

## AGRC 311-International Study Tour @USask



Drs. Karen Tanino and Kate Congreves took a group of students to southwestern Ontario July 1-10th for AGRC 311, a field course focused on horticulture production and practices. This course was jointly organized by the University of Saskatchewan and University of Guelph (although all of the students were UofS).

The group teamed up with Dr. Laura Van Eerd from the University of Guelph, Ridgetown Campus for a whirlwind study tour of Canada's #1 horticultural region. The tour included 26 stops at various horticultural farms, grower operations, and research stations where students interacted with farmers, owners/operators, government extension staff, and researchers. Students saw the full scale of production – ranging from Canada's largest Brussel sprout farm to a 1-acre urban farm. Other sites included: processing vegetables, organic systems, greenhouse pepper, high tunnel strawberries, u-pick blueberries, asparagus and pickling, lavender, peanut, tobacco, turfgrass, wholesale nursery, agri-tourism, controlled environment and plant preservation research, ginseng, hops, orchid, rose, apple and tender fruit, cannabis, brewery and vineyards. Students finished the study tour by participating in the Plant Canada conference which was held at the University of Guelph from July 7-10, 2019.



## Staff Appointments



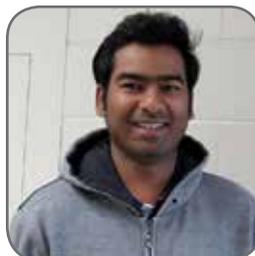
**Kiran Baral** began working as a Post Doctoral Fellow with the Forage breeding program on September 1, 2019.



**Susil Ranasinghe** joined the molecular quality research laboratory as a research technician on June 24, 2019.



**Andrew Harris** began working as a research technician with the spring wheat and canaryseed breeding program on September 3, 2019.



**Mortuza Reza** began working with the cereal and flax pathology research program as a research technician on July 2, 2019.



**Laura Jardine** began working as a project manager for the molecular pulse breeding program on September 3, 2019.



**Eva Sarmiento** joined the spring wheat and canaryseed breeding program as a research technician on August 26, 2019.



**Ayla Lichtenwald** began working as a research technician in the durum wheat molecular breeding lab on June 3, 2019.



**Kenna Skoglund** began working as a research technician with the barley and oat breeding program on July 22, 2019.



**Valentyna Klymiuk** joined the durum wheat molecular breeding laboratory as a post doctoral fellow on August 21, 2019.



**Maureen Troesch** joined the durum wheat breeding program as a research technician on June 3, 2019.



**Tram Truong** joined the molecular quality laboratory as a research technician on August 1, 2019.

## Long Term Service Recognition

The Plant Sciences Department and the Crop Development Centre would like to recognize the following staff members on their years of service milestones:

For the months of June - September, 2019

### 10 years of Service:

*Aaron Gerein*  
Research Technician  
Weed Control & Research  
Program  
August 24, 2009



### 5 years of Service:

*Hema Sudhakar Duddu*  
Research Officer  
Crop Phenotyping  
August 1, 2014



### 10 years of Service:

*Mark Colin*  
Research Technician  
Crop Molecular Genetics  
Laboratory  
June 1, 2009



### 5 years of Service:

*Coral Stang*  
Research Technician  
Durum Wheat Breeding  
Program  
September 2, 2014



### 10 years of Service:

*Heidi Lazorko*  
Research Technician  
Durum Wheat Breeding  
Program  
June 1, 2009



### 5 years of Service:

*Denver Falconer*  
Research Technician  
Herbarium  
September 2, 2014



### 10 years of Service:

*Leona McNutt*  
Research Technician  
Spring Wheat & Canaryseed  
Breeding Program  
September 8, 2009



### 5 years of Service:

*Manu Gangola*  
Post Doctoral Fellow  
Molecular Quality  
Laboratory  
September 11, 2014



### 25 years of Service:

*Michael Grieman*  
Research Technician  
Spring Wheat & Canaryseed  
Breeding Program  
August 2, 1994



### 25 years of Service:

*Scott Ife*  
Research Technician  
Pulse Breeding Program  
July 1, 1994



## Save the Date

PLSC Staff Photo Day

.....Thursday, November 7, 2019

PLSC Holiday Party

.....Friday, December 13, 2019

## New Graduate Students



**Kathryn Aldridge** is from Kelfield SK. She attended the University of Saskatchewan where she completed a BSA with Great Distinction in Crop Science in June 2019. Kathryn joins the Agronomy and Weed Ecology as a Masters students under the supervision of Steve Shirtliffe and Eric Johnson. Her research will focus on weed interactions.



