## **2018 THEME: CONNECTIONS**

We make our world a stronger place when we connect our knowledge, our curiosity, and our findings. People need to connect with one another; ideas need to be connected. Connections with partners need to be made, and solutions to everyday challenges need to be discovered. It is by making connections that we see the greater picture of what our world can be.

## Research & Innovation WEEK 2018 Lakehead University





## **Program of Events 2018**

## **THUNDER BAY CAMPUS**

#### Friday, March 2

- Research & Innovation Week Opening Ceremonies
- Keynote luncheon Dr. Sheldon Levy, CEO of NEXT Canada, spoke on *The Effects of the Changing Nature of Work on Universities*

#### Saturday, March 3

- Lakehead University Research Interactive Displays, Activities and Prizes at Intercity Shopping Centre
- Ancient Brews Rediscovered & Re-created

#### Sunday, March 4

• Comix in an Authoritarian Age: What Graphic Novels Can Tell us About Democracy

#### Monday, March 5

#### **Social Innovation Forum**

- Panel: Agrobiodiversity to Sustain Community Food Systems
- Keynote Talk and Community Luncheon *Who's in Charge Here? Community-Based Research and Social Innovation* -Dr. Katherine Graham
- Strategies for Fostering Social Innovation in Northwestern Ontario: A Community-University Research Conversation
- *City Limits: Addressing Social Injustice through Community-Based Research* at the Thunder Bay Community Auditorium

#### **Tuesday, March 6**

- Growing diverse worldviews together through spirit, stories, and relational accountability: Identifying and working through the tensions between community and academy when doing Indigenous community-based research
   Dr. Debbie Martin
- Annual Postdoctoral Fellow Poster Competition
- Graduate Student Conference 2018: Poster Session
- Strengthening Partnerships with Northern Aboriginal Institutes
- Celebrating Our Authors
- Northern IGNITE

#### Wednesday, March 7

- Graduate Student Conference 2018: Oral Presentations 3 Minute Thesis
- Undergraduate Student Research Conference
- Intelligent Softcomputing Techniques for System State Prognostics - Distinguished Researcher Talk - Dr. Wilson Wang

- FINTech: Connecting Innovations with the New Frontiers of Commerce
- Faculty of Science and Environmental Studies Speaker Series Presentation: *The Power of Gene Silencing to Fight Lethal Viral Infections and Cancer* Dr. Jyoti Chattopadhyaya
- Thursday, March 8
- International Women's Day Entrepreneur Panel
- Faculty Research Day Poster Presentations
- Gairdner Foundation Presentation: *Chromatin and Stem Cell Fate are Impacted Globally by Short Telomeres* - Dr. Lea Harrington
- 13<sup>th</sup> Annual Research & Innovation Awards Reception

## **ORILLIA CAMPUS**

#### Monday, March 19

- Student Research Presentation
- Research & Innovation Week Opening Ceremonies
- Environmental Sustainability Research Panel
- The Trigger Warning Debate
- *Leonard Cohen: In His Own Words,* a film by Dalibor Misina

#### Tuesday, March 20

- Social Justice Student Poster Presentation
- Resources, Economy and Society Research Forum -Panel: *Poverty and Civic Engagement*
- Resources, Economy and Society Research Forum -Panel: Understanding Food Insecurity: Local / Global Perspectives
- Local Food Initiatives Display
- Resources, Economy and Society Research Forum Panel: *The Global Food Chain*
- Unique Cultures of the World
- Bitcoin: Cryptocurrency Hype or New Asset Class?

#### Wednesday, March 21

- Undergraduate Research Poster Displays
- Social Inequality Student Presentation
- Doing Business in China: Innovation Policies and Corporate Social Responsibility Practices in China
- Are Genetically Modified Foods Safe?

## **Opening Ceremonies** (Thunder Bay)

Opening ceremonies for Research and Innovation Week were celebrated with special guests.

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**Keynote luncheon** – Dr. Sheldon Levy, CEO of NEXT Canada, spoke about the *Effects of the Changing Nature of Work on Universities*.

## **Intercity Shopping Centre**

The public visited our interactive, educational research displays at Intercity Shopping Centre and learned about some of the exciting research taking place at Lakehead University.







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## **Social Innovation Forum**

The Social Innovation Forum opened Lakehead University's 2018 Research and Innovation Week, "Connections." The Forum was designed to showcase innovative approaches to community-university partnerships and the impact such connections can have on social justice and innovation.





