On July 1, 2014, the University of Manitoba’s Department of Human Nutritional Sciences joined the Faculty of Agricultural and Food Sciences.

By bringing together Human Nutritional Sciences with Agricultural and Food Sciences, the University strengthens its leadership role in helping build safe, healthy, just and sustainable food systems that can adapt to the rapid change our province, nation and the world are experiencing today.

The Department of Human Nutritional Sciences continues to uphold its mission to excel in the generation of advanced knowledge and training of tomorrow’s leaders in nutrition and human health promotion through the integration of concepts in metabolism, food and community nutrition.

The Department offers a B.Sc. in Human Nutritional Sciences which is accredited by the Dietetians of Canada. Students choose from three options: Nutrition, Foods or Food Industry. The nutrition stream prepares students interested in becoming a Registered Dietitian to meet eligibility requirements to apply for dietetic internships across Canada, and also offers U of M students an opportunity to apply for pre-selection internship positions with the Manitoba Partnership Dietetic Education Program. Students in all options can gain industry experience through practicum options. Graduate programs in Human Nutritional Sciences are offered at the M.Sc. and Ph.D. levels.

Scientists in the human nutritional sciences are engaged in research areas ranging from the roles of food and nutrients at the cellular and molecular levels, to interactions with behaviours of the human population ultimately leading to disease prevention and management.

Department members and students regularly share their knowledge with the community through outreach activities on and off campus, such as through the CanU after school program and the Nutrition Education and Community Outreach group.

A history of education and research

- **1910** - The Manitoba Agricultural College, itself first founded in 1906, introduces a Diploma in Household Sciences, with the focus areas of Cookery and Theory of Foods.
- **1915** - The diploma program becomes a Degree in Home Economics.
- **1924** - The Manitoba Agricultural College becomes the Faculty of Agriculture and Home Economics at the University of Manitoba.
- **1967** - The Department of Foods and Nutrition is formed.
- **1970** - The Faculty of Home Economics is formed, splitting away after sixty years with Agriculture.
- **1981** - The Faculty changes its name to Human Ecology, reflecting the diversification of curricula.
- **2002** - The Department of Foods and Nutrition becomes the Department of Human Nutritional Sciences.
- **2014** - The Department of Human Nutritional Sciences officially joins the Faculty of Agricultural and Food Sciences.

**HNS by the Numbers**

- 14 faculty members
- 270 undergraduate students*
- 67 graduate students*
- $1.9 million in annual research revenue

*As of Winter 2015
Greetings alumni and friends! It has been a year of transitions and milestones for all of us connected to the Faculty of Agricultural and Food Sciences.

In July 2014, following extensive consideration and discussion, and with department and Faculty council approvals, the Department of Human Nutritional Sciences moved from the Faculty of Human Ecology to Agricultural and Food Sciences. The Faculty welcomes this move, which strengthens our goals in addressing the complex issues in food production systems, human health and the environment for the benefit of all Manitobans. Bringing together experts in agricultural production and processing with those in nutrition will enhance efforts already underway in our labs and in our classrooms to address nutritional security, sustainable food production, economic viability and much more.

Also this past year, Tracy Gilson was appointed as Operations Manager of the Glenlea Research Station. Tracy comes to us with extensive agribusiness management and government administration experience. She is providing her expertise to revitalize and manage the research station as well as the Bruce D. Campbell Farm and Food Discovery Centre.

Our students and staff continue to make a difference in many ways, as teachers, mentors, innovators and leaders (see page 7). The impact of the Faculty may also be measured by the many contributions of our remarkable alumni (see page 8). This is just a small sample of the accolades that our alumni receive for their important accomplishments locally and abroad, and we are proud of every one of them.

The Faculty’s enrolment numbers are at an all-time high, with 890 undergraduate and 283 graduate students across all programs. We boast one of the highest levels of international students, with approximately 18% of our undergraduate and 43% of our graduate student body hailing from abroad. We strive to deliver relevant and comprehensive education that puts our students at the forefront of the agri-food industry. The student experience is enhanced through hands-on learning opportunities like summer research awards, outreach events and field trips. In addition to their studies, our students impressively engage in numerous club and council functions, competitions and other extracurricular activities, which develop critical skills in communications, leadership and community connection.

