University of Basel

Faculty of Medicine

ECPM – European Center of Pharmaceutical Medicine

Institute of Pharmaceutical Medicine

Annual Report 2017.

ECPM®

European Center of Pharmaceutical Medicine

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ECPM at a glance

In 2017 ECPM

- Started the 14th ECPM course cycle with 98 participants (1908 participants since 1991)
- Collaborated with 150 faculty members from different affiliations
- Developed and offered special modules and lecture series
- Conducted a summer institute at the George Washington University and a study trip to Israel
- Was involved in graduate and postgraduate teaching of 10 different programmes
- Acquired about 750,000 Swiss Francs in third-party research funding
- Was working on 16 research projects
- Completed 5 research projects
- Authored and co-authored 17 published peer-reviewed articles and multiple conference abstracts
- Gave multiple scientific presentations to external audiences
- Employed 13 people

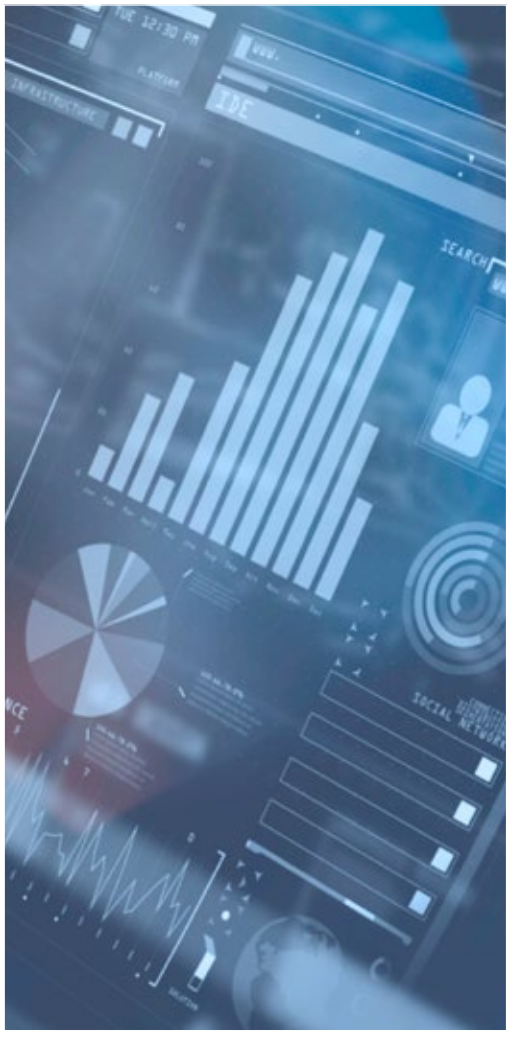
Activities in a nutshell

Research

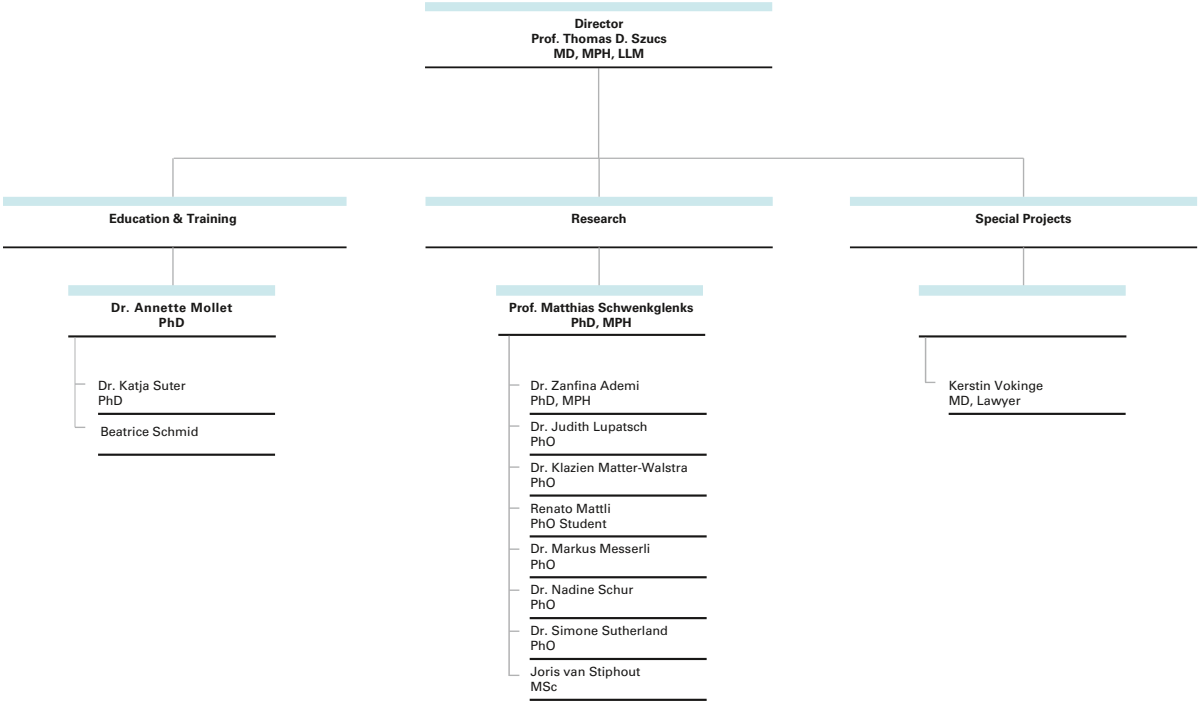
- Health Technology Assessment
- Health economics and pharmaco-economics
- Decision-analytic modelling
- Health Services Research
- Epidemiology; observational study and clinical trial design
- Biostatistics

Education and Training

- Undergraduate and graduate training of medical, pharmacy, human biology, public health and nursing students
- Supervision of PhD, Master and Master of Advanced Study theses
- Master theses: 8
- PhD theses: 3
- MPH MAS theses: 6
- MMD MAS thesis: 2 (4 ongoing)
- postgraduate training: CAS, DAS, MAS in Pharmaceutical Medicine/Medicines Development
- Online e-learning courses
- Summer institute and study trip
- public health and nursing
- Specialist examination for board certification FMH in Pharmaceutical Medicine
- Federal Training Center for MDs in Pharmaceutical Medicine and Public Health



Organisational chart



Director

Thomas D. Szucs, MD MBA MPH LLM, heads the unit and is Professor in Pharmaceutical Medicine and Director of ECPM at the University of Basel.

Previously he was Chief Medical Officer of Hirslanden Holding, the largest group of private hospitals in Switzerland. From 1998 to 2001 he was head of the Department of Medical Economics, a joint venture of the University Hospital in Zurich and the Institute of Social and Preventive Medicine of the University of Zurich. Professor Szucs' former appointments include head of research and founder of the Center of Pharmacoeconomics of the University of Milan, head of the working group for clinical economics at the University of Munich, senior consultant at Arthur D. Little Inc. and head of the Department of Health Economics at F. Hoffmann-La Roche Ltd. in Basel. Professor Szucs was appointed professor of pharmacology/pharmacoeconomics at the School of Pharmacy of the University of Milan in 1996 and associate professor for medical economics at the University of Zurich in 2002. He holds a medical degree from the University of Basel, a Master in Business Administration from the University of St. Gallen, Switzerland, a Master of Public Health degree from Harvard University, and is board certifi ed in Pharmaceutical Medicine as well as in Prevention and Public Health. He has also received a LL.M in International Business Law with a specialisation in Information- and Technology Law from the University of Zurich. He serves as a member of the editorial board of several scientific journals and has published more than 300 scientific articles, book chapters and monographs. In 2010 he was appointed Honorary Professor at Peking University. In June 2012, Prof. Szucs was elected to direct the Faculty Assembly of the Medical Faculty of the University of Basel. He was elected to represent the Swiss Society of Pharmaceutical Medicine in the Senate of the Swiss Academy of Medical Sciences. Currently, Prof. Szucs is Chair of the Master of Public Health Programme of the Universities of Basel, Berne and Zurich; additionally, he chairs the examination committee of the Swiss Association of Pharmaceutical Medicine.

In the fall academic semester of 2013/2014 Prof. Szucs went on a sabbatical in order to practice clinical medicine at the Hirslanden Clinic in Zurich. Apart from clinical duties and rotations, he conducted research on drug safety by analyzing in-house prescriptions and initiated a personalized medicine clinic focusing on pharmacogenetics.

In October 2014, Prof. Szucs received the Annual Prize of the Swiss Society of Health Economics, in recognition of his service as a president to this society as well as his endeavors to broaden and strengthen the field of health economics in the Switzerland.

In November 2014, Prof. Szucs received a lifetime honorary professorship at the Peking University's Health Science Center in recognition for his past and ongoing support of the Chinese Course on Drug Development and Regulatory Sciences.

Finally, the Board of the International Health Economics Association awarded the University of Basel the honour of hosting the 2019 World Congress of Health Economics. This congress will welcome around 1,000 participants from around the globe. Prof. Szucs and Prof. Felder are members of the local Steering Committee and are representing the Faculties of Medicine and Economics, respectively.

Thomas is board certified in Pharmaceutical Medicine as well as in Prevention and Public Health. He has published more than 400 articles, book chapters and monographies. He has worked extensively in the field of pharmaceutical economics and epidemiology. In 2013 he started to practice in personalised medicine with special emphasis on pharmacogenomics at the Klinik Hirslanden in Zurich. In 2016 he was rated among the 20 most influential economists in Switzerland.

Education & Training
Personnel.

