

➤ **On January 2, 2018** the successful completion of the merger between Agrium Inc. (Agrium) and Potash Corporation of Saskatchewan Inc. (PotashCorp), was announced. This resulted in the creation of the world's premier provider of crop inputs and services. Nutrien, [www.nutrien.com] headquartered in Saskatoon, with nearly 20,000 employees and operations and investments in 14 countries produces and distributes over 26 million tonnes of potash, nitrogen and phosphate products for agricultural, industrial and feed customers globally. The company has an agriculture retail network that services over 500,000 growers helping them optimize crop yields and their returns.

➤ **Ontario has** announced \$713M in research funding to the University of Guelph to help support innovation in food and agriculture. As Malcolm Campbell the Vice-President of Research at the University stated "it is not just about making discoveries that push back the frontier of your discipline....but it is also about converting those discoveries into action and creating innovations that are going to create jobs, grow the economy and make us more competitive in a global market-place."

➤ **The Globe and Mail Report on Business** provides a feature article on "The Future of Food" [pp. 21-39. March, 2018. www.theglobeandmail.com/business]. This interesting feature describes how Canadian companies are embracing food innovation enabled by science, engineering, and technology. "Birth of a Cherry" discusses how agricultural engineering is changing the foods we eat. Did you know that 80% of the world's cherry varieties were developed in a Canadian research Centre in BC's Okanagan Valley? "Snacks with Benefits" describes Canadian work to create more healthy grab-and-go foods with nutritional benefits. As stated in the article "Over the past five years Canada has invested over \$3B in supporting agricultural innovation, upgrades and market expansion through its Growing Forward 2 program [www.agr.gc.ca]. "Upstream Battle" discusses Canada's first genetically modified animal to be approved for human consumption- Atlantic salmon. Canadian farmers are poised to be one of the world's top producers of plant-based protein.

➤ **The April, 2018** issue of *MacLean's Magazine* provides a special 64-page *Canadian Business* [www.canadianbusiness.com] insert report on "Canada's Best Managed Companies". This is an outstanding analysis of the Canadian way of doing business; providing much more than just a list but also authoritative features detailing Canadian business excellence and the importance of outstanding and motivated employees.

➤ **The Canadian** National Institute for the Blind [www.cnib.ca] is celebrat-



ing its 100th birthday. Originally created in response to the needs of soldiers returning from the First World War, the organization has for 100 years been an established leader in advocating for and providing services to Canadians who are blind or partially sighted. The CNIB is energetically building on its past and taking on difficult challenges with innovative research, engineering, technology and human solutions. Technology is seen to be a major focus in the future of the CNIB; eliminating barriers to those with visual impairment.

➤ **The recent** passing of Roger Bannister and Stephen Hawking reminds us of outstanding examples of the human spirit. Roger Bannister in 1954 was the first human to run a mile in less than four minutes; an event which is considered to be one of the milestone achievements in athletic history. Retiring from running he had a long and celebrated career as a neurologist. Stephen Hawking is regarded as one of the greatest theoretical physicists of all time and wrote the international bestseller "A Brief History of Time." Hawking had been an inspiration to others with his lifelong battle with the disease amyotrophic lateral sclerosis. Imprisoned within his body he had a relentless spirit, joy for life, and made a difference bringing science to the public. In 2009 he took up a research position with the Perimeter Institute for Theoretical Physics in Waterloo, Ontario. The Stephen Hawking Centre in Waterloo Ont. is the only building in the world to bear the late physicist's name.

➤ **The managing** director of McKinsey & Company and chair of the Canadian Government's Advisory Committee on Economic Growth, Dominic Barton is predicting massive change that will disrupt millions of Canadian jobs in the next twelve years. "There is a good chance that not just your job, but also the kind of job you do will be eliminated". The Advisory Council suggests that the challenge must be met with a major revamping of job training and lifelong education. This will require multi-billion dollar funding and significant public-policy changes that create employment pathways. The widely cited 2017 study by McKinsey & Company "A Future That Works: Automation, Employment and Productivity" provides further information.

➤ **Toronto was** the only Canadian city to make the short list of 20 finalists for selection of Amazon's second headquarters. 238 cities globally applied for this \$5B investment and 50,000 new jobs opportunity. Feedback received on the Calgary bid strongly suggested that our workforce did not possess the skills needed for the workplace and economy of the future. Many of us have known and spoken-out for many years that basic and applied research policy in Canada has failed to meet the needs of our youth by inhibiting their creative abilities and not providing them with the resources necessary to compete successfully and engage in the hard but important rewarding career paths that grow the national economy. This feedback from one of the world's most successful companies is a catalyst for necessary change.

➤ **The Globe and Mail** co-published its 16th annual list of "Canada's Top Employers for Young People" [February 9, 2018. www.ct100.ca/yp]. The employers on this list are Canadian leaders in attracting and retaining young employees. Kristina Leung, Senior Editor of the Canada's Top 100 Employers project stated "In the competition for talent, a key variable for millennials and Gen-Z is the ability to connect their work with greater meaning – that's where winners of this year's competition excel." Most importantly the report provides many insights into the organizational culture that reaps rewards by effectively motivating and empowering youth towards achieving their potential.

➤ **The five** winning bids of public funding for "high-technology superclusters" were named by the federal government on February 15. These clusters are hoped to promote economic growth and job creation. The five superclusters include:

- The Ocean supercluster in Atlantic Canada will use innovation to improve ocean-based industries, including fisheries, oil and gas and clean energy.
- The Scale AI supercluster in Quebec will work on building intelligent supply chains through artificial intelligence and robotics.
- The Advanced Manufacturing supercluster in Ontario will connect technology strengths to the manufacturing industry to prepare for the economy of tomorrow.
- The Protein Industries supercluster in the Prairies will work on making the country a leading source of plant proteins.
- The Digital Technology Supercluster in British Columbia will use big data and digital technologies to unlock new potential in sectors such as health care, forestry, and manufacturing.

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Retired Canadian women's hockey star Hayley Wickenheiser announced on February 7 that she will donate her brain to concussion research after her death. She is one of many athletes who desire to help increase understanding of concussion injury and the resulting chronic traumatic encephalopathy. The Concussion Legacy Foundation [www.concussionfoundation.org] which supports CTE and concussion research says that more than 2,800 former athletes and military veterans have promised to donate their brains since 2008. Many of their stories are profiled on the foundations website. As Ms. Wickenheiser states "by pledging my brain to the Concussion Legacy Foundation I hope to support the best science and accelerate the de-

velopment of ways to prevent and treat CTE." Halley Wickenheiser, a four-time Olympic gold medalist in women's hockey travelled to North Korea following the Winter Olympic Games and ran practices as a volunteer for North Korea's national women's and men's hockey teams.

A recent article published in *the Globe and Mail* [March 20, 2018. page B9] written by Jennifer Lewington "Niche Degrees Allow Grads to Stand Out" discusses the growing number of Canadian business schools who are creating new specialty graduate degrees. Many of these are a blend of residential and online program delivery in diverse fields such as data analytics and artificial intelligence to name but two. ■