

NGDI-UBC Newsletter December, 2012



Wishing you a safe and happy holiday season! Dr. Kishor Wasan and Jocelyn Conway

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NGDI Member News

Dr. Peter von Dadelszen receives additional \$17 million for Pre-eclampsia research

A project aimed at finding and treating women at risk of succumbing to pre-eclampsia – the often-fatal onset of high blood pressure during pregnancy – will receive an additional \$17 million from the Bill & Melinda Gates Foundation.

Peter von Dadelszen, a professor of obstetrics and gynaecology at the University of British Columbia (UBC) and a clinician-scientist at the Child & Family Research Institute (CFRI) is leading the multi-pronged effort in 11 developing countries, which has previously received \$7.4 million from the Gates Foundation.



This second grant will allow Dr. von Dadelszen's team to conduct much larger trials in four countries – Nigeria, Mozambique, Pakistan and India – involving 130,000 expectant mothers. Although pre-eclampsia is easily treated in hospital, it is the second-leading cause of maternal death because women are not properly diagnosed or not transported to appropriate facilities. <read more>

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Dr. Hongshen Ma is new Grand Challenges Canada Awardee

Dr. Hongshen Ma, Assistant Professor, Department of Mechanical Engineering at UBC will develop a low-cost and portable hematology analyzer as a screening tool for several key global health diseases including parasitic infections (viral, bacterial, fungal, and helminths), micronutrient deficiency (Iron, Vitamin A, and Vitamin B12), and hemoglobinopathies (sickle cell, thalassemia, and G6PD). For video: http://bit.ly/XGM9jR For the full Grand Challenges Canada press release click here.



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NGDI Members at Centre for TB Research Discover Potential New Treatment for Tuberculosis

'Repurposed' anti-parasite drug shows promise as new TB treatment: UBC research

A well-established family of drugs used to treat parasitic diseases is showing surprising potential as a therapy for tuberculosis (TB), according to new research from University of British Columbia microbiologists.

The findings, published online this week in the journal *Antimicrobial* Agents and Chemotherapy, *are based on in vitro tests of the avermectin* family of drugs. Discovered nearly 40 years ago, the drugs are commonly used in the developing world to eliminate the parasitic worms that cause river blindness and elephantiasis but have been thought to be ineffective against bacterial diseases. The UBC study shows that in the lab, the drugs actually killed the bacteria that cause TB, including drug resistant forms.

"These drugs are cheap, routinely produced by pharmaceutical companies, and, in many cases, approved for humans use," says UBC researcher Santiago Ramón-García, a co-author on the paper. "So the jump from lab bench to clinic could be much quicker."

"In addition, the drug concentrations effective in vitro indicate members of this family might be very valuable additions to the small repertoire of drugs we have to fight multi-drug resistant TB, which have very low probabilities of being cured."

The international collaboration was lead by scientists in UBC's Department of Microbiology and Immunology associated with UBC's Centre for Tuberculosis Research and the Neglected Global Diseases Initiative. "This underscores the great

potential for investments in research to find new uses for approved drugs or synergistic drug combinations," says coauthor and UBC microbiologist Charles Thompson.

Further studies are needed to assess the drugs' clinical application for treating TB. UBC researchers are now working with animal models to determine effective dosage levels and regimens. They will also study whether avermectins could be combined with other drugs to create effective therapies. Link to <u>full article</u>.

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New Article provides In-depth Analysis of Wel-Tel's Antiretroviral Adherence Trial

Mia Van Kop and Dr. Richard Lester have just published in PLOS One their in-depth analysis of 2007's successful Kenyan trial. Link to full article.

Read related SciDev Net article, <u>Mobile phone texts can help HIV patients cut viral load</u>. Dr. Lester was also recently spotlighted on GHDOnline.

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SAVE THE DATE: Universities Allied for Essential Medicines Conference January 26th, 2013

The student UAEM Conference will take place on Saturday January 26th, 2013 on the Vancouver campus. More details to follow in early January.

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NGDI News

NGDI Office moves to new Pharmaceutical Sciences building

Kishor Wasan, Director of the NGDI is pleased to announce that the Faculty of Pharmaceutical Sciences will be providing support for the NGDI with in-kind office space and administrative services. From November on the new address of the NGDI-UBC is: #5504 – 2405 Wesbrook Mall, Vancouver, BC V6T 1Z3. Jocelyn Conway's phone number has changed to 604-827-1571, her email stays the same at jocelyn.conway@ubc.ca.