The ECPM training platform offers undergraduate and postgraduate training in the field of pharmaceutical medicine/drug development sciences at different levels. The structure includes an undergraduate/graduate level for medical and life sciences students and three postgraduate levels. The first postgraduate level represents the ECPM Course (Diploma of Advanced Studies Course, DAS, 30 ECTS), which then can be complemented by master modules plus a thesis to achieve the MAS title of MMD (Master of Advanced Studies in Medicines Development, 60 ECTS). The third level offers courses for continuing professional career development, which are also accredited by the Swiss Medical Society (FMH) for board certification, the Swiss Association of Pharmaceutical Professionals (SwAPP) Diploma and IMI PharmaTrain specialisation in Pharmaceutical Medicine/Medicines Development.

We are collaborating locally with the Clinical Trial Unit of the University Hospital in Basel, as well as Europe wide with Universities in the PharmaTrain network and internationally with the Peking University, the University of San Francisco and the George Washington University.

Head of Education & Training, Managing Director

Annette Mollet, PhD, dipl. Pharm. Med. SwAPP is managing director of ECPM and head of education & training of ECPM at the University of Basel since 1997.

She studied Pharmacy at the University of Basel and received her PhD in Neurobiology at the Swiss Federal Institute of Technology in Zurich.

Annette Mollet worked at F. Hoffmann-La Roche in the Clinical R&D department where she conducted clinical trials in the field of AIDS and Anticoagulation therapeutics and worked as a Medical and Product Manager responsible for oncology products at the Swiss affiliate of Roche Pharma. She is chairing the Federal Expert Committee for the Evaluation of Radioactive Drugs at Swissmedic (Swiss Agency for Therapeutic Products) and the BAG (Swiss Federal Office of Public Health) since 2007, being a member since 1994. She is a member of the board of SwAPP (Swiss Association of Pharmaceutical Professionals) since 1999 and the commission for specialty training and continuous education (CPD). She is also involved as a programme manager in the creation of a European Specialist title in Pharmaceutical Medicine and Master title in Medicines Development within IMI (Innovative Medicines Initiative). She chairs the PharmaTrain Federation (successor project after termination of the PharmaTrain project in 2014) working group of course providers in pharmaceutical medicine. She teaches drug development both at the University of Basel and Zurich with emphasis on regulatory affairs. Annette is the co-author of the "Dictionary of Pharmaceutical Medicine" by Springer (fourth edition, 2017) and was member of the working party on the "PharmaTrain Syllabus for Pharmaceutical Medicine" lead by the Royal College of Physician.

Course Director

Katja Suter, PhD is Course Director in Training and Education of ECPM at the University of Basel since 2017. She received her MSc in Pharmacy in 2003 and her Ph.D. in 2007 from the University of Basel. During her thesis she studied the pharmacokinetics of nasally delivered drugs.

She joined the Basel Institute for Clinical Epidemiology and Biostatistics (Ceb) as a research scientist and was involved in performing health technology assessments and systematic reviews. From 2009 to 2016 she worked in the hospital pharmacy of the University Hospital Basel and completed her specialization in Hospital Pharmacy FPH in 2010. Since 2007 Katja is involved in the undergraduate education at the Faculty of Medicine and since 2016 she teaches the basics of evidence-based pharmacy at the Department of Pharmacy of the University of Basel.

She joined the European Center of Pharmaceutical Medicine in 2017 as course director. Katja became also the ECPM webmaster and takes care of the linkedIn activities.

Administrator and Course Organiser

Beatrice Schmid is responsible for the course organisation and administration as of March 2013. Since 1996 Beatrice was responsible for the management of different administrative secretariats. She started her career in a facility management company where she managed human resource matters. In 2000 she joined Novartis where she held different positions such as administrative assistant in the IT department and later as human resource assistant of the technical operations department. From 2002 until 2013 she worked for Helvetia, a Swiss insurance company. At that time she was involved in the administration of the IT support in headquarters and later she coordinated the executive secretariat of the sales management. In March 2013 she joined ECPM where she manages the course administration and organises the secretariat of the institute. This includes the file maker database and the user management of our mediathek.

Research.
Personnel.

ECPM's research activities focus on the health economic characteristics, cost-benefit implications and efficient use (e.g. guided by predictive testing or risk stratification models) of pharmaceuticals and other health care interventions in Switzerland and internationally. They have a close relationship with modern Health Technology Assessment and imply the use and integration of health economic and pharmacoeconomic evaluation methodology (cost effectiveness, cost utility, application of advanced modelling techniques), outcomes and clinical research (i.e., randomised clinical trial and observational study) methodology and biostatistics. Complementary activities occur in related fields such as health systems research, health services research and clinical epidemiology and pharmacoepidemiology.

Health economic evaluation studies, which are a mainstay of ECPM's research activities, integrate clinical evidence with medical resource use and cost data to analyse the value for money provided by new or long-used drugs or other healthcare interventions. The overarching question is how scarce health care resources can be optimally used to maximise patient benefit. The results of this type of research complement comparative effectiveness research and are an important prerequisite of informed and transparent decision making in the health care sector.

Clinical fields addressed by ECPM studies include oncology and haematology, cardiovascular disease and heart failure, geriatrics, postoperative pain management, infectious diseases and vaccinations.

Head of Research

Matthias Schwenkglenks, PhD, MPH has been Head of Research at ECPM since 2003. He also leads the Medical Economics Unit at the Epidemiology, Biostatistics and Prevention of the University of Zürich, Switzerland, since 2010.

He obtained a Master of Arts in Sociology and Political Sciences from the University of Tübingen, Germany, a Master of Public Health from the Universities of Basel, Bern and Zürich, and a PhD in Epidemiology from the University of Basel.

In 2009, he received the Venia legendi in "Health Economics and Public Health" from the University of Zürich, and was subsequently appointed professor (Titularprofessor) in 2016. Current research interests and teaching activities are in the fields of health economics, health economic evaluation and modelling, health services research, epidemiology, observational study and trial design, and biostatistics. He previously headed the Department of Medical Economics at the Hirslanden Group of Private Clinics, Zürich, and worked as a research fellow at the Department of Medical Economics of the University of Zürich. He also has extensive professional experience in internal intensive care nursing.

Senior Research Scientists

Klazien Matter-Walstra, PhD studied human biology in Groningen, Netherlands, followed by a PhD in cancer immunology at the University of Bern. Thereafter, she was a supervisor at the immune-cytology laboratory at the Institute of Pathology of the University of Bern. She became a research assistant at the "Paracelsus heute" foundation, a medical writer for Mediscope AG and a research assistant at the Institute of Evaluative Research in Orthopaedics at the University of Bern, where she received training in health services research and small area analysis. Dr Matter-Walstra completed courses in cancer diagnostics, epidemiology, medical pharmacology, evidence based medicine, evaluation research and health economics. Since 2007, she has been a senior researcher at ECPM where she is responsible for outcomes research and health economic activities in cooperation with the Swiss Group for Clinical Cancer Research (SAKK). Klazien left ECPM in 2017. We thank her for her great contributions, wishing her all the best for her future career.

Senior Research Scientists

Zanfina Ademi, Pharm, MPH, PhD was trained as a Pharmacist before completing a Master of Public Health at the University of Kuopio, Eastern Finland. In 2011, she was awarded a PhD by Monash University, Melbourne, Australia in epidemiological and health economic modelling. For three years she worked as a Research Fellow at the Melbourne EpiCentre of the University of Melbourne.

Her research involved Epidemiological studies that assess the long-term outcomes of cardiovascular disease and their predictors and application of decision analytic methods as a framework for cost-effectiveness analysis of chronic disease. While at The University of Melbourne, she was awarded an Early Career Research grant and in 2012 and 2013 she was a chief investigator in two awarded projects by National Health and Medical Research Council in Australia. She was involved in teaching undergraduate and graduate courses in Epidemiology, Evidence-based Medicine and Health Economics at The University of Melbourne and Monash University.

Since July 2014, Zanfina has been appointed as a Senior Research Scientist at ECPM. Her current research interests are in the field of epidemiology, health service research, as well as epidemiological and health economic modelling techniques. Zanfina has co-supervised two PhD students at Monash University, one who has graduated and one who will soon be completed. Zanfina left ECPM in January 2018. We thank her for her great contributions, wishing her all the best for her future career.

Research Scientist

Nadine Schur, PhD studied Biomathematics at the University of Applied Science Zittau/Görlitz, Germany, before obtaining a Master of Science in Epidemiology at the University of Basel in 2008. Afterwards, she worked on her PhD thesis "Geostatistical modelling of schistosomiasis transmission in Africa" at the Department of Epidemiology and Public Health, Swiss Tropical and Public Health Institute (Swiss TPH), Basel, that she published in 2011.

She continued her work at the Swiss TPH on the spatial distribution of neglected tropical diseases in Africa for another year where she was also involved in teaching. Then, she started a new position as Research Associate at the Department of Infectious Disease Epidemiology, Imperial College London, UK, analysing demographic and behaviour-related factors as well as temporal trends associated with the HIV epidemic in Zimbabwe. She also gained knowledge on the conception and implementation of epidemiological field studies in the framework of the Manicaland Project.

Since 2015, she is employed as Research Scientist at the Institute of Pharmaceutical Medicine (ECPM, University of Basel, Switzerland). Her current research interests are in the field of epidemiology and biostatistics focused on multivariable regression analysis, cost calculations of drug developments in randomised controlled trials and epidemiological modelling in relation to the prevention of diseases.

Research Scientist

Joris van Stiphout, MSc studied Oefentherapie Mensendieck in Amsterdam, Netherlands, which is comparable to physiotherapy. Thereafter, he obtained a master in Health Sciences at the VU University Amsterdam. He completed courses in epidemiology, biostatistics, care and prevention research and quantitative research. During his master, he chose the specialisation "policy and organisation of health care". Within the specialisation he completed the courses advanced health economics, economic evaluations, management in health organisation and regulation and organisation in health care. Joris van Stiphout did his internship at EMGO+ Institute for Health and Care Research, VU University Amsterdam where he wrote his master thesis. He has been a trainee at ECPM since May and a research scientist since September 2014. Joris left ECPM in 2017. We thank her for his great contributions, wishing him all the best for his future career.

