
| | <i>University of British Columbia</i> | |
| | Mentored five junior Engineering Physics students. | |
| | Laboratory Assistant and Outreach Volunteer | 2014 – 2018 |
| | <i>UBC Engineering Physics Project Laboratory</i> | |
| | Engaged university first year and high school students for STEM outreach. | |