Fall 2022
Toast to USask’s Doctoral Graduates

The beauty and diversity of Saskatchewan is profound. Under our province’s endless sky, and situated on Treaty 6 territory by its swiftly flowing river (Kisiskatchewani Sipi) in Saskatoon, we, at the College of Graduate & Postdoctoral Studies are proud to call this place home. We are grateful to share this space with you, the Homeland of the Métis and pay our respect to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another.

Debby Burshtyn  Dean of College of Graduate & Posdoctoral Studies
Debby is an advocate for adapting graduate education and mentorship to fit the changing funding and employment landscape. She continues to lead initiatives designed to effect long-term positive change on graduate students’ learning experiences. Through her work with the Canadian Association for Graduate Studies (CAGS) Task Force on Excellence in Graduate Programs, Debby is committed to a vision of excellence in graduate programming across Canada and here, at USask.

Grit McCreath  University Chancellor
From spending Sundays on campus with her parents as a youngster, to being a student and alumna, to being a member of the University Senate and the Board of Governors, McCreath has held many roles at USask, giving her time and energy for the better part of 20 years. For the last decade, Chancellor McCreath has served the University of Saskatchewan as a member of the Senate and Board of Governors.

“The pursuit of a PhD is an enduring and daring adventure.”

Ran Sun  (Agricultural Economics) Adoption of an Innovative Water Management System in Eastern Canada
Ruth Aschim  (Animal Science) An Interdisciplinary Approach to Mapping and Modelling Resource Selection and the Rapid Spread of Invasive Wild Pig (Sus scrofa) at the Northern Extent of their Introduced Range
Breeanna Kelln  (Animal Science) Improving Grazing Capacity Through Introduction of Bloat Free Legumes in Existing Pasture Stands
Bruna Maria Remonato Franco  (Animal Science) The Influence of Wavelength on Production, Behaviour, Health, and Welfare of Broiler Chickens
Pallavi Bohidar  (Biomedical Engineering) Simulation, Design, and Implementation of Approaches to RF-Encoded (TRASE) MRI
AliAkbar Jamali Beyrami  (Biomedical Engineering) Identifying Drug-Target and Drug-Disease Associations Using Computational Intelligence
Sreenivasa Aditya Mandapati  (Biochemistry, Microbiology & Immunology) The Role and Mechanism of Action of BRK in Tamoxifen-resistant Breast Cancer
Toomas Parratt  (Civil Engineering) Wintertime Infiltration and the Thermal Dynamics of Black Spruce Peatlands within the Boreal Plains
Iurii Anisimov  (Chemistry) Polyaniline/Biopolymer Composites for Moisture Detection and Their Electromechanical Properties
Bahareh Vafakish  (Chemistry) Investigation of Chitosan-based Sorbents for Water Treatment, Pollutant Detection, and Adsorption Mechanism
Amara Zuhaib  (Chemistry) Characterization of Organic Glasses by NEXAFS Spectroscopy
Martin Dechant  (Computer Science) Socially Anxious Play: Design, Development, and Evaluation of Game-Based Digital Behavioral for The Assessment of Social Anxiety
Matthew Miller  (Computer Science) Supporting Relationships with Video Chat
Weicheng Qian  (Computer Science) Transmission Modeling with Smartphone-Based Sensing
Md Sami Uddin  (Computer Science) Use of Landmarks to Improve Spatial Learning and Revisitation in Computer Interfaces
Laila Albughayl  (Education Administration) Women Leaders’ Experiences in Navigating the Labyrinth of Leadership in Saudi Post-Secondary Institutions
Keonie Green  (Education) Environmental Awareness in Early Years Education: A Systematic Content Analysis on Research from Different Countries
Mohammadreza Asadikouhanjani (Electrical Engineering) Design of Efficient DNN Accelerator Architectures

Rinku Basak (Electrical Engineering) Development of Multifunctional Electrical Impedance Spectroscopy System for Characterization in Plant Phenotyping

Nestor Sandoval (Electrical Engineering) Stochastic Operation of Distribution Networks with Voltage Dependent Load

Julio Torres Tello (Electrical Engineering) Optimization of AI models as the Main Component in Prospective Edge Intelligence Applications

Seyed Shahim Vedaei (Electrical Engineering) A Hybrid Localization Method for Wireless Capsule Endoscopy (WCE)

Botao Zhu (Electrical Engineering) Energy-Efficient and Fresh Data Collection in IoT Networks by Machine Learning

Danny Beveridge (Environment and Sustainability) Searching for Shared Meaning: Defining and Measuring Sustainability as Institutional Work and Organizational Change

Jania Chilima (Environment and Sustainability) Exploring Involvement of Community Water Users in Collaborative Water Resource Governance and Management Regime for Lake Diefenbaker, Saskatchewan, Canada

Seyedmohammad Ghoreishi (Environment and Sustainability) Socio-hydrology from Local to Large Scales: An Agent-based Modeling Approach

