Annual Report 2008-2009

Celebrating our history and looking into our future
Message from the Dean
For the Faculty it was a highly productive year in spite of financial turmoil that has also affected the University. The academic staff has been very successful in obtaining new grants for their work. Many graduate students successfully defended their research work. Our work with Manitoba Agriculture Food and Rural Initiatives has grown into action on tracking long-term consumer food choices.

The level of innovation in the work of the Faculty has been recognized by increased grant funding and awards. In four of the last five years, the prestigious annual Centrum New Scientist award recognized a member from Human Nutritional Sciences. This year Dr. Jim House received this national recognition. The Medical Textiles researchers are creating new research programs with collaborators from the Faculties of Medicine, Science, Engineering and Agriculture and Food Sciences. In Family Social Sciences new projects are being developed with collaborators from the Asper School of Business.

Human Nutritional Sciences has welcomed a new Department Head, Dr. Jim House. His leadership will help the Department to realize several major initiatives. Family Social Sciences welcomed a new researcher in Aboriginal Health, Dr. Rachel Eni. Her work in communities enhances established initiatives of the Department in community and social development. The valuable work of all Departments makes the Faculty of Human Ecology what it is today: strong, science-based, community connected and internationally recognized. We expect to build on these achievements in the years to come.

Fire in Duff Roblin

On March 28, 2009, fire caused significant damage to the Duff Roblin Building. The Departments of Human Nutritional Sciences and Textile Sciences were directly affected by this tragic occurrence. Offices and lab space, as well as years of research data and published results, were lost at this time.

The process of starting again has begun. New, temporary offices have been found for the affected staff members and the daunting task of data recovery and rebuilding is underway. Our staff has been relocated in various places both on and off campus. The Textile Sciences staff has been given office space within the Human Ecology Building and is currently using lab space kindly given by the Department of Chemistry in the Parker Building. The graduate students have also been assigned space in the Human Ecology Building and have use of the Parker Building lab so that their programs can continue despite the situation.

Human Nutritional Sciences staff have office and lab space within the Human Ecology Building, Richardson Centre for Functional Foods and Nutraceuticals and the Canadian Centre for Agri-Food Research in Health and Medicine (CCARM). The Department Office for Human Nutritional Sciences is now located in the Human Ecology Building along with the office of the Department Head. The graduate students in Human Nutritional Sciences have been assigned desk space within the Human Ecology Building as well. Some students have gone to Richardson Centre and CCARM as well as they
require the lab space that those facilities can provide. The faculty would like to thank both CCARM and the Richardson Centre for Functional Foods and Nutraceuticals for their generosity and support during this difficult time.

Replacement equipment and supplies have been coming in and we are slowly getting our research programs back on track. The teaching schedule has not been affected to any great degree and arrangements have been made for office space to be available here in the Human Ecology Building so that professors will have space to meet with students and ensure that their course delivery runs as smoothly as possible. Laboratory and teaching materials have been recovered and replaced, to a large degree, by Dennis Labossiere. His efforts have made the process much smoother.

**Research News**

The research programs within the Faculty of Human Ecology are growing in both size and scope. Research partnerships and collaboration with community agencies are continuing to expand and become more important to our research. Our researchers continue to perform internationally acclaimed research and they are recognized around the world as leaders in their area.

The Faculty of Human Ecology received over $2,000,000 dollars in research money during the 2008 university fiscal year. Government agencies such as NSERC, SSHRC, and CIHR have recognized the strength of the applications of Human Ecology researchers. Agencies such as Pulse Canada, St. Amant Research Centre as well as the Manitoba Health Research Council continue to fund projects in our faculty as well.

When the amount of funding and the number of researchers are averaged out, we can see that, on average, our researchers bring in just over $100,000 per person. If you compare this with other faculties across campus, we are in 5th place in terms of amount per person.

**Family Social Sciences**

Dr. Kerstin Rogers continues to grow her research program. A 2008 CIHR application on home care and end-of-life care was successful. She is a co-investigator along with 2 colleagues from the Faculty of Nursing as well as several community professionals. She is also a member of a team that received a Manitoba Medical Services Foundation grant on decision-making processes and health regarding people with acquired brain injury. The questions are directed to health care professionals, patients and family members.
Dr. Douglas Brownridge has recently had another book published by Routledge Literature. *Violence Against Women: Vulnerable Populations* investigates under-researched and under-served groups of women who are particularly vulnerable to violent victimization from an intimate male partner. Dr. Brownridge is continuing his research in the subject area of family violence in special populations. He is working with researchers from Hong Kong.