Research Scientist

C. Simone Sutherland, PhD worked as a clinical research professional for many years in Canada prior to developing an interest in health economics. In 2013, after working as a Research Associate at the Programs for Assessment of Technology in Health (PATH) Research Institute, she pursued a Master in Health Economics and Decision Modelling at the University of Sheffield. Upon graduating with merit, she returned to the PATH Research Institute, where she continued assessing the clinical and cost outcomes of new technologies for projects with Health Quality Ontario (HQO). In order to expand on her knowledge of diseases and modelling, she came to Switzerland in 2014 to complete a PhD in Epidemiology at the Swiss Tropical and Public Health Institute, with a combined focus on dynamical modelling and economic evaluation for interventions related to eliminating human African trypanosomiasis. Upon completion of her PhD in 2016, Simone joined ECPM as a Research Scientist.

Simone has been involved in teaching health economics to students at a master's level since 2015, and during her years of research, has had the opportunity to develop various techniques in health research methodology from systematic reviews to disease modelling. In addition, she has acquired knowledge of a wide range of diseases and interventions including diabetes, cardiovascular disease, COPD, schizophrenia, chronic kidney disease and diagnostic testing. Her current interests remain in health decision-making methods for ailments that are prevalent in the western hemisphere, but also expand to concerns in developing economies with a focus on neglected tropical diseases.

Research Scientist

Judith Lupatsch, PhD is a research scientist and lecturer at ECPM. Her research interests focus on health economics, epidemiology and health service research. She has a degree in Social Sciences from the University of Mannheim, Germany, where she focused on judgment and decision models as well as behavioural psychology. After working in several projects, she continued with a master's degree in Economics at the University of Bern, Switzerland, where she became interested in econometrics and health economics. Her thesis was on further developing and better modelling of preference-based utility measures for health economic evaluations. She perused with a PhD in Epidemiology and Biostatistics at the ISPM (Institute of Social and Preventive Medicine) in Bern where she had the chance to deepen her modelling and data analyses skills, especially in cancer epidemiology. After the PhD she went for a post-doctoral fellowship to the INSERM (Institute national de la santé et de la recherche médicale) in Paris, France. She joined the ECPM in 2017, where she is mainly responsible for health economic and health service research projects in cooperation with the SAKK (Swiss Group for Clinical Cancer Research).

Research Scientist

Markus Messerli, PhD graduated in 2016 as a doctor in philosophy in pharmaceutical sciences at the University of Basel. During his thesis at the Pharmaceutical Care Research Group he was focusing i) on the evaluation of a pharmacist-led medication review service (Polymedication Check), and ii) on the investigation of specific drug-related problems, i.e. swallowing difficulties with medication intake. He joined the ECPM as a research scientist in January 2017 and worked as a project manager on part time basis. Further, he is in charge of the hospital pharmacy in the rehabilitation centre Rheinfelden where he also acts as a clinical pharmacist.

Special Projects

Kerstin Noëlle Vokinger, MD studied in parallel law and medicine at the University of Zurich. She obtained her Master in Law 2012 and passed the medical board examination 2015. Already during her studies, she was a fast track candidate in the PhD-program Biomedical Ethics and Law at the University of Zurich. She received her PhD degree 2015, which was funded by the Swiss National Foundation (SNF). From 2010 to 2015 she was a researcher at the Chair for Constitutional Law at the University of Zurich. Dr. Vokinger sat for the bar after clerking at the prosecutor's office and at a law firm in Zurich and was admitted to the Swiss bar as an Attorney 2014. Subsequently, she worked as an Attorney at a law firm in Zurich focusing on the areas of pharmaceutical law, medical law, patents, regulation and litigation. Dr. Vokinger obtained her LL.M. (Master of Laws) degree from Harvard Law School in 2016 and worked from 2015 to 2016 as an editor of the Harvard Journal of Law and Technology and as a Visiting Researcher at Harvard Law School focusing on the research project "Global Access to Medicines". This position was supported by the SNF. Currently, she has an appointment as a Postdoc Fellow at Harvard Medical School and the Brigham and Women's Hospital in Boston where she conducts research with a focus on therapeutics in the intersection of law and medicine. She is working as an Attorney-at-Law at the law firm WalderWyss in Zurich. Dr. Vokinger has published numerous papers and has given presentations, among other places, at Harvard Medical School and the UN/WIPO in Geneva.

PhD Candidate

Renato Mattli, MSc ETH, MAS BA studied Human Movement Sciences at the ETH in Zurich. After working several years as a Clinical Research Associate in the medical device industry he acquired a MAS in Business Administration. Thereafter, he worked as a Health Economics and Market Access Manager EMEA for the same medical device company. Since 2012, Renato is working as a Research Associate at the Winterthur Institute of Health Economics (WIG) that belongs to the Zurich University of Applied Sciences (ZHAW). Since 2014, he is also the deputy head of the Health Economics Research Group within the WIG. His main research interests and teaching activities are in the fields of health economic evaluation and health technology assessment. Renato joined the ECPM in 2016 as a part time PhD student. The title of his thesis is "scaling up cost-effective physical activity interventions in a culturally diverse setting".

Education & Training.
Current Status.

ECPM, founded in 1991, has established a reputation as the premier European training centre in pharmaceutical medicine. Training is offered on undergraduate, graduate and post-graduate levels. On a postgraduate and continuing education level, courses provide expert knowledge in drug development, pharmaceutical medicine, clinical research, and regulatory sciences. The ECPM Diploma Course (ECPM Course) represents the core of the postgraduate training platform. It covers the training need of specialists working in one or the other phase in drug development to provide a holistic view of the process and comprehensive instructions for integrating cutting-edge concepts and best practices in medical product development and regulatory sciences. The focus of the ECPM training platform is to teach integrated medicines development with emphasis on requirements for rational and rapid development of a new product for the global market. The course programmes cover all aspects of pharmaceutical medicine and drug development sciences as defined by the IMI PharmaTrain syllabus.

Undergraduate / Graduate Teaching

ECPM employees teach a variety of graduate-targeted courses in pharmaceutical medicine, health economics and health policy. Courses are offered within the Medical Faculty and the Pharmacenter of the University of Basel, as well as at the Medical/Science faculty of the University of Zurich. Lectures are given in English and German, please see respective title on the list below.

Postgraduate Training

Since January 2012 ECPM is recognised as IMI PharmaTrain Training Centre of Excellence. This certifies that ECPM adheres to the IMI Education & Training Quality Standards as well as to the PharmaTrain Syllabus, Learning Outcomes and Curriculum for training in pharmaceutical medicine. Within the lap of PharmaTrain 12 Universities in Europe were recognized as Centres of Excellence allowing now a mutual acceptance of trainees and credit points.

Participants of the «Regulatory Science» Course at George Washington University during the onsite visit at the FDA campus.

The following postgraduate courses were offered in 2017:

Diploma Course (DAS) in Pharmaceutical Medicine

The 14th cycle started in September 2017 and ends with the examination in August 2019.

Project Management in Medicines Development

In collaboration with the CTU (Clinical Trial Unit) of the University Hospital Basel

This course is based on the PMBOK guide and includes 6 days of face to face teaching, a pre-assignment and a homework on project management in drug development and management of clinical trials.

Issues and Trends in Regulatory Sciences

In collaboration with the George Washington University

This one-week programme on regulatory science includes a visit to the FDA and the NIH hospital the National Library and the Congress.

Study Trip to Israel

In collaboration with the Swiss Society of Health Economics and Health Sciences

Since 1995, Israel has had a National Health Insurance (NHI) system that provides a benefits package to all citizens and permanent residents of Israel, which the government updates each year. The trip included visits of hospitals, insurance companies and the industry.

Scientific Medical Writing

In collaboration with Mediwrite

This course provides an introduction to the field of strategic scientific and medical writing and offers hands on training in writing and analysing scientific texts.

Presentation and Communication Skills

This seminar offers an intense two-day interactive, hands-on programme designed to build and expand essential presentation skills, persuasive power, and personal presence.

Participants of the study trip on the Israeli health care system.

Education & Training.
Objectives for the coming years.

Participants of the 14th ECPM Course Cycle (2017–2019).

The backbone of ECPM Education and Training remains the ECPM Diploma Course with approximately 110 participants every second year. The current course started in September 2017 and will run until August 2019. In January 2012 ECPM received the "Centre of Excellence" accreditation by PharmaTrain and adapted the learning outcomes and examination mode to the Europe wide accepted standards. Re-accreditation is planned for January 2018.

The aim is to maintain the high quality and our leading role in the training of medicines development. The ECPM Course is recognised by the Swiss Association of Pharmaceutical Medicine (www.sgpm.ch), by the Swiss Medical Association (www.fmh.ch) and the Swiss Association of Pharmaceutical Professionals (www.swapp.ch) to cover the theoretical training and the examination for specialisation and board certification. Collaboration with professional associations and our customers from pharmaceutical industry, academia and regulatory authorities are key. Through the PharmaTrain collaboration we can offer the master course participants to acquire courses and credit points à la carte in Europe.

