ISPM News Archive 2011

15.11.2011 13:24

Secretariat of IEA moves to ISPM

Matthias Egger has been elected the new Secretary of the International Epidemiological Association (IEA)

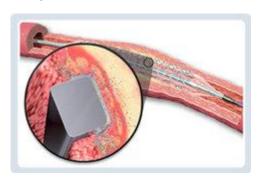


The director of ISPM, Matthias Egger has been elected the new Secretary of the International Epidemiological Association (IEA) for the term of 2011-2014 and the office of the Secretariat has been moved to ISPM. The IEA is led by Cesar Victora, a renowned Brazilian epidemiologist and has more than 2000 members in over 100 different countries. The aim is to facilitate communication amongst those engaged in research and teaching of epidemiology throughout the world, and to encourage its use in all fields of health including social, community and preventive medicine. Among other tasks, the Secretary is responsible for conducting operations related to membership, holding elections, overseeing the organization of the World Congress of Epidemiology, and producing a variety of written documents for the IEA including the Newsletter and Triennial Report. Matthias Egger looks forward to expanding the organization's membership, augmenting its reputation, and implementing a new web site to better serve the IEA. He will be supported by Kali Tal, a social scientist, independent scholar and freelance writer based in Bern.

Link: www.ieaweb.org

Trial on the long-term safety and effectiveness of novel drug-eluting stents published

Paper by ISPM and CTU Bern on the safety and effectiveness of a novel drug-eluting stent published today in The Lancet.



The 4 year results of LEADERS were published today in The Lancet, simultaneously with a talk given at TCT 2011 in San Francisco. The article by Bindu Kalesan, Giulio Stefanini, Dik Heg, Stephan Windecker, Peter Jüni and colleagues from 10 European sites, describes a randomised controlled multi-centric non-inferiority trial in 1700 patients with chronic stable coronary artery disease or acute coronary syndromes comparing a novel drug-eluting stent using a biodegradable polymer with one of the most effective drug-eluting stents to date, which uses a non-degradable polymer.

Use of drug-eluting stents with controlled release of anti-proliferative drugs from durable polymer surface coatings reduce the risk of restenosis compared with use of bare metal stents. However, early generation, durable polymer drug-eluting stents were associated with an increased risk of very late stent thrombosis that occur one year or later after stent implantation. The persistence of polymer material on the stent surface after completion of drug release was suggested as a potential trigger for a chronic inflammatory response that leads to very late stent thrombosis. The biodegradable polymer of the novel stent completely disintegrates into water and carbon dioxide after 6 to 9 months, once the drug is released. This should in turn reduce the risk of very late stent thrombosis.

The 4 year follow-up of LEADERS indicates that the novel stent with a biodegradable polymer is not only non-inferior, but appears to improve long-term clinical outcomes compared with the conventional drug-eluting stent with a non-degradable polymer. During the first year, clinical outcomes were comparable. After one year, however, the risk of very late stent thrombosis in patients who had received the novel stent was reduced by 80%.

Link to publication

Swiss Epidemiology Winter School: only few places left

The three courses of the Winter School 2012 are almost fully booked.



The concept of the winter school resembles that of the well-known epidemiology summer schools but takes place during the week following the International Lauberhorn ski race in January, when Wengen is calm, with few people on the slopes. Students stay on site and work hard in the morning. They then have an extended break to review course materials, catch up on emails or (more likely) to go skiing. We reconvene at 5 pm for computer sessions, group work or lectures. The winter school is supported by the Swiss School of Public Health.

Three courses are on offer:

- Advanced survival analysis for cohort studies
 (Co-ordinator: Prof. Jonathan Sterne, University of Bristol, January 15-20)
- Indirect comparisons and network meta-analysis: Evidence synthesis with multiple treatments (Co-ordinator: **Dr. Julian Higgins**, University of Cambridge, January 16-19)
- Writing a journal article and getting it published
 (Co-ordinator: Prof. Nicola Low, University of Bern, January 18-20)

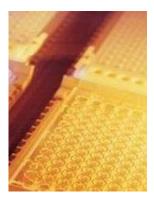
See flyers and website for further information or go directly to registration to book your place: Course Registration

- Website Swiss Epidemiology Winter School
- Flyer survival analysis
- Flyer network meta-analysis
- Flyer journal article
- Website Swiss School of Public Health

Picture credit: www.mywengen.ch

New guidelines for reporting epidemiological studies that involve molecular markers

New recommendations which provide a checklist for the accurate and ethical reporting of studies involving molecular markers have been proposed by a group of international researchers, including researchers from ISPM.



