

# ISPM News Archive 2013

20.12.2013 11:55

## Florence Summer Course 2014 open for registration

The 27th Residential Summer Course in Epidemiology in Florence, Italy is organized by the European Educational Programme in Epidemiology (EEPE) under the patronage of the International Epidemiological Association (IEA) and run in collaboration with several European Universities, including University of Bern.



The 2014 edition of the **three-week course (9 ECTS)**, which will run from **23 June – 11 July 2014** has been thoroughly revised and updated. The course offers a lively mixture of methodological lectures, guest lectures on special topics, and practical exercises, in a stunning environment in the hills above Florence. The course provides an overview of epidemiological methods, the core concepts of epidemiological thinking, and allows students to acquire skills in the analysis of epidemiological data. In the last week students can choose from different modules, including modules on advanced statistical analysis, advanced epidemiological concepts, and methodological issues in environmental, clinical epidemiology or reproductive epidemiology.

Every year EEPE offers an additional **one-week course (3 ECTS)** on a topical theme in Epidemiology. The 2014 edition of the Special Course will be given by **George Davey Smith** (University of Bristol) from **16 June – 20 June 2014** on Genomic and epigenomic epidemiology: role in life-course research and causal inference.

Students can register for the three-week course, the one-week course, or both.

Please visit the EEPE website at [www.eepe.org](http://www.eepe.org) for further details and registration.

## PanCareLIFE: The Swiss Childhood Cancer Registry joins a European study on quality of life and late effects after childhood cancer

**The project:** PanCareLIFE is a 5-year (2013-8) EU Framework 7 Programme that studies the impact of treatment regimes on the long-term health of childhood cancer survivors. Specifically, PanCareLIFE will evaluate quality of life and the risks of lowered female fertility and loss of hearing. It will develop guidelines to preserve fertility and widely disseminate the results of this project. The European Union supports this project, and has contributed 6 million Euros in funding.



**The Problem:** More effective therapies and better supportive care have increased survival rates after childhood cancer to nearly 80% in developed European countries, and this has resulted in a steady increase in the number of survivors in the population. However, the treatments that have increased survival are harsh and can have serious side-effects that decrease survivors' quality of life in the long term. The goal of [PanCareLIFE](#) is to raise the quality of life of those who survived cancer diagnosed before they were 25 to the same level as their peers who did not have cancer. PanCareLIFE uses observational data and molecular genetic studies to investigate late effects that reduce fertility and impair hearing (ototoxicity), and will assess health-related quality of life (HRQoL). Information gained from PanCareLIFE's studies will be incorporated into new guidelines for to preserve fertility.

**The Solution:** The number of survivors with late effects is small in any one country, but large cohorts are required to accurately estimate risk. PanCareLIFE has assembled a team of prominent investigators from eight European countries who will provide over 12,000 well-characterised research subjects, allowing PanCareLIFE to identify both genetic and non-genetic risk factors linked to decreases in fertility and ototoxicity. PanCARELife will also conduct studies that evaluate the effect of impaired fertility and ototoxicity on quality of life. PanCareLIFE will advance knowledge in survivorship studies by evaluating large cohorts with observational and genetic tools that increase understanding of individual risk factors. Survivors may then be stratified into groups, and thus benefit from more personalized, evidence-based, care. In the future, survivors can expect effective therapies to have less severe side effects, and will experience a seamless transition to long-term follow-up care These approaches will increase quality of life for those survivors whose cancer was diagnosed in childhood.

**Swiss participation:** The ongoing Swiss Childhood Cancer Survivor Study, a nationwide long-term follow-up study on quality of life, health problems and follow-up care after childhood cancer, provides the context for [Swiss Childhood Cancer Registry \(SCCR\)](#) participation in this project. SCCR will contribute data on HRQoL from more than 2200 survivors. The University of Bern, in collaboration with the University of Münster in Germany, will be responsible for the statistical analysis of HRQoL data from eight different European countries. Switzerland also contributes data on fertility and hearing problems from the Swiss childhood Cancer Survivor study and provides epidemiological and statistical expertise.

**Project Info:** PanCareLIFE is an EU FP7 project (Project No. 602030) funded by the FP7-HEALTH-2013-INNOVATION-1 HEALTH.2013.2.4.1-3 call: Investigator-driven supportive and palliative care clinical trials and observational studies HEALTH. Further information on Swiss participation in this study can be obtained from Prof. Claudia Kuehni ([kuehni@ispm.unibe.ch](mailto:kuehni@ispm.unibe.ch)) or Ms Rahel Kuonen ([rkuonen@ispm.unibe.ch](mailto:rkuonen@ispm.unibe.ch)).

16.10.2013 13:00

## First MADE student graduated

**Stephanie Lesser, the first student participating at the Master of advanced studies in advanced epidemiology MADE, graduated in Rotterdam.**



The Master of advanced studies in advanced epidemiology MADE is an international postgraduate Master and was initiated in 2012. The ISPM of the University of Bern is one of the four European Universities participating in this programme. Stephanie Lesser started the programme in 2012 and spent five months at the ISPM Bern to carry out her Master research project and to write her Master thesis. Stephanie now concluded her studies and received the diploma during the NIHES Graduation Ceremony in Rotterdam. Congratulations, Stephanie!

08.10.2013 14:33

## Claudia Berlin wins Best Poster Award at GEOMED 2013

Claudia Berlin won a prize for her poster presentation on avoidable hospitalizations in Switzerland at the GEOMED Conference 2013 in Sheffield, UK.



Avoidable hospitalizations are defined as hospitalizations for exacerbations of diseases which, if treated properly in primary health care, would not have happened. Avoidable hospitalizations are therefore indicators of access and quality of ambulatory care. Claudia's study documented the variation in avoidable hospitalizations across Switzerland and identified possible determinants, for example the structure of ambulatory care in different regions. Funded by the Federal Office of Public Health, the study used data of all hospital discharges in Switzerland from 2008 to 2010 and data of health care supply structures.

