Professional Development (IN-PERSON AND VIRTUAL)

Jared A. Brock

LUNCHEON KEYNOTE SPEAKER

Surviving Tomorrow: Re-engineering life in the face of democratic, ecological, and economic breakdown

BIO

Jared is an award-winning author and director of several films including PBS's "Redeeming Uncle Tom" with Danny Glover. He is the host of the Surviving Tomorrow podcast, and his writing has appeared in The Guardian, Esquire, Smithsonian, USA Today, Huffington Post, and TIME Magazine. He has travelled to more than 40 countries including North Korea, Transnistria, and the Vatican, and does not own a cellphone.

BREAKFAST PLENARY

Characterizing, Managing and Reporting on Environmental, Social and Governance Issues

Kirsten Ketilson, P.Ag.

BIO

Kirsten is a positive, passionate Professional Agrologist and Lean Six Sigma Black Belt with a Master of Science degree and over 20 years of experience managing, leading and collaborating with multidisciplinary teams in dynamic, fast-paced environments. She excels at problem solving by understanding clients' issues and needs and designing, co-ordinating, and executing effective solutions. She translates big ideas into actions and stays excited and engaged through the journey. She is an expert in climate, energy and environmental policy relevant to carbon and environmental impact assessment and has strong policy analysis skills.

	TRACK 1 Practising Geoscience and Engineering	TRACK 2 Practising the Professions	TRACK 3 Leadership & Engagement	TRACK 4 Transformation at APEGS / Ethics
7:30 – 9:45 am	**Breakfast Plenary**	Breakfast and presentation		
10:00 – 11:00	**Update on Saskatchewan Resources** Gavin Jensen	**The Impacts of Workplace Injuries – They Are Larger Than You May Think** Grant Van Eaton	**Embracing Change** Part 1. Penny Popp	**Governance Transformation at APEGS** Kristen Darr, Stormy holmes
11:15 – 12:15	**Mining Life Cycle Assessments** Alex Grant, Laurens Tijsseling	**Urban Climate and City Design** Dr. Iain D. Stewart	**Embracing Change** Part 2. Penny Popp	**The Future of the Registration and Regulation of Firms** Bert Munro
12:30 – 2:15	**Luncheon Keynote**	Lunch and presentation		
2:30 - 3:30	**New Resources in Saskatchewan – Helium, Lithium, Cobalt, Nickel** Panel presentation Andrew Davidson, Zach Maurer, Roger Lemaitre	**Q & A with Jared Brock, Keynote Speaker**	**What is Duty to Consult and Accommodate … and Why Should I Care?** Tracy Campbell	**7 Lenses of Ethical Leadership - Through the Kaleidoscope** Linda Fisher Thornton
3:45 - 4:45	**New Resources in Saskatchewan – Panel Q&A** Continued from session 3. Moderator: Erik Nickel	**Geothermal Power Generation in Southeast Saskatchewan** Kirsten Marcia, P.Geo.	**Interdisciplinary and Experiential Learning Opportunities with Engineering** Adam McInnes, M.D., M.Sc.	**7 Lenses of Ethical Leadership - Applying Ethical Thinking** Linda Fisher Thornton

Professional Development Tracks

TRACK 1

Practising Geoscience and Engineering

Resource transformation: Discovering more of what Saskatchewan has to offer

Gavin Jensen, P.Geo.

ABSTRACT

This talk will illustrate the work completed by Saskatchewan Geological Survey to investigate the potential for developing new resources in the province, such as lithium and cobalt as well renewing the interest in a once-produced resource, helium. The interest for these resources are predominantly due to the strong projected growth of electrification of vehicles. Demand for numerous minerals associated with this sector has begun to rapidly expand and is projected to continue to grow over the next few decades. Additionally, all three minerals are included on the recently released list of Canada's critical minerals which are considered critical for the sustainable economic success of Canada and its role in the transition to a low-carbon economy.

Since April 2019 brine permit sales for the intent to produce lithium has generated 6.9 million dollars of revenue for the province. The focus of the presentation will be on the work completed by the survey for lithium exploration.

