Faculty of Agricultural and Food Sciences - 2014

aggregate



Faculty of Agricultural and Food Sciences

Growing Our Oilseed Research



Project lead Rob Duncan

The University of Manitoba, long recognized as a trailblazer in high erucic acid rapeseed (HEAR) cultivar development, will continue to innovate in this field thanks to a Collaborative Research and Development grant from the Natural Sciences and Engineering Research Council of Canada and support from Bunge Canada and DL Seeds for a total of \$3.9 million over the next five years.

The research program is focused on producing world-class hybrid herbicide-tolerant HEAR cultivars, as well as uncovering novel aspects of blackleg resistance. The program will also provide training for highly qualified personnel in plant breeding, plant genomics and plant pathology.

Along with the research expertise of the Department of Plant Science's Rob Duncan, Dilantha Fernando and Genyi Li, the project will incorporate knowledge in hybrid development from DL Seeds and oilseed processing from Bunge Canada.

HEAR produces a unique oil that is used in a wide range of lubricants, slippage agents, plastics, lacquers, coatings and cosmetics.

"Father of Canola" Honoured

The late Dr. Baldur Stefansson (BSA/50, MSc/52, PhD/66), renowned University of Manitoba plant scientist, was honoured last summer with the unveiling of a bust in his likeness. Dr. Stefansson was the first person honoured at the new Innovation Plaza on the Fort Garry campus, a public space in front of the Buller Building intended to inspire visitors and celebrate the achievements of noted University of Manitoba scholars and researchers. His installation was sponsored by the Richardson Foundation. Dr. Stefansson began his career as an oilseed breeder in the Department of Plant Science and recognized the potential of rapeseed as an edible oilseed crop for temperate climates.

In 1974, Dr. Stefansson released Tower, the first 'double zero' rapeseed cultivar with less than five percent erucic acid and low levels of glucosinolates, which cause bitterness in vegetables such as cauliflower and brussels sprouts. The significant improvements in both oil and meal quality, as well as taste, were recognized in a new commodity



name canola. In 1987, Dr. Stefansson registered the world's first low linolenic canola cultivar, Stellar, and products made with canola have since been commonplace on grocery shelves.

Dean's Message



Many of you will already know that, as of June 30 this year, I am stepping down as Dean after 10 fascinating, rewarding and challenging years. When I took my post in 2004, agriculture as an industry was in the doldrums and undergraduate student recruitment had been in decline for a decade. I was encouraged at that time by the industry, alumni and students that my key challenge should be to raise the interest of young people in the excitement and rewards of a career in the agri-food business and to reverse the decline in undergraduate recruitment, and to reconnect our urban population with the importance of agriculture to their health and wellbeing.

I am delighted, therefore, to report that through a number of initiatives – many of which you have generously supported - we have achieved much over the last nine and a half years, including a doubling of our undergraduate population and major increase in our public outreach activities. For example, we have built the Bruce D. Campbell Farm and Food Discovery Centre, a unique and significant outreach facility for the public and industry; enhanced our interaction with high school science teachers and their students; and worked collaboratively with Agriculture in the Classroom - Manitoba.

We have articulated our two-year Agriculture Diploma program with our degree programs so that good diploma students can transfer up to 60 credits into the appropriate degree program and extended this mobility to Olds and Assiniboine Community Colleges; re-established a direct entry route into the Faculty for first year students; worked to develop and maintain our 2+2 student transfer agreements with international agriculture universities; and instituted a post-baccalaureate diploma in agriculture for internationally educated agrologists. In addition, students across the campus can benefit from three recently introduced minor programs in soil science, entomology and crop protection.

All this does not mean, however, that we have been idle on other fronts. Over the same period our annual research income from all sources has tripled to approximately \$15 million. We have renovated and built new research facilities on the Fort Garry Campus, at the Ian N. Morrison Research Farm in Carman, and at Glenlea Research Station; increased our research output; and maintained our graduate student population at over 200, of whom 35% are doctoral candidates. Since its opening in 2006, the Richardson Centre for Functional Foods and Nutraceuticals has become recognized internationally for its innovative and quality research. Studies conducted at the CWB Centre for Grain Storage Research, opened officially in March 2005, have had an impact on improvements to the storage of grains around the world. The National Centre for Livestock and the Environment has also gained an international reputation for its work on the sustainability of intensive livestock production systems, as well for its direct benefit to Manitoba's livestock industry.