More and more issues are arising in public health which involve geography and medicine. [GEOMED](#) is an international interdisciplinary conference that brings together statisticians, geographers, epidemiologists, computer scientists, and public health professionals to discuss methods of spatial analysis, as well as present and debate the results of such analyses.

03.09.2013 16:54

## Cooper, the swimming ape

Together with South African colleagues ISPM's evolutionary medicine group published the first report on swimming apes in the American Journal of Physical Anthropology. It received massive media coverage worldwide.



Two researchers from ISPM Bern (Nicole Bender) and the University of the Witwatersrand, South Africa (Renato Bender) published the first video-based observation of swimming and diving apes in the American Journal of Physical Anthropology in July 2013. They showed that instead of the usual dog-paddle stroke used by most terrestrial mammals, these animals use a type of breaststroke.

The researchers concluded that the swimming strokes peculiar to humans and apes might be the result of an earlier adaptation to an arboreal life. The media release of the University of Bern can be found [here](#).

This publication led to worldwide media coverage, especially in online media. The University of the Witwatersrand found that the media coverage reached at least 63 million people worldwide. In Australia alone 164 websites reported on this study. The scientific news-website Alpha Galileo chose the picture of Cooper, the swimming chimpanzee, as the picture of the month in August 2013. Discovery Channel and Thompson Reuters TV are planning documentaries on the subject.

*(Picture copyright: Renato Bender)*

27.08.2013 12:09

## SystemsX.ch project granted to ISPM researchers

Researchers of the ISPM successfully applied for an Interdisciplinary PhD (IPhD) project on the systems biology of antibiotic treatment for gonorrhoea.



**SystemsX.ch**  
The Swiss Initiative in Systems Biology

The PhD project "Exploring response surfaces and synergistic interactions of antibiotic combination treatment for *Neisseria gonorrhoeae*" was awarded to Dr. Christian Althaus (main applicant) and Prof. Nicola Low (co-applicant) from the ISPM and Dr. Andrea Endimiani (co-applicant) from the Institute for Infectious Diseases (IFIK) at the University of Bern.

The project will adopt a systems biology approach to explore the impact of antibiotic combination regimens on the in vitro growth kinetics of *N. gonorrhoeae* using microbiological experiments and mathematical modeling.

SystemsX.ch (The Swiss Initiative in Systems Biology) supports interdisciplinary research and education to promote the future generation of systems biologists.

Read more: [SystemsX.ch newsletter](#)

26.08.2013 14:20

## Epidemiology Winter School 2014 in Wengen - registration now open!

The Winter School takes place in January during the week following the International Lauberhorn ski race, when Wengen is calm, with few people on the slopes. Students stay on site and work hard in the mornings. They then have an extended break to review course materials, catch up on emails or (more likely) go skiing or snowboarding. We reconvene at 5 pm for computer or practical sessions.



We offer **6 courses** in 2014 which run for 3 days, either from Monday to Wed or Thurs to Sat, during the week of **20-25 January, 2014**. Each course earns 1.5 ECTS.

- **Causal inference in observational epidemiology**  
Prof. Miguel Hernan, Harvard University, Prof. Marcel Zwahlen, University of Bern
- **Indirect comparisons and network meta-analysis: Evidence synthesis with multiple treatments**  
Prof. Julian Higgins, University of Bristol, Dr. Georgia Salanti, University of Ioannina
- **Writing a journal article – and getting it published**  
Dr. Kali Tal, University of Bern
- **Statistical analysis with missing data using multiple imputation and inverse probability weighting**  
Prof. James Carpenter, University of London, Dr. Manuel Koller and Dr. Kurt Schmidlin, University of Bern
- **Applied Bayesian statistics**  
Prof. Marcel Zwahlen and Dr. Sandro Gsteiger, University of Bern, Dr. Beat Neuenschwander, Novartis
- **Mathematical modeling in infectious disease epidemiology**  
Prof. Sebastian Bonhoeffer, ETH Zurich, Dr. Christian Althaus and Prof. Nicola Low, University of Bern

**Our website is now open for bookings.** The number of participants is limited – book early to avoid disappointment.

The website of the Swiss Epidemiology Winter School can be found [here](#).

## A new asthma prediction tool for children

A simple tool developed at the ISPM Bern helps to predict later asthma in preschool children with recurrent wheeze or cough



Many preschool children suffer from wheeze or chronic cough. These children visit frequently their doctor, are often hospitalized and receive various treatments. Fortunately only few of them develop chronic asthma at school-age. Others have transient problems, which gradually disappear. It is important to anticipate which children are more likely to develop asthma at school-age. This knowledge improves clinical decision-making, allows comforting worried parents and enables researchers to include the right children into research studies. Several tools for improving prediction of later asthma in symptomatic toddlers have been developed. However, some are difficult to use in clinical practice, while other tools have methodological limitations.

In an original article in The Journal of Allergy and Clinical Immunology (JACI) Pescatore et al. present their new asthma prediction tool. They used data from 1-3 year old children from Leicestershire, UK, who had visited their doctor for wheeze or recurrent cough. Using information on symptoms at preschool-age, the authors developed a statistical model to predict presence of asthma 5 years later. The tool uses only information which can easily be collected in primary care and is non-invasive (e.g. does not rely on blood tests). In addition, the tool has been developed in a standardized way, avoiding limitations of previous instruments such as overfitting.

Of the 1226 preschool children with wheeze or recurrent cough in this study only 345 (28%) had asthma 5 years later. The prediction tool consists of 10 items, which sum up to a maximum score of 15. The items include: gender, age, parental history of asthma, presence of eczema, presence of wheeze apart from colds, of frequent wheeze, of wheeze disturbing daily activity, of wheeze accompanied by shortness of breath and of wheeze triggered by exercise and by inhaled allergens (house dust, pollen or pets dander). Despite being so simple, the tool performs similarly or better compared to previously published instruments.

