

## **Abate Create newsletter November 2016**

### **Welcome to the first semi-regular newsletter of the Create Abate project!**

The most recent Create Abate Steering committee meeting took place at Western University in October, and one of the issues we discussed was the need for better communication among the Create team members. Our team is large, and spread out over North America, Europe and Africa, and it is important to remember that we are all working towards a common goal – training the next generation of algae bloom professionals. What we want to do going forward is to do a better job at sharing success stories, provide updates on upcoming meetings, job vacancies, and anything else that seems relevant to our team. And it was decided that a newsletter that will be sent to all team members on a semi-regular basis was the way to go. And in case you have not met me, my name is Silke Nebel and I am the new Create Abate Project Manager, working with Irena Creed.

**The focus of the November 2016 newsletter is on our collaborators.** As you all know, a key component of the Create training program is the development of professional skills of our students and postdoctoral fellows. This is where the collaborators come in – they offer the opportunity to work with professionals in government, the non-for-profit and the private sector and can thus provide invaluable hands-on experiences. Our collaborators, in turn, get to work with some of the best students in the country, while NSERC is paying the bills. So let's make sure those opportunities are taken advantage of.

We currently have 24 collaborators from 19 institutions. Four just joined us this October, so please welcome....

**Anthony Taabu-Munyaho ([ataabum@yahoo.com](mailto:ataabum@yahoo.com))!** Anthony is the Director of Research at the **National Fisheries Resources Research Institute in Jinja, Uganda.**

**Dak de Kerckhove!** Dak ([Dak.deKerckhove@ontario.ca](mailto:Dak.deKerckhove@ontario.ca)) is a Research Scientist with the **Ontario Ministry of Natural Resources and Forestry** and an Assistant Professor in Ecology and Evolutionary Biology, University of Toronto. He works on both applied and theoretical questions in aquatic ecosystems and strives to forge collaborative projects among academic, government and industrial partners to improve our understanding and management of Canada's natural resources.



**Fred McGarry**, the Executive Director of the **Centre for Community Mapping (Comap)**! Comap is a not-for-profit based in Waterloo, Ontario, with a mission to: (1) research, develop, supply and sustain information technology and communications services to strengthen civil society; and (2) to spin-off for-profit enterprises that have beneficial socio-economic impact.

COMAP's web and mobile shared knowledge platforms for socio-economic, cultural and environmental innovation use collaborative geomatics, mediated social network and customized services to support partnerships among members of geographic and virtual communities of practice whose common goal is strengthening civil society within a sustainable economy. Possibly most relevant to the goals of Create Abate is COMAP's expertise in large-scale computing and development of apps, such as the Flowing Waters Information System. Please go to <http://www.comap.ca/> to learn more or contact Fred directly: [mcgarry@comap.ca](mailto:mcgarry@comap.ca).

**Mark Palmer from Greenland Consulting!** The Greenland Group of Companies is an engineering and technologies enterprise. They work on a wide range of projects, including municipal infrastructure, water resources, asset sustainability, smart (internet-of-things) information

systems, low impact development, and – crucially - integrated cumulative effects monitoring and analytical tools to better manage excessive watershed nutrients and address climate change impacts. For more information, go to: <http://www.grnland.com/>, or contact Mark at [mpalmer@grnland.com](mailto:mpalmer@grnland.com).



Other options for internships (usually 4 or 8 months long) are with:

- Dr. Kathleen Weathers ([weathersk@caryinstitute.org](mailto:weathersk@caryinstitute.org)) is an Ecosystem Scientist at the **Cary Institute of Ecosystem Studies in Millbrook, NY**. Dr. Weathers' research focuses on quantifying how biology affects geochemistry and biogeochemical cycling across heterogeneous landscapes, and within and among multiple systems (air-land-water).
- Shari Clare ([sclare@fieraconsulting.ca](mailto:sclare@fieraconsulting.ca)) is one of the Founding Directors and a Senior Biologist for **Fiera Consulting in Edmonton, Alberta**. She is a Project Manager and research scientist with a strong background in and education in natural resource policy and conservation biology, and more than 15 years of professional experience as a wildlife consultant specializing in wetlands and water policy.
- Michael Cohrs ([michael.cohrs@fluidimaging.com](mailto:michael.cohrs@fluidimaging.com)) is an Applications Engineer for **Fluid Imaging Technologies**, the makers of the FlowCam Imaging System. Working in the Aquatic Markets, Michael's work has focused on developing algal population dynamic studies in freshwater systems, with a particular emphasis on cyanobacteria monitoring.
- Harry Nelson ([harry@fluidimaging.com](mailto:harry@fluidimaging.com)) is Vice President, Aquatic Markets for the laboratory instrumentation manufacturer **Fluid Imaging Technologies** of Scarborough Maine USA. Nelson helped spearhead the growth and acceptance of the company's FlowCAM® particle imaging and analysis system in marine and freshwater research, water quality analysis and other aquatic markets.

- Dr. Neil Hutchinson ([neil.hutchinson@environmentalsciences.ca](mailto:neil.hutchinson@environmentalsciences.ca)) is the Principal Scientist at **Hutchinson Environmental Services Ltd.**, and has over 30 years of postgraduate experience in limnology and watershed studies. His professional career has focused on pollutants and stressors of aquatic systems, with a focus extending from geochemical to laboratory to whole-watershed levels of investigation and a specialization in PreCambrian Shield systems.
- Dr. Andrew Paterson ([andrew.paterson@ontario.ca](mailto:andrew.paterson@ontario.ca)) is a Research Scientist at the **Ontario Ministry of the Environment and Climate Change's** Dorset Environmental Science Centre. His work focuses on understanding how multiple stressors affect the water quality and ecology of inland lakes.
- Dr. James Rusak ([jim.rusak@ontario.ca](mailto:jim.rusak@ontario.ca)) is a Research Scientist and Group Leader at the **Ontario Ministry of the Environment and Climate Change** Dorset Environmental Science Centre. His research focuses on understanding the interactions and feedbacks between a lake's biology and its physical and chemical attributes as well as the environmental context (e.g., regional landscape and climate) in which it is embedded.
- Dr. Jennifer Winter ([jennifer.winter@ontario.ca](mailto:jennifer.winter@ontario.ca)) supervises a team at the **Ontario Ministry of the Environment and Climate Change** whose focus includes nutrients, algal communities and associated issues in inland lakes and the Great Lakes, and was the lead research scientist for Lake Simcoe from 2001 to 2012. Her research interests include the influences of human activities on aquatic ecosystems and the modelling of nutrient loading to rivers and lakes.
- Dr. Michelle Palmer ([Michelle.Palmer@ontario.ca](mailto:Michelle.Palmer@ontario.ca)) is an aquatic ecologist specializing in the assessment of multiple stressors, their interactive impacts on lake physics, chemistry, and biology, and implications for restoration. Michelle directs the Algae Lab at the **Ontario Ministry of the Environment and Climate Change** and provides scientific and technical support for the provincial blue-green algal bloom response protocol.
- Dr. Mark Ridgway ([mark.ridgway@ontario.ca](mailto:mark.ridgway@ontario.ca)) is a Research Scientist & Director at Harkness Laboratory of Fisheries Research, Aquatic Research and Monitoring Section, at the **Ontario Ministry of Natural Resources & Forestry**. His research covers basic and applied areas of fish ecology and aquatic science in support of resource policy and management for the Ontario Ministry of Natural Resources & Forestry.
- Dr. Guang Guo ([guanggao@niglas.ac.cn](mailto:guanggao@niglas.ac.cn)) is a Research Scientist at the **Nanjing Institute of Geography and Limnology in China**. His research interests include the microbial ecology of lakes; phosphorus dynamics in lakes; microbial food web and lake metabolism.
- Sue Miller ([suem@nbmca.on.ca](mailto:suem@nbmca.on.ca)) is the Program Manager for Drinking Water Source Protection at the **North Bay-Mattawa Conservation Authority**.
- Dr. Amanda Poste ([amanda.poste@niva.no](mailto:amanda.poste@niva.no)) is an aquatic ecologist at the **Norwegian Institute for Water Research** and is particularly interested in human impacts on aquatic

environments. Her research focuses primarily on eutrophication and harmful cyanobacterial blooms as well as environmental contaminants (fate, transport, biomagnification).