Dr. Javier Mignone continues his international research. He received the Endgberg-Fewster International Development Grant - Canadian Home Economics Foundation for a study entitled “Development of an intercultural maternal child health centre in Comalapa, Guatemala.” The funding is to support the development of a broader project with our Indigenous partners in Guatemala and the Cree Nation Tribal Health Centre in The Pas, in relation to an intercultural maternal child health centre. He also received a University of Manitoba Research Grants program for his project “The Life Story Board: A pictorial medium for expression and reflection of life narrative.” The main objective of this research project is to assess the feasibility of the Life Story Board (a diagnostic and therapeutic tool for children) for school-based assessment and counseling of immigrant newcomer youth. The study will be conducted in partnership with a Winnipeg school division. As well, Dr. Mignone is part of a group of researchers who received funding from Canadian Institutes of Health Research (CIHR) for the project entitled “International Infectious Diseases and Global Health Training Program: Four Continents, One Shared Experience.” This is a large international training program for doctoral and post-doctoral individuals, as well as clinical research fellows, that involves universities and research centres in Winnipeg, Canada; Bangalore, India; Nairobi, Kenya; Medellin, Colombia.

**Dr. Shahin Shooshtari**

Dr. Shooshtari is an assistant professor in Family Social Sciences and Community Health Sciences at the University of Manitoba. She is also a researcher with St. Amant Research Centre in Winnipeg. The St. Amant Research Centre’s mission is to advance and share knowledge to enhance the quality of life of persons living with intellectual/developmental disabilities, through research.

Dr. Shooshtari’s program of research is focused on “Health and Aging and Intellectual/Developmental Disabilities”. Her research primarily uses quantitative methods. It involves the use of data from large-scale National Population Health Surveys conducted by Statistics Canada, or provincial administrative databases to investigate the social, psychological and lifestyle factors associated with health and well-being of individuals, patterns of health and health care use, and aging-related issues, for example development of dementia. For example, in
2006, she led a population-based pilot study funded by the Canadian Institutes of Health Research (CIHR) to establish an operational case definition for intellectual disability based on the linked administrative data sets in Manitoba. The data sources used included physician claims and hospital discharge abstracts of Manitoba Health and Healthy Living, Special Education Funding from Manitoba Department of Education, Citizenship and Youth, and the Social Assistance Management Information Network database of Manitoba Family Services and Housing. Using the validated criteria, they estimated that over a 5-year period (between 1998 and 2003) there were a total of 5,384 individuals living with an intellectual disability in Manitoba, an administrative prevalence estimate of 0.47%. Of these, 1,005 were 45 years of age or older (Submitted to the Journal on Developmental Disabilities, Under Review). Subsequently, Dr. Shooshtari collaborated with Dr. Patricia Martens from the Manitoba Centre for Health Policy (MCHP) and developed a health profile for Manitobans with intellectual disability living in the community. The results of this research, presented at the 13th World Congress on Intellectual Disabilities in South Africa in August 2008, indicate significant health disparities for people with intellectual disability compared to the age-and sex-matched control group. In particular, they found a much higher rate of depression, total respiratory illnesses, and dementia among persons with intellectual disability compared to the population of the same age and sex, but without intellectual disability. As another example, they found a much higher incidence rate of fall-related injuries among the population with intellectual disability compared to the population without intellectual disability. These findings influence policy and program planning. They have the potential to improve service delivery and access, improve quality of care, and ultimately enhance the quality of life for persons living with intellectual/developmental disabilities.

Dr. Shooshtari’s more recent research projects focused on “Aging with A Developmental Disability”, “Trajectories in Health and Social Service Use by Children with Developmental Disabilities” and “Knowledge Translation”. The project entitled “Trajectories in Health and Social Service Use by Children with Developmental Disabilities” is funded by the Manitoba Health Research Council (MHRC) for two years (2008-2010). It is focused on health and well-being of children living with an intellectual/developmental disability in Manitoba. Although there is extensive information and reports on the health and well-being of Manitoba children in general, there is currently a lack of information on the health and well-being of children who are living with an intellectual/developmental disability in this province. Using the linked administrative data from multiple sources listed above, Dr. Shooshtari and colleagues are looking at a number of indicators to describe health status and changes over time including mortality rates, rates of chronic conditions such as diabetes, depression, other mental illnesses, respiratory illnesses; rates of injuries; proportion experienced violence, and any indication of child abuse. In terms of health care use, they are looking at access to primary health care, access to preventive care, for example, immunization rates, access to specialist physicians, overall rates of visits to physicians and hospitalizations. In terms of social services use, they are looking at proportion of children in care as well as families receiving protection or support from Manitoba child and family services.
Over the last three years, Dr. Shooshtari has collaborated with the interdisciplinary research team at St. Amant on several research projects focused on knowledge translation in developmental disabilities. In 2007, they received funding from the CIHR and subsequently from the Life Course Health Initiative of Human Ecology (2008, 2009) to consult with different groups of stakeholders including practitioners, policymakers, planners, and direct care providers including parents and other family members regarding their knowledge needs and research priorities as relates to developmental disabilities. From those consultations they learned more about factors impeding or facilitating knowledge translation in developmental disabilities. Furthermore, they learned that there are many knowledge gaps that affect provision of quality care to persons with intellectual/developmental disabilities who live in Manitoba. What are some of the gaps in knowledge and priorities that are commonly identified by and across different stakeholder groups including parents, practitioners, administrators and policymakers? This is the focus of Dr. Shooshtari’s next research project funded by the Faculty of Human Ecology Life Course Health Initiative.

