Developing a Career in Academic Surgery Course

Monday 4 May 2015
PERTH CONVENTION AND EXHIBITION CENTRE
PERTH, WESTERN AUSTRALIA
DCAS Course Organising Committee

Co-chairs:
Professor Marc Gladman
RACS Section of Academic Surgery
Professor Julie Ann Sosa
Association for Academic Surgery

Committee Members:
Mr Richard Hanney . . . . . . . . . . . . . . Chair, RACS Section of Academic Surgery
Dr Deborah Wright . . . . . . . . . . . . . . . . . . RACS Trainees Association Representative
Dr Christine Lai . . . . . . . . . . . . . . . . . . . . RACS Younger Fellows Committee Representative
Ms Siobhan Fitzpatrick . . . . . . . . . . . . . SurgIN Representative
Associate Professor Wendy Babidge . . Director, RACS Research Audit and Academic Surgery
Dr Tamsin Garrod . . . . . . . . . . . . . . . . . . Secretariat, Section of Academic Surgery

Course Organiser:
Ms Caroline Handley . . . . . . . . . . . . . . . . . . RACS Conferences and Events Management

This educational activity has been approved in the Royal Australasian College of Surgeons’ CPD Program. Fellows who participate can claim one point per hour (maximum 7 points) in Maintenance of Knowledge and Skills.

Intention to Photograph
Please be advised that photographs may be taken at the Course and reproduced.

Final Program

6:45am  Registration and breakfast
Northern Foyer, Level 2

7:15am  Welcome
River View Room 4, Level 2
Michael Grigg (President, Royal Australasian College of Surgeons)

7:20am  Introduction
Julie Ann Sosa (Durham, USA) and Marc Gladman (Sydney)

SESSION 1: A CAREER IN ACADEMIC SURGERY
River View Room 4, Level 2
Chairs: Justin Dimick (Ann Arbor, USA) and Debra Nestel (Melbourne)

7:30am  Why every surgeon can and should be an academic surgeon
Mark Smithers (Brisbane)

7:50am  Where do good research questions come from?
Michael Solomon (Sydney)

8:10am  Comparative effectiveness research
Caprice Greenberg (Madison, USA)

8:30am  Technology enhanced learning in surgery
Anthony Gallagher (Cork, Ireland)

8:50am  Educational research
Carla Pugh (Madison, USA)

9:10am  Panel discussion

9:30am  MORNING TEA
Northern Foyer, Level 2

9:55am  Introduction – Hot Topic in Academic Surgery
Marc Gladman (Sydney)
River View Room 4, Level 2

HOT TOPIC IN ACADEMIC SURGERY:
Patient safety
Justin Dimick (Ann Arbor, USA)

SESSION 2: PRESENTING YOUR WORK
River View Room 4, Level 2
Chairs: Caprice Greenberg (Madison, USA) and James Lee (Melbourne)

10:20am  Writing an abstract, choosing the right meeting
Julie Ann Sosa (Durham, USA)

10:45am  Submitting and revising your manuscript
John Mansour (Dallas, USA)

11:10am  Presenting your work
Muneera Kapadia (Iowa City, USA)

11:30am  Panel discussion

11:50am  LUNCH with the faculty
River View Room 5, Level 2

12:50pm  Introduction – Keynote Presentation
Jeffrey Hamdorf (Perth)
River View Room 4, Level 2

KEYNOTE PRESENTATION: How to be awarded a Nobel Prize in medical research
Barry Marshall (Perth)
SESSION 3: CONCURRENT ACADEMIC WORKSHOPS:

Workshop 1: Tools of the Trade
River View Room 4, Level 2
Chairs: John Mansour (Dallas, USA) and Richard Hanney (Sydney)
Building a career pathway: opportunities, obstacles and getting past them
1:30pm Building a career pathway: opportunities, obstacles and getting past them
   Amir Ghaferi (Ann Arbor, USA)
1:45pm A successful career - our "dirty little secrets"
   Deborah Amott (Melbourne)
2:00pm Getting started as an academic surgeon
   Ian Bissett (Auckland)
2:15pm Why a trainee should consider full-time research
   Deborah Wright (Dunedin)
2:30pm Panel discussion

