PREFACE

The Geological Survey, Government of Newfoundland and Labrador, is tasked with collecting, interpreting and disseminating geoscience data, thus enhancing our Province's geoscience knowledge-base. The data generated are primarily used by the mineral-resource industry to inform and enhance their exploration and investment efforts. A strong mineral-resource sector provides both direct and indirect employment opportunities and wealth throughout Newfoundland and Labrador. The Geological Survey is proud of the role it plays in fostering and promoting the industry over the past decades, a role it will continue to play well into the future.

Geological Survey data are also increasingly in demand from other Provincial departments to inform policy (*e.g.*, hazard mapping, coastal vulnerability *etc.*), to assist in health and safety initiatives (as in identifying groundwater contaminants derived from bedrock), developing new economic initiatives (such as enhancing the geotourism) and many more. Current Research is a major delivery product for new data, in addition to Open File reports and maps, and including our online Geoscience Atlas, all of which can be freely accessed *via* the Geological Survey website (http://www.nr.gov.nl.ca/nr/mines/geoscience/index.html).

This volume of Current Research reflects the wide range of activities undertaken, both in the field and in office-based projects. The list of authors reflects the many collaborative efforts undertaken by Geological Survey geologists, with 11 non-Survey co-authors, and indicates our strong ties with Memorial University and the Geological Survey of Canada, as well as collaborations with the Geoscience and Mines branch, Nova Scotia, the University of Copenhagen, and Ulster University.

For the Island, there are reports on the geochronology of the Bull Arm Formation (Andrea Mills), northern Mount Peyton intrusive suite (Hamish Sandeman), carbonate-hosted zinc mineralization on the Great Northern Peninsula (James Conliffe), lithogeochemistry of mafic rocks on the Bonavista Peninsula (Andrea Mills), bedrock geology of the St. Alban's map area (Anne Westhues), till geochemistry and Quaternary mapping in south-central Newfoundland (Heather Campbell), and Quaternary studies off the south coast of Newfoundland (Jennifer Organ). In Labrador, there are reports on high-grade iron-ore deposits in western Labrador (James Conliffe), the Michelin uranium deposit (Greg Sparkes), bedrock geology of the northern Ashuanipi Complex (Tim van Nostrand), U–Pb geochronology of the western part of the Nain Plutonic Suite (Bruce Ryan), and Quaternary mapping and till geochemistry in western Labrador (Heather Campbell).

Office-based projects contribute significantly to our Provincial geoscience knowledge base. In this volume, the Mineral Occurrence Data System (Greg Stapleton) is described. The MODS provides descriptions of more than 6900 mineral occurrences in the Province, and is a valuable resource to the mineral-resource industry. Data from this and other projects are delivered through the Geological Survey's GeoScience Online webmapping application (http://gis.geosurv.gov.nl.ca/). This interactive resource atlas makes geoscience resources available online and freely accessible anywhere in the world to an ever-expanding clientele. I encourage you to explore this website – it contains a wealth of information!

This year the Survey introduces 2 new publication formats. An Occasional Report series will include substantive mid-project reports, such as overviews or compilation reports. The first of these will be authored by Ian Knight and colleagues detailing the lithostratigraphy, facies and depositional environments of the Forteau Formation, southern Labrador. An Executive Summary publication containing brief overviews of current projects will complement Current Research. These summaries are designed for policy makers and the public.

The coming years will likely be challenging in light of the current fiscal situation and more impending retirements of our long-term staff. However, the Geological Survey remains committed to providing the highest level of service. Planning for the 2017 field season is underway with projects planned in western Labrador, and throughout Newfoundland – mineral-deposit studies in the Labrador Trough and Baie Verte Peninsula, surficial mapping and till geochemistry in north-central Newfoundland, ongoing coastal monitoring around the Province, and regional bedrock-mapping projects on the Island and in Labrador.

Martin Batterson
Director

Readers who would like to write a rebuttal to, or discussion of, any report contained in this volume are invited to submit it to the editor by November 1, 2017, to be considered for inclusion in Report 2018-1.