Panel: Agrobiodiversity to Sustain Community Food Systems.



Strategies for Fostering Social Innovation in Northwestern Ontario: A Community-University Research Conversation.



Keynote Talk and Community Luncheon - *Who's* in Charge Here? Community-Based Research and Social Innovation - Dr. Katherine Graham.



City Limits: Addressing Social Injustice through Community-Based Research.



## **Guest Speakers**

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Dr. Debbie Martin, Canada Research Chair in Indigenous Peoples' Health and Well-Being in the Faculty of Health Professions, Dalhousie University, led a workshop that highlighted principles of conducting ethical research in partnership with Indigenous Communities.





In the Faculty of Science and Environmental Studies Speaker Series Presentation, Dr. Jyoti Chattopadhyaya, (Chair of Bioorganic Chemistry, and Chair of the Chemical Biology Program at the University of Uppsala, Sweden), spoke on *The Power of Gene Silencing to Fight Lethal Viral Infections and Cancer.* 





Dr. Wilson Wang, Department of Mechanical Engineering, spoke about *Intelligent Softcomputing Techniques for System State Prognostics*, in his Distinguished Researcher Talk.





Dr. Lea Harrington: Department of Medicine, Professeure accrédité (cross-appointment), Department of Biochemistry, Université de Montréal, Institute of Research, Gairdner Foundation guest speaker spoke on the topic of *Chromatin and Stem Cell Fate are Impacted Globally by Short Telomeres.* 



## **Other Special Events**



#### Ancient Brews Rediscovered & Re-created

Patrick McGovern, University of Pennsylvania Museum, took his audience on a fascinating journey through time to the dawn of brewing when our ancestors might well have made a Paleo-brew of wild fruits, honey, cereals, and botanicals.



*Strengthening Partnerships with Northern Aboriginal Institutes:* This event explored the rich history of the Aboriginal/Indigenous Institutes in Ontario through a round table discussion regarding the vision of post-secondary education in Ontario.



*Comix in an Authoritarian Age: What Graphic Novels Can Tell us About Democracy* This Roundtable discussion made connections between the production, selling, and reading of graphic novels (comics), a frequently subversive and sometimes undervalued genre, and the current political climate.



*Celebrating Our Authors* The Lakehead University Community was invited to come and listen as some of our faculty discussed their research and recently published works.

#### International Women's Day Entrepreneur Panel

Through the Economic Development & Innovation (EDI) office and the Partners in Innovation and Entrepreneurship (PIE) program, female faculty and students who have ventured into the world of entrepreneurship shared their greatest accomplishments and discussed challenges along the way to owning their own business.

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#### Northern IGNITE Northern IGNITE encouraged speakers to use a photo-only presentation while describing their passion and process the

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presentation while describing their passion and process throughout their research journey. This event focused on bringing Lakehead research activities to the community and sharing industry partner success stories with attendees.

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## **Faculty Research Day**

Faculty Research Day again offered the University community the opportunity to learn about some of the innovative research being undertaken at Lakehead University by our faculty members and their research teams.

## Undergraduate Student Research Conference

The annual Undergraduate Research Conference is held each March during Research and Innovation Week in order to highlight the vast amount of high-quality research being undertaken by our undergraduate students.







## Graduate / Postdoctoral Fellow Research Conferences

#### **Graduate Student Conference 2018**

Lakehead University Graduate Students from all programs were invited to present their research and compete with their program colleagues in either oral or poster presentation formats. The oral presentations this year again followed the new format known as the "Three-Minute Thesis."



#### **Postdoctoral Fellows Poster Competition**

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Postdoctoral Fellows currently engaged in research at Lakehead University participated in the Annual Research and Innovation Week Poster Competition for Postdoctoral Fellows. A panel of reviewers judged and adjudicated all eligible posters for first place in two categories.