Workshop 2: Residents / Registrars
Meeting Room M2, Level 2
Chairs: Carla Pugh (Madison, USA) and John Windsor (Auckland)
Is a higher degree worth pursuing? Which one? When?
1:30pm “The doctorate - the (?) ultimate higher degree?”
   Sarah Aitken (Sydney)
1:45pm Masters by coursework
   Julian Smith (Melbourne)
2:00pm Is a “Masters” by research worth the effort?
   Guy Maddern (Adelaide)
2:15pm Overseas experience - why, what and when
   Warren Hargreaves (Sydney)
2:30pm Panel discussion

Workshop 3: Career Academics
Meeting Room M3, Level 2
Chairs: Julie Ann Sosa (Durham, USA) and Ian Bennett (Brisbane)
1:30pm Building a career pathway: opportunities, obstacles and getting past them
   Timothy Pawlik (Baltimore, USA)
1:42pm Building a career pathway: opportunities, obstacles and getting past them
   Clifford Cho (Madison, USA)
1:54pm Grant writing
   David Watson (Adelaide)
2:14pm Academic surgery in private practice
   Owen Ung (Brisbane)
2:29pm Panel discussion

2:40pm AFTERNOON TEA
Northern Foyer, Level 2

SESSION 4: A CAREER IN ACADEMIC SURGERY
River View Room 4, Level 2
Chairs: Muneera Kapadia (Iowa City, USA) and Andrew Hill (Auckland)
3:00pm Finding and being a mentor
   Michael Wagels (Brisbane)
3:20pm Coalface research changing local policy and practice
   Didier Palmer (Darwin)
3:40pm The future of academic surgery
   John Windsor (Auckland)

Closing remarks
   Julie Ann Sosa (Durham, USA)
   Marc Gladman (Sydney)

The Association for Academic Surgery together with the RACS Section of Academic Surgery sincerely thanks the generous support of Johnson & Johnson Medical Companies.
Association for Academic Surgery Speakers and International Faculty

Justin Dimick
Ann Arbor, USA
Professor Justin B. Dimick, is the Henry King Ransom Professor of Surgery, Chief of the Division of Minimally Invasive Surgery, and Associate Chair for Faculty Development at the University of Michigan. Professor Dimick has an active clinical practice which is primarily devoted to advanced laparoscopy, including treatment of morbid obesity, gastroesophageal reflux (GERD), abdominal wall hernias, and other benign and neoplastic diseases of the stomach, spleen, and foregut. He has expertise in major abdominal wall reconstruction for large ventral hernias, including component separation procedures. He is also the lead editor of a new textbook, Clinical Scenarios in Surgery: Decision Making and Operative Technique, published by Lippincott in 2012. Professor Dimick serves on the Leadership Team for the Institute for Healthcare Policy and Innovation (IHPI) at the University of Michigan where he has an active research program. His research focuses on quality measurement, policy evaluation, and large-scale quality improvement interventions. He has more than 160 peer-reviewed publications. Professor Dimick currently serves in leadership positions in several organizations, including President of the Association for Academic Surgery (AAS), the Board of Directors of the Surgical Outcomes Club (SOC), the Editorial Board for JAMA Surgery, and the Executive Committee of the Michigan Bariatric Surgery Collaborative (MBSC). He has served in advisory roles for the American College of Surgeons-National Surgical Quality Improvement Program (ACS-NSQIP), the Institute of Medicine (IOM), and the Medicare Payment Advisory Commission (MedPAC).

Amir Ghaferi
Ann Arbor, USA
Dr. Ghaferi graduated summa cum laude/Phi Beta Kappa from UCLA in 2001, received his medical degree from the Johns Hopkins University School of Medicine in 2005, and completed his general surgery residency at the University of Michigan in 2012. He joined the University of Michigan faculty in 2012 as an Assistant Professor of Surgery and an Assistant Professor of Management and Organizations in the Stephen M. Ross School of Business. He is currently the Chief of General Surgery at the Ann Arbor VA Healthcare System and the Founder/Director of the Bariatric Surgery Program.

Dr. Ghaferi’s clinical practice is devoted to advanced laparoscopy, including gastroesophageal reflux disease, bariatric surgery, and groin hernias. He is also very active in medical student and resident education. He is currently the 3rd year medical student clerkship director at the VA hospital and serves on the Advisory Committee of the Academic Surgeon Development Program.