The Faculty is one of the most research-intensive on the University of Manitoba campus - with $23 million in annual research revenues in 2013 - and we have identified four signature research areas: Safe and Healthy Food, Sustainable Crop and Livestock Production Systems, Bioengineering and Watershed Management. Our researchers continue to lead and collaborate on effective local and global agri-food systems that produce safe, nutritious and affordable food for all. We do this in a manner that also addresses the health of our agricultural and other ecosystems, and contributes to developing strong communities and economies.

Sharing our knowledge and expertise is a key part of our mission, and we regularly engage in academic, industry and public avenues to achieve this. The Farm and Food Discovery Centre continues to serve as a focal point for our outreach activities, and has hosted over 19,000 visitors since opening its doors three years ago.

We cannot do this on our own and I thank you, our alumni, for your time and financial support of a strong learning, research and service environment in the Faculty of Agricultural and Food Sciences.
Staff Changes

Dr. Karin Wittenberg was officially appointed Dean of the Faculty of Agricultural and Food Sciences on January 1, 2015. She brings to the position strengths in agricultural research, education and outreach, and has a significant range of administrative and partnership-building experience.

A professor in the Department of Animal Science, Karin has led the faculty in several capacities including Associate Dean (Research) and Department Head of Animal Science. Karin received her Ph.D. in ruminant nutrition from the University of Manitoba and soon after joined the Department of Animal Science.

Her research has been in the development of sustainable animal production systems. Notably, she led the establishment of the National Centre for Livestock and the Environment and the Bruce D. Campbell Farm and Food Discovery Centre, and guided a $7-million industry-led fundraising initiative in support of these two innovative facilities.

Karin is the recipient of numerous awards and honours from science peers, industry and the community, including the Canadian Society of Animal Science Fellowship Award, the Manitoba Pork Council Education Award and the YMCA-YWCA Women of Distinction Award for Science and Innovation.

Warm Welcomes

Dr. Argenis Rodas-Gonzalez was appointed Assistant Professor in the Department of Animal Science in July 2014 in the area of meat science and food safety. Argenis received his DVM from Universidad Del Zulia in Venezuela and his Ph.D. from Texas Tech University. His research interests include evaluation of meat composition and quality, with special interest in factors affecting meat shelf life and palatability.

Dr. Tracy Gilson was appointed Operations Manager for the Glenlea Research Station, and manages the operations and maintenance of the research station as well as the Bruce D. Campbell Farm and Food Discovery Centre in support of the Faculty’s research, teaching and outreach goals. She previously served as acting assistant deputy minister in Manitoba Agriculture, Food and Rural Development.

Management Moves

Jared Carlberg was appointed Associate Dean (Academic) and Martin Scanlon was appointed Associate Dean (Research) effective January 2015. Fouad Daayf was appointed Head of the Department of Plant Science in January 2015.

Brian Oleson was re-appointed for two years as Head of the Department of Agribusiness and Agricultural Economics in January 2015.

Michael Trevan was appointed Acting Head of the Department of Food Science in July 2014.

In Memoriam

Dr. Reginald Gallop passed away on March 30, 2014. Dr. Gallop was the first Food Science department head, serving in that role from 1966 to 1978. He retired from the University of Manitoba in 1990.

Dr. Ron Pereira passed away on June 28, 2014. Dr. Pereira was an original staff member of the Department of Food Science, beginning in 1966. He served as acting head for a period, and retired in 1995.

Dr. Thomas Devlin passed away on August 9, 2014. Dr. Devlin taught and conducted research in ruminant nutrition, particularly in beef cattle, in the Department of Animal Science for over 30 years, retiring in 1995.

Fond Farewells

Dr. Peter McVetty, Plant Science, retired after 35 years of service in June 2014. He served as Head of the Department for six of those years. Peter has been appointed a Senior Scholar.

