

# Laura Mikula

Sensorimotor Control Lab  
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Canada

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## EDUCATION

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- 2018 Ph.D., Cognitive Neurosciences, Université Claude Bernard Lyon 1, Lyon, France
- 2018 Ph.D., Vision Sciences, Université de Montréal, Montréal, Canada
- 2014 M.Sc., Neurosciences, Université Claude Bernard Lyon 1, Lyon, France
- 2012 B.Sc., Physiology, Université Claude Bernard Lyon 1, Lyon, France

## PROFESSIONAL EXPERIENCE

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- 2020-present Postdoctoral visitor, Sensorimotor Control Lab, York University, Toronto, Canada
- 2019-2020 Postdoctoral fellow, Visual Psychophysics and Perception Laboratory, School of Optometry, Université de Montréal, Montréal, Canada
- 2018-2019 Postdoctoral fellow, ImpAct team, Lyon Neuroscience Research Center, Bron, France

## PUBLICATIONS

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### Peer Reviewed Journal Articles

- 2020 **Mikula L**, Mejía-Romero S, Chaumillon R, Patoine A, Lugo E, Bernardin D, Faubert J. Eye-head coordination and dynamic visual scanning as indicators of visuo-cognitive demands in driving simulator. *PLoS ONE*, 15(12): e0240201. DOI: 10.1371/journal.pone.0240201

- 2018 **Mikula L**, Jacob M, Tran T, Pisella L, Khan AZ. Spatial and temporal dynamics of pre-saccadic attentional facilitation before pro- and anti-saccades. *Journal of Vision*, 18(11):2, 1-16. DOI: 10.1167/18.11.2
- 2018 **Mikula L**, Sahnoun S, Blohm G, Pisella L, Khan AZ. Vibrotactile information improves proprioceptive reaching target localization. *PLoS ONE*, 13(7): e0199627. DOI: 10.1371/journal.pone.0199627
- 2018 **Mikula L**, Gaveau V, Pisella L, Khan AZ, Blohm G. Learned rather than online relative weighting of visual-proprioceptive sensory cues. *Journal of Neurophysiology*, 119(5), 1981-1992. DOI: 10.1152/jn.00338.2017

### Submitted Articles

- 2020 **Mikula L**, Blohm G, Koun É, Khan AZ, Pisella L. Movement drift in optic ataxia reveals deficits in hand state estimation. *Journal of Experimental Psychology: Human Perception and Performance*.
- 2020 Patoine A, **Mikula L**, Mejía-Romero S, Chaumillon R, Michaels J, Keruzoré O, Bernardin D, Faubert J. Increased visual and cognitive demands emphasize the importance of meeting visual needs at all distances while driving. *PLoS ONE*. [Preprint]

### FELLOWSHIPS & AWARDS

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- 2020 Vision: Science to Applications (VISTA) Postdoctoral Fellowship, York University, Canada
- 2020 Postdoctoral Student Award, Road Safety Research Network (RRSR) of Quebec, Canada
- 2017 Excellence Scholarship, Faculté des Etudes Supérieures (FESP) & École d'Optométrie de l'Université de Montréal (ÉOUM), Canada
- 2017 Scholarship for end of PhD studies, Faculté des Etudes Supérieures et Postdoctorales (FESP), Canada
- 2017 Additional funding for students, Groupe de Recherche en Sciences de la Vision (GRSV), Canada
- 2016 Winner of the contest "Votre recherche en BD" (Your research in comics), Fédération des Associations Étudiantes du Campus de l'Université de Montréal (FAÉCUM), Canada

- 2015 Doctoral Mobility Fellowship, LabEx CORTEX, France
- 2015 Doctoral Mobility Fellowship, Programme Avenir Lyon Saint-Étienne (PALSE), France

