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of processing systems, plant layout and process design. Prior to his work at Iowa State, he was a Lead Scientist with the United States Department of Agriculture – Agricultural Research Service. He was an assistant professor at Northern Illinois University in the Department of Engineering and Industrial Technology. Before this, he worked for a design-build firm and was responsible for process and equipment design.

K.T. Sampath heads the National Institute of Animal Nutrition and Physiology, Bangalore, India, and is a well known scientist in the area of Animal Nutrition. His specialization includes animal feed databases, bypass nutrients, and enhancing productivity in dairy animals. He has 30 years of experience in the field of research in animal nutrition and related areas. Dr Sampath has published more than 110 research papers, including research articles, reviews and popular articles, technical bulletins, book chapters and lead papers presented at seminars and workshops. Dr Sampath is associated with a number of scientific societies as President or Member. He has also served on various important scientific and technical committees. Dr Sampath has been honoured with many awards for his contributions in the fields of animal science and livestock developmental activities, and has successfully organized and conducted many scientific seminars, symposia, workshops and training programmes.

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David J. Schingoethe is Emeritus Professor of Dairy Science at South Dakota State University, USA, whence he recently retired after more than 42 years of teaching and dairy cattle nutrition research. Research investigations have focused primarily on the areas of protein and energy nutrition of lactating cows, with a major thrust on utilizing crops and by-products important to the region. He is considered a leader in the use of co-products such as distillers grain, sunflower products and whey in diets of dairy cattle. He is the author or co-author of more than 500 scientific and popular press articles related to his research, and has been invited to speak at more than 60 international, national and regional conferences on subjects related to his research. His academic degrees include BS and MS degrees in Dairy Science from the University of Illinois, and a PhD from Michigan State University in Dairy Science and Nutrition. He is a Past President of the American Dairy Science Association and of the Federation of Animal Science Societies, and was an Editor of the Journal of Dairy Science for 8 years. He has received numerous awards for his research, teaching and service efforts.

Jon P. Schoonmaker is an assistant professor in the Department of Animal Sciences at Purdue University in West Lafayette, Indiana, USA. He earned a BS (Meat and Animal Science) from the University of Wisconsin-Madison and MS and PhD (animal science, ruminant nutrition) degrees from Ohio State University. He teaches nutrition and beef production classes at Purdue University. Research activities have focused on the impact of vitamins and minerals on growth and body composition of beef animals. Specifically, use of maize co-products for feedlot animals as well as gestating and lactating beef cows; vitamin D and beef tenderness; dietary cation-anion difference and beef tenderness; and vitamin A and its precursors' impacts on partitioning of fat deposition.

Jennifer S. Schutz received her MS and PhD degrees from Colorado State University, USA, in animal sciences, with an emphasis on feedlot ruminant nutrition. She is currently a post-doctoral research associate in the Department of Animal and Food Science at Texas Tech University. Her research interests are focused on beef cattle nutrition, ruminant metabolism, animal health, and feedlot production management systems for enhanced carcass quality. She is a member of the American Society of Animal Science, National Cattlemen's Beef Association, and Gamma Sigma Delta.

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Gerald C. Shurson is professor in the Department of Animal Science at the University of Minnesota, USA. He holds a PhD in swine nutrition and currently has responsibilities for teaching, research and extension programmes related to swine.

During the past 13 years his research programme has focused primarily on evaluating the nutritional value of dried distillers grains with solubles in swine diets. He has developed an extensive network of collaborators, including researchers at other universities, in various industries and in international research communities. His research work has resulted in numerous scientific publications and presentations to national and international audiences. He works closely with the U.S. Grains Council to provide educational programmes and assess export market opportunities for DDGS. He also serves as a consultant for a wide variety of ethanol and feed companies and organizations, as well as government agencies.

Fabien Skiba is in charge of the Nutritional Value Unit at Arvalis-Institut du végétal, France. With his team, he is working to improve knowledge on the value of pulses and of cereals and their co-products for pigs and poultry. In recent years he has supervised several experiments on wheat DDGS, including those of the PhD project of Pierre Cozannet and also with European ethanol producers.

T. Smith After college, Tim first went to Africa as a volunteer in the sixties, helping establish a village in Tanzania. He then joined the National Dairy Research Institute at Reading, where work on poor quality forages was the subject of his PhD. In 1986 he joined a World Bank team in Zimbabwe, where he addressed aspects of ruminant nutrition affecting resource-poor smallholder crop-livestock farmers. He was also head of Matopos Research Station in Zimbabwe. Since 1996 he has been involved with a number of livestock-related projects in several African and Asian countries. He has also acted as a consultant for a number of international organizations such as the International Atomic Energy Agency (IAEA), Vienna, Austria and the Food and Agriculture Organization (FAO) of the United Nations, Rome, Italy.