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## **Awards Of Excellence**





## RESEARCH AND INNOVATION WEEK 2018 AWARDS

#### **GRADUATE STUDIES RESEARCH EXCELLENCE AWARDS**

#### **Natural Sciences Category**

Dmitry Tarasov, PhD Forest Sciences (supervisor, Dr. Pedram Fatehi)

Md Nur Hossain, PhD Chemistry & Materials Science (supervisor, Dr. Aicheng Chen)

#### **Social Sciences Category**

Kevin Gardam, Master of Public Health (supervisor, Dr. Helle Moeller)

#### **GRADUATE STUDENT CONFERENCE**

#### **Three-Minute Thesis**

People's Choice Award: Jocelyn Bel, MSc Biology (supervisor, Dr. Kam Leung)
Second Place: Allyson Paris, MSc Environmental Engineering (supervisor, Dr. Baoqiang Liao)
First Place: Robert Jackson, PhD Biotechnology (supervisor, Dr. Ingeborg Zehbe)

#### **Graduate Student Conference Poster Winners**

Winner Engineering Category: Minoo Ataie, MSc Environmental Engineering (supervisor, Dr. Pedram Fatehi) Winner NSERC/Science Category: Xuantong Chen, MSc Forestry (supervisor, Dr. Wensheng Qin) Winner SSHRC Category: Jennifer White, Master of Social Work (supervisors, Dr. Jodie Murphy, Dr. Lori Chambers, Dr. Kirsten Oinonen) Winner CIHR Category: Gabrielle Gaultier, PhD

Biotechnology, (supervisor, Dr. Marina Ulanova)

#### **Postdoctoral Fellows Poster Awards**

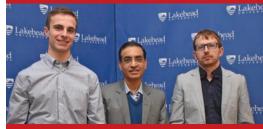
Health Category - Dr. Neha Dewan, Department of Health Sciences (supervisor, Dr. Vicki Kristman) Natural Sciences and Engineering - Dr. Samira Gharehkhani, Department of Chemical Engineering (supervisor, Dr. Pedram Fatehi)

#### **Indigenous Partnership Research Award**

**Dr. Frederico Oliveira**, Department of Anthropology, and **Clifford Bull**, Chief, Lac Seul First Nation for their collaborative project, *A Tridimensional Approach to First Nations' Land Use and Occupancy in Northwestern Ontario: an Applied and Culturally Relevant Pilot Study.* **Dr. Ruth Beatty**, Faculty of Education, Lakehead Orillia, and **Christina Ruddy**, First Nations partner, for their project, *Connecting Anishinaabe and Western Mathematical Ways of Knowing.* 



Dr. Chander Shahi, Dean, Faculty of Graduate Studies with Graduate Student Conference Three-Minute Thesis award winners: People's Choice Award: Jocelyn Bel, MSc Biology, Second Place: Allyson Paris, MSc Environmental Engineering, First Place: Robert Jackson, PhD Biotechnology.



Dr. Chander Shahi, Dean, Faculty of Graduate Studies with Graduate Studies Research Excellence Award winners: Social Sciences Category - Kevin Gardam, Master of Public Health; Natural Sciences Category - Dmitry Tarasov, PhD Forest Sciences.



Dr. Shahi with Graduate student conference poster winners: Winner SSHRC Category: Jennifer White, Master of Social Work; Winner NSERC/Science Category: Xuantong Chen, MSc Forestry; Winner Engineering Category: Minoo Ataie, MSc Environmental Engineering, and Winner CIHR Category: Gabrielle Gaultier, PhD Biotechnology.



Andrew Hacquoil, Research Services, with Postdoctoral fellows Poster award winners: Natural Sciences and Engineering -Dr. Samira Gharehkhani, Department of Chemical Engineering; and Health Category -Dr. Neha Dewan, Department of Health Sciences.



Denise Baxter, Vice-Provost Aboriginal Initiatives, with Indigenous Partnership Research award winners: Dr. Frederico Oliveira, Department of Anthropology, and Wade Bull, Lac Seul FN Councillor accepting of behalf of Chief Clifford Bull and the community (Lac Suel First Nation), for their collaborative project, A *Tridimensional Approach to First Nations' Land Use and Occupancy in Northwestern Ontario: an Applied and Culturally Relevant Pilot Study.* 



Denise Baxter, Vice-Provost Aboriginal Initiatives, with our other Indigenous Partnership Research award winners: Dr. Ruth Beatty, Faculty of Education, Lakehead Orillia, and Christina Ruddy, First Nations partner, for their project, *Connecting Anishinaabe and Western Mathematical Ways of Knowing*.



Student Innovation Award Winner Ayyappa Kumar Sista Kameshwar, PhD student, Department of Biology with Florence MacLean, Director Industry Research Partnerships and Ellen MacKay, Director, Innovation Development, Economic Development and Innovation.



Faculty Innovation Award winner Dr. Pedram Fatehi, Canada Research Chair in Green Chemicals and Processes, Department of Chemical Engineering, with Florence MacLean, Director Industry Research Partnerships and Ellen MacKay, Director, Innovation Development, Economic Development and Innovation.

