

CCHSA Editorial

The past year was a time of change for the Canadian Centre for Health and Safety in Agriculture (CCHSA), with Dr. James Dosman retiring as Director after several decades of leading our organization. In November 2007 it was my great honour to assume the Directorship of CCHSA, Canada's leading agricultural and rural health and safety research, knowledge translation and service delivery organization.

Our Agricultural Health and Safety Network, to which 172 of Saskatchewan's 298 rural municipalities belong as members, celebrated its 20th Anniversary in 2008! We look forward to the next 20 years of service and knowledge translation from The Network, which is under the very able leadership of Ms. Kendra Ulmer, RN, BSN. The many programs and services provided by The Network are outlined in this newsletter. I would like to extend my personal congratulations to Ms. Kirsten Theaker, from the Rural Municipality of Chesterfield, who was the winner of this year's 90th Saskatchewan Association of Rural Municipalities (SARM) Anniversary scholarship.

In 2007 Dr. Dosman was named the Stueland Scholar of the Marshfield Clinic for Farm Medicine, in Marshfield, Wisconsin (USA), in recognition of his contributions to agricultural medicine. Congratulations again, Dr. Dosman.



Our Mission

To conduct and stimulate research, education and health promotion programs aimed at enhancing the health and well-being of agricultural, rural and remote populations.

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Finally, it is with much sadness that we grieve the passing in February 2008 of Dr. Helen McDuffie, a Professor Emeritus at the University of Saskatchewan. Dr. McDuffie had retired from CCHSA in 2006, after a long and illustrious career with us. Her wisdom will be sorely missed within CCHSA.

Sincerely, John R. Gordon, PhD, Director, Canadian Centre for Health and Safety in Agriculture

Services

The Agricultural Health and Safety Network (The Network) began in 1988, as a joint venture between the Centre for Agriculture Medicine, Saskatchewan Association of Rural Municipalities and six Rural Municipalities (RMs). As of 2008, 172 RMs, which includes 27,400 farm families, are Network members. The Network continues to benefit from the input of the Steering Committee comprised of six RM councilors, each representing one of the six divisions of SARM.

Network Initiatives

20TH ANNIVERSARY OF THE AGRICULTURAL HEALTH AND SAFETY NETWORK

The year 2008 marks the 20th Anniversary of the Network. At the SARM spring convention, The Network recognized SARM and participating rural municipalities for their partnership and support in achieving this milestone. Renewed recruitment efforts began in the spring of 2008, with support from the College of Medicine at the University of Saskatchewan, to help reach the goal of 200 RM's for the 20th year of service.

STRESS ON THE FARM: BUILDING MOMENTUM

A Network initiative which began in 2006 to enable farm families to better understand stress, its impact, and learn how to balance stress when farming in difficult times included *Sleepless in Saskatchewan*, *Difficult Times: Stress on the Farm, Farm Stress Inventory, Saskatchewan Farm Injury Control Summit VIII*, and an annual spring package.

Sleepless in Saskatchewan workshops continue to be delivered over a vast geographical area with the support of the Farm Stress Line, Network RMs and corporate organizations.

Jon Shearer, a sleep specialist from Algonquin College in Ottawa, conducts the *Sleepless in Saskatchewan* workshops. Throughout the tour Jon captivates, entertains and informs participants about the dynamics of sleep, reducing stress and fatigue, managing shift work and extended hours and what easy, inexpensive tips that farmers can use to make sleep work more effectively for them, as well as, identify the links between stress, fatigue and the risk of injury.



In December 2007 the 2007-2008 tour started up with a workshop in Saskatoon for people who work with farmers, their families and industrial workers. The Network delivered thirteen *Sleepless in Saskatchewan* workshops in rural Saskatchewan. In addition to these presentations, corporate workshops were delivered to Husky Oil and Ipsco. In 2007 the *Sleepless in Saskatchewan* tour reached approximately 2,000 Saskatchewan farm families.

The *Sleepless in Saskatchewan* tour was organized by the Network and the Farm Stress Unit with sponsorship from SARM, Saskatchewan Agriculture and Food, the Canadian Agricultural Safety Association and Agriculture and Agri-Food Canada in 2006.

CN SAFETY PATROL PROGRAM – A NEW PARTNERSHIP BETWEEN CN, AGRIBITION & THE NETWORK AT THE CANADIAN WESTERN AGRIBITION 2007.



The University of Saskatchewan, through the Network, teamed up with CN and Agribition to ensure the safety of everyone who attended the 2007 Canadian Western Agribition. A total of 15 University of Saskatchewan students were recruited and travelled to Regina for the event. They were easily recognized in red CN coveralls and black U of S Network hats. The students' task was to monitor traffic control where livestock and people met at key intersections in the barns. The Canadian Western Agribition committee, CN and the Network found the students' participation to be a success and are looking forward to future partnerships.

MANAGE MORE THAN JUST YOUR BACK!

By hosting and supporting the launching of the 2008 Canadian Agricultural Safety Week (CASW) campaign for the western provinces, the Network demonstrated the leadership taken by various safety organizations within the province of Saskatchewan. "Manage more than just your back!", with a focus on sprains, strains and falls was the theme for 2008

Statistics from Canadian Agriculture Injury Surveillance Program (CAISP) show that sprains and strains are Canada's leading type of farm-related injuries. The goal of this campaign was to encourage farmers to think through their work and find ways to reduce the risks for these kind of farm-related injuries.

The CASW campaign was delivered by the Canadian Federation of Agriculture (CFA) and the Canadian Agricultural Safety Association (CASA) in partnership with Agriculture and Agri-Food Canada (AAFC).

RESPIRATORY HEALTH AND HEARING CONSERVATION PROGRAM FOR FARMERS

The Respiratory Health Program and Hearing Screening are two programs which are delivered by the Network's professionally-trained staff, free of charge, to farmers and their families in their local community. At the same time as these clinics increase awareness of health and safety risks associated with respiratory hazards on the farm and exposure to harmful noise. They also develop methods to reduce farm exposures and demonstrate the hearing protection that works best for each individual. Respiratory clinics were held in the RMs of Bratt's Lake #129, Kingsley #124, Kindersley #290, Morris #312; and hearing clinics in the RMs of Kingsley #124 and Kindersley #290.