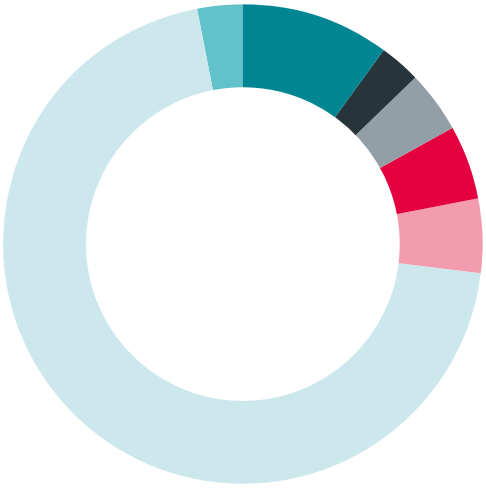
The first candidate finished in September 2015 and three others until December 2017. Several students are in the process of attending master module courses and writing their master thesis. Through the Bologna system it is possible to acquire credit points at other Universities. The rule is that at least 50 % of the training and the master thesis must be completed at the University where the candidate is enrolled. The syllabus for education and training in pharmaceutical medicine was revised by a working group of PharmaTrain under the lead of the Royal College of Physicians and in collaboration of ECPM.

ECPM partners with the University of Beijing and the University of San Francisco to enhance training competencies and standards. Through the collaboration with the School of Medicine and Health Sciences at the George Washington University ECPM offers a yearly one-week summer institute on "Issues and Trends in Regulatory Sciences" including a visit at the FDA. This course reveals ECTS credits which can be used for achieving the MAS title. A study trip to Scandinavia to learn how they organise their health system is offered together with the Swiss association of health economics.

Education & Training.
Overview of activities.

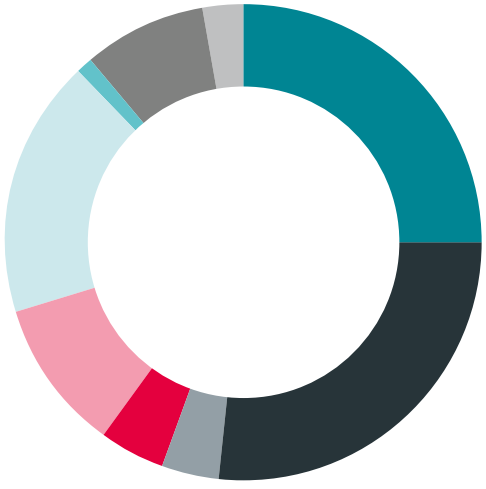
Overview of 2017–2019 Figures

Affiliations of Course Participants



Workplace of students	
Academia / University hospital	10%
Biotech	3%
Consultancy	4%
CRO	5%
Other	5%
Pharmaceutical company	70%
Regulatory agency	3%
Total	**100%**

Educational Background

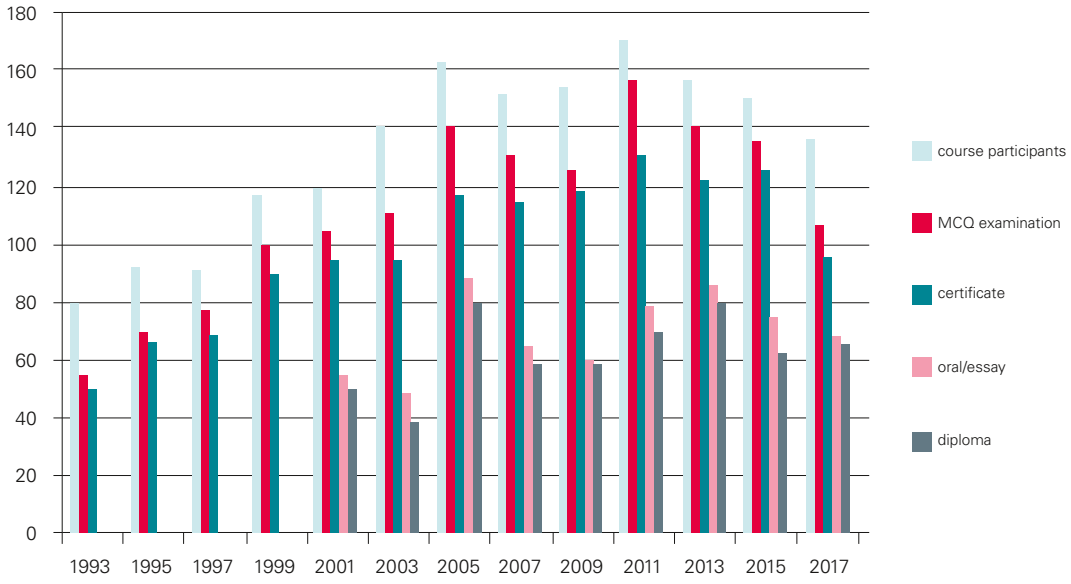


Educational background of students (2017 – 2019)	
MD	25%
PhD	26.9%
MD, PhD	3.7%
MBA, Business	4.6%
MSc Pharm. Sciences	10.2%
MSc Life Sciences	17.6%
MA Linguistics	0.93%
BSc Life Science	8.3%
others	2.8%
Total	100%
Totel no of students	108

Age groups

2015 – 2017	
25– 30 years	6
30– 35 years	18
35– 40 years	28
40– 45 years	32
45– 50 years	16
50– 55 years	6
55– 60 years	2
Total	108

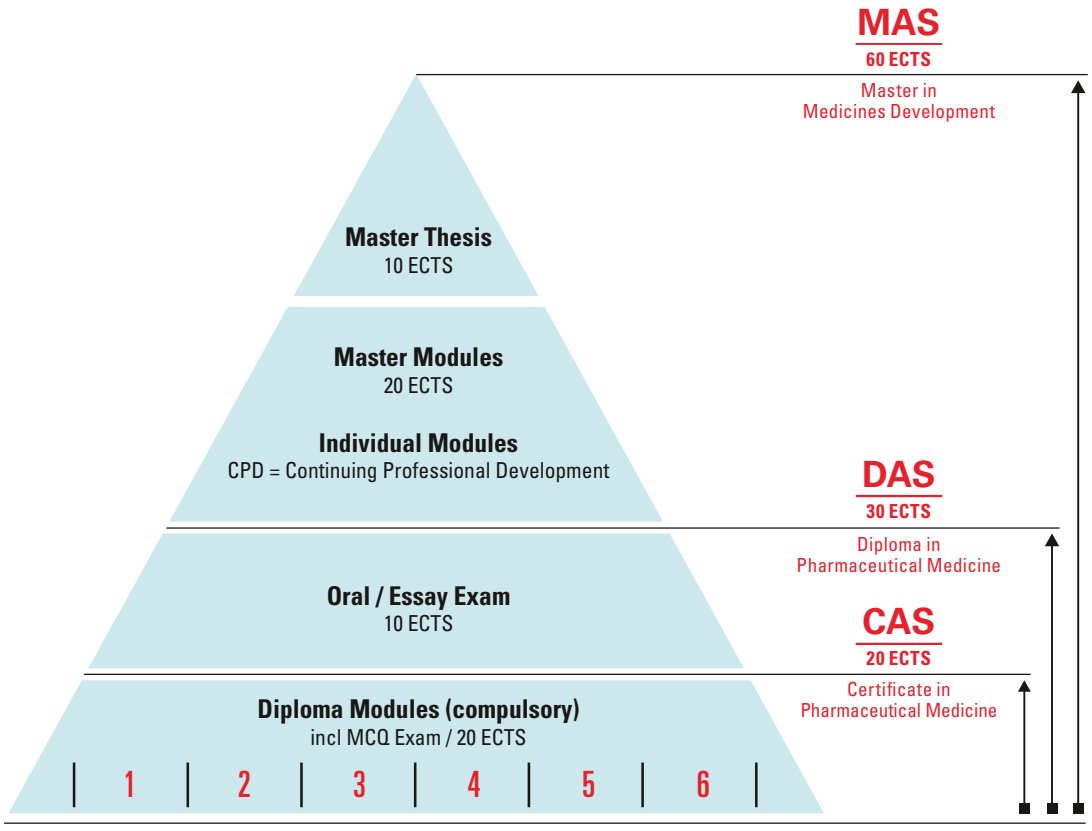
Examination



ECPM Platform

The ECPM training platform is conceived to provide profound training for scientists and managers in different areas of drug development. As such, its primary targets are to provide up-to-date knowledge on current trends in drug development and to train the leaders in drug development for their next career step. Additionally it offers a platform to share knowledge with colleagues and discuss with experts face-to-face.

The ECPM training platform contains undergraduate and postgraduate training in the field of pharmaceutical medicine/drug development sciences at different levels. The structure includes the undergraduate and graduate level for medical students and the three postgraduate levels where the ECPM Course forms the basis with a Diploma of Advanced Studies in Pharmaceutical Medicine (30 ECTS) The diploma can be complemented with master modules plus a thesis to achieve a MAS title in Medicines Development (MMD) (60 ECTS). The third level includes all diploma and master modules, many elective modules and short courses, which are accredited by the University of Basel and several professional associations for continuing professional development, please see www.ecpm.ch. ECPM collaborates with a science-driven and highly experienced international faculty including a network of experts in academia, pharmaceutical industry and regulatory agencies and bodies of the health care system. Within this network ECPM was the coordinating entity of the European IMI PharmaTrain project (2009–2014), which aimed at fostering the overall understanding and competence for successful execution of integrated drug development and life-cycle management of medicines by identifying training gaps and by harmonising the teaching programmes.



ECPM Diploma Course (DAS) in Pharmaceutical Medicine

The ECPM Course is a well-established postgraduate education and training programme targeted at representatives from industry, service industry, academic and government decision- and policy-makers who already have a good grounding in the basics and will benefit from a more in-depth, comprehensive and systematic immersion into modern medical product development, regulation and market introduction. Participants are involved in lectures, panel discussions, team-oriented case studies and interactive learning. Participation in the ECPM Course provides the opportunity to integrate work and education, to discuss with experts face-to-face or online, to gain in-depth knowledge while building an international network, and to put this into perspective with their own career plan.

