

EDITED BY
DAWN FORMAN
MARION JONES
JILL THISTLETHWAITE

**LEADING
RESEARCH AND
EVALUATION IN
INTERPROFESSIONAL
EDUCATION AND
COLLABORATIVE
PRACTICE**



Leading Research and Evaluation
in Interprofessional Education and
Collaborative Practice

Dawn Forman • Marion Jones • Jill Thistlethwaite
Editors

Leading Research and Evaluation in Interprofessional Education and Collaborative Practice

palgrave
macmillan

Editors

Dawn Forman
Curtin University
Australia

Jill Thistlethwaite
University of Technology Sydney
Australia

Marion Jones
Auckland University of Technology
New Zealand

ISBN 978-1-137-53742-3 ISBN 978-1-137-53744-7 (eBook)
DOI 10.1057/978-1-137-53744-7

Library of Congress Control Number: 2016939249

© The Editor(s) (if applicable) and The Author(s) 2016

The author(s) has/have asserted their right(s) to be identified as the author(s) of this work in accordance with the Copyright, Designs and Patents Act 1988.

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made.

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature
The registered company is Macmillan Publishers Ltd. London

Foreword

In many senses, interprofessional education (IPE), interprofessional practice (IPP) and interprofessional care (IPC) represent what Rittel and Webber (1973) have called a ‘wicked problem’. Wicked problems are ‘difficult or impossible to solve. Their solutions depend on incomplete, contradictory and changing requirements that are often difficult to recognise. And they are confounded by complex interdependencies between actors and agents.’ (p. 155). If ever there were a wicked problem, research and evaluation in, and of, IPE is surely one. What could be more complex than relationships between governments, post-secondary institutions, the health care industry and the professions? As interprofessional education advances and new expectations are placed on health professional education, this wicked problem will require the attention of leaders in health care, post-secondary education, professional organisations and patient organisations—all of whom are represented in this admirable and important collection of papers.

In 1997 at the international conference, *All Together Better Health*, Dr DeWitt Baldwin observed: ‘Interprofessional education is a great truth awaiting scientific confirmation.’ Eighteen years on, has the field used appropriate theories, models, methods, and experiments, to provide ‘scientific confirmation’ that IPE/IPP/IPC do indeed promote collaboration through understanding? Has it shown that using IPE/IPP/IPC to promote collaboration does indeed improve quality of care and health

outcomes? Reflecting on those questions there is now an understanding, threaded throughout the text in this collection of papers, that the challenges confronting IPE are surely no more numerous or complex than those encountered in any other area of scholarly endeavour.

It is clear from the work presented in this book that IPE/IPP/IPC need focal points in theories. Those theory-informed focal points will help to build a variety of testable models. Such models will allow the evaluation of educational parameters associated with interprofessional practice and care, and policy options in the wider health system. Using models derived from robust theories will then allow the development and testing of rigorous scholarly and practice bases for IPE/IPP/IPC. Of necessity, to further IPE/IPP/IPC will involve examining a mix of health and human service professions, in a variety of settings, both within the post-secondary education system and in practice.

For those familiar with the history of the field, ‘fashion and expediency’ are hallmarks of IPE/IPP/IPC in previous incarnations. What is clear across the writing in this collection of papers is that if IPE/IPP/IPC is to move beyond ‘fashion and expediency’, then it is necessary to use theoretical frameworks based on principles that are coherent, generalisable, transferable, and of continuing applicability. Without a theoretical base, any discoveries about IPE, and any understanding of its operational power, will be moot. Many writers in this book tackle these difficult concepts. What they make clear is that without a theoretical base, and well-constructed methodologies to test and evaluate that theoretical base, a body of knowledge about the importance and impact of IPE/IPP/IPC on collaborative models of care will not grow.

As shown in this collection of papers, educational programmes that claim to promote interprofessional collaboration have a major task in front of them. They must provide theory-based, conceptual opportunities to test assumptions about IPE/IPP/IPC that, at the very least, provide replicable data. Those data should speak to the relationships amongst, and between, different health and human service professions, health systems and crucial policies, as expressed in the values and beliefs held by practitioners and as exteriorised in health systems.