I want to express my deep gratitude to those who have supported the Faculty over the years, from individual donors to our industry partners, as well as those who have participated with us in our research, education and research initiatives. I know that we could not have achieved these lofty goals without your loyalty, faith and hard work, and for that I truly thank you!

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Michael Trevan Dean, Faculty of Agricultural and Food Sciences

CHALLENGER VISIONARY TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVE aggregate 2014

Staff Changes

Fond Farewells

Gary Fulcher, Food Science, retired after nine years of service in December 2013. He served as Head of the Department for eight of those years.

Terry Galloway, Entomology, retired from the Faculty in December 2013 after 36 years, serving as Acting Head of the Department twice during that time. He was appointed Senior Scholar in January 2014.

Don Johnson, Biosystems Engineering, officially retired as an instructor in August 2013 after 37 years of service.

Ian Brown, Greenhouse Manager in Plant Science, retired in September 2013 after 42 years of service.

Management Moves

Paul Bullock was appointed Head of the Department of Soil Science in July 2013.

Martin Scanlon was appointed Acting Head of the Department of Food Science in July 2013.

Fouad Daayf was appointed Acting Head of the Department of Plant Science in July 2013.

Jared Carlberg was appointed Acting Associate Dean (Academic) in January 2014.

Digvir Jayas has been reappointed as Vice-President (Research and International) of the University of Manitoba for a five-year term, effective July 1, 2014. Digvir is also a Distinguished Professor in Biosystems Engineering.

In Memoriam

Dr. Michael Zwarich passed away on January 29, 2014. Michael joined the Department of Soil Science in 1956, and was a long-time professor of soil genesis and classification. He retired in 1994.

John Watson passed away on May 27, 2013. John worked for the Department of Plant Science for 29 years, serving as Field Superintendent until his retirement in 1998.

J. Cameron Brown (BSA/52,

MSc/55) passed away on August 2, 2013. Cam served as Chair of the 100th anniversary



celebrations of the Faculty, and was involved in the "Gateway to the Future" fundraising drive. He also led the campaign to establish the Stan T.K. Cheung Centre for Animal Research and was influential in establishing several awards, scholarships and fellowships in the Faculty.

4-H Comes to Campus

The University of Manitoba has partnered with 4-H Manitoba to form the Future Leaders Club, a provincial first. Club members are 18 to 25 years of age and come from very different backgrounds ranging from newly arrived students from China to seasoned 4-H members with over a decade of experience. The club's focus for this year has been getting organized as a group, engaging in different leadership activities on and off campus, and growing awareness and membership for upcoming years. To date, the club

has held successful workshops on grantsmanship and social media, and its first speaking competition.





Discovery Centre Unveils New Programs, New Look

The Bruce D. Campbell Farm and Food Discovery Centre kicked off 2014 with four new school programs, a suite of birthday party options and a refreshed marketing campaign.

The new education programs investigate the science behind wheat, eggs, dairy products and potatoes by following the commodity from the farmer's field to the students' table. The day-long field trips start with learning about on-farm production practices and end in the kitchen where the raw ingredients are turned into healthy and tasty treats. These hands-on, inquiry-based lessons focus on the student experience and connect urban students with agriculture.

A perfect venue for children's parties, the Centre now offers themed birthday packages that

explore animals, crops, and Manitoba food products.



Students visit the Centre as part of Bio-Innovation Week.

To help market these exciting new programs, an advertising campaign was launched that targets educators and families, with engaging imagery that focuses on food and young people. The new look is reflected on the



Centre's website, Facebook and Twitter pages.

