Recap: UBC Global Antimicrobial Resistance Symposium

The Antimicrobial Resistance Symposium on March 1, hosted by the UBC Neglected Global Diseases Initiative and the Centre for International Child Health, discussed antibiotic use, their evolution, their role in our health system today, and the impact they will have in years to come. In his keynote speech, Dr. Ramanan Laxminarayan addressed the frequent and often non-lifesaving circumstances, such as to treat the seasonal flu and the precautionary mass-medication of livestock, in which antibiotics are used. Addressing antibiotic resistance is difficult because patients, physicians, hospitals, pharmaceutical companies, and agricultural users have insufficient incentives to act in ways that would conserve antibiotic effectiveness.

These challenges suggest the simultaneous deployment of multiple strategies: vaccination to prevent illness and reduce demand for antibiotics, aggressive hospital infection control, judicious prescribing and cycling of antibiotics, treatment with narrow-spectrum antibiotics, development of new antibiotics, and a coordinated federal policy that stewards this resource. Watch Dr. Laxminarayan’s engaging TED talk on the subject - The coming crisis in antibiotics.

During the panel, Dr. Ramanan Laxminarayan, along with Dr. David Patrick, Dr. Ashley Roberts, and Dr. Robert Hancock, discussed the necessity of education at all levels to avoid over-prescribing and potential alternatives that could be considered. The panel called on all of us to think of antibiotics and their ongoing effectiveness as a finite resource and to engage in our communities and national forums to help the public recognize the importance of addressing antimicrobial resistance as a local and global health issue.

To learn more about antimicrobial resistance and its impact globally and locally, visit the WHO’s webpage.
Celebrating International Nursing Day
Meet Brooklyn Nemetchek

Every year on May 12th, International Nurses Day recognizes and celebrates the important role that nurses play in our medical institutions. Meet Brooklyn Nemetchek, a registered nurse from Saskatoon, Saskatchewan, passionate about making a difference in global health. She completed her Bachelors of Science in Nursing from the University of Saskatchewan in 2016 and is currently in the process of completing her Masters of Nursing. Between her degrees, she took part in a Commonwealth Collaboration with the Mbarara University of Science and Technology where she spent three months volunteering as a nurse in urban and rural Uganda. Her love of Uganda led her back in 2017 where she partnered with the Centre for International Child Health on the Smart Discharges project as part of her global health research.

Brooklyn’s role in the project was twofold: first, she completed an updated systematic review on the topic of pediatric post-discharge mortality in resource-limited settings; and secondly, she facilitated a modified Delphi process that used current data and a panel of experts to identify the most relevant diagnostic variables that could be implemented in low resource setting to measure post-discharge mortality in young children.

During her time in Uganda, Brooklyn was also volunteering at the Mbarara Regional Referral Hospital as a nurse in the surgical emergency and pediatric oncology departments. She worked and learned alongside the dedicated local health professionals, treating malaria, typhoid, trauma, burns, and childhood cancers, among many other injuries and illnesses.

“Global health, put simply, is caring about our brothers and sisters around the world- about improving physical, social, emotional, and spiritual health.”

-Brooklyn Nemetchek

We would like to acknowledge the enormous amount of hard work and energy that nurses invests in their practice to improve the lives of their patients. Thank you to all of our nurses!

Global Health Nurse and Allied Health Professions Capacity Building: Beyond our Borders

On January 26th, a group of 15 managers from our campus met with one goal in mind, to generate greater involvement of nurses and allied health professionals in global health at BC Children’s and Women’s. This was an initial meeting to generate ideas in developing a global health strategy for nurses and allied health professionals. More consultations will continue to
It is well known that there are too few healthcare workers worldwide and low- to middle-income countries bear the highest burden of this shortage and nurses and allied health professionals are crucial in addressing this gap. If you are a nurse or allied health professional involved in global health, please get in touch with Alexia Krepiakevich.

Recap: Global Health and Innovation Lunch & Learn

On January 24th, Healthy Starts and the Centre for International Child Health hosted the first Global Health and Innovation Lunch & Learn of 2018. Over 50 individuals interested in global health gathered to learn and discuss experiences and new innovations in global child health.

