



**MEMBERSHIP:**

2001 – Present	Canadian Poultry Research Council (Member of the Scientific Advisory Committee).
1998 – Present	Poultry Science Association
2004 – Present	World's Poultry Science Association

**CURRENT RESEARCH INTERESTS:**

- Development of new generation enzyme supplements for poultry and swine.
- Enzyme hydrolysis products, yeast-derived products, and nucleotides as prebiotics and natural alternatives to antibiotics in poultry and swine nutrition.
- Non-starch polysaccharides, resistant starch, oligosaccharides, glucosinolates, phytate, glycoproteins and dietary fiber components: Measurement and relevance to feedstuffs quality and exogenous enzyme application.
- Quality characteristics and nutritive value of low-fibre, yellow-seeded canola, flax, and wheat and corn distillers dried grains with solubles (DDGS).

**GRADUATE COURSES TAUGHT:**

**ANSC7450/HNSC7450** Energy and Carbohydrate Nutrition and Metabolism  
**ANSC 7390** Animal Science Graduate Seminar (Ph.D. students).  
**ANSC 7530** Special Topics in Animal Physiology (co-instructor, digestion and environment).  
**ANSC 7510** Special Topics in Animal Nutrition (co-instructor, feed enzymes).  
**ANSC 7540/ANSC 4570** Advanced Applied Animal Nutrition (co-instructor: carbohydrate analysis and utilization).  
**ANSC 3510** Feeds and Feeding (co-instructor: probiotics, prebiotics and exogenous enzyme use).

**SUPERVISION OF GRADUATE STUDENTS:**

2019 – present	Tetiana Sessiongong, M.Sc. student, Animal Science, co-advised
2018 – present	Yanxing Niu (Stella), Ph.D., Animal Science, co-advised
2016 – 2019	Gustavo Mejicanos, Ph.D., Animal Science, co-advised
2015 – 2018	Samuel Ariyibi, M.Sc. Student, Animal Science
2015 – 2017	Maral Rhamani, M.Sc. Student, Animal Science
2012 – 2015	Gustavo Mejicanos, M.Sc., Animal Science
2011 – 2015	Deborah Ayoade, Ph.D., Animal Science
2010 – 2015	Mohammad Alizadeh, Ph.D., Animal Science
2010 – 2015	Mahshid Ratfar, Ph.D., Animals Science
2010 – 2011	Samuel Waitutu, M.Sc. Student, Animal Science

2004 – 2010	Wei Jia, Ph.D., Animal Science
2001 – 2005	Xiang Feng Meng, Ph.D., Animal Science
2000 – 2002	Olufemi Festus Omogbenigun, M.Sc., Animal Science, co-advised
1998 – 2001	Lisa Schmidt, M.Sc., Animal Science
1998 – 2000	Yong Li, M.Sc., Animal Science
1997 – 2000	Xinyu Zhou, M.Sc., Animal Science
1997 – 2000	Dongsheng Liang, M.Sc., Animal Science, co-advised
1996 – 1998	Heather Kienzle, M.Sc., Animal Science
1996 – 1999	Ping Jiang, M.Sc., Animal Science
1992 – 1996	Joseph Simbaya, Ph.D., Animal Science

#### **SUPERVISION OF VISITING SCIENTISTS AND TECHNICAL STAFF:**

2017 – 2022	Lan Shi, Research Technician III
2006 – 2019	Dr. Anna Rogiewicz, Research/Professional Associate
2019	Dr. Marcin Hejdysz, Postdoctoral Fellow (3 months)
2018	Vini Damborg, Visiting Ph.D. Student (2 months)
2012 – 2013	Dr. Behzad Mansoori, Visiting Professor
1997 – 2017	Tomas Davie, Research Technician III
2015 – 2016	Jakub Naczemski, Postdoctoral Fellow
2015	Jason Grauer, Summer Student
2015	Veronica Izydorczyk, Summer Student
2013-2014	Niu Yanxing, Visiting Ph.D. Student
2010 – 2011	Przemyslaw Zdunczyk, Visiting Ph.D. Student (6 months)
2011	Yanxing Niu, Visiting Ph.D. Student (2 months)
2009 – 2010	Dr. Marzena Mogielnicka, Postdoctoral Fellow
1999 – 2005	Karen Carrette, Research Technician
1999 – 2001	Dr. Danuta Boros, Research Associate
1997 – 1998	Dr. Malgorzata Cyran, Postdoctoral Fellow
1996 – 1997	Dr. Jolanta Gdala, Visiting Scientist
1996 – 1997	Beverly McKay, Research Technician
1995 – 1996	Dr. Malgorzata Chibowska, Postdoctoral Fellow

