

SHORT COURSE

ROUNDUP VANCOUVER, BC

Controls on Precambrian Gold Deposits with a focus on the Superior Craton

Precambrian greenstone belts are an important metal source worldwide. As the rate of greenfields discoveries decrease the challenge is to focus scarce exploration dollars to the most prospective areas to discover new deposits. The Mineral Exploration Research Centre (MERC) at Laurentian University conducts field and laboratory research on mineral deposits and their ore systems to develop new exploration methodologies.

This short course will focus on deposit- and regional-scale controls for orogenic Au and volcanogenic Cu-Zn-Au deposits. The presentations will be based on integration of district to deposit scale studies including geochemistry, U-Pb geochronology, radiogenic and stable isotopic data to provide a better understanding of the complex interplay of stratigraphic, structural and ore-system controls. It will include results from the ongoing **Metal Earth** research in the Superior Craton focused on the Abitibi-Wawa and Wabigoon Terranes and examine controls on metal endowment at crust to mantle scales as an aid to improve greenfield area selection and exploration.

The course will include presentations by geoscientists with over 100 years of collective expertise in Precambrian geology, volcanology, sedimentology, stratigraphy, structural geology, geochemistry, metallogeny and exploration targeting and will provide tools to focus exploration dollars on better quality target areas.



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Mineral Exploration Research Centre
at the HARQUAIL School of Earth Sciences

JANUARY 19, 2020

Agenda:

8:30-9:00: Dr. Ross Sherlock

Introduction to gold deposit styles of the Superior Craton and new research initiatives

9:00-10:30: Dr. John Ayer

Comparison of the Tectonic Setting and Timing of Large Gold Camps within the Superior Craton

10:45-12:15: Dr. Bruno Lafrance

Structural Controls on Orogenic Gold deposits: Exploration Implications

12:15-1:15: Lunch

1:15-2:45: Dr. Harold Gibson

Characterizing Gold-Rich VMS Deposits; Implications for Exploration at the Deposit to Craton scales

3:00-4:00: Dr. Ross Sherlock

Geologic framework of the Larder Lake area and controls on gold deposits with examples from the Kerr Addison deposit

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Visit merc.laurentian.ca to learn more about MERC and Metal Earth. Contact us at merc@laurentian.ca.