## INVITED TALKS ---

- 2019 Multisensory integration for reaching movements. York University, Toronto, Canada, May 27
- 2018 Multisensory integration for reaching movements. Justus Liebig University Giessen, Germany, August 14
- 2018 Intégration visuo-proprioceptive pour l'action. Rencontres Mouvement et Handicap, Lyon, France, February 8
- 2017 Involvement of the posterior parietal cortex in online control of reaching. Doctoral School Neuroscience and Cognition Annual Scientific Meeting, Lyon, France, September 11
- 2016 Proprioceptive weights are independent of left and right hand sensory reliabilities. CORTEX Students Club, Lyon, France, April 25
- 2015 Intégration multi-sensorielle pour l'action chez les sujets sains et les patients avec ataxie optique. École d'optométrie, Université de Montréal, Canada, December 15

## CONFERENCE ACTIVITY ---

- 2020 **Mikula L**, Mejía-Romero S, Chaumillon R, Patoine A, Lugo E, Bernardin D, Faubert J. Increased visual-cognitive demands in driving simulator result in modifications of eye-head coordination and dynamic visual scanning. *The Eye, The Brain & The Auto*, Online, December 7-8
- 2020 **Mikula L**, Mejía-Romero S, Chaumillon R, Patoine A, Lugo E, Bernardin D, Faubert J. Dynamic analysis of eye-head movements for estimating visuo-cognitive demands during driving. *Neuromatch Conference 3.0*, Online, October 26-30
- 2019 Pisella L, Jurkiewicz T, **Mikula L**. Troubles visuo-spatiaux et ataxie optique. *Journées de Neurologie de Langue Française*, Lille, France, April 16-19

- 2017 **Mikula L**, Pisella L, Blohm G, Khan AZ. Involvement of the posterior parietal cortex in online control of reaching. *Society for Neuroscience*, Washington, DC, November 11-17
- 2016 **Mikula L**, Jacob M, Pisella L, Khan AZ. Temporal dynamics of attention before anti-saccades. *Journal of Vision*, 16(12), 1044-1044.
- 2016 **Mikula L**, Jacob M, Tran T, Pisella L, Khan AZ. Temporal dynamics of attention before anti-saccades. *Vision Sciences Society*, St. Pete Beach, FL, May 13-16
- 2016 **Mikula L**, Jacob M, Tran T, Pisella L, Khan AZ. Temporal dynamics of attention before anti-saccades. *Doctoral School Neuroscience and Cognition Annual Scientific Meeting*, Lyon, France, May 3
- 2015 **Mikula L**, Pisella L, Blohm G, Khan AZ. Proprioceptive weights are independent of left and right hand sensory reliabilities. *21st Annual Meeting of the FRQS Vision Health Research Network*, Québec, QC, November 6
- 2015 **Mikula L**, Pisella L, Blohm G, Khan AZ. Proprioceptive weights are independent of left and right hand sensory reliabilities. *Society for Neuroscience*, Chicago, IL, October 17-21
- 2013 Claude L, Sauzeau J-B, **Mikula L**, Perchet C, Magnin M, Garcia-Larrea L, Mazza S, Bastuji H. Modulation of nociceptive information processing during paradoxical sleep: an intracerebral recording study in Humans. *Congress of the EFIC (European Federation of IASP Chapters)*, Florence, Italy, October 9-12

## TEACHING EXPERIENCE

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### Université de Montréal, Teaching Assistant

Neurophysiology of Eye Movements (undergraduate, fall 2015)

## RESEARCH EXPERIENCE

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- 2014 Student internship: “Contribution of visual and proprioceptive information to pointing movements”, ImpAct team, Lyon Neuroscience Research Center, Bron, France. Advisors: Laure Pisella & Aarlenne Z Khan
- 2013 Student internship: “Modulation of nociceptive information processing during paradoxical sleep in humans”, Neuropain team, Lyon Neuroscience Research Center, Bron, France. Advisor: Hélène Bastuji

## OUTREACH

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- 2017 Ma Thèse Pour Les Nuls (My Thesis for Dummies), Lyon Science Fair, October 14
- 2016 Ma Thèse en 180 secondes (Three Minute Thesis), Rhône-Alpes regional final, April 28

## LANGUAGES

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French: Native	■ ■ ■ ■ ■
English: Fluent	■ ■ ■ ■ ■
Spanish: Elementary reading, writing and speaking	■ ■ ■ ■ ■

## REFERENCES

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**Aarlenne Zein Khan**

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