

Faculty of Kinesiology

OVERVIEW

The University of New Brunswick's (UNB) Faculty of Kinesiology has been a Canadian leader in kinesiology, physical education and recreation since 1957. They have earned a reputation for research scholars in biosciences, psychological, socio-cultural, managerial and philosophical aspects of human performance, recreation and sport, in addition to personal and community health and wellness.

RESEARCH CAPABILITIES

- Movement Analysis
- Health and Rehabilitation Research
- Workplace Injuries
- Fitness and Performance Analysis
- Diabetes and Obesity
- Coaching Healthy Habits
- Sport and Leisure History
- School Nutrition
- Sport and Media
- Individual and Family Recreation, Sport Management and Marketing
- Natural Resource-based Recreation Sport Psychology
- Applied Ethics in Sport, Leisure and Health

MAJOR PROJECTS

Socio-cultural Aspects of Health, Sport and Active Living

Researcher(s): Dr. Charlene Shannon, Dr. Cynthia Stacey, Dr. Fred Mason and Dr. David Scott

Understanding parents experiences in facilitating physical leisure activities for children who are overweight. Determining psychological strategies for enhancing sport performance and evaluating public sector sport, recreation, health promotion initiatives and development strategies in New Brunswick.

Understanding and Promoting Healthy Behaviours

Researcher(s): Dr. Mary McKenna, Dr. Gabriela Tymowski and Dr. David Scott

Undertaking a national survey of 'Farm to Cafeteria' programs in Canadian schools, universities, colleges and healthcare facilities. Research includes: two core indicators and measures (CIM) projects for school nutrition, private and public partners for healthy schools (P³HS), behaviour modification in sport and exercise and the development and assessment of a children's physical activity program at a First Nations School.

Human Movement Analysis

Researcher(s): Dr. Victoria Chester, Dr. Usha Kuruganti and Dr. Chris McGibbon

Examining human movement through clinical biomechanics and neuromuscular physiology. Research includes: multi-segment foot modelling, mapping muscle activity using high-density surface electromyography, examining the impact of strength training on strength and balance, and developing powered robotics to improve health.

Ergonomics and Occupational Biomechanics

Researcher(s): Dr. Usha Kuruganti, Dr. Wayne Albert and Dr. Jeremy Noble

Investigating posture, biomechanical loading and muscle activity in the upper body. Field-related research projects providing insight into muscle fatigue to create strategies for employee injuries in the following fields: forestry, Canadian Forces helicopter pilots, city transit drivers, city police, off-shore workers and nursing patient transfer activities.

Sport and Recreation Marketing and Management

Researcher(s): Dr. Jonathan Edwards, Dr. Terri Byers and Greg Duquette

Exploring marketing strategies to address sport fan satisfaction, and understanding the experiences, motivations and satisfactions of leaders and volunteers.

Clinical and Applied Physiology

Researcher(s): Dr. Danielle Bouchard, Dr. Martin Senechal and Dr. Ken Seaman

Testing novel solutions, based on exercise physiology, to help inactive adults to reach the minimum recommendations of exercise to improve health and physical capacities. Research includes: exercise intensity interpretation, strategies to reach the physical activity guidelines in adults and older adults, lifestyle modifications in obese and older adults, reduction of sedentary behavior, and investigating the impact of resistance exercise on acute secretion of irisin in obese individuals (REACTION Study).

FACILITIES

The Andrew and Marjorie McCain Human Performance Laboratory

Discovering, disseminating, and applying knowledge in biomechanics and the neuromuscular physiology of human movement. Increasing the understanding of movement impairments and developing innovative approaches to help Canadians achieve optimal function.

Biochemistry and Exercise Physiology Laboratory

Understanding human cardiovascular, respiratory and neuromuscular responses to physical activity.

Occupational Performance Laboratory

Studying ergonomic, biomechanical and human factor concerns related to workplace injury development and strategies for injury reduction.

Motor Control, Learning and Sport Performance Analysis Laboratories

Exploring factors affecting information processing, issues of inhibitory control and motor learning (skill acquisition).

For more information please visit: www.unb.ca/fredericton/kinesiology/