A faculty network of experts from academia, pharmaceutical and biotechnology companies and regulatory authorities (including the EMA, FDA, Japan and Emerging Markets regulatory agencies) carry the teaching responsibility. A successful completion of the course and the final examination provides the title "Diploma of Advanced Studies (DAS) in Pharmaceutical Medicine" and includes 30 ECTS credits.

MMD-Master Course (MAS) in Medicines Development

The Master Course in Medicines Development is a postgraduate master course (Master of Advanced Studies, MAS). This programme extends the Diploma Course in Pharmaceutical Medicine. Master modules can be chosen according to the needs of the candidates to be able to cope with the challenges of drug development. Training and skills provide the basis to critically assess and improve challenges in the drug development process.

The programme is designed to be completed while working and through the IMI PharmaTrain network the course and ECTS credit points are mutually recognised between the participating Universities to offer the opportunity of mobility and availability.

Continuing Education

Back to back with the modules of the Diploma course, ECPM offers one-day seminars called "Frontiers in Drug Development" on current trends and hot topics. These seminars are open to the public and are accredited for continuing education by different professional organisations, such as the Swiss Medical Association (FMH). Topics covered in the past included. The complete list can be viewed on http://web.ecpm.ch/frontiers-in-drug-development.

Examination

The diploma and specialist examinations are offered once a year. 108 candidates participated in the multiple choice (August 2017) and 93 passed it successfully (failure rate 13.9 %). 34 candidates took the oral/essay examination on the 20th August 2017 and 33 took it on the 13th of September 2017. The overall failure rate was 6%.

E-learning

To cope with the limited time resources and reduced budgets of specialists working in the health care environment, ECPM has produced three e-learning programmes. E-learning modules can be used for different teaching purposes. First they can be used as a self-learning tool for preparation or repetition of course material, second they can replace selected face-to-face modules required to achieve the Master in Medicines Development or to collect credits for continuing professional education:
Basics in Health Economics (launched 2013)

- Drug Safety and Pharmacovigilance (launched 2014)
- Personalised Healthcare (launched 2015)

A Certificate of Attendance from the University of Basel will be awarded after successful completion of each e-learning programme (1 ECTS).

Current Projects

- ECPM is working on several new training and teaching programmes:
- Module on *„Leadership and Business Development“* will be offered in a updated version
- Module on *“Medical and Scientific Writing”*
- Module on *„Project Management in Medicines Development”* (third edition)
- Additional master module: a survey among the ECPM alumni revealed that the following topics are highest interest: market access, safety, bioinformatics, genomics
- Summer institute together with the School of Medicine and Health Sciences at the George Washington University on *“Issues and Trends in Regulatory Science”* (second edition)
- Study Trip to Israel jointly with the Swiss society of health economics and health sciences *“The Israel Healthcare Story”*

Completed Projects

- Two master thesis in medicine’s development supervised and awarded
- Module on *„Project Management in Medicines Development”* (second edition)
- Module on *“Ethical and Legal Aspects of Clinical Trials”*
- Summer Institute at George Washington University (second edition)

Scientific Presentations to External Audiences

Presenter (name, function)	Presentation title	Event (title, location, date)
Isabelle Widmer, course director	Medical Information	DIA Annual Medical Information and Communications Conference, Orlando, FL, April 2016
Annette Mollet, Head of Education & Training, Managing Director	Regulatory Documents	Summer Institute, George Washington University, Washington, US May 24, 2017

Expertise for Approval of Radioactive Diagnostics and Therapeutics

Annette Mollet chairs the Federal Expert Committee for radioactive drugs consulting Swissmedic and the Federal Office of Public Health regarding the approval of new diagnostic and therapeutic drugs and tools for nuclear medicine.

Postgraduate Training Activities[1]

ECPM has been provisionally recognized as a training centre for the board certification for physicians in Prevention and Public Health. For the board certification for physicians in pharmaceutical medicine ECPM is partnering with the SAKK (Swiss Group for Clinical Cancer Research) to create a joint centre for continuing education in this field. Currently both positions are open.

Undergraduate Teaching at the University of Basel Medical School

1. Szucs TD. Tutorate im Wissenschaftsmonat (WiMo) für Medizinstudenten, 4./5. Studienjahr Medizin Master, Universität Basel.
2. Szucs TD, Mollet A, Blank PR. Interprofessionelles Modul Medikamentenentwicklung. Major Clinical Medicine, 2. Studienjahr Medizin Bachelor, Universität Basel.
3. Szucs TD. Interprofessionelles Modul Pharmakogenomik und personalisierte/individualisierte Medizin. Major Clinical Medicine, 2. Studienjahr Medizin Bachelor, Universität Basel.
4. Mollet A, Szucs TD, Schwenkglenks M. Interprofessionelles Modul Arzneimittelsicherheit in der Klinik. Major Clinical Medicine, 3. Studienjahr Medizin Bachelor, Universität Basel
5. Schwenkglenks M, Matter-Walstra K, Blank PR. Interprofessionelles Modul Medizinische Ökonomie. Major Clinical Medicine, 3. Studienjahr Medizin Bachelor, Universität Basel.
6. Schwenkglenks M. Interprofessionelles Modul Gesundheitspolitik. Major Clinical Medicine, 3. Studienjahr Medizin Bachelor, Universität Basel.
7. Schwenkglenks M, Lupatsch J. Kleingruppenseminare im Themenblock Körper, Subjekt, Umwelt, 1. Studienjahr Bachelor. (Themen: Soll man Statine in der Prävention der koronaren Herzkrankheit einsetzen? Stehen die Kosten im Verhältnis zum Nutzen bei der sogenannten Alternativmedizin?)
8. Zanfina Ademi, C. Simone Sutherland. 41127 Advanced Research Methods - Health Economics. 3. Master and PhD students, Universität Basel
9. Suter K. Tutorate im POEM (Patienten-orientierte evidenzbasierte Medizin), clinical Epidemiology I: critical appraisal (treatment); 3. Studienjahr Medizin (2 x 2 lessons = 4 lessons), responsible Prof. Heiner C Bucher

[1] In Switzerland this is considered „Weiterbildung" according to the „Weiterbildungsordnung" of the Swiss Medical Association (FMH www.fmh.ch).

Undergraduate Teaching at the University Basel, Faculty of Science

10. Suter K. 44826-01 Evidence Based Pharmacy I- Basics (12 lessons), Master Pharmazie
11. Suter K. Lectures forming part of 48174-01 Evidence Based Pharmacy II – Research Methods, Master Pharmazie (3 lessons) (responsible Prof. Kurt Hersberger)
12. Schwenkglenks M. Lectures forming part of 20458-01 – Essentials in Drug Development & Clinical Trials.

Undergraduate Teaching at the University of Zurich

13. Szucs TD, Blank PR, Mollet A. Mantelstudium Arzneimittelentwicklung. 2.–4. Studienjahr Medizin Bachelor, Universität Zürich.
14. Schwenkglenks M, Szucs TD, Blank PR, Matter-Walstra K., Mollet A. BME310 – Research methodology for studies on human health and disease. 3. Studienjahr Biologie Bachelor oder Master, Universität Zürich.
15. Szucs TD, Blank PR, Schwenkglenks M, Mollet A. BME329 – Developing New Medicines: An Introduction. 3. Studienjahr Biologie Bachelor oder Master, Universität Zürich.
16. Schwenkglenks M, Szucs TD, Matter-Walstra K. BME18 – Clinical epidemiology and quantitative research in health care. 3. Studienjahr Biologie Bachelor oder Master, Universität Zürich

Undergraduate Teaching at the University of Bern

17. Schwenkglenks M. Lectures on Health economic evaluation and Health Technology Assessment in Switzerland and Europe. Master Biomedical Engineering, Universität Bern.

Postgraduate Teaching at the University of Basel

18. Mollet A, Szucs TD, Schwenkglenks M, Blank PR. Lectures forming part of the ECPM Course in Pharmaceutical Medicine.
19. Schwenkglenks M, Mattli M. Gesundheitsökonomische Modellierung – Hands-on. Course forming part of the Postgraduate Master Programme in Public Health.
20. Suter K. Lectures forming part of 46399-01 Forschungsseminar Klinische Pharmazie, (1 lessons) (responsible Prof. Kurt Hersberger, Prof. Christoph R Meier)

Postgraduate Teaching at the University of Zurich

21. Blank PR, Mollet A, Schwenkglenks M, Szucs TD. Courses forming part of the Postgraduate Master Programme in Public Health.

Research.
Current Status.

ECPM has been active in research since 2003. In the early days, a majority of studies were run with industrial partners, as there was (and is) only limited public funding for pharmaceutical-related health economic evaluation and Health Technology Assessment in Switzerland. In 2017, our group was one of the most active health economic groups in Switzerland in terms of publication activity, and project scope and scale. Based on 6 fulltime equivalents of scientific staff, we pursued a broad range of research activities, including participation in EU-funded international projects.

An FP7-funded project was devoted to the detection of new biomarkers in breast cancer and a HORIZON 2020-funded project addresses pharmacotherapy optimisation in elderly patients. In both cases, ECPM is responsible for the health economics work packages. We also take responsibility, since 2007, for the outcomes research and health economic evaluation activities of the Swiss Group for Clinical Cancer Research (SAKK), the leading Swiss collaborative study group in the field of oncology and haematology. In a growing atmosphere of reform of the national approach to Health Technology Assessment (HTA), we are engaged in discussion and are developing cooperation with relevant academic and non-academic players in the field, including health insurance companies. In cooperation with partner institutions from several Swiss universities, we perform HTAs for the Swiss Medical Board (SMB), a non-profit institution funded by e.g. the Swiss cantons and the Swiss Academy of Medical Sciences (SAMW). Projects with industrial partners continue to also play a relevant role, which gives us opportunities to work with raw data from large, multinational randomised clinical studies and to be involved in Health Technology Assessment activities abroad, e.g. in the UK. In cooperation with the Basel Pharmacoepidemiology Unit (BPU; Prof. Christoph Meier), and the Helsana Group, we have, for the fourth time, published a report on medication utilisation in Switzerland, based on health insurance claims data covering about 15 % of the Swiss population (Helsana Arzneimittelreport). Projects and resulting publications are listed in section Overview of Activities, below.