Such data should align *with* the elements of the classic CAIPE definition of IPE. Those data should be derived from evaluation metrics that measure the knowledge and skills acquired when learning ‘with’, ‘from’, and ‘about’ in IP teams; from evaluation metrics that describe the roles and responsibilities professionals actually assume when collaborating; from evaluation metrics that demonstrate the benefits of IPE to quality of care to patients or clients, the benefits to the practice of a profession, and the benefits to an individual’s professional growth. Such intersectoral matters are clearly illustrated in Part II of this book.

It is recognised that the scholarship necessary to build such metrics needs to be *interdisciplinary*. That is, elaboration and understanding of the definition will come from viewing IPE/IPP/IPC through the lenses of a number of different academic disciplines such as socio-linguistics, sociology, philosophy, anthropology, economics, political science and others. As is shown, using models that conceptualise the collaborating partners, the evaluation metrics should allow us to assess outcomes and downstream impacts: outcomes for the client/patient; outcomes for the process of interprofessional practice; outcomes for individual professionals; outcomes for agencies in which IP collaboration is exemplified, and ultimately their downstream impacts.

To achieve these ends, studies are also needed that allow measurement of change along a number of dimensions, as a function of collaborative team experience. Such studies need to be both cross-sectional and longitudinal. Such studies need to show that skills acquired in IPE/IPP/IPC are significantly translated to and sustained in practice.

There is a clear and abiding lesson from nearly every interprofessional study conducted with students over the past 18 years: students really enjoy interprofessional experiences. Many, many papers have been published which demonstrate appreciation of and commitment to learning together. Virtually all have been evaluated using a Likert scale, which essentially says: ‘We love it, give us more—NOW’. We need to work very hard to translate this large data set into a system of curricular reform. We urgently need to keep students’ appreciation and commitment to IPE/IPP/IPC alive after they graduate and begin practising. Sadly, at present this is seldom the case.

So—what of future challenges? As this collection of papers makes clear, those working in IPE need to articulate clear, testable questions about IPE, IPC and IPP. Leaders need to develop (or adopt) evidence-informed methods to examine those questions. They need to find appropriate tools for data analyses. Leaders also need to develop contexts for interpretation of data that further a deeper understanding of IPE/IPP/IPC, ideas that cross many of the chapters in this volume.

To test such challenges the field can use theories and methods from other domains of scholarship in various ways. Data derived from cognate theories and methods have huge potential to formulate answers to these fundamental questions.

The field needs data-based quantified *experience*, as opposed to *perceived* values. In the education–provider framework, such data should give educators, practitioners and policymakers a distinct understanding that interprofessional education (IPE) should always accompany interprofessional practice and care (IPP/IPC). Such data should allow the field to provide the evidence prescribed by Dr Baldwin, by showing that IPE does indeed improve collaboration, and that collaboration does indeed improve quality of care.

This collection of papers forces those in the field to think again about the definition of IPE. To ask, what concepts are needed to test ‘*with*’, ‘*from*’, and ‘*about*’ within the contexts and continuum of *collaboration* through to *quality of care*? How, and what, do IP collaborators *think* about their professions? How, when and where, do IP collaborators *talk* about their professions? How do IP collaborators articulate the ‘*good*’ of what they do? How do IP collaborators verbally *conceptualise* their interactions with other health professionals? These are the wicked questions that confront all who are devoted to furthering the agenda.

What this collection of papers shows clearly is that IPE/IPP/IPC needs to take real advantage of the opportunities that now exist to test these wicked questions. The ideas represented here show how diligently work in IPE/IPP/IPC, around the world, is pushing the boundaries. The work clearly shows that we can’t afford to slide backwards into the future, that we are no longer at the beginning. The field is now in a most difficult place. The initial joy of ‘new love’ is fading. Facing the field, as shown in this collection of papers, is the reality of theories, models and methods and

the hard work needed to keep IPE/IPP/IPC moving forward. However, we are also at a juncture where the old Celtic saying is apposite: *Whoever has no patience, has no wisdom.*

John H.V. John H.V. Gilbert, C.M., Ph.D.,
LLD (Dalhousie), FCAHS Professor Emeritus,
University of British Columbia.
Adjunct Professor, Dalhousie University.
Founding Chair, Canadian
Interprofessional Health Collaborative.

Annette Elliott Rose, Ph.D.,
RN Director, Professional Practice
First Nations and Inuit Health Branch,
Health Canada, Halifax, Nova Scotia

Reference

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–169.

Acknowledgment

The author of the Foreword wishes to thank Dr Annette Elliott Rose, WHO/PAHO Collaborating Centre, Health Workforce Planning and Research, Dalhousie University, for her many generous contributions to the preparation of this Foreword.

