#### **Master Classes**

Title	Research methodology for the implementation of Professional Services
Teachers	Prof. Charlie Benrimoj
	Dr. Victoria Garcia-Cardenas
Overview	During the last 30 years, much of the pharmacy practice research has concentrated on the development and evaluation of new professional pharmacy services. However, the challenge has been to convert the clinical, economic and humanistic benefits of those services into usual practice. Implementation science provides a scientific approach to promote the systematic uptake of research findings and evidence based interventions into routine practice, that until recently, was not being applied to the implementation of professional pharmacy services.  This workshop will review potential models and frameworks and will adapt them to the implementation of professional pharmacy services. Concepts such as barriers and facilitators for practice change and their causal relationships, implementation strategies, practice change facilitation models, and evaluation methods for implementation programs will be discussed.
	The outcome of the workshop will be that participants will be able to apply these scientific approaches to specific professional pharmacy services, being able to develop and evaluate evidence-based implementation programs.
CVs	Professor Charlie Benrimoj: Professor S.I. (Charlie) Benrimoj B.Pharm (Hons), Ph.D. is the Director and Head of the Graduate School of Health University of Technology Sydney 2011 to present). He was the Foundation Professor of Pharmacy Practice, Dean of the Faculty of Pharmacy and Pro-Vice Chancellor (Strategic Planning) University of Sydney. He is a visiting professor at the University of Granada. His research interests encompass professional pharmaceutical services from community pharmacy. He has published over 200 papers, 24 major research reports and presented and co-authored 200 conference presentations. He has co-authored a book "Community Pharmacy: Strategic Change Management" (2007). He was awarded the Andre Bedat 2010 by International Pharmacy Federation (FIP) and was elected a Fellow of three distinguished international and national societies in 2008 - Pharmaceutical Society of Australia, 2008 - Royal Pharmaceutical Society of Great Britain, 2007 - International Pharmacy Federation.  Dr Victoria Garcia Cardenas: Victoria Garcia Cardenas (PhD, M Pharm, B Pharm) is a Senior Lecturer in pharmacy at
	the Graduate School of Health, University of Technology Sydney (Australia). She is also a member of the Pharmaceutical Care Research Group at the University of Granada (Spain). Her teaching and research interests encompass medication adherence, the evaluation and implementation of complex interventions and practice change in community pharmacy. She has published over 25 papers in refereed journals, four major research reports and presented and co-authored 35 conference presentations. Victoria is currently involved in five national and international research projects for the evaluation and implementation of professional services in community pharmacy.



Title	Qualitative methodology in pharmacy practice research, methods and design
Teachers	Dr. Charlotte Rossing
	Dr. Ingunn Bjornsdottir
Overview	- General overview of qualitative methods: A map of the methods (Relevant examples: Application of qualitative methods in drug research and development and/or pharmacy) - Theory use in qualitative research: Narrowing in on pharmacy (Relevant examples: Every research uses theory, in qualitative methods it is conscious use) - Group discussions: Participant work
	- Group discussions: Participant work
CVs	Dr. Charlotte Rossing Charlotte Rossing MSc, PhD (Pharm) graduated from the University of Copenhagen, Faculty of Pharmaceutical Sciences in 1998. In 2003 she received a PhD degree in Social pharmacy with a thesis named: "The Practice of Pharmaceutical care in Denmark – a quantitative approach".  Subsequently, Charlotte Rossing joined Pharmakon, where she is the Director of Research and Development.  Charlotte Rossing has been involved in studies under the following topics:  · Medical technology assessment of dose dispensing  · Safe and effective medication (compliance and concordance)  · Compliance and welfare technologies  · Clinical pharmacy in residential and nursing homes  · Medication reviews and counselling  · Patient and medication safety of disabled persons in residential facilities  · Pharmacy and municipality collaboration in public health  · Primary care based initiatives to enhance medication safety in transition of care  · Implementation of pharmaceutical care services  Furthermore, she is responsible for the continuing education and professional development for pharmacist and pharmacy technicians in Denmark.  Charlotte Rossing acts as reviewer in several international journals. She has acted as chair and co-chair for FIP Forum for Innovators 2011-14, a programme organised by FIP Community Pharmacy Section. She is in the steering committee of the Special Interest Group of Pharmacy Practice Research under FIP. She has been on the Board of Pharmaceutical Care Network Europe
	Dr. Ingunn Björnsdóttir:  University of Oslo, Social Pharmacy, Associate Professor, October 2013  University of Iceland: Research Inst. for Pharmaceutical Outcomes & Policy CEO November 2008 – March 2010, external lecturer/adviser 1993-2004 & 2009  Icelandic Directorate of Health, August 2011- December 2012  Icelandic Medicine Pricing and Reimbursement Committee, April 2011-July 2011  Icelandic Ministry of Health/Welfare, May – Dec. 2008, April 2010 – March 2011  The Danish University of Pharmaceutical Sciences/University of Copenhagen, Associate Professor, August 2005 – July 2007  The Pharmaceutical Society of Iceland/The Icelandic Pharmacists' Union (Islands Farmaceutforening) CEO, August 1998 – June 2005 (partly part time)  The State Social Security Institute, specialist, February - July 1999 (40%)  Chief pharmacist, Hospital & Nursing/Retirement Home, Akranes, March 1996 – July 1998 (40%)  Chief pharmacist, the Pharmacy in Akranes, August 1987 – February 1996  Chief pharmacist, the Pharmacy in Húsavík, August 1984 – July 1987  Member of Executive committee of EuroPharm Forum 2004 – 2010  Vice-President of the Pharmaceutical Society of Iceland 1991-1993 & 2011-2013