The new recommendations are an extension of the STROBE guidelines for the reporting of the STrengthening the Reporting of OBservational studies in Epidemiology (STROBE). The Molecular Epidemiology recommendations (STROBE-ME) were recently published in seven journals: *PLoS Medicine, European Journal of Clinical Investigation, Journal of Clinical Epidemiology, Preventive Medicine, Mutagenesis, Journal of Epidemiology* and *Community Health, European Journal of Epidemiology*. They will also be published on the STROBE website where a forum for discussion will be available.

The researchers hope that STROBE-ME will help to uphold researchers' ethical duties and responsibilities, such as accurately, completely, and transparently reporting findings in sufficient detail to allow the scientific community to assess their strengths and weaknesses, make fair comparisons, and clearly interpret the findings.

Links:

- STROBE website
- Article in Plos Medicine

Picture credit: ACS Biomarkers

Robert Wenner Prize awarded to ISPM researcher

Julia Bohlius was awarded the Robert Wenner Prize 2012 for her ground breaking work on the place of erythropoiesis stimulating agents in cancer.



The Robert Wenner Prize of 100'000 CHF is awarded by the Swiss Cancer League to young researchers in recognition of their outstanding achievements. The prize was established by gynecologist Robert Wenner (1909–1979), an influential figure in the cancer league movement in Switzerland.

Julia Bohlius heads the cancer research group at ISPM. Her research interests are at the interface of oncology, epidemiology and public health. She received the prize for her ground breaking work on the effect of erythropoiesis stimulating agents (for example erythropoietin or EPO) in cancer patients. These agents increase hemoglobin levels in anemic tumour patients, however, as Bohlius conclusively demonstrated in a large individual-patient data meta-analysis published in the The Lancet in 2009, they also increase mortality. "My ambition is to do research that is directly relevant to patients' lives and public health", Bohlius said. In his laudation at the award ceremony, Matthias Egger, the director of ISPM, described Dr Bohlius as "bloody sharp, with lots of empathy and stamina".

Links:

- uniaktuell/robert_wenner_preis
- Krebsliga.ch/medienmitteilung

New Associate Professor of Paediatric Epidemiology

On 1st September, 2011, Claudia Kuehni was promoted to Associate Professor of Paediatric Epidemiology by the Medical Faculty of the University of Bern.

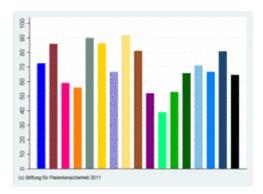


Claudia Kuehni studied medicine at the University of Bern and Zurich and completed an MSc in Epidemiology at the London School of Hygiene and Tropical Medicine (1998). She worked as registrar in Delémont, Biel, St. Gallen and Bern and became a board-certified pediatrician in 1998. Between 1997 and 1998 she was an Honorary Clinical Research Fellow at the Dept. of Child Health, University of Leicester, UK. and has been an Honorary Visiting Fellow since 1999. From 2001 to 2002 she was a senior lecturer at ISPM Basel. Since 2002 she has held the same position at ISPM Bern. In 2008 she received the Venia docendi (Habilitation) and in 2009 she was appointed Head of Division of International and Environmental Health at ISPM Bern.

Her research focus is in pediatric pulmonary disorders and childhood cancer. She is leading the <u>Leicestershire cohort studies</u> together with Prof. Mike Silverman, with a focus on childhood asthma and wheezing disorders. She also heads the Swiss <u>Childhood Cancer Registry</u>, with a focus on long-term outcomes of children with cancer.

Threats to patient safety in the primary care office - First data from Switzerland

David Schwappach from the ISPM Bern and the Swiss Patient Safety Foundation conducted a study among Swiss primary care offices to assess safety threats in the medical office. This study is the first to report safety data for outpatient care in Switzerland.



