The School of Kinesiology has had a full schedule for the beginning of 2004. We have started the interview process for our new Kinesiology position in Biomedical Engineering. One candidate has been interviewed and two further candidates are scheduled for the latter part of February.

In addition, we also had a visit from Etienne Burdet who has been recommended for the Joint CRC Tier II in Biomedical Engineering with the School of Engineering Science. The purpose of his visit was the development of his application for the CRC and for the preparation of his CFI submission.

Courses for the Spring semester are well under way and apart from some disappointing enrolment figures in upper division elective courses, there is a small increase in total enrolment in Kinesiology.

The School has been required to make some adjustments in its use of space by the construction of new offices on and under a bridge between the Kinesiology building and the Applied Sciences Bldg. This has resulted in the loss of the Seminar Room with its conversion to offices, and the temporary evacuation of offices on both the 8000 and 9000 levels.

I should like to take this opportunity to congratulate Josephine Anthony and Parveen Bawa on their 25 years of service to SFU. The 25 Year Service Awards dinner was held at the Diamond University Centre on November 25th, 2003.

I also want to congratulate Parveen Bawa on her organization of the Special Symposium honouring Dr. Richard B. Stein of the University of Alberta. Parveen devoted a significant amount of work to this project and all reports from those who attended indicate that she did an excellent job. Her report on the Symposium and the meeting of the Canadian Physiological Society follows.

John Dickinson

Faculty, Adjuncts & Graduate Students

A Report from the Rockies

The annual meeting of the Canadian Physiological Society was held January 28 to February 1, 2004 at the Silver Star Resort, BC. Over 170 participants attended. Normally, a short symposium celebrating a particular event forms a part of the whole meeting. This year, the Symposium entitled “Nerve, Muscle and Beyond,” to celebrate the scientific contributions of Richard B. Stein of the University of Alberta, formed approximately 75% of the meeting. Three of Dr. Stein’s students are professors in the School of Kinesiology (Andy Hoffer, Parveen Bawa and Ted Milner).

The Symposium was a great success both scientifically and as a reunion for many speakers. A large number of people commented that they have not been to such a high quality meeting. The Symposium, attracted a total of 76 speakers from Canada, USA, UK, Germany, Denmark, Serbia and Japan. The papers included theoretical neuronal models, neuronal regeneration/rehabilitation, very sophisticated recording systems from the brains and spinal cords of intact animals, motor control models, eye-head coordination; locomotion, functional electrical stimulation, etc. Full papers associated with the Symposium will be published in the Canadian Journal of Physiology and Pharmacology in the summer of 2004.

The following six papers from the School of Kinesiology were presented at the meeting. The first two were part of the main CPS section, while the latter four were presented during the Symposium.

Parveen Bawa
Co-Organizer, CPS Organizer, Symposium

CPS Papers:
Walker, V.E. and Andrew P. Blaber. Ventilatory variables influence maximal voluntary breath hold duration more than the magnitude of the diving response in elite freedivers.

Angoli, Damiano, Gina Nalewajek, Francisco S. Cayabyab, Vincenzo Macri, and Eric Accili. Structural determinants of hyperpolarization-activated channel coassembly and functional expression.
Symposium Papers:
Bawa, Parveen and Blair Calancie. High-frequency stimulation of human corticomotoneurons.

Robinovitch, Stephen N., Dawn M. Mackey, Quan Hong and Elmire Postma. Biomechanics of balance recovery in the elderly.

Milner, Ted E. and David W. Franklin. Neural mechanisms of early stage motor learning.


Andrew Blaber has agreed to serve as a Member of the Scientific Board for the IAA 15th Humans in Space Symposium in Graz / Austria, May 22-25, 2005, which will be organized for IAA by the Institute for Adaptive and Spaceflight Physiology (IAP) in Graz.

Oliver Jay has been appointed as a Postdoctoral Fellow with the SafetyNet Group, in Matt White’s Laboratory for Exercise and Environmental Physiology (LEEP). He is participating in the Human Cold Working Conditions (CWC) group (http://www.safetynet.mun.ca/projects1.htm) Oliver, who studied at Loughborough, brings an expertise in the area of manual function and cold injury for workers in cold environments. This will help build new directions in the CWC project.