#### **EXTERNALLY SPONSORED RESEARCH PROJECTS (last 10 years):**

2019 – 2023	B.A. Slominski and C.M Nyachoti. <i>Effective Use of Novel Canola Feed Ingredients</i> . Canadian Bio-Systems, Botaneco, Sask-Canola, Lumex, NSERC CRD. Total \$ Amount: \$501,480.00 (Principal Investigator).
2018 – 2023	B.A. Slominski. <i>Novel Bioactives of Yeast: Enzymatic Release, Identification and their Prebiotic Effects</i> . Poultry Science Cluster, CPRC, CBS & AAFC. Total \$ Amount: \$381,000.00 (Principal Investigator)

- 2018 – 2023 B.A. Slominski and C.M. Nyachoti. *Understanding the impacts of CM on gut microbiota and potential prebiotic effect of enzymatically-released bioactive fibre components and the long term effects of high levels of canola meal inclusion*. Canola Science Cluster, CCC, CBS & AFAC. Total \$ Amount: \$919,000.00 (Principal Investigator).
- 2018 – 2023 B.A. Slominski. *Development of a tool for rapid analysis of glucosinolate content in canola meal*. Saskatchewan Canola Development Commission. Total \$ Amount: \$320,000.00 (Principal Investigator).
- 2015 – 2018 B.A. Slominski. *Effective dietary phosphorus management with phytase and multi-carbohydrase supplementation and its benefit to the producer and the environment*. Manitoba Egg Farmers-ARDI. Total \$ Amount: \$225,000.00 (Principal Investigator).
- 2015 – 2018 B.A. Slominski and C.M Nyachoti. *High Inclusion Levels of Canola Meal in Swine and Poultry Feeds*. Canola Science Cluster, CCC & AAFC. Total \$ Amount: \$676,000.00 (Principal Investigator).
- 2015 – 2018 B.A. Slominski. *The effect of enzyme supplementation on the nutritive value of yellow-seeded canola*. Canola Council of Canada. Total \$ Amount: \$89,000.00 (Principal Investigator).
- 2015 – 2018 B.A. Slominski. *Canola meal quality survey*. Canola Science Cluster, CCC & AAFC. Total \$ Amount: \$192,000.00 (Principal Investigator).
- 2015 – 2017 B.A. Slominski. *Development of an enzyme/yeast-based prebiotic for poultry*. Poultry Science Cluster, CPRC & AAFC. Total \$ Amount: \$240,000.00 (Principal Investigator).
- 2017 – 2021 B.A. Slominski. *Development of an Enzyme Preparation Specific to Indigestible Components of Soybean Meal*. Canadian Bio-Systems Inc. Total \$ Amount: \$140,000.00 (Principal Investigator).
- 2010 – 2012 B.A. Slominski, D. Levin, C.M. Nyachoti and K.M. Wittenberg. *Enhancement of ethanol yield and distillers dried grains with soluble (DDGS) nutritive value using enzyme technology*. Husky Energy/NSERC. Total \$ Amount: \$370,000.00 (Principal Investigator).
- 2010 – 2013 B. A. Slominski and J-C. Rodriguez. *Distillers dried grains with solubles (DDGS) as a potential source of immunomodulatory and growth promoting activity for poultry*. Canadian Poultry Research Council/Poultry Industry Council/Canadian Bio-Systems/NSERC. Total \$ Amount: 348,000.00 (Principal Investigator).
- 2010 – 2014 B.A. Slominski. *The effect of processing on chemical composition and nutritive value of canola meal*. Canola Council of Canada, \$200,000.00.
- 2005 – 2012 B.A. Slominski, C.M. Nyachoti, and W. Guenter. *Enhancement of the feeding value of feedstuffs by enzyme supplementation*. Canadian Bio-Systems Inc., \$960,500.00 (Principal Investigator).
- 2008 – 2012 B.A. Slominski and M. Nyachoti. *The effect of enzyme supplementation on the nutritive value of yellow-seeded canola*. Canola Council of Canada, \$110,000.00 (Principal Investigator).