SHARING AND SPREADING THE NEWS

The "Saskatchewan Agricultural Health and Safety Communication Day" was held on December 5th, 2007 by the Network in conjunction with the Saskatchewan Alliance for Safety in Health in Agriculture (SASHA). Aiming

at organizations and individuals involved in agricultural health and safety knowledge translation and training in Saskatchewan, this meeting provided opportunity for agencies and industry to meet to communicate, collaborate and bolster the farm safety message and training in Saskatchewan. It brought together Saskatchewan Agricultural Health and Safety



organizations with an interest in reducing the risk of illness, injury and death while farming. This communication day was a contributing step in developing a provincial strategy to prevent agricultural injuries and illnesses in Saskatchewan.

Support from: Canadian Agriculture Safety Association (CASA).

90TH SASKATCHEWAN ASSOCIATION OF RURAL MUNICIPALITIES (SARM) SCHOLARSHIP

The 90th SARM Aniversary scholarship, initiated in 1995 with SARM and through continued support of the Founding Chairs Program, is awarded each year to a grade 12 student for the best essay discussing farm safety. This \$1000 scholarship is to be applied to the winner's post-secondary education tuition. This year's winner



was **Kirsten Theaker** from the RM of Chesterfield # 261. Kirsten is planning to enter the College of Agriculture in the area of animal sciences at the University of Saskatchewan in the fall of 2008.

Resources

Network News spring and fall editions continues to be delivered to active farm families in the Network. *The Rural Councilor* still hosts a column written by The Network staff. Each article focuses on farm health and safety issues. To view the *NetworkNews* please go to: aghealthandsafetynetwork. usask.ca

HEARING RESOURCE FOR FARM FAMILIES

In order to meet the needs of young and new agricultural workers, the existing hearing conservation resource has been enhanced with new content, language and design. The focus of this new resource is on agriculture production-related noise exposure and associated effects, noise-induced hearing loss, chemical-induced hearing loss and personal protective equipment. Attendees of future Network Hearing Conservation clinics will benefit from this new resource.



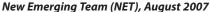
THE NETWORK WEBSITE has been reviewed, updated and new additional content made available. The site (aghealthandsafetynetwork. usask.ca) will continue to evolve this year to offer quality agricultural health and safety resources.

Research

Improving Access to Assessment and Diagnosis of Early Stage Dementia in Rural and Remote Saskatchewan

In Saskatchewan, seniors make up 22% of towns and villages, compared to 15% of the cities. Given the increasing risk of dementia with age, the large proportion of seniors in rural communities creates challenges in providing specialized services for assessment, diagnosis, and care of persons with dementia.

A research team at the University of Saskatchewan has been conducting research aimed at improving access to dementia care services in rural and remote northern communities, including the development and evaluation of a Rural and Remote Memory Clinic.





WHAT IS THE RURAL AND REMOTE MEMORY CLINIC?

The Rural and Remote Memory Clinic was launched in March 2004 and over 200 patients have been seen to date.

HOW DOES IT WORK?

A few weeks prior to attending the one-stop weekly clinic in Saskatoon all patients are seen by a nurse and neuropsychologist via Telehealth videoconferencing from the Telehealth site closest to the patient's home. At the full day clinic in Saskatoon, patients undergo an interdisciplinary assessment by a neurologist, neuropsychology team, physical therapist, geriatrician, and neuroradiologist (CT Scan).

WHAT HAPPENS AFTER THE PATIENT HAS BEEN ASSESSED?

At the end of the day, team members report on their assessment and discuss the diagnosis and treatment plan, which is then communicated to the patient and family before they go home. Patients are then randomly assigned to either in-person (standard care) or Telehealth for the first follow-up appointment after which they alternate modes for their 6, and 12 week, and 6 month follow-up visits. The one-year and subsequent annual assessments are conducted in person.

WHAT ARE THE ADVANTAGES FOR THE PATIENTS AND THEIR FAMILIES USING THE TELEHEALTH AND "ONE STOP CLINIC" COMPARED TO OLD METHODS?

For these patients who have attended the clinic to date, the average distance saved by attending a Telehealth appointment, compared to an in-person appointment in Saskatoon, is 440 kms per round trip.

A number of evaluation strategies are used to assess satisfaction with the clinic model, including survey questionnaires and telephone interviews. Our analyses show that patients and caregivers report similar satisfaction levels for Telehealth and in-person appointments, but convenience ratings are significantly higher for Telehealth appointments. Reduced travel cost, time, and stress are reported in relation to use of Telehealth.

Research funded by: Canadian Institutes of Health Research, University of Saskatchewan, Saskatchewan Health Research Foundation, and the Alzheimer Society of Saskatchewan. Telehealth Saskatchewan provides personnel and technical support.

Translating Research in Elder Care (TREC)

The vast majority of people entering long-term care facilities today have relatively high needs and more complex care requirements compared to a few decades ago. The use of knowledge or research ("knowledge translation") among providers in long-term care settings is an important way to improve the quality of care delivered to residents.

WHAT IS THE TREC PROGRAM?

TREC is composed of two distinct projects. The first stage of data collection (Project 1) will begin in the summer 2008 and will involve surveying a variety of health care providers and conducting interviews with Special Care Aides at each facility enrolled in the study. Fall 2008 will see the start of Project 2, which involves in–depth case studies at selected of facilities.

WHAT ARE THE GOALS OF THIS PROJECT AND WHY IT'S IMPORTANT TO INCLUDE RURAL NURSING HOMES IN THE STUDY?

The goal of the research is to understand how the context of the nursing home work environment impacts both knowledge translation among care providers and care outcomes for residents of the nursing homes.

Translating Research in Elder Care (TREC) Saskatchewan Team



WHY IS THIS PROJECT IMPORTANT FOR SASKATCHEWAN?

A large proportion of Saskatchewan's nursing homes are located in rural areas and Saskatchewan has the largest proportion of seniors in Canada (15% of total provincial population in 2006). Nearly half (47%) of seniors in the province currently live in a rural area. Statistics Canada estimates that by 2011, over half the population of long-term care residents will be over the age of 85.

HOW AND WHY DID THIS PROJECT COME TO FRUITION?

Research by the Canadian Study of Health and Aging found that 35% of people over the age of 85 have dementia. Past evidence indicates that better working environments are linked to more positive health outcomes. Researchers from the University of Saskatchewan have teamed up with colleagues from the Universities of Alberta and Manitoba and embarked on the five-year TREC program.

