



**Saskatchewan Beekeepers  
Development Commission**

# **WELCOMES**

## **All Participants**

### **to the**

# **2021 SBDC Annual Convention!**

### **Contents:**

- Convention Agenda
- Presenters Biographies
- Sponsors List and Descriptions
- Parking Information



## Friday November 19, 2021 8:30 a.m.

| Time         | Presentation by WCVM Honey Bee Health Research Lab<br>Moderated by Dr. Elemir Simko  |
|--------------|--|
| <b>8:30</b>  | <p><b>AFB Research (total 34 minutes):</b></p> <ol style="list-style-type: none"> <li>1. <b>Determining AFB Risk at the Yard Level</b> - The transition from individual to herd health medicine – Dr. Michael Zabrodski, - DVM, MSc Student, WCVM, U of S (10 minutes)</li> <li>2. <b>Improving Control of AFB in Saskatchewan through the surveillance of Extracted Honey</b> - Dr. Michael Zabrodski - DVM, MSc Student - WCVM, U of S (17 minutes)</li> <li>3. <b>Antimicrobial resistance and molecular epidemiology of AFB in Saskatchewan</b> -Dr. Oleksii Obshta - MSc Student, WCVM, U of S (7 minutes)</li> </ol> <p><b>Toxicology and EFB Research (59 minutes)</b></p> <ol style="list-style-type: none"> <li>4. <b>How do honey bee castes differ in their response to neonicotinoids</b> – Dr. Ivanna Kozil, PHD candidate, WCVM, UofS (13 minutes)</li> <li>5. <b>Some lessons learned from reproducing EFB disease in the hive</b> - Dr. Ivanna Kozil, PHD candidate, WCVM, UofS (12 minutes)</li> <li>6. <b>Do fungicides and highly pathogenic isolates of M. plutonius explain outbreaks of EFB during blueberry pollination</b> – Dr. Jenna Thebeau, MSc Student, WCVM, U of S (12 minutes)</li> <li>7. <b>Can Oxytetracycline, tylosin and lincomycin be used as treatments for EFB in honey bees</b> – Fatima Masood, MSc Student, WCVM, U of S (12 minutes)</li> <li>8. <b>Future direction for EFB and toxicology research</b> – Dr. Sarah Wood, Pathologist, Prairie Diagnostic Services, MSc Student, WCVM, U of S (10 minutes)</li> </ol> <p><b>Nosema Research (12 minutes)</b></p> <ol style="list-style-type: none"> <li>9. <b>Nosema Infection status of Saskatchewan honey bee colonies and outlook on fumagilin efficacy</b> – Dr. Sarah Biganski, Postdoctoral fellow, WCVM, U of S (12 minutes)</li> </ol> <p><b>Conclusion (10 minutes)</b><br/>Conclusion, future, directions, Update on WCVM Chair in Pollinator Health – Dr. Elemir Simko, Professor in Veterinary Pathology, WCVM, U of S (10 minutes)</p> <p><b>Questions: (5 minutes)</b></p> |
| <b>10:30</b> | <b>Coffee Break</b> – Sponsored by: Vita Bee Health (Canada)   |
|              | <b>Bee Environment Safety and Breeding Model</b>   |
| <b>11:00</b> | <b>Pesticide Survey of Beebread Samples Across Different Crop Regions in Saskatchewan</b> – Dr. Renata Raina-Fulton (Presenter), Iman Salehi (Presenter) and Murray Belyk, University of Regina , Department of Chemistry & Biochemistry   |
| <b>11:30</b> | <b>Breeding for Varroa Resistance in Collaboration with Ontario Tech-Transfer Program</b> - Dr. Ernesto Guzman, Professor & Director, University of Guelph’s Honey Bee Research Centre – Guelph, Ontario   |
| <b>12:15</b> | <b>Lunch</b>   |
| <b>1:15</b>  | <b>2021 Canadian Honey Council Report</b> – Jake Berg, CHC President, SBDC Representative, Commercial Beekeeper  |
|              |  |

| <b>Joint meeting with Canadian Honey Council</b> |   |
|--|---|
| <b>1:35</b>                                      | <b>Honey Marketing Challenges</b> – Rod Scarlet, Executive Director – Canadian Honey Council  |
| <b>2:00</b>                                      | <b>Alberta Beekeepers</b> - Jeremy Olthof, President - Alberta Beekeepers Commission  |
| <b>2.15</b>                                      | <b>Manitoba Beekeepers in 2021</b> – Ian Stepler, President – Manitoba Beekeeping Association   |
| <b>2:30</b>                                      | <b>Coffee Break</b> – Sponsored by: Ridgedale Coop  |
| <b>3:00</b>                                      | <b>Annual General Meeting</b> <ul style="list-style-type: none"> <li>• Financial Presentation</li> <li>• Year in Review</li> <li>• Director’s Report</li> <li>• Election</li> <li>• Election Results</li> </ul> |
| <b>5:00</b>                                      | <b>Convention Concluded</b>   |