- 2010 – 2013 B.A. Slominski. *Improving carbohydrate composition of canola meal to increase energy content*. Canola Council of Canada (Canola Meal Science Cluster), \$231,000.00.
- 2010 – 2013 B.A. Slominski and M. Naychoti. *High inclusion levels of canola meal in swine and poultry feeds*. Canola Council of Canada (Canola Meal Science Cluster), \$412,000.00 (Principal Investigator).
- 2006 – 2012 B.A. Slominski, C.M. Nyachoti, and W. Guenter. *Development of an enzyme preparation specific to indigestible components of soybean meal*. Canadian Bio-Systems Inc., \$132,000.00 (Principal Investigator).
- 2007 – 2010 K.M. Wittenberg, B.A. Slominski, and C.M. Nyachoti. *Evaluation of wheat- and corn-based distillers dried grains with solubles (DDGS) for livestock and poultry*. ARDI/WED/Husky Energy. Total \$ Amount: 799,600.00 (Co-Investigator).
- 2008 – 2010 B.A. Slominski. *Designing Oilseeds for Tomorrow's Market*. Genome Canada/Manitoba Energy Science. Total \$ Amount: 206,541.00.

#### **SCHOLARSHIPS AND AWARDS:**

- 2004 NRC/Alberta Science and Technology Award for Innovation in Industrial Research (with Canadian Bio-Systems Inc.).
- 2002 NSERC Synergy Award for Innovation.
- 1984 Minister of Agriculture Award for Research in Applied Biochemistry.
- 1979 – 1980 FAO Fellowship, University of Uppsala, Sweden.
- 1976 – 1979 Postgraduate Scholarship (Ph.D.), Polish Committee for Scientific Research.
- 1973 – 1974 Postgraduate Scholarship (M.Sc.), University of Agricultural Sciences, Poland.

#### **PUBLICATIONS:**

##### **Articles in Refereed Journals:**

- Niu, Y. Rogiewicz, A., Shi, L., Patterson, R., and Slominski, B.A. 2022. The effect of enzymatically-modified canola meal and carbohydrase enzyme supplementation on growth performance, nutrient utilization, and gut health of broiler chickens. *Poultry Sci.* (submitted).
- Rogiewicz, A., A. Józefiak, D. Mikulski, J. Juśkiewicz, Z. Zduńczyk, J. Jankowski, D. Józefiak, R. Patterson and B.A. Slominski. 2022. The effect of a multi-carbohydrase enzyme and yeast-derived product on intestinal microbiome structure, activity, and gut function of healthy turkeys. *Can. J. Anim. Sci.* (submitted).

