RESEARCH CHAIR ENHANCES INSTITUTE

WITH THE RECENT ADDITION OF A PRESTIGIOUS CANADA Research Chair, the Health, Leisure and Human Performance Research Institute (HLHP) is raising its profile nationally and internationally. Recently, Phillip Gardiner assumed the seven-year, $1.4 million research chair in Physical Activity and Health Studies, as well as the directorship of the Institute.

Established in 1992, this research arm of the Faculty of Physical Education and Recreation Studies aims to create an environment which promotes and supports research in health, leisure behaviour and human performance. "One reason I was attracted to the Institute is its unique interdisciplinary yet interrelated approach," said Gardiner. "In fact, it's only one of a handful of institutes in North America that use this approach."

This approach fits well with Gardiner's personal research history. After graduating from the University of Windsor in Physical Education and History, he obtained a Masters of Physical Education at Windsor and a PhD from the University of Alberta. Employing a reductionist approach to studying muscle fatigue, he developed an appreciation for working together with other researchers to examine "emergent properties", or properties that express themselves when different elements are put in combination. He then continued research at the Neuromuscular Research Laboratory at UCLA under the mentorship of V. R. Edgerton, before joining the Department of Kinesiology at the University of Montreal where, during 24 years at that institution, he established his international reputation as one of the preeminent scientists in this field.

"Phillip Gardiner has a unique combination of knowledge in the areas of exercise physiology, neurophysiology and molecular biology," said Dennis Hrycaiko (BPE/71, CertEd/72, Ph.D) Dean of Physical Education and Recreation Studies. "Having him on faculty is a huge gain for the University of Manitoba." Gardiner's area of research examines how the nervous system adapts to chronic increases and decreases in physical activity. This information can help form recovery plans for people who have, for instance, suffered a stroke. His planned research will be conducted at the Institute, and at the Spinal Cord Research Center in the Faculty of Medicine, where he holds an adjunct position and a research laboratory.

As director of the Institute, Gardiner will foster a large number of collaborative projects within the University and with established collaborators. He holds research funding from many organizations including the Canadian Space Agency, the National Sciences and Engineering Research Council of Canada, Health Canada, and, through his collaboration with American scientists, the National Institutes of Health. He is the President of the Canadian Society for Exercise Physiology, a former co-editor-in-chief of the Canadian Journal of Applied Physiology, and author of the recently published text, Neuromuscular Aspects of Physical Activity. He has recently been invited to join a steering committee which will advise the federal, provincial, and territorial governments on physical activity and health.

BY RUSS MEDVEDEV (MA/95)

EXAMPLES OF RESEARCH PROJECTS IN PROGRESS WITHIN THE INSTITUTE’S RESEARCH GROUPS ARE:

EXERCISE AND ENVIRONMENT MEDICINE
HEAD - Gordon Giesbrecht (BPE/85, MPE/86, PhD/90):
Thermoregulatory metabolism and blood flow in humans.

HEALTH AND WELLNESS
HEAD - Alexander Segall (BA/65, MA/67, PhD):
Health and well-being in later life.

LEISURE AND TOURISM
HEAD - Kelly MacKay:
Integrating multiple forest values in sustainable forest management, outdoor recreation inventory, atlas, and habitat project.

LIFESPAN AND DISABILITY
HEAD - Jennifer Mactavish:
Perspectives for change: Issues in community support for people with intellectual disability.

SPORT AND HUMAN PERFORMANCE
HEAD - Marion Alexander:
Neuromuscular changes with aging and the effect on driving ability.