Dr. Wasan and Jocelyn would like to acknowledge and thank Angus Livingstone and the University-Industry Liaison Office for the 2.5 years of in-kind support provided for office space and administrative services. Jocelyn enjoyed her time there and also thanks the UILO staff for their support and friendship, especially Lynda McCubbin, Sarah Mouratidis, Dara Tabareh and Jamie Hall. The NGDI is highlighted in the UILO Annual Report here. [top]

New UBC Global Health Website - www.globalhealth.ubc.ca is Up and Running

UBC now has an internet hub for global health that highlights 5 main pillars: clinical, interdisciplinary, public health, basic sciences and social sciences. Dr. Charles Larson and Katherine Came of the School for Population and Public Health have spearheaded this project. The website is in its infancy and you can provide comments and supply content by emailing Katherine.came@ubc.ca.

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NGDI Distinguished Lectureship Seminar with Dr. Clive Ondari of WHO

On November 2nd, 2012, Dr. Clive Ondari visited the Faculty of Pharmaceutical Sciences at UBC and spoke as part of the Distinguished Lectureship Series with the Neglected Global Diseases Initiative. Clive Ondari, PhD, MBA, BSc, is the Coordinator, Medicine Access and Rational Use (MAR), Essential Medicines and Pharmaceutical Policies (EMP) at the

World Health Organization. Dr. Ondari has been with the WHO since 1999, and was previously Associate Professor and Head of Pharmaceutics and Pharmacy Practice at the University of Nairobi.



Dr. Ondari's talk provided attendees with an overview of the obstacles to "access" to essential medicines in lower- and lower-middle income counties (LMICs). He began by taking us through the Framework for Coordinated Action which the Department of Essential Medicines at the WHO utilize in their work on barriers to access. The framework is comprised of four areas of focus, including: rational selection, sustainable financing, affordable prices, and reliable health and supply systems. All of these areas must be attended to in order for access to be achieved. <read more>

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NGDI Intern Positions: Two position available starting January, 2013.

The NGDI is working on a project called "The Neglected Diseases Database" (NDD). The NDD is an open-source, interdisciplinary library database that will create a much needed research-hub for the multi-disciplinary academic community who work in neglected diseases. This project requires a Database Research intern position over the spring semester. The student will have the opportunity to develop familiarity with the behind-the-scenes research that occurs in the construction of a large-scale database. The student will work as a computer programmer in a team of library science specialists (with programming experience) and neglected disease researchers. The student will use research skills to help survey and record language patterns in use in neglected global diseases research. This work will help to determine the phrasing of our index categories. The student will be encouraged to contribute to the interface design, visualization tools and strategic indexing to help facilitate knowledge translation in an important research area.

The NGDI office requires a Data Management intern over the spring semester. The student will have the opportunity to develop familiarity with data management and neglected diseases literatures. This may be of personal interest or of use for those preparing applications for the health industry, graduate school or medical school. The student may also be trained to interact with qualitative data analysis software in order to learn to manage a large volume of the latest research on neglected diseases in the organization's personal computer library.

For more information on these positions please email Raquel Baldwinson at rbaldwinson@gmail.com. Or you can apply for the positions through the student Career Services Online.

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Funding Opportunities

Stars in Global Health: Round 5

Grand Challenges Canada announces *Stars in Global Health* Phase I Request for Proposals. This unique program enables innovators in low- and lower-middle-income countries and the Canadian International Development Agencies (CIDA) 'Countries of Focus' as well as in Canada, to develop their **bold ideas with big impact** to improve global health conditions.



Awards are initially valued at \$100,000 CAD for up to 12-18 months to demonstrate proof-of-concept of the idea.

Phase I grantees who complete their proof-of-concept projects and have solutions that are ready to transition to scale will be invited to submit Phase II Transition to Scale proposals which will require 50% matching through partnerships.

Deadline for Stars in Global Health Phase I proposals: February 6, 2012 3:00 p.m. ET.