In summary, the new tool represents a simple, low-cost and non-invasive method to predict the risk for later asthma in symptomatic pre-school children and is ready to be tested in other populations.

### Links:

- [Abstract](#)  
[Medienmitteilung der Universität Bern](#)

### Authors:

Anina M. Pescatore, Cristian M. Dogaru, Lutz Duembgen, Michael Silverman, Erol A. Gaillard, Ben D. Spycher, Claudia E. Kuehni

**Picture reference:** Tradimus (Own work), [CC-BY-SA-3.0](#)

09.08.2013 09:31

## ISPM seminars 2013/2014

The 2013/2014 seminar programme released today includes 12 talks by speakers from Switzerland, the Netherlands, Germany, Canada, and the United States.

Seminarprogramm 2013 / 2014		
Institut für Sozial- und Präventivmedizin (ISPM)		
Datum	Zeit und Ort	Vorlage
21. August 2013 St. Gallen	16:30 CPSU	Exposure to farming in early life and development of asthma and other allergic diseases – results from the Swiss birth cohort study
10. September 2013 Universität Zürich	16:30 KHS	Hospital Care during pregnancy before, during, and after birth in Switzerland: An analysis of hospital admissions during pregnancy, delivery, and postpartum
10. Oktober 2013 Universität Zürich	16:30 KHS	Bridging comorbidity factors in health and disease: the Swiss-UK patient survey, interview, interview
22. Oktober 2013 ZMK Regensburg	16:30 KHS	Comorbid chronic conditions in patients with knee osteoarthritis: associations and prognostic impact
29. November 2013 Bern	16:30 IPHS	An analysis of malaria in a large dataset: John Snow's analysis of multiple outbreaks by complex spatial intervention
10. Dezember 2013 Bern	16:30 Schweizer Nationalrat	Worldwide collaboration – Transdisciplinary research for sustainable development: experiences from Switzerland Prof. Dr. Urs Wiesmann, Centre for Development and Environment, University of Bern

The first seminar will be given by Erika von Mutius from LMU Munich on exposure to farming in early life and development of asthma and allergy. Other speakers include Gillian Hawker on the fallacy of ignoring comorbid chronic conditions in patients with osteoarthritis, Georgia Salanti on advanced models for meta-analyses, Marcel Tanner on malaria vaccines, and Milo Puhan on putting evidence into context. The Christmas Seminar in December will be given by Urs Wiesmann from the Centre for Development and Environment at the University of Bern on his experiences when performing transdisciplinary research for sustainable development on 4 different continents.

Please check out [the programme](#) and come along.

31.07.2013 11:00

## Swiss Meeting for Infectious Disease Dynamics 2013

The fourth meeting - SMIDDY 2013 - will take place at the ETH in Zurich on Friday, 13 September 2013.



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.

### Invited Speakers

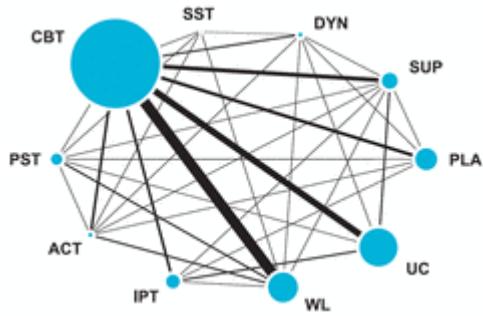
- Prof. Dr. Niel Hens, Interuniversity Institute of Biostatistics and Statistical Bioinformatics, Hasselt University, Diepenbeek, Belgium
- Dr. Theodore Kypraios, School of Mathematical Sciences, University of Nottingham, United Kingdom
- Prof. Dr. Amalio Telenti, Institute of Microbiology, Lausanne University Hospital and University of Lausanne, Switzerland

There is no registration fee. Abstracts can be submitted until July 31 and registration is open until August 31.

Website: [www.smiddy.ch](http://www.smiddy.ch)

## Different psychotherapeutic treatments for depression have similar benefits

Evidence that different psychotherapeutic interventions have comparable effects was found by a team at the ISPM and the University of Amsterdam, after they conducted a network meta-analysis with more than 15,000 patients. The study, published in PLOS Medicine, also found that the effect of treatment was considerably overestimated in smaller studies, but no large studies were available for some types of psychotherapeutic intervention.



Depression is a common condition, affecting one in six people at some point in their lives. Psychotherapy is a much desired treatment option for such patients. Debates about the relative effectiveness of different psychotherapeutic treatments are heated. For the first time, a published network meta-analysis summarizes all available evidence from all psychotherapy trials on depression, up to 2012. Similar benefits were found for psychotherapeutic interventions, and all of them were effective compared to waitlist. Differences in patient characteristics, treatment settings, and type of depression did not alter the general findings. Effects were moderately large (0.62 and above). Scientific support for claims of beneficial effect was stronger for psychotherapies that had been more frequently tested, and tested in larger studies, including cognitive behavioural therapy, interpersonal therapy, and problem-solving therapy. These findings suggest that patients with depression would benefit from discussing different psychotherapeutic options with health care providers in order to select the type of psychotherapy that is most suitable and best available.

Link: <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001454>

## Bars in der Nachbarschaft können Gesundheit gefährden

**Das Leben in einem Quartier mit vielen Bars und Restaurants mag abwechslungsreich und amüsant sein, es kann aber auch die Gesundheit gefährden. Dies haben Epidemiologen des Instituts für Sozial- und Präventivmedizin der Universität Bern in einer heute Mittwoch veröffentlichten Studie gezeigt. Das Risiko, an alkoholbedingten Krankheiten zu sterben, steigt mit zunehmender Dichte von Lokalen um den Wohnort.**



Mit einem geschätzten Konsum von 11,5 Litern reinem Alkohol pro Kopf und Jahr liegt die Schweiz in der WHO-Rangliste von 185 Ländern in den Top 20. Alkoholmissbrauch wird heute mit über 20 verschiedenen Erkrankungen in Verbindung gebracht, unter anderem mit mehreren psychischen Erkrankungen, Leberveränderungen sowie neurologischen Erkrankungen. Aber auch das Risiko für Herz-Kreislauferkrankungen sowie Krebs ist erhöht.