Dr. Ghaferi’s research focuses on understanding the relationship of organizational culture to quality and safety, with the ultimate goal of designing interventions to improve care locally, regionally, and nationally. He is currently a co-investigator on an NIH funded grant that seeks to assess the resources, safety culture, and safety-related practices and behaviors that are associated with “failure to rescue” – the ability to recognize and manage major postoperative complications.

Anthony Gallagher
Cork, Ireland
Professor Anthony Gallagher is Director of Research and Professor of Technology Enhanced Learning in the Application of Science to Simulation, Education and Research on Training (ASSERT) for Health, School of Medicine, University College Cork, Ireland. He completed a B.Sc. (Hons.) at the University of Ulster and his Ph.D. in Psychology at the Trinity College Dublin. In 2013 he was awarded his D.Sc. for his published work on ‘Assessment and training of surgeons and physicians for image guided medicine’. He became Research Director of the Northern Ireland Centre for Endoscopic Training and Research and in 1998 he was appointed as Consultant Psychologist (Hon.) to the Royal Group Hospitals Trust and in 1999 Assistant Director, The Queen’s University Centre for Health Care Informatics. He was awarded a Fulbright Distinguished Scholarship and worked with Professor Richard Satava at Yale University. In 2003 he was appointed Director of Research at Emory Endosurgery Unit and Adjunct Professor at Emory University. In 2005 he worked as Professor of Human Factors at the National Surgical Training Center at the Royal College of Surgeons in Ireland (Dr. atiir), ah!2010 hal wemmmom an authored book, Fundamentals of Surgical Simulation: Principles and Practices. His principal research interests currently include virtual reality, minimal access surgery, endovascular interventions, pacemaker implantation and validation of medical devices for training and assessment. He is considered one of the leading exponents and international experts in the world for the design, application and validation of VR in medicine.
John C. Mansour, MD, FACS
Dallas, USA
Dr. Mansour completed his General Surgery Residency at the University of Wisconsin in Madison prior to completing his Surgical Oncology fellowship at Memorial Sloan-Kettering Cancer Center in New York City. He is a member and has held leadership positions in a number of professional organizations including the Americas Hepatopancreatobiliary Association, Society of Surgical Oncology, American Society of Clinical Oncology, Association for Academic Surgery, and the Western Surgical Association. He has chaired academic sessions for multiple annual meetings including his work as the Co-Chair of the AHPBA-sponsored Consensus Conference on the Multidisciplinary Treatment of Bile Duct Cancers.

His areas of clinical and academic interest are focused on the study of hepatopancreatobiliary malignancy as well as other upper gastrointestinal cancers. Research efforts have been directed primarily at questions involving the behaviors and genetic characterization of HPB malignancies as well as quality assurance during the delivery of multidisciplinary care. He has won multiple teaching awards for his work with both medical students and residents.

Muneera R Kapadia, MD, MME
Iowa City, USA
Dr Kapadia is an Assistant Professor of Surgery at the University of Iowa. She received her undergraduate degree in chemical engineering from the Massachusetts Institute of Technology and her medical degree from the University of Michigan. She completed her General Surgery training at Northwestern University in 2009 and a fellowship in Colon and Rectal Surgery at the University of Minnesota in 2010. In 2014, Dr Kapadia earned her master’s degree in Medical Education from the University of Iowa. Dr Kapadia’s main clinical interests include inflammatory bowel and pelvic floor diseases.

Caprice Greenberg, MD, MPH
Madison, USA
Dr. Greenberg is a board-certified general surgeon with advanced training in surgical oncology and a health services researcher focused on improving patient safety and quality of care. She attended the University of Chicago for her undergraduate studies and medical school. She did her general surgery residency at Brigham and Women’s Hospital in Boston as well as a surgical oncology fellowship at the Harvard Partners-Dana Farber Cancer Center. She also completed a research fellowship while earning a masters degree from the Harvard School of Public Health. She then joined the faculty at Brigham and Women’s Hospital and Harvard Medical School in 2007, where she held several leadership positions in the Center for Surgery and Public Health.