## Presenters Bio for 2021 Convention



**Dr. Pierre Giovenazzo**, Dr. Giovenazzo, received a PhD in veterinary sciences at the University of Montréal (Varroa IPM strategies). He is professor at University Laval's Biology Department and held a Chair in Educational Leadership in apicultural science 2016-2021. His recent research focuses on honey bee breeding, queen reproduction, pollination services, honeybee nutrition and varroa IPM strategies. He has published over 90 scientific research publications/reports and his communication skills are recognized not only in academia, but throughout the beekeeping community. He was vice-president of the Canadian Association of Professional Beekeepers of Canada (2014-2017) and is member of various national and international beekeeping stakeholder associations. He was president of the 46<sup>th</sup> Apimondia 2019 Congress Montreal September 8 -13.



**Dr. Ernesto Guzman**, Professor and Director of the University of Guelph's Honey Bee Research Centre in Ontario, Canada. He got a DVM degree in 1982 and obtained M.Sc. and Ph.D. degrees in Entomology from the University of California at Davis in 1989 and 1992, respectively. Dr Guzman has worked for several research and academic institutions in Mexico, the USA and Canada. His research has focused on genetics, behaviour, and diseases of honey bees. Dr. Guzman is author of more than 300 publications and has received numerous awards.



**Dr. James Tansey**, Provincial Specialist, Insect/Pest Management, Production Technology Crops and Irrigation Branch, Saskatchewan Ministry of Agriculture, Regina, SK. He earned both an M.Sc. and Ph.D. from the University of Alberta. His research has included aspects of leafy spurge biological control, mechanisms of cabbage seedpod weevil and cabbage root maggot resistance, and insecticide resistance in, and cultural and chemical control of the Asian citrus psyllid. His doctoral dissertation was nominated for the Governor General Gold Medal Award. He was also a Regulatory Affairs Manager with Dow AgroSciences Canada Inc. in Calgary, Alberta.



**Mr. Garrett Dodds**. Garrett currently works for the USDA's Agricultural Research Services Honey Bee Lab in Baton Rouge, LA as a Research Technician for Dr. Arián Avalos. His love of honey bees began around the age of 15 when his Grandfather helped him catch a swarm on their family farm near Bellefontaine Ohio. Later he became a County Bee Inspector for over 10 years. Upon graduation from high school, Garrett began attending The Ohio State University where he worked at the Rothenbuhler Honey Bee Lab under the direction of Sue Cobey. It was there he learned the art and skills needed for bee breeding including queen rearing and instrumental insemination of honeybees. After graduating from Urbana University in 2007, Garrett began his career with the USDA where his skills are utilized to assist in the continued research on Honey Bees with Varroa Sensitive Hygiene (VSH) trait developed by Dr. John Harbo. Garrett has assisted on various research projects at the USDA including a large multi-year study on several hundred colonies of VSH bees in migratory pollination operations, and the development of a Pol-Line strain of VSH mite resistant commercially desirable bees for commercial pollination. He continues to develop the Pol-line honeybee strain, manage the breeding efforts of the Hilo Bee Project and instrumentally inseminate honeybees for various research projects at the lab involved with virus resistance, genetic markers and inbreeding studies.



**Dr. Kaira Wagoner**, Dr. Wagoner is a Research Scientist at the University of North Carolina Greensboro. Dr. Wagoner is interested in honey bee health and chemical communication, particularly as they relate to Varroa and the social immune mechanism hygienic behavior, the ability of adult honey bees to detect and remove unhealthy brood from the hive. Dr. Wagoner's 2015 doctoral dissertation was an investigation of the relationships between common stressors, brood-signaling, hygienic behavior, and selective breeding in the honey bee. She is currently using natural honey bee stress signals to develop novel tools to facilitate apiary management and improve selection of disease and Varroa-resistant honey bees. When not in the lab or apiary, Dr. Wagoner enjoys traveling, playing games, and spending time in the great outdoors with her husband and two nature-loving boys. She is currently collaborating with SBDC- in evaluation and development of unhealthy brood assay for use in selection and breeding hygienic bees.