For her research in the area of aging with intellectual disability, Dr. Shooshtari received the emerging scholar award from the International Association for Scientific Study of Intellectual Disabilities in 2008.

**New Staff in Family Social Sciences**
We wish to welcome Dr. Rachel Eni to the Department of Family Social Sciences. She comes to us from Community Health Sciences. She is an aboriginal communities specialist, and will be a huge asset to us in both teaching and research. One of the goals of Human Ecology is to continue to increase our aboriginal content and focus and Dr. Eni will be invaluable to that process.

**Human Nutritional Sciences**
The research program strength of the Human Nutritional Sciences Department continues to gain recognition internationally. Whether it is media attention or awards, the researchers are recognized experts in their field of expertise and are sought out by industry and community agencies.

Dr. James Friel received grants from AFMNet and the Manitoba Institute of Child Health in the past year. The AFMNet grant was for research in Bioactives in Human Milk. This research aims at further experiments in bioactive molecules derived from human milk. The goal is to attain enough data to start commercialization. The Manitoba Institute of Child Health grant is to develop the optimum method for preparing food for the premature infant while in hospital.

Dr. Harold Aukema is part of a group that received funding from CIHR to study the impact of long-term consumption of high protein diets on renal health, hypertension, glucose handling and adipose metabolism in obesity - implications for dietary reference intakes. He also received funding from the Saskatchewan Pulse Growers for a study entitled “Pulse Consumption in Canada: Analysis of Pulses in the Canadian Community Health Survey.” Canada-Manitoba Agri-Food Research and Development Initiative
awarded him a grant for the study on the effect of flax in human dietary trials on eicosanoids.

Dr. Mohammed Moghadasian received funding from SERC to study the interactions between flaxseed oil and cyclosporine. He also received a grant from ARDI to study anti-atherogenic effects of "designer oil" in mice.

Drs. Carla Taylor, human nutritionist, Peter Zahradka, CCARM team leader, and vascular surgeon Randy Guzman have been studying how eating pulses can affect blood vessel function and affect heart disease. Pulses are a group of foods that include peas, beans and lentils. This clinical trial shows that daily consumption of pulses leads to major improvements in blood vessel function in individuals with peripheral arterial disease (PAD), a condition in which blood flow to the limbs is reduced. The study findings were presented at the Experimental Biology conference in New Orleans. The study was one of seven clinical trials funded by Pulse Canada, with support from Agriculture and Agri-Food Canada (AAFC) and Canada’s pulse growers associations.

Dr. Miyoung Suh is the principle investigator in two studies. She received a University of Manitoba-Research Grant for the study entitled “Seminolipid production in obese rat testis.” She also received an NSERC Discovery grant to study the effect of dietary fats on testis function.

Dr. Michel Aliani, Director of the Weston Sensory and Food Laboratory, received an NSERC Discovery grant for his work entitled “Biochemical Study of the Formation of Key Flavor Precursors in Various Skeletal Muscles Post-mortem.” This project will study the biochemical reactions responsible for the key flavor precursors formation in chicken, bison and elk meat including elucidation of the biochemical basis for good flavor development in various types of meat. Dr. Aliani was chosen as keynote speaker for the Centre for Functional Foods and Nutraceuticals Sensory and Instrumental Techniques for Measuring Food Flavour and Aroma Workshop in June, 2009. He was later interviewed for UniversityNews.org on his research. To hear an audio file of the interview, click here http://universitynews.org/2009/7/UM071709.mp3

New Department Head in Human Nutritional Sciences
Dr. Jim House began his term as Department Head January 1, 2009. Dr. House brings a wealth of knowledge and experience with him and we are very excited about his vision for the Human Nutritional Sciences Department. His research program investigates how vitamins contained in the diet are used to support healthy animals and people. His primary focus over the past few years has been the study of the vitamin folic acid. His research is helping to define how changes in the way we feed animals can influence the vitamin content of the meat and eggs. He is also conducting research to determine whether certain segments of the population may be at risk for consuming either too little or too much of specific nutrients or foods.
Dr. Rotimi Aluko and his team of researchers received grant money from AFMNet, NSERC, as well as the Manitoba Centre of Excellence Fund for a study on how extracts from yellow pea proteins fight high blood pressure and chronic kidney disease (CKD). Nutri-Pea Ltd., a private Canadian company that specializes in making food products from yellow peas, was the industrial partner for the project. The results of the study were presented at the American Chemical Society’s 237th National Meeting in Salt Lake City in March 2009. Dr. Aluko was featured in a news conference during the ACS conference and has since been interviewed on CTV and his research was featured in the AFMNet Advance publication this winter. To view the news conference click here: http://www.ustream.tv/recorded/1285204

The following is taken from the article in the AMFNet Winter 2009 magazine Advance.