Gary Martens, Plant Science, retired after 16 years in May 2014. Over the years Gary served as an Instructor and Acting Director of the School of Agriculture. Gary continues to serve the School as a Farm Management Advisor.
Green Paper Explores Climate Change and Prairie Agriculture

“Moving Toward Prairie Agriculture 2050” is a “green” paper authored by University of Manitoba researchers and others which was commissioned by the Alberta Institute of Agrologists for presentation at their annual conference in April 2014. The paper explores ways the western Canadian agricultural industry might adapt as the changing climate affects world food production practices.

Edited by Brian Amiro, Christine Rawluk and Karin Wittenberg, the paper features 23 authors presenting on a broad range of Prairie food production issues including future water management, beef production, cropping systems, pests, transportation, food quality and insurance. They provide a current status of each topic and also a glimpse into the future of what may happen and how the industry can, or has begun to, prepare to address the issue.

The green paper not only served as the anchor for the conference theme, but was also submitted to the Alberta government legislature as a key document. The report also generated several media articles.

The Green Paper is available to read at www.nicle.ca.

Nematode Project Helps Pulse Industry

A tiny but destructive pest of many crops, the stem and bulb nematode (*Ditylenchus dipsaci*) is on the quarantine list for many of Canada’s trade partners. For more than a decade, Canada’s yellow pea exports to India have been scrutinized heavily for the presence of this pest, which has appeared in Canadian Food Inspection Agency samples in extremely low frequencies. Although found in low frequencies, the impact on the pulse trade industry was great because of the need to fumigate container ships that had positive samples.

Mario Tenuta, Canada Research Chair in Applied Soil Ecology, and his research team set out to resolve this market access problem by looking for the host plants for these nearly microscopic worms in the Prairie Provinces.

Following a hunch, they determined the nematode was not in pea plants, but hosted in Canada thistle weeds in the fields and surrounding ditches. Further analysis revealed the nematode in question was actually a similar but different species named *D. weischeri*.

With these findings, Pulse Canada is working with CFIA to update their testing methods with the goal of reducing the quarantine of Canadian pulse exports. Mario’s lab continues to confirm the new nematode is not a pest issue of crops. The lab is also examining other nematodes in pulse fields across the Prairies. The research is funded by the Alberta Pulse Growers Association, Saskatchewan Pulse Growers, Manitoba Pulse and Soy Growers Association, the Alberta Crop Industry Development Fund and AAFC’s Growing Forward 2 program.
Arborists Online

The Manitoba Arborist Training and Licensing Program, offered through the School of Agriculture, is now available in an online option to students seeking to learn about tree care.

Aimed at those seeking to apply for a Manitoba Arborists Licence with the Province of Manitoba, the program covers topics such as tree biology, plant classification and identification, soil science and tree worker safety. The program’s new online format means students can access the course from anywhere and work at their own pace. The materials include readings, interactive slideshows and video to help meet the needs of different styles of learners.

Registration is now open for the next session of the Manitoba Arborist Training and Licensing Program, which begins May 2015. Visit ManitobaArborists.ca for more information or to register.

Sharing Indigenous Knowledge

A special presentation entitled “The Relevance of Treaties to the Agricultural Community” was made by Jamie Wilson, Treaty Commissioner of Manitoba, and Ovide Mercredi, Senior Advisor to President Barnard, with moderator and Faculty alumnus EJ Fontaine. They discussed the relevance of treaties to farmers and the agricultural community. The seminar was provided to second year Diploma in Agriculture students as part of their capstone course, where they are exploring issues that impact their farms and their industry.

Diploma Curriculum Under Review

The School of Agriculture has begun a comprehensive review of the Diploma in Agriculture program, to ensure that our graduates are successfully prepared for their future careers and are relevant and responsive to their industry. The goal is to have a completely revised curriculum in place by 2018, with the first students graduating from the revamped program in 2020.