**Ms. Rosanna Punko** (she/her), BSc, MSc. Ms. Punko’s first exposure to honey bees was working for a commercial beekeeper for three summers during university. I have a Bachelor of Science in Biological Sciences from the University of Calgary and am a recent graduate from the University of Manitoba with a Master of Science in Entomology. Previously, I assisted in the evaluation of HopGuard and other potential miticides for Varroa mite control with the Government of Alberta Bee Health Assurance Team. Currently, I work as an Apiculture Inspector for the Government of Alberta.



**Mr. Geoff Wilson.** Geoff is the Provincial Specialist, Apiculture in Saskatchewan and is based in Prince Albert. His primary roll is to help enhance the beekeeping industry in the province. A combination of working closely with beekeepers, and the rolls of regulation, extension and some research gives Geoff a unique insight to beekeeping issues in the province. Geoff earned his B. Sc. (Agriculture) and M. Sc. (Environmental Biology) from University of Guelph, ON.



**Mr. Graham Parsons.** Graham has been with Saskatchewan Agriculture since January 2016. He originally started as an Apiculture Intern and now is Saskatchewan’s Pollinator Biosecurity Specialist. He deals with support of the honey bee industry through regulation, education and extension. As well he supports the alfalfa leafcutter beekeepers of the province. Other aspects of his work include pollination support for crop producers and habitat and management recommendations in support of managed and wild pollinators. Graham was the Lead Researcher for the SBDC from 2011 to 2015, as well as completing his Masters of Science in Entomology studying honey bee disease and overwintering at the University of Manitoba. Graham lives with his wife and two kids near Prince Albert Saskatchewan where he keeps a few honey bee colonies of his own.



**Dr. Renata Raina-Fulton.** Dr. Raina-Fulton is a Professor and Department Head, Chemistry & Biochemistry Department, University of Regina and Director of the Trace Analysis Facility at University of Regina. Dr. Raina-Fulton is also Chair, Canadian Council of University Chemistry Chairs (CCUCC) and has been conducting environmental research projects involving pesticides and related contaminants for over 25 years. Her research area includes development of trace methods for the analysis of pesticides and their transformation products or metabolites using chromatography-mass spectrometry methods.



**Mr. Murray Belyk.** Murray is a Retired Manager, Environmental Affairs for Bayer CropScience including former companies. CropLife Canada Chair of the Environmental Subcommittee for Pollinator Health. Past responsibilities included environmental fate research and risk evaluations of crop protection products including multiple sentinel hive health field studies established across Canada. Currently Adjunct Professor (Chemistry and Biochemistry Department) at the University of Regina.



**Dr. Medhat Nasr,** Saskatchewan Bee Tech Adoption Program Lead, Alberta Provincial Apiculturist (Retired). Medhat has spent decades developing alternatives for mite control, managing miticide resistance, evaluating integrated pest management (IPM) programs, and breeding quality bees. His research program has also focused on developing effective application methods, and registration of formic acid, Oxalic Acid (drenching and sublimation), HopGuard<sup>2</sup> and Apivar<sup>®</sup> for Varroa treatment in Canada. Medhat was the president of CAPA from 2014-2018. He is a member of the “Varroa Resistance and Treatment Team” of Honey Bee Health Coalition-USA. He received numerous awards for his contributions to apiculture in Canada and USA. Medhat earned his B. Sc. and M. Sc. (Entomology) from Cairo University, Egypt. He earned a Ph. D. in Entomology from University of California, Davis, US



**Dr. Elemir Simko,** DVM, DVSc, ACVP, Professor, Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan. Elemir obtained his DVM degree (1990) from the University of Belgrade (Yugoslavia) and Doctor of Veterinary Science degree (1998) from the Ontario Veterinary College, University of Guelph (Canada). Since 1998, he has been a faculty member in the Department of Veterinary Pathology, WCVM, involved in teaching, diagnostics and research. 6 years ago, he established a Honey Bee Health Research and Teaching Program at the WCVM. He has received three awards for teaching excellence and two awards for research excellence.