Contents

Part I	Research in General: Implementation and Challenges	1
1	Best Practice in Leading Research and Evaluation for Interprofessional Education and Collaborative Practice	3
	<i>Dawn Forman and Jill Thistlethwaite</i>	
2	The Formation and Development of the National Center for Interprofessional Practice and Education	23
	<i>Barbara Brandt and Jill Thistlethwaite</i>	
3	Reviewing Pre-Qualifying Interprofessional Education in the UK: From Recommendations to Implementation	41
	<i>Hugh Barr and Marion Helme</i>	

Part II	Examples of Research Projects in the Field	59
4	Steps to Transdisciplinary Collaborative Practice, The Way Towards Building Communities of Practice in Early Child Health Care: A Case from Colombia	61
	<i>Francisco Lamus-Lemus and Rosa Margarita Duran-Sabogal</i>	
5	Implementing Interprofessional and Citizenship Education in a Regional University: Carving Paths, Crossing Boundaries in Complex Adaptive Systems	79
	<i>Hassan Soubhi, Sandra Coulombe, Dominique Labbé, Liliane Asseraf-Pasin, Sharon Hatcher, Ariane Girard and Stéphane Allaire</i>	
6	Going 4D: Embedding the Four Dimensional Framework for Curriculum Design	99
	<i>Gemma Sinead Ryan, Kate Cuthbert, Tanya Dryden, Denise Baker and Dawn Forman</i>	
Part III	Evaluation in General: Implementation and Challenges	123
7	Implementing and Evaluating Interprofessional Education and Collaborative Practice Initiatives	125
	<i>Matthew J. Oates and Megan Davidson</i>	
8	Building Evaluation into the Development of Interprofessional Education Initiatives	145
	<i>Susan Pullon, Ben Darlow and Eileen McKinlay</i>	

Part IV	Examples of Evaluation in the Field	167
9	Transition from Uniprofessional Towards Interprofessional Education: The Malaysian Experience of a Pragmatic Model	169
	<i>Seng-Fah Tong, Nabishah Mohamad, Chai-Eng Tan, Benny Efendie, Kanaga Kumari Chelliah and John HV Gilbert</i>	
10	Leadership and Evaluation Issues in Interprofessional Education in Sabah, Malaysia	193
	<i>Wendy Shoesmith, Waidah Sawatan, Ahmad Faris Bin Abdullah and Sue Fyfe</i>	
11	Establishing and Evaluating Interprofessional Student-Led Wellness Assessment Services Focused on the Elderly	213
	<i>Kreshnik Hoti, Jeff Hughes and Dawn Forman</i>	
12	Distinctive Leadership Styles in a Collaborative Strategy for Mental Health Care Delivery in Pakistan	237
	<i>Muhammad Tahir Khalily</i>	
13	Using a Community of Practice to Increase Leadership Capacity in Non-Traditional Settings for Interprofessional Student Learning	253
	<i>Monica Moran and Carole Steketee</i>	
14	Interprofessional Health Care Team Challenge: A New Zealand Perspective	267
	<i>Brenda Flood, Daniel O'Brien and Marion Jones</i>	

15	International Classification of Functioning, Disability and Health: Catalyst for Interprofessional Education and Collaborative Practice	285
	<i>Stefanus Snyman, Maria van Zyl, Jana Müller and Maryke Geldenhuys</i>	
16	Partnering with Patients in Interprofessional Education in Canada and in the USA: Challenges and Strategies	329
	<i>Isabelle Brault, Marie-Claude Vanier, Vincent Dumez, Angela Towle, William Godolphin, Amy L. Pittenger, Jeannine Conway, Joseph R. VonBank and Lauren Collins</i>	
17	Research and Evaluation: The Present and the Future	355
	<i>Jill Thistlethwaite</i>	
	Index	369

About the Editors and Contributors

About the Editors

Dawn Forman initially qualified as a radiographer, transferring to teaching six years after qualifying and then to academia in the early 1990s. Dawn was a university executive and Dean of Faculty for thirteen years in the UK and has been an independent consultant for nine years. As a consultant Dawn has been privileged to work internationally with universities and health services in the areas of leadership development, executive coaching, and interprofessional education and has researched and published in each of these fields. Following a period of consultancy with Curtin University, Australia Dawn worked there for 15 months and continues as an adjunct professor. Dawn is also an adjunct at the Auckland University of Technology, New Zealand and a visiting professor at the University of Derby, UK and Chichester University, UK. This is Dawn's eighth book and she has published more than 90 peer-reviewed publications. As well as her professional qualifications Dawn has a PhD, an MBA, and post graduate diplomas in research methodology and executive coaching.