- Adhikari, P.A., Rogiewicz, A., Kim, W. K., Cosby, D. E., Cox, N. A. and Slominski, B.A. 2022. Effect of enzyme-modified yeast products on *Salmonella* Enteritidis colonization in different organs of laying hens. *J. Appl. Poultry Res.* doi: 10.1016/j.japr.2022.100277.
- Zdunczyk, Z., D. Mikulski, J. Jankowski, B.A. Slominski and J. Juskiwicz. 2022. The effect of the dietary inclusion of pea seeds of colored-flowered and white-flowered varieties on gastrointestinal function in turkeys. *Animal Nutrition* 10 (2022) 167-177.
- Niu, Y., Rogiewicz, A., Shi, L., Patterson, R., and Slominski, B.A. 2022. The effect of multi-carbohydrase preparations on non-starch polysaccharides degradation and growth performance of broiler chickens fed diets containing high inclusion level of canola meal. *Anim. Feed Sci. Technol.* doi.org/10.1016/j.anifeedsci.2022.115450.
- Jing, M., Zhao, S., Rogiewicz, A. Slominski, B.A., and House, J. 2021. Effects of phytase supplementation on production performance, egg and bone quality, plasma biochemistry and mineral excretion of layers fed varying levels of phosphorus. *Animal Int. J. Anim. Biosci.* Cambridge, England). 01, Vol 15. <https://doi.org/10.1016/j.animal.2020.100010>.
- Jing, M., Zhao, S., Rogiewicz, A. Slominski, B.A., and House, J. 2021. Effects of phytase supplementation on growth performance, plasma biochemistry, bone mineralization and phosphorus utilization in pre-lay pullets fed various levels of phosphorus. *Animal Production Science* <https://doi.org/10.1071/AN20265>.
- Echeverry, H., A. Yitbarek, B.A. Slominski, and J.C. Rodriguez-Lecompte, J. 2021. Yeast cell wall polysaccharides enhanced expression of T helper Type 1 and 2 cytokines profile in chicken B lymphocytes exposed to LPS challenge and enzyme treatment. *British Poultry Science.* 62: 125-130.
- Low, K.E., X. Xing, P.E. Moote, G.D. Inglis, S. Venketachalam, M.G. Hahn, M.L. King, C.Y. Tétard-Jones, D.R. Jones, W.G.T. Willats, B.A. Slominski, and D.W. Abbott. 2020. Combinatorial glycomic analyses to direct CAZyme discovery for the tailored degradation of canola meal non-starch dietary polysaccharides. *Microorganisms* 8, 1888:1-27.
- Zduńczyk, Z., J. Jankowski, D. Mikulski, P. Zduńczyk, J. Juśkiwicz, B.A. Slominski. 2020. The effect of NSP-degrading enzymes on gut physiology and growth performance of turkeys fed soybean meal and peas-based diets. *Anim. Feed Sci. Technol.* 263:114448.
- Sanchez, J., A. Thanabalan, T. Khanal, R. Patterson, B.A. Slominski, and E. Kiarie. 2019. Growth performance, gastrointestinal weight, microbial metabolites and apparent retention of components in broiler chickens fed up to 11% rice bran in a corn-soybean meal diet without or with a multi-enzyme supplement. *Animal Nutrition* 5:41-48.
- Chen, W., Ma, X., Wang, X., Chen, S., Rogiewicz, A., Slominski, B., Wan, X., Huang, F. 2019. Establishment of a rapeseed meal fermentation model for iturin A production by *Bacillus amyloliquefaciens* CX-20. *Microbial Biotechnol.*, 12:1417-1429.
- Rad-Spice, M., A. Rogiewicz, J. Jankowski, B.A. Slominski. 2018. Yellow-seeded Canola. Part 1. Nutritive value of the meal for broiler chickens. *Anim. Feed Sci. Technol.* 240:66-77.
- Kozłowski, K., D. Mikulski, A. Rogiewicz, Z. Zdunczyk, M. Rad-Spice, H. Jeroch, J. Jankowski, B.A. Slominski. 2018. Yellow-seeded Canola. Part 2. Nutritive value of the meal for turkeys. *Anim. Feed Sci. Technol.* 240:102-116.

- Zdunczyk, Z., D. Mikulski, J. Jankowski, B. Przybylska-Gornowicz, E. Sosnowska, J. Juskiewicz, R. Amarowicz, B.A. Slominski. 2018. Effect of dietary inclusion of high- and low-tannin faba bean (*Vicia faba* L.) seeds on microbiota, histology and fermentation processes in the gastrointestinal tract of finisher turkeys. *Anim. Feed Sci. Technol.* 240:184-196.
- Jing, M., S. Zhao, A. Rogiewicz, B.A. Slominski, and J.D. House. 2018. Assessment of the minimal available phosphorus needs of laying hens: Implications for phosphorus management strategies. *Poult. Sci.* 97:2400-2410.
- J. Sanchez, A. Thanabalan, T. Khanal, R. Patterson, B.A. Slominski, and E. Kiarie. 2018. Effects of feeding broiler chickens up to 11% rice bran in a corn-soybean meal diet without or with a multi-enzyme supplement. *Animal Nutrition Journal*, DOI: <https://doi.org/10.1016/j.aninu.2018.12.001>
- Radfar, M., A. Rogiewicz, B.A. Slominski. 2017. Chemical composition and nutritive value of canola-quality *Brassica juncea* meal for poultry and the effect of enzyme supplementation. *Anim. Feed Sci. Technol.* 225:97-108.
- Adewole, D.I., A. Rogiewicz, B. Dyck, and B.A. Slominski. 2017. Effects of canola meal source on the standardized ileal digestible amino acids apparent metabolizable energy contents for broiler chickens. *Poult. Sci.* 96:4298-4306.
- Mejicanos, G.A., A. Rogiewicz, C.M. Nyachoti, and B.A. Slominski. 2017. Fractionation of canola meal using sieving technology. *Can. J. Anim. Sci.* 97(4): 613-621.
- Adewole, D.I., A. Rogiewicz, B. Dyck, C.M. Nyachoti, and B.A. Slominski. 2017. Standardized ileal digestible amino acids contents of canola meal from Canadian crushing plants for growing pigs. *J. Anim. Sci.* 95:2670-2679.
- Mikulski, D., J. Juskiewicz, B. Przybylska-Gornowicz, E. Sosnowska, B.A. Slominski, J. Jankowski, and Z. Zdunczyk. 2017. The effect of dietary faba bean and non-starch polysaccharide degrading enzymes on the growth performance and gut physiology of young turkeys. *Animal* 12: 2147-2155.
- Adewole, D.I., A. Rogiewicz, B. Dyck, and B.A. Slominski. 2016. Chemical and nutritive characteristics of canola meal from Canadian processing facilities. *Anim. Feed Sci. Technol.* 222:17-30.
- Alizadeh, M., A. Rogiewicz, E. McMillan, J.C. Rodriguez-Lecompte, R. Patterson, and B.A. Slominski. 2016. Effect of yeast-derived products and distillers dried grains with solubles (DDGS) on growth performance and local innate immune response of broiler chickens challenged with *Clostridium perfringens*. *Avian Pathol.* 45(3):334-345.
- Dadalt, J.C., D.E. Velayudhan, M.A. Trindade Neto, B.A. Slominski, and C.M. Nyachoti. 2016. Ileal amino acid digestibility in high protein sunflower meal and pea protein isolate fed to growing pigs with or without multi-carbohydrase supplementation. *Anim. Feed Sci. Technol.* 221:62-69.
- Alizadeh, M., J. C. Rodriguez-Lecompte, A. Rogiewicz, R. Patterson, and B. A. Slominski. 2016. Effect of yeast-derived products and distillers dried grains with solubles (DDGS) on growth performance, gut morphology, and gene expression of pattern recognition receptors and cytokines in broiler chickens. *Poult. Sci.* 95:507-517.