It is a strategic goal to intensify our cooperation with other units at the University of Basel pursuing related research activities, e.g. the Basel Institute for Clinical Epidemiology & Biostatistics, Swiss Tropical and Public Health Institute, Department of Health Economics at the Faculty of Business and Economics (DHE), Basel Pharmacoepidemiology Unit. The aforementioned units and ECPM have joined forces to establish an interdisciplinary network of excellence for comparative effectiveness and health economic research, S-CORE. S-CORE has recently achieved formal recognition as a Research Network of the University of Basel.

Research staff is also involved in undergraduate and postgraduate university teaching.

Key Areas of Expertise

- Pharmacoeconomics
- Health economics
- Decision-analytic modelling
- Epidemiology
- Outcomes research
- Clinical and observational study designs
- Biostatistics

Main Areas of Activity

- Oncology and haematology
- Cardiovascular disease and heart failure
- Influenza and other infectious diseases
- Geriatrics, specifically pharmacotherapy optimisation in the elderly
- Medication utilisation in Switzerland
- Variation in healthcare utilisation
- Approaches to health technology assessment and valuation of health service

Research.
Objectives for the coming years.

ECPM's situation and achievements in 2017 indicate the successful development of a small research unit. One main aim for the coming years is continued contribution to the shaping of new Swiss approaches to Health Technology Assessment and to the reimbursement of drugs and other health care services. In the future, Swiss authorities will commission more related tasks from academia. We intend to be prepared and make valid contributions.

Additional scientific aims are to expand research using administrative datasets provided by health insurance companies, and research on methodological topics in health economic evaluation.

Another important aim is to strengthen collaboration and develop potential for synergies with local partners from the Department of Public Health and beyond (e.g. Basel Institute for Clinical Epidemiology & Biostatistics; Basel Pharmacoepidemiology Unit at the Department of Pharmaceutical Sciences; Swiss Tropical and Public Health Institute; Prof Stefan Felder, representing health economics at the Faculty of Business and Economics). Steps to jointly establish an interdisciplinary network of excellence for comparative effectiveness and health economic research have recently led to formal recognition by the University, as mentioned above.

Establishing new grants from non-industry sponsors (cooperative study groups, non-profit organisations) and competitive grant givers remains important. However, as third-party funding of Health Technology Assessment-related and health economic evaluation-related research remains structurally uncertain, we also need to gain substantially more long-term university funding for our research group to ensure sustainability.

Research.
Overview of activities.

Sources of project funding in 2017

SAKK	22%
Health insurance companies	12%
University	12%
Swiss Federal Office of Public Health and semi public sources	5%
EU (HORIZON 2020)	5%
Commision of Technology and Innovation	5%
Industry and health care providers	39%

Note: numbers are appproximate

Local academic collaborations

- Prof. Stefan Felder, Health Economics, Faculty of Business and Economics, University of Basel
- Basel Institute for Clinical Epidemiology and Biostatistics (ceb), University Hospital Basel
- Prof. Christoph Meier, Pharmacoepidemiology Unit, University of Basel, and Hospital Pharmacy Basel, University Hospital Basel
- Prof. Kurt Hersberger, Pharmaceutical Care Research Group, Faculty of Science, University of Basel
- Swiss Tropical and Public Health Institute

Collaborations with national and international academic and public entities

- Epidemiology, Biostatistics and Prevention, University of Zürich
- University Hospital Zürich
- Institute of Social and Preventive Medicine, University of Bern
- Swiss Group for Clinical Cancer Research (SAKK)
- Swiss Federal Office of Public Health (BAG)
- INC-EU Study Group, Switzerland/UK
- Harvard School of Public Health, USA
- St. George›s Hospital, London, UK
- Department of Medicine 3, Division of Gastroenterology and Hepatology, Christian Doppler Laboratory for Molecular Cancer Chemoprevention, Medical University of Vienna, Vienna, Austria
- Department of General Medical Oncology, University Hospitals Leuven,
- Leuven Cancer Institute, Leuven, Belgium

Collaborations with private entities:

- Helsana Group of health insurance companies
- Germany Breast Group, Neu-Isenburg, Germany
- Pharmaceutical companies

Research.
Current Projects.

The following list comprises projects that have been started and are still on-going.

Ongoing	
Title:	Pricing and budget impact of biosimilars
Project lead & contributors:	ML, MS
Hypothesis / Objectives:	Estimation of impact of biosimilars on healthcare costs
Start date:	01.11.17
Partner(s):	Industry, University Hospital Basel
Output:	Report
Source of funding:	Industry

Ongoing	
Title:	Pill Protect®: health-economic performance characteristics and implications for health care financing
Project lead & contributors:	ZA, CSS, ML, NSch, MS
Hypothesis / Objectives:	Pill Protect: health-economic performance characteristics and implications for health care funding
Start date:	01.08.16
Partner(s):	Industry
Output:	Peer-reviewed publication, abstract
Source of funding:	Commission for Technology and Innovation (CTI), industry

Ongoing	
Title:	Cost-effectiveness of hyperkalemia treatment
Project lead & contributors:	ZA, CSS, MS
Hypothesis / Objectives:	Cost-effectiveness of hyperkalemia treatment
Start date:	01.05.16
Partner(s):	Industry
Output:	Abstract
Source of funding:	Industry

Ongoing	
Title:	Health economic properties of targeted cancer therapies
Project lead & contributors:	MS, CSS
Hypothesis / Objectives:	Early health economic assessment of targeted cancer therapies
Start date:	01.12.15
Partner(s):	Industry
Output:	Abstracts
Source of funding:	Industry

Ongoing

Title:	Effect of the Swiss human research legislation on the costs associated with randomized clinical trials in Switzerland
Project lead & contributors:	NSch, MS
Hypothesis / Objectives:	Assessment of impact of Swiss human research legislation on clinical trial costs and application timelines
Start date:	01.08.15
Partner(s):	Clinical Trial Unit at University Hospital Basel
Output:	Reports, peer-reviewed publications
Source of funding:	Swiss Federal Office of Public Health

Ongoing

Title:	OPERAM: Optimising PharmacothERApy in the
Project lead & contributors:	MS, PB, ZA
Hypothesis / Objectives:	Most older adults have multiple chronic diseases (multimorbidity) and multiple medications (polypharmacy). However, multimorbid patients are often excluded from clinical trials and most guidelines address diseases in isolation. Inappropriate drug prescription and poor drug compliance are common and contribute to up to 30% of hospital admissions. OPERAM investigators developed STOPP/START criteria to detect inappropriate drug use, both over- and underuse. Applying these criteria limits unnecessary polypharmacy and reduces underuse of indicated medications, but it remains uncertain whether systematic pharmacotherapy optimisation can improve clinical outcomes and reduce costs.We propose a multicentre randomised controlled trial to assess the impact of a userfriendly software-assisted intervention to optimise pharmacotherapy and to enhance compliance in 1900 multimorbid patients aged ≥75 years. Outcomes will include drug-related hospital admissions, health care utilisation, quality of life, patient preferences and cost-effectiveness. We will also perform several network meta-analyses (NMA) to provide new comparative evidence on the most effective and safest pharmacological and non-pharmacological interventions to reduce common causes of preventable hospital admissions (e.g. falls, fractures, bleeding). Therapy optimisation in the multimorbid elderly, enhanced compliance and discontinuation of less effective interventions have the potential to improve clinical, quality of life and safety outcomes, while reducing costs. We will provide a structured method with practical software solutions for optimal prescribing and new comparative evidence from NMAs for addressing multimorbidity and polypharmacy by means of customised, patient-centred guidelines. OPERAM ultimately aims at better healthcare delivery in primary and hospital care, based on effective, safe, personalised and cost-effective interventions that can be applied to the rapidly growing older population in Europe
Start date:	01.05.15
Partner(s):	OPERAM Consortium: Universität Bern, University Catholique de Louvain, Universiteit Utrecht, University College Cork, Panepistimio Ioanninon, Università degli Studi Gabriele d' Annunzio di Chieti-Pescara, TP21 GmbH
Output:	Pending
Source of funding:	EU (HORIZON 2020, proposal 634238) and Swiss State Secretariat for Education, Research and Innovation (SERI; contract number 15.0137)

Ongoing

Title:	Co-operative projects in the field of health economics and outcomes research in oncology
Project lead & contributors:	KM, JL, MS
Hypothesis / Objectives:	Outcomes research, health services research and health economic evaluation projects in cooperation with Schweizerische Arbeitsgemeinschaft für Klinische Krebsforschung (SAKK) and hospitals
Start date:	01.12.14
Partner(s):	SAKK, University Hospital Basel, other hospitals
Output:	Abstracts, peer-reviewed publications.
Source of funding:	Public

Ongoing

Title:	Health Technology Assessments (HTAs) for the SwissMedical Board
Project lead & contributors:	MS, ZA, JvS
Hypothesis / Objectives:	Performance of health economic parts of HTAs for the Swiss Medical Board
Start date:	01.06.14
Partner(s):	Basel Institute for Clinical Epidemiology and Biostatistics (CEB), Basel; Institut für Sozial- und Präventivmedizin (ISPM), Universität Bern; Institut Ethique Histoire Humanités (iEH2), Universität Genf; Institut für Epidemiologie, Biostatistik und Prävention (EBPI), Universität Zürich
Output:	Health Technology Assessment reports, peer-reviewed publications
Source of funding:	Swiss Medical Board