Marion Jones is Dean of University Postgraduate Studies at Auckland University of Technology (AUT) and a director of the National Centre for Interprofessional Education and Collaborative Practice in New Zealand.

A significant focus of her academic career has been the development of postgraduate study. For ten years she was Associate Dean Postgraduate to the Faculty of Health and Environmental Sciences. Her area of research is interprofessional practice and education, postgraduate supervision and peri-operative nursing. She is an author for more than 30 journal articles and five books on these topics, as well as presenting at 70 national and international conferences.

Jill Thistlethwaite is a general practitioner and health professional education consultant in Sydney, Australia, with an adjunct appointment at the University of Technology Sydney. Jill trained as a physician at University College London and worked as a general practitioner in a semi-rural family practice in Yorkshire, UK for ten years before moving into academia. In 2003 Jill emigrated to Australia. Her main interests are interprofessional education, communication skills and professionalism. Jill has written and edited ten books with another two in press, written many book chapters, and published more than 90 peer-reviewed papers. In 2014 Jill was a Fulbright senior scholar and spent four months at the National Center for Interprofessional Practice and Education, University of Minnesota. During her stay she spoke at the Institute of Medicine in Washington DC on the nature of evidence for IPE.

Notes on Contributors

Ahmad Faris Abdullah is the Deputy Dean of Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah from 2004 to 2008 and from 2012 to present. Prior to holding the post, he was a psychiatrist at the Hospital Mesra Bukit Padang, Kota Kinabalu in the state of Sabah, Malaysia. He was instrumental in the planning of hospitals and mental institutions in East Malaysia. He obtained his MD from Universiti Kebangsaan Malaysia in 1993 and later completed his Masters degree in Psychiatry in 2000. He is one of the first alumni of the Melbourne-Harvard Leadership Programme in 2001–2002. While serving in the Ministry of Health, he worked in the Medical Campus, Rural Medical Education Centre and the original proposal for the university teaching hospital. He

also authored the first draft of the multi-award winning community engagement programme, Universiti-Family Partnership in Community Wellness Programme, better known in Malay as 'PuPUK'.

Stéphane Allaire has been Professor of Educational Practices at the Université du Québec à Chicoutimi since 2005. He is the current Dean of Research and Creation at the Université du Québec à Chicoutimi. He holds a PhD in Educational Technology from Laval University where he studied socio-digital affordances that support collaborative reflective practice and knowledge building. His teaching activities are related to classroom management and pre-service teachers' supervision. His research interests include collaborative communication technologies for the development of writing, knowledge building and networked learning communities, and learning environment and multi-grade classrooms in rural schools.

Liliane Asseraf-Pasin is Associate Director of the Physiotherapy Programme, Faculty of Medicine, McGill University, Montreal, Québec, Canada. She received her PhD in Education from McGill University in 2012. She is a member of the Centre for Medical Education and a member of the Joint Curriculum Committee for Interprofessional Education at the Faculty of Medicine, McGill University. Asseraf-Pasin chairs the PT Admissions Committee and the Curriculum Committee at the School of Physical and Occupational Therapy. In addition to teaching qualitative research and advanced educational and management strategies, she is responsible for the coordination and implementation of the equivalency programme for internationally trained physiotherapists completing their equivalency at the School. Her current research interests include interprofessional education and practice and developing cultural competency.

Denise Baker is Head of Pre-qualifying Healthcare at the University of Derby where she has worked since 2013. Prior to this she worked at Birmingham City University for 15 years teaching diagnostic radiographers and assistant practitioners. Her research interests currently focus on the development of the support workforce, and she has been part of the national group developing the Care Certificate in the UK.