- Juskiewicz J., J. Jankowski, M. Kosmala, Z. Zdunczyk, B.A. Slominski, and P. Zdunczyk. 2016. The effects of dietary dried fruit pomaces on growth performance and gastrointestinal biochemistry of turkey poults. *J. Anim. Physiol. Anim. Nutr.* 100:967-976.
- Alizadeh, M., J. C. Rodriguez-Lecompte, H. Echeverry, G. H. Crow, and B. A. Slominski. 2016. Effect of yeast-derived products and distillers dried grains with solubles (DDGS) on antibody-mediated immune response and gene expression of pattern recognition receptors and cytokines in broiler chickens immunized with T-cell dependent antigens. *Poult. Sci.* 95:823–833.
- Alizadeh, M., J. C. Rodriguez-Lecompte, A. Yitbarek, S. Sharif, G. Crow, and B.A. Slominski. 2016d. Effect of yeast-derived products on systemic innate immune response of broiler chickens following a lipopolysaccharide challenge. *Poult. Sci.* 95:2266–2273.
- Woyengo, T.A., R. Patterson, B.A. Slominski, E. Beltranena, and R.T. Zijlstra. 2016. Nutritive value of cold-pressed camelina cake with or without supplementation of multi-enzyme in broiler chickens. *Poult. Sci.* 95:2314–2321.
- Niu, Y., A. Rogiewicz, W. Chuyun, G. Mian, F. Huang, and B.A. Slominski. 2015. The effect of microwave treatment on the efficacy of expeller pressing of *Brassica napus* rapeseed and *Brassica juncea* mustard seeds. *J. Agric. Food Chem.* 63:3078-3084.
- Jankowski, J., Z. Zdunczyk, D. Mikulski, J. Naczmannski, J. Juskiewicz, A. Troszynska, and B.A. Slominski. 2015. Inclusion of flaxseed in turkey diets decreases the n-6/n-3 PUFA ratio and increases the proportion of biologically active EPA and DHA without affecting meat quality. *Eur. J. Lipid Sci.* 117:797-809.
- Shang, Y., A. Rogiewicz, R. Patterson, B.A. Slominski, and W. K. Kim. 2015. The effect of phytase and fructooligosaccharide supplementation on growth performance, bone quality and phosphorus utilization in broiler chickens. *Poult. Sci.* 94:955-964.
- Mansoori, B. A. Rogiewicz, and B.A. Slominski. 2015. The effect of canola tannins on the intestinal absorption capacity of broilers using a d-xylose test. *J. Anim. Physiol. Nutr.* 99:1084-1093.
- Kaczmarek, S.A., A. Rogiewicz, M. Mogielnicka, A. Rutkowski, R.O. Jones, and B.A. Slominski. 2014. The effect of protease, amylase and NSP-degrading enzyme supplementation on nutrient utilization and growth performance of broiler chickens fed corn/soybean meal-based diets. *Poult. Sci.* 93:1745-1753.
- Zduńczyk, Z., J. Jankowski, D. Mikulski, M. Mikulska, G. Lamparski, B.A. Slominski, and J. Juskiewicz. 2014. Growth performance, gastrointestinal function and meat quality in growing-finishing turkeys fed diets with different levels of yellow lupine (*L. luteus*) seeds. *Arch. Anim. Nutr.* 68 (3):211-226.
- Agyekum, A.K., T.A. Woyengo, B.A. Slominski, Y.L. Yin, and C.M. Nyachoti. 2014. Effects of formulating growing pig diet with increasing levels of wheat-corn distillers dried grains with solubles on digestible nutrient basis on growth performance and nutrient digestibility. *J. Anim. Physiol. Anim. Nutr.* 98 (4):651-658.
- Ayoade, D.I., E. Kiarie, B.A. Slominski, and C.M. Nyachoti. 2014. Growth and physiological responses of growing pigs to wheat-corn distillers died grains with solubles. *J. Anim. Physiol. Anim. Nutr.* 98 (3):569-577.