The Centre continues to play host to a variety of activities, from the casual visitor to large groups of all ages. In the summer of 2013, the Centre hosted its 10,000th visitor! Whether it is an industry meeting, a conference tour or a seniors' group visit, the Centre is a unique destination of choice. Visit today. www.ffdc.ca

Making Farm Safety a Priority

Two safety projects aimed at agriculture students and farmers will gain traction thanks to \$300,000 in grants from the Workers Compensation Board of Manitoba (WCB). The funding is part of the WCB's Research and Workplace Innovation Program, which supports innovative projects and scientific research to help reduce workplace injuries and illnesses. The School of Agriculture will lead the projects, the first which will utilize the Glenlea Research Station as a model for developing customized safety plans for livestock producers, as well as for feed mills, field crops, agri-research and agri-tourism businesses. The second project will develop and deliver farm safety training, including a course that will be created specifically for distance delivery, as well as provide rural workshops. Project partners include Keystone Agricultural Producers and Manitoba Canola Growers Association, with support from Canadian Agricultural Safety Association.



Farm safety project team members (l-r) back row – Guy Robbins, Aimé Chaput, Don Chaput; middle row – Thea Green, Barry Peril, Al Neveux; front row – Lorrie Koroscil, Michele Rogalsky

We want to hear from you

Two and a half years ago University of Manitoba President David Barnard requested that we search for ways to reduce the number of faculties from 20 to around 13 by 2017. He was clear that these faculty amalgamations should only happen where it makes sense, and that this is not a cost-cutting exercise.

Since that time we have been holding discussions with other faculties and units to explore the possible academic advantages of amalgamation. To this end, the Faculty Councils of both Agricultural and Food Sciences and Human Ecology have voted by substantial majorities to transfer the Department of Human Nutritional

Submit your comments today!

Sciences from Human Ecology to Agricultural and Food Sciences. This recommendation must now be approved by Senate and eventually the Board of Governors.

We have also entered into discussion with the Clayton H. Riddell Faculty of Environment, Earth, and Resources about the potential for a merger. From individual conversations with our faculty members, it seems that there is a broad measure of support for this merger, so long as it is carried through properly and there is a clearly articulated vision and academic purpose for merging. For example, a re-development of our curricula might lead to degree programs that would better

serve the needs of our students as they live and work through the next challenging 40 years. The Faculty of Agricultural and Food Sciences at the University of Manitoba was first founded as the Manitoba Agricultural College in 1906, and in the years since that time, has adapted itself to match the challenges and demands of our industry. Going forward, with your help, we will chart our future to best serve our students, our partners and the general public in our mission to "Feed the world without costing the Earth".

We would greatly appreciate your views on the matter of this potential merger.

Please join in the discussion by sharing your thoughts. All submitted comments will be confidential. Visit umanitoba.ca/afs/merger/ or email agdean@umanitoba.ca before the end of April 2014.

Tackling Water Quality Issues

First Nations science and engineering students will be at the forefront of addressing multi-billion-dollar water services gaps in their communities.

Annemieke Farenhorst, Soil Science, will lead a \$3-million H2O CREATE program, with assistance from the Centre for Human Rights Research and in collaboration with Trent University, University College of the North, the Assembly of First Nations and industry partners. H2O CREATE is part of the H2O Program for Water and Sanitation Security. The program was recently awarded funding from Natural Sciences and Engineering Research Council of Canada.

H2O program students, including many who are Indigenous, will assist First Nations, water treatment system manufacturers and engineering firms at a crucial time when residents of 113 First Nations across Canada are unable to drink their tap water.

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 www.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 Agriculture 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 at umanitoba.ca/admin/dev_adv/, call (204) 474-9195 or 1-800-330-8066 or email philanthropy@umanitoba.ca.

Individuals

Edward M. and Phyllis M. Bailey Michael E. Bartmanovich and Claire Bartmanovich (estate) Victor H. Beaudin Alan A. Borger and Natalija E. Zmavc John M. Chang George W. Chapman Robert S. Chapman Charles D. Dyck Adeline A. Elias Lvall R. Franck Rev. Keith S. and Denise M. Fraser Dr. John A. Garland Alan and Ethel L. Graham James M. and J. M. L. Halley Prof. Ernest and Elma Hiebert Dr. Jesse R. and Ann C. J. Ingalls Dr. Alexander F. Janzen and Frieda Janzen (estate) Myrna L. Kraft and Dr. Daryl F. Kraft (estate) Norman C. and Kaye Little Nelson L. Longmuir and Marguerite R. Thibeault Gladys Lovatt and Donald B. Lovatt (estate) Kenneth M. and Shirley A. McKenzie Bruce E. Peloquin Leonard J. and Carol Penner Ronald G. Pettitt J. David and Betty Pizzey Dr. Geza J. and Trudi Racz Dr. William E. and Leola I. Rempel Dr. George T. Richardson, C.M., O.M. and Dr. Tannis M. Richardson, C.M. Dr. Wilbert G. and Sharon Ronald