Dr. Odion Karalaci, a resident at BC Children’s Hospital, captured the attention of the crowd through telling his experiences delivering care in various hospitals around the world. Most recently, during his one month exchange in Ghana, he was able to better understand the local health system and provide training to fellow pediatric physicians. Odion also shared about his experience working with Operation Rainbow Canada in China where he provided reconstructive surgery for children with cleft lip and palate deformities.

Dr. Mark Ansermino, Director of the Center for International Child Health, spoke about the possibilities of using mobile phones to diagnose sepsis in children. Even in low resource settings, cell phone use is high. He said there is great opportunity to use low-cost mobile health devices, combined with data driven prediction models, to detect sepsis early and help save lives.

Check the Healthy Starts website or stay tuned to our next eUpdate to learn about our next Global Health and Innovation Lunch & Learn.

Are you familiar with newborn and intrapartum technologies? If so, we want to hear from you!

We at the Centre for International Child Health are currently conducting a landscape review of newborn (less than 28 days) and intrapartum technologies that have been used and/or are planning to be used hospitals in low resource settings.

Do you have expertise, knowledge, or general interest in technology in any of the following areas?

1. Digital Device Connectivity: Integrated solutions that monitor and inform device usage, with the overall goal of preventive maintenance or immediate repair of medical devices.

2. Physiologic Continuous Monitoring: Multiparameter, non-invasive, non-disposable devices for use in referral facilities to monitoring patient vital signs for support such as earlier detection of major morbidities, automatic interpretations, and/or treatment monitoring.

3. Respiratory Support Interventions: Interventions to treat newborns with respiratory distress that focus on technology improvements to reduce cost, improve efficiency, and increase operator independence.

4. Intrapartum Monitoring Devices: Intrapartum labor monitoring tools that are inexpensive, robust, user-friendly, and can automatically interpret fetal heart reactivity, decelerations,
contractions, and various other parameters.
5. **Ultrasound Devices**: Next gen, ultrasound tools that combine innovative hardware and software solutions.

If you know of any applicable technologies that are on the market or in the pipeline please contact [Teresa Johnson](mailto:teresa.johnson@ubc.ca).

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**Project Updates from Around BC Children's and BC Women's**

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**Refugee Health Initiative Celebrates a Successful First Year**

**The Refugee Health Initiative (RHI)** is celebrating its first successful year of helping new refugees transition into their new lives in Vancouver. The program couples refugee families with UBC medical students and interpreters to help facilitate families’ transitions into their communities.

The RHI began with 7 student and 6 families meeting on a weekly basis with the goal of empowering the families to overcome challenges and barriers preventing them from navigating the BC healthcare system. The initiative is growing strong into its second year with a team of 20 medical students helping 16 refugee families. Their support programs are also growing with additional workshops and new collaborations with other professional health groups.

Check out two videos that the RHI produced to help refugees, the first providing an ‘Introduction to Refugee and Canadian Health Care’ and the second on ‘How to Fill a Prescription - A Guide for Refugees in Canada’.

If you’d like to learn more or get involved, [email the RHI](mailto:teresa.johnson@ubc.ca) or check out the [Refugee Health Initiative blog](https://www.ubc.ca/humanities/ubc-medical-refugee-health-initiative) for more info.

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**UBC ranked #1 Nation-wide for Global Equity in Biomedical Research**

At the end of 2017, the Universities Allied for Essential Medicines (UAEM) published the [2017 University Report Card for Global Equity in Biomedical Research](http://www.uaem.org). The report card evaluated the impact that 15 Canadian Universities had on global health, including transparency, neglected health
UBC ranked first in Canada and second place globally (just behind Oxford University) and was the only institution in Canada to get an A grade in the report.

UBC was the first university in Canada to implement formal global access principles in 2007 and was ranked first in North America for university global health impact in 2013. The recent establishment of the Global Health Office at the School of Population and Public Health shows that UBC has an ongoing commitment to creating equity and reducing health disparities within the global community.