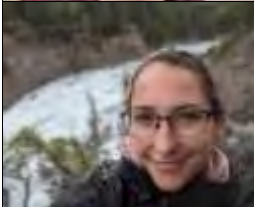
**Dr. Sarah Wood**, DVM, PhD, Diagnostic Veterinary Anatomic Pathologist with Prairie Diagnostic Services Inc., University of Saskatchewan.  
Sarah received her DVM from the WCVM in 2012. After a few years of practice, she came back to the WCVM and completed a PhD (with residency) in honey bee ecotoxicology in 2020. She is a co-foundress of the Honey Bee Research Program at the WCVM. Her research interests include European foulbrood disease and pesticide toxicopathology in honey bees.



Ivanna Kozii, DVM, PhD Candidate (with Residency), Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Ivanna obtained her DVM degree (2014) from the Bila Tserkva National Agrarian University (Ukraine). She is a co-foundress of the Honey Bee Research Program at the WCVM. Currently, she is finishing her PhD program with Residency in Anatomic Pathology. Her PhD research focuses on reproductive toxicopathology in honey bees.



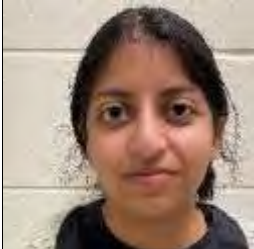
Michael Zabrodski, DVM, MSc Student (with Residency), Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Michael received his DVM from the University of Calgary in 2015 and spent several years in small animal practice. He is currently in the third year of his MSc program with Residency in Anatomic Pathology at the WCVM. His MSc research focuses on American foulbrood disease in honey bees.



Jenna Thebeau, DVM, MSc Student (with Residency), Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Jenna received her DVM from Atlantic Veterinary College, University of Prince Edward Island in 2020 and she is currently in the second year of her MSc program with Residency in Anatomic Pathology at the WCVM. Her MSc research focuses on European foulbrood disease in honey bees pollinating blueberry.



Sarah Biganski, BSc, MSc, PhD, Postdoctoral Fellow, Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Sarah obtained her MSc from the Martin-Luther University, Germany, and PhD from University of Technology Darmstadt and Julius Kuehn-Institut, Federal Research Centre for Cultivated Plants, Germany. Sarah's research expertise is in insect pathology and ecology, and microbial & biological control. Her current research is focused on pathogenesis, prevalence and prevention of *Nosema ceranae* and *Nosema apis* in SK.



Fatima Massood, BSc, MSc Student, Department of Veterinary Microbiology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Fatima obtained a BSc degree in Immunology and Microbiology at the University of Saskatchewan in 2021. Her MSc is focused on European foulbrood, specifically antimicrobial resistance and whole genome analysis of *Melissococcus plutonius*



Oleksii Obshta, DVM, MSc Student, Department of Veterinary Pathology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan.  
Oleksii obtained his DVM from the Bila Tserkva National Agrarian University (Ukraine) in 2020. His MSc is focused on American foulbrood, specifically antimicrobial resistance and whole genome analysis of *Paenibacillus larvae* and molecular epidemiology.

## Platinum Sponsors:

**Tony Lalonde Sales PRT** has been providing the beekeeping community with



equipment that is essential for a beekeeper's success for nearly 20 years.

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With a rigorous and ethical approach to research and development into honeybee health, Vita has no commercial interests in crop pesticides or crop breeding that may be harmful to honeybees.

With headquarters in the UK, offices in Italy, Canada, USA and Russia, partners across the globe, Vita researches, develops, and manufactures a range of honeybee health products. These products are marketed internationally through a network of 60 distributors in 50 countries.

## Coffee Sponsor:

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## **GENERAL INFORMATION:**

**NAME TAG:** Please wear your name tag at all times during the convention.

**MEALS & EVENTS:** You will be assigned a name tag and tickets for the various meals and events that you are entitled to with your registration (or have paid for as an 'add on'). The following ticket will be inserted in your name tag pocket:

**COFFEE BREAKS:** Your registration includes coffee breaks. You will find coffee and tea (and complimentary honey) on the main tables in the display area. Cold beverages are offered in several coolers in the display area - look around or ask a Board member to help you locate them. SBA thanks all coffee break sponsors for their support!

**NEED MORE INFORMATION WHILE AT CONVENTION?** Dan Wasylenchuk, Convention Chair. If Dan is unavailable, any Board member can help you or direct you to who can help you