**Pea peptides fight hypertension and kidney disease**

**By Anupriya Dewan**

Pea proteins that have been hydrolyzed and split into smaller pieces called peptides have been shown to combat kidney disease and hypertension, say researchers at the University of Manitoba.

Prof. Rotimi Aluko, Department of Human Nutritional Sciences, says pea peptides provide relief for hypertension in two ways. They block renin, the root cause of increased blood pressure found early on in the biochemical pathway, and they reduce kidney disease progression.

Current medications target Angiotensin Converting Enzyme (ACE), which amplifies the effects of renin, making it a less effective method of curing the kidney disease.

The body regulates blood pressure using a variety of compounds, including renin, by changing the diameter of blood vessels. Renin increases blood pressure by producing a compound that helps blood vessels contract. But if excess renin is released, blood vessels contract more than they should, increasing blood pressure to dangerous levels. ACE normally amplifies renin’s effect and makes the problem worse.
“Inhibiting renin is like cutting off the head of a giant called hypertension. It can’t be a problem anymore,” says Aluko. “Blocking ACE is like cutting off an arm or a leg. The giant still lives.” The isolated pea peptides block renin’s activity, which prevents the blood vessels from contracting excessively. With the blood vessels dilated, the blood pressure remains normal because there is more space for blood to flow through. With little renin activity present, there’s also no amplification due to ACE, solving the problem at its root.

As a result, these peptides are more effective at treating hypertension than drugs on the market today, because medications target ACE, not renin.

The isolated peptides also increased cyclooxygenase 1 (COX1) levels, which is known to reduce inflammatory agents released by the kidney. Reduced inflammation improves kidney function and reduces the ability of kidney disease to elevate blood pressure, solving this cause of hypertension at its root. Animal studies look promising and are targeting the root cause of the problem for the first time, but the work isn’t done yet. Aluko plans to do clinical studies to measure the impact of the peptides on humans.

“Curing hypertension may become as easy as drinking juice or taking a pill that contains the peptide,” says Aluko.

Also working on this project are Prof. Harold Aukema and Prof. Paramjit S. Tappia from the University of Manitoba.

Funding for this project has been provided by AFMNet, the Natural Sciences and engineering Research Council and the Manitoba Centre of Excellence Fund.

Peter Jones’ Research Program at RCFFN

Dr. Peter Jones, Canada Research Chair in Nutrition and Functional Foods, has served as founding Director of the RCFFN since its opening. The Centre’s mission statement is to lead functional foods and nutraceuticals research for the improvement of health and nutrition and to support the development of an economically viable functional food and nutraceutical industry in Manitoba and western Canada.

Dr. Jones’ research is focused on identifying and investigating candidates for functional food ingredients, specifically the efficacy of novel bioactive materials such as plant sterols which are natural components found in plants which can act as cholesterol-lowering agents. Dr. Jones is accompanied by other researchers from the Faculties of Human Ecology, Pharmacy, Agricultural and Food Sciences, and Science, as well as government and industry investigators. Overall, research at the RCFFN involves a variety of topics and levels of research, including cell cultures, animal trials, human clinical trials, food sensory evaluation techniques, and bioactive compound extraction, amongst others.
Textile Sciences
The exciting and innovative medical textile research continues in Textile Sciences. As with the other departments, the researchers in Textile Sciences are being recognized internationally as experts and are being sought out as speakers and presenters for special events. In August 2008, Dr. Song Liu was asked to go to China as a delegate of the 2008 Dragon 100 You Chinese Leaders Forum. The forum is an annual event that brings together 100 ethnic Chinese people aged 18 to 35 who are considered leaders of the future. Participants are selected for their outstanding leadership skills, excellent academic and non-academic achievements and strong commitment to the community. Dr. Liu, along with Dr. Jun Cai (Engineering) went to Hong Kong and the Pearl River Delta Region, Guangdong Province from August 22-30, 2008 where they discussed global issues and explored Chinese culture and heritage as part of the forum.

Dr. Liu received both the Manitoba Health Research Council operating grant and an establishment grant. The project funded through the MHRC operating grant is entitled "Novel Dual-functional Wound Dressings: Active Infection Control and Wound Healing Promotion" and, "Development of bio-protective Textiles via a Novel Surface Modification Technique" is the title for the MHRC establishment grant. He also received an NSERC Discovery Grant for the project entitled "Novel Surface Modification Technique for Chemically Inert Polymers for Medical and Biomedical Applications.

Mashiur Rahman
Dr. Mashiur Rahman has an appointment as an Instructor in the Department of Textile Sciences. He is a valuable part of the department in both teaching and research. Dr. Rahman’s research focus is on the surface characteristics and physical properties of a novel anti-thrombosis polyester. Thrombosis is one of the major and catastrophic complications of polyethylene terephthalate (PET) or commonly known as polyester in graft applications, which is as high as 20% in some PET implantations. Thrombosis may be reduced when the active groups on the surface of the polyesters react with the blood proteins. The active groups on the polyester surface can be
generated using hydrolysis techniques. However, the extent of hydrolysis of polyester is restricted due to surface damage and physical properties changes, which reduce the lifetime of polyester implants. This lower hydrolysis of polyesters limits the generation of active groups on the surface and hence the protein binding capability. His current research focuses on achieving the optimum chemical modification without disturbing the surface of the fiber, and then the blood proteins will be used to react with this modified surface.