WHO ARE THE PRINCIPAL INVESTIGATOR AND THE COLLABORATORS INVOLVED WITH THIS RESEARCH PROJECT?

The principal investigator of the study is Carole Estabrooks of the College of Nursing, University of Alberta. The study will involve 36 long-term care facilities in Alberta, Saskatchewan and Manitoba. The research team here in Saskatchewan will be visiting seven urban and five rural nursing homes. CCHSA's faculty member Dr. D. Morgan is the leader of the Saskatchewan component of the TREC program.

TREC is funded for five years (2007 to 2012) by the Canadian Institutes of Health Research. For more information online, visit www.trecresearch.ca

CCHSA National Network

WHAT'S THE OBJECTIVE OF THE CIHR CENTRE FOR RESEARCH DEVELOPMENT (CRD) PROGRAM: CANADIAN CENTRE FOR HEALTH AND SAFETY IN AGRICULTURE?

The overall objective of this Centre is to address the health of people as a result of working and living in the agricultural rural ecosystem. Housed at the University of Saskatchewan, this Program is one of seven CIHR centres funded by the National Centre for Research Development, Institute of Population and Public Health (IPPH). The CCHSA CRD is a national network of approximately 65 scientists from 10 universities across Canada.

WHAT ARE THE ONGOING ACTIVITIES OF THIS CENTRE?

An ongoing activity is the provision of funding for the Junior and Senior Faculty Release Time Support Program which is used for salary replacement for teaching duties in order to increase faculty members' time for research. In 2007, two faculty members were awarded Release Time: Dr. Donna Rennie from the University of Saskatchewan and Dr. Rob Jamieson from Dalhousie University, Nova Scotia.

The CCHSA National Network also provides funding through the Pilot Project Program, which is intended to address research gaps in the theme areas, encourage new collaborations among researchers, and lead to the development of research proposals for submission to national granting agencies.

The Canadian Centre for Health and Safety in Agriculture Program (CCHSA) National Network is funded by the Canadian Institutes of Health Research (CIHR) Centres for Research Development (CRD) Institute for Population and Public Health (IPPH), "Understanding and Addressing the Impacts of Physical and Social Environments on Health" Strategic Initiative. This program is also supported by Quebec's Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST).

Saskatchewan Farm Injury Surveillance Project

This ongoing surveillance program has followed fatal injuries for the period 1900-2007 and hospitalized farm injuries for the period 1990 – 2004. We are pleased to report that the project has a new partner, the Occupational Health and Safety Division (OH&S) of the Ministry of Education, Employment and Labor, Government of Saskatchewan. The O.H & S. Division has provided financial and in-kind support. The most recent publication of the results for the surveillance is available in the *Comprehensive Injury Surveillance Report, 1995-2005* Chapter 13 at the Canadian Agricultural Injury Surveillance Program website (http://www.caisp.ca/).

Canadian Institutes of Health Research (CIHR) National Training Program: Public Health and the Agricultural Rural Ecosystem (PHARE)

The CIHR Student Training Initiative in Health Research (STIHR) program has an increasing number of applications each year from highly qualified candidates and has been able to attract international trainees as well. The trainees come from 10 participant Universities across Canada that includes 39 different laboratories. The disciplines represented include: Micro/Cell Biology, Medicine/Vet Medicine, Nursing/Psychology, Kinesiology, Toxicology, Agriculture/Ag Engineering, Biostatistics, Epidemiology and Occupational/Environmental Health.

THE FOLLOWING TRAINING SCHOLARSHIPS WERE AWARDED IN 2007–2008:

Post-doctoral Fellowship:

François McNicoll, Université Laval and Chandima Karunanayake, University of Saskatchewan (U of S).

PhD:

Hope Bilinski, U of S; Leah Boutilier, Dalhousie University; Chandrashekhar Charavaryamath, U of S; Tara-Leigh Fleming, U of S; Julie Kosteniuk, U of S; Valérie Létourneau, Université Laval; Sarah Oosman, U of S; David Schneberger, U of S; Mikiko Terashima, Dalhousie University; and Silvia Vilches, University of British Columbia

Masters:

Lewis Baarda, University of Lethbridge; Annick Demanche, Université Laval; Geneviève Filion, Université Laval; Lee Hynes, Dalhousie University; and Afshin Vafaei, Queen's University.

Student's Research

CHANDIMA KARUNANAYAKE, PhD, PHARE trainee working as Post Doctoral Fellow under the supervision of Dr. Punam Pahwa and Dr. Donna Rennie. **Academic background:** Bachelor's in Statistics, Masters in Applied Statistics and Biostatistics, and PhD. in Applied Statistics.

CLAIRE MCGUIGAN, MSc. **Thesis title:** Nitrates, gene expression, and cytotoxicity in human cell lines. Defended on July 23rd, 2007.

Capacity Building

What is the Founding Chairs Program?

The Founding Chairs Program was established in 1989 to create an Endowment Fund for the Centre. Since its inception, almost \$5 million has been raised through the generosity of Corporations and Individuals. A portion of the funds raised have been placed in an Enhancement Fund to provide funds for special research projects, scholarships for graduate students and knowledge translation.

HOW IS IT MANAGED?

It is directed by a Management Committee comprised of 3 members who are Contributors and 3 members appointed from the University of Saskatchewan. Current members include *Glen Tully, President, Federated Co-operatives Inc, Chairperson; Terry Baker, Chair of Board of Directors, Viterra; Lyndon Carlson, Vice-President, Marketing and Product Development, Farm Credit Canada, Dr. John Gordon, Director, Canadian Centre for Health and Safety in Agriculture, Dr. William Albritton, Dean, College of Medicine; and Matt Webster, Trust Advisory Services, University of Saskatchewan.*

This year, in remembrance of our longtime faculty member, Dr. Helen McDuffie, we allocated funds to establish the Dr. Helen Harris McDuffie Fellowship on Interdisciplinary Research in Agricultural Health. The Fellowship will be awarded on an annual basis through an application review process.

WHAT IS THE GOAL FOR THE NATIONAL INITIATIVE AND WHEN WILL IT BE LAUNCHED?

A National Initiative goal to raise an additional \$5 million will be launched in the fall of 2008. A successful campaign will ensure a secure financial base for the Canadian Centre for Health and Safety in Agriculture.

