A short introduction to the



Caroline Aubry-Wake,
Canadian Young Hydrologic Society
Executive Committee

Canmore, May 2018

About



- A bottom-up initiative to stimulate the interaction and active participation of *young hydrologists* within the hydrological scientific community.
- What is a "young hydrologist"?

benefit from and/or contribute to the YHS, that focuses on the early career (MSc, PhD,

Anybody that thinks that he or she can



Post-Doc) hydrological scientific community, but is not strictly limited to.

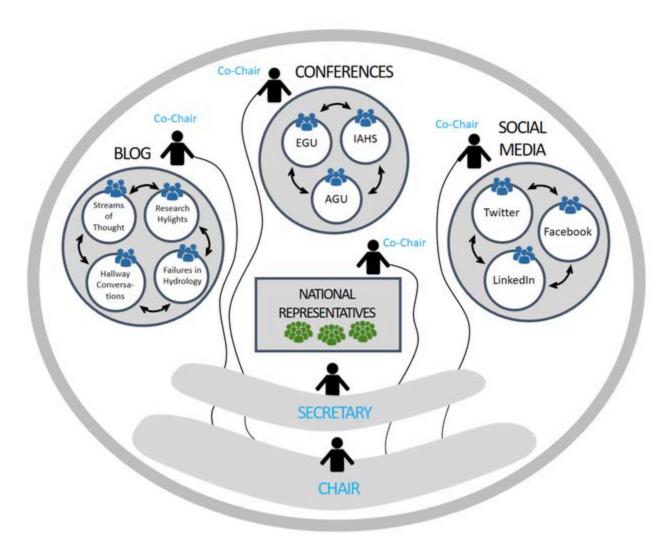
Objectives



- Facilitate connections among hydrologists early in their careers
- Organize events to enhance the professional development of early-career hydrologists
- Provide a central information platform for early-career hydrologists
- Create awareness of current and future research topics within hydrology
- Make the scientific community more accessible to early-career hydrologists
- Stimulate Early Career leadership at relevant organizations

Structure





Team



Board (2016-2017)

Chair: Nilay Dogulu (Middle East Technical University, Ankara)

Co-chair: Wouter Berghuijs (ETH Zürich) Secretary: Harsh Beria (University of Lausanne)

Member: Andrea Popp (Eawag)

Board (2015-2016)

Chair: Wouter Berghuijs (University of Bristol)

Co-chair: Tim van Emmerik (Delft University of Technology) Secretary: Nilay Dogulu (Middle East Technical University, Ankara)

Website

Maarten Smoorenburg (Deltares)

Shaun Harrigan (Centre for Ecology & Hydrology)

Marius Floriancic (ETH Zürich)

Streams of Thought, Hallway Conversations, Research "Hylights"

Nilay Dogulu (Middle East Technical University, Ankara)

Kevin Roche (Northwestern University)

Wouter Berghuijs (ETH Zürich)

Tim van Emmerik (Delft University of Technology)

Adam Wlostowski (University of Colorado)

Maarten Smoorenburg (Deltares)

EGU session organizers

Hannes Müller (Leibniz Universität Hannover)

Ina Pohle (Brandenburgische Technische Universität Cottbus)

Maarten Smoorenburg (Deltares)

Shaun Harrigan (Centre for Ecology & Hydrology)

Marius Floriancic (ETH Zürich)

Wouter Berghuijs (University of Bristol)

Tim van Emmerik (Delft University of Technology)

Nilay Dogulu (Middle East Technical University, Ankara)

Claudia Teutschbein (Uppsala University)

Lieke Melsen (Wageningen University)

Wouter Knoben (University of Bristol)

David Wright (University of Adalaide)

AGU H3S committee

Evan Kipnis (Chair) (University of Utah)

Niels Claes (Co-Chair) (University of Wyoming)

Sheila Saia (Cornell University)

Natasha Krell (Princeton University)

Kevin Roche (Northwestern University)

Adam Wlostowski (University of Colorado at Boulder)

Harsh Beria (Indian Institute of Technology at Kharagpur)

Vanessa Garayburu Caruso (University of New Mexico)

Allison Goodwell (University of Illinois at Urbana-Champaign)

Chelsea Morris (Cornell University)

Emily Voytek (Colorado School of Mines)