- Dr. William Cochlan ([cochlan@sfsu.edu](mailto:cochlan@sfsu.edu)) is a Senior Research Scientist at Romberg Tiburon Center at **San Francisco State University**. He is a biological oceanographer/marine microbial ecologist who addresses the fundamental question: “What factors control phytoplankton growth, their nutrition and distribution in the ocean?”
- Dr. Peter Njuru ([pnjuru@seku.ac.ke](mailto:pnjuru@seku.ac.ke)) is a Lecturer and Chairman, Department of Environmental Science and Technology, School of Environment and Natural Resources Management at **South Eastern Kenya University**. Dr. Njuru is involved in teaching, supervising and mentoring of both undergraduate and graduate students.
- Dr. Ann-Kristen Bergstrom ([ann-kristin.bergstrom@emg.umu.se](mailto:ann-kristin.bergstrom@emg.umu.se)) is a Senior Lecturer (Associate Professor) at the Department of Ecology and Environmental Sciences at **Umea University in Sweden**. Her research focuses on the ecology of pelagic food webs (including zooplankton, phytoplankton and bacterioplankton) in freshwater ecosystems.
- Dr. Steven Wilhelm ([wilhelm@utk.edu](mailto:wilhelm@utk.edu)) is the Kenneth and Blaire Mossman Professor of Microbiology at the **University of Tennessee-Knoxville**. His research group is interested in how microbes shape their environment and how environmental conditions shape microbial community structure and function
- Dr. Harvey Bootsma ([hbootsma@uwm.edu](mailto:hbootsma@uwm.edu)) is an Associate Professor at the School of Freshwater Sciences at the **University Wisconsin-Milwaukee**. He conducts basic and applied research on the limnology of large lakes, and his specific interests include nutrient dynamics, algal ecology, and ecosystem response to land use and climate change.
- Dr. Katrina Moser ([kmoser@uwo.ca](mailto:kmoser@uwo.ca)) is a Professor in the Department of Geography at **Western University**. Her research is on water quality and quantity issues, and specifically how humans are impacting these important resources.
- Dr. Sue Watson ([sue.watson@canada.ca](mailto:sue.watson@canada.ca)) is a Research Scientist with **Environment and Climate Change Canada**. Her research addresses water quality and algal and cyanobacterial blooms in the Great Lakes, Lake Winnipeg and other waterbodies with a focus on the ecophysiology and chemical ecology of these blooms, their causes, and their ecological and socioeconomic impacts such as taste-odour, toxins and fouling.

More information about our collaborators can be found on our website:

<http://uwo.ca/biology/abate/people/collaborators.html>

## Past adventures

In 2016, part of the Abate team headed to Kenya for a 3-week field school. Check out their adventures here: [http://atwestern.typepad.com/western\\_africa\\_abroad/](http://atwestern.typepad.com/western_africa_abroad/)

## Upcoming meetings

The next meeting of the Society of Canadian Limnologists/Canadian Conference for Fisheries Research will take place in Montreal, January 5-8, 2017 under the theme 'Novel Approaches to Managing Aquatic Ecosystems in a Rapidly Changing World' (<http://www1.uwindsor.ca/glier/ccffr/>). If there are enough Create team members attending the conference, we should take this opportunity for a team meeting. If you attend this conference, please email me ([snebel2@uwo.ca](mailto:snebel2@uwo.ca)) and I will see whether we have critical mass. If not, we will organize another Create Abate meeting in early 2017.

## And last but not least...

... stay tuned for an upcoming survey to all HQP about your interests related to the Abate program and where you think the priorities for training should be.

Please share this newsletter with any Create Abate team members whom I might have missed. And please send stories of success, upcoming events, publication of major results or anything else you would like to see in this newsletter to me at [snebel2@uwo.ca](mailto:snebel2@uwo.ca).

Til the next time!

Silke