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"2012/13 Program on Research and Innovation Leading to Rapid Detection of Pathogenic E. coli"

Proposals invited for a smarter, cheaper, faster way of detecting pathogenic E. coli

A consortium of Canadian research organizations has combined efforts to fund development of an innovative test for the presence of pathogenic E. coli bacteria during food production. This funding program aims to foster continuous improvement in the safety of the Canadian food supply and create long-term health benefits for Canada.

This funding program has been introduced by Alberta Innovates Bio Solutions, Alberta Genome on behalf of Alberta Livestock and Meat Agency, Genome Canada and Ontario Ministry of Agriculture, Food and Rural Affairs. More than \$1 million is available over 18 months for one or two projects to develop a genomic based detection methodology that is rapid, sensitive, affordable, and field-deployable.

Researchers or a team of researchers within private industry, academic institutions, provincial research centres, federal research centres or non-profit research establishments are invited to submit a letter of intent (LOI) to the program as the first step in the application process for a non-repayable research grant. Applications should have a strong connection to Canada. The deadline for submission of a letter of intent (LOI) is **January 14, 2013,** 2:00 p.m. MST.

A workshop is being conducted in the second week of December, 2012 that will include information regarding the topics of this call. Pre-registration is required by November 29th to Heather Smith at Genome Alberta, HSmith@genomealberta.ca.

A news release, the Letter of Intent form, and the Program Guidelines are available at www.genomealberta.ca.

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BCIC-Mitacs Commercialization Voucher Program

The voucher program is a key component of the <u>BC Technology Strategy</u> – announced in July 2012, and was created to demonstrate the value of collaboration between industry and post-secondary institutions, and to develop and retain B.C. talent. Under the program, graduate students can apply for a \$15,000 commercialization voucher to undertake opportunity assessments of new products or services or new market opportunities for existing products or services at established B.C. companies.

Companies eligible for the voucher program will benefit from vital information on the commercialization potential of their technology or business concept, allowing them to make an informed decision whether or not to pursue the opportunity.

In this pilot phase of the voucher program, all applications must be received by **March 15, 2013**, although companies are encouraged to submit their application as soon as possible. Full program guidelines including program structure, eligibility and funding details of the BCIC-Mitacs Commercialization Voucher Program can be found at: www.bcic.ca/voucher or www.mitacs.ca/commercialization-voucher-program

Learn More: www.bcic.ca www.mitacs.ca

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Saving Brains – Scaling Impact: Request for Proposals

The Grand Challenges Canada *Saving Brains* initiative promotes the fulfillment of human capital potential by focusing on interventions that nurture and protect early brain development in the first 1,000 days of life. This is the third call for proposals issued under the Grand Challenges Canada *Saving Brains* program.

Grand Challenges Canada is seeking **bold ideas with big impact** for products, services, policies and implementation models that protect and nurture early childhood brain development in a sustainable manner.

Our focus is on low- and lower-middle-income countries and Canadian International Development Agency (CIDA) Countries of Focus. Specifically, proposals must provide innovative solutions relevant to low-resource settings.

The total funding available to support this competition is up to \$10 million CAD. We expect to fund proposals through two funding streams: seed grants (up to \$250,000 CAD) and transition-to-scale grants (up to \$2 million CAD).

Deadline for Proposals is February 11, 2013 at 11:59 ET

For more information about the *Saving Brains - Scaling Impact* Request for Proposals and eligibility criteria, please click HERE.

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Directory of International Grants and Fellowships in the Health Sciences

This directory of Non-NIH Funding Opportunities includes a variety of international grants and fellowships in biomedical and behavioral research. Its goal is to provide information about additional funding opportunities available to those in the field of global health research. The directory is maintained by the **Fogarty International Center**, the international component of the U.S. National Institutes of Health (NIH).

Funding Opportunities for:

Predoctoral/Graduate Students http://1.usa.gov/Un6FOI

Postdoctoral Students http://1.usa.gov/TCc9Xw

Faculty http://1.usa.gov/ZoDlgl

Health Professionals http://1.usa.gov/Sl1r5H

Institutions - http://1.usa.gov/QEPAUQ

Travel - http://1.usa.gov/STHhRb

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Call for Papers

New Journal: Evolution, Medicine, and Public Health

http://www.oxfordjournals.org/our journals/emph/call for papers 2012.html

Evolution, Medicine, and Public Health is a new open access journal that publishes original, rigorous applications of evolutionary thought to issues in medicine and public health. The journal aims to connect evolutionary biology with the health sciences to produce insights that may reduce suffering and save lives.