S. Smyth is a Research Scientist at the University of Saskatchewan, Canada. He received his PhD from the University of Saskatchewan in 2005, and his research has focused on how societies regulate innovation. The focus of this research is on the innovation of agricultural biotechnology. Dr Smyth is part of a group of academics that received \$CAN 5.4 million in funding in 2009 from Genome Canada to examine the genomic, economic, environmental, ethical, legal and social (GE³LS) issues pertaining to bio-products and biofuels. In addition to this, Dr Smyth is leading the GE³LS component on two other Genome Canada-funded projects that have a combined value of \$CAN 22.5 million. Much of his recent research has focused on marketplace liabilities created by innovation, which has been compiled in a 2010 book—*Innovation and Liability in Biotechnology: Transnational and Comparative Perspectives*—published by Edward Elgar.

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Hans H. Stein is Professor of Monogastric Nutrition at the University of Illinois, USA. He obtained an Associate's degree in Agriculture from the Gråsten Farmer's College, Gråsten, Denmark, in 1983, and continued his education at the Royal Veterinary and Agricultural University in Copenhagen, Denmark, where he received his BS and MS degrees in Animal Science in 1988. Dr Stein received his PhD degree in non-ruminant nutrition from the University of Illinois in Urbana-Champaign, USA, in 1998. His research focuses on feed ingredient evaluation and measuring energy and nutrient digestibility in feed ingredients. He and his graduate students have conducted numerous experiments to measure digestibility of energy and nutrients in many feed ingredients, including soybean products and co-products from the biofuels industry. Dr Stein has given invited presentations on swine nutrition and swine production in 28 countries around the world and has authored or co-authored 76 scientific publications.

Karl-Heinz Südekum is Professor of Animal Nutrition at the University of Bonn, Germany. He obtained his undergraduate and graduate degrees in Animal Science at the University of Kiel, Germany. His areas of expertise include intake and digestion by ruminants. Integrated into this research are attempts to optimize ruminal nutrient delivery by applying a variety of physical and chemical treatments on feedstuffs, particularly cereal grains and oilseed commodities. These studies are paralleled by continuing research to establish simple laboratory measurements to estimate ruminal degradation of protein and carbohydrates and intestinal nutrient digestion.

Harold Tilstra is a 1975 graduate of the College of Veterinary Medicine, University of Minnesota, USA. Dr Tilstra's current position with Land O' Lakes Purina Feed LLC includes supervising several swine feed sales consultants, organizing swine feed sales training programmes, and coordinating national and international technical support for distillers grain utilization and marketing. He represents Land O' Lakes Purina Feed LLC as a delegate to the US Grains Council and as a director on the

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Michael Wang is the manager of the Systems Assessment Group of the Center for Transportation Research (CTR) at Argonne National Laboratory, USA. Dr Wang's research areas include the evaluation of energy and environmental impacts of advanced vehicle technologies and new transportation fuels, including biofuels. Dr Wang's accomplishments include the development of Argonne's GREET (Greenhouse gases, Regulated Emissions, and Energy use in Transportation) software model for life-cycle analysis of advanced vehicle technologies and new fuels. At present, GREET has more than 15 000 registered users worldwide. Dr Wang's research and the GREET model have been used by governmental agencies in North America, Asia and Europe to develop transportation fuel policies, such as low-carbon fuel standards and vehicle greenhouse gas emission regulations.

Andrea K. Watson is a research technician and PhD student in Animal Science at the University of Nebraska-Lincoln, USA. She assists faculty members in coordinating research projects involving the utilization of ethanol co-products by the cattle industry.

J. Alan Weber is a founding partner of MARC-IV, a consulting company that specializes in the development of industrial products from agricultural resources. Active with biodiesel commercialization activities since 1991, Mr Weber assisted with the establishment of the National Biodiesel Board's (NBB) Washington, D.C., office in 2006–07 and continues to provide economic and technical support to NBB efforts. He currently leads industry feedstock development efforts to increase raw material sources such as algae, jatropha, minor oilseeds (winter canola and camelina), halophytes and traditional oilseed commodities. In addition to his activity with MARC-IV, Mr Weber is actively engaged with the management and operation of an 875-acre family farm in central Missouri. Weber is a recipient of the 2007 NBB Outstanding Service Award and the NBB Industry Outstanding Commitment Award in 2000. He completed his undergraduate and graduate training in agricultural economics at the University of Missouri, USA.

Zeev Wiesman is a professor in the department of Biotechnology Engineering, and Head of the Energy Engineering Unit, Faculty of Engineering Sciences, Ben Gurion University of the Negev, Beer Sheva, Israel. He is an expert in plant lipid biotechnologies, with emphasis on biofuels, bio-energy and food industries. Professor Wiesman has published a book and more than 100 scientific papers, chapters in books and patents.

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Leonid Yarmolinsky is a chemist, with emphasis on organic chemistry and physical chemistry of complex heterogenic systems. He holds an MSc in organic chemistry and also an MSc in desert researches. His PhD is in progress. Currently he is collaborating with Professor Zeev Wiesman on various research projects.

Ruurd T. Zijlstra is a Professor at the University of Alberta, Edmonton, Alberta, Canada. He was born and raised in The Netherlands, where he completed an MSc degree at Wageningen University. In 1996 he completed a PhD at the University of Illinois, USA, and moved to Canada. He has published 68 scientific papers in peer-reviewed journals on feed quality evaluation and other swine nutrition topics. His current research programme is focused on feed quality evaluation techniques, nutritional quality of co-products, and unique aspects of carbohydrate nutrition in swine.