Maura Gillis-Cipywnyk, Institutional Advancement Director, coordinates the Program in consultation with the Committee and the Director.

National Stakeholder Consultation on Health and Safety Research and its Effective Knowledge Translation to the Agricultural Sector

Between April 2007 and August 2007, the CIHR funded Program: "Canadian Centre for Health and Safety in Agriculture" conducted a National Stakeholder Consultation with financial support from the Advancing Agriculture and Agri-Food Program of Agriculture and Agri-Food Canada. The project involved administering a questionnaire (289) and conducting focus groups (15) across Canada aimed at evaluating the needs, gaps, and approaches for applied research and knowledge translation in agricultural health and safety from the perspective of the stakeholders.

Results from the National Stakeholder Consultation led to the development of a Business Plan aiming at addressing research-to-practice gaps identified by Decision Makers and Agricultural Stakeholders during the consultation process. The AgriSafe R2P Program proposal has been submitted to the Minister of Agriculture and AgriFood Canada and is being promoted with Department Officials.

Participation from the Farming Community Helps Research Project at the Centre

The Saskatchewan Cohort Study of Farm Injuries has entered its third year. A team of researchers led by Dr. Pickett from Queen's University and including scientists from Monash University (Australia), Marshfield Medical Research Centre (USA) and Louise Hagel, housed at the Canadian Centre for Health and Safety in Agriculture, completed the baseline data collection in April 2007. In November 2007 the first follow-up was completed and the second one is underway.

This project, funded by the Canadian Institutes of Health Research, examines characteristics of farm operational practices as determinants of injury, as well as how physical, economic and social settings work to protect farm people from injury. Participation and interest in the study by the farming community has been excellent and counted on the co-operation of selected Rural Municipal Councils in Saskatchewan which brought to the study approximately 6,000 farms and 15,000 individuals on farms in Saskatchewan.

The study has established a website that can be accessed at: http://cchsa-ccssma.usask.ca/skfarminjuryproject/.

Published Papers in Referred Journals

Chen Y, Rennie D, Cormier Y, McDuffie H, Pahwa P, Dosman J. Reduced risk of atopic sensitization among farmers: the Humboldt study. [Journal Article. Research Support, Non-U.S. Gov't] International Archives of Allergy & Immunology, 144(4):338-42, 2007.

Chenard L, Senthilselvan A, Grover V, Kirychuk S, Lawson J, Hurst TS, Dosman J. Lung function and farm size predict healthy worker effect in swine farmers. Chest 2007, 131:245-254.

Clatney L, MacDonald H, Shah SM. Mental health care in the primary care setting: Family physicians' perspectives. Journal of the Canadian Family Physicians, 2008; 54(6):884-9.

Day L, Dosman J, Hagel L, Dostaler S, Snodgrass P, Thiessen J, Biem HJ, Marlenga BL, Koehncke N, Crowe T, Pahwa P, Pickett W.

Application of novel communication technologies to the study of farm families: a randomized controlled trial. Preventive Medicine, 2008; 46:364-9. http://dx.doi.org/10.1016/j.ypmed.2007.10.002.

Ferguson LW, Rajput ML, Muhajarine N, Shah SM, Rajput A. Clinical features at first visit and rapid disease progression in Parkinson's disease. Parkinsonism Related Disorders, 2008; 14(5):431-5.

Fernando U, Biswas D, Allan B, Attah-Poku S, Willson P, Valdivieso-Garcia A, Potter AA. Serological assessment of synthetic peptides of Campylobacter jejuni NCTC11168 FlaA protein using antibodies against multiple serotypes. Medical Microbiology and Immunology, 2008 March; 197(1):45-53. Epub 2007 August 18.

Fernando U, Biswas D, Allan B, Willson P, Potter AA. Influence of Campylobacter jejuni fliA, rpoN and flgK genes on colonization of the chicken gut. International Journal of Food Microbiology, September 15, 2007; 118(2):194-200. Epub 2007 August 1.

Forbes D, Markle-Reid M, Hawranik P, Peacock S, Kingston D, Morgan D, Henderson S, Leipert B, Jansen L. Availability and acceptability of Canadian home and community-based services: Perspectives of family caregivers of persons with dementia. Home Health Care Services Quarterly, 2008, 27(2):75-99.

Forbes D, Janzen L, Markle-Reid M, Hawranik P, Morgan D, Henderson S, Leipert B, Peacock S, Kingston D. Gender differences in use and availability of home and community-based health services for people with dementia. Canadian Journal of Nursing Research, 2008, 40(1): 38-59.

Ghosh S, Pahwa P, Rennie D, McDuffie HH. Opposing trends in the prevalence of health professional-diagnosed asthma by sex: a Canadian National Population Health Survey study. [Journal Article. Research Support, Non-U.S. Gov't] Canadian Respiratory Journal, April 2008, 15(3):146-52.

Ghosh S, Pahwa P, Rennie DC. Comparison of Design-based and Model-based methods to estimate the variance using National Population Health Survey Data (1994-2003). Model Assisted Statistics and Applications, 2008; 3(1): 33-42.

Hogan D, Bailey P, Carswell A, Clarke B, Cohen C, Forbes D, Man-Son-Hing M, Lanctôt K, Morgan D, Thorpe L. Management of mild to moderate Alzheimer's Disease and dementia. Alzheimer's and Dementia: The Journal of the Alzheimer's Association, 2007, 3:355-384.

Hossain A, McDuffie HH, Bickis MG, Pahwa P. Cross Canada Study of Pesticides and Health Researchers. Case-control study on occupational risk factors for soft-tissue sarcoma. [Journal Article. Research Support, Non-U.S. Gov't] Journal of Occupational & Environmental Medicine, December 2007, 49(12):1386-93.

Klomp H, Lawson JA, Cockcroft DW, Chan BT, Cascagnette P, Gander L, Jorgenson D. Examining asthma quality of care using a population-based approach. Canadian Medical Association Journal, 2008, 178:1013-21.

Kulig J, Andrews ME, Stewart N, Pitblado R, Bentham D, Forbes D, MacLeod M, Morgan D, Smith B, Remus G. How do registered nurses define rurality? Australian Journal of Rural Health, 2008, 16:28-32.

Lawson JA, Rennie DC, Senthilselvan A, Cockcroft DC, McDuffie HH.Occurrence of new onset wheeze in a three year follow-up of schoolchildren. Annals of Allergy Asthma and Immunology, 2007; 99:502-8.