BIO

Gavin obtained a B.Sc. in Land Reclamation and Remediation, and a B.Sc and M.Sc. in Geology all from the University of Alberta. He joined the Saskatchewan Geological Survey as a Research Petroleum Hydrogeologist in 2007. Since 2011 Gavin's focus area has been in determining the concentration and spatial distribution of lithium in brines. His research has helped guide and foster the growth and interest of this emerging industry within the province of Saskatchewan which led to the province's first subsurface mineral public offering for lithium in December 2019. Gavin's current research is aimed towards a collaboration with the University of Regina that is investigating regarding the presence and distribution of Rare Earth Elements (REE) in brines.

Mining Life Cycle Assessments

Alex Grant and Laurens Tijsseling

BIOS

Alex is Principal at Jade Cove Partners. He is a Forbes 30 Under 30 honoree in Energy for 2021, and Partner at Minviro where he builds environmental impact models of lithium-ion battery supply chain processes. He is a technology innovation adviser at Zelandez, a lithium brinefield services company with operations in Argentina, Bolivia, and Chile, and a research affiliate at Lawrence Berkeley National Laboratory. Alex co-founded Lilac Solutions, a Silicon Valley lithium extraction technology company funded by Bill Gates' Breakthrough Energy Ventures and others. Alex has an M.S. from Northwestern University in Chemical Engineering and a B.Eng. from McGill University in Chemical Engineering & Philosophy.

Laurens is the Sustainability Manager at Minviro, where he supports resource projects in development, mining operations and battery material end users to quantitatively understand the environmental impact of their own production processes and upstream and downstream supply chains. Prior to joining Minviro he worked as a process engineer and supported the world's largest cobalt mine to understand the impact of mineralogy on their metals recovery.

New Resources in Saskatchewan - Helium, Lithium, Cobalt, Nickel

Panel Presentation

Andrew Davidson, CPA
Zachary Maurer, Geoscientist-In-Training
Roger Lemaitre, P.Eng., P.Geo.

BIOS

Andrew is the CEO of Royal Helium and is a resource development professional with more than a decade of continued experience in moving quality projects from greenfield exploration to production across multiple commodity types. As a founder of Royal Helium, Mr. Davidson is one of the most experienced helium exploration company executives in Canada.

A graduate of the University of Calgary (BComm), Mr. Davidson is a Chartered Professional Accountant with Certification in both Saskatchewan and Alberta. Mr. Davidson has extensive experience in the financial management and capital structuring aspects of companies in the junior resource markets in Canada. Mr. Davidson currently sits as a director for a number of junior natural resource exploration and production companies.

Zach is the CEO of Prairie Lithium and started work in Saskatchewan's energy sector in 2009 and worked his way from a roughneck into consulting roles. During his consulting career, he managed environmental and hydrogeologic projects in Canada and the United States. In 2019, he incorporated Prairie Lithium. He has since led multiple rounds of private equity funding and established Prairie Lithium as the first and largest active lithium brine developer in the region. He holds a B.Sc. in Geology from the University of Regina and is currently conducting M.Sc. research on lithium hydrochemistry in the Williston Basin. He also holds a Diploma in Exploration Information Technology from the Southern Alberta Institute of Technology (SAIT).

Roger is the CEO of UEX Corp. and is an engineer and geologist with more than 20 years of professional experience, with both senior and junior mining companies. Before joining UEX, Mr. Lemaitre held the position of CEO and Executive Director of URU Metals Limited, an AIM-listed junior uranium and base metal exploration company, where he re-organized the company's asset mix by identifying and successfully acquiring significant new exploration projects. Prior to joining URU, Mr. Lemaitre held a variety of senior management positions with Cameco Corporation, one of the world's largest uranium producers, and was Cameco's Director of Worldwide Exploration Projects. In this position, Mr. Lemaitre had responsibility for overseeing the execution of Cameco's growing international exploration programs and budgets as well as overseeing the field activities of three global exploration offices. Before becoming the Director of Worldwide Exploration, Mr. Lemaitre was Cameco's Manager of Regional Exploration, Saskatchewan and was involved in Cameco's strategic growth team tasked with the identification of opportunities in the uranium sector. Mr. Lemaitre has a Master of Applied Science in Geology from McGill University, a Bachelor of Applied Science in Geological Engineering from Queens University and a Master of Business Administration from Athabasca University.