She was recruited to the University of Wisconsin-Madison in 2011 to create the Wisconsin Surgical Outcomes Research (WISOR) Program of which she is the Director, as well as the inaugural recipient of the endowed WARP Professor of Surgical Research. Her research focuses on the quality and safety of surgical care and in particular aims to: 1) improve operative performance and patient safety through innovative interventions such as surgical coaching; and 2) decrease practice variation and engage patients and other stakeholders in promoting high quality surgical care in cancer. Her research has been funded by PCORI, NCI, AHRQ and numerous foundations. She co-chairs the Cancer Care Delivery Research Committee of the Alliance for Clinical Trials in Oncology. Dr. Greenberg is a nationally recognized expert in the field of surgical outcomes research and holds several national leadership and committee positions, including founder and Past President of Surgical Outcomes Club and Recorder of the Association of Academic Surgery.

Dr Kapadia plays an active role in medical and surgical education. She serves as the Associate Program Director for the General Surgery Residency at the University of Iowa. She is also on the medical school admissions committee, and plays an active role in educating the preclinical students. In 2011 she received the Outstanding Educator Award for the Department of Surgery. Furthermore, Dr Kapadia is interested in communication skills and is developing a research program that focuses on communication with surgical patient families.

Dr Kapadia is on the Editorial Board of Journal of Surgical Research and reviews for several other journals. She is an active member of multiple national professional societies and served as the Education Committee Chair from 2013-15 for the Association for Academic Surgery. As part of her responsibilities, she organized the AAS Fundamentals of Surgical Research Course in 2013 and 2014.
Timothy Pawlik, MD, MPH, PhD, FACS
Baltimore, USA

Dr. Pawlik received his undergraduate degree from Georgetown University and his medical degree from Tufts University School of Medicine. Dr. Pawlik completed surgical training at the University of Michigan Hospital and spent two years at the Massachusetts General Hospital as a surgical oncology research fellow. He then went on for advanced training in surgical oncology at the University of Texas M. D. Anderson Cancer Center in Houston. Dr. Pawlik’s main clinical interests include alimentary tract surgery, with a special interest in hepatic, pancreatic and biliary diseases. Dr. Pawlik also has an interest in medical ethics and completed a fellowship in medical ethics at the Harvard School of Public Health as well as a Masters in Theology from Harvard Divinity School in Boston. In addition, Dr. Pawlik has received a PhD from the Johns Hopkins Bloomberg School of Public Health in Clinical Investigations.

Dr. Pawlik took his first faculty appointment at Johns Hopkins in 2005, where he is currently Professor of Surgery and Oncology, as well as the Director of the Johns Hopkins Liver Tumor Clinic. Dr. Pawlik holds the John L. Cameron Chair of Alimentary Tract Diseases and is Chief of the Division of Surgical Oncology. Dr. Pawlik has given close to 300 invited talks both nationally and internationally in over 25 different countries. Dr. Pawlik has published over 400 articles and 40 book chapters, in addition to editing four surgical textbooks. Dr. Pawlik serves on multiple editorial boards including Annals of Surgery, Journal of American College of Surgeons, and Journal of Gastrointestinal Surgery. Dr. Pawlik is an Associate Editor for Annals of Surgical Oncology and the Journal of Surgical Research, as well as being the Deputy Editor of JAMA-Surgery. Dr. Pawlik has served on the executive council of several of the premier surgical associations in the United States and is the immediate past-President of the Association for Academic Surgery. Dr. Pawlik is a member of a number of professional societies including the Society of Surgical Oncology, Americas Hepato-Pancreato-Biliary Association, Society of Clinical Surgery, Halsted Society, and American Surgical Association.

Carla M. Pugh, MD, PhD, FACS
Madison, USA

Carla Pugh is currently an Associate Professor and Vice-Chair of Education and Patient Safety in the Department of Surgery at University of Wisconsin, Madison. She is also Director of UW-Health’s Clinical Simulation Program. Her clinical area of expertise is Acute Care Surgery.

She obtained her undergraduate degree at U.C. Berkeley in Neurobiology and her medical degree at Howard University School of Medicine. Upon completion of her surgical training at Howard University Hospital, she went to Stanford University and obtained a PhD in Education.

Her research interests include the use of simulation and advanced engineering technologies for medical and surgical education. Associate Professor Pugh holds two patents on the use of sensor and data acquisition technology to measure and characterize hands-on clinical skills. Currently, over one hundred medical and nursing schools are using one of her sensor enabled training tools for their students and trainees.