Ein Forschungsteam um Professor Matthias Egger hat nun in einer Kohortenstudie in der Schweiz untersucht, inwieweit Bars, Restaurants und Hotels in der Nachbarschaft das Risiko beeinflussen, an einer alkoholbedingten Erkrankung zu sterben. Die Berner Epidemiologen bestimmten dazu einerseits die Anzahl solcher Verkaufsstellen im Umkreis von einem Kilometer um den Wohnort und andererseits die Gehdistanz zum nächsten Alkoholausschank. Beides hängt mit dem Risiko zusammen, an alkoholbedingten Erkrankungen zu sterben, wie ihre Studie zeigt. «Interessanterweise wirkt sich schon eine leicht grösere Distanz zur nächsten Bar positiv auf das Sterberisiko aus», sagt Egger. Dieses Resultat bleibt auch dann bestehen, wenn für individuelle Risikofaktoren wie Bildung, beruflicher Status, Beschäftigung, Zivilstand oder Elternschaft sowie für geographische Faktoren – etwa urbane oder ländliche Umgebung, Sprachregion und sozioökonomischer Status der Nachbarschaft – korrigiert wird.

Die WHO führt eine Reduktion der Alkoholverkaufsstellen als Prävention von Alkoholmissbrauch auf, sagt Egger. Im «Nationalen Programm Alkohol» des Bundes werde zwar die Einschränkung des Alkoholverkaufs zu gewissen Zeiten, nicht aber die Reduktion der Verkaufsstellen an sich als mögliche Strategie erörtert.

Egger gibt zur Berner Studie jedoch zu bedenken, dass diese keinen kausalen Zusammenhang zwischen der Dichte von Bars und der Sterberate feststellen konnte. So sage die Studie nichts über den tatsächlichen Alkoholkonsum der einzelnen aus. Verkaufsstellen von Alkohol über die Gasse, wie Supermärkte oder Tankstellenshops konnten aufgrund fehlender Daten ebenfalls nicht analysiert werden.

Es könne auch nicht ausgeschlossen werden, dass Leute mit Alkoholproblemen vermehrt in Gebiete mit mehr Alkoholverkaufsstellen zögen. In der Studie wurden die Daten von 4,4 Millionen Menschen analysiert die zum Zeitpunkt der Volkszählung 2000 in der Schweiz wohnten und 30 bis 94 Jahre alt waren. Vom 5. Dezember 2000 bis zum 31. Dezember 2008 wurden 10'878 Todesfälle in Zusammenhang mit alkoholbedingten Erkrankungen verzeichnet. Das Projekt ist Teil der vom Schweizerischen Nationalfonds und vom Bundesamt für Statistik unterstützten Schweizer Kohortenstudie (Swiss National Cohort).

**Angaben zur Studie:**

Spoerri A, Zwahlen M, Panczak R, Egger M, Huss A; Swiss National Cohort:

*Alcohol-selling outlets and mortality in Switzerland-the Swiss National Cohort.*, Addiction, 13. Mai 2013, doi: 10.1111/add.12218

**Kontakt:**

Prof. Dr. Matthias Egger, Institut für Sozial- und Präventivmedizin Bern

Tel: 031 631 35 01 / 079 239 97 17

e-Mail: [egger@ispmed.unibe.ch](mailto:egger@ispmed.unibe.ch)

Quelle: [Medienmitteilung](#) der Universität Bern

14.05.2013 14:00

## Hoch oben lebt es sich länger

**Die Bewohner der oberen Stockwerke eines Hauses leben im Schnitt länger als ihre Nachbarn im Parterre. Dies ergab eine im «European Journal of Epidemiology» veröffentlichte Studie der Universität Bern. Die Forscher vermuten soziale Unterschiede als Grund für das unterschiedliche Sterberisiko. Allerdings sterben in den oberen Stockwerken mehr Menschen durch Sprünge aus grosser Höhe.**



Wer in einem mindestens vierstöckigen Haus in einem oberen Stockwerk wohnt, hat meist nicht nur die bessere Aussicht als die Nachbarn weiter unten, er kann diese auch länger geniessen. Das Team um Professor Matthias Egger und Radoslaw Panczak vom Institut für Sozial- und Präventivmedizin der Universität Bern hat in einer Kohortenstudie gezeigt, dass Menschen im untersten Stock ein deutlich höheres Risiko haben, an Herzkreislauf- oder Lungenerkrankungen zu sterben als ihre Nachbarn, die im vierten oder höheren Stock wohnen. Beide Todesursachen sind mit gesundheitsrelevantem Verhalten wie Rauchen, Ernährung und Bewegung verbunden. Egger vermutet deshalb, dass die gefundenen Unterschiede im Sterberisiko zumindest zum Teil mit Unterschieden im sozioökonomischen Status der Bewohnerinnen und Bewohner der verschiedenen Stockwerke erklärt werden können. Zwar wurden in der Studie einige dieser Faktoren wie Bildung, Nationalität und Beruf berücksichtigt. Hingegen sind etwa das Einkommen und das Vermögen der Bewohner nicht bekannt.

Die Forscher schliessen auch nicht aus, dass das Leben in einem höheren Stock mehr Bewegung bringt und damit die Gesundheit verbessert. «Wer regelmässig die Treppen zu seiner Wohnung erklimmt, macht etwas für seine Gesundheit» sagt Egger. Allerdings dürfte vor allem in die höheren Stockwerke doch meistens der Lift zum Einsatz kommen.