- Zduńczyk, Z., J. Jankowski, J. Juśkiewicz, D. Mikulski, and B.A. Slominski. 2013. Effect of different dietary levels of low-glucosinolate rapeseed (canola) meal and non-starch polysaccharide-degrading enzymes on growth performance and gut physiology of growing turkeys. *Can. J. Anim. Sci.* 93: 353-362.
- Slominski, B.A., W. Jia, A. Rogiewicz, C.M. Nyachoti, and D. Hickling. 2012. Low-fiber Canola. Part I: Chemical and Nutritive Composition of the Meal. *J. Agric. Food Chem.* 60:12225-12230.
- Jia, W., D. Mikulski, A. Rogiewicz, Z. Zdunczyk, J. Jankowski, and B.A. Slominski. 2012. Low-fiber Canola. Part II: Nutritive Value of the Meal. *J. Agric. Food Chem.* 60:12231-12237.
- Khajali, F. and B.A. Slominski. 2012. Factors that affect the nutritive value of canola meal for poultry. *Poult. Sci.* 91:2564-2575.
- Ayoade, D.I., E. Kiarie, T.A. Woyengo, B.A. Slominski, and C.M. Nyachoti. 2012. Effect of a multi-carbohydrase enzyme on ileal amino acid digestibility in extruded full fat soybean fed to finishing pigs. *J. Anim. Sci.* 90:3842-3847.
- Trinidad Neto, M.A., F.O. Opapeju, B.A. Slominski, and C.M. Nyachoti. 2012. Ileal amino acid digestibility in canola meals from yellow- and black-seeded *Brassica napus* and *Brassica juncea* fed to growing pigs. *J. Anim. Sci.* (In press; published online before print July 31, 2012, doi: 10.2527).
- Agyekum, A., B.A. Slominski, and C.M. Nyachoti. 2012. Organ weight, intestinal morphology and fasting whole-body oxygen consumption in growing pigs fed diets with distillers dried grains with solubles alone or in combination with a multi-enzyme supplement. *J. Anim. Sci.* 90:3032-3040.
- Mikulski, D., J. Jankowski, Z. Zdunczyk, J. Juskiwicz, and B.A. Slominski. 2012. The effect of different levels of rapeseed meal on growth performance, carcass traits and meat quality in turkeys. *Poult. Sci.* 91:215-223.
- Slominski, B.A. 2011. Recent advances in research on enzymes for poultry diets. *Poult. Sci.* 90:2013-2023.
- Jia, W., A. Rogiewicz, H.L. Bruce, and B.A. Slominski. 2010. Feeding flaxseed enhances deposition of omega-3 fatty acids in broiler meat portions in different manner. *Can. J. Anim. Sci.* 90:203-206.
- Jia, W., and B.A. Slominski. 2010. Means to improve the nutritive value of flaxseed for broiler chickens: The effect of particle size, enzyme addition and feed pelleting. *Poult. Sci.* 89: 261-269.
- Yang, Y., E.G. Kiarie, B.A. Slominski, A. Brule-Babel, and C.M. Nyachoti. 2010. Amino acid digestibility in three types of new generation distillers dried grains with solubles fed to growing pigs and their effects on NSP utilization, bacterial profile and digestive enzyme activity. *J. Anim. Sci.* 88:3304-3312.
- Woyengo, T.A., B.A. Slominski, and R.O. Jones. 2010. Growth performance and nutrient utilization of broiler chickens fed diets supplemented with phytase alone or in combination with citric acid and multicarbohydrase. *Poult. Sci.* 89:2221-2229.
- Jozefiak, D., A. Ptak, S. Kaczmarek, P. Mackowiak, M. Sassek, and B.A. Slominski. 2010. Multi-carbohydrase and phytase supplementation improves growth performance and liver insulin

