A Frozen-Ground Cartoon

Explaining international permafrost research using comic strips

Frédéric Bouchard 1,2,3, Bethany Deshpande 4, Michael Fritz 5, Julie Malenfant-Lepage 2,3,8, Alexandre Nieuwendam 7, Michel Paquette 4, Ashley Rudy 1, Matthias Siewert 1, Yvina Sjöberg 1, Audrey Veillette 1, and Jon Harbor 10

1 Centre Éos Terre Environnement, Institut national de la recherche scientifique (INRS), Québec, QC, Canada
2 Department of Geographic Sciences, Université du Mans, Université du Maine, Le Mans, France
3 Centre d'Études Nordiques (CÉN – Centre for Northern Studies), Université Laval, Québec, QC, Canada
4 Department of Geography, Linnaeus University, Växjö, Sweden
5 Department of Periglacial Research, Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI), Potsdam, Germany
6 Department of Civil and Marine Engineering, Université Laval, Quebec, QC, Canada
7 Centre de Glaciologie, 20 Rue de la Gare, 20200 Bordeaux, France
8 Department of Geophysics and Geodynamics, Queen's University, Kingston, ON, Canada
9 Department of Physical Geography, Stockholm University, Stockholm, Sweden
10 Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, West Lafayette, IN, USA

Summary

Apart from people in cold region communities and a small - although steadily increasing - scientific community, the general public knows very little about permafrost properties, its dynamic in response to climate change, and the research going on in the field. We are addressing this by making permafrost science accessible to children, youth, their parents, and teachers. We are producing an 100% outreach-related project that aims at ‘Frosting’ permafrost research to the ends of the Earth (http://fipa.antsisportal.org), but with a casual approach via a series of comic strips. Characters are excellent ways to communicate messages in today’s media landscape: they are graphic, funny and direct, and can be rapidly sized via social media to reach many people. Our outreach project targets the general public, focusing on young students who have to choose careers at the high school or college levels. By introducing them to permafrost research activities, particularly fieldwork, our ‘Frosting-Ground Cartoon’ will enhance the dissemination of permafrost knowledge and broaden the international community of permafrost ‘lovers’. This new project is coordinated by a core group of permafrost early career researchers from Canada, Germany, Sweden and Portugal (in collaboration with an external senior advisor), and is endorsed by the International Permafrost Association (IPY) as a targeted ‘Action Group’. First, we received nearly 60 applications from 16 countries (Step 1). Ten artists were selected to produce a one-page pitch (Step 2). We finally chose two artists to work on the comic strips (Step 3).

Step 1: Application call
Jan 2018

49 received
10 selected

Step 2: One-page ‘pitch’
Feb-Mar 2018

10 received
2 selected

Step 3: Collaboration with the artists
Apr-Jun 2018

Noémi Ross

Canada

Heta Nääs

Finland

Guten Tag! Bonjour!
Hi!

My name is Noémie Ross.
I am a graphic artist focused on creating comics and graphic novels. My work explores themes of identity, context, history, and the ways in which these elements shape our understanding of the world. I am passionate about creating stories that challenge the status quo and encourage critical thinking.

Permafrost distribution

Acknowledgements

This project is endorsed by the International Permafrost Association (IPA) as a targeted ‘Action Group’. The one-page pitch step was funded by the Permafrost Young Researchers Network (PYRN) and the Canadian research program ‘Arctic Development and Adaptation to Permafrost in Transition’ (ADAPT). No. 16. Näsä was supported by Climate and Cryosphere (CIC) to attend IDPP.

Walking on a Giant!

My name is Heta Näsä.
I am a graphic artist from Finland.
I love to create comics and graphic novels that explore themes of identity, politics, and the human condition. My work often deals with issues such as power, inequality, and social justice, and I use it as a tool for questioning and challenging the status quo.

I live in Helsinki, Finland.
To contact me: heta.nasa@gmail.com