Nicht bei allen Todesursachen sind die Nachbarn in den höheren Stockwerken jedoch im Vorteil: Sie starben in der Beobachtungszeit von 2001 bis 2008 deutlich häufiger als die Bewohner der untersten Stockwerke durch Sprünge aus grosser Höhe in suizidaler Absicht. Gemäss Egger ist es unklar, ob dies allein an der Gelegenheit liegt. «Die Frage ist aber interessant für die Diskussion, ob die Verfügbarkeit einer Methode einen Einfluss auf die Suizidrate hat», sagt der Epidemiologe.

In der Kohortenstudien auf Bevölkerungsebene wurden die Daten von 1,5 Millionen Menschen analysiert, die zum Zeitpunkt der Volkszählung 2000 in der Schweiz in einem Gebäude mit vier oder mehr Stockwerken wohnten. In der Beobachtungszeit von 2001 bis 2008 wurden insgesamt 142'390 Todesfälle verzeichnet. Das Projekt ist Teil der vom Schweizerischen Nationalfonds und vom Bundesamt für Statistik unterstützten Schweizer Kohortenstudie (Swiss National Cohort).

### **Angaben zur Studie:**

Radoslaw Panczak, Bruna Galobardes, Adrian Spoerri, Marcel Zwahlen, Matthias Egger: *High life in the sky? Mortality by floor of residence in Switzerland*, European Journal of Epidemiology, No. 10654, 13. Mai 2013, doi: 10.1007/s10654-013-9809-8

### **Weitere Auskunft:**

Prof. Dr. Matthias Egger, Insitut für Sozial und Präventivmedizin der Universität Bern

Tel: +41 79 239 97 17 (erreichbar heute Dienstag 14.5. ab 14.00h Uhr)

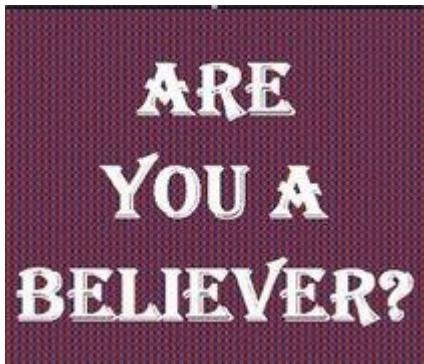
Mail: [egger@ispm.unibe.ch](mailto:egger@ispm.unibe.ch)

Quelle: [Medienmitteilung](#) der Universität Bern

22.04.2013 08:22

## **Researcher allegiance to a specific treatment is associated with larger effects for that treatment in psychotherapy trials**

A meta-meta-analysis by ISPM and the University of Freiburg, Germany, summarized 30 meta-analytic estimates of the allegiance-outcome association. Across 1700 trials, when researchers preferred a specific treatment, the effects of that treatment were increased. In short, researcher allegiance may bias psychotherapy trials.



Researcher preferences have been widely discussed as a source of bias in randomized trials of psychotherapy. Early meta-analytic studies found a strong association between researcher allegiance and outcome, which suggested that researcher preferences influence trial outcome. However, more recent findings have been mixed. To resolve the question, researchers at ISPM and the University of Freiburg, Germany, conducted a meta-meta-analysis that synthesized data from 30 meta-analyses and more than 1700 trials. The mean RA-outcome association was  $r = .26$  (95% CI .19 to .33), corresponding to a moderate effect size.

The study suggests that researcher preferences can bias psychotherapy outcome studies. To counter this potential bias, the authors recommend that psychotherapy trials be conducted collaboratively by teams with mixed allegiances. Meta-analysts should take into account the possibility that researcher allegiance causes bias when they discuss their findings.

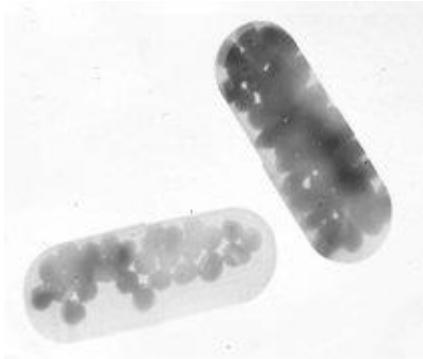
**Link:** <http://www.sciencedirect.com/science/article/pii/S0272735813000275>

**Source picture:** <http://peoplebrief.blogspot.ch/2012/06/are-you-believer.html>

18.04.2013 10:33

## "Zu Wirkungen und Nebenwirkungen" - premiere of a clinical trial in the theatre setting today

Today is the premiere of a clinical trial performed at the Mansarde in the Stadttheater Bern (<http://www.livestudie.ch>).

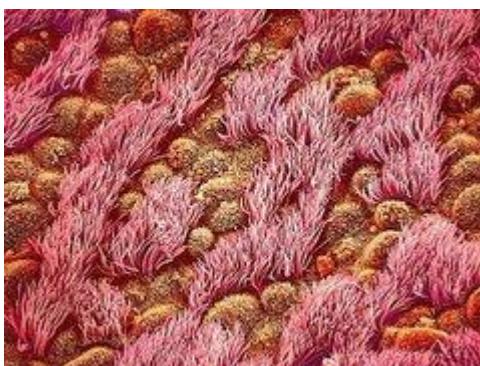


Members of the audience will act as trial participants and staff from ISPM Bern and the Centre for Evolutionary Medicine Zürich will perform random allocation of participants, data collection and statistical analysis in fast motion during the evening. During the second part of the evening, the trial will serve as a vehicle for discussing challenges and promise of clinical research and the notion of uncertainty in science in general.