- receptor sensitivity in broiler chickens fed diets containing full-fat rapeseed. *Poult. Sci.* 89:1939-1946.
- Jankowski, J., A. Lecewicz, Z. Zdunczyk, J. Juskiewicz, and B.A. Slominski. 2010. The effect of partial replacement of soybean meal with sunflower meals on ileal adaptation, nutrient utilization and growth performance of young turkey. *Br. Poult. Sci.* 52:456-465.
- Jia, W., B.A. Slominski, H.L. Bruce, C.M. Nyachoti, and R.O. Jones. 2009. Enzyme addition facilitates the post-disease compensatory growth of broiler chickens challenged with *Clostridium perfringens*. *Can. J. Anim. Sci.* 89:369-381.
- Emiola, I.A., F.O. Opapeju, B.A. Slominski, and C.M. Nyachoti. 2009. Growth performance and nutrient digestibility in pigs fed barley/wheat DDGS-based diets supplemented with a multicarbohydrase enzyme. *J. Anim. Sci.* 87:2315-2322.
- Jia, W., B.A. Slominski, H.L. Bruce, G. Blank, and O. Jones. 2009. Effects of diet type and enzyme addition on growth performance and gut health of broiler chickens during sub-clinical *Clostridium perfringens* challenge. *Poult. Sci.* 88:132-140.
- Emiola, I.A., O.O. Akinremi, B.A. Slominski, and C.M. Nyachoti. 2009. Nutrient utilization and manure P excretion in growing pigs fed corn-barley-soybean based diets supplemented with microbial phytase. *Anim. Sci. J.* 80:19-26.
- Kiarie, E.G., B.A. Slominski, and C.M. Nyachoti. 2009. Tissue fatty acid profiles, plasma biochemical characteristics and cecal biogenic amines in piglets fed diets containing flaxseed and carbohydrase enzymes. *Livest. Sci.* 121:1-6.
- Jia, W., B.A. Slominski, W. Guenter, A. Humphreys and O. Jones. 2008. The effect of enzyme supplementation on egg production parameters and omega-3 fatty acids deposition in laying hens fed flaxseed and canola seed. *Poult. Sci.* 87:2005-2014.
- Kiarie, E.G., B.A. Slominski, D.O. Krause, and C.M. Nyachoti. 2008. Non-starch polysaccharides hydrolysis products of soybean and canola meal protect against enterotoxigenic *Escherichia coli* in piglets. *J. Nutr.* 138:502-508.
- Kiarie, E., C.M. Nyachoti, B.A. Slominski, and G. Blank. 2007. Growth performance, gastrointestinal microbial activities and nutrient digestibility in early-weaned pigs fed diets with flaxseed and carbohydrase enzyme. *J. Anim. Sci.* 85:2982-2993.
- Ser W.Y., S.D. Arntfield, A.W. Hydamaka, and B.A. Slominski. 2007. Use of diabetic test kits to assess the recovery of glucosinolates during isolation of canola protein. *Food Sci. and Technol.* (Accepted June 14, 2007).
- Slominski, B.A., T. Davie, M.C. Nyachoti, and O. Jones. 2007. Heat stability of endogenous and microbial phytase during feed pelleting. *Livestock Sci.* 109:244-246.
- Rosin, E.A., G. Blank, B.A. Slominski, and R.A. Holley. 2007. Enzyme supplements in broiler Chicken diets: in vitro and in vivo effects on bacterial growth. *J. Sci. Food Agric.* 87:1009-1020.
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**Papers in Conference Proceedings (invited presentations, last 12 years):**