A note of congratulation is also due to Matt White who has a feature article describing his work in the January 22nd, 2004 issue of SFU Week, and his research proposals were extensively reported in The Vancouver Sun on January 21st, 2003 and in The Province on February 1st, 2004.

Julia Christensen is on a Co-op work term in Matt White’s Laboratory for Exercise and Environmental Physiology this semester. She is working on a project to contribute to the development of re-breathing devices for underwater escape from submerged helicopters. http://www.sfu.ca/mediapr/sfu_news_archives_2003/sfunews012_20415.htm

Bill Ross, Professor Emeritus, reports that in March 2004 he will be a feature speaker at the NW American College of Sports Medicine (ACSM) Meeting in Seattle. He will also have a Rosscraft/TeP exhibition booth at that meeting.

Bill Ross reports that the AEQuotes 1 and Link Websites.doc with Rosscraft sites and others will be included in an addendum in Vol 1 of a three-volume series of Animated Essays for Human Biologists and Health Professionals (in PPT and HTML formats in English, Spanish, Portuguese and Japanese, plus tutorials and addenda).

Bill Ross also notes that his new book (named above), a DVD movie, new segmentor, new small bone caliper (Tommy Three), new features on Both Campbell calipers, Gauicho Pro skinfold caliper by Rosscraft SRL, a new high end digital skinfold caliper, and a new front end loader (TemEasy) by Pat Wong, will all debut at the June 2-5, 2004 ACSM meeting in Indianapolis. Rosscraft will have an exhibit there for the 7th time. A General Meeting of Rosscraft and TeP Associates is also planned at that time. Check out www.rosscraftsrl.com


AWARDS CEREMONY

The SFU Awards Ceremony was held on January 27th, 2004. Congratulations to the following Kinesiology faculty, graduate and undergraduate students who were recipients.

2003 Awards and Recipients (Kinesiology):

Faculty:
Government of Canada Research Chairs: GLEN TIBBITS
Michael Smith Foundation for Health Research Scholar Award: SCOTT LEAR

Graduate Students:
Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate Scholarship: JENNIFER LITT, N. PETER REEVES

C.D. Nelson Memorial Graduate Scholarship: ANDREW LIANG, HARNEET SINGH

Undergraduate Students:
Simon Fraser Alumni Leadership Entrance Scholarship: HILARY L. NELSON

Gordon M. Shrum Entrance Scholarship: ERIC DU RUO CAI

Canada Millennium Excellence Award: ERIC DU RUO CAI, HILARY L. NELSON

Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award: GINA M. NALEWAJEK, ERIN N. SLOAN, JENNIFER SOLOMON

PUBLICATIONS

Canadian Interuniversity Sport (CSI) Outstanding Football Lineman: IBRAHIM KHAN

**SEMINAR**

You are invited to a Seminar by

**DR. ROGER N. LEMON**
Director, Institute of Neurology
University College, London

**Title:** “Synchrony in the motor system and control of skilled hand movements.”

**Date:** Tues Feb 17th, 2004
**Time:** 11:30 am to 12:30 pm
**Place:** ASB 9705

**KINES CO-OP CORNER**

We recently heard from two of our Kinesiology Co-op students working in California and Michigan, AIDEN WICKEY and JIM BOWIE. Both are senior Kinesiology Co-op students. This will be Aiden’s 4th and 5th co-op work term and Jim’s 3rd and 4th co-op work term.

**AIDEN WICKEY & JIM BOWIE:**
"For the Spring and Summer semesters of 2004 we have the honor of doing an 8-month Co-op workterm at Humantech, Inc. Humantech is a human performance consulting firm specializing in workplace ergonomics and it is based in Ann Arbor, Michigan. However, we are based in the West Coast office in Irvine, California. In March 2004, when the West Coast office closes, we will move to the Ann Arbor office for the duration of our co-op term (until August 2004).

“Working at Humantech has given us exposure to ergonomics projects in unique settings such as call centres, factories, and hospitals. As well we have the benefit of learning from many experienced mentors. Humantech is the largest consulting team of Board Certified Professional Ergonomists in North America.