The project is funded by the Swiss National Science Foundation as part of the [Agora funding scheme](#), which aims at promoting interaction and dialogue between scientists and the public. People involved from ISPM include Laurent Schwander, Raffaele Battaglia, Jennifer Bäuml, Bruno Da Costa, Vanessa Arn, Sam Iff and Peter Jüni. The premiere is sold out, but a few tickets remain available at the box office of Mansarde. Further performances are planned in Bern, Zürich and Basel. Dates will be communicated in due time at the [project website](#).

## BESTCILIA: EU-funded project to improve care of Primary Ciliary Dyskinesia

**Primary Ciliary Dyskinesia (PCD)** is a typical orphan disease: diagnosis is often delayed; there is insufficient evidence on treatment effectiveness; and long-term outcomes are largely unknown. **BESTCILIA (Better Experimental Screening and Treatment for Primary Ciliary Dyskinesia)** is the largest international research program on PCD. The project began in December of 2012, and is funded by the European Union (FP7). BESTCILIA will conduct the first RCT on PCD, and will increase our understanding of the epidemiological and clinical course of the disease, and speed up diagnosis. ISPM Bern leads Work Package 1: “Observational Trials in Primary Ciliary Dyskinesia”.



Primary Ciliary Dyskinesia (PCD) is an orphan lung disease: a rare, genetically heterogeneous disorder resulting from dysfunction of small hair-like organelles (cilia) that clean the upper and lower airways. It can affect multiple organs beside the respiratory system, and may cause serious impairment and lower quality of life. Its prevalence is estimated to be about 1 in 10,000.

Like other orphan diseases, PCD and other disorders of dysmotile cilia are rarely studied. There are some publications on pathology, genetics and diagnostic method, but little data, is available on epidemiology, clinical course throughout life and long-term prognosis. We also lack good data on treatment effectiveness.

Early diagnosis and appropriate treatment of PCD may reduce morbidity and mortality and lower health care costs.

To stimulate research and improve clinical care, in 2006 the European Respiratory Society funded a taskforce on PCD, which included representatives from 26 countries. This taskforce joined forces with an NIH-funded US-PCD-network. In December 2012, BESTCILIA (Better Experimental Screening and Treatment for Primary Ciliary Dyskinesia) emerged from this consortium, funded by the European Union (FP7). Now the largest international research program on PCD, BESTCILIA aims to advance our knowledge about the epidemiology and clinical course of PCD, and to improve both diagnosis and treatment.

ISPM Bern (Claudia Kuehni) is leading Work Package 1 (WP 1), “Observational Trials in Primary Ciliary Dyskinesia”, which will collect all available cross-sectional and longitudinal observational data on PCD and then conduct an individual patient data meta-analysis. WP 1 will answer pertinent questions on the spectrum and severity of disease and its evolution over lifetime. WP 2 (Heymut Omran, Münster, D) will build an international PCD registry, to monitor trends in incidence, management and outcomes. WP3 (Panayiotis Yiallouros, Nicosia, CY) will improve clinical practice in PCD by introducing standardized diagnostic testing in European countries where this is not yet available. WP4 (Jane Lucas, Southampton, UK) will establish PCD-specific health-related quality of life questionnaires as an outcome measure for future research. WP5 (Kim Nielsen, Copenhagen, DK) will undertake the first randomized clinical trial on PCD.

BESTCILIA's kick-off meeting took place in March 2013, on Cyprus. Researchers and patient organizations participated. Because the patient population in each country is small, international collaboration is necessary if we are to learn more about this disease, effectively power future clinical trials and improve our understanding of PCD.

21.03.2013 09:00

## **Das neue Humanforschungsgesetz - Implikationen und Herausforderungen**

**Informationsveranstaltung**

**Montag, 6. Mai 2013**

**Inselspital Bern, Auditorium Rossi**



Am 1. Januar 2014 wird das Bundesgesetz über die Forschung am Menschen (Humanforschungsgesetz, HFG) in Kraft treten. Das neue HFG regelt erstmalig die Forschung am Menschen umfassend. Es wird weitreichende Veränderungen auf die Durchführung der Forschung am Menschen nach sich ziehen, unter anderem durch die Einführung einer risikobasierten Regulierung klinischer Versuche.

Die Veranstaltung dient der Einführung in die neuen Regulierungen der Forschung am Menschen, welche mit Inkraftsetzung des neuen Humanforschungsgesetzes anfangs 2014 für die ganze Schweiz gelten werden. Die Veranstaltung bietet die Möglichkeit, sich einen Überblick über die neuen Rahmenbedingungen zu verschaffen und die wichtigsten Neuerungen mit Fachleuten zu diskutieren.

Es stehen folgende Präsentationen auf dem Programm (PDFs der Präsentationen sind mit den Namen verlinkt):

- Struktur und Geltungsbereich des neuen HFG. [Christoph Jenni \(BAG\)](#)
- Die Risikokategorisierung von Studien. [Andri Christen \(BAG\)](#)
- Welche Auswirkungen hat das neue HFG auf meine Studie? [Brigitte Meier \(BAG\)](#)
- Das neue Portal für klinische Studien. [Stephanie Züllig \(BAG\)](#)
- Institutionelle Implikationen. [Peter Brauchli \(SAKK\)](#), [Niklaus Tüller \(KEK Bern\)](#) und [Sven Trelle \(CTU Bern\)](#)

Am 11. November 2013 findet eine zweite vertiefende Veranstaltung zum Thema statt.

Weitere Informationen finden Sie im [Programm-PDF](#).

20.03.2013 09:27

## Results from PC trial reported in this week's New England Journal of Medicine

In this week's issue, the New England Journal of Medicine reports results of two randomized trials comparing percutaneous closure of a patent foramen ovale against medical treatment in patients with stroke but no clear cause (PC and RESPECT trials).



In about one third of young patients who suffered a stroke, no clear cause can be identified. In about 50% of these patients, a patent foramen ovale is found as a potential cause of embolic events, compared with about 25% in the general population. It was therefore hypothesized that percutaneous closure of the patent foramen ovale might prevent future embolic events in such patients.