Ongoing

Title:	Drug reports based on Swiss health insurance claims data
Project lead & contributors:	MS, NSch
Hypothesis / Objectives:	Analysis of drug use in Switzerland and related medical and economic aspects, based on Swiss health insurance data
Start date:	01.09.13
Partner(s):	Basel Pharmacoepidemiology Unit and Hospital Pharmacy, University Hospital Basel
Output:	Publicly available reports published in 2014-2017. Peer-reviewed publications of sub-topics
Source of funding:	Health insurance provider

Ongoing

Title:	Health economic analysis of PENELOPE trial.
Project lead & contributors:	MS
Hypothesis / Objectives:	Health economic evaluation alongside the randomised controlled PENELOPE trial. PENELOPE is a phase III trial of palbociclib (PD-0332991) in patients with hormon receptor positive, HER2 negative patients with primary breast cancer and a high risk of recurrence after neoadjuvant chemotherapy.
Start date:	01.09.13
Partner(s):	GBG Forschungs GmbH, Neu-Isenburg, Germany
Output:	Pending
Source of funding:	Private entity, non-industry

Ongoing

Title:	Scientific Office for INC-EU Study Group
Project lead & contributors:	JvS, MS, NSch
Hypothesis / Objectives:	Continuous monitoring of state of knowledge in the field of chemotherapy-induced neutropenia, content management for INC-EU website.
Start date:	01.01.11
Partner(s):	INC-EU Study Group; St. Georges Hospital, London, UK
Output:	Web content
Source of funding:	Industry

Ongoing

Title:	Health economic analysis alongside SAKK clinical oncology trials.
Project lead & contributors:	KM, JL, MS
Hypothesis / Objectives:	The treatment of patients with cancer with new drugs may not only increase overall survival but may also increase or decrease overall treatment costs. Therefore, a comparison of incurred costs with achieved benefit in the form of increased overall survival by way of a cost-effectiveness analysis is undertaken. Prospective health economic data collection is still ongoing in two randomised clinical trials. For two other clinical trials data collection was finalized by the end of 2014 and analysis started 2015. Tree new studies including health economic evaluations were initialized in 2014, one more in 2015
Start date:	01.11.07
Partner(s):	SAKK
Output:	Abstracts, peer-reviewed publications
Source of funding:	Public

Ongoing

Title:	Health economics of bronchitol dry powder.
Project lead & contributors:	MS
Hypothesis / Objectives:	Assessment of health economic characteristics and cost-effectiveness of mannitol dry powder in the treatment of cystic fibrosis, for different countries
Start date:	15.02.13
Partner(s):	Industry
Output:	Abstract, peer-reviewed publication in preparation
Source of funding:	Industry

Research.
Completed projects.

The following list comprises projects that were completed during 2017.

Completed	
Title:	Performance-based pricing and reimbursement of pharmaceuticals (literature review)
Project lead & contributors:	JS, MS
Hypothesis / Objectives:	Literature review of approaches to value-based pricing and reimbursement of pharmaceuticals
Start date:	01.12.15
Partner(s):	Industry
Output:	Report, abstract
Source of funding:	Industry

Completed	
Title:	Cost-effectiveness analysis of chronic heart failure treatment
Project lead & contributors:	ZA, MS
Hypothesis / Objectives:	Assessment of the cost-effectiveness of sacubitril / valsartan in chronic heart failure patients with reduced ejection fraction, from a Swiss perspective
Start date:	01.03.15
Partner(s):	Industry
Output:	Report, abstract, peer-reviewed publication
Source of funding:	Industry

Completed	
Title:	Cost-effectiveness analysis of acute heart failure treatment
Project lead & contributors:	MS, TDS
Hypothesis / Objectives:	Cost-effectiveness analysis of serelaxin in the treatment of acute heart failure
Start date:	01.10.13
Partner(s):	Industry
Output:	Report
Source of funding:	Industry

Completed	
Title:	CAMPOS study.
Project lead & contributors:	MS
Hypothesis / Objectives:	To assess patterns of outpatient osteoporosis treatment costs in Switzerland by way of a prospective observational study.
Start date:	01.10.11
Partner(s):	Universitätspoliklinik für Osteoporose, Inselspital Bern; Swiss osteoporosis specialists; industry.
Output:	Abstract
Source of funding:	Industry

Completed

Title:	Use of osteoporosis treatments in Switzerland
Project lead & contributors:	MS
Hypothesis / Objectives:	Assessment of use osteoporosis treatments in Switzerland, using health insurance claims data
Start date:	01.10.17
Partner(s):	Health insurance provider
Output:	Report
Source of funding:	Industry

Completed

Title:	Epidemiology of clostridium difficile infection (CDI) and pricing of relevance for CDI-directed antibiotics
Project lead & contributors:	MM, MS
Hypothesis / Objectives:	Review of epidemiology of clostridium difficile infection (CDI) and pricing criteria for CDI-directed antibiotics
Start date:	15.01.17
Partner(s):	Industry
Output:	Report
Source of funding:	Industry

Publications, presentations and teaching activities of ECPM in 2017.

Publications

Kastien-Hilka T, Rosenkranz B, **Schwenkglenks M**, et al. Association between Health-Related Quality of Life and Medication Adherence in Pulmonary Tuberculosis in South Africa. Front Pharmacol. 2017 Dec 18; 8:919

Speich B, von Niederhäusern B, Blum CA, et al (including **Schwenkglenks M**). Randomized Trials Affordable (MARTA) Group. Retrospective assessment of resource use and costs in two investigator-initiated randomised trials exemplified a comprehensive cost item list. J Clin Epidemiol. 2017 Dec 29

Speich B, von Niederhäusern B, Schur N, et al (including **Schwenkglenks M**). Randomized Trials Affordable (MARTA) Group. Systematic review on costs and resource use of randomised clinical trials shows a lack of transparent and comprehensive data. J Clin Epidemiol. 2017 Dec 26.

Ademi Z, Pfeil AM, Hancock E, et al (including **Schwenkglenks M**). Cost-effectiveness of sacubitril/valsartan in chronic heart-failure patients with reduced ejection fraction. Swiss Med Wkly. 2017 Nov

Ademi Z, Sutherland CS, Van Stiphout J, Michaud J, Tanackovic G, **Schwenkglenks. M**. A systematic review of cost-effectiveness analysis of screening interventions for assessing the risk of venous thromboembolism in women considering combinedoral contraceptives. J Thromb Thrombolysis. 2017 Nov;44(4):494-506.

Conen D, Rodondi N, Mueller A, et al (including **Schwenkglenks M**). Design of the Swiss Atrial Fibrillation Cohort Study (Swiss-AF): structural brain damage and cognitive decline among patients with atrial fibrillation. Swiss Med Wkly. 2017 Jul

Blank PR, Ademi Z, Lu X, **Szucs TD, Schwenkglenks M.** Herpes zoster vaccine: A health economic evaluation for Switzerland. Hum Vaccin Immunother. 2017 Jul 3;13(7):1495-1504.

Kastien-Hilka T, Rosenkranz B, Sinanovic, et al (including **Schwenkglenks M**). Health-related quality of life in South African patients with pulmonary tuberculosis. PLoS One. 2017 Apr 20; 12(4)

Schandelmaier S, Tomonaga Y, Bassler D, et al (including **Schwenkglenks M**). remature Discontinuation of Pediatric Randomized Controlled Trials: A Retrospective Cohort Study. J Pediatr. 2017 May; 184:209-214.e1.

Matter-Walstra K, Schwenkglenks M, Dedes KJ. Cost-effectiveness of palbociclib plus letrozole versus letrozole alone as a first-line treatment in women with oestrogen receptor-positive, HER2-negative, advanced breast cancer. Revised results for the Swiss health care setting. Breast Cancer Res Treat. 2017 Jun;163(3):635

Biétry FA, Pfeil AM, Reich O, **Schwenkglenks M**, et al. Benzodiazepine Use and Risk of Developing Alzheimer's Disease: A Case-Control Study Based on Swiss Claims Data. CNS Drugs. 2017 Mar;31(3):245-251.

Aichmair A, Burgstaller JM, **Schwenkglenks M** et al.; LSOS Study Group. Cost-effectiveness of conservative versus surgical treatment strategies of lumbar spinal stenosis in the Swiss setting: analysis of the prospective multicenter Lumbar Stenosis Outcome Study (LSOS). Eur Spine J. 2017 Feb;26(2):501-509.

Publications

Kastien-Hilka T, Rosenkranz B, **Schwenkglenks M**, et al. Association between Health-Related Quality of Life and Medication Adherence in Pulmonary Tuberculosis in South Africa. Front Pharmacol. 2017 Dec 18; 8:919

Speich B, von Niederhäusern B, Blum CA, et al (including **Schwenkglenks M**). Randomized Trials Affordable (MARTA) Group. Retrospective assessment of resource use and costs in two investigator-initiated randomised trials exemplified a comprehensive cost item list. J Clin Epidemiol. 2017 Dec 29

Speich B, von Niederhäusern B, Schur N, et al (including **Schwenkglenks M**). Randomized Trials Affordable (MARTA) Group. Systematic review on costs and resource use of randomised clinical trials shows a lack of transparent and comprehensive data. J Clin Epidemiol. 2017 Dec 26.

Ademi Z, Pfeil AM, Hancock E, et al (including **Schwenkglenks M**). Cost-effectiveness of sacubitril/valsartan in chronic heart-failure patients with reduced ejection fraction. Swiss Med Wkly. 2017 Nov

Ademi Z, Sutherland CS, Van Stiphout J, Michaud J, Tanackovic G, **Schwenkglenks. M**. A systematic review of cost-effectiveness analysis of screening interventions for assessing the risk of venous thromboembolism in women considering combinedoral contraceptives. J Thromb Thrombolysis. 2017 Nov;44(4):494-506.