**Congratulations to UBC for being recognized for their ongoing contributions to the equity and access principles in global health research!**

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**Join the Global Health Online Network (GHON)**

Are you looking to collaborate with others on exciting projects in global health? The Global Health Online Network (GHON) is a platform administered by The Neglected Global Diseases Initiative that provides a private link between all global health advocates at UBC. Membership includes over 55 faculty members, 31 research associates, and over 300 online members. The goal of GHON is to create an active connected community for practitioners, scientists, residents, and students at UBC that can (or wish to) directly contribute to global health.

First and foremost, GHON has been designed to be for anyone at UBC with an interest in global health. GHON is for those new to global health and those practicing in the field. As an outlet for global health, GHON sends weekly emails filled with information to introduce users to, stay up to date in, and opportunities for continued education in global health.

Get connected and **sign up with your UBC CWL login** to access our network and newsletters. For more information contact **Katie Gourlay**.

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**News and Upcoming Events**

**Igniting Collaborative Efforts in Sepsis Roundtable**

May 3rd, 2018
Sepsis is a serious medical condition resulting from an overwhelming immune response to infection. Despite advances in modern medicine, worldwide sepsis is the leading cause of preventable death following an infection. In Canada, 1 in 18 deaths are related to sepsis and often affect the most vulnerable in the population. How facilities prioritize sepsis diagnosis and treatment is critical to patient survival and UBC wants to ensure it’s doing its best in the fight against sepsis.

On May 3rd, the Center for International Child Health is co-hosting a roundtable discussion focusing on igniting collaborative efforts to combat sepsis. The discussion will bring together specialists in the field to collaborate in order to improve the quality of treatment at UBC. The main goals of the meeting are focused on improving the fight against sepsis in women and children through prioritizing efforts at UBC, including building on preexisting strengths related to diagnosis and treatment of sepsis and what areas need to be improved.

If you are a specialist involved in the research or treatment of sepsis and are interested in joining the discussion, please contact Alexia Krepiakevich.

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**CUGH Conference and Pre-conference Satellite Sessions, NY**

**March 15-18, 2018**

Register Today

The 9th Annual Conference of the **Consortium of Universities for Global Health (CUGH)** will be held this March 16-18, 2018, at the New York Hilton Hotel Midtown in New York, New York. The theme of this year’s conference is Health Disparities: A Time for Action. Featured themes include global health law, human rights, and conflict prevention; governance, health systems, and public institutions; implementation science; neglected topics in global health; reducing disparities and improving well-being across the lifespan; and the social determinants of health; and more. See the **2018 CUGH agenda** for more details.

Free pre-conference satellite sessions will be held on March 15, 2018, organized and coordinated by distinguished academic and research institutions in global health. Visit the **CUGH satellites session webpage** to learn more.

Register online and join the more than 1,700 scientists, faculty, students, and implementers from more than 50 countries at this year’s CUGH conference.

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**Publication Spotlight: Dec 2017 - Feb 2018**

**The Global Burden of Paediatric and Neonatal Sepsis: A Systematic Review**

Dave Goldfarb, and colleagues Carolin Fleischmann-Struzek, Peter Schlattmann, Luregn J Schlapbach, Konrad Reinhart, & Niranjan ‘Tex’ Kissoon

The incidence of sepsis is highest in neonates and children, yet the global burden of sepsis in these age groups has not been assessed. This systematic review and meta-analysis used 1270 studies from from 23
high and middle-income countries, published between 1979 and 2016. The results were an aggregate estimate of 48 (95% CI 27–86) sepsis cases and 22 (14–33) severe sepsis cases in children per 100,000 person-years. Mortality ranged from 1% to 5% for sepsis and 9% to 20% for severe sepsis. The population-level estimate for neonatal sepsis was 2202 (95% CI 1099–4360) per 100,000 live-births, with mortality between 11% and 19%. A total incidence of 30 million cases of sepsis in neonates and 12 million in children was estimated. Few population-based data are available from low-income settings and the lack of standardization of diagnostic criteria and definition of sepsis in the reviewed studies are obstacles to the accurate estimation of global burden.