Click here to read Editor-in-Chief Stephen Stearns' first editorial, setting out the vision for the journal.

Journal Topics: The journal will publish papers on range of topics, including but by no means limited to:

- The origin, maintenance and medical significance of human genetic variation
- Mismatches to modernity, with implications for autoimmune disease, diabetes, obesity and cancer
- Special features of human reproductive biology, including menopause
- Broader features of mammalian reproductive biology, including evolutionary conflicts of interest between parents, between parents and offspring, and among offspring, with implications for some of the diseases of pregnancy
- The evolution of aging and how it explains our susceptibility to degenerative disease
- Cancer as a somatic evolutionary process in which both resistance to chemotherapy and metastasis result from natural selection operating on clonal genetic variation

- Pathogen evolution—especially virulence, drug resistance, and evasion and suppression of the immune system
- The evolution of host tolerance of vs. resistance to pathogens
- Pathogen evolution to emerge as agents of new diseases
- The evolution of vectors that transmit disease
- Insights from comparisons with other species
- Ideas on how best to teach evolution in medical curricula

Have you authored a high quality, interesting research paper that will be accessible across a broad spectrum of biological and medical disciplines?

If you have, then we want to hear from you.

The benefits of submitting

Submit your paper to Evolution, Medicine and Public Health and benefit from:

- Fast first decision within 28 days of submission
- Your paper being published within a few days of acceptance online in 'Advance Access'
- No open access fees for the launch period
- Your published paper being compliant with funding agencies such as the Wellcome Trust and the Howard Hughes Medical Institute (HHMI)
- Your published paper being automatically deposited in the open access repository PubMedCentral

Read our instructions to authors and submit your paper online here.

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PLOS NTDs 5th Anniversary Call for Papers

As part of the journal's ongoing <u>fifth-anniversary celebration</u>, <u>PLOS Neglected Tropical Diseases</u> would like to acknowledge and pay tribute to the pioneering work of key members and institutions in the NTDs research community with a call for papers to a "Historical Profiles and Perspectives" series.

Over the past five years, the NTDs field has undergone many changes and seen many exciting developments. However, with millions still at risk of becoming infected with NTDs, much work remains to be done. Through this series we hope to draw attention to the work of major figures and institutions in the field with the goal of identifying key lessons that can be used to inform future research and control programs.

The call for papers will be open from now through Aug. 31. "Historical Profile and Perspectives" manuscripts submitted as part of this series will be published throughout 2013. Submissions should spotlight individual researchers or institutions who have contributed significantly to progress within the field, focusing on major accomplishments, the challenges encountered, and lessons learned.

For more information, see our call for papers webpage. To submit an article, go to http://editorialmanger.com/pntd.

Here are a few Historical Profiles and Perspectives that we've published in the past:

- <u>From Tucson to Genomics and Transgenics: The Vector Biology Network and the Emergence of Modern Vector Biology</u>
- The Stigmatization of Leprosy in India and Its Impact on Future Approaches to Elimination and Control
- Yaws: A Second (and Maybe Last?) Chance for Eradication

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Upcoming Conference

International Workshop on Multi-drug Resistant Tuberculosis (MDRTB) 2013 14-18 January, 2013.

The 2013 Workshop promises to be a high-level event, featuring a cutting edge agenda, and some of world's top researchers and policy makers in the field of tuberculosis action and research. Among the 50 Confirmed speakers include: Clifton Barry, Barbara Laughon and Ministers for Heath from China etc. It will also provide a forum to explore issues, exchange ideas and identify gaps in knowledge and action required to tackle the pressing global challenge of drug resistant tuberculosis. Additional speakers will be selected from submitted abstracts.

The 2013 Workshop will comprise two complementary fora:

Two Forums

- 1) China-US NIAID TB Drug Discovery Forum: exploring Opportunities for Research Collaboration Joint Conference—IMCAS and NIAID/NIH (January 14-15, 2013)
- 2) The Global Crisis of Drug-Resistant Tuberculosis and the Leadership of the BRICS Countries: Challenges and Opportunities —IOM and IMCAS (January 16-18, 2013).