Hugh Barr is Emeritus Professor of Interprofessional Education and Honorary Fellow at the University of Westminster with visiting chairs in the same field at Curtin in Western Australia and Kingston with St George's University of London, Greenwich and Suffolk in the UK. He is President of the UK Centre for the Advancement of Interprofessional Education (CAIPE) and Emeritus Editor for the *Journal of Interprofessional Care*. He served on the WHO study group on interprofessional education and collaborative practice and was the first convenor for the World Interprofessional Education and Collaborative Practice Coordinating Committee. He was awarded honorary doctorates by East Anglia and Southampton Universities for his role in promoting interprofessional education nationally and internationally. He was previously an Assistant Director of the then Central Council for Education and Training in Social Work (CCETSW) following social studies at the University of Nottingham and ten years in probation, prison aftercare and criminology.

Barbara Brandt serves as the Associate Vice President for Education within the University of Minnesota's Academic Health Centre, where she is responsible for the *1Health* initiative to build interprofessional practice skills of students and faculty in a broad range of health professions. Brandt also serves as director of the National Center for Interprofessional Practice and Education, a public-private partnership and cooperative agreement with the Health Resources and Services Administration, established in 2012. Four private foundations have signed on to invest in this innovative centre: The Josiah Macy Jr. Foundation, Robert Wood Johnson Foundation, and Gordon and Betty Moore Foundation. Brandt holds a Bachelor of Arts in the teaching of history from the University of Illinois at Chicago and Master of Education and Doctor of Philosophy degrees in continuing education (specialising in continuing professional education for the health professions) from the University of Illinois at Urbana-Champaign.

Isabelle Brault is an assistant professor and leader of inter-faculty IPE courses on collaboration in health care at the Faculty of Nursing of Université de Montréal. Since June 2014 she has been vice president of the Interfaculty Operational Committee for Interprofessional Education

on Collaboration and Partnership in Care. Her research focus includes evaluative research on interprofessional education on collaboration and partnership in care, nursing administration and clinical governance. She is a researcher for the Quebec Nursing Intervention Network and for the Institut de recherche en santé publique de l'Université de Montréal.

Kanaga Kumari Chelliah is a professor and the Head of Diagnostic Imaging and Radiotherapy in the Faculty of Health Sciences, National University of Malaysia. She has twenty years' experience in facilitating undergraduate education and supervision of postgraduate students. Since 2005 she has been a panel member of the MQA Accreditation committee and has contributed to the quality of diagnostic imaging programmes. She is also a Class H consultant approved by the Ministry of Health and responsible for the quality control of ionising equipment. She introduced interprofessional education to the Faculty of Health Sciences in 2013 and has a keen interest in interprofessional collaborative practice. Kanaga's research interests include health sciences education and breast imaging, and she has been a regular contributor to local and international publications.

Lauren Collins is Associate Professor of Family and Community Medicine and Geriatrics at Thomas Jefferson University, Associate Director of Jefferson's Centre for Interprofessional Education (JCIPE) and Director of Jefferson's Health Mentors Programme. In 2015, she was selected as one of five recipients of the Macy Faculty Scholars Programme from the Josiah Macy Jr. Foundation. In addition, she has received the American Academy of Family Physicians' Award for Excellence in Graduate Medical Education, Jefferson's IPE Education Award, three AAMC/Macy Collaborative Development Awards and a HRSA Geriatric Academic Career Award. Collins has served as Principal Investigator of a five-year HRSA-funded undergraduate medical education grant, *The Jefferson Patient-Centred Medical Home (PCMH) Predoctoral Education Project*. Collins serves as a peer reviewer and/or editorial board member for six peer-reviewed journals, has more than 20 peer-reviewed publications and more than 50 national presentations, teaches and advises students, and serves on multiple committees for interprofessional education.

Jeannine M. Conway is Assistant Dean of Professional Education and Director of Teaching, Learning and Assessment as well as an associate professor in the Department of Experimental and Clinical Pharmacology, College of Pharmacy, University of Minnesota. She received her BS in pharmacy and PharmD from the University of Minnesota and completed a fellowship in neuropharmacology. Her interests include anticonvulsant pharmacokinetics and educating future pharmacists and neurologists in how to optimise pharmacotherapy. She provides clinical pharmacist services in an adult epilepsy clinic and the interprofessional comprehensive facial pain clinic at the University of Minnesota. She is also the Director of Pre-Advanced Pharmacy Practice Experiential Education and has significant experience in delivering pharmacy skills education.

Sandra Coulombe is a professor at the Université du Québec à Chicoutimi in vocational education. She holds a PhD in Education. Her teaching activities include social and professional integration, collaboration in vocational training centres and practical training of teachers in vocational training. Her research interests focus on workplace learning, communities of practice, and collaborative practice in vocational training. She is a research associate at the Laboratory of Anthropology of Education and the CRIFPE.