In addition to over 5 million dollars in recent research funding, her work has received numerous awards from medical and engineering organizations. In 2011 Associate Professor Pugh received the Presidential Early Career Award for Scientists and Engineers from President Obama. She is considered to be a lead, international expert on the use of sensors for performance measurement and in 2014 was invited to give a TEDMED talk on the potential uses of technology to transform how we measure clinical skills in medicine.
Julie Ann Sosa, MD MA FACS
Durham, USA

Julie Ann Sosa, MD MA FACS is Professor of Surgery and Medicine (Oncology) at Duke University, where she serves as Chief of Endocrine Surgery and Director of Health Services Research in the Department of Surgery and Leader of the Endocrine Neoplasia Diseases Group at the Duke Cancer Institute and the Duke Clinical Research Institute. Her clinical interest is in endocrine surgery, with a focus in thyroid cancer. She is the author of 200 peer-reviewed publications and 50 book chapters, and has served as PI or investigator for a number of international clinical trials for advanced thyroid cancer. She serves on the Board of Directors of the American Thyroid Association, as well as on guidelines committees for the ATA, AJCC, and NCCN. She was Recorder of the Association for Academic Surgery and currently serves as Co-Chair of the DCAS Course. She is Deputy Editor of JAMA-Surgery, and Associate Editor of the World Journal of Surgery and the Journal of Surgical Research. Dr. Sosa was born in Montreal and raised in upstate New York. She received her AB at Princeton, her MA at Oxford, and her MD at Johns Hopkins, where she also completed the Halsted residency and a fellowship.

Clifford Cho
Madison, USA

Dr. Clifford Cho is an Associate Professor of Surgery and Chief of the Section of Surgical Oncology at the University of Wisconsin School of Medicine and Public Health. He completed his training at the Memorial Sloan-Kettering Cancer Center and his clinical practice is focused on hepatopancreaticobiliary and gastrointestinal surgical oncology. He is also principal investigator of a VA-funded laboratory that is identifying ways to optimize T cell-based approaches to cancer immunotherapy.
Sarah Aitken FRACS
Sydney
Sarah Aitken is a Vascular Surgeon at Concord Hospital in Sydney, a Clinical Academic with the University of Sydney and the inaugural recipient of the Royal Australian College of Surgeon’s Senior Lecturer Fellowship. She is currently completing her doctoral thesis on “The Epidemiology and Outcomes of Older Patients having Vascular Surgery in New South Wales” – a large linked-data epidemiology study. She has been awarded the Chapman Bequest for cardiovascular research and the Grace Cuthbert-Browne Award for epidemiology research as well as completing an additional Grad Cert in Clinical Epidemiology. Her academic pursuits are varied and include adult education methods and anatomy teaching (including development of a virtual anatomy teaching module); epidemiology of vascular surgical conditions such as thoracic aneurysms, diabetic foot and amputees; patient-centred care and medical ethics.

Deborah Amott FRACS
Melbourne
Dr Deborah Amott is a Melbourne based ENT surgeon with a subspecialty interest in Head and Neck cancer treatment. She is Head of Unit at Northern Health, works in the Head and Neck Tumour Stream at Royal Melbourne Hospital, and also has her own private practice. She is active both in teaching and research at the university and post-graduate levels. In her spare time she hangs out with her 5 year old son, does yoga and cycling, and has decided to run a half-marathon later this year. Yes, she’s one of THOSE people.

Ian Bissett FRACS
Auckland
Ian Bissett is an Associate Professor and the Academic Head of surgery at the University of Auckland and a consultant surgeon at Auckland City Hospital. He graduated in 1979 from the University of Auckland and completed his FRACS in 1987 and then worked as a general surgeon in Pokhara, Nepal until 1997. He then undertook his MD research in the anatomy and radiology of rectal cancer. In 2001 he spent a year in the colorectal unit in Concord Hospital in Sydney then returned to his present position. His particular research interests include rectal cancer, the assessment and management of defaecatory disorders and intestinal motility. He is the former head of the Auckland Hospital Colorectal Unit and former President of the Colorectal Surgical Society of Australia and NZ. He has over 70 publications in peer reviewed journals and 4 book chapters published. He continues to visit Nepal on a yearly basis to perform outreach surgical clinics and teach. He has been married to Johanna since 1977 and has 3 children and 2 grandchildren. Ian is a keen cyclist and kayaker, plays touch rugby and is an active member of his local church.

