ZWICKER LAB NEWSLETTER

Spring

Zwicker Lab



JILL ZWICKER

WHAT'S IN THIS ISSUE:

- New staff and students
- Update on research studies
- Participate in upcoming research

WELCOME NEW STAFF AND STUDENTS!

We said goodbye to Sara Leckie, who has moved on to another research lab and welcome Erin Klein, as our new research coordinator. Erin will be supporting the various research projects in the lab. She is also an occupational therapist and will be conducting OT assessments, as part of the research studies.

Erin will be pursuing her PhD, exploring the impact of DCD in Indigenous communities. She completed her Masters in Rehabilitation Sciences in the Zwicker Lab, exploring the parental impact of raising a child with DCD across British Columbia. As a clinical occupational therapist, she has worked with children and families in schools, community care, and child development centres.







POST-DOCTORAL FELLOW



DORINE VAN DYCK

Dorine completed her Master of Science in Psychology (cognitive development and neuropsychology) and her PhD at the Université Libre de Bruxelles (Belgium). She was particularly interested in the heterogeneity of the profiles of children with DCD and their brain functioning. Since then, Dorine has worked with children with neurodevelopmental conditions as a clinical neuropsychologist at the Hôpital Universitaire des Enfants Reine Fabiola and in a pediatric clinic (Brussels, Belgium). Seeking to integrate her research with her clinical practice, she joined the Zwicker Lab in 2024 as a postdoctoral fellow, starting a new research project focusing on the prenatal environmental predictors of DCD.

PHD STUDENTS



OLIVIA TSIHLIAS



PATRICIA MORTENSON



STACEY MILLER



SIARA KAINTH



Olivia received her Bachelor of Science degree with an honours specialization in Kinesiology from the University of Western Ontario. She is currently pursuing her PhD in Rehabilitation Sciences. Olivia has a strong interest in motor skills and motor development. She is passionate about giving all children the ability to participate and develop through sport and play. Olivia's research is focused on developing best practice principles for early identification of children with/at risk for DCD to ensure access to early intervention.

Patricia completed both her Bachelor of Science degree in Occupational Therapy and Master in Science in Rehabilitation Degrees at UBC and after a long gap, has returned for doctoral studies. She has worked in paediatric OT practice for over 25 years, instructs in the UBC Rehabilitation Sciences Online Programs, and is currently involved in a project to support patient-oriented research for the Neuromuscular Disease Network for Canada. Her PhD work will focus on the occupational and participation needs for children with Spinal Muscular Atrophy.

Stacey has a Bachelor of Science degree in Physical Therapy and a Master of Rehabilitation Science degree, both from the University of British Columbia, and is now undertaking part-time doctoral studies. Stacey has worked as a physiotherapist at BC Children's Hospital since 2004, focusing on the orthopaedic management of children with cerebral palsy (CP) since 2009. Since 2014, she has led the development of North America's first province or state-wide hip surveillance program for children with CP. Her PhD studies will aim to lay the ground work for broader hip surveillance guidelines for children across motor impairments by first developing a system to classify motor function that is independent of diagnosis.

Siara received her Bachelor of Kinesiology with a minor in Psychology at the University of British Columbia. After gaining experience working as a Kinesiologist, she pursued a Master's of Physiotherapy in the United Kingdom and is now completing a part-time PhD in Rehabilitation Sciences at UBC. She currently works as a Registered Physiotherapist with both children and adults in the community. Throughout Siara's education and work experience, she was always held a passion for working with children of all abilities. Her goal is to be able to identify gaps in research while working in the field and address these gaps with valuable research in order to make a difference in the lives of those with DCD.



