

The **McGill School of Environment** (MSE) says "**THANK YOU**" for your philanthropic contributions to the "\$15,000 for 15 years" fund. Through your generous donations we are able to extend undergraduate learning beyond the classroom.

Gifts honoring the anniversary will support the MSE Undergraduate Experiential Learning Fund which will support opportunities for MSE students to participate in varied learning experiences. As many of you know firsthand, student experiences outside the classroom are invaluable; when students design sustainability projects, participate in field research opportunities, or network with prominent environmental scholars from around the world, they are transforming their theoretical knowledge into practical experiences. Your gift means that the MSE is able to continue to promote these opportunities and succeed in its mission of fostering an environment in which students can thrive and become tomorrow's leaders.



The MSE attracts a unique type of student, who is able to comprehend and navigate the complex dynamics of environmental challenges and are catalysts of change in their communities. By providing support, we recognize students for their achievements and provide them with the opportunity to receive training in research methods, learn to analyze data, create written and oral presentations of their results and participate in formal research symposiums and conferences. This knowledge shapes their career choices. A research experience creates original thought, fosters curiosity for a lifetime, and enables life-changing collaborations.

McGill School of Environment students build knowledge and competencies to change the world!

#### The MSE welcomes new staff

**Kevin Manaugh** has accepted a joint appointment as Assistant Professor in the Department of Geography and McGill School of Environment.

His research uses a multidisciplinary approach to try to understand how transportation systems can be designed to better serve current and future



users with a particular focus on issues of social justice. Kevin is especially interested in active transportation (cycling and walking) and understanding neighbourhood walkability. He has researched and published on the determinants of mode choice, modeling transportation-related green house gas emissions, and regional accessibility measures and is affiliated with the TRAM (Transportation Research at McGill) research group for the past six years.

# McGill School of Environment Visiting Scholar Award, Dr. Mark Wilson and Dr. Thomas Nemes

#### Mark Wilson

Department of Ecology & Evolutionary Biology, Department of Epidemiology Previous Director, Global Health Program, The University of Michigan



Mark is an ecologist and epidemiologist with broad research interests in infectious diseases, including the analysis of transmission dynamics, the evolution of host-vector-parasite systems, and the determinants of human disease risk. After earning his doctoral degree in 1985 from the Harvard School of Public Health through studies on the epidemiology and environmental determinants of Lyme disease, he has focused his research on a variety of other infectious diseases since then.

## **Thomas Nesme**Bordeaux Sciences-Agro Université de Bordeaux, France

Thomas is an Associate Professor of Agronomy at Bordeaux Sciences Agro, which is the agricultural college (école d'ingénieurs agronomes) of Bordeaux University (France)



agronomes) of Bordeaux University (France) since 2005. He completed His Master in Montpellier (France) in 2000 and his PhD in soil science and agricultural systems at INRA in 2004.

### MSE Expertise in Demand

MSE Professors, **Nicolas Kosoy** and **Madhav Badami**, have been invited to participate in a consultative workshop at the newly instituted Amazonian University IKIAM by the Government of Ecuador.

"The Ministry of Knowledge and Human Talent (MCCTH) in Ecuador is the institution in charge of the establishment of The Amazonian University IKIAM, a new university located in the Amazonian City of Tena. The University aims to provide teaching, research and service to the region and the world through three proposed Schools: Life Sciences, Earth Sciences, and the School of the Science of Settlements.

In this regard, the MCCTH is pleased to announce the IKIAM Amazon University Workshop (IAUW). The workshop will be hosted by the MCCTH and will be held the first week of December 2013 in Tena, Ecuador.

The primary goal of the workshop is to review in depth the academic proposal for the establishment of IKIAM, its guiding principals and aims, its relation with Ecuador's national development strategy, and its interaction with the national and international higher education systems.

### Elena Bennett and the Liber Ero Fellowship:

### Bridging the Gap Between McGill and Decision-Makers

by Melissa Fundira, MSE Journalist

On September 5th-6th, 2013, the McGill School of Environment kicked off the Liber Ero Fellowship, a new program geared towards science communication and policy engagement. Through close interactive and handson practice with local and national journalists, McGill professors and graduate students gained the tools necessary to communicate their science to policy-makers.

#### What is the Liber Ero Fellowship?

Essentially, we recognized that there was a big demand among McGill professors and graduate students for more training in outreach communication and engaging with decision-makers in general. We brought in a group called Compass (they do communications workshops) to help us with that, and they brought in a smattering of journalists—a few francophone, Anglophone, local, and federal—and together, they helped train us in communications.

#### Was the goal to transmit academic knowledge to a wider audience?

Yes, that's right. If you are a professor or graduate student, and you're interested in communicating to a wider audience—engaging with the media, engaging with policy makers and other decision-makers or NGOs—how do you go about doing that? And especially, how do we do that effectively? How do you express yourself in a way that people can understand what it is that you're trying to say? We did a lot of training that [asked the question]: "what's the media's perspective?" If you want to work with the media, you've go to be giving them what they need, too. So, how do you do that? I think a big part of the learning was to understand what a journalist's day is like [and] what are they after when they call you up for an interview. A lot of us turn down those opportunities... "No, I don't have time for that" or "No, I don't understand how that works..." So, what happens when we say yes to that, and why should we say yes to that?