Li Y, Gottschalk M, Esgleas M, Lacouture S, Dubreuil JD, Willson P, Harel J. Immunization with recombinant Sao protein confers protection against Streptococcus suis infection. Clinical and Vaccine Immunology, August 2007; 14(8):937-43. Epub 2007 June 13, 2007.

McDuffie HH, Quail J, Ghosh S, Pahwa P. Host factors, occupation, and testicular cancer in Saskatchewan, Canada: 1979-2002. [Journal Article. Research Support, Non-U.S. Gov't] Journal of Agricultural Safety & Health, July 2007, 13(3):247-58.

Morgan D, Crossley M, Stewart N, D'Arcy C, Forbes D, Normand S, Cammer A. Taking the hit: Focussing on caregiver "error" masks organizational-level risk factors for nursing aide assault. Qualitative Health Research, 2008, 18(3):334-346.

Patel BA, Gomis S, Dar A, Willson PJ, Babiuk LA, Potter A, Mutwiri G, Tikoo SK. Oligodeoxynucleotides containing CpG motifs (CpG-ODN) predominantly induce Th1-type immune response in neonatal chicks. Developmental and Comparative Immunology, 2008; 32(9):1041-9; Epub 2008 March 13, 2008.

Reeder BA, Chad KE, Harrison EL, Ashworth NL, Sheppard MS, Fisher KL, Bruner BG, Quinn BG, Pahwa P, Hossain MA. Saskatoon in motion: class- versus home-based exercise intervention for older adults with chronic health conditions. [Journal Article. Randomized Controlled Trial. Research Support, Non-U.S. Gov't] Journal of Physical Activity & Health, January 2008, 5(1):74-87.

Ross, AG, Vickers D, Olds GR, Shah SM, McManus DP. Katayama Fever. Lancet Infectious Diseases, 2007; 7:218-223.

Seo T, Pahwa P, McDuffie HH, Nakada N, Goto S, Ghosh S, Nakagawa K. Interactive effect of paraoxonase-1 Q192R polymorphism and smoking history on the lung function decline in grain workers. [Journal Article. Research Support, Non-U.S. Gov't] Annals of Epidemiology, April

2008, 18(4):330-4.

Seo T, Pahwa P, McDuffie HH, Shindo J, Goto S, Hashimoto M, Ghosh S, Nakagawa K. Association between paraoxonase-1 Q192R polymorphism and lung function among Saskatchewan grain handlers. [Comparative Study. Journal Article] Pharmacogenomics, August 2007, 8(8):901-8.

Shapiro C, Maenz L, Hossain A, Pahwa P, Rosenberg A. Onset to first visit intervals in childhood rheumatic diseases. [Journal Article. Research Support, Non-U.S. Gov't] Journal of Rheumatology, September 2007, 34(9):1913-7.

Technical Reports Relevant to Academic Field

Bergen A, Morgan D, Green K. Dementia care for residents in rural nursing homes: A process evaluation of the Enhancing Care Program. May 2008, Report printed at the University of Saskatchewan (42 pg).

LaBrash L, Ulmer K, Landsdall D, Koehncke N, Halliday S, de Freitas SB. What Did You Say? How to Prevent Hearing Loss. June 2007.
Agricultural Health and Safety Network, Canadian Centre for Health and Safety in Agriculture. University of Saskatchewan, Saskatoon, SK.

Morgan D, Stewart N, Crossley M, D'Arcy C, Forbes D, Normand S, Cammer A. Physical assault of special care aides: Let's take a look – A study report. Saskatoon, Saskatchewan: University of Saskatchewan, Canadian Centre for Health and Safety in Agriculture, May 2007 (12 pg).

Invited Lectures and Invited Conference Presentations

Morgan D, Kirk, A. Rural and Remote Memory Clinic. Quality and Safety Summit, Saskatoon Health Region. Invited presentation in session profiling "Local Champions" as examples of successful health teams, March 5, 2008.

Morgan D, Cammer A. Working together to address the work environment and physical assault of Special Care Aides in long-term care settings. Presentation to the Continuing Care Assistant Program Advisory Committee, SIAST, December 5, 2007.

Morgan D, Kirk A, Crossley M, Dal Bello-Haas V, Stewart N, D'Arcy C,

Harder S. Rural and Remote Memory Clinic: A Successful Model for Healthcare Delivery for Seniors with Dementia. Invited presentation to the Supportive Services Committee, Continuing Care Branch, Saskatchewan Health, October 3, 2007.

Morgan D, Normand S. Physical Assault of Special Care Aides: Let's Take a Look. Presentation to Special Care Aides in long-term care facilities in Nipawin, Melfort, Humboldt, Wynyard, Yorkton, Esterhazy, Melville, Battleford, and North Battleford, August 2007.

Conference Proceedings and Abstracts

Bergen A, Morgan D, Green K, Stewart N, Normand S. Dementia care for residents in rural nursing homes: An evaluation of the enhancing care program. **Presented:** Canadian Association on Gerontology 36th Annual Scientific and Educational Meeting, Calgary, AB, November 1-3, 2007.

Bruner M, Lawson JA, Pickett W, Janssen I. Rural Canadian adolescents are more likely to be overweight and obese compared with urban adolescents. **Presented:** International Conference on Physical Activity and Obesity in Children, Toronto, ON, June 24-27, 2007.

Cammer A, Morgan D, Stewart, N. The process of accessing dementia care for Aboriginal older adults living in Northern Saskatchewan. **Presented:** Saskatchewan Association of Health Organizations (SAHO) Conference, Regina, SK, April 13-15, 2008.

Crossley M, D'Arcy C, Poock J, Lanting S. Joys and Challenges of Transdisciplinary Research and Practice: Neuropsychology in an Innovative Interprofessional Memory Clinic. **Presented:** Four abstracts. International Neuropsychological Society 36th Annual Meeting, Waikoloa, Hawaii, February 6-9, 2008.