Food Scholarship Program Created

Thanks to a recent \$100,000 gift from the Guelph Food Technology Centre, a legacy fund has been established in the Faculty to support scholarships and programs focused on the food production and processing industries, and directed towards students in Food Science and Human Nutritional Sciences. The fund supports 10 undergraduate entrance scholarships each valued at \$8,000 over two years. As well, \$20,000 has been dedicated to support co-operative work experience opportunities. Visit **umanitoba.ca/afs/awards/** to learn more about these and other awards in the Faculty. Dr. Gabriel L. Roy Jeannette Rubinyi Richard W. and K. Joan Rue Prof. Marvin E. and Gloria E. Seale Raymond E. and Betty Snitynsky Evelyn J. Stephen Roslyn L. and Alexander W. Stewart Cornelius H. and Nelly van Gorp Thuraya Weedon and George F. Skinner (estate) Tim Wendell Norval C. and Ivy Young Didzus Zuzens and Gundega A. Ansklavins (estate)

Organizations

Agrium Inc. Animal Nutrition Assoc. of Canada -Manitoba Division Canadian Association of Agri-Retailers Canadian Bio-Systems Canadian Wheat Board Credit Union Central of Manitoba Croplife Canada - Manitoba Council Dairy Farmers of Manitoba Guelph Food and Technology Centre Industrial Investments Ltd. James Farms Limited **Keystone Agricultural Producers** Kiessling/Isaak Family Foundation Manitoba Ag Days Manitoba Beef Producers Manitoba Egg Farmers Manitoba Hog and Poultry Days Manitoba Institute of Agrologists Wpg Branch Manitoba Pork Council Manitoba Pulse Growers Association Inc. Noventis Credit Union - Gimli Nutreco Canada Inc. Pallister Farm Ltd. **Pioneer Hi-Bred Limited** Starbuck Credit Union Steinbach Credit Union Limited Syngenta Canada Inc. - Guelph

List includes donors who made a gift or payment of \$500+ to Faculty of Agricultural and Food Sciences affiliated funds. Information provided by Philanthropy for the period of January 1, 2013 to December 31, 2013. CHALLENGER VISIONARY TRAILBLAZER CHALLENGER VISIONARY INNOVATOR ADVE aggr<u>egate</u> 2014

Accolades Staff

Sue Arntfield, Food Science, was awarded the Teaching Award of Merit from the North American Colleges and Teachers of Agriculture for excellence in teaching an agricultural discipline.

Harold Bjarnason, who served as Dean of the Faculty from 1999 to 2004, was appointed Dean Emeritus for his distinguished service to the University.

Kris Dick, Biosystems Engineering, was recognized with a University of Manitoba Outreach Award for his efforts in establishing "El Pueblo Creciente" which provides alternative housing solutions to people living in impoverished areas of Honduras.

Nazim Cicek, Biosystems Engineering, received a Manitoba Excellence in Sustainability Award from the Manitoba Round Table for Sustainable Development for his work on water and nutrient management and biofuel generation. Nazim also received the John Turnbull Award from the Canadian Society for Bioengineering for his contributions to waste management.

Annemieke Farenhorst, Soil Science, was recognized with a University of Manitoba Outreach Award for her tireless efforts in encouraging and empowering women to enter careers in the sciences and engineering.

Digvir Jayas, Vice-President (Research and International) and Distinguished Professor in Biosystems Engineering, was named a Foreign Fellow of the National Academy of Sciences, India for his contributions to grain storage. Peter McVetty, Plant Science, was awarded a Queen Elizabeth II Diamond Jubilee Medal for his contributions to canola/rapeseed research and development.