New Resources in Saskatchewan – Panel Q&A

Andrew Davidson, CPA
Zachary Maurer, Geoscientist-In-Training
Roger Lemaitre, P.Eng., P.Geo.
Moderator: Erik Nickel, P.Geo.

BIO

Erik graduated from the University of Saskatchewan with a degree in Geology in 1994 and obtained his Master of Science in geology from the University of Regina in 2008. After a five-year tour as a wellsite geological consultant, Erik spent 15 years as a research geologist with the petroleum geology branch of the Saskatchewan Geological Survey (SGS). His research interests, while at the SGS, were primarily in the Mississippian carbonates of southeast Saskatchewan, performing some of the original Midale reservoir characterization for PTRC's Weyburn project starting in 2001. Erik also studied many other aspects of Saskatchewan's petroleum and natural gas resources, most notably an extensive body of work on the geology of Bakken tight oil reservoirs. Erik joined the PTRC in 2014 and is primarily responsible for the management and delivery of enhanced oil recovery research programs, including STEPS and HORNET, as well as managing the Centre's carbon capture and storage project (Aquistore).

TRACK 2

Practising the Professions

The impacts of workplace Injuries – they are larger than you may think

Grant Van Eaton

BIO

Grant has 41 years of service with the Saskatchewan Workers Compensation Board and is currently the Complex Injury Claims Specialist. His previous position was managing the Extended Services unit which is responsible for all aspects of work-related claims resulting in a fatality, catastrophic injury, cancer-related claims and more recently severe Covid work-related injuries. Prior to the Extended Services role, Grant's responsibilities over the last 13 years were around the initial acceptance or denial of all work-related claims for the province of Saskatchewan and the ongoing management of all long-term claims for the southern half of Saskatchewan as the Director of Operations South.

Urban Climate and City Design

Dr. Iain D. Stewart

BIO

Iain is a Research Associate at Ontario Tech University and a Fellow of the Global Cities Institute in Toronto. Iain holds a PhD in Geography from the University of British Columbia and is a specialist in urban climatology and climate-sensitive urban design. He is co-author of a textbook on the urban temperature effect, and a 2021 recipient of the Timothy Oke Award for Original Research in the Field of Urban Climatology, given by the International Association for Urban Climate.

Geothermal Power Generation in Southeast Saskatchewan

Kirsten Marcia, P.Geo.

ABSTRACT

The DEEP Earth Energy Production Corp. ("DEEP") geothermal power project is located in Southeastern Saskatchewan, a few kilometres north of the United States border within the Williston Basin. Successful geothermal resource exploration in a hot sedimentary aquifer (HSA) requires two main contributing factors: hot fluid in permeable rocks; and high well productivity. Modern well design has made sweeping the heat from the reservoir possible. DEEP developed a unique geothermal field design to maximize flow rates and optimize an important regional geothermal resource. DEEP's "ribcage" geothermal well field design is globally unique and may be a transformative application of modern oil and gas drilling, completions and stimulation design applied for the first time on a renewable energy project. The project is advancing with local world-class oilfield expertise and redeploying that uniquely skilled workforce into a new clean energy industry for Canada.

BIO

Kirsten is the founder of DEEP and its president and CEO. Kirsten is a geology graduate from the University of Saskatchewan, and she has worked in the exploration industry for 20 years in commodities including diamonds, gold, uranium and oil and gas.

Most recently, Kirsten was a recipient of the 2022 Canada's Clean50 award for her inspiring leadership in the Renewable Energy category.

Her past experience was focused in Saskatchewan and Alberta for Canadian TSX-listed companies including Wescan Goldfields Inc., Vena Resources and Shore Gold Inc.

TRACK 3

Leadership & Engagement

Embracing Change

Penelope Popp, P.Eng.

BIO

Penelope (Penny) is an accomplished leader, Professional Engineer and Project Management Professional with extensive experience building teams. Penny graduated from the University of Regina with her MBA and has an in-depth understanding and applied knowledge of leadership principles. Through her down-to-earth style and ability to tackle difficult issues, she both empowers individuals, while ensuring the oversight of organizations as complex systems. She is a certified practitioner of EQ-i 2.0 and EQ-i 360 assessments as well as a Certified Leadership Coach. Penny is an active member of the Project Management Institute and has a wealth of practical leadership, change and project management experience.