- [1] Establishing and evaluating an interprofessional Rural and Remote Memory Clinic: Making transdisciplinary collaboration work (D'Arcy C, Morgan D, Stewart N, Kirk A, Biem J, Forbes D, McBain L, Crossley M, Cammer A.).
- [2] Interprofessional diagnosis in a memory clinic for rural and remote residents: The contributions of clinical neuropsychology are enhanced within the context of a diverse and innovative health-care team (Crossley M, Lanting S, Lejbak L, Burnett M, Gitlin J, Kirk A, Dal Bello-Haas V, Basran J, Harder S, Holfeld L, Morgan D.).
- [3] Interprofessional research in a rural and remote memory clinic: The role of neuropsychology in collaborative research on differential diagnosis in early stage dementia (Poock J, Crossley M, Dal Bello-Haas V, Harder S, Lanting S, Haugrud N, Kirk A, McBain D, Morgan D.).
- [4] Modifying neuropsychological assessment protocols for individuals referred to a rural and remote memory clinic: Incorporating insights and research methods from human geography and cultural anthropology (Lanting S, Crossley M, McBain L, Morgan D.).

Cammer A, Morgan D, Stewart N. The process of accessing dementia care for Aboriginal older adults living in Northern Saskatchewan. **Presented:** Saskatchewan Association of Health Organizations (SAHO) Conference, Regina, SK, April 13-15, 2008.

Cammer A, Morgan D, Stewart N. Negotiating culturally incongruent systems: The process of accessing dementia care for aboriginal older adults living in northern Saskatchewan. **Presented:** Gerontological Society of America 60th Annual Scientific Meeting, San Francisco, CA, November 16-20, 2007.

Cammer A, Morgan D, Stewart N, Crossley M, Kirk A, Harder S, DalBello Haas V, Basran J, D'Arcy C, Forbes D, Biem H. Improving access to early assessment and treatment of dementia: Evaluation of a telehealth supported multidisciplinary memory clinic for rural and remote seniors. **Presented:** Canadian Coalition for Seniors' Mental Health 2nd National Conference, Mississauga, ON, September 24-25th, 2007.

Cammer A, Morgan D, Stewart N. Swimming the river of care: The use of a participant-directed group activity as a data collection tool for a grounded theory project. **Presented:** Advances in Qualitative Methods 8th Annual Conference, Banff, AB, September 21-24, 2007.

Cammer A, Morgan D, Stewart N. Negotiating culturally incongruent systems: The process of accessing dementia care for Aboriginal older adults living in northern Saskatchewan. **Presented:** Gerontological Society of America 60th Annual Scientific Meeting, San Francisco, CA, November 2007.

Estabrooks C, Morgan D, Stewart N, Teare G, Cammer A. The Translating Research in Elder Care (TREC) Program. **Presented:** Saskatchewan Association of Health Organizations (SAHO) Conference, Regina, SK, April 13-15, 2008.

Estabrooks C, Norton P, Morgan D, Sales A, Smith M, Birdsell J. Six abstracts in Symposium: Translating Research in Elder Care (TREC). **Presented:** Canadian Association on Gerontology 36th Annual Scientific and Educational Meeting, Calgary, AB, November 1-3, 2007.

- [1] Introductory Abstract, Carole Estabooks.
- [2] Building context: An organizational monitoring system in long-term care (Norton, P),
- [3] Building context: A case study program in long-term care (Morgan D, Germann K),
- [4] An enhanced audit and feedback intervention in long-term care (Sales A.),
- [5] Innovative knowledge translation pilots in long-term care (Smith M),
- [6] Building relationships between decision-makers and researchers in long-term care (Birdsell J, Huband B).

Forbes D, Markle-Reid M, Hawranik P, Peacock S, Kingston D, Morgan D, Henderson S, Leiper, B, Jansen L, Normand S.

Availability and acceptability of Canadian home- and community-based services: Perspectives of family caregivers of persons with dementia. **Presented:** Bridging Partnerships in Aging & Rehabilitation Research, London, ON, February 8, 2008.

Forbes D, Markle-Reid M, Hawranik P, Peacock S, Kingston D, Morgan D, Henderson S, Leipert B, Jansen L, Normand S.

Availability, accessibility, and acceptability of home and community-based services: Perspectives of unpaid caregivers of persons with dementia. **Presented:** Gerontological Society of America 60th Annual Scientific Meeting, San Francisco, CA, November 16-20, 2007.

Forbes D, Markle-Reid M, Hawranik P, Peacock S, Kingston D, Morgan D, Henderson S, Leipert B, Jansen L, Normand S. How are we doing in meeting the needs of persons with dementia and their unpaid caregivers? **Presented:** Canadian Association on Gerontology 36th Annual Scientific and Educational Meeting, Calgary, AB, November 1-3, 2007.

Forbes D, Markle-Reid M, Hawranik P, Peacock. S, Henderson S, Kingston D, Morgan D, Leipert B, Jansen L, Normand S, Wong M. Supporting Caregivers in Dementia Care. Presented: Festival of International Conferences on Caregiving, Disability, Aging, and Technology. Toronto, ON, June 16-19, 2007.

Ghosh S, Pahwa P, Rennie D. Rural/Urban differences in asthma prevalence and smoking among adult Canadian population using National Population Health Survey. **Presented:** Canadian Society for Epidemiology and Biostatistics 2007 Conference, Calgary, AB, May 28-31, 2007.

Ghosh S, Pahwa P. Comparison of Design-Based and Model-Based Methods to estimate the cluster effect using National Population Health Survey Data (1994–2003). **Presented:** Annual Joint Statistical Meetings, Salt Lake City, USA, July 29–August 2, 2007.

Goodridge D, Lawson J, Marciniuk D, Duggleby W, Rennie D, Stang MR. Health care utilization of patients with chronic obstructive pulmonary disease and lung cancer in the last twelve months of life; Presented: Canadian Hospice and Palliative Care Association Conference, Toronto, ON, November 4-7, 2007.

Goodridge D, Lawson J, Marciniuk D, Duggleby W, Rennie D, Stang MR. Use of acute care, long term care and home care services by patients with lung cancer and chronic obstructive pulmonary disease in the last twelve months of life. **Presented:** 7th Annual Saskatchewan Cancer Research Day, Saskatoon, SK, December 2007.

Hatchette TF, Webby RJ, Willson P, Webster RG. Mammalian reassortants containing the NS gene from the B allele can transmit between mammals; The mystery of B allele restriction continues. **Presented:** Infectious Disease and Medical Microbiology Conference, Halifax, NS, October 2007.