Title	Economic evaluations supporting the implementation of a sustainable pharmacy
	service
Teachers	Prof. Olivier Bugnon
	Dr. Clemence Perraudin
Overview	Health service researchers must focus on implementing services that optimize both the interests of pharmacists and payers in a sustainable way. In this context, the masterclass will deal with financial planning tools to analyse and support the business decision from the provider perspective, as well as with methods to assess the cost-effectiveness of the service from the healthcare system perspective.
CVs	Olivier Bugnon: Prof. Olivier Bugnon, born in 1964 (Fribourg, Switzerland), graduated as a pharmacist from the University of Lausanne in 1988. He obtained his PhD in Neuropharmacology from the University of Geneva (1994) and his Privat-Docent title in 2005 from the University of Lausanne. He obtained his postgraduate FPH Diploma of Specialist in Community Pharmacy Practice (2003). From 1997 to 2002, he was Head of the "Quality and Development" department at the Swiss Association of Pharmacists (Bern, Switzerland). Since 2002, he is Head of the Community Pharmacy Center and Quality manager at the Department of Ambulatory Care and Community Medicine (PMU) in Lausanne. Since 2007, he is an Associate Professor in Community Pharmacy Practice at the School of Pharmaceutical Sciences (University of Geneva, University of Lausanne). His main research and teaching activities are focused on development, implementation and evaluation of person-centered and integrated pharmacy services: e.g. chronic care management programs, interprofessional quality circles in primary care and nursing homes, medication adherence-enhancing programs, deprescribing interventions, specialty pharmacy services, medication reconciliation, vaccinations, addiction management and integration of cyberhealth tools.
	Dr. Clemence Perraudin: Dr. Perraudin studied public health and health economics in Paris, where she received her PhD in 2013. She started as a post-doctoral fellowship and became health economist at the Community Pharmacy Center, Department of Ambulatory Care and Community Medicine, University of Lausanne (Switzerland). Her research focuses on economic evaluation and implementations studies on interprofessional healthcare programs, notably involving community pharmacists. She currently co-supervised a thesis on the evaluation of the implementation of an interprofessional support program for type 2 diabetes patients in the French-speaking part of Switzerland



Title	Adherence assessment tools and the development of interventions for the different 3
	phases of adherence according to the ABC taxonomy
Teachers	Prof. Isabelle Arnet
	Prof. Kurt E. Hersberger
Overview	Participants will gain insight into specific tools aimed at assessing adherence to medication. A critic evaluation of different tools will occur in light of published study results. The peculiarity of the new ABC taxonomy (initiation, implementation, discontinuation; refer to Vrijens B in Br J Clin Pharmacol 2012) will delineate the adequacy of some tools. Participants will obtain room to present their own projects and discuss the choice of their adherence assessment method.
CVs	Prof. Isabelle Arnet: Isabelle Arnet studied Pharmacy at the Swiss Federal Institute of Technology in Zurich and graduated in 1991. She acquired 1999 at the Department of Clinical Pharmacology & Toxicology of the University Hospital Basel her PhD with a thesis on "Compliance/Non-compliance and psychological attributes".  In 2008 she joined the Pharmaceutical Care Research Group of Prof. Kurt E. Hersberger at the University of Basel as a senior scientist. She now assists in developing Pharmaceutical Care as a core competency of the pharmacy workforce within the Swiss health system. Her main focus of interest is adherence to, and persistence with multiple drug therapies. With researchers from Utrecht (the Netherlands), she published standards for the operationalization of adherence measures with medication records. With researchers from Perth (Australia), she validated a new method to calculate adherence to polypharmacy from pharmacy claims data (publication is imminent). She was awarded the post-doctoral degree (Habilitation) in 2017.
	Professor Kurt E. Hersberger: Kurt Hersberger studied Pharmacy in Basel and Zürich and received in 1981 at the Swiss Federal Institute of Technology Zurich a certificate in management, technology and economics (BWI) and in 1992 his PhD. He started in 1994 as a lecturer for Pharmacy Practice and became head of the Pharmaceutical Care Research Group at the University of Basel in 2000. In 2007 he was awarded the post-doctoral degree (Habilitation) and appointed senior lecturer for Clinical Pharmacy by the University Council. To keep in touch with the needs of community pharmacies, he continues working part-time in his own pharmacy. His research aims to evaluate and develop services provided by pharmacists in primary care. Special focus is on drug-related problems, polypharmacy, self-care, seamless care, and newly on pharmacogenotyping as a new clinical pharmacy service.