"The skills training we have received includes at data collection worksites, data analysis, research methods, and report writing.

"Living in California offers a lot of activities to do day and night. There are numerous attractions such as beaches, theme parks, TV show tapings, and cheap hockey games ($15 tickets) all close by. The warm weather allows for outdoor activities such as surfing, hiking and rollerblading all year round. Despite the high cost of living and crazy traffic, we recommend for anyone to experience a term of working and living in Southern California."

Another senior student, TINA CAREY, who will be convocating this October, is working locally in Abbotsford at Glenn Mountain Orthopaedic & Sports Physiotherapy, as a Student Kinesiologist alongside four physiotherapists and under the direct supervision of Kim Singbeil, a Registered Kinesiologist and University of Alberta graduate. Kim and Robyn (one of the physiotherapists) are co-owners of the clinic.

**TINA CAREY:**
"Everything at Glenn Mountain is going great! Kim is an awesome person to work with and to learn from. I’m starting to get really comfortable in the setting and I’m learning tons. Right now I’m instructing clients on stretches, abdominal and posture exercises as well as weight training exercises and work simulations. Most of the clients are great to work with, but there are others that are a little more difficult. It is good to work on my communication skills with a variety of people with different needs. Soon I will start to perform some functional tests. It’s a great placement and I’m enjoying myself."

**ACE SYMPOSIUM**

The Association for Canadian Ergonomists (ACE) held a Student Symposium at the BCIT campus on January 27th, 2004. DARLEEN HEISLER, and co-op students ZALEENA JANMOHAMED and ALECIA KOZBIAL hosted the event. Zaleena is currently enrolled in UBC’s Occupational Therapy program and Alecia is looking for a 4th and final co-op work term. Both Zaleena and Alecia are the ACE Student Representatives. The event consisted of networking opportunities, poster displays and formal presentations.

**SFU Presentations**

**Title:** Cell Phone Messaging System: Evaluation and Recommendation for Redesign

**Student:** ALECIA KOZBIAL (ACE Student Rep for SFU)

**Project Summary:**
The purpose of this project was to evaluate the prototype design of a cell phone messaging website and to make recommendations to improve the site based on the results from usability testing.

**Poster displays**

**Title:** Redesign of a Fuel Pump Promoting Greater Independence and Safety for the Elder User

**Student:** FABIO FELDMAN

**Project Summary:**
The purpose of this project was to analyze the difficulties seniors have using fuel pumps, and utilize this information for the redesign of the device. To accomplish this task, questionnaires were presented to aged individuals, an aged individual was observed utilizing a fuel pump. Data in the form of literature and research were analyzed, and a closer examination of the fuel pump itself occurred.
Title: Video Analysis of an Endoscopic Bimanual Task with Changes in Camera Rotation and Display Location

Student: BIN ZHENG
(Other Authors: FARAH VERJEE, CHRISTINE L. MACKENZIE.)

Project Summary:
This study investigated the effects of camera rotation (0 degrees vs. 45 degrees) and display location (vertical vs. superimposed) on bimanual performance of an endoscopic cutting task. We found camera rotation degraded task performance; whereas a superimposed display would alleviate these effects of camera rotation on task performance, compared to the vertical image display. Implications were addressed for optimal endoscopic procedures and layout designs.

Title: Gerontechnology – Redesign of a Digital Camera for the Elderly

Student: KIRSTEN WILLMS
(Other authors: ALECIA KOZBIAL, BRYAN CERVANTES and AIDEN WICKEY.)

Project Summary:
This group project was undertaken after identifying the lack of senior-centered electronic products on the market. Specifically, the digital camera was chosen as an item designed with little regard for an elderly user but having an increasing number of possible users. User profiling was undertaken to describe current elderly citizens (65-74 years of age) and questionnaires were administered to identify current opinions about cameras in general. The results from the questionnaires were then used in creating and analyzing tasks for the user to perform during usability testing. A prototype was developed based on a current digital camera on the market. Outcomes of the task analyses and usability testing were analyzed to evaluate the prototype and determine issues with the camera design. A set of recommendations were produced to resolve these issues.

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