What is Duty to Consult and Accommodate … and Why Should I Care?

Tracy Campbell

ABSTRACT

The Duty to Consult and Accommodate is the process to identify negative impacts and address them. Sounds simple, right? In fact, there are three main hurdles to protecting the rights held by Indigenous peoples in Saskatchewan, including treaty rights. First, most Canadians are unclear of the rights held by Indigenous peoples. Second, most Canadians are unclear of what constitutes an impact to those rights, and third, financial compensation to address impacts is not available. Understanding these hurdles will assist those involved in natural resource development projects, or those involved in the management of public resources.

This presentation will help you understand:

- What are the rights, including treaty and Aboriginal rights, existing in Saskatchewan?
- What constitutes an impact to treaty and Aboriginal rights?
- What do you do about impacts to rights once they are identified?

Understanding these three hurdles will assist professionals tasked with implementing a duty to consult and accommodation process.

BIO

As the Principal with Calliou Group, Tracy specializes in providing advice and support to Indigenous nations in their fight to protect their Section 35 rights, including within the Duty to Consult and Accommodate process. To be a trusted adviser in this space requires expertise in the fields of Section 35 rights, environmental assessment methodology, and regulatory review frameworks.

Tracy has more than 25 years of experience, assisting clients all across Canada when clarification of Canada's Treaty Relationship is required. She is a former partner with MNP LLP, former Chief Negotiator for the Government of the Northwest Territories, and former Consultation Manager, Ministry of Environment, for the Government of Alberta.

Interdisciplinary and Experiential Learning Opportunities with Engineering

Adam McInnes, M.D., M.Sc.

ABSTRACT

Engineering is a profession that is building the future, but it can't always go it alone. Collaboration with other professions brings together important insights and skills that are imperative to success. My journey in engaging with engineering began with joining engineering student groups and doing a research project while I was in medical school, expanded to starting companies that engage with and promote engineering, and now includes developing STEAM educational programs, in addition to doing graduate studies in biomedical engineering. My experience has shown me the importance of interdisciplinary and experiential learning and the importance of engineering in our world.

BIO

Adam is a PhD student and Vanier Scholar at the University of Saskatchewan where he is engaged in tissue engineering and regenerative medicine research. He is a strong advocate of interdisciplinary work and has sought out ways to engage with and promote the engineering discipline. This has included being a member of the University of Saskatchewan Space Design Team and SaskInvent while he was in medical school, helping to found the Canadian Space Technology Advocacy Group to promote space exploration and a health-care hackathon called Med.Hack(+) to develop technology for health care, and working to establish post-secondary educational opportunities that combine engineering and health. Further, Adam is currently working to build a STEAM education program for youth. Adam grew up on a small farm in southwestern Saskatchewan. He serves as president of Saskatoon Métis Local 126, supporting Métis post-secondary students, staff, and faculty in Saskatoon.

TRACK 4

Transformation at APEGS / Ethics

Governance Transformation at APEGS

Kristen Darr, P.Geo.
Stormy Holmes, P.Eng., FEC, FGC (Hon.)

ABSTRACT

Join us to hear about the accomplishments of the Governance Change project and the status of implementation still underway. This will include the status of the Constituent Society Relationships Task Group and other plans APEGS has for continuous improvement as a regulator and why.

BIOS

Kristen currently holds the position of Director, Environment & Sustainability with SaskEnergy in Regina, Sask. In this leadership role, Kristen is responsible for the Corporation's Environmental Management System, ensuring industry best practices are implemented into operational activities and regulatory compliance is achieved. Prior to SaskEnergy, Kristen began her career in the consulting industry. Primarily working in environmental and geotechnical areas, Kristen built a foundation of experience travelling throughout Northern Alberta and Saskatchewan conducting field work. This foundation allowed her to take on the responsibility of a variety of major projects as an Environmental Geoscientist and Project Manager later in her career.

Born and raised in Regina, Kristen is a professional geoscientist with a degree in Geography and Environmental Studies from the University of Victoria. Kristen is actively engaged with APEGS, currently serving as president.