There seems to be a very high interest in bridging the gap between disciplines and different actors in the environmental movement. How do you see the MSE and McGill's role evolving in terms of connecting to decision-makers? How about the everyday person?

What I see is a McGill that is increasingly interested in interacting with it's local environment; it's a McGill that is no longer content to be Anglophones in a francophone context [and] no longer content to be an isolated little bubble. To do that, we need some training and we need a way in to talk to folks. I think that one way to do that is through the environment. The environment has a really powerful draw on people [and] the MSE in particular has a lot of expertise [on that]. It's something that people really care about and so that's an obvious way in for McGill to get more engaged in decision-making in the local environment.



Nicolas Kosoy Assistant Professor MSE & Natural Resource Sciences



Madhav Badami Associate Professor MSE & School of Urban Planning



Elena Bennett Assistant Professor MSE & Natural Resource Sciences

# MUS Montreal's Urban Susta

#### What is MUSE?

MUSE, or the Montreal Urban Sustainability Experience is a summer field semester offered by the McGill School of Environment and based on the island of Montreal. MUSE focuses on exploring and establishing aspects of urban sustainability while emphasizing a healthy balance of theoretical and practical knowledge. By encourage active, student-driven and experience-based learning, MUSE creates a learning environment with a high level of engagement amongst students, professors, and the local community. MUSE students help create a hands-on, integrated, and interdisciplinary learning experience that transcends the boundaries of traditional undergraduate education.



### Take the long view: Contribute to a natural history of Montreal



Hopkins, H.W. 1879. Atlas of the city and island of Montreal, including the counties of Jacques Cartier and Hochelaga; from actual surveys, based upon the cadastral plans deposited in the office of the Department of Crown Lands.

As a part of MUSE, students will develop a strong understanding of the repercussions of human activity on the environment and how the environment affects our own activities. Montreal's history, and the natural history of the Island, offer a case study for an ongoing research project. Each year, students will work to develop a historical reconstruction of Montreal which will be part of a larger project to be completed over the course of several years. These projects will vary from year to year, and are achieved through the exploration of different methods and approaches for reconstructing past environments and tracing environmental, cultural, and geographical changes. As a MUSE student, your work will contribute to this larger "Hochelaga Project", providing foundational knowledge for subsequent generations of students. Through this work, you will develop an appreciation for mapping both history and place in order to inform the present, and even our future.

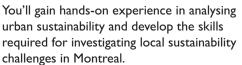
### **USE:**

### stainability Experience



### Assess Sustainability in your own City

MUSE students critically assess Montreal as a sustainable city through research, discussions, and field trips. Local experts and practitioners will share their insights on working towards sustainability, and highlight the ups and downs of initiating sustainable urban projects.





### Make a difference; Make change

As a MUSE student, you will learn about the challenges facing urban Montreal by exploring the city. You will learn about sustainability initiatives by talking to people doing this work. And you will find your own place among those making a contribution! Your vision for a sustainable Motnreal will be challenged, refined, developed and shared. Using Montreal as a case-study of an urban environment, MUSE students work together in striving to identify and implement pathways for sustainable living.





### Join Us!

You can learn more about Montreal's urban sustainability by contacting the program coordinator, Dr. Julia Freeman: julia.freeman@mcgill.ca



# Science vs. Ideology: Mark Lynas on What the Environmental Movement Got Wrong

by Melissa Fundira, MSE Journalist

Mark Lynas is an author and public speaker on various environmental topics. He was the climate change advisor to President Mohamed Nasheed of the Maldives before the latter was deposed in a 2012 military coup d'état. Previously an environmental activist, Lynas made highly publicized changes to his stances on polarizing topics within the environmental community. The MSE had the chance to interview him on issues regarding the difference between ideology and science, biotechnology, nuclear power, and the future of the Maldives.

### What is the critical change in opinion you've had regarding certain environmental issues?

I have had a change of mind about certain things, which are areas of difficulty for the environmental movement, but I haven't ceased to be an environmentalist. What I'm trying to do is to have an evidence-based environmentalism. In some fairly critical areas, environmentalism doesn't have the evidence base. The problem is, too much environmentalism is frozen in the 1970s or even earlier. Ideologies don't like to shift, and that's the problem with creating them.

### What brought about this change in perspective from ideology to science-based environmentalism?

My environmental activism predated my interest in science. The worldview that I had then was a worldview that was formulated, not around science, but around activist notions of corporations being bad. It was an ideological worldview. I'm not saying that's completely illegitimate, it's as valued as any other ideological worldview, but some of the things we were against, I don't think were right. I don't think anyone can have no ideology; even me saying that science is the most important thing is in itself an ideological statement and I accept that. But, I think it's a more valid way of understanding the world than any other. If we didn't have science we wouldn't even know the world was warming up, let alone be able to do something about it.