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MASTER STUDENTS



RACHAEL DEVENYI

Rachael graduated from the University of Guelph with a Bachelor of Science in Biological Sciences and a minor in Neuroscience. Following graduation, Rachael worked as a Clinical Research Project Coordinator at The Hospital for Sick Children contributing to studies related to global childhood malnutrition, healthcare inequities, and child and family centred care. Rachael is now pursuing a Master's degree in the Women+ and Children's Health Sciences program. Her research in the Zwicker Lab examines the trajectory of motor development in children with congenital heart disease, with the aim of improving clinical care and rehabilitation strategies.



SARAH TISCHER

Sarah is a physiotherapist from Germany, where she obtained her license and practiced as a pediatric therapist for five years. She became interested in research while pursuing her BSc in Applied Therapeutic Sciences and working with emerging therapy approaches. Passionate about providing children with the best possible rehabilitation, Sarah recently moved to Vancouver to complete her Master of Science in Rehabilitation Sciences at UBC, where she is advancing her skills in research. In the Zwicker Lab, Sarah will focus on investigating brain changes following rehabilitation in children with DCD and Autism Spectrum Disorder (ASD) as part of her master's research.



RESEARCH COORDINATOR



GISELA GOSSE

Gisela is the research coordinator in Zwicker Lab. She has been with Zwicker Lab for 10 years and helps keep the lab running and organized. Gisela is the primary contact for the JUMP for DCD study. She provides administrative support for lab research projects and assists with coordinating appointments for occupational therapy assessments and managing the needed documentation, to inform a DCD diagnosis.

Are you interested in becoming more involved at Zwicker Lab?

We are always looking for parents/guardians, children, and youth to partner with us on current and future projects.

https://www.bcchr.ca/zwicker-lab/family-engagement



RESEARCH STUDY UPDATES



Image from Dr. Melissa Licari

Thank to you everyone who filled out the online parent/guardian questionnaire.

We received responses from 237 families on the impact of raising a child with or at risk for DCD across British Columbia.



Policy Briefs to the Ministries of Health, Education, and Family and Child Development

Co-creating a DCD Toolkit for Primary Care Providers and families for early identification

Developing family-focused research initiatives for early intervention care

Resources to support awareness and advocacy



Information and resources for healthcare providers, families, and educators to increase awareness and understanding about DCD

https://www.cdrinfosource.ca/search? query=dcd%20advocacy%20toolkit&menu%5BUser%2 0Specific%5D=Everyone



Information and resources on research and advocacy efforts to support individuals with DCD and their families. https://www.isra-dcd.com/



Information and resources focused on improving awareness about DCD https://www.dcdkids.com/

RESEARCH STUDY UPDATES



We have recently published the results on the effectiveness on using the Cognitive Orientation to daily Occupational Performance Approach (CO-OP) for children with DCD and ASD, an intervention aimed at improving performance in childchosen motor-based goals.

We want to thank the children and families that participated in this research which provided strong evidence that treatment works to improve the lives of children with DCD and their families.

WHAT DID WE DO?

26 children between ages of 8-12 years completed 10 weeks of CO-OP treatment with an Occupational Therapist working towards three motor-based goals that were personally meaningful to the child. Examples of these goals included riding a bike, throwing and catching a ball, writing a paragraph neatly, and tying shoes. The participants underwent motor assessments, and completed rating scales to see if there were any motor, and/or behaviour changes as a result of the treatment.

WHAT DID WE FIND?

Autistic children with DCD can learn motor skills using CO-OP CO-OP improved performance in the child's goals, the quality of their movement, and their motor skills

Performance in their motor goals and movement quality continued even 3 months after the intervention

https://onlinelibrary.wiley.com/doi/10.1111/dmcn.16058

Opportunities to Participate in Research

Development of a DCD Family Toolkit:

We are looking for parents to provide feedback on handouts and resources to support greater awareness of DCD in the community and provide newly diagnosed families with information and resources.

This will require time to review handouts and participate in online or in-person interviews or focus groups to discuss your feedback. Renumeration for your time will be provided.

Contact **Erin Klein** at (604) 875-2345 ext. 6417 or erink01@mail.ubc.ca for more information