- Slominski, B.A. 2019. Canola meal for poultry - Recent studies and perspectives. Proc. 15<sup>th</sup> Int. Rapeseed Congress, June 16-19, Berlin, Germany (*invited presentation*).
- Rogiewicz, A. and B.A. Slominski. 2019. Low-glucosinolate rapeseed meal as a valuable source of protein for poultry. Proc. 22<sup>nd</sup> Eur. Symp. Poult. Nutr. Gdansk, Poland, June 12-13, pp. 15-21 (invited speaker- Plenary session "Future protein sources: Focus on the European market").
- Slominski, B.A. 2018. Advances in the understanding of dietary fibre and its components in relation to the use of alternative feed ingredients in modern poultry and livestock production. Proceedings of the 2018 Animal Nutrition Conference of Canada, Edmonton (*invited presentation*).
- Rogiewicz, A. and B.A. Slominski. 2018. Lipids and energy utilization from canola co-products for poultry. Canadian Lipid and Bioresource Conference, Saskatoon, September 2018 (*invited presentation*).
- Slominski, B.A. 2015. Nutritive Value of Canola Meal: The Dietary Fibre Story. 14<sup>th</sup> Int. Rapeseed Congress, July 5-9, Saskatoon, Canada (*invited presentation*).

- Slominski, B.A. 2013. Enzyme Hydrolysis Products and Yeast-derived Products as Prebiotics and Natural Alternatives to Antibiotic Growth Promoters. Mexican Association of Animal Nutrition (AMENA), Puerto Vallarta, Oct. 22-25, CD ROM (*invited presentation*).
- Slominski, B.A. 2012. New Generation Enzymes. Proceedings of the 33<sup>rd</sup> Western Nutrition Conference, Winnipeg, Sept.19-20, pp. 156-170 (*invited presentation*).
- Slominski, B.A. 2012. Canola meal: Survey and current yellow canola research. Canola Industry Meeting, Saskatoon, Dec. 5-6 (*invited presentation*).
- Slominski, B.A. 2012. Recent Advances in Research on Enzymes for Animal Feeds. 1<sup>st</sup> International Forum on Animal Health and Food Safety. Beijing, Nov. 8-11, (*invited presentation*).
- Slominski, B.A. Enzyme combinations and their effects in poultry. 2011. Proceedings of the 1<sup>st</sup> Congresso Sorbe Aditivos Na Alimentacao Animal “Enzimas”, Nov. 30-Dec. 3, Campinas, Brazil (*invited presentation*).
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- Slominski, B.A. 2010. Recent advances in research on low-fiber canola. Canola Industry Meeting, Saskatoon, Dec. 8, 2010 (*invited presentation*).
- Slominski, B.A. 2010. Recent advances in enzymes for poultry diets. Proceedings of the Annual Nutrition Conference, Rogers, Arkansas, Sept. 7-9 (CD ROM) (*invited presentation*).
- Slominski, B.A. 2010. Recent advances in enzymes for poultry. Proceedings of the 71<sup>st</sup> Minnesota Nutrition Conference, Owatonna, Minnesota, Sept. 21-22, pp. 196-213, (*invited presentation*).

**Abstracts in Conference Proceedings (selected; last 25 years-112 in total):**

- Che, A.Q., A. Rogiewicz, V.J. Barthet, N. Pogorzelec, and B. A. Slominski. 2022. Application of near-infrared spectroscopy for rapid analysis of glucosinolate content in canola meal. Proceedings of the 2022 Animal Nutrition of Canada, Saskatoon, May 2022.
- Sessingnong T., O. Omotosho, A. Rogiewicz, Y. Niu, J. Ferreira, R. Patterson, and B. A. Slominski. 2022. Research on evaluation of expeller/cold-pressed canola (EPC) as a valuable feed ingredient for poultry. Proceedings of the 2022 Animal Nutrition of Canada, Saskatoon, May 2022.
- Niu, Y., Rogiewicz, A., Shi, L., Patterson, R., and Slominski, B.A. 2021. The effect of enzymatically modified canola meal on growth performance, nutrient utilization and intestinal bacterial population of broiler chickens. Poultry Science Association Meeting, July 2021.
- Niu, Y., Rogiewicz, A., Shi, L., Patterson, R., and Slominski, B.A. 2021. The effect of replacement of canola meal with enzymatically modified canola meal (ECM) on growth performance and nutrient utilization of broiler chickens. Proceedings of the 2021 Animal Nutrition Conference of Canada, May 2021.

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- Barthet, V., Petryk, M., Rogiewicz, A. and B. A. Slominski. 2019. Prediction of oil and protein contents of Canadian canola meal by Near-Infrared Spectroscopy. 15<sup>th</sup> International Rapeseed Congress, Berlin, Germany. June 16-19, 2019.
- Rogiewicz, A., and B. A. Slominski. 2018. Nutritive value and high inclusion levels of canola meal for poultry. Prairie Livestock Expo, Winnipeg, December 2018.
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