Four conference Mini-symposia:

- Target Identification and Drug Discovery
- Epidemiology, Diagnosis and Therapy
- Special Considerations and Challenges for pre-XDR and XDR TB
- Political, Fiscal Challenges and Health Care Systems

We warmly welcome scientists, academics, physicians, member of biopharmaceutical industry, technology and R&D developers, non-governmental organizations, patient advocates, government representatives and policy experts to participate in the workshop. We believe that your coordinated contribution to this field is unparalleled and a workshop on this topic will be of great benefit.

Beijing is a city steeped in history and buzzing with culture. We wish you all an enjoyable time in the capital city of China and at the 2013 Workshop. We recommend that you register early for the conference. For more information, please follow the link: www.mdrtb.org

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Reports of Interest

Neglected Disease Research and Development: A Five Year Review



G-FINDER has released a new report on neglected disease research and development: <u>Link</u> to full report

SciDev Net [LONDON] Global efforts to reform product development for neglected diseases are failing, a launch of a five-year review of funding of research and development for these diseases, heard today.

The report shows that overall funding has stagnated since 2007, at a time when increases are needed, the launch heard. In addition, a recent trend of higher industry funding for commercially viable diseases may lead to a two-tier, two-speed system, in which products

for some diseases get left behind, according to Mary Moran, director of the Policy Cures think-tank and the report's lead author.

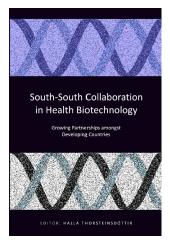
She presented findings showing that, while up to 70 per cent of global R&D funding for 'semi-commercial' diseases such as dengue and <u>tuberculosis</u> goes towards product development, only 45 per cent of such funding for diseases reliant on public funding goes on product development. <<u>read more</u>>

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South-South Collaboration in Health Biotechnology: Growing Partnerships amongst Developing Countries

Editor: Halla Thorsteinsdottir

International Development Research Centre IDRC - 2012



Available online PDF [296p.] at: http://bit.ly/TCei6Y

".....This book presents a detailed portrait of the contours of South-South collaboration in the health biotechnology sector. In particular, it casts revealing light on the factors that guide effective scientific partnerships and exchanges. The authors explore these issues by combining a wide range of quantitative and qualitative methodologies, including copublications analyses, in-depth surveys of biotechnology firms and interviews with around 350 researchers, entrepreneurs and policy-makers in developing countries.

The key findings indicate that the level of South-South collaboration among researchers in health biotechnology remains low but is slowly increasing and that entrepreneurial collaboration seems to be more prevalent. Collaboration has helped to extend capacity in health biotechnology research, manufacturing and innovation to an increasing number of developing countries and thereby lessened the divide between them. Such collaboration

has strongly focused on shared health needs and has helped to increase the availability of more affordable health products and services.

Governments and non-governmental organizations (NGOs) have also been able to foster closer ties between researchers by establishing programmes and extending funding for collaboration. Nevertheless there is still a lack of dedicated resources...."

Content:

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- 1.1 History of South-South collaboration
- 1.2 Drivers of South-South collaboration
- 1.3 Increased emphasis on South-South scientific and technological collaboration
- 1.4 Potential factors and conditions shaping South-South health biotechnology collaboration
- 1.5 Study on South-South health
- 2. South-South Research Collaboration in Health Biotechnology
- Mapping South-South Entrepreneurial Collaboration in Health Biotechnology
- 4. Setting a Southern Course: Brazil's South-South Collaboration in Health Biotechnology
- 5. Beyond the Great Wall: China's South-South Collaborations in Health Biotechnology
- 6. Learning through Collaborations: Egypt's South-South Health Biotechnology Collaboration
- 7. A Growing Southern Agenda: India's South-South Health Biotechnology Collaboration
- 8. Promoting an African Renaissance? South Africa's Health Biotechnology Collaboration with Sub-Saharan African Countries
- 9. Paving the Silk Road: Sub-Saharan Africa's South-South Collaboration with China and India in Health Biotechnology
- 10. Promoting South-South Collaboration Revisited