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Blank PR, Ademi Z, Lu X, **Szucs TD, Schwenkglenks M.** Herpes zoster vaccine: A health economic evaluation for Switzerland. Hum Vaccin Immunother. 2017 Jul 3;13(7):1495-1504.

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Schandelmaier S, Tomonaga Y, Bassler D, et al (including **Schwenkglenks M**). remature Discontinuation of Pediatric Randomized Controlled Trials: A Retrospective Cohort Study. J Pediatr. 2017 May; 184:209-214.e1.

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Aichmair A, Burgstaller JM, **Schwenkglenks M** et al.; LSOS Study Group. Cost-effectiveness of conservative versus surgical treatment strategies of lumbar spinal stenosis in the Swiss setting: analysis of the prospective multicenter Lumbar Stenosis Outcome Study (LSOS). Eur Spine J. 2017 Feb;26(2):501-509.

Schmutz C, Mäusezahl D, Bless PJ, et al (including **Schwenkglenks M**). Estimating healthcare costs of acute gastroenteritis and human campylobacteriosis in Switzerland. Epidemiol Infect. 2017 Mar;145(4):627-641.

Matter-Walstra KW, Achermann R, Rapold R, et al (including **Schwenkglenks M** and **Szucs TD**) Days spent in acute care hospitals at the end of life of cancer patients in four Swiss cantons: a retrospective database study (SAKK 89/09). Eur J Cancer Care (Engl). 2017 Jul;26(4).

Gautschi O, Rothschild SI, Li Q, **Matter-Walstra**, et al. Bevacizumab Plus Pemetrexed Versus Pemetrexed Alone as Maintenance Therapy for Patients With Advanced Nonsquamous Non-Small-cell Lung Cancer: Update From the Swiss Group for Clinical Cancer Research (SAKK) 19/09 Trial. Clin Lung Cancer. 2017 May;18(3):303-309.

Ademi Z, Pasupathi K, Liew D. Clinical and Cost Effectiveness of Apixaban Compared to Aspirin in Patients with Atrial Fibrillation: An Australian Perspective. Appl Health Econ Health Policy. 2017 Jun;15(3):363-374.

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Monograph

Szucs TD. (Ed.) Das KV – eine Schweizer Erfolgsstory? 20 Jahre Krankenversicherungsgesetz in der Schweiz – 20 Experten ziehen Bilanz. Orell Füssli, Zürich, 2016.

Scientific Presentations to External Audiences

Presenter (name, function)	Presentation title	Event (title, location, date)
Szucs TD, Director	Basics of Clinical Research	CAS in Clinical Research I, Jan 11-13
Szucs TD, Director	Development of Medicines in Times of Cost Constrain	HLG Winter Conference, Flüeli Ranft, January 29
Szucs TD, Director	Clinical Research and Capital Markets	ECPM, Basel, February 9
Szucs TD, Director	Arzneimittelrecht	MPH Kurs, Zürich, March 8
Szucs TD, Director	Pharma Innovationen im Zeitalter der Kostendämpfung	Fortbildung Kantonsspital Baden, March 15
Szucs TD, Director	CCDRS Reimbursement	CCDRS, Beijing, March
Szucs TD, Director	PUCRI Carer	PUCRI, Beijing, March
Szucs TD, Director	Une offre – un service, all inclusive au sein d'un réseau, quels défis en termes de soins, de coûts et de financement ?	13eme Seminaire practique sante, Lausanne, April 27
Szucs TD, Director	Genomische Medizin für Apotheker	Österreichische Apothekenkammer, Wien, May 5
Szucs TD, Director	Einführung in die Pharmakoökonomie	Österreichische Apothekenkammer, Wien, May 6
Szucs TD, Director	Interpretation eine pharmakoökonomischen Studie	Österreichische Apothekenkammer, Wien, May 6
Szucs TD, Director	Konzepte der Gesundheitsökonomie	MPH, May 10
Szucs TD, Director	Role of Drug Expenditure in Healthcare Market and Healthcare Insurance	Budapest, May 13
Szucs TD, Director	Reimbursement Strategies of Follow-on Medicinal Products	Budapest, May 13
Szucs TD, Director	Ausgabenentwicklungen in der Gesundheitsversorgung	Lakeside Symposium, May 11

Szucs TD, Director	Persönliche Medizin in der Privatmedizin	Birshof, May 12
Szucs TD, Director	Reimbursement Strategies	Semmelweis university, May 13
Szucs TD, Director	Pharmacogenomics–introduction	CCDRS, Beijing, June
Szucs TD, Director	Life Science & Leadships–lessons for a career in medicines development	CCDRS, Beijing, June
Szucs TD, Director	Decision for Full Development	CCDRS, Beijing, June
Szucs TD, Director	The Art and Science of Making Better Decision	CCDRS, Beijing, June
Szucs TD, Director	Systematic Reviews and Meta Analysis How to Get It Right	CCDRS, Beijing, June
Szucs TD, Director	Trends in Market Access and Reimbursement	ECPM, Basel, June 29
Szucs TD, Director	How to Deal with Missing Data	CCDRS Beijing, August 25
Szucs TD, Director	Practice Session on Study Design	CCDRS Beijing, August 25
Szucs TD, Director	Health Economic / Outcome Research Trials and Their Transferability	CCDRS Beijing, August 26
Szucs TD, Director	Patient-Reported Outcomes and Quality of Life Measurements	CCDRS Beijing, August 26
Szucs TD, Director	History of Drug Discovery and Development	ECPM, Basel, September 4
Szucs TD, Director	Health care systems in transition	ECPM, Basel, September 6
Szucs TD, Director	Principles and Practice of Drug Repositioning and Repurposing	ECPM, Basel, September 7
Szucs TD, Director	Steigende Medikamentenkosten: wird die personalisierte Medizin zum Kostendämpfer oder Kostentreiber?	Gemeinsame Jahrestagung SGI/GSASA, St. Gallen, September 15

Evaluation of Research Projects and Publications (peer review)

Thomas D. Szucs is a reviewer for a number of clinical and health economic journals including Annals of Oncology, Pharmacoeconomics, Lancet, Swiss Medical Weekly.

Matthias Schwenkglenks is a reviewer for a number of clinical and health economic journals including The American Journal of Managed Care; Cardiovascular Drugs and Therapy; European Journal of Cardiovascular Prevention and Rehabilitation; Health Policy; HEART; Infection; Journal of the American Medical Association (JAMA); Journal of Clinical Oncology, Medical Decision Making; Osteoporosis International; PharmacoEconomics; Swiss Medical Weekly, Value in Health.He serves as a member of the Editorial Board of Medical Decision Making, a renowned health economic journal.

C. Simone Sutherland is a reviewer for a number of journals including International Journal of Technology Assessment in Health Care (IJTAHC), Infectious Diseases of Poverty, Parasites & Vectors, Public Library of Science (PLOS) Neglected Tropical Diseases (NTDs), BioMed Central (BMC) Health Services and Value in Health.

Klazien Matter-Walstra is a reviewer for a number of clinical and health economic journals including Quality of Life Research, International Journal of Health Policy and Management, Comparative Effectiveness Research, Journal of Medical Economics and Family Practice.

Zanfina Ademi is a reviewer for a number of clinical journals including Stroke, Circulation, PLOS one, Atherosclerosis, Vaccine, Drugs, Clinical Therapeutics, Cardiovascular Therapeutics, Expert review of Clinical Pharmacology, and health economics journals including PharmacoEconomics and Value in Health.

Theses Supervised by ECPM Collaborators in 2017

Belinda von Niederhäusern, REDUCING WASTE IN CLINICAL RESEARCH: A COST-CONSEQUENCE APPROACH (PhD in cooperation with Department of Clinical Research).

Tanja Kastien-Hilka, Health-related Quality of Life and its Association to Medication Adherence in Active Pulmonary Tuberculosis in South Africa – an Integrated Patient-centred Outcomes Approach (PhD in ccoperation with Swiss TPH and University of Capetown).

Martina Hahn, Preventing Cervical Cancer with HPV Testing. What can we learn for the Swiss health system from evidence collected for the health systems of other countries? A systematic review of current health economic evaluations (MPH thesis).

Thathya Venu Ariyaratne, Comparison of Long-term Outcomes and Cost Effectiveness of Coronary Bypass Surgery versus Percutaneous Coronary Interventions in the Australian context. Ongoing at Monash University, Co-supervising at Monash University the following PhD thesis.

Christos Pouskoulas, Anwendung eines Einzelrechnungsprüfungssystems für stationäre Spitalleistungen im Kanton Luzern – eine Evaluationsstudie (MPH thesis).

Renato Mattli, Scaling up cost-effective physical activity interventions in a culturally diverse setting (PhD thesis in cooperation with Swiss TPH, Department of Sports Science and ZHAW Winterthur).

Alessandro Crimi - Novel approaches in antiretroviral therapies retention and demand estimation for AIDS patients in Zimbabwe – Master in Business Administration (MBA) International Health Management (IHM) thesis with Swiss TPH. External expert for a MSc defence.

Latham N. Wer soll was (das) bezahlen? Ein Discrete Choice Experiment gesellschaftlicher Präferenzen in Deutschland zu Prävention und Therapie (MPH thesis).

Hendrik Schmidt, Creating and Adding Value in Medicines Development Through Enhanced Data Use (MMD thesis)

Jain Anand, A Comprehensive Study on Structural and Procedural Characteristics of Pharmaceutical Regulatory Authorities for Development, Evaluation and Filing of Drugs Globally (MMD thesis).

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