Jada Koushik (Environment and Sustainability) Sense of Place Dimensions: Examining how Students, Educators and Administrators Perceive Place as Influencing K-12 Sustainability Education in Rural and Urban School Districts

Maria Mora Garces (Environment and Sustainability) Collaborative Water Governance: Fostering Participation, Relationships, and Reconciliation in Mistaswasis Nêhiyawak

Sumudu Warnakulasuriya (Food Science) A Study of Antimicrobial and Surfactant Properties of N-lauroyl Amino Acids and Development of Similar Compounds from Canola Meal Proteins

Holly Annand (Geography) The Influence of Climate And Wetland Management On Prairie Hydrology - Insights From Smith Creek, SK

Xiaolei Yu (Geography) Assessing Vegetation Response to Drought In Northern Mixed Grasslands: Perspective From Remote Sensing

Alessandro Tarsia (History) Tobacco in Stó:lo Historical Consciousness. Change and Continuity Through Intersectional Stigmas and Honours


Cole Libner (Health Sciences) Novel Mechanisms of Neurodegeneration in Multiple Sclerosis Models

Holly Mansell (Health Sciences) Selective Studies on The Challenges of Cannabis Use In Children, Youth, and Young Adults

Deena Honan (Nursing) How do Registered Nurses Understand Fellowships?

Lee Sanders (Interdisciplinary Studies) Exploring Loss of Cree Culture as a Criminogenic Need in the Context of Colonization and Indigenous Overrepresentation, with Emphasis on the Structural Determinants of Risk and Culture-Specific Protective Factors that buffer Against Risk

Jesus Corona Gomez (Mechanical Engineering) Wear and Corrosion Resistance Improvement of CoCrMo alloy by Tantalum Based Coatings

Hadi Hosseinzade Halqesari (Mechanical Engineering) Large Eddy Simulation of Wall-bounded Turbulent Flows at High Reynolds Numbers

Michelle Pavloff (Nursing) Rural Home Care Registered Nurses’ Experiences with Continuing Nursing Education

Asmita Poudel (Pharmacy) Development of Liposomal Formulation containing Phytosterols and Tocopherols with the Aim of Reducing Low Density Lipoprotein Cholesterol (LDL-C)

Muhammad Ruhul Amin (Physics and Engineering Physics) Determination of He Every Level of Eu 2+ for Next Generation LED Phosphors

Jayangani Ranasinghe (Physics and Engineering Physics) Comprehensive Investigation of Selected Uranium Compounds with Application for Clean Energy

Stefanie De Heij (Plant Science) Carabids & Weed Seed Biocontrol

Anteneh Feyissa (Plant Science) Inheritance of Resistance to Chocolate Spot (Botrytis fabae) in Faba Bean (Vicia faba)

Shaoming Huang (Plant Science) Hormonal and Genetic Basis of Heat Response in Field Pea (Pisum sativum L.)

Hu Wang (Plant Science) Genetic Variation and Genome-environment Association of Alfalfa (Medicago sativa L.) Populations Under Long-term Grazing

Kathrina Mazurik (Psychology) The Repertoires of Relatedness: Understanding the Parent-Child Relationships of Young Adults Who Live at Home

Joshua Neudorf (Psychology) Relating Structural Connectivity to Brain Function Using Deep Learning, Graph Theory, Complexity, and Disease

Darryl Quinlan (Psychology) Is Training in Martial Arts Beneficial to One’s Health? The Devil in in the Detail

Andrea Scerbe (Psychology) Digital Tools for Delivery of Dementia Education: Increasing Rural Accessibility for Dementia Care

Brandon Sparks (Psychology) Swiping Away Tear: Incels, Dating Applications, and Social Supports

Cailey Strauss (Psychology) Face to Face: A Reflexive Thematic Analysis of Victim–Offender Mediation

Farron Wielinga (Psychology) Use of Dynamic Risk Instruments to Assess Sexual Violence Risk in a Community-Supervised Sample of Men with Sexual Violence Convictions

Travis Reynolds (Public Policy) The Endogenous Nature of Corporate Governance: A Comparison of Consumer and Producer Co-ops

Jebunnessa Chapola (Women’s, Gender, and Sexualities Studies) A Racialized Settler Woman’s Transformative Journey in Canada: Building Relational Accountabilities

Daniel Udenze (Vaccinology Immunotherapeutics) Comparative Infection Pathotypes of Wild-Type and CpG-Recorded Zika Virus Variants In Vitro and In Vivo

Breanna Arnold (Veterinary Biomedical Sciences) Effects of Repetitive Intermittent Hypoxia After Acute and Chronic Spinal Cord Injury

Michelle Tucker (Large Animal Clinical Sciences) Feasibility of Individualized Airway Surgery in Horses

Ivanna Kozii (Veterinary Pathology) Neonicotinoid Toxicity in Reproductive Honey Bee Castes

As the world’s next leaders, our doctoral scholars will lead with respect | nikänítān manāchihitowinhk | ni manachihitoonaan and respond to what the world needs.