The first step of this research is to identify the internal regions and structural rearrangements that are responsible for the surface cracking during chemical modifications. Further, a number of chemical modification techniques, process parameters, material size and cross-section, and preparation techniques would be investigated to identify the best possible chemical modification method for protein binding capability.

The successful outcome of this research will lead to the creation of a novel polyester that will be used for many areas of graft implantations where thrombosis is a critical problem that leads to numerous human deaths.

Post Doc Research
We are fortunate this year to have several post doc researchers working in all three departments within Human Ecology. They are valuable assets to our team and we are very excited to have them.

Dr. Kimberley Arbeau
Dr. Arbeau received a B. A. Honours in 2002 from St. Thomas University in Fredericton, NB. She went on to earn a Master’s of Arts in 2004 from Carleton University in Ottawa, ON and recently graduated with a Ph.D. in Psychology from Carleton University. She began a postdoctoral fellowship with Dr. Rosemary Mills in the Department of Family Social Sciences in September of 2008. Her main research interests lie in the area of children’s peer relationships and social development, specifically children’s adjustment, especially in the classroom. Teachers may be overwhelmed with the more difficult (e.g., hyperactive, aggressive) students in their classrooms so it may be fairly easy for shy children to become overlooked. However, peers may notice shy children, especially bullies. The passive and timid nature of shy children may make them easy targets for the bullies in the classroom.

In her postdoctoral fellowship with Dr. Mills, Dr. Arbeau is incorporating Dr. Mills’ research interest in shame, with her interest in childhood shyness. She is currently examining the combined effects of shyness and shame on children’s adjustment outcomes. The research generally shows that being shy or having high shame proneness can have detrimental effects for children. She is examining whether those children who are both high in shyness and shame have the most negative outcomes as well as whether
having parents and teachers who are high on empathy can protect children from negative adjustment problems.

Dr. Zuyuan Xu
Dr. Xu received his PhD in genetics at the Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, 2004. After one year, he came to Winnipeg, for his postdoctoral research training in Dr. Mohammed Moghadasian’s laboratory at the University of Manitoba, Department of Human Nutritional Sciences. The main objective of his research projects that he conducted during his postdoctoral training was to elucidate the mechanisms underlying anti-atherogenic effects of plant sterols and pro-atherogenic impact of probucol, a lipid-lowering agent, in Apo-E knock out mice. With the use of DNA microarray and other laboratory techniques, they were able to identify a number of genes related to lipid metabolism and inflammatory process to be involved in the pathogenesis of atherosclerosis. His current research interest is to further elucidate the role of the transcriptional factors such as PPARs and PGC-1 in the process of atherogenesis in ApoE-KO mice, and he is also interested in investigating the mechanisms behind protective effects of n-3 fatty acids in metabolic syndrome. Dr. Xu has received the MHRC (Manitoba Health Research Council) postdoctoral fellowship (2007-2009).

Dr. Zhaohui Zhao
Dr. Zhaohui Zhao is a Manitoba Health Research Council (MHRC) Postdoctoral Fellowship Award winner (2008-2010). His ranking was 4th out of 31 applications received in 2008. Dr. Zhao is interested in the preventive effects and mechanism of functional foods and nutraceuticals against cardiovascular disease (CVD). His primary research emphasis is to examine the efficacy of phenolic antioxidants (PA) from grain bran and coffee on experimental models of CVD. Recent epidemiological studies suggest associations between the consumption of PA-rich foods/beverages and the prevention of atherosclerosis, diabetes, and cardiovascular disease. The mechanism, however, are not completely clear. The lack of information on details of the bioavailability and pharmacokinetics also limits the application of PA as agents against CVD. Dr. Zhao has been performing a series of animal studies to investigate the pharmaceutical parameters plus mechanisms by which PA may prevent heart disease in experimental animals. Furthermore, he is also conducting a study to investigate the therapeutic potential of a flaxseed oil and fish oil-based ‘designer oils’ formulation in a mouse model of metabolic syndrome. The new formulation contains a balance of fatty acids.
acids (FA) i.e. similar amounts of FA from short chain, saturated, monounsaturated and polyunsaturated as well as low n-6/n-3 FA ratio, therefore is expected to bring health benefits. Dr. Zhao is a specialist in the application of HPLC/HPGC. He has successfully developed an efficient HPGC system to on-line determine the distributions of total cholesterol, particle size and particle number among plasma/serum lipoproteins, which are very important factors in CVD.