Kate Cuthbert is the Academic Lead for Health and Social Care at the Higher Education Academy, UK. Kate has significant experience in facilitating change within learning organisations (incorporating undergraduate, postgraduate and CPD/work-based learning frameworks). Her academic background is health and social care (producing learning opportunities in clinically-led commissioning; interprofessional learning; patient safety; quality improvement skills; and leadership and management). Kate has delivered national learning programmes in patient safety as part of the NHSIII safer care initiative and headed up numerous validation and quality assurance activities in higher education institutions, working to meet professional/regulatory body requirements and health sector needs. Her work at the Higher Education Academy has included whole organisational change programmes and curricula reviews. She recently led the development and delivery of the Teaching Excellence Programme. Kate

has significant teaching experience in psychology, including mental health. Her PhD explored health beliefs in eight post-Soviet states.

Ben Darlow is a Senior Lecturer in the Primary Health Care and General Practice Department, University of Otago Wellington, and a Physiotherapy Specialist in private practice in Wellington, New Zealand. Ben received his PhD in Medicine from the University of Otago and has research interests in musculoskeletal pain and interprofessional education. Ben is a member of the Wellington Interprofessional Teaching Initiative which includes pre-registration dietetic, medical, physiotherapy and radiation therapy students. Ben is involved in teaching and evaluating interprofessional education initiatives.

Megan Davidson is Adjunct Associate Professor of Physiotherapy at La Trobe University in Melbourne, Australia. Davidson has been involved in clinical and academic interprofessional collaboration and education for more than 20 years. She was a member of a team of academics and clinicians who were funded to develop an enquiry-based interprofessional learning programme for health sciences students to undertake during their clinical placements. Her research interests in education are in the areas of interprofessional education, the assessment of clinical performance, and evidence-based practice. Megan has been a consultant to professional, government and non-government organisations on a variety of health practice and workforce issues.

Tanya Dryden is a senior lecturer and Programme Leader for the FdSc Professional Development Health and Social Care (Higher Apprenticeship Assistant Practitioner) Course at University of Derby. Previous experience includes teaching on pre-registration nursing and operating department practitioner courses. Her current areas of interest relate to the development of the unregistered workforce within health and social care.

Vincent Dumez holds a finance degree and a Master in Science of Management from Montreal's international business school Hautes Études Commerciales. Until 2010, Dumez was senior strategic consultant in one of Montreal's most influential consulting firms. Suffering from severe chronic diseases for more than three decades, Dumez has

been actively involved in the promotion of the ‘patient partner’ concept at Montreal University. This involvement led to: the completion of his master’s dissertation on patient-doctor relationship; his contribution to the training of patients; work on various boards of community organizations and his involvement as a speaker in forums to healthcare professionals. Dumez has also been a key collaborator for the Education Centre (CPASS) of the Faculty of Medicine of the University of Montreal. From October 2010 to June 2013, he founded and led the Faculty Office of the Patient Partner Expertise. He is now co-director of a larger faculty unit, which integrates interprofessional collaboration and patient partnership competencies development.

Rosa M. Durán-Sabogal is a nurse with a Masters in Health Administration. Currently she is Professor of Community Health and team member of the Center of Studies for Community Health at Universidad de La Sabana (CESCUS). Recently she was the deputy director of ‘Equitable Life Start’, a comprehensive research programme that studied early childhood development in the central region of Colombia, to develop evidence-based strategies for capacity building at different levels of the programme’s ecological approach. Besides this she has more than 25 years of experience in public health programmes, developing processes for management of national and regional initiatives in disease prevention and health promotion for different population groups across the life cycle. As an independent consultant Rosa has coordinated and managed projects in maternal and child health, chronic diseases and primary health care. In addition to this interest and work in community health, she has a long-standing interest in health policy, project management and administration of health services.

Benny Efendie is a clinical pharmacist and currently working as a lecturer and coordinator of experiential learning programmes at the School of Pharmacy, Monash University Malaysia. He has pioneered interprofessional education in various institutions, including the International Medical University, SEGi University and Monash University. Currently he is completing his PhD on interprofessional education among first year students. He is actively involved in FIPed, the education arm of the

International Federation of Pharmacy, especially in the working group for IPE and also in the Australasian Community of Interprofessional Collaborative Practice (ACoIPCP).