**Stephen Awodele** is from Nihort Idadan, Nigeria. He attended Editi State University in Nigeria where he completed a Bachelor of Science in Agriculture in March, 2018. Stephen joins the department as a Masters student under the supervision of Jon Bennett. His research will focus on how certain biotic and abiotic components relate to variation in plant traits.



**Caleb Bryan** is from Cabot Arkansas. He attended the University of Central Arkansas where he completed a Bachelor of Science in August, 2019. Caleb joins the Entomology program as a Masters student. His research will focus on studying the mechanisms that govern insect interactions with plants.



**Adam Carter** joined the department as a PhD student under the supervision of Curtis Pozniak. Adam is from Brandon, MB. He attended the University of Manitoba where he completed a Bachelor of Science in Agriculture (Honours) in 2014 and continued on to complete a Masters of Science program in Plant Agriculture from the University of Guelph in 2017. Adam's PhD research will continue studying plant breeding and genetics.



**Samantha Morrice** joined the Entomology program as a Masters student under the supervision of Sean Prager. Her research focuses on the community ecology of pollinators with respect to field and wetland margins in crop lands. Samantha attended Athabasca University and later the University of Saskatchewan where she completed a Bachelor of Science in Biology



**Sudipta Dutta** is from the Village of Daragaon Tea Estate in Habiganj, Bangladesh. She attended Bangabandhu Sheikh M.R Agricultural University where she completed a Master of Science in Biotechnology in 2017 and a Bachelor of Science in Agriculture in 2014. Sudipta joins the pulse breeding program under the supervision of Bert Vandenberg. Her research will student the application of omics technologies on pulse crops.



**Emediong Etukudo** attended the University of Nigeria, where she completed a Bachelor of Agriculture (Honours Crop Science) in 2010 and the University of Leeds in England where she completed a Master of Science in Plant Science and Biotechnology 2016. Emediong joins the department as a masters student under the co-supervision of Isobel Parkin and Tim Sharbel. Her research will be focus on molecular genomics of pulse crops.



**Hansanee Fernando** is from Sri Lanka. She attended the Faculty of Agriculture, University of Ruhuna where she completed a Bachelor of Science of Agricultural Resource Management & Technology (Honours) in 2017. Hansanee joins the crop phenotyping group as a masters student under the supervision of Steve Shirtliffe.



**Tristan Gjevre** is from Saskatoon. He attended the University of Saskatchewan where he completed a BSc in Biology (Honours) and a BSA majoring in Crop Sciences in 2019. Tristan joins the department as a masters student under the supervision of Ravi Chibbar. His research will focus on the molecular biology aspects of grain quality.



**Dylan Sjolie** attended the University of Alberta where he completed a Bachelor of Science with Specialization in Animal biology in 2013. Dylan comes to the department from College Station, Texas A&M University where he worked as a Research Assistant. Dylan joins the Weed Control research group under the co-supervision of Chris Willenborg and Meghan Vankosky (AAFC). His work will focus on creating more accurate population predictor models for four major agricultural pests).



**Praveen Sapkota** is from Nepal. He attended Tribhuvan University in Kathmandu, where he completed a B.Sc. in Agriculture in 2007 and later a M.Sc in Crop Science at Texas Tech University in Lubbock, Texas. Praveen joins the department as a Ph.D student in the pulse breeding program under the supervision of Bert Vandenberg. His research will focus on herbicide-tolerant lentil production.



**Trang Phan** joined the department as a masters student under the supervision of Kate Congreves. Her research will study plant nutrition, soil health and soil greenhouse gas emissions. Trang attended the University of Saskatchewan where she completed a BSA (Honours)

majoring in Agricultural Biology in 2019.



*l. to r. Eric Johnson, Kayla Eason, Shaun Campbell*

Kayla Eason, a graduate research assistant at the University of Georgia in Tifton GA, spent two weeks this past summer visiting and working with the Agronomy and Weed Ecology group at the Kernen Crop Research Farm.

## 2019-2020 PLSC Graduate Students Exec



Meet our Plant Sciences Graduate Student Executive for the 2019-2020 academic year:  
 Back row: Matt Wengler, Olakorede Kanmi-Obembe, Amanda Fedorchuk, Zalelem Taye, Asanka Ravinatha Godakanda,  
 Front row: Maria Alejandra Oviedo-Ludena, Mengying Liu, Berenice Romero, Ana Vargas Palacios, Surendra Bhattarai!