The annual Students' Teacher Recognition Reception gives outstanding graduating students an opportunity to honour teachers who have made important contributions to their education. **Martin Scanlon**, Food Science, was recognized by degree student **Ryan Murphy**, and **Don Flaten**, Soil Science, was honoured by diploma student **Matt Lowry**.

Three Animal Science faculty were honoured by the Canadian Society of Animal Science. **Karin Wittenberg** received the prestigious CSAS Fellowship Award. **Martin Nyachoti** received the Excellence in Nutrition and Meat Sciences Award. **Gary Crow** received the Lifetime Membership Award.

Students

Warren Blunt, Ph.D. student in Biosystems Engineering, received one of the inaugural Sir Gordon Wu Graduate Student Scholarships, given for exceptional intellectual ability and academic accomplishments. The renewable scholarships have a maximum value of \$40,000.

Marley Boyce, M.Sc. student in Plant Science, was awarded with the 2012 Seed of the Year - West Scholarship. This \$4,000 award is for a graduate student enrolled in a western Canadian university and developing research in plant breeding or genetics.



(I-r) Ted Young, CYSA chair, Kim McCaw, CYSA past president, Courtney Jordan, Richard Kuntz, CYSA president

Courtney Jordan, agronomy student, was named this year's senior champion in the 28th annual Canadian Young Speakers for Agriculture (CYSA) competition held in November at the Royal Agricultural Winter Fair in Toronto. She selected the topic "Reading, Writing and Agriculture: Should Agriculture Be In The Curriculum?" In total, 28 competitors from five provinces took part in the senior competition.

Three Food Science students received awards from the AACCI Foundation (formerly known as the American Association of Cereal Chemists): **Filiz Koksel**, Ph.D. student, \$3,000 graduate fellowship; **Lilei Yu**, M.Sc. student, \$2,500 graduate fellowship; and **Carly Isaak**, degree student, \$1,000 undergraduate scholarship.

Filiz Koksel, Food Science, 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.

Alumni Contributions Recognized

Dan Mazier, producer and young farmer advocate, and the late Allan Chambers, educator and farm leader, received the 2013 Certificates of Merit from the Faculty of Agricultural and Food Sciences in recognition of their contributions to Manitoba's agricultural community.

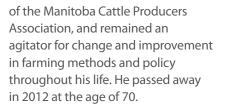
Raised on a family farm near Justice, MB, Dan Mazier graduated from the Diploma in Agriculture program in 1984. Today, he and wife Leigh operate a diversified operation that includes grains, oilseeds, seed production, cattle, poultry and sheep. An active community leader, Dan helped establish the Young Farmers Committee for Keystone Agricultural Producers (KAP). Dan currently serves as the vice-president of KAP and is committed to ensuring the farming industry creates a safe work environment for all farmers.

Allan Chambers received his Bachelor of Science in Agriculture in 1965 and began his career with agricultural extension work, which led to a



(I-r) Dean of the Faculty Dr. Michael Trevan, Karla Andrich (daughter of Certificate of Merit recipient Allan Chambers), Certificate of Merit recipient Dan Mazier, Director of School of Agriculture Michele Rogalsky.

lifetime of farming in the Interlake. He also taught at the University of Manitoba and served as the Assistant Director of the School of Agriculture. Through his diverse career, he worked in Oman and Sudan for the Canadian International Development Agency, wrote for the Winnipeg Free Press and several farm publications and provided tax advice to farmers as part of the federal NISA program. Allan was the first general manager



2014 Reunions

- Class of 1969 Diploma will celebrate its 45th reunion on June 21-22 in Onanole. Contact Roger Froebe at Ve4rlf@shaw.
 ca or 204-669-4723.
- Class of 1984 Diploma will celebrate its 30th reunion on June 21 in Winnipeg. Contact Michele Rogalsky at michele. rogalsky@umanitoba.ca or 204-474-9262.
- Class of 1964 Diploma will celebrate its 50th reunion on July 18-20 in Winnipeg. Contact Charlie Froebe at cfroebe@ mymts.net or 204-745-2658.



The Diploma Class of 1963 visited the Bruce D. Campbell Farm & Food Discovery Centre as part of their 50th reunion held in May 2013.