Title	Technology-enabled pharmacy: Understanding this new model of pharmacy practice
Teachers	Prof. Darrin Baines
Overview	This class is an introduction to technology-enabled pharmacy. It will define the concept and explain how existing models of pharmacy practice should be modified to take account of the new opportunities that new technologies offer. The session will outline new models of pharmacy practice and examine the importance of productivity as a concept in pharmacy practice research. The session will be valuable to researchers and students working in the area of pharmacy practice research.
CVs	Darrin Baines is a professor of health economics with strong analytical skills in economic evaluation, modelling and the reform of health systems, along with a specialism in technology-enabled pharmacy. He has over 20 years' experience of working in academia, consultancy and the NHS. He currently leads two international knowledge exchange networks in health economics, operating in China and Egypt. Since the mid-1990s, he has successfully delivered over 50 economic evaluation and health economics projects, with clients including charities, the British Council, the NIHR, pharma and the health service. Professor Baines has written over 140 articles published in both academic and trade journals, and has extensive experience of teaching, supervising and examining undergraduate and postgraduate students, both in the UK and internationally.



Title	Multicriteria Decision Analysis to support decision-making in health care
Teachers	Prof. Carlos Antonio Bana e Costa
	Prof. Monica Duarte Oliveira
Overview	Participants will gain insight into how concepts, methods and tools from Multicriteria Decision Analysis (MCDA) can assist the evaluation of health technologies and interventions. In a first part, an introduction to concepts, critical mistakes and good practice in MCDA will be provided, with a focus on the socio-technical design of evaluation models. In a second part, a short overview of the state of the art and challenges in MCDA for health technology assessment literature will be presented. In the last part real cases of MCDA used to evaluate health interventions and to understand patient preferences will be described. Participants will have time to discuss how MCDA can be used in their projects.
	Prof. Carlos António Bana e Costa:
	Carlos Antonio Bana e Costa:  Carlos A. Bana e Costa is a Full Professor of Decision and Information at Instituto Superior Técnico (University of Lisbon) and a Researcher at the Centre for Management Studies of Instituto Superior Técnico (CEG-IST). He is also head of I&D projects at CEG-IST. Professor Bana e Costa's primary interests are in the fields of Management and Decision Sciences, namely Multicriteria Decision Analysis and Decision Conferencing. He has widely published in these areas (http://web.tecnico.ulisboa.pt/carlosbana/) and he co-authored the MACBETH approach for decision-aiding (http://www.m-macbeth.com). He has also been developing consultation in public strategic decision-making processes, policy appraisal and bid and performance evaluation worldwide, following the sociotechnical facilitation perspective shared by the members of the International Decision Conferencing Forum. He is also a senior partner of BANA Consulting (http://www.banaconsulting.pt).
CVs	Prof, Mónica Duarte Oliveira:  Mónica Oliveira is an Associate Professor of Decision Sciences at Instituto Superior Técnico (University of Lisbon) and a Researcher at the Centre for Management Studies of Instituto Superior Técnico (CEG-IST). Her research interests include the development of management science models to assist policy and decision makers in health and clinical settings, with a special interest in multi-criteria value modelling using participatory processes. She has enhanced and applied management science techniques in multiple public and private organizations. She has published her research in Operations Research, Management Science, and Health Economics and Management international journals. She has been active in participating in international health projects, has been involved in advisory boards from the Portuguese Ministry of Health, and is an active member of the Portuguese Association of Health Economics and of the EURO Working Group on Operational Research Applied to Health Services. She holds a degree in Economics by the University of Porto and a MSc and PhD in Operational Research by the London School of Economics and Political Science.

