

## Mini Symposium Speakers, Bio, Titles and Abstracts

Jacques Simoneau, Exploration Manager, Integra Gold Corp.



### Abstract

Pending

### Bio

Mr. Simoneau is a senior level exploration geologist with extensive experience working with major gold companies identifying and evaluating precious metals opportunities. Mr. Simoneau has been actively involved in and led the design, implementation and management of exploration projects and feasibility studies in various geological environments in Canada and internationally. As Exploration Manager for Goldcorp, he led the exploration team at the Eleonore Project through a positive feasibility study and construction decision. Under his leadership the Eleonore Project's resource grew to over 7 million ounces of gold and transitioned from exploration and development to operations. Mr. Simoneau also held the position of Principal Geologist for Barrick Gold, and was responsible for the identification and evaluation of exploration projects for potential acquisitions. Prior to his work with Goldcorp and Barrick, Jacques spent 18 years with Placer Dome where he held various senior positions, including Project Manager for early to advanced stage exploration projects in North America, West Africa, and Southern Africa. Mr. Simoneau is a P.Ge., graduating from the Université de Montréal and a member in good standing of the Ordre des Géologues du Québec.



**Title:**

**Synorogenic gold mineralization in granite-greenstone terranes: The deep connection between extension, major faults, synorogenic clastic basins, magmatism, thrust inversion, and long-term preservation**

**Abstract**

In this talk I will explain what is special about the major the faults (“the breaks”) that characterize granite-greenstone terranes such as the Abitibi in Ontario and Quebec, i.e. the empirical association of major steep faults, preserved panels of synorogenic clastic rocks and alkaline volcanics, synorogenic magmatism, and world-class gold endowment. All of this can be explained by a model in which the principal faults were initiated as synorogenic extensional faults, playing a critical role in basin formation, before being inverted as thick-skinned thrusts that buried (and preserved!) upper crustal depositional environments with gold deposits in their structural footwall. Extension played a critical role in the flare-up of synorogenic magmatism, and it is the extent of this magmatism that may be the ultimate predictor of overall gold endowment. This new model for large Archean gold deposits brings the understanding of these deposits closer to how we think many modern gold deposits form.

**Bio**

Wouter Bleeker obtained degrees in geology and ore petrology from the Free University of Amsterdam, working on projects in Scandinavia. In collaboration with industry, his M.Sc. degree involved unravelling the structure, stratigraphy and mineralogy of silver-bearing phases of an ore-bearing horizon in the Bergslagen District, central Sweden. His work contributed to the discovery and economic mineral extraction of the Lovisa massive sulphide deposit. He then taught at the University of Botswana before coming to Canada. He obtained his Ph.D. from the University of New Brunswick with a dissertation on the structure and stratigraphy of the Thompson Nickel Belt and its nickel sulphide deposits. He showed that the various deposits of the Thompson area are hosted by a refolded nappe structure. Unfolding of this structure demonstrated that the ore deposits occur where ultramafic sills intruded along sulphide-rich black shales and iron formations. He has worked on the geology of the Timmins area for more than two decades, first as a researcher with Falconbridge Ltd. and later with the Geological Survey of Canada. With the GSC, and a through a number of global collaborations, he has worked on numerous Precambrian terrains and cratons around the world, notably the Slave craton.

**Christian Tessier, Senior Mine Geologist, Canadian Malartic.**



**Title**

**Canadian Malartic Mine, a challenge to mine a world class deposit in town.**

**Abstract**

In 2009, Canadian Malartic became the first mine in Quebec to obtain an operational permit via a ministerial decree. On May 19<sup>th</sup> 2011, after a 1 billion \$ investment, CM mine became the biggest gold mine in Canada. The mine is located in an old mining camp with over 50 years of underground mining history. In 2000, the camp was considered as a low residual potential for mining again. The Canadian Malartic discovery has led to new ways of evaluating and treating geological data. It also contributed in a new approach to mining development. In 2014, gold production reached 535,000 Oz and in 2015, the mine is now aiming for 560,000 Oz.

The fact that this mine is located directly on the edge of the town of Malartic brings a lot of technical constraints making mining activities even more complex. Taking into account factors such as the prevailing winds, vibration and overpressures caused by blasting, noise emission levels and dust management are part of the daily challenges of the technical services team. Social acceptance and the well-being of the citizens of Malartic remains the main focus.

**Bio, Christian Tessier**

2009 graduate from the Université du Québec à Montréal (UQAM) with a bachelor's degree in mineral resources geology. Over the course of his studies, he worked on various gold exploration projects located in Quebec (Abitibi region), Ontario (Lake Superior/Thunder Bay area) and Manitoba (Flin Flon/Snow Lake area). He has accumulated over 5 years of experience in the gold mining sector as a mine/production geologist (underground and open-pit), project geologist and senior geologist. As a mine and project geologist, he worked for Island Gold Mine (Richmont Mines Ltd.), Dubreuilville, Ontario (2010-2011) and Canadian Malartic Mine (Agnico-Eagle – Yamana Partnership), Malartic, Quebec (2011-2014). For the last 15 months, he has been Senior Geologist for the Canadian Malartic open-pit gold mine, one of Canada's largest active gold mines.

**Doug Cater, Vice President Exploration, St Andrew Goldfields Ltd.**



**Title**

**An Exploration Update for St Andrew Goldfields.**

**Abstract**

SAS (operating as “SAS Goldmines”), is a gold mining and exploration company with an extensive land package in the Timmins mining district, north-eastern Ontario, which lies within the Abitibi greenstone belt, the most important host of historical gold production in Canada.