Karunanayake CP, Pahwa P. Statistical Modeling of Longitudinal Mental Distress among rural seniors who participated in the National Population Health Survey. **Presented:** 2007 Proceedings of the American Statistical Association, Health Policy Statistics Section [CD-ROM], Alexandria, VA: American Statistical Association: pp. 1494-1501 and in the Annual Joint Statistical Meetings, Salt Lake City, USA, July 29–August 2, 2007.

Karunanayake CP, Pahwa P. Effects of smoking, nervous system drugs and health care needs on longitudinal mental distress among rural seniors. **Presented:** Saskatchewan Epidemiology Association, SEA Symposium, Regina, SK, October 11, 2007.

Lanting S, Crossley M, Morgan D. The clinical utility of two modified screening measures in the detection of cognitive impairment and dementia in Canadian Aboriginal seniors referred to a rural and remote memory clinic: A case study approach. **Presented:** International Neuropsycholgical Society 36th Annual Meeting, Waikoloa, Hawaii, February 6-9, 2008.

Lawson JA, Dosman JA, Rennie DC, Beach J, Newman S, Senthilselvan A. The relationship between endotoxin exposure and asthma and wheeze in children and adolescents. **Presented:** Symposium 07. Charting a course. Exploring directions in public health, Edmonton, AB; November 15-16, 2007.

Lawson JA, Dosman JA, Rennie DC, Beach J, Newman S, Senthilselvan A. The relationship between symptoms, medication use and PEFR variability with endotoxin concentration in children with asthma. **Presented:** European Respiratory Society Annual Congress, Stockholm, Sweden, European Respiratory Journal, 30(Suppl 51), 298s; September 15-19, 2007.

Madani K, Reeder B, Pahwa P, Hossain A. Impact of Body Mass Index and waist circumference on coronary heart disease risk in men and women. **Presented:** Canadian Society for Epidemiology and Biostatistics (CSEB) Student Conference, Calgary, AB, May 28, 2007.

Markle-Reid M, Forbes D, Henderson S, Kingston D, Browne G, Hawranik P, Morgan D, Leipert B. Testing a theoretical model to explain community service use by unpaid caregivers of persons with dementia. Presented: McMaster School of Nursing Annual Research Day, McMaster University, Hamilton, ON, October 4, 2007.

Markle-Reid M, Kingston D, Forbes D, Henderson S, Browne G, Hawranik P, Morgan D, Leipert B. Testing a theoretical model to explain community service use by unpaid caregivers of persons with dementia. Presented: Registered Nurses' Association of Ontario 6th International Elder Care Conference. Toronto, Ontario, September 2007.

McGilton K, Morgan D, Mueller C, McKenzie-Green B. Four abstracts in Symposium: Understanding effective management and supervisory practices in long-term care facilities: The basis for high quality care. **Presented:** Gerontological Society of America 60th Annual Scientific Meeting, San Francisco, CA, November 16-20, 2007.

- [1] Nursing leadership and nursing home culture change (C. Mueller)
- [2] The role of nursing managers in managing change in rural nursing homes: Creating and sustaining special care units (Morgan D, Stewart N, D'Arcy C, Cammer A.)
- [3] The relationship between work complexity and nurse turnover in long-term care (McKenzie-Green, B)
- [4] Against all odds: How do nurse supervisors in long-term care environments manage to get through their day? (McGilton, K.).

McLeod LA, Shah SM, Pahwa P, Abony S, Hoeppner V.

Characteristics of tuberculosis among Aboriginal populations: Is there a difference in rates by residence (on and off reserve)? **Presented:** 14th Annual Life & Health Sciences Research Conference, Saskatoon, SK, March 16, 2007.

Morgan D, Crossley M, Stewart N, Normand S, Cammer A. Taking the Hit: Experiences of physical assault by special care aides in long-term care. **Presented:** Saskatchewan Association of Health Organizations (SAHO) Conference, Regina, SK, April 13-15, 2008.

Morgan D, Crossley M, Basran J, Stewart N, D'Arcy C, Dal Bello-Haas, V, Forbes D, Cammer A. How can we help you? An analysis of referring problems to a rural memory clinic from the perspectives of the physician and the patient/caregiver. **Presented:** Canadian Association on Gerontology 36th Annual Scientific and Educational Meeting, Calgary, AB, November 1-3, 2007.

Morgan D, Crossley M, Kirk D, D'Arcy C, Biem J, Forbes D, Dal Bello-Haas V, Harder S, Basran J, McBain L. The development and evaluation of a telehealth-supported Rural and Remote Memory Clinic. **Presented:** Saskatchewan Association of Health Organizations (SAHO) Conference, Regina, SK, April 13-15, 2008.

Nowshad G, Bano R, Shah SM, Bano K. Maternal under-nutrition and the risk of spontaneous abortion in Pakistan. **Presented:** 34th Annual International Conference on Global Health, Partnerships: Working Together for Global Health, Washington DC, May 29-June 1, 2007.

Pahwa P, Karunanayake CP. 2007. Joint modeling of longitudinal binary outcome and time to dropout: An application using complex survey data. **Presented:** 2007 Proceedings of the American Statistical Association, Health Policy Statistics Section [CD-ROM], Alexandria, VA: American Statistical Association: pp. 3406-3413 and in the Annual Joint Statistical Meetings, Salt Lake City, UT, July 29 – Aug. 2, 2007.

Pahwa P, Karunanayake CP, McDuffie H, Dosman J, Cross-Canada Group. The role of ethnicity as a risk factor for Hodgkin's Disease. Presented: Canadian Society for Epidemiology and Biostatistics (CSEB), Calgary, AB, May 28-30, 2007.

Pahwa,P, Ghosh S, Koehncke N, Halliday S. Health-related quality of life of Saskatchewan grain workers. **Presented:** Canadian Society for Epidemiology and Biostatistics 2007 Conference, Calgary, AB, May 28-31, 2007.

Peacock S, Forbes D, Markle-Reid M, Hawranik P, Kingston D, Morgan D, Henderson S, Leipert B, Jansen L, Normand S. The rewards and challenges of caring for a family member with dementia. Presented: Canadian Association on Gerontology 36th Annual Scientific and Educational Meeting, Calgary, AB, November 1-3, 2007.

Rennie DC, Chen Y, Dosman JA, Lawson JA. Changes in Asthma Prevalence in Children: The 1993 and 2004 Humboldt Studies. Presented: European Respiratory Society Annual Congress, Stockholm, Sweden. European Respiratory Journal, 30(Suppl 51), 298s, September 15-19, 2007.