Another research interest of Dr. Zhao is nutritional immunology. He has investigated the anti-inflammatory effects of amino acids and coffee compounds in experimental colitis mouse and in the coculture system with human intestinal epithelial Caco-2 cells and macrophage-like THP-1 cells.

Dr. Jun Chen

Dr. Chen’s research work has several major parts. The first is redox potential gradients triggered the tunable release of DNA and macromolecular drug from layer-by-layer polyelectrolyte multilayered film (PEM), which constructed by the synthetic polycations (poly(disulfide amidoamine)s) and polyanions. This work has been published in Small (Impact Factor is 6.525).

At the same time, he has constructed a blend of reducible polycation and non-reducible polycation/polyaion PEM and has developed a simple and mild method for the fabrication of noncrosslinked porous films. The paper is published in Advanced Materials (Impact Factor is 8.191).

The other part of his research work focuses on the design and synthesis of bioreducible poly(amidoamine)s and hydrolytically degradable poly(amino ester)s as gene delivery vectors, then linking the PEG onto the polycations by acid-labile linker. The two articles have been accepted by Biomacromolecules (Impact Factor is 4.146) and published in Polymer (Impact Factor is 3.331), respectively.

Currently, Dr. Chen is working on the stimuli-sensitive amphiphilic block polymeric micelles and their Doxorubicin controlled release behavior in vitro. These two papers are being prepared at this time and they will be submitted to the Journal of Controlled Release (Impact Factor is 5.690).

Staff Awards

The Canadian Society for Nutritional Sciences recently awarded the 2008 Centrum Foundation New Scientist Award for Outstanding Research to Dr. James House, Professor and Head of the Department of Human Nutritional Sciences, Faculty of Human Ecology at the University of Manitoba.
The New Scientist Award was established to recognize outstanding contributions to nutrition research by a member of the Canadian Society for Nutritional Sciences who is within 15 years of completing their Ph.D.

Four out of five of the last award recipients have been from the Department of Human Nutritional Sciences at the University of Manitoba.

Dr. Carla Taylor - 2005
Dr. Harold Aukema - 2006
Dr. Mohammed Moghadasian - 2008
Dr. Jim House - 2009

“I think this is a reflection of the strength of the nutrition research program here at the University of Manitoba, and a testament to the fact that the Canadian nutrition community recognizes this strength,” said House.

Dr. Rotimi Aluko, Human Nutritional Sciences and Dr. Douglas Brownridge, Family Social Sciences won Merit Awards from the University of Manitoba for research excellence and service to the University.

Connie Magalhaes, Human Nutritional Sciences, received the 2009 Students' Teacher Recognition Award. Shirley Angelia Simadiputri, 3rd year student in Human Ecology, nominated Ms Magalhaes.

**Undergraduate Medals, Awards and Accomplishments**

Dr. A.W. Hogg Undergraduate Scholarship:

*Manon Roy*
Isbister Scholarship:  
_Tracey Mills_

Special Scholarships in Human Ecology:  
a. (min 24-51 credit hrs):  
_Mallory Giardino_  
a. (min 54 - 83 credit hrs):  
_Madelaine Calanza_  
b. (min 84 credit hrs):  
_Antonia Schindle_

Manitoba Egg Producers’ Marketing Board Scholarship:  
_Jessica Derksen_

Helen Fowler Broughton Scholarship:  
_Chantal Taillefer_

Catherine E. Reimer Memorial Scholarship:  
_Amanda Hamel_

Dr. Elizabeth Feniak Scholarship  
_Cecile Koop_

Russell Food Equipment Ltd. Award:  
_Jenna Hart_

Mildred Simmons Memorial Scholarship:  
_Eniko Kresz_

Human Ecology 75th Anniversary Scholarship:  
_Catherine Marshall_

Lara Onalee Nagler Memorial Award:  
_Siew Lung Goh_

Michelle Cloutier Memorial Award for Student Involvement:  
_Lindsay Graham_  
_Lara Iserloh_

E. Elizabeth Shannon Award:  
_Tracey Fisher_

Cecilia A. Gonzales Scholarship:  
_Katelyn Woolison_
Manitoba Association of Home Economists - Ruth Berry Award: 
*Manon Roy*

Manitoba Pork Prize – Human Ecology: 
*Tiffany Nicholson*

Betty Morton Christian Scholarship: 
*Jackie Cunningham*

Goldie Goldstein Prize in Nutrition: 
*Stephanie Verleih*

Manitoba Association of Home Economists Provincial Student Membership: 
*Cecile Koop*

Dr. Elizabeth B. Smith Award 
*Karin Dunthorne*

**Graduands Medals and Awards – May 2009**

University Gold Medal: 
*Tabitha Marshall*

**Human Ecology Program Medals**  
Faculty of Human Ecology (Textile Sciences): 
*Lisa Dyck*

Faculty of Human Ecology (Family Social Sciences): 
*Bonnie Land*

Faculty of Human Ecology (Human Nutritional Sciences): 
*Tabitha Marshall*

Faculty of Human Ecology (Health Studies): 
*Melanie Hegg*

Faculty of Human Ecology Medal of Merit: 
*Melanie Hegg*

Dr. Vivian Bruce Scholarship: 
*Kimberley Livingstone*

Helen Broughton Prize: 
*Caroline Bernjak*
Several medals and awards will be awarded in the next round of competition.