An advisory committee made up of industry, alumni and academic members is guiding the process. A wide consultation has begun, starting with focus groups exploring what skills, attributes and learning outcomes are considered important by the agri-food industry. Areas of particular interest are communications, critical thinking, leadership and knowledge. A stakeholder survey will also be conducted to collect feedback on these needs.

If you are interested in learning more or wish to participate in the survey, please visit the School of Agriculture website at umanitoba.ca/afs/school/ for more information.

Get Your Faculty Fix

Stay up-to-date with Faculty news and events with the bi-weekly e-newsletter AG e-news by signing up at agfoodsci@umanitoba.ca.

Archived issues can be found at umanitoba.ca/afs/AG_e-news/

The Faculty can also be found on Twitter at @UM_agfoodsci
Our Donors

Thank you to the people who alone or as part of an organization or corporation have pledged to put their money to work for the Faculty of Agricultural and Food Sciences. This money has made a big difference - it has helped students cover the cost of their tuition and books, paid for new research equipment, refurbished classrooms and laboratories, and sent students on field trips.

As a donor, you can tell us how you would like your gift directed - to scholarships and bursaries, to special funds like the Bruce D. Campbell Farm and Food Discovery Centre, the Centennial Entrance Scholarship, the Agricultural and Food Sciences Student Experience Fund or to the Faculty of Agricultural and Food Sciences Endowment Fund, which provides teaching and other resources for the Faculty.

If you would like to make a donation, visit the Philanthropy website atumanitoba.ca/admin/dev_adv/, call (204) 474-9195 or 1-800-330-8066 or email philanthropy@umanitoba.ca.

Students Pledge to Keep On Giving

Degree and diploma students in the Faculty of Agricultural and Food Sciences voted this year to continue their support of the Faculty’s Endowment Fund and the Student Initiatives Fund through a $132 surcharge on their tuition fee.

The Endowment Fund supports projects that enhance teaching, research and outreach activities, while the Agriculture Student Initiatives Fund assists projects that directly impact student activities.

The commitment from the student body will equate to an approximate $200,000 contribution over the two-year term of the pledge. To date, students have contributed over $1.3 million since they began their support in 1988.
### Accolades

#### Staff

**Belay Ayele**, Plant Science, received the University of Manitoba Rh Award, given to academic staff members in the early stages of their careers who display exceptional innovation, leadership and promise in their respective fields.

At the annual Students’ Teacher Recognition Reception, for 2014 **Anita Brûlé-Babel**, Plant Science, was recognized by degree student **Danica Swaenpoel**; **Connie Magalhaes**, Human Nutritional Sciences, was recognized by degree student **Michelle Stevens**; and **Gary Martens**, Plant Science, was honoured by diploma student **Kayla Antonowich**.

**Jared Carlberg**, Agribusiness and Agricultural Economics and Associate Dean (Academic) was named 2014 Professor of the Year by degree students.

**Rob Gulden**, Plant Science, and **Barb Sharanowski**, Entomology, were awarded the 2014 Teaching Award of Merit from the North American Colleges and Teachers of Agriculture for excellence in teaching an agricultural discipline.

**Rick Holley**, Food Science, has been named a Fellow of the International Academy of Food Science and Technology for his outstanding contributions to the field of science and technology.

**Digvir Jayas**, Biosystems Engineering and Vice President (Research and International), was presented with the Kishida International Award for outstanding contributions by the American Society of Agricultural and Biological Engineers.

**Gary Martens**, Plant Science, was named 2014 Teacher of the Year by diploma students.

**Emma McGeough**, Animal Science, received the Canadian Society of Animal Science Young Scientist Award 2014, for excellence in any area of animal and/or poultry science. Emma is also one of three inaugural researchers accepted into the new Beef Cattle Research Council Researcher Mentorship Program.

**Martin Scanlon**, Food Science and Associate Dean (Research), was the recipient of the 2014 University of Manitoba Graduate Students’ Association Teaching Award.

**Kristine Blair**, Animal Science M.Sc. student, has been named to the Canadian Cattle Association Cattlemen’s Young Leaders Program, an eight-month mentorship with a provincial/national producer organization, while gaining the expertise and business acumen necessary to sustain the cattle industry into the future.