Brenda Flood is a senior lecturer at Auckland University of Technology, New Zealand, where she is an interprofessional education and practice development leader within the Faculty of Health and Environmental Sciences. Brenda is currently undertaking doctoral research with a focus on exploring health professionals' experiences of interprofessional practice. Her study aims to reveal and illuminate insights from these experiences to inform interprofessional learning.

Sue Fyfe is an epidemiologist, anatomist, speech pathologist and teacher with research interests in disability, health services and educational research, particularly interprofessional education and innovative approaches to teaching and learning (T&L). She has published and presented widely on disability and T&L innovation, and been successful with a number of national competitive T&L grants. She is currently working on pedagogy for the flipped classroom, innovative methods of assessment and developing student identity and skills that prepare students for roles in primary care. She has held senior leadership roles at Curtin University, Australia, as inaugural Dean of Teaching and Learning in the Faculty of Health Sciences, Head of School of Public Health and Professor of Medical Education for the School of Medicine. She is Deputy Chair of the WA Peel Development Commission, a Board member of the Maureen Bickley Centre for Women in Leadership and Chair of the Forest Heritage Centre.

Maryke Geldenhuys is a coordinator of Public Health and Community-Based Education in the undergraduate medical curriculum at Stellenbosch University (South Africa). Prior to this she was a facilitator in interprofessional education and collaborative practice, whilst working in the government sector. As an occupational therapist she realises the importance of interprofessional teamwork to ensure effective intervention in a challenging social context. She obtained a Master's Degree in Early Childhood Intervention at the University of Pretoria, where she developed a passion for interprofessional teamwork, family-centred community intervention

and collaborative problem solving. She also has experience of working in a private paediatric practice.

John H.V. Gilbert is the Founding Principal and Professor Emeritus, College of Health Disciplines, University of British Columbia where he was also founding Director of the School of Audiology and Speech Sciences, and Director of the School of Rehabilitation Sciences. He is a member of the Editorial Board of the *Journal of Interprofessional Care*, and Co-editor of the open access *Journal of Research in Interprofessional Education*. He was Co-chair of the WHO Study Group on Interprofessional Education and Collaborative Practice, and currently serves on the Advisory Committee on social determinants of health at the WHO. He was awarded the Queen's Diamond Jubilee Medal in April 2012. Dr Gilbert was appointed a Member of the Order of Canada, in July 2011, for his leadership in the development of interprofessional education. At the Convocation of Dalhousie University, Halifax, Nova Scotia in May 2016 he will receive the honorary degree, Doctor of Laws, *honoris causa* in recognition of his work.

Ariane Girard is a student completing her BSc degree in Nursing Sciences at the Université du Québec à Chicoutimi. She is also completing a Master's Thesis in Nursing, exploring and describing nursing practices in primary care for patients with multi-morbidity, combining physical chronic diseases and common mental disorders. She contributes to several research projects as a research assistant. She is also working as a registered nurse in an addiction rehabilitation centre.

William Godolphin is Professor Emeritus in the Department of Pathology & Laboratory Medicine at the University of British Columbia, Vancouver, Canada. He is also Co-director of Patient & Community Partnership in Education, Office of the Vice Provost Health, which was most recently the Division of Health Care Communication in the College of Health Disciplines. Godolphin has been a teacher and researcher for many years, with projects and publications ranging across lipoproteins, breast cancer prognostic factors, clinical laboratory toxicology, laboratory automation and robotics, and medical education. Over the past two decades he has, in

collaboration with Dr Angela Towle, developed and studied educational interventions that aim to help health professionals engage patients/clients in informed and shared decision-making. The most promising of these has involved bringing the authentic and autonomous voices of patients and community into health professional education.

Sharon Nur Hatcher is an associate professor in the Department of Emergency and Family Medicine at the Faculty of Medicine and Health Sciences at the Université de Sherbrooke, Québec, Canada. She is currently the Associate Dean for the Saguenay-Lac-St-Jean region, as well as Director of the Saguenay Medical Programme. She also holds the position of Associate Dean at the Université du Québec à Chicoutimi. Sharon completed a Masters in Clinical Science with the University of Western Ontario in 2014 with a thesis on the integration of spirituality in medical education. She has been a participant in several curriculum renewal committees with her department, where she served as chair, with the College of Family Physicians of Canada, and more recently with the MD Programme of the Université de Sherbrooke. Her areas of interest include patient-centred care and interprofessional education, as well as service-learning and community engagement.