## "A reference genome for pea provides insight into legume genome evolution"

After a 6 year process the pea genome paper has been published. Dr's Bunyamin Tar'an, Kishore Gali and Tom Warkentin were part of the international consortium that took on this project which was led by our colleagues in Dijon, France and included researchers in Czech Republic, Australia, and USA. The group feels it is a great accomplishment considering the large size of the pea genome, of which more than 80% is repetitive sequences. The pea genome sequence resource will benefit the pea and legume community for many years. Funding was provided by the Saskatchewan Pulse Growers.

The article can be found in Nature Genetics at the following link:

[https://www.nature.com/articles/s41588-019-0480-1.epdf?author\\_access\\_token=WPNz3mS2W9dV8jinLm6mFdRgN0jAjWeI9jnR3ZoTv0Orj3dbHRJ7ZvbogWNeGGjxtfcw8k-tpOnQViZTA0CZcyn\\_EhIdFltCmHqk67U5hoSkke7-WT7qodZRJWqzQdGBVpIQIRQR2Lnv7oWaEWcc1w%3D%3D](https://www.nature.com/articles/s41588-019-0480-1.epdf?author_access_token=WPNz3mS2W9dV8jinLm6mFdRgN0jAjWeI9jnR3ZoTv0Orj3dbHRJ7ZvbogWNeGGjxtfcw8k-tpOnQViZTA0CZcyn_EhIdFltCmHqk67U5hoSkke7-WT7qodZRJWqzQdGBVpIQIRQR2Lnv7oWaEWcc1w%3D%3D)



## Plant Sciences Graduate Student Farewell Pizza Lunch

The Plant Sciences Graduate Student Association 2018-19 hosted a farewell lunch of the graduate students who successfully defended their thesis in the past academic year (September 1, 2018- August 31, 2019). There were nineteen students in total (13 M.Sc. and 6 Ph.D.).

We would like to wish all the graduating students good luck for their future endeavours. Your presence is highly appreciated. Congratulations to:

Oleksandr Alba M.Sc.  
Ramandeep Bamrah M.Sc.  
Ethan Bertholet M.Sc.  
Gurcharn Brar Ph.D.  
Dilanganie Dissanayaka M.Sc.  
Chen Huang Ph.D.  
Kali Kasper M.Sc.  
Sandesh Neupane M.Sc.  
Mohammad Rezaei Ph.D.  
Endale Tafesse Ph.D.

Samuel Tandoh M.Sc.  
Akshaya Vasudevan M.Sc.  
Junsheng Zhou M.Sc.  
Vladimir Pajic Ph.D.  
Adebimpe Oyeneye M.Sc.  
Jessica Pratchler M.Sc.  
Caroline Brown M.Sc.  
Amarjargal Gungaabayar M.Sc.  
Kiran Baral Ph.D.

## Congratulations...



**Jessica Pratchler** successfully defended her MSc. thesis entitled "Optimal Seeding Rates and Disease Management for Yield and Quality in Faba Bean (*Vicia faba* L. minor)" on Wednesday June 19, 2019.



**Caroline Brown** successfully defended her MSc. thesis entitled "Secondary Dormancy of a Diverse Collection of Annual *Brassica napus* L. Genotypes and the Relationship with Seed Germination, Vigour and Quality Traits" on Wednesday July 31, 2019.



**Amarjargal Gungaabayar** successfully defended her MSc. thesis entitled "Forage Yield, Nutritive Value, and Nitrogen Fixation Rate of Pea-Cereal Intercrops for Greenfeed Production in Saskatchewan" on Friday August 23, 2019.



**Jessa Hughes** successfully defended her MSc. thesis entitled "Genetic Inheritance of Horticultural Traits in Faba Bean (*Vicia faba* L.)" on Wednesday, September 18, 2019.



**Kiran Baral** successfully defended his Ph.D thesis entitled "Development of Genomic Tools for Accelerated Breeding of Crested Wheatgrass (*Agropyron cristatum* L. Gaertn)" on Wednesday August 21, 2019.



**Zelalem Taye** was awarded the Teacher Scholar Doctoral Fellowship by the College of Graduate and Postdoctoral Studies (CGPS) in partnership with the Gwenna Moss Centre for Teaching and Learning. The award is a mentored graduate teaching fellow-

ship and is available only to doctoral students. The monetary scholarship is provided in earnings by the CGPS and the remaining amount if provided through the appointment as a sessional lecturer. Zelalem will be delivering the PLSC 423-Landscape Ecology and Vegetation Management course with Dr. Eric Lamb as the mentor.



PhD student **Soudeh Farzadfar** (left) and MSc student **Trang Phan** (right) from the Vegetable Agronomy program were both awarded NSERC-CREATE, "Climate-Smart Soil" Scholarships.