Country representatives

Austria - Daniel Klotz

Bangladesh - Shahadat Hossain

Ethiopia - Fasil Teshome Worku

Germany - Hannes Müller, Ina Pohle

Greece - Nikolaos Vavlas

Ireland - Shaun Harrigan

Jordan - Mohammad Algadi

Kenia - Ruth Katui Nguma

Nigeria - Isaac Adedeji, Bethel Ukazu Ugochukwu

Norway - Jonathan Rizzi

Pakistan - Shabeh ul Hasson

Russia - Georgy Ayzel

Senegal - Ansoumana Bodian

Serbia - Nikola Zlatanovic

South Africa - Coli Ndzabandzaba

Sudan - Modathir Zaroug

Sweden - Claudia Teutschbein

Switzerland - Andrea Popp, Marius Floriancic

Turkey - Nilay Dogulu

Canadian Young Hydrologic Society

Nadine Shatilla (McMasterr University) Kelly Biagi (McMaster University)

Lauren Somers (McGill University)

Caroline Aubry-Wake (U. Saskatchewan)

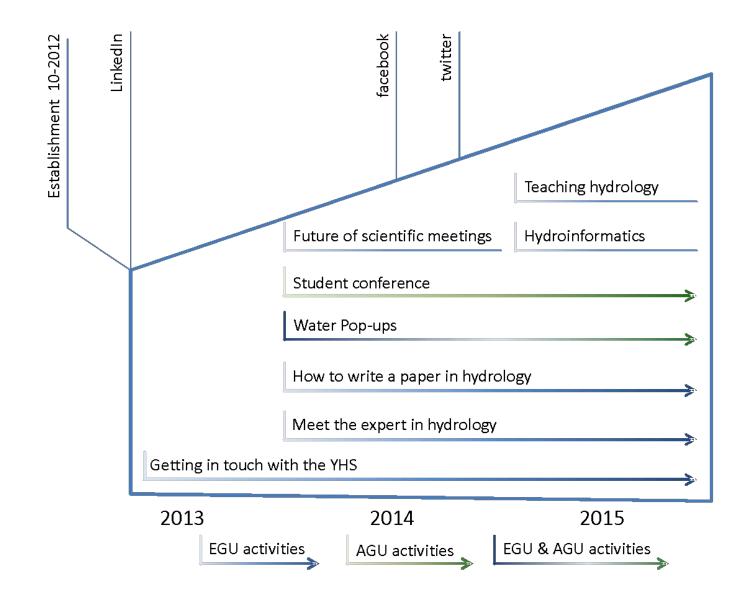
Pierrick Lamontagne-Gagné (McGill University)

Sophie Wilkinson (Waterloo)

Cody Ross

First years...





Canadian YHS



Past activities since Canadian YHS inception in 2015

Primary affiliation with CGU-HS

- 2016: "Challenges and opportunities in Canadian hydrology" workshop (50 ECRs)
- 2017: "Progression of a scientific career in academia" seminar (60 ECRs, ~13% of CGU attendees)

Current activities

- 2018: "Careers in hydrology: Options and insights" workshop and panel discussion (expected 60+ ECRs)
- 2018: "Tips and Tricks for publishing in hydrology" workshop
 GWF Annual Science Meeting (in collaboration with GWF YP group)
- 2018: Inaugural GWF Young Professionals workshop and social events

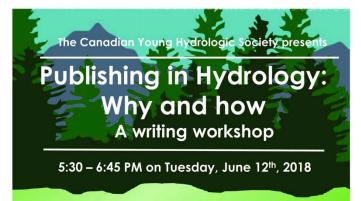


How to write a paper





Key skill, but rarely taught in university programs.



sed by the academic publishing system? tain where to publish a paper? Struggling to find time to write?

earn and ask experts about writing and publishing in hydrology!

Dr. Laura Lautz, Syracuse University Mike Waddington, McMaster University

om TBD at the Scotiabank Convention Centre in Niagara Falls

hs@amail.com vhs

Young Society



course at #egu17 by @rosswoodskiwi

@YoungHydrology vounghs com



About Blog Resources How to write a paper

How to write a scientific paper in Hydrology?