Marion Helme is the current convenor for the World Interprofessional Education and Collaborative Practice Coordinating Committee, and elected Board member of the UK Centre for the Advancement of Interprofessional Education (CAIPE). After an early career in social work practice she worked as a lecturer and researcher in social work and in systems thinking, and gained a doctorate for research into children and young people's participation. For the last twelve years she has been immersed in interprofessional education, first for the UK Higher Education Academy, based at King's College London, including IPE teaching, producing publications, obtaining European Commission funding to set up and run the European Interprofessional Education Network (EIPEN), and managing projects in IPE research and open educational resources in public health. Most recently she has worked as an independent researcher and honorary fellow of St George's University of London and Kingston University.

Kreshnik Hoti is a pharmacy practice academic with extensive experience as a community and consultant pharmacist. Kreshnik has set up novel interprofessional programmes to integrate students from various health science disciplines at Curtin University, Australia. The focus of these programmes was on dementia and disease state and medication management review in aged care and community settings. He was involved in the training of various health professionals by facilitating workshops on collaborative practice in chronic disease management, and this has broadened his understanding of interprofessional collaboration. He has published papers on pharmacist prescribing, medication supply models to residential aged care facilities, interprofessional education, antibiotic use, e-health literacy and evaluation of community pharmacy-based professional services.

Jeff Hughes is the former Head of the School of Pharmacy, Curtin University. He graduated from the Western Australian Institute of Technology (WAIT) with a BPharm degree in 1978. Since then he has completed three postgraduate degrees, including his PhD which he received in 2007. His research interests include interprofessional education, pharmacy practice, health literacy, pain assessment and management, adverse drug reactions and pharmacovigilance, infectious diseases, diabetes, hypertension, palliative care, cognitive impairment and dementia, and patient and medication safety. Jeff has won a number of awards including the 2004 PSA Pharmacist of Year Award and 2014 Australasian Pharmaceutical Sciences Association Medal. He has published more than 200 research and professional papers and contributed to 20 books. Jeff is an accredited pharmacist and a part-owner of a community pharmacy.

Muhammad Tahir is Professor of Psychology and Director of Quality Enhancement Cell (QEC) at the International Islamic University Islamabad, Pakistan. Muhammad was Senior Clinical Psychologist in the Psychology Department, Roscommon Mental Health Services and Clinical Supervisor for DPsychSc, School of Psychology National University of Ireland, Galway, Ireland. His research interests include addiction, PTSD, neuropsychological disorders, mental health, neuro-feedback, schema modes. He is a member of the Pakistan Psychological Association, Associate Fellow of the Psychological Society of Ireland and a

Chartered member of the British Psychological Society. He has presented his scientific and research work in national and international conferences, attended and participated in continuous professional development trainings and has published articles on a range of mental health issues in refereed journals.

Dominique Labbé is a PhD candidate and Professor of Nursing Sciences at the Université du Québec à Chicoutimi. She practised as a full-time emergency nurse for 15 years and is now working part-time in emergency wards. Her PhD thesis is on the integration of family members in intensive care units and what they can bring to quality of care in emergency situations, including resuscitation and invasive procedures. She is also a clinical simulation instructor, conducting interdisciplinary high fidelity simulations in critical care involving nursing, medicine and respiratory therapy students.

Francisco Lamus-Lemus is a paediatrician working in public health, maternal and child health, primary health and health professions education. He has led different community health development projects with civil society organisations and public sector institutions in Colombia and internationally. He is currently the director of the research group in family and community medicine at the Center of Studies for Community Health at Universidad de La Sabana (CESCUS). In different action research projects he has contributed with programmes such as the WHO 'Healthy School Initiative' in Cundinamarca and Bogotá, re-engineering the Maternal and Child Care initiative in Bogota 2006–2011, designing and implementing the Integrated Management of Childhood Illness (IMCI) strategy in different Colombian territories, developing the Management Model for Child Health and Wellbeing for the Ministry of Health in Colombia in 2004, and recently directing the 'Equitable Life Start' research programme. Much of his experience has been built around interprofessional action research and collaboration with communities in primary health care.

Eileen McKinlay is a senior lecturer in the Primary Health Care and General Practice Department, University of Otago Wellington and the Director of the department's interprofessional postgraduate programme.