The Lancet, 2018; 6(3), p223-230

VIEWPOINT: Smart Hospital Discharges to Address a Neglected Epidemic in Sepsis in Low- and Middle-Income Countries
Matthew Wiens, Niranjan ‘Tex’ Kissoon & Jerome Kabkyenga

As many children die shortly after hospital discharge following in-hospital treatment for sepsis as during hospital admission. Post-discharge mortality is an acute problem in low- and middle-income countries (LMIC), which are plagued by large numbers of socioeconomically disadvantaged children served with limited resources in congested and non-resilient health care systems. Post-discharge deaths are largely ignored despite concerted efforts to address child mortality worldwide during the United Nations (UN) Millennium Declaration era in which member states committed to decreasing mortality for those younger than 5 years by two-thirds between 1990 and 2015. Infectious diseases account for approximately half of childhood deaths, and sepsis is the final common pathway leading to most of these deaths. Although decreases in mortality were substantial, approximately 18,000 deaths still occur daily, mostly from preventable causes, with the major burden being in sub-Saharan Africa and southern Asia.

JAMA Pediatr. 2018; 172(3), p213-214

Want to share something you’ve recently published? We’d love to hear from you.

Funding Opportunities

Canadian Child Health Clinician Scientist Program

Application Deadline: April 1, 2018

The Canadian Child Health Clinician Scientist Program (CCHCSP) is a trans-disciplinary training program for the next generation of clinician-scientists in child and youth health research in Canada. CCHCSP provides support for highly qualified child health clinician candidates to develop knowledge and skills for a career as an independent scientist in child health research. The program is an excellent opportunity to develop the national connections that are needed to succeed in pediatric research. Several clinician-scientists now working at BC Children’s Hospital have received CCHCSP grants.

The program focuses on a variety of clinical disciplines, including medicine, nursing, occupational therapy, physical therapy, social work, and pharmacy. Funding is provided between $50,000 and $70,000 per year for up to three years (for early faculty or post-doc candidates) or four years (for PhD candidates). Candidates must have a clinical degree and be involved in research to a significant degree.

To learn more about the program and the process of applying, contact Pascal Lavioie, the CCHCSP leader for UBC and BC Children’s Hospital, or Jennifer Myers, Manager of Research Education at BC Children’s Hospital Research Institute.

Global Affairs Canada: Small and Medium Organizations

Upcoming call for proposals: Partnerships for Her Voice, Her Choice

Planned month of call launch: March 2018
Eligibility: Canadian
Global Affairs Canada will launch a call for preliminary proposals aimed at Canadian organizations working to increase access and reinforce rights to sexual and reproductive health in developing countries. Further information on the call will be uploaded to their website in the coming weeks.

**Upcoming call for proposals:**

**Innovative Women’s Economic Empowerment in Ghana**

Planned month of call launch: April 2018

Eligibility: Canadian and Ghanaian organizations including private sector entities

Geographic scope: Ghana

Estimated size of projects sought: $5 million to $10 million

Global Affairs Canada will launch a call for preliminary proposals to enhance economic empowerment, well-being and inclusive economic growth for women in Ghana. This call will seek projects that use innovative approaches to address the root causes of gender inequality. Successful projects will contribute to: improving the enabling environment and reduce gender-specific barriers for women’s economic empowerment; enhancing access to decent work for women; and, increasing the productivity, profitability and innovation of women-owned businesses.

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**2018 Health System Impact Fellowship in partnership with Canadian Institute of Health Research (CIHR)**

Application Deadline: April 5, 2018

Michael Smith Foundation for Health Research (MSFHR) is partnering with CIHR’s Institute of Health Services and Policy Research on the 2018 Health System Impact Fellowship Program. The Fellowship provides PhD trainees and post-doctoral fellows studying health services and policy or related fields with a paid experiential learning opportunity outside of the traditional scholarly setting.

For more information, visit the 2018 Health System Impact Fellowship website.

**2018 Implementation Science Team competition**

Development Grant LOI deadline: April 16, 2018, 16:30(PT)

Full application deadline: Mid-Jan, 2019

The new MSFHR Implementation Science Team Program supports teams of BC researchers, research users and senior decision-makers studying what interventions work within the health system and why, and how these interventions can be implemented, adapted to other settings, or scaled-up across regions.

To learn more, visit the Implementation Science Team website.

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Have questions, suggestions, or something to share? Email us at cichinfo@cw.bc.ca so we can include it in our next quarterly eUpdate.