Young

1:16 PM - 24 Apr 2017

8 Retweets 14 Likes



In the last few years, the Hydrological Sciences (HS) Division of the EGU has organised a very successful short course during EGU, titled "How to write (and publish) a scientific paper in hydrology". Each presentation has great tips for hydrology students from layout of your paper, what should go in each section and how the publishing system works from a

Meet the Expert in Hydrology

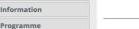




European Geosciences Union General Assembly 2017

Vienna | Austria | 23-28 April 2017

EGU.eu



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Stimulate thinking about the "bigger picture"

SC19/HS12.1 ECS

Meet the Expert in Hydrology: Is research at different spatial scales connected? (co-organized)

Conveners: Wouter Knoben Q, Wouter Bergh Fri, 28 Apr, 08:30-10:00 / Room -2.91

Add this session to your Personal program

Hydrological research takes place across extr detailed hydrological processes of hillslopes a descriptions to simulate streamflow, while gli-

In theory, research at these different spatial : understanding and models, which leads to in across different spatial scales may be more d heterogeneities across diverse landscapes, ar between scales.

This session brings together experts who wo role of experimental findings at the field/catc model/theory development), and Prof. Reed experiences on bridging the connections bet between them and their views on future deve



Wouter Berghuijs @wberghuijs

Great "meet the expert" session on synergy across scales #EGU17 #hydrology @YoungHydrology @reedh2o

Copernicus Office



10:01 AM - 28 Apr 2017

Meet the Expert in Hydrology: Is research at different spatial scales connected?

Posted on May 3, 2017 by Young Hydrologic Society

A -Streams of Thought-contribution by Wouter Knoben, Shaun Harrigan, David Wright, Wouter Berghuijs

Scaling (i.e. the transfer of knowledge across scales) and scale issues (i.e. the associated problems) are at the heart of most hydrologic puzzles. In the most recent "Meet the Expert in Hydrology" session, organized at the EGU General Assembly 2017 in Vienna, YHS invited three speakers to identify to what degree their research is connected, influenced by, and influencing research at other spatial scales. By evaluating the current state of research and discussing future directions we tried to shed some new light on the question "Is hydrological research at different spatial scales connected?". This is what we learned...

Hydrological research takes place across extremely different spatial scales (from porescale to global). Experimentalists have an understanding of detailed hydrological processes of hillslopes and headwater catchments, model developers generate larger-scale

Scientific sessions with a twist



HS1.11

Learning from hypotheses and failures in hydrology PICO session

Conveners: Hannes Müller Q, Inge Wiekenkamp Q

Co-Conveners: Anne Fangmann Q, Georg Houben Q, Ina Pohle Q, Michael Stockinger Q, Lena M. Tallaksen Q, Tim van Emmerik Q, Seth Westra Q

PICOs / Mon, 24 Apr. 15:30-17:00 / PICO spot A

HS1.10

Add this session How my water research made the news PICO session

Can we be sure to t extremely useful fo methods) can also

Testing hypothesis Convener: Stefanie Lutz Q

approaches strongl Co-Conveners: Andrea Popp Q, Tim van Emmerik Q, Manuel Felipe Rios Gaona Q

pose the question v PICOs / Wed, 26 Apr, 13:31 HS1.6

Add this session to your Pers

The aim of this sess the chance to share research. The session driven approaches

and even may bring

Geoscientists are often asked ab whose research often touches up examples of hydrological researc

The invited speakers will (1) high

We are happy to an this session.

communicating scientific results In cooperation with (4) illustrate how to communicate

Public information:

This session is scheduled as PICC standard PICO sessions. The oral run wild: slides, posters, videos, s

Water Sciences Pop-Ups PICO Session

Convener: Tim van Emmerik Q This session is co-organized by th Co-Convener: Shaun Harrigan Q

PICO / Mon, 13 Apr, 10:30-11:08 / PICC

Add this session to your Personal program

research topics in hydrology and In cooperation with the Young Hydrologic Soc

This session provides (early career) scientists PICO poster discussion, on their future vision scientists and the general public, Presentation issues like the future of publishing, education notable examples from previous editions of the

We specifically encourage students and early career stage, with the goal of having a divers



Great turnout at the hypothesis PICO #EGU17



nter ress om/

bstr

Short courses and workshops



Quick recap on EGU 2017 Short course on Hydrological Forecasting

geostatistical method

András Bárdossy (Ui

University of Crete):

