

CURRICULUM VITAE



Personal information

Name Charlotte Roy
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Academic Employment

- since 2017 Research scientist in the Applied Cognitive Psychology Department (Prof. Dr. Marc Ernst), Institute for Psychology and Education, Ulm University, Germany
- since 2017 Undergraduate and graduate instructor, Institute for Psychology and Education, Ulm University, Germany
- 2013-2015 Teaching assistant, EuroMov laboratory, Movement Sciences Faculty, Montpellier University, France

Education

- 2017 Ph.D., Human Movement Sciences, University of Montpellier
Dissertation: *Effect of audio-tactile stimulation on movements of coordination*
Dissertation Advisors: Julien Lagarde, Ph.D., Simone Dalla Bella, Ph.D, Pr.
- 2013 M.A., Human Movement Sciences, University of Montpellier
Thesis: *Effect of variability of an auditory stimulation on perception and gait kinematic*
Thesis Advisor: Simone Dalla Bella, Ph.D, Pr.
- 2011 M.A., Psychology, University of Montpellier
Thesis: *Dynamical approach of time and rhythm perception*
Thesis Advisor: Dennis Brouillet, Ph.D, Pr.
- 2009 B.A, Psychology, University of Montpellier

List of publications

Roy, C., Wiebusch, D., & Ernst, M. (2020, April 22). Where did I park my car? Influence of landmark permanency on navigation. <https://psyarxiv.com/gq6d5>

Roy C., Dalla Bella S., & Lagarde J. (2019). Multisensory Integration and Behavioral Stability. Psychological Research. <https://link.springer.com/article/10.1007/s00426-019-01273-4>

Roy C., Lagarde J., & Dalla Bella S. (2017). Walking to a multisensory beat. *Brain and Cognition*, 113, 172-183. <https://doi.org/10.1016/j.bandc.2017.02.002>

Roy C., Dalla Bella S., & Lagarde J. (2017). To bridge or not to bridge the multisensory time gap: Bimanual coordination to sound and touch with temporal lags. *Experimental Brain Research*, 235(1), 135-151. <https://doi.org/10.1007/s00221-016-4776-4>

Roy C., Wiebusch D., & Ernst M. (in preparation). Human navigation in the third dimension.

List of third-party funds

02.2020 Start-up funding Grant, Ulm University. 72 K€/2 years.

02.2020 Associated Researcher to a collaborative European Grant, CrowdDNA, H2020-FETOPEN-899739. Ulm: 410 K€/42 months, Total for the project: 2 M€/42 months.

2013-2016 Fellowship from the French Ministry of Research, University of Montpellier. 80 K€/3 years.

2013-2016 Member of the European Research Project BeatHealth, FR7-ICT-2013-10

Awards

2016 Award of Best Oral Presentation, School Day, France

2015 Winner of 3 min Thesis, France (<https://www.youtube.com/watch?v=zKAt0808hW4>)

2015 Award of Best Poster, School Day, France

2013 Award of Best Poster, EuroMov, France

Teaching

Master level seminars (336h)

- Navigation in Animals, Men and Machines, Ulm University. 4 h/week = 2h seminar + 2h practical training. 3 semesters. Master first & second year.
- The misleading senses: when we can't rely on our senses anymore, Ulm University. 4 h/week = 2h seminar + 2h practical training. 3 semesters. Master first & second year.

Master level lecture (12h)

- Navigation: from strategies to neurosciences, Ulm University. Lecture: 4h (x3).

Bachelor level seminars (128h)

- Developmental Psychology from Infancy to Old Age, University of Montpellier (Bachelor first year, 2 semesters)
- Neurosciences of Sport Performances, University of Montpellier (Bachelor second year, 2 semesters)
- Learning, Motivation & Performances in Sport, University of Montpellier (Bachelor second year, 2 semesters)
- Group Affects and Group Dynamics, University of Montpellier (Bachelor third year, 1 semester)