Kristine was also one of two recipients of The Environmental Stewardship Award for 2014 presented by the Manitoba Beef Producers. The award recognizes producers who go above and beyond standard industry conservation practices and set positive examples for other cattle producers and the general public.

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**Braden Calvert**, diploma student, skipped his Manitoba team to the gold medal at the 2015 World Juniors men’s championship in Tallinn, Estonia.

**Chang Hee Choi**, M.Sc. student in Agribusiness and Agricultural Economics, was awarded the Graduate Student Teaching Award of Merit from the North American Colleges and Teachers of Agriculture for excellence in teaching an agricultural discipline.

**Dylan MacKay**, Ph.D. student in Human Nutritional Sciences, has won this year’s American Society for Nutrition Clinical Emerging Leader Award, which recognizes a graduate student who is a major contributor in the planning or conducting of a human clinical nutrition trial.

**Rotimi Ojo**, Soil Science Ph.D. student, was announced as one of three recipients of the Dean of Graduate Studies Student Achievement Award.
Recognizing Our Alumni

Ed Tyrchniewicz, agricultural educator, and Marg Rempel, farmer and community leader, received the 2014 Certificates of Merit from the Faculty of Agricultural and Food Sciences in recognition of their contributions to Manitoba’s agricultural community.

Ed Tyrchniewicz obtained a B.S.A. in agricultural economics from the University of Manitoba in 1962, followed by his Ph.D. at Purdue University. He served as professor and department head of the Department of Agricultural Economics, and a variety of other appointments during his career. Today he is a senior scholar and teaches in the Internationally Educated Agrologists Post-Baccalaureate Diploma program. Over his long career, Ed participated in many provincial and national public inquiries, helping shape the development of Canadian and international agricultural policy and programs.

Marg Rempel grew up on a dairy farm near Brandon, MB. Marg and her husband Ron worked with Mennonite Central Committee in Brazil, and returned to Manitoba to the family farm near Ste. Anne. Marg farmed together with Ron until his death in 2003, and continues to farm with her son. She is very involved in Manitoba’s agriculture community, serving with 4-H, Keystone Agricultural Producers, Manitoba Rural Adaptation Council, Manitoba Pork Council, Canadian Agri-Food Policy Institute, and Canadian Foodgrains Bank. Marg’s contributions have had local and global impact, and she has said that primary food production is the most important vocation that exists.

Other Alumni Awards

Dr. Vernon Burrows (BSA/51, MSc/53) was inducted into the Canadian Science and Engineering Hall of Fame at the Canada Science and Technology Museum for his pioneering work in oat breeding, with 28 varieties to his name including AC Gehl, the “naked” oat.

Bill Siemens (DipAg/59), Bob McNabb (BSA/69) and Don Kroeker (BSA/57) were inducted into the Manitoba Agricultural Hall of Fame for their significant contributions to Manitoba agriculture.

Charlie Froebe (DipAg/64) was inducted into the Canadian Agricultural Hall of Fame for his efforts in the Canadian canola sector.

Kelly Beaulieu (BA/87, BSA/91), founder of the start-up food company Canadian Prairie Garden Purees, received the Technology Innovation Award from the Canadian Aboriginal and Minority Business Council, and the Manitoba Food Processors Association’s “Manitoba TASTE Award for Best New Product”.

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2015 Reunions

Class of 1955 (and thereabouts) - Degree - will celebrate its 60th reunion September 10-13 in Winnipeg. Contact Bob Hicks at reuheh@hotmail.com.

Class of 1965 - Degree - will celebrate its 50th reunion October 2-4 (U of M Homecoming) in Winnipeg. Contact Gary Zilkey at garyz@wcgwave.ca.

Class of 1960 - Diploma - will celebrate its 55th reunion, date and location to be determined. Contact Marcel Fraser at Fraser2008@shaw.ca.

Class of 1965 - Diploma - will celebrate its 50th reunion June 19-21 in Stonewall. Contact Marcel Fraser at Fraser2008@shaw.ca.