Health Telematics Unit

Global e-Health Research and Training Program

Academic Annual Report 2003

Researching Today's Issues – Training Tomorrow's Leaders

FACULTY OF | UNIVERSITY OF
MEDICINE | CALGARY

TABLE OF CONTENTS

Message from the Head

Program Mandate

People

Partners & Collaborators

Research and Innovation Activities
- Research Domains
- Current Research Projects
- Publications and Presentations
- Research Funding

Global Outreach

Training Program

Financial Report

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MESSAGE FROM THE HEAD

The Health Telematics Unit (HTU) has been key to the development of telehealth in the province, which included four parallel phases of development. It has been key in terms of raising money, making it happen, and contributing to the intellectual knowledge of telehealth/e-health.

Phase I looked at health reform and restructuring, as telehealth rolled into health regions, and the need to include e-health technologies into the delivery of care. Today, the Provincial Telehealth Program has rolled out with more than 235 sites, with every health region now using e-health technologies, and a Provincial Telehealth Steering Committee in place. Phase II, the operational phase, helped to get the Calgary Health Region up and running. Phase III was the development of an academic telehealth program, including the best telehealth researchers in the country, and a training program (Masters, PhD). A business plan has been developed for the academic arm, and will be revisited as the Program evolves. The funding for the Program was initially provided through the Partners in Health campaign. As well, Shaw Communications and the Canada Foundation for Innovation provided needed infrastructure money to build the state-of-the-art HTU facility.

The current phase, Phase IV, the service arm, includes the private sector showcase and incubator space. The HTU will be holding information forums with the government, Calgary Health Region, Faculty, and private sector to gather their input on the Business Lines and core service competencies of the Program.

The HTU has reached the point where further growth and sustainability require a higher status and level of recognition within the University of Calgary, Faculty of Medicine. In order to facilitate this, the HTU has initiated the process to become recognized as the Global Centre for e-Health Research and Training.

Full Time Faculty	*3*
Research Assoc.	*1*
Research Assistants	*3 to 5*
Support Staff	*2*
Research Funding	*$1,161,990*
Publications/Presentations (not including non-peer reviewed and in press)	*38*
PhD/Masters Students	*5*
Sabbatical Fellow	*1*
Exchange Student/Summer Student	*2*

This Report represents activities from January 1 to December 31, 2003.

PROGRAM MANDATE

- To provide sound evidence, through high quality research, about the utility, effectiveness, and sustainability of telehealth applications in improving health, health care, and health systems.
- To create and train a critical mass of world-class investigators to conduct applied, partnered telehealth studies.
- To disseminate related knowledge and foster telehealth research in provincial, national and international jurisdictions, through leadership, partnership and consultation.
- To provide a state-of-the art collaboratory for the use of other researchers and groups.

PEOPLE

Detailed Description of FTEs for each position:		
RESOURCE	2002	2003
Head	1	1
Researchers (75% protected)	2	2
Telehealth Program Coordinator	1	1
Program Secretary and Researchers Secretary	1	1
Program Head Secretary	1	
Sabbatical Fellows / Apprenticeships	1	1
Post-doctoral Fellows	1	
Research Associates	1	1
Graduate Students	4	5
Research Assistants (Part-time)	3 to 5	3 to 5
Summer Research Students	1	1
Exchange Student	1	1

Current Members of the Telehealth Program

Head
Penny Jennett   Health Researcher, Educator

Researchers: 75% protected time
Marilynne Hebert   Evaluation, e-Learning
Richard Scott   Policy, Evaluation, Outcome Measures, Globalization

Other Researchers
Jeff Caird   Psychology; Human Interfaces
Ann Casebeer   Health Policy
Trevor Cradduck   Alberta Research Council
Paul Dick   Policy and Social Benefits; Outcomes
Steven Edworthy   Chronic Diseases
Rod Elford   Family Physician
Roger Girard   Information Communications Technology
David Hailey   Health Economics
Francis Lau   Technology; Social Benefits
Tom Noseworthy   Policy and Social Benefits
Tom Rosenal   Critical Care; Informatics
Peter Sargious   Internist
David Strong   Aboriginal Telehealth
John Toews   Continuing Learning
Doug Urness   Telepsychiatry
Mo Watanabe   Professor Emeritus
Janet Wayne   Nursing
John Parboosingh   Workplace Learning; Communities of Practice
Jose Pereira   Palliative Care Distance Learning
Jaci Lyndon   Palliative Care Distance Learning

Affiliates
Mike Chiasson   Information Systems
Catherine Keenan   Telehealth Program Manager, CHR
Cheri Nijssen-Jordan   Telehealth Director, CHR

Graduate Students

Basia Siedlecki (PhD)
Andora Jackson (PhD)
Maria Palacios (Masters)
Pin Cai (Masters)
Shariq Khoja (Masters)