SAS owns and operates the Holt and Holloway Mines, is advancing the Taylor Project towards commercial production and is conducting an aggressive exploration program across 120km of land straddling the Porcupine-Destor Fault Zone.

In 2015, the company continues to actively explore high quality exploration targets situated both adjacent to the operations and also more generative targets located throughout the district. This talk will provide an exploration update on company programs.

**Bio**

Doug is a Professional Geologist with more than 30 years of experience in the Exploration & Mining industry in Canada and Internationally.

Doug is Vice President Exploration with St Andrew Goldfields – joining the company in June 2012. St Andrew Goldfields is a Canadian gold producer and mineral exploration and development company that is listed for trading on the Toronto Stock Exchange. The Company’s mining assets include the Holt and Holloway Mines and Taylor Project which are located near Matheson Ontario. The company holds approximately 1,700 mineral claims in Northeastern Ontario which extend over a 120 kilometres distance and are proximal to the prolific Porcupine Destor Fault Zone.

Prior to joining St Andrew Goldfields, Doug was the Project Manager for the Back River, Nunavut Gold property owned by Sabina Gold & Silver and Dundee Precious Metals. Throughout his career he has worked on large scale gold projects across Canada, in the United States, Dominican Republic and in Africa. Doug is also a Director with Sierra Metals a Mining and Exploration company with operations in Mexico and Peru, and is a Council member for SW, ON with APGO.



**DETOUR GOLD™**



Mineral Exploration Research Centre  
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## **Title**

**The Detour Lake Region of the Abitibi: Newly Discovered Mineralization Highlights the Potential Metal Endowment of the Area**

**Co-authors: J.A. Ayer<sup>2</sup>, D.J. Kontak<sup>2</sup>, J.F. Metall<sup>1</sup>  
Kelly J. Malcolm<sup>1,2</sup>**

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## **Abstract**

The Detour Lake region is located in the NW part of the Abitibi Greenstone Belt, Canada, and is host to Canada's second largest producing Au mine (Detour Lake mine, 459Mt of 1.01g/t Au). The Detour Lake deposit is classified as an orogenic type system. It is hosted within arc-related Archean volcanics of the 2.72Ga Deloro Assemblage (tholeiitic basalts to peridotitic komatiites) that have undergone lower greenschist through to lower amphibolite metamorphism. Mineralization occurs as a series of westerly-trending lensoidal bodies which are sub-parallel to regional deformation. Ore material is relatively low-grade (~0.5-5g/t Au) and associated with intense biotite alteration, as well as pyrite, chalcopyrite, and bismuth-telluride minerals. Newly discovered high-grade (~3-8g/t Au) mineralization (known as the 58N and 75 zones) situated roughly 7km south of the Detour Lake mine is hosted within a coalesced swarm of high-level tonalitic dikes that intrude the Deloro metavolcanics. Within these felsic dikes, Au mineralization is centered on zones of biotite and phyllic alteration hosting stockwork-type arrays of quartz ± carbonate ± tourmaline veins. Cross-cutting relationships of mineralization and chemically-related yet barren dike rocks indicate both a spatial and temporal relationship between the Au event and magmatism. The characteristics of the Au mineralization and setting suggest affinities to the syenite-associated style of mineralization (e.g., Kirkland Lake) versus the orogenic style seen in the Detour Lake deposit, thus the new discovery equates to an oxidized intrusion-type gold deposit. This talk will discuss the two different deposits in a comparative sense to convey their genetic and temporal relationships, which may have important metallogenic and exploration implications for the northern portion of the Abitibi.

## **Bios**

Kelly Malcolm is an exploration geologist who has worked at Detour Gold Corporation intermittently since 2011 on several projects. He is currently working on a 30,000 m drill program to test the underground potential of Detour's 58N zone high-grade gold discovery. He is also researching the new discovery at the Mineral Exploration Research Centre of Laurentian University. He holds a BSc in Geology and a BA in Economics, and is an MSc candidate at Laurentian University.

Jean Francois Métaïl is a geologist with over 20 years of direct involvement in economic geology. Prior to joining Detour Gold in July 2012, Mr. Métaïl spent 16 years with Barrick Gold Corporation where he progressed to Director, Geology and Reserves Strategy with responsibility for geology functions as they relate to production and overall reserves strategy. From 2003 to 2009, Mr. Métaïl served as Senior Ore Reserve Specialist focusing on compliance, 3D modeling, and estimation and reporting of resources, and from 1999 to 2003 Mr. Métaïl worked on various international projects as Ore Reserve & Senior Geologist. Prior to joining Barrick in 1996, Mr. Métaïl started his career at Placer Dome Inc. In 1991, he received a Bachelor of Science in geology from Université de Montréal.

**Asmaa Anwar, B. Sc., Senior Geologist –Project Manager, Alamos Gold Inc.**

**Logo**



**Title**

**Geology and Mineralization at Young-Davidson**

**Abstract**

Pending

**Bio**

Asmaa Anwar joined Alamos via the merger with AuRico Gold as Senior Geologist. Ms. Anwar has over 14 years of experience in geoscience and the mining industry, primarily focused on diamond and gold exploration. Prior to joining Alamos, Asmaa was Project Geologist with AuRico Gold and Northgate Minerals where she oversaw the Kemess Underground block cave drilling program and Young-Davidson Exploration and Resource drilling. She has also worked for Shore Gold as Senior Project Geologist where she led a team of geologists overseeing underground development for bulk sampling. Asmaa began her career at the GSC where she worked for four years. Asmaa holds a degree in Geology from the University of Western Ontario.