Research on patient safety and medical errors has traditionally focused on in-patient care. While the majority of patients are treated in an outpatient setting, little is known about the frequency and nature of safety events in primary care. David Schwappach from the ISPM Bern and the Swiss Patient Safety Foundation conducted a study among Swiss primary care offices to assess safety threats in the medical office. This study is the first to report safety data for outpatient care in Switzerland. 603 doctors and medical practice assistants working in primary care participated in the study and responded to a standardized survey. They reported about the frequency of and harm associated with specific safety events ('hot-spots', such as diagnostic errors, drug interactions, etc.). Responders were also asked to name and rank three threats to patients safety they personally were most concerned about. Finally, safety climate in the offices was assessed. Quantitative and qualitative data methods are used to analyze results.

Doctors and medical practice assistants recognize diverse threats to patient safety in primary care. Involving both occupational groups in detection and analysis of risks in medical offices is valuable to improve collaboration and safety.

The study was awarded the "Förderpreis Managed Care 2011" by the Forum Managed Care. Results are currently being published. A first overview is presented here: http://www.saez.ch/pdf_d/2011/2011-39/2011-39-697.PDF.

ISPM to evaluate integrated geriatric care

The division of Social and Behavioral Health research will evaluate a large project of integrated geriatric health care in the Canton of Bern.



The Evaluation Support Unit (ESU), headed by Heinz Bolliger-Salzmann, is responsible for the evaluation of a major project of geriatric health care in the Canton of Bern. Initiated and funded by the Gesundheits- und Fürsorgedirektion (GEF) of the Canton of Bern, the integrated geriatric health care project aims to facilitate the process of geriatric care, for example by preventing interruptions in care or suboptimal interventions. Data will be collected from two cantonal hospitals: in the intervention hospital integrated geriatric care will be implemented whereas the other will serve as the control. The intervention includes teams of different health professionals and informal care givers, which make sure that the patient's needs are properly assessed. Personal coaches will facilitate the management during hospital stays and assist the patients with the organization of care during the first 6 months after discharge. The ISPM will be responsible for the scientific evaluation of this pilot project. Over nearly 2 years data will be collected by care givers and coaches. Additional data will be collected from routine databases, qualitative expert interviews, focusgroups and in-depth interviews with patients and their relatives.

Photo credit

Two new SNF Ambizione awards

Julia Bohlius (Ambizione-PROSPER) and Christian Althaus (Ambizione) have won Swiss National Science Foundation (SNF) awards to conduct, manage and lead their own independent research projects at ISPM.



<u>Dr. Julia Bohlius</u> will investigate "AIDS-defining and non AIDS-defining cancers in patients starting ART in Southern Africa: cohort and linkage studies". She will use epidemiological methods to study the incidence and risk, survival and prognostic factors for AIDS-defining and non AIDS-defining cancers in people infected with HIV. The project is based on the International epidemiologic Databases to Evaluate AIDS (IeDEA) initiative. The planned research will contribute to the aims of the World Health Organization (WHO) and other national and international agencies to improve cancer care in low and middle income countries.

<u>Dr. Christian Althaus</u> will investigate "Acute and chronic dynamics of HIV and hepatitis C infections, within-host evolution and epidemiological outcomes". He will use mathematical models to analyse and interpret clinical data from patients infected with HIV and hepatitis C virus (HCV), in collaboration with researchers from the Swiss HIV Cohort Study, USA and Australia. This project will lead to a better understanding of the impact of the cellular immune response on these chronic viral infections. Ultimately, this research will contribute to efforts to design better vaccine candidates for HIV and HCV.

Sereina Herzog wins SSPH+ Award 2011

The Swiss School of Public Healthplus (SSPH+) announced that ISPM PhD student Sereina Herzog is the winner of the SSPH+ Award 2011 for the best published PhD article in public health.



Sereina Herzog's article on Heterogeneity in vaccination coverage explains the size and occurrence of measles epidemics in German surveillance data was published 2011 in the journal Epidemiology and Infection. The research was done under the supervision of Prof. Leonhard Held at the University of Zurich. Sereina's PhD is part of the Epidemiology and Mathematical Modelling for Infectious disease Control (EPideMMIC) project.

The SSPH+ Award for the best published PhD article in public health is annually assigned to the best published PhD article of students registered with the SSPH+ Program Public Health or with the SSPH+ International Doctoral Courses in Health Economics and Policy.