Sabbatical

Elizabeth Henderson

Research Associates/Assistants

Maryann Yeo	Research Associate
Bonnie Rush	Research Assistant
Heidi Brandstadt	Research Assistant
JJ Jansen	Project Manager

Support and Technical Staff

Judy Hunter	Telehealth Program Coordinator
Maryann Fraser	Program Secretary
Stephanie Yeo	Summer Student
Tyler Murphy	Technical Support
Neal Heaton	Technical Support
Mike Reed	Technical Support

PARTNERS AND COLLABORATORS

ACADEMIC

BCIT
Dalhousie University
Laurentian University
McGill University
NETERA
Sapporo Medical University, Japan

University of Alberta
University of British Columbia
University of Calgary
University of Missouri, USA
University of Northern B.C.
University of Ottawa Heart Institute

University of Queensland, Australia
University of Sherbrooke
University of Toronto
University of Victoria
University of Waterloo

PRIVATE

Alberta Research Council
ALLECTRA
CAREO
Empirica GmbH
March Networks
Rights Market Inc.
Shirwin Systems
Systems Farm
We Care Home Health Services

PROFESSIONAL

Canadian Society of Telehealth
COACH
Royal College of Physicians & Surgeons
Nurses Association of Quebec

PUBLIC

Advisory Council on Rural Health
Atlantic Health Sciences Corp.
Calgary Health Region
CANARIE Inc.
EU-Commission
First Nations & Inuit Health Branch
German Government
Health Canada
Industry Canada

RESEARCH AND INNOVATION

Research Domains

- e-Health Policy and Social Benefits
- e-Health Impact and Outcomes
- e-Health Technology Applications
- e-Health Technology Innovation

Current Research Projects

E-Health Policy and Social Benefits

- Telemental Health Services to Rural British Columbia (Canadian Health Infostructure Partnership Fund)
- Social and Economic Benefits of Telehealth (Alberta Heritage Foundation for Medical Research)
- Telehealth in Rural Remote and Northern Communities (Office of Rural Health)
- A Telesante: En Strategie for Soutenir la Pratique des Professionnels Del la Sante (Canadian Health Services Research Foundation)
- National Telehealth Initiatives Guidelines: Environmental Scan (Richard Ivey Foundation)
- Telehealth and e-Health Policy Considerations for Alberta (Alberta Health and Wellness)
- Costing Framework for Telehealth
- Women's Participation in Domestic Violence Health Policy

E-Health Impact and Outcomes

- A Canadian Consensus Approach to Identification and Definition of Outcome Indicators for Evaluation of Telehealth
- The Future Impact of Telehealth on the Practice and Professions of Laboratory Medicine (Calgary Laboratory Services)
- Yukon Telehealth Evaluation Project (Health Canada - CHIPP)
- Alberta SuperNet Research Alliance – Health Component (SSHRC – INE)
- Inventory of Telehealth Evaluation Activities in Alberta (Alberta Health and Wellness)
- Stakeholder Readiness for Telehomecare Diabetic Support
- CHR Telehealth Project Evaluations

E-Health Technology Applications

- Video-visits in Palliative Home-care (CIHR)

E-Health Technology Innovation

- Policy and Peer Permission System Development Project

E-Learning Focus

- Building Capacity in Health Informatics for Professionals in Health Settings
- A Collaborative Health Informatics Research Training Program (CIHR Strategic Training Program)
- Pan Canadian Health Informatics Collaboratory (CANARIE)

Publications

Book Chapters and Contributions: 4
Peer-reviewed Publications: 6
Abstracts: 28
TOTAL: 38 Publications

Other publications: 19 non-peer reviewed publications.

Presentations:
National Presentations: 42 (13 invited)
International Presentations: 19 (7 invited)
Local Presentations: 17
TOTAL: 78 Presentations

Research Funding

Summary of Research Funding and Service Contract Sources

International $140,323
National $893,680
Provincial/Local $87,687
Service Contracts $40,300
Total **$1,161,990**

Research Funding Details	Amount
International	
EU-Canada Initiative	140,323
National	
CANARIE	12,000
Health Canada	5,000
Industry Canada	5,000
SSHRC	19,500
CHSRF	7500
Richard Ivey Foundation	80,000
Health Canada – OHIH	5,000
Health Canada OHIH – KDE	35,000
CIHR	5,000
CANARIE	88,000
University of British Columbia	28,000
CIHR	5,000
CIHR	283,384
CIHR	74,695
CANARIE	33,914
Office of Learning Technologies / NPLT	23,187
CIHR	113,500
Richard Ivey Foundation	70,000
Provincial/Local	
Calgary Laboratory Services	8,732
Alberta Heritage Foundation for Medical Research	5,000
Alberta Cancer Board Palliative Care Research Initiative	5,000
Community Initiatives Program	68,955
Research Service Contracts	
Calgary Health Region	18,000
Alberta Wellnet	11,000
Alberta Health and Wellness	11,300
TOTAL	**$1,161,990**