**Carmen Budiwski & Rachel Buchanan,** (FSS) had the opportunity to present their paper, *The Challenges of Housing Revitalization in Poor Urban Neighbourhoods: A Case Study on the Spence Neighbourhood in Winnipeg* at the InSight conference in Ottawa. The paper was inspired by Dr. Wilder Robles who, not only encouraged them to write the paper, but also to present at the conference.

The paper they wrote examines housing revitalization in Winnipeg’s inner-city from a local, national and global perspective. They argue that Canada suffers from a systemic housing crisis that primarily affects immigrants and Aboriginal peoples. It focused on the Spence Neighbourhood Association (SNA), a community-based organization (CBO) funded by the Province of Manitoba. SNA has played a key role in promoting housing renewal in Winnipeg’s inner-city. SNA has renovated boarded up homes in order to provide ‘affordable’ houses for low income families. Yet, SNA has produced contradictory results, including the onset of gentrification. The paper concludes that Winnipeg is facing a housing crisis that will not be solved by CBOs alone; it will require the involvement of the Canadian government through the promotion of a national housing strategy, particularly to address the immediate housing needs of Aboriginal and immigrant communities.

Presenting this paper at the InSight Conference in Ottawa was an overall great experience for these students. It gave them the opportunity to meet and connect with students who had similar interests. It also gave them a chance to showcase some of the skills they have developed over their university career including writing, presenting and of course, working as a team.
They appreciate and value the aid of Dr. Robles for his valuable input and continuous support during the writing process of their paper.

**Colleen Rogers**, Dietetic Intern and graduate HNS (2009) is a Morgan Medals Award recipient from Canadian Foundation for Dietetic Research. This is a regional award (Saskatchewan, Manitoba and North-Western Ontario Region) and Colleen will still compete for the national award. (Her senior thesis with Carla Taylor formed the basis of this award).

**HESO - A Student View**

This past year for HESO was an historic one as it was also the first year HESO had a male Senior Stick. Actually, there were three males on student council this past year including the Vice Stick. That was me. I had an excellent time serving in that position. I made new friends and got involved with many aspects of student affairs. I was also the person who drove the nutrition department mad by having a pizza sale and movie every week. We concluded the movie Friday by having a hotdog and hamburger sale, which was a hit.

I did more than just organize food and movies, however. I assisted in making a University One presentation for recruiting students. I also participated in recruiting at the high school level. Aaron and I went to schools and delivered a presentation. I also participated in recruiting through the open house, and at the career fair. It was wonderful helping people to realize that our faculty could help them tap their potential.

Every year there is an Association of Canadian Human Ecology Students (ACHES) conference. This year it was held at Brescia College in London, Ontario. Four universities were involved: Western University, University of Alberta, University of Moncton and Manitoba. It was interesting to gather together and see the variations, yet similarities of Human Ecology across Canada. Here we learned the importance of networking and what to do after the degree. Some participants jumped on the opportunity to join the International Federation of Home Economists (IFHE) as a way to branch out and develop a worldwide network.

Now that I have graduated, I have started my career. It was not as planned, as I wanted to go into a Master’s program in Marriage and Family Therapy. I was told I needed experience, so I moved to North Battleford, Saskatchewan to be a counselor for the Battleford’s and Area Sexual Assault Centre. My background in child and adolescent development and family violence made me a perfect fit for this job. I have also become a
columnist for the Battleford’s Regional Optimist. Every other Friday my column ‘Locking Hearts Together’ appears in the paper. Both jobs are very rewarding. If there is one thing I have learned while on HESO, it is networking and keeping connections that you make during your education. I have had the privilege of developing professional relationships with the faculty and staff. I have also joined several organizations to help me continue to develop my skills and also for me to connect with others. It has helped me find professional support in my job as a sexual assault counselor.

**Graduate Awards and Accomplishments**

**Kimberley Arbeau,** (FSS) was awarded a Manitoba Health Research Council postdoctoral fellowship.

**Jacqueline Bugera,** (HNS) was accepted as a participant in the 2009 CIHR Summer Program in Aging that was held at White Point Beach Nova Scotia. Her funded thesis project is entitled “Formulating Food Products for the Aging Baby Boomer Population.”

**Mika Kawaguchi,** (FSS) received a 2009 RDC Graduate Student and Postdoctoral Award to support her thesis research on the retirement preparations of Canadian Women.

**Trisha Pownall,** (HNS) won the second place award in the graduate student poster competition organized by the Protein and Co-products division of AOCS at the 100th conference in Orlando, FL.