See abstract and full article here.

See Sereina Herzog's CV here.

ISPM seminars 2011/2012

The 2011/2012 seminar programme, which has been released this week, includes 12 talks by speakers from Switzerland, Canada, the United States, Italy, and France.



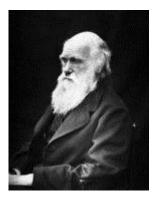
The first seminar will be given by Louise Potvin from University of Montreal on the controversy of randomised trials to evaluate population health interventions. Other speakers include David Cohen on how to distinguish between expensive toys and cost-effective therapies, Pietro Vernazza on the promise of antiretroviral therapy for HIV prevention, Philippe Ravaud on problems of network meta-analyses and David Felson on the frustration with non-surgical treatments in osteoarthritis. The Christmas Seminar in December will be given by Hansjörg Znoj on "The psychology of the motorbike". The series will be completed in July 2012 by Gordon Guyatt, who originally coined the term "Evidence-Based Medicine" in 1990. Please check out the programme (PDF, 20KB) and come along.

For more information click **here**.

Photo credit: www.nsg-berlin.de

Symposium on evolutionary medicine at the annual HBES conference

Nicole Bender from the ISPM Bern organized and chaired a symposium on evolutionary medicine at the annual congress of the Human Behavior and Evolution Society in Montpellier, France, 29.06.2011 - 03.07.2011.



In this symposium, seven talks on challenges and new directions of the upcoming field of evolutionary medicine were presented and discussed with leading experts. A broad range of topics was covered, like reproductive ecology and female health, adaptive constraints of the human lung, parent-of-origin effects on empathy and longevity. The new Center for Evolutionary Medicine of Zürich was presented, as well as new approaches connecting veterinary medicine to human medicine. Please see the links below for a description of the HBES congress and for abstracts of the symposium on evolutionary medicine.

Links:

- 23rd Annual conference, Montpellier
- The Evolution & Medecine Review

Picture:

Charles Darwin (1809-1882) in seinen neueren Jahren. Foto durch J. Cameron, 1869 (<u>Change by Evolution</u>, <u>Charles Darwin-Jahr 2009</u>).

Childhood cancer in the vicinity of nuclear power plants

A large nationwide longitudinal study found no evidence of an increased risk of cancer in children born near nuclear power plants in Switzerland. The CANUPIS study was performed by ISPM in collaboration with the Swiss Childhood Cancer Registry and the Swiss Paediatric Oncology Group.



A case-control study from Germany published in December 2007 showed that the risk of leukaemia in small children living within 5 km of a nuclear power plant was more than double that of children living further away. These findings caused anxiety in the Swiss population and were the subject of a debate in parliament. As a result, the Federal Office of Public Health (FOPH) and the Swiss Cancer League asked the Institute of Social and Preventive Medicine (ISPM) at the University of Bern to perform a comparable study in Switzerland. The CANUPIS study (Childhood Cancer and Nuclear Power Plants in Switzerland, see www.canupis.ch) was conducted from September 2008 to December 2010. The results are published today in the «International Journal of Epidemiology».

In this study, the ISPM investigators compared the risk of leukaemia and other cancers in children born close to nuclear power plants with the risk in children born further away. The study included all children born in Switzerland since 1985: over 1.3 million children aged 0 to 15 years who were followed during the years 1985 to 2009 (over 21 million person-years of observation). Switzerland was divided into four zones: zone I included the area 0 to 5 km from the nearest nuclear power plant; zone II 5 to 10 km; zone III 10 to 15 km and zone IV the rest of the country beyond 15 km. The risk of childhood cancer was calculated for each zone. The numbers of cancer cases in zones I-III were then compared to the numbers expected based on the risk in zone IV (the reference group).

A statistically significant increase or reduction in the risk of childhood cancer was not observed in any of the analyses. «The risk of childhood cancer in the vicinity of Swiss nuclear power plants is similar to that observed in children living further afield,» says Matthias Egger, director of ISPM. He stresses that the slight deviations from the expected risk in the vicinity of nuclear power plants is most likely due to the play of chance.