Rennie DC, Lawson JA, Senthilselvan A, Paterson C, Kirychuk S.

The relationship between childhood asthma and fungal levels in household dust. **Presented:** European Respiratory Society Annual Congress, Stockholm, Sweden, European Respiratory Journal, 30(Suppl 51), 750s September 15-19, 2007.

Semchuk K, Love EJ, Pahwa P, Mathews EJ. Parkinson's disease and occupational exposure to armed forces environments. **Presented:** Canadian Society for Epidemiology and Biostatistics 2007 Conference, Calgary, AB, May 28-31, 2007.

Shah SM, Hagel L, Koehncke N, Pickett W, Dosman JA. Farm fatalities in Saskatchewan, 1990-2004. **Presented:** Epidemiology in a Changing World, Calgary, AB, 2007.

Thornhill T, Poock J, Crossley M, Morgan D, Vickers D, Dal Bello-Haas V. The use and utility of the Timed up-and-go (TUG) in community-dwelling older adults with cognitive impairments. **Presented:** World Congress of Physical Therapy, Vancouver, BC, June 2-6, 2007.

Vatanparast H, Whiting SJ, Shah SM. Trends in beverage intake of Canadians within last three decades; are they similar to the trend in the United States? **Presented:** Proceedings of Canadian Nutrition Congress, Winnipeg, MB, June18-21, 2007.

Vatanparast H, Henry C, Shah SM, Whiting S. Patterns of beverage intakes of Canadian children: Evidence for a negative trend in calcium intake due to substitution of milk by non-carbonated soft drinks in grade 9 female students living in Saskatoon. **Presented:** Prevention Matters Conference, Saskatoon, October 22-24, 2007.

Research Grants Received

Morgan D. Comparison of rural vs. urban referrals to a tertiary care centre for neurological assessment of possible dementia: A five-year retrospective chart review. College of Medicine Summer Student Research Project, University of Saskatchewan, 2007.

D'Arcy C, Morgan D, Kosteniuk J. Luther Care Communities Workplace Survey. Luthercare Communities, Saskatoon, SK, 2007.

Continuing Research Grants

Chilibeck P, Whiting S, Biem J, Case A, Pierson R, Olatunbosun O, Pahwa P. Effect of Combined exercise Therapy and Phytoestrogen Supplementation on Prevention of Osteoporosis. Funded by: Canadian Canadian Institutes of Health Research, March 2004-2009.

Dosman JA and Collaborators. Canada Foundation for Innovation. National Agricultural Industrial Hygiene Laboratory. 2007-12.

Dosman JA, Babiuk LA, Cormier Y, Brison R., Pickett W, Kennedy SM, Gagnon GA. Canadian Centre for Health and Safety in Agriculture (CCHSA). Funded by: Canadian Institutes of Health Research, Centres for Research Development. 2003-2009. Also supported by the Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST).

Dosman JA and Collaborators. Agriculture and AgriFood Canada. A National Consultation on Health and Safety Research and its Effective Translation to the Agricultural Sector, 2007–08.

Dosman JA, Ulmer K, LaBrash L. A Muscloskeletal Injury Prevention & Ergonomic Workshop "Taking Care of the Farmer". Canadian Agricultural Safety Association (CASA). September 2006-March 2007.

Dosman JA, LaBrash L, Ulmer K. Sleepless in Saskatchewan Tour. Canadian Agricultural Safety Association (CASA). September 2006-March 2007

Dosman JA, LaBrash L, Ulmer K. Modification of existing resource "Hearing Conservation for Farm Families" Canadian Agricultural Safety Association (CASA). September 2006-March 2007.

Estabrooks C, Cummings G, Degner L, Dopson S, Laschinger H, Leiter M, Morgan D, Norton P, Profetto-McGrath J, Rycroft-Malone J, Smith M, Sales A. Translating Research in Elder Care (TREC). Canadian Institutes of Health Research. Awarded January 2007.

Dal Bello-Haas V, Crossley M, Morgan D, Kirk A, Harder S. Factors Associated with Falls and Near-Falls in Community-Dwelling Older Adults with Early-Stage Dementia, Saskatchewan Health Services Research Foundation, Establishment Grant.

Katamayzk P, Reeder B, Elliot S, Raine K, Joffres M, McLean D, Pahwa P. Understanding the Individual and Socio-Environmental Health Risks of Obesity: The Canadian Heart Health Surveys Follow-up Study. CIHR, 2004-2009.

Morgan D, Stewart N, Crossley M, D'Arcy C, Biem J, Kirk A. (Co-Investigators). CIHR New Emerging Team Proposal "Strategies to Improve the Care of Persons with Dementia in Rural and Remote Areas. Canadian Institutes of Health Research and partners (Saskatchewan Health Research Foundation, University of Saskatchewan, Alzheimer Society of Saskatchewan).

Pickett W, Dosman, J, Brison R, Marlenga B, Day L, Biem HJ, Hagel L, Crowe T, Pahwa P. Saskatchewan Farm Injury Cohort Study. Funded by: Canadian Institutes of Health Research (CIHR).

Awards: Faculty, Students & Staff



Presentation of the 2007 Stueland Scholar award (from left): Marlene Stueland, Michael Stueland, Nancy Stueland-Adamski, James Dosman, M.D., and Sue Dosman.

James Dosman, M.D, was named the recipient for the 2007 Stueland Scholar. The Stueland Scholar award presentation took place on October 31 at the National Farm Medicine Center of Marshfield Clinic Research Foundation, Marshfield, WI, USA.

The Stueland Scholar award was established in 2001 to honor the late Dean Stueland, M.D., M.P.H., who served Marshfield Clinic and its patients as an administrator, clinician, educator and researcher, and was also medical director of the National Farm Medicine Center. The award goes to an individual who has made significant contributions in the areas of emergency, agricultural and/or alcohol and drug abuse medicine, all special interests of Dr. Stueland.

Obituary

Helen Elizabeth Harris McDuffie,

Ph.D., Professor Emerita, College of Medicine, University of Saskatchewan, died on February 14, 2008. Dr. McDuffie joined the Centre for Agricultural Medicine at the U of S in 1982 where she remained until her retirement in 2006.



Helen McDuffie



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