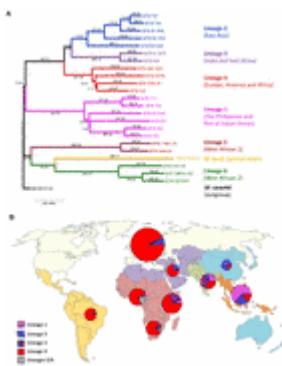
The PC trial was led by the Departments of Cardiology and Neurology at Inselspital and CTU and ISPM Bern. The RESPECT trial was led by centers in the US.

Taken together, the two trials suggest that percutaneous closure might be effective in reducing recurrent strokes. Controversy remains, however, and extended follow-up will be needed for both trials to understand whether currently observed trends translate into robust evidence.

See [Issue of March 21, 2013](#) for trials and accompanying editorial.

## HIV/TB host-pathogen relationship: insights from molecular epidemiology

A research team led by ISPM's Lukas Fenner found that the host-pathogen relationship in tuberculosis is disrupted by HIV infection.



Human tuberculosis (TB) caused by *Mycobacterium tuberculosis* kills 1.5 million people each year. *M. tuberculosis* has been affecting humans for millennia suggesting that different strain lineages may be adapted to specific human populations. The combination of a particular strain lineage and its corresponding patient population can be classified as sympatric (e.g. Euro-American lineage in Europeans) or allopatric (e.g. East-Asian lineage in Europeans). Lukas Fenner and a team from ISPM, the Swiss Tropical and Public Health Institute and the Swiss HIV Cohort Study hypothesized that infection with the human immunodeficiency virus (HIV), which impairs the human immune system, will interfere with this host-pathogen relationship. The team performed a nation-wide molecular-epidemiological study of HIV-infected and HIV-negative TB patients between 2000 and 2008 in Switzerland. They found that HIV infection was associated with the less adapted allopatric lineages among patients born in Europe, and this was not explained by social or other patient factors such as increased social mixing in HIV-infected individuals. Strikingly, the association between HIV infection and less adapted *M. tuberculosis* lineages was stronger in patients with more pronounced immunodeficiency. The observation was replicated in a second independent panel of *M. tuberculosis* strains collected during a population-based study in the Canton of Bern. Published in PLoS Genetics (see link below), the study provides evidence that the sympatric host-pathogen relationship in TB is disrupted by HIV infection. Further information about the project can be found on the project website ([www.tb-network.ch](http://www.tb-network.ch)). The study was also highlighted in "The Evolution & Medicine Review" ([evmedreview.com](http://evmedreview.com)).

Citation: Fenner L, Egger M, Bodmer T, Furrer H, Ballif M, et al. (2013) HIV Infection Disrupts the Sympatric Host–Pathogen Relationship in Human Tuberculosis. PLoS Genet 9(3): e1003318.

<http://www.plosgenetics.org/article/info%3Adoi%2F10.1371%2Fjournal.pgen.1003318>

## Nine PhDs awarded in 2012

Each of our nine PhDs was supervised by ISPM Bern senior staff and completed work in epidemiology, biostatistics and health sciences. See below for abstracts and publication lists.



[\*\*Bindu Kalesan:\*\*](#) Modeling time-to-event data in estimating effectiveness and safety in interventional cardiology

[\*\*Bruno da Costa:\*\*](#) Summarizing and expressing treatment effects in meta-analyses of trials with continuous outcomes

[\*\*Corina Rüegg:\*\*](#) Physical Activity and Physical Function in Long-Term Survivors of Childhood Cancer

[\*\*Janneke Heijne:\*\*](#) Control of sexually transmitted Chlamydia trachomatis transmission

[\*\*Monika Bachmann:\*\*](#) Health behaviour change in smokers: Five articles on the development of smoking behaviour

[\*\*Oliver Fuchs:\*\*](#) The Impact of Genes and the Environment on Respiratory Morbidity in Infants and Children

[\*\*Pippa Scott:\*\*](#) Pneumococcal and measles vaccines: systematic reviews and meta-analyses

[\*\*Sereina Herzog:\*\*](#) Mathematical modelling for the timing of progression from Chlamydia trachomatis infection to pelvic inflammatory disease

[\*\*Thomas Munder:\*\*](#) Meta-analyses on risks of bias in randomized controlled trials of psychotherapy

## **SwissTransMed calls for proposals to launch translational research platforms**

**Research proposals for translational research platforms are solicited by the National Steering Group of SwissTransMed, on behalf of the Rectors' Conference of the Swiss Universities (CRUS).**



SwissTransMed is a network of platforms that will translate scientific discoveries to practical clinical applications and treatments, and vice versa. Each will include basic and clinical scientists, engineers, clinicians and students in all relevant fields, who will work together to develop disease models, new diagnostic approaches, prevention strategies and therapies ("from bench to bedside"). Platforms will run until 2016, when they will be evaluated for continuation of funding.

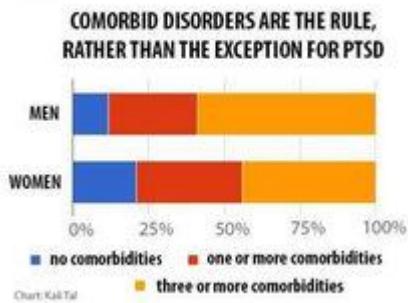
Proposals should focus on a specific medical field or clinical topic (e.g., joint replacement in orthopedic surgery or inherited conditions in pediatrics). Selection is competitive; a maximum of six proposals will be funded.

The deadline for submission of [applications](#) is May 30, 2013.

## PTSD: The Futile Search for the "Quick Fix"

Kali Tal was invited to write a Guest Blog on PTSD by Scientific American, and it is featured on their website.

