

## Development of the 'Disability and Exercise Training' Resources

The Canadian Disability Participation Project (CDPP) *Resource Suite: Disability and Exercise Training* were developed utilising materials from the Canadian Society for Exercise Physiology's (CSEP) Disability and Exercise modules. The CSEP Disability and Exercise modules are a practical training resource for individuals in the health and fitness industry who are looking to be more inclusive in their practice. The modules allow users to learn communication tips when working with a client, how to prescribe exercise for an individual with a disability and how to set up a safe and inclusive exercise environment.

The CSEP modules were originally created by a Committee of CDPP researchers, including Dr. Jennifer Leo, Dr. Amy Latimer-Cheung, Dr. Jennifer Tomasone, Dr. Rebecca Bassett-Gunter, Dr. Kelly Arbour- Nicitopoulos; staff from The Steadward Centre for Personal and Physical Achievement at the University of Alberta; and CSEP Certified Exercise Physiologist Bobbi-Jo Atchison from Equality Fitness and Recreation. The Committee met, discussed information, and shared resources that would be incorporated into the CSEP modules. Several community members were also involved in the process of developing and reviewing the CSEP module content, acting as Community Content Experts.

Below are tables describing the affiliations and expertise of the involved CDPP researchers and Community Content Experts.

**Table 1.** CDPP Researchers

Researcher	Affiliations	Expertise
Dr. Jennifer Leo	Team Member, Sport & Exercise at the Canadian Disability Participation Project  Director, The Steadward Centre for Personal & Physical Achievement, University of Alberta  Former Director, Research at the Abilities Centre	Physical activity experiences for people with disabilities, including perceptions of inclusion and preparation of fitness professionals
Dr. Amy E. Latimer-Cheung	Research Lead, Sport & Exercise at the Canadian Disability Participation Project  Associate Professor and Tier 2 Canada Research Chair in Physical Activity Promotion at Queen's University  Co-leader, Revved Up Research Group	Understanding and promoting healthy lifestyle behaviours in the general population and among people with chronic disease and disability
Dr. Jennifer R. Tomasone	Team Member, Sport & Exercise, Canadian Disability Participation Project  Assistant Professor, School of Kinesiology and Health Studies at Queen's University  Co-Leader, Revved Up Research Group	Promoting physical activity participation among individuals with disabilities and prescription by healthcare professionals

Researcher	Affiliations	Expertise
Dr. Rebecca Bassett-Gunter	<p>Team Member, Sport &amp; Exercise, Canadian Disability Participation Project</p> <p>Associate Professor, School of Kinesiology and Health Sciences at York University</p>	<p>Understanding health promotion and the development of optimally effective health promotion messages targeting psychosocial predictors of behaviour</p> <p>Health promotion among special populations (i.e., people with SCI, MS) and children &amp; youth</p>
Dr. Kelly Arbour-Nicitopoulos	<p>Team Member, Sport &amp; Exercise, Canadian Disability Participation Project</p> <p>Associate Professor, Physical Activity &amp; Disability, Faculty of Kinesiology and Physical Education at the University of Toronto</p> <p>Adjunct Scientist, Bloorview Research Institute</p> <p>Director of Research, Active Living Alliance for Canadians with a Disability</p>	<p>Evidence-based practices for promoting physical activity across the lifespan in populations living with physical disabilities</p>


**Table 2.** Community Content Experts

Community Member	Perspective
Bobbi Jo Atchison	CSEP CEP certified fitness professional from Equality Fitness and Recreation, with practical knowledge and expertise of exercise and fitness for individuals with a range of disabilities and chronic health conditions
Morgan Cathcart	Para swimmer and exercise professional from The Steadward Centre, with lived disability experience
Shannell Cordas- Brown	Therapeutic Recreation student from the University of Alberta, with experience in online learning
Caitlin Riddoch	Graduate student from the University of Alberta, specializing in adapted physical activity and community-based fitness and exercise for people with disabilities
Adam Fitzpatrick	CSEP CEP certified fitness professional from the Abilities Centre, with practical knowledge and expertise of exercise and fitness for individuals with a range of disabilities and chronic health conditions
Dr. Joanna Auger	Associate Teaching Professor and Certified Group Fitness Leader from the University of Alberta, with expertise in adapted physical activity, exercise for people with disabilities, and pedagogical practices for teaching about exercise and disability

Evidence-based content informing the CSEP Disability and Exercise modules were pulled from a variety of organizations, including the Active Living Alliance for Canadians with a Disability (ALACD), CDPP, CSEP, Revved Up, SCI Action Canada Lab, and The Steadward Centre. A description of organizations and their perspective/expertise can be found below in Table 3.