#### Ministry of Health and Long-Term Care Funding Announcement

Dr. Andrew Dean: Congratulatory remarks on behalf of the Minister of Health and Long-Term Care, Dr. Helena Jaczek, to Holly Prince, Dr. Kathy Kortes-Miller, team members and partners for their First Nations palliative care training program.

#### **INNOVATION AWARDS**

#### **Student Innovation Award Winner**

Ayyappa Kumar Sista Kameshwar, PhD student, Department of Biology

#### **Faculty Innovation Award**

**Dr. Pedram Fatehi**, Canada Research Chair in Green Chemicals and Processes, Department of Chemical Engineering

#### **Building Research Capacity Award**

**Dr. Han Chen**, Faculty of Natural Resources Management

#### Canada Research Chair (CRC) Award

**Dr. Max Haiven** as Lakehead University's Canada Research Chair in Culture, Media and Social Justice

#### SENATE RESEARCH COMMITTEE AWARDS

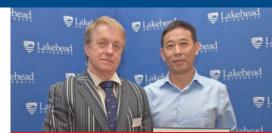
#### **Contributions to Research Award**

**Dr. Sudip Rakshit**, Biorefining Research Institute, Chemical Engineering – NSERC Category

**Dr. Cheryl Lousley**, English – SSHRC Category **Dr. Rebecca Schiff**, Health Sciences – CIHR Category

#### **Distinguished Researcher Award**

**Dr. Pamela Wakewich**, Departments of Sociology and Women's Studies, and former Director of Lakehead's Centre for Rural and Northern Health Research.



Dr. Andrew P. Dean, Vice-President Research and Innovation, with Building Research Capacity award winner, Dr. Han Chen, Faculty of Natural Resources Management.



Anne Klymenko, Director, Research Services and Dr. Andrew P. Dean, Vice-President (Research and Innovation) with Dr. Anna Guttman, Department of English, accepting Canada Research Chair (CRC) award on behalf of Dr. Max Haiven as Lakehead University's Canada Research Chair in Culture, Media and Social Justice.



Dr. Moira McPherson, Interim President and Vice-Chancellor, and Dr. Maria Grazia Viola, Chair Senate Research Committee with Contribution to Research Award winner, Dr. Sudip Rakshit, Biorefining Research Institute, Chemical Engineering – NSERC Category



Dr. Moira McPherson, Interim President and Vice-Chancellor, and Dr. Maria Grazia Viola, Chair Senate Research Committee, with Distinguished Researcher Award winner Dr. Pamela Wakewich, Departments of Sociology and Women's Studies, and former Director of Lakehead's Centre for Rural and Northern Health Research.

## Orillia



#### **Opening Ceremonies**

Opening Ceremonies for Research and Innovation Week were celebrated with special guests and municipal partners. Dr. Andrew P. Dean presented the Indigenous Partnership Research Award to Dr. Ruth Beatty and Christina Ruddy.









#### Leonard Cohen: In His Own Words documentary screening

Filmmaker and Lakehead University professor Dr. Dalibor Mišina kicked off Research and Innovation Week in Orillia with a special screening of his documentary, *Leonard Cohen: In His Own Words*. The film offered an unmediated insight into Cohen's thoughts on growing up, writing, love, monastic life, the human condition, and "the third act."



#### **Environmental Sustainability Panel**

Hosted by Dr. Sree Kurissery, Chair of the Department of Sustainability Sciences, the Environmental Sustainability panel featured research being undertaken by faculty members, graduate students, research assistants, and undergraduate students.

#### **Social Justice Student Poster Presentation**

Lakehead University undergraduate students from the sociology program were invited to present their research to their peers and the public.



#### **Resources, Economy and Society Research Forum**

Lakehead Orillia faculty and local community members explored a range of important and contemporary social issues, including poverty, food insecurity, social justice and civic engagement during this day-long forum.



Project objectives & Methodology

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#### Are genetically modified foods safe?

The week closed with a screening of the documentary, *Food Evolution*, followed by a facilitated question and answer session with Dr. David Law, Department of Biology and former research biochemist for Monsanto Co., Dr. Victoria Te Brugge, Department of Sustainability Sciences, and Ian Affleck, Vice-President - Plant Biotechnology at CropLife Canada.



## Special Thanks to Our Media Partners!

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## **Sponsors**









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