Stormy is the Executive Director and Registrar with APEGS and for over 20 years has been an energetic volunteer committed to the engineering and geoscience professions. She has served two terms as a councillor and is a past-president. She served as Executive Sponsor for the Governance Review Project, which looked at APEGS governance structure and practices and from which 33 recommendations were identified. As Chair of the Governance Change Steering Group, Stormy worked with the consultant, steering group, and council to address each of the Governance Review 33 recommendations.

The Future of the Registration and Regulation of Firms

Bert Munro, P.Eng., FCSCE, FCSSE, FEC, FGC (Hon)
Chair, APEGS, Corporate Registrant Task Group

ABSTRACT

One of the recommendations resulting from the governance review that APEGS undertook in 2019 was for APEGS to examine the registration and regulation of firms that engage in the practice of professional engineering or geoscience in Saskatchewan, including sole proprietors, and to provide recommendations on future requirements for Certificate of Authorization (CofA) holders.

In the fall of 2021, council established the Corporate Registrant Task Group (CRTG) to undertake this work, including the review of the ongoing need for, or appropriateness of, Permission to Consult (PtoC) and any required bylaw revisions.

This session will provide an overview of the work of the CRTG to date and present possible recommended changes to the registration and regulation of firms. The CRTG will also be seeking input and feedback from the members in attendance, as stakeholders in this process, to be considered as the CRTG prepares their final recommendations to Council.

BIO

Bert retired as Vice President and General Manager with Associated Engineering and ATAP Infrastructure Management. He is a long-term holder of PtoC with responsibility for the CofA of several firms in multiple jurisdictions, and with over 40 years of experience in municipal infrastructure, buildings, and water resources engineering, project, asset, and business management. Bert continues to provide specialized advisory services and mentorship to engineers, planners, and former clients and to serve on the Boards of the Saskatoon Airport Authority and the Columbarium at St John's Cathedral, and as a Trustee University of Saskatchewan College of Engineering -Engineering Advancement Trust.

Bert is a Past President of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS).

"7 Lenses" of Ethical Leadership

Linda Fisher Thornton

BIO

Linda is an innovative leadership development consultant with a passion for ethical leadership. Her book "7 Lenses" introduces a practical 7-Lens model for learning ethical leadership and seeing the nuances of ethical complexity. A former bank executive and now CEO of Leading in Context LLC, Linda has been in the leadership development field for over 25 years and is redefining leadership with the ethical values built in. She is on Inc. Magazine's Top 100 Leadership Speakers list and teaches applied ethics as adjunct associate professor for the University of Richmond. Her website is LeadinginContext.com.

Linda will be giving two presentations. They are designed to stand alone if you wish to attend only one.

7 Ethical Lenses: Through the Kaleidoscope

Professional challenges continue to increase in complexity, with the pandemic adding new ethical variables.

At the same time, traditional ethical decision-making processes have lacked the breadth and depth to guide ethical choices while meeting the needs of multiple stakeholders.

As a result, there is a critical need for a broader, higher-level process for ethical thinking and decision making.

In this session, Linda Fisher Thornton, Author of "7 Lenses", will provide an in-depth review of her 7 Lenses model with seven perspectives for "seeing" ethical choices that provide a multidimensional view. Together the 7 Lenses provide a kaleidoscopic perspective on ethical responsibility and an eye-opening picture of what it means to "do the right thing." She will share an example to demonstrate how seeing a situation through all 7 Lenses reveals ethical nuances and guides us to make ethical choices that benefit a wide array of stakeholders.

7 Ethical Lenses: Applying Ethical Thinking

Having a robust ethical decision-making model is not enough; it is using it in real time that makes the difference.

In this session, Linda Fisher Thornton, Author of "7 Lenses", will briefly review her 7 Lenses model from the previous session that includes a continuum of seven perspectives for recognizing and thinking through complex ethical issues. Using this multi-lens schema takes the dialogue about responsibility to a higher level and leads to the kind of multistakeholder thinking that builds positive organizations and communities.

She will share a challenging situation that requires ethical thinking and participants will engage in a discussion as they apply all 7 Lenses to the situation together to see its ethical nuances. There will be time to discuss other possible applications of this model including areas where 7 Lenses thinking can be utilized.