### What are the common misconceptions about GMOs and its effects?

The most important misconception is that there's any single category of GMO. There's nothing which makes virus-resisting cassava – which I've seen in Uganda – the same category as insect-resistant corn in the Northern Plains of the United States. Similar techniques have been used to create the biology of those seeds, but they don't have any relationship with each when it comes to any potential environmental or socioeconomic impacts.



You have a new book called "Nuclear 2.0: Why a Green Future Needs Nuclear Power". What are some of the misconceptions about nuclear power you outline?

The misconception is that there's something dangerous and scary about nuclear power. It has risks and benefits when you look

at it, but the benefits far outweigh the risks. Some forms of nuclear power are less safe than others – you have to be concerned about proliferation. But, you don't foreclose one of the major low-carbon options, just from an ideological hang-up from the 1970s, if you're serious about climate change.

Even if we take Greenpeace's figures for wind and solar deployed by 2030, if you take nuclear out of the mix, then we end up with higher emissions and much higher global warming. If you put nuclear in the mix at an increased level together with Greenpeace's wind and solar, then we can really get somewhere in terms of mitigating climate change.

President Mohamed Nasheed had the goal of turning the Maldives into the first carbon-neutral nation by 2020. Had it not been for his ousting in the coup d'état of 2012, do you think he could have achieved this goal?

It was always ambitious, not least the technical challenges, because the Maldives is hundreds of very small islands. There was no obvious, easy renewable solution to power whole islands permanently, there was no obvious source of hundreds of millions of dollars in investment you would need, and the politics [were] all over the place, where, the major challenge is still to get a properly running democratic system. It was a real plan, the policy was clear, and the president was forcefully behind it, but it was also meant to send a signal to the world, so it was symbolic as much as it was real.



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### Philanthropy Making a Difference

### Vivian Lewin Field Study Endowment Award

Awarded to MSE students who wish to take a McGill recognized field study abroard program or have a pre-arranged independent course or honours course that involves field research abroad. We are please to announce this year's winner: **Sarah Fioravanti**, *B.Sc.*(*Ag.*), Year 3,

Honours Environment - Food Production & Environment

carlcom Food Security Research Project: Improving food and nutrition security in Barbados through the School Meals Program: Food security among the Barbadian population is low, mainly because of the large reliance on food importation of obesogenic products. As a result, a high food import bill, a high incidence of diet related diseases, and the loss of consumption of local fruits and vegetables is negatively impacting the country. This Honours project targets children in nursery and primary schools, through the improvement of the current School Meals Program, as a vehicle for change in dietary behaviour. The improvement of such programs will respect the recommendations of the Caribbean Food Guide, and an association with local farmers will be made for them to provide a consistent supply of food from the six food groups. The required acreage and volume of crops will be calculated and provided to Barbadian farmers in order for them to produce enough crops to satisfy the need for the school meals.





Lauren was awarded the **Pathy Family Foundation (PFF) Community Leadership Fellowship,** a new fellowship program that offers
extraordinary opportunities for McGill students to bring sustainable and
positive social change to communities around the world. The funding helps
to support a community-based project of their own design, based anywhere
in the world and in any field.

After graduating from McGill with a BA in World Religions, Lauren returned to pursue a **Diploma in Environment**. She has worked and volunteered with environmental NGOs around Montreal including the Fondation David Suzuki, Action Communiterre, and Alternatives. During this time she became interested in the environmental and ethical dimensions of food and food systems and has been increasingly involved in the Montreal urban agriculture movement. She implemented the St. Monica School Garden Program at a local elementary school. Lauren believes gardens are an important site of learning and sharing. They promote healthy living habits and create vibrant social spaces for the community. She believes that sharing knowledge and making improvements in our environment can bring people together and help create social and political change.

Project Description: Ça pousse! is an educational garden service and the newest program for Action Communiterre, a local non-profit organization and leader in urban agriculture and food security initiatives in Montreal since 1997. It is an innovative social economy service that combines edible landscaping and educational programming for schools and other social institutions in Notre-Dame-de-Grâce and surrounding Montreal neighbourhoods.

The MSE is:

**Director—Nancy Ross** 

**Faculty Members** 

Madhav Badami (School of Urban Planning)

Christopher Barrington-Leigh (Inst. for Health & Social Policy/ Economics)

Elena Bennett (Natural Resource Sciences)

Peter G. Brown (Geography)

Jeffrey Cardille (Natural Resource Sciences)

Colin Chapman (Anthropology)

Sylvie de Blois (Plant Science)

Jaye Ellis (Faculty of Law)

Frédéric Fabry (Atmospheric and Oceanic Sciences)

Iwao Hirose (Philosophy)

Nicolas Kosoy (Natural Resource Sciences)

**Brian Leung (Biology)** 

Kevin Manaugh (Geography)

Gregory Mikkelson (Philosophy)

Jeanine Rhemtulla (Geography)

Anthony Ricciardi (Redpath Museum)

Raja Sengupta (Geography)

Renée Sieber (Geography)

Ismael Vaccaro (Anthropology)

**Faculty Lecturers** 

Julia Freeman George McCourt Kathy Roulet

**Staff** 

Danielle Lefebvre Shannon Scott Christina Zhu