The full publication of this study is:

Spycher BD, Feller M, Zwahlen M, Röösli M, von der Weid NX, Hengartner H, Egger M, Kuehni CE. Childhood cancer and nuclear power plants in Switzerland: A census based cohort study. International Journal of Epidemioloy 2011 doi:10.1093/ije/DYR115

Autoren: MZwahlen, MEgger, CKuehni

Links:

- Pressemitteilung auf der Canupis Homepage
- The paper can be downloaded from Oxford Journal as html version and pdf
- CANUPIS Homepage, press release

- Communiqué de presse
- Comunicato stampa

Major HIV/Aids project in Southern Africa extended

ISPM's bid, together with the School of Public Health at University of Cape Town for continued funding of the International epidemiological Databases to Evaluate AIDS in Southern Africa (IeDEA-SA) was successful.



The project is funded by the National Institute of Allergy and Infectious Disease (NIAID), the National Cancer Institute (NCI) and the National Institute of Child Health & Human Development (NICHD). The extension will run from July 2011 to June 2016. IeDEA-SA is a large network of programmes and clinics that treat HIV-infected patients with potent antiretroviral therapy (ART) in South Africa, Lesotho, Botswana, Zimbabwe, Zambia, Mozambique and Malawi, with the following aims:

- 1. To continue to provide the best available data related to the delivery of ART in children, adolescents and adults in Southern Africa, with a focus on long-term program effectiveness and outcomes.
- 2. To describe the long-term and temporal trends in regimen durability and tolerability and examine monitoring strategies.
- 3. To describe important co-morbidities and co-infections of HIV infection, with a focus on tuberculosis and cancer.
- 4. To explore the interface between ART and pregnancy, focusing on pregnant women on ART and cohorts of exposed infants.

These aims were developed collaboratively in a meeting in Mozambique in September 2010 and reflect the research priorities in the context of scale-up of ART in the region.

Links:

- IeDEA Southern Africa
- University of Bern, Institute of Social and Preventive Medicine
- University of Capetown, School of Public Health and Family Medicine

Screening for syphilis in pregnancy saves lives

Low cost prenatal syphilis screening interventions could prevent half of newborn deaths and stillbirths related to the disease. The Lancet Infectious Diseases article comes from the University of Bern, University College London and WHO. The systematic review and meta-analysis included 10 studies with more than 41,000 women. Syphilis in pregnancy is responsible for nearly 500,000 foetal and perinatal deaths every year.



This is the first study to quantify the levels of benefit that could be achieved by screening for syphilis in pregnancy, when single interventions are combined and delivered as a comprehensive programme. The review adds to the observational evidence of the benefits of single interventions such as penicillin for the treatment of diagnosed syphilis in pregnancy and of the diagnostic efficacy of rapid point-of-care tests and same day treatment.

The World Health Organization (WHO) has been advocating and supporting countries to eliminate congenital syphilis by strengthening access to universal screening for syphilis in all pregnant women and providing adequate treatment if positive (http://www.who.int/reproductivehealth/topics/rtis/syphilis/en/). In addition, a global effort led by WHO is aiming to strengthen the dual elimination of mother-to-child-transmission of HIV and syphilis in the context of antenatal care services.

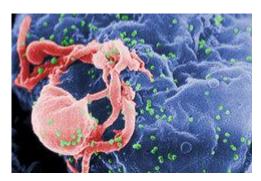
Links to the journal website and media coverage:

- The Lancet
- Reuters
- BBC News
- Effectiveness of interventions to improve screening for antenatal syphilis: a systematic review and meta-analysis - Link to the <u>protocol</u>

Picture link: http://www.solidarietainrete.org/?p=3385#more-3385

Swiss Meeting for Infectious Disease Dynamics 2011

The Swiss Meeting for Infectious Disease Dynamics" (SMIDDY) will take place Wednesday, 24th of August 2011, in Basel.



The one-day meeting focuses on the field of mathematical, computational and statistical modeling of infectious disease dynamics. Topics include within-host and between-host dynamics of infectious diseases in both humans and animals. The aim of the meeting is to bring together researchers from different fields within Switzerland, ranging from fundamental research to public health policy making. Several research groups will have the opportunity to present their work in a dedicated forum, learn about other projects and foster future collaborations.

There is no registration fee. Abstracts can be submitted until June 30 and registration is open until August 20.