**Stephen Awodele** was awarded the 2019 Saskatchewan Innovation & Opportunity Scholarship. Stephen is starting his Masters research with supervisor Jon Bennett.



**Adam Carter** was awarded the 2019 Robert P. Knowles Scholarship and the NSERC Canada Graduate Scholarship. Adam recently joined the department as a PhD student in the durum wheat molecular breeding program.



**Praveen Sapkota** was awarded the 2019/2020 Rene Vandeveld Postgraduate Scholarship. Praveen recently joined the department as a PhD student with Pulse breeding program.

## Plant Sciences Grad Students Visit Corteva Agriscience



On August 21, 2019, a group of PLSC graduate students took part in a tour of the Corteva Agriscience facility located just outside of Saskatoon. The students reported they learned a great deal about Corteva's corn, canola, and soybean breeding programs, and were thankful for the wonderful opportunity they had to interact with researchers working in the industry and see how everything works in a company like Corteva.

## Plant Sciences Grad Students Association-Relay for Life



The Plant Sciences Graduate Student Association (PSGSA) Relay for Life team would like to thank everyone who generously donated to the relay team. They are thrilled to announce that the team raised almost \$600 for the Canadian Cancer Society. The event took place on Friday June 14, in Saskatoon at the Henk Rhys Soccer Centre.

The PSGSA relay team consisted of (l.-r.) Ishita Patel, MSc student, Toluwase Olukayode, PhD student, Keiko Nabetani, MSc student, Ariana Forand, MSc student.

## Garcia Schellhorn Retirement

Garcia Schellhorn will be retiring at the end of September after 38 years with the Department of Plant Sciences. During that time she saw many changes in the Department and its staff. The Department itself underwent several name changes, as did the program she was part of all those years. The program started off as winter wheat breeding and soon expanded to include major no-till agronomy, applied low temperature stress physiology, and genomic interests. Garcia contributed in all these areas and was involved in projects that extended from implementing and analyzing field plot studies to controlled environment research that covered whole plant low temperature genetic responses to the production of doubled haploids and RNA and DNA extraction. She participated in the training and supervision of many, many summer students and was an active resource person for graduate students and postdoctoral fellows within the program and as part of collaborative efforts with U of S, national, and international programs. There was no task too difficult for her to manage and her patience and skill was best exemplified when she was the first person in the world to successfully make interspecific crosses between hexaploid wheat and crested wheat grass. As demonstrated by her many years of service, her versatility and many talents have contributed directly to program continuity and success in an often unstable research world.



## Dr Gordon Gray Memorial Award

As part of the fruit breeding program annual plant sale the group sold a particular plant with the goal of donating the proceeds to the Dr. Gordon Gray Memorial Award.

In the fall of 2018, Dr. Gray had allowed the group to take cuttings of the plant with the intention of propagating it for the annual sale. After Dr. Gray's sudden passing in February of this year, the group agreed the proceeds from the sale should more appropriately go towards donations to the memorial award.

The fruit breeding plant sale is held annually on the first Friday in June. This year's advertisement of the event included the intent of donating these proceeds to the memorial fund.

The sale of the gorgeous passion flowers raised over \$600 for the memorial award.



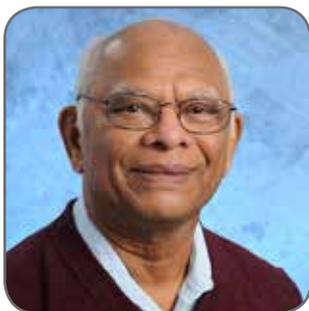
## happy wedding day...



Sean Prager and his new wife Emily Dorff (pictured in center) were married on June 29, 2019 at the Berkshires in Massachusetts. Making the trip from Saskatchewan for the wedding were Randy Kutcher, Steve Shirtliffe, Sabine Banniza and Kirstin Bett.

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## deepest sadness



The Department of Plant Sciences is saddened to announce the passing of a former professor in the department.

Dr. Jana was a professor in the Plant Sciences department from 1969-2002. He was a statistics instructor and studied biodiversity and conservation.

A celebration of life was held on Friday, August 30, 2019 at the University Club. The on-line obituary can be read at <https://thestarphoenix.remembering.ca/obituary/sakti-jana-1076603505>.

Deepest sympathies are extended to Ryan Babonich and his wife Jenny on the passing of Jenny's father, His Honour, the Honourable Thomas Molloy. The former chancellor passed away from cancer on July 2, 2019.

A news release dedicated to Saskatchewan's Lieutenant Governor can be read at the following link:

<https://news.usask.ca/articles/general/2019/former-usask-chancellor-w.-thomas-molloy-passes-away-after-battle-with-cancer.php>

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