You can find the lect

An Introduction to C

Geostatistics in R (b

post later this month

Posted on July 14, 2017 by shaunharrigan

For the first time at this year's EGU 2017, HEPEX and the YHS jointly organised a Short

course on Hydro forecasting and

· Estimating r

· Reducing pr · Forecast ver

Risk-based c



Continue readir

Posted in EGU, New

Hydroinformatics for hydrology: geostatistical modelling

Posted on July 3, 2017 by Young Hydrologic Society

This year's focus for "Hydroinformatics for hydrology" short course at EGU GA 2017

was geostatistics. Being introduced to the fundamentals of geostatistics, the participants

(> 60, the room was

Opinion papers in hydrology: Why and how? (short course) at **EGU 2017**

Posted on May 3, 2017 by tvanemmerik



Using R in Hydrology (short course) at EGU 2017

Posted on May 2, 2017 by shaunharrigan

"Using R in hydrology" short course at EGU 2017 was a great success, attracting over 100 participants (in a room with 80 seats, see photo!). We covered a wide range of hydrologically focused applications of the R programming language: reproducible documents with rmarkdown, Using R as a GIS, Hydrological modelling with airGR, as well as Visualisation, Extreme value statistics and Trend analysis of discharge time-series. The slides with all the code and example datasets are available here.



Graduate and undergraduate students, post-docs and early career hydrologists: Start the 2018 CGU Annual Meeting off by attending the CYHS workshop and social night!

The Canadian Young Hydrologic Society Presents:

Options and Insights

1:30-4 pm on Sunday, June 10th, 2018

Careers in Hydrology:

featuring guest speakers:

racuse University - Launching new research projects ivironment Canada - A perspective from a government

y of Northern British Columbia - Working abroad as a cientist, working with NGOs

MBA, P.Geo, Amec Foster Wheeler - Working as a hydrologist in industry

With social event to follow!

Cost: \$10. Venue TBA online when registering for the CGU Conference in **Niagara Falls**

ail.com







by Anna Solcerova (Delft

Young (and mature) scien on a short course titled "O Vazken Andréassian, and topic. Participants of this as well as personal advice quantifiable message, whi controversial. Vazken disc readability. Two things all papers, and that good opin

Find their presentatio

Bettina Schaefli - Opinior Vazken Andréassian - Op

Posted in FGU News Res

We still have a co geostatistics in hy

1:38 PM - 27 Apr 20 0 171 01

YoungHyd

@YoungHyd

Hubert Savenije - Opinio

Informal activities





Following

Hydrodrinks was very well attended again this year! #egu17 #hydrology



11:38 PM - 26 Apr 2017

Similar activities







Separate committees established





Online activities





Quick recap on EGU 2017 Short course on Hydrological Forecasting

Posted on July 14, 2017 by shaunharrigan

For the first time at this year's EGU 2017, HEPEX and the YHS jointly organi course on Hydrological Forecasting. The course was focused on real-time hyd forecasting and topics covered included:

- Estimating predictive uncertainty (e.g. ensembles & post-processing)
- Reducing predictive uncertainty (e.g. data assimilation)
- Forecast verification (graphical & numeric approaches)
- Risk-based decision making game for operational water management it

Main content

- Updates
- Info about YHS
- Past resources
- Blog posts



Social media presence











LinkedIn Group FacebookGroup

TwitterPage

Youtube Channel

385 Members 1.6 k Members 1870 Followers

@YHS

@CanadianYHS

34 Subscribers

37 Videos

2277 VViews

In Summary



- Idea: YHS is a catalyst for involvement of early career hydrologists within the scientific community (which already led to big changes within e.g. EGU, AGU, IAHS, CGU)
- Current status: YHS runs a sweep of online and offline activities annually reaching ~1500 people offline and ~7500 online.
- Future: remain focused on shaping ECS involvement in the scientific community (we're happy with most current aspects!), but focus on better global coverage.



Creating Community for Early-Career Geoscientists

Student involvement in geoscience unions: A case study from hydrology

By Wouter R. Berghuijs, Shaun Harrigan, Evan L. Kipnis, Nilay Dogulu, Marius Floriancic, Hannes Müller, Ina Pohle, Sheila M. Saia, Frank Sedlar, Maarten Smoorenburg, Claudia Teutschbein, and Tim van Emmerik 016 December 2015

The American Geophysical Union (AGU) and the European Geosciences Union (EGU) play central roles in nurturing the next generation of geoscientists. Students and young scientists make up about one quarter of the unions' active memberships [American Geophysical Union, 2013;

Join us!



Young Hydrologic Society

@YHS @CanadianYHS