Supervision

- 2 PhD students (Ulm University)
 1. CrowdDNA project. Start July 2020.
 2. 3D Navigation project. Start October 2020.
- 5 Master's Theses (Ulm University)
 1. "Adding the third dimension to Human navigation" (O.F. 2020)
 2. "The Prior of Being Straight on Walking in Circle Behavior" (A.L. 2020)
 3. "Navigation in 3 dimensions: ecological experiment" (I.C. 2020)
 4. "Effect of Landmark's Permanency on navigational strategies" (R.K. 2019)
 5. "Effect of Posture on Walking in Circle Behavior" (J.F. 2018)
- 7 Bachelor's Theses (Ulm University)
 1. "Navigation in 3 dimensions: a modelling-based study" (M.K. 2020)
 2. "Navigation in 3 dimensions: a questionnaire-based study" (C.G. 2020)
 3. "3 D navigation in virtual reality" (L.M. 2020)
 4. "Navigation in 3 dimensions: ecological experiment" (H.L. 2019)
 5. "Relation Between the behavior of Veering and Circling?" (A-K.K. 2019)
 6. "Effect of Posture on Walking in Circle Behavior" (R.L. 2019)
 7. "Landmark's permanency on Navigation" (L.H. 2018)
- 3 Projects supervision (Ulm University)
 1. Turning in circle & Ringo Robots (N.K. & A.N. 2020)
 2. Octavis experiment (A.T. 2018)
 3. Landmark's permanency (C.C. 2017)

Conference Presentations

Roy C., Wiebusch D., & Ernst M. (2020). Adding dimensions to human navigation: vertical & time. 1st GK Doktorat Symposium. Tübingen, Germany.

Roy C., Lagarde J., & Dalla Bella S. (2016). Walking to a multisensory beat: benefits of audio-tactile rhythmic stimulation. International Multisensory Research Forum (17th IRMF). Suzhou, China.

Roy C., Lagarde J., & Dalla Bella S. (2016). Walking to a multisensory beat: benefits of audio-tactile rhythmic stimulation. Doctoral Day, Marseille, France.

Decker L., Roy C., Marmelat, V., Torre K., Ramdani S., & Dalla Bella S. (2014). Optimisation de la stimulation auditive rythmique en vue d'améliorer la rééducation de la fonction locomotrice. Neurophysiologie Clinique/Clinical Neurophysiology.

Posters Presentations

Roy C., Wiebusch D., & Ernst M. (2019). Where did I park my car? Influence of landmarks' permanency on navigation. *Vision Science Society*. Florida, USA.

Roy C., Wiebusch D., & Ernst M. (2018). Where did I park my car? Influence of landmarks' permanency on navigation. *Spatial Cognition Conference*. Tübingen, Germany.

Roy C., Dalla Bella S., & Lagarde J. (2015). To bridge or not to bridge the time gap: Bimanual coordination to sound and touch. *ACAPS*, Nantes, France.

Roy C., Dalla Bella S., & Lagarde J. (2015). To bridge or not to bridge the time gap: Bimanual coordination to sound and touch. *Rhythm Perception and Production Workshop*. Amsterdam, Netherlands.

Roy C., Dalla Bella S., & Lagarde J. (2015). To bridge or not to bridge the time gap: Bimanual coordination to sound and touch. Doctoral Day, Nice, France.

Roy C., Decker L., Marmelat, V., Torre K., Ramdani S., & Dalla Bella S. (2013). Seeking an optimality criterion for gait improvement via rhythmic auditory stimulation: role of perception. EuroMov Inaugural Conference, Montpellier, France.

Academic Activities & Responsibilities

- Manuscript Reviewer for
 - Journal of Experimental Psychology: Human Perception and Performance
 - PlosOne
 - Attention Perception and Psychophysic
- Professional affiliations
 - Vision Science Society
 - International Multisensory Research Forum

- Member of the Subject Examination Board Cognitive Systems, Ulm University, since 2019
- Member of the Organizing committee of the IMRF conference, Ulm University, 2020

- Elected Student to the Doctoral School Council, Marseille-Nice-Montpellier, 2013-2016
- Elected Student to the Management Board of the Faculty, Montpellier, 2013-2015
- Organization of the School Day Research Conference, hosting 150 participants, Nice, 2015
- Secretary of the PhD association *AssoDocSMH*, Marseille-Nice-Montpellier, 2013-2016
- Organization of the weekly laboratory meeting, Montpellier, 2013-2016

Relevant skills

- Programming ability in *Matlab* and *R*
- Fluent in English / German: learning in process (Level B2) / Spanish (Level B1)