**Table 3.** Description of organizations that provided content for CSEP Disability and Exercise modules

Organization	Organization Goals
Active Living Alliance for Canadians with a Disability	<p>Leads and supports a diverse network of organizations to be more inclusive in their physical activity programming, policies, and social and physical environments.</p> <p>Shares best practices, connects stakeholders, and shapes attitudes, values, and philosophies about inclusion in communities across the country.</p>
Canadian Disability Participation Project	<p>Alliance of university, public, private, and government sector partners working together to enhance community participation among Canadians with physical disabilities.</p>
Canadian Society for Exercise Physiology	<p>National voluntary organization composed of professionals interested and involved in the scientific study of exercise physiology, exercise biochemistry, fitness, and health.</p> <p>CSEP is the resource for translating advances in exercise science research into the promotion of fitness, performance, and health outcomes for Canadians.</p>
The Steadward Centre for Personal and Physical Achievement	<p>Team with expertise in Adapted Physical Activity and Parasport development, annually serving more than 1000 children, youth, and adults experiencing disabilities and training more than 250 students.</p> <p>Fosters community and individual achievement and excellence in Adapted Physical Activity and Para sport by applying innovative research, widely sharing expertise and delivering quality programs, with and for, individuals experiencing disability.</p>
Revved Up	<p>Partnership bridging the gap between community and research.</p> <p>Exercise Program: Community-based exercise program for individuals in the greater Kingston community who are living with a disability.</p> <p>Research Group: Focuses on translating research knowledge about physical activity into practical guidelines and interventions that foster full and meaningful participation for all Canadians.</p>
SCI Action Canada Lab	<p>Conducts research on how to inform, teach, and enable people living with spinal cord injury to initiate and maintain a physically active lifestyle</p> <p>Studies the mental and physical health benefits of physical activity for people living with spinal cord injury.</p> <p>Works closely with community stakeholders to ensure research addresses meaningful questions and results can be put into practice.</p>



After drafting the modules, the Committee met again to review the modules to ensure all content reflected evidence-based information. The modules are intended to be used by CSEP Certified Personal Trainers, CSEP Clinical Exercise Physiologists, and others who were interested in learning more about exercise and disability. The Community Content Experts reviewed the content and provided input to ensure it reflected their multiple perspectives as fitness and exercise professionals, individuals with lived disability experience, and pedagogy experts. The input from the Community Content Experts was critical in the development of authentic case studies and real-life scenarios used throughout.

Accordingly, the evidence-based CSEP Disability and Exercise modules were utilized to produce the CDPP *Resource Suite: Disability and Exercise Training*. The resources outlining the six steps include:

1. **Key Steps for Health Care and Exercise Professionals:** This resource is a succinct one-page infographic, containing basic information for each of the 6-steps regarding how to discuss, prescribe, and adapt exercise for your patient or client with a disability. The infographic is a quick guide which can be used as a quick reference by professionals.
2. **A 6-Step Guide:** This resource is a more detailed, two-page summary on the 6-steps for exercise discussion, prescription, and adaptation by professionals.
3. **A 6-Step Companion Guide:** This resource is a companion guide that outlines all 6-steps – communicating and gathering information; pre-assessment considerations and contraindications; conducting fitness assessments; interpreting and using assessment results; prescribing exercise; and adapting exercise – in detail. This resource contains the highest level of information for professionals.

These resources for health care and exercise professionals outline important considerations for exercise discussion and prescription for persons with disabilities.