More information can be found on www.smiddy.ch

MADE: new Master in Advanced Epidemiology

European Universities have joined forces to meet the need to integrate clinical and genetic epidemiology in medical research and training. The results – the MADE Master programme – is intended to ensure that Advanced Epidemiology rapidly becomes reality.



Most medical schools have not yet incorporated genetic or genomic courses into their curricula. Healthcare workers and medical scientists are largely unprepared for the coming revolution in medicine. Society needs physicians and medical scientists who can incorporate the latest developments in genetics into medical decision-making, and who can assess complex predictive evidence and risk-estimates. Under the leadership of Erasmus University, Rotterdam, an new Master programme in Advanced Epidemiology (MADE) aims to address this gap.

MADE offers several advantages over the existing epidemiology Master's programmes offered by individual medical schools. First, by combining clinical and genetic epidemiology within a single innovative programme, it enables graduates with a previous Master degree to study and conduct research at as many as four top European institutes, among them ISPM, University of Bern.

The 2011-12 programme starts on August 15, 2011, in conjunction with the Erasmus Summer Programme 2011. Applicants must hold a master's degree in medicine, biology, biochemistry, pharmacy, nutrition, health sciences or allied sciences. Online applications for the 2011-12 programme must be submitted by March 31, 2011.

More information: www.madeineur.eu

Contact: made-masters[at]erasmusmc.nl

ISPM participates in PanCareSurFup

Researchers from the ISPM (PD Dr. med. Claudia Kuehni, Dr. phil. Gisela Michel) are participating in an international collaborative project funded by the 7th Framework Programme. The aim is to build a European cohort of childhood cancer survivors, to study late outcomes and to provide guidelines for follow-up.



Childhood cancer survivors, though being 'cured' of cancer, often experience late physical and psychological effects secondary to their cancer or its treatment. To accelerate the search for new successful treatments and improve the quality of life after cancer, 16 research institutes from 11 European countries have decided to join forces and launch a groundbreaking study funded by the EU.

The ISPM Bern is one of the participants in the The PanCareSurFup project ('Pancare childhood and adolescent cancer survivor care and follow-up studies'). This project has received almost 6 million EUR under the Health Theme of the EU's Seventh Framework Programme (FP7) and will be running from February 2011 to January 2016. The kick-off meeting was on 2-3 February in Lund, Sweden.

PanCareSurFup will, through cooperation with existing registries and databases, collect data on the risks of complications of cancer treatments to create a retrospective European cohort. Using this cohort research will centre on cardiac toxicity, second cancers and late mortality, with service projects based on a study of models of follow-up and transition to adult care. PanCareSurFup will describe risks of complications of treatment received. Risk prediction and guidelines for care and education will be based on this research and existing evidence, and will be tailored for each country. The expected benefit is to provide every European childhood cancer survivor with better access to care and better long-term health.

Link zu PanCare Childhood and Adolescent Cancer Survivor Care and Follow-up Studies

Photo credit: from the award winning film "Stationspiraten" (www.stationspiraten.ch)

ISPM website popular worldwide

In 2010 we had 67,000 visitors who accessed over 200,000 pages.

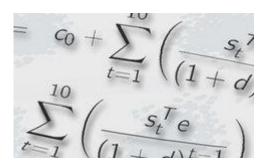


The website of ISPM is popular. Last year we had about 5,600 visitors each month who accessed a total of 202'460 pages. Most visitors came from Switzerland and Germany, followed by the United Kingdom, USA and Canada. As shown on the map, interested individuals from all over the world visited www.ispm.ch. Indeed, only few countries (the white areas on the map) did not visit at least once.

We are very pleased about the almost global interest for our website! Thank you for visiting and recommending www.ispm.ch.

New Master Programme in Biostatistics

The Master Programme in Biostatistics offered by the University of Zurich fills an important gap.



After the demise of the Programme at University of Neuchâtel several years ago, Switzerland has again a Master in Biostatistics. The programme is run jointly by the Institute of Mathematics and the Institute of Social and Preventive Medicine (ISPMZ) at University of Zurich. The program will start in fall 2011; the first "Masters of science in biostatistics" are expected to graduate in 2012.

More information including a detailed study guide is available on the website of the course at

www.math.uzh.ch/biostat