GLOBAL OUTREACH

- Use of Telemedicine Videoconferencing for Educational and Research Exchanges (Japan)
- EU-Canada e-Health Initiative
- Germany-Canada e-Homecare Project
- International Visitors:
    - UK Journalists, December 8, 2003
    - Contingency from Taiwan - Ms. Bonita Hung, Assistant Researcher and Dr. Juang, September 10th, 2003, National Center for High-Performance Computing, National Science Council, Taiwan, (http://www.nchc.gov.tw)
    - Delegation from Jalisco, Mexico (Sister State to Alberta), August 18, 2003, Delegation of IT Industry, Academic and Government representatives,
    - Doctors Alvaro Margolis and Fernando Alvarino, Universidad de la Republica of Uruguay, June 17, 2003
    - Dr. Richard Wootton , Australia, June 2003
    - Dr. Dat Tran, Oregon Health and Science University, Portland Oregon, May 12, 2003
    - Mr. Eric Hayes, EU Ambassador to Canada, May 6, 2003
    - Dr. Keith Wicliffe-Jones (UK visitors), April 17, 2003
    - Dr. Thomas Strothotte, Professor, Department of Simulation and Graphics, Faculty of Computer Science, Otto-von-Guericke University, Magdeburg, Germany, April 16, 2003
    - Bjørn Veseth, March 21, 2003, Journalist representing a tele-magazine, Norway
    - Research Seminar, March 10, 2003, Presented jointly by The University of Calgary & Sapporo Medical University
    - Dr. Colin Carati, Associate Professor and Assistant Dean, Microcirculation and Lymphology Laboratory, Faculty of Health Sciences, Flinders University, Adelaide, Australia, February 4, 2003
    - Prof. Dr, Ing. Yong-Hoon Kim, Department of Mechatronics, Head of Sensor Systems Laboratory (Millimeter Wave technology), Kwangju, Korea. January 3, 2003
    - Anne Galloway, Project Manager, Connected Critical Care, NSW Telehealth Initiative, Department of Health, New South Wales Australia, May 13, 2003

TRAINING PROGRAM

- 2 PhD Students: Andora Jackson and Basia Siedlecki
- 3 MSc Students: Mone Palacios, Pin Cai, Shariq Khoja
- Fourth Annual National Telehealth Research Summer Institute:
- Online Graduate Courses for Professionals in Health Settings: 1) Introduction to Telehealth and Telehealth Research; 2) Evaluation in e-Health; 3)
- Research Exchange – China

HTU Seminar Series

Date:	Scholar & Affiliation:	Presentation Topic:
March 20th	**Raymond W. Pong, Ph.D.** Research Director Centre for Rural and Northern Health Research, Laurentian University **John Hogenbirk, M.Sc**. Senior Researcher Centre for Rural and Northern Health Research, Laurentian University	"Assessing Teletriage in Northern Ontario"
May 7th	**Dr. Arto Ohinmaa** Associate Professor Health Policy and Management Program Department of Public Health Sciences University of Alberta	"Review of Recent Studies on Assessment of Telemedicine: Study Quality and Economic Quality of Studies"
May 12th	**Dat Tran, MD** Division of Medical Informatics and Outcomes Research Oregon Health & Science University	"Applying Task Analysis to Better Support Bioinformatics Tasks"
May 15th	**Dr. Maria Palacios** Health Telematics Unit Faculty of Medicine, U of C **Dr. Pin Cai** Health Telematics Unit Faculty of Medicine, U of C	"e-Health Technology and Rural Communities – Who Could Benefit Most?"
September 18th	**Xiaomin Wang** Visiting Scholar from China Health Telematics Unit Faculty of Medicine, U of C	"China and e-Health"
October 30th	**Dr. Richard E. Scott** Associate Professor Global e-Health Research and Training (GeHRT) Program Health Telematics Unit Faculty of Medicine, U of C	"Environment e-Health – Impacting Your Project and Program!"
November 13th	**Sharon Iversen, RN B.Ed CDE MCE**	"A Quick Glance at Reflective Inquiry in Post Secondary Education: Lessons Learned at the Teaching Reflections Summer Institute, August 2003"
November 27th	**Dr. Douglas Urness** CHS Clinical Assistant Professor	"The Defined Daily Dosage System of Drug Utilisation Monitoring"
December 11th	**Dr. Rod Elford** Clinical Assistant Professor, U of C; Director – Digital Telehealth Inc.; Staff Physician – 8th & 8th Health Centre	"The Nunavut Telehealth Network'

Program Financial Report

In conjunction with applying to become a Centre, the Health Telematics Unit, Telehealth and e-Health Program is updating the Academic/Training Program Business Plan to include a Service Arm Component, as well as a revenue generation plan. This is expected to be in place by 2005.

The Program Financial Report is prepared using the University fiscal year end of March 31. The Report details operational revenue and expenses and is available upon request.

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