Figure 1



Posttraumatic Stress Disorder (PTSD) is a stress disorder caused by exposure to trauma. In the U.S., approximately 10% of women and 4% of men suffer from PTSD. Tal's article questions the effectiveness of short-term therapies for treating the majority of PTSD patients. Over 80% of those with PTSD have comorbid disorders like depression, substance abuse, and anxiety disorder, which make the problem much harder to treat, but those with comorbid disorders are most frequently excluded from clinical trials of short-term treatments. For most PTSD patients, the disorder will be chronic and requires long-term management. Tal discusses the political, social and economic conditions under which short-term treatments are developed and sold, and the interests of the military, pharmaceutical companies and insurance companies in claiming that short-term therapies are the answer for PTSD. Tal promotes a longer view, focused both on managing PTSD as a chronic condition, and on violence prevention.

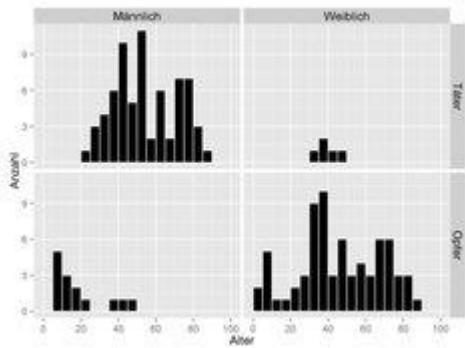
Kali received assistance from Jürgen Barth, who advised her about PTSD trials and clinical research.

Kali Tals Guest Blog on PTSD:

<http://blogs.scientificamerican.com/guest-blog/2013/02/26/ptsd-the-futile-search-for-the-quick-fix/>

## Tödliche Familiendramen kommen in allen sozialen Schichten vor

Tötungsdelikte innerhalb von Familien mit anschliessendem Suizid des Täters kommen in der Schweiz in allen sozialen Schichten etwa gleich häufig vor. Stressige Lebenssituationen wie Scheidungen, befristeter Aufenthaltsstatus oder enge Wohnverhältnisse sind Risikofaktoren, wie eine Studie der Universität Bern zeigt. Die Häufigkeit dieser – meist von Männern mit Schusswaffen begangenen – Delikte hat aber in den vergangenen 20 Jahren nicht zugenommen.



Rund sechs bis sieben tödliche Familiendramen gibt es pro Jahr in der Schweiz. Nun hat eine Gruppe um Radoslaw Panczak und Professor Matthias Egger des Instituts für Sozial- und Präventivmedizin der Universität Bern in einer Kohortenstudie über den Zeitraum 1991 bis 2008 erstmals die Risikofaktoren untersucht. Wie die im Januar in der Fachzeitschrift «PLoS ONE» veröffentlichten Resultate zeigen, hat sich die Häufigkeit solcher tödlichen Dramen in diesem Zeitraum nicht verändert.

Die Geschlechterrolle ist bei den Tötungsdelikten mit anschliessendem Suizid des Täters klar verteilt: In über 93 Prozent der untersuchten Fälle waren die Täter männlich, 84 Prozent der Opfer waren weiblich. In drei Viertel aller Familiendramen brachte ein Mann seine Ehefrau um, in weiteren acht Prozent tötete er neben der Frau auch ein oder mehrere Kinder.

Die Altersverteilung zeigt bei den Tätern Spitzen um 45 und 75 Jahre. «Neben den klassischen Eifersuchtsdramen gibt es in der älteren Generation auch Täter, die ihre schwer kranke Ehefrau aus Überforderung oder aus Mitleid töten», sagt Matthias Egger. Geschiedene Männer waren häufiger Täter als verheiratete, Nichtreligiöse häufiger als Katholiken. Keinen Einfluss hatte die Anwesenheit von Kindern im Haushalt, die Sprache oder eine städtische oder ländliche Umgebung.

Die Studie fand keinen Zusammenhang zwischen der sozialen Schicht und der Häufigkeit von tödlichen Familiendramen. Weder Bildung noch Beruf hätten laut den Forschenden einen Einfluss. Die Nationalität spielt ebenfalls keine Rolle. Mit einer Ausnahme: Ausländer mit einer befristeten Aufenthaltsbewilligung waren häufiger Täter. «Auch andere stressige Lebenssituationen wie Scheidungen oder enge Wohnverhältnisse erhöhen das Risiko», sagt Egger.

### Fast immer Schusswaffen verwendet

Tatwaffe war in über 85 Prozent der Fälle eine Schusswaffe. Ob es sich dabei um Militärwaffen handelt, konnten die Forschenden nicht eruieren, da diese Angaben in den Sterbestatistiken fehlen. Laut Egger zeigen jedoch internationale Studien einen starken Zusammenhang zwischen der Verfügbarkeit von Schusswaffen und der Anzahl Familiendramen in einem Land. Die Zahl der Familiendramen in der Schweiz sei gemessen an der Einwohnerzahl höher als in anderen europäischen Staaten. Präventivmediziner Egger ist daher überzeugt: «Mit einem eingeschränkten Zugang zu Waffen könnten Familiendramen verhindert werden.»

In der weltweit ersten Kohortenstudie auf Bevölkerungsebene zum Thema der Tötungsdelikte mit anschliessendem Suizid wurden insgesamt 73 Vorfälle mit 158 Getöteten analysiert. Das Projekt ist Teil der vom Schweizerischen Nationalfonds und vom Bundesamt für Statistik unterstützten Schweizer Kohortenstudie (Swiss National Cohort).

**Bibliographische Angaben:**

Radoslaw Panczak, Marcel Zwahlen, Adrian Spoerri, Kali Tal, Martin Killias, Matthias Egger: Incidence and Risk Factors of Homicide–Suicide in Swiss Households: National Cohort Study, PLoS ONE 8(1): e53714. doi:10.1371/journal.pone.0053714

Quelle: [Medienmitteilung der Universität Bern](#)