**Jennifer Protudjer,** (Interdisciplinary Health PhD) won a 2-year graduate scholarship from CIHR to complete her PhD.

**Gayatri Thiyam,** (HNS) received first prize for a poster competition in the Health and Nutrition section at the 100th AOCS Conference in Orlando, FL.

**Chibuike Udenigwe,** (HNS) received the NSERC Canadian Graduate Scholarship award for PhD students. It is the second highest scholarship award and it is given by NSERC to PhD students who have displayed academic and research excellence. Chibuike also received the 2009 Honoured Student award from the American Oil Chemists' Society (AOCS). The award consists of an all expense paid trip to attend the 100th annual AOCS conference in Orlando, Florida, May 3-6 where Chibuike will be formally presented with a plaque during the annual Business Breakfast and Awards Recognition Ceremony on May 5. While he was there, he won the first place award in the graduate student poster competition organized by the Protein and Co-products division of AOCS.
**Program Information**

**Food Industry Option**
Dr. Christina Lengyel, coordinator, organized a reception for all the participants of the FIO practicum program. It gave the students a chance to show what they had accomplished during their time in their practicum placement. It also gave the other students a chance to see what their fellow students had done. It gave the faculty the opportunity to personally thank the companies who participated in the program. The representatives who attended the reception and presentations were able to see what other companies and students had accomplished. The companies involved in the practicum program said only good things about our students and how well prepared they were for a work environment. They benefited as much as the students from having them work there. Students reap the benefits of their experience in the work environment as they are able to use their skills and acquire new skills through work experience.

The Faculty of Human Ecology would like to thank all the agencies and companies who participate in all of our practicum courses. Their contribution to our student’s success is invaluable.

**Interdisciplinary Health Program**
This spring marked the first two graduates from Interdisciplinary Health Program. Alina Tablowski is going into grad school (CHS at the UofM) and Melanie Hegg is working as an RA for an FSS faculty member (Rachel Eni). We wish them all the best in their endeavours.

**Dietetic Internships**
The fall of 2008 marked the first year that students were pre-selected for a dietetic internship position with the Manitoba Partnership for Dietetic Education. These students will be starting their dietetic internship in the fall of 2010. Students who have completed 60 - 90 credit hours of their 120 credit hour program are eligible to apply via this route. We believe that pre-selecting students for the internship will allow both accepted and not accepted students to plan for their future more effectively. They will be able to choose courses and make decisions that will help them further their career goals. It also allows us to work much closer with the MRHA in planning and administrating the dietetic internship so that it is effective for the students.
The traditional dietetic application route will also remain available to students. This year 25 students were accepted into programs in southeastern Ontario, Moncton, Ottawa, Northern Ontario, Halifax as well as Winnipeg.

**Enrolment**
This year 292 students have registered for fall and winter and we have 147 newly admitted students.
The planning and organization for our centennial events is moving forward at a great pace and we are very excited at what the year holds for us. We are beginning our celebration with the Centennial Kick-Off event on September 11, 2009 in conjunction with the Homecoming events planned by the Alumni Association. Our program will highlight the past with a fashion show put on by the Costume Museum of Canada. This will be a show of replicas of the garments donated by the Faculty of Human Ecology. It will also include a reading and presentation from the history book "Home Economics to Human Ecology: A Unique 100 Year Journey", by Dr. Michael Eskin, Associate Dean. Finally, we will honour the future of the faculty by officially opening the Centennial Pathway fund raising project.

This summer, on July 23rd, we played an important role in the event to honour the history and importance of Alumni House. Many of our alumni who lived in the “Practice House” were in attendance sharing their memories and pictures with some of our current students, who were in attendance as volunteers. It was a very successful afternoon and we would like to thank the Alumni Association for all their hard work to make it such a success.

As part of our ongoing build up to the centennial celebration in September 2010, we have several programs and initiatives. We are trying to connect with our “lost” graduates with help of Development and Advancement. Part of our advertising is a call to alumni asking them to spread the word about our centennial and to get any of our lost grads to update their contact information so that they will receive their invitation.

We have also sent out a call for nominations for our Top 100 Graduates. We have many alumni who have gone into their communities and made a difference and we want to honour them.

Dr. Michael Eskin is putting together a history of the faculty using contributions from staff members, both current and retired. The history will cover the evolution of the
Faculty of Human Ecology from its inception in 1910 to present day and beyond. We are very proud of our past and very excited about the strong future that our faculty has.

**Staff**

We would like to welcome Sheri Hubert to the Dean’s Office. She is the Graduate Student Assistant. Sheri will help our graduate students with program planning, registration, etc. Sheri has already proven herself to be a valuable asset to our team and we look forward to working with her.

Dr. Douglas Brownridge was promoted to full professor effective March 30, 2009.

Dr. Mohammed Moghadasian was granted tenure effective July 1, 2009.

Congratulations to both.

Need more Info? Have a comment? Do you have time to volunteer at the Centennial Celebrations?

Contact Glenda Parsons at 474-7045 or gparson@cc.umanioba.ca