Marc Gladman FRACS
Sydney
Marc A Gladman is Professor of Colorectal surgery at the University of Sydney, Head of the Academic Colorectal Unit at Concord Hospital, Sydney and Director of the Enteric Neuroscience & Gastrointestinal Research Group, Anzac Research Institute, University of Sydney. His abiding research interest is the understanding of bowel function in health and disease and the application of such knowledge to improve patient care. He also runs an active research program focused at measuring
and improving surgical quality in New South Wales. He has authored 10 textbooks, including the highly acclaimed “Examination Surgery: A Guide to Passing the FRACS in General Surgery” and “Clinical Cases and OSCEs in Surgery”, which has won recognition at the British Medical Association international book awards. Professor Gladman currently holds leadership positions in several organizations, including the Executive Committee of the Section of Academic Surgery of the RACS and the Surgical Services Taskforce of the Agency for Clinical Innovation. He has served in advisory roles for the National Health Performance Agency, the Cancer Institute of NSW and is on the NSQIP Implementation Steering Committee for the ACI, NSW Health.

Jeffrey Hamdorf FRACS
Perth
Jeff is a General, Upper Gastrointestinal and Bariatric Surgeon in Perth. Throughout his career he has maintained a strong involvement with education and training and has been the facilitator/director of the Western Trauma Course, Early Management of Severe Trauma, Teaching on the Run, Surgical Preceptorships and has facilitated many courses through the Clinical Teaching and Evaluation Centre (CTEC) and the Royal Australasian College of Surgeons. He has many contemporary research and training interests nationally and internationally. He has delivered many national and international presentations and published articles especially in the surgical literature on education. He is the Head of the School of Surgery, and was the inaugural Professor of Medical Education, UWA and is Director of CTEC.

Richard Hanney FRACS
Sydney
Richard Hanney is a General Surgeon and a Clinical Senior Lecturer in the University of Sydney and Westmead Hospital. Within the RACS, he has previously chaired the Younger Fellows Committee helping form the Trainees Association and establish the Younger Fellows and Trainees’ dinner at the ASC. For the last 7 years he has worked with the Academic Section convening the DCAS course and partnering with the Association for Academic Surgery. He considers himself very fortunate to have worked closely with many remarkable individuals over that time. Most recently he has been exploring ways the College can partner successfully with medical students aspiring to surgical careers. He is currently Chair of the Academic Section of the RACS.

Warren Hargreaves FRACS
Sydney
After obtaining his Fellowship in General Surgery Dr Hargreaves completed a Fellowship in Surgical Oncology at the Royal Marsden Hospital, London. He returned to Sydney in 2006 and commenced specialist practice at St Vincent’s Hospital.

As the Supervisor of Surgical Training, Dr Hargreaves joined the NSW General Surgery Training Committee in 2007 and became the Chairman in 2011.

In 2009 he joined the academic staff of the University of Notre Dame, Sydney, and was appointed the Discipline Leader in Surgery. In addition to teaching undergraduates, Dr Hargreaves is a committee member and Course Director of AssET for the RACS.

Dr Hargreaves sub-speciality interest is in the management of soft tissue tumours and he has recently completed writing chapters in the Clinical Guidelines for the Management of Soft Tissue Sarcoma for the Cancer Council of Australia.

Dr Hargreaves is currently the Head of the Unit of Surgical Oncology on the St Vincent’s Campus.

Andrew Hill FRACS
Auckland
Professor Andrew Hill attended the University of Auckland completing his MBChB in 1988. He later completed a Doctorate in Surgery from the University of Auckland in 1996 and a Doctorate in Education in 2011. Following a research fellowship at Harvard University in 1993 and 1994, Andrew completed surgical training in 1997 and worked in Kenya as a medical missionary.

Andrew returned to Middlemore Hospital and the University of Auckland in 2002 where he now practices as a Colorectal Surgeon and is the Head of the South Auckland Clinical Campus of the University of Auckland. He has received extensive research funding from the University and from External Sources and has used this to develop a significant research portfolio.

His research interests are improving outcomes from major abdominal surgery and medical education and he has published over 180 peer-reviewed papers in these areas. Andrew leads the Auckland Enhanced Recovery after Surgery group (AERAS), an interdisciplinary research team aiming to improve patient outcomes after major surgery.

Andrew is a member of the RACS Council and is the Chair of the Board of Surgical Research and the Surgical Research Society of Australasia.
Developing a Career in Academic Surgery

James Lee MBBS FRACS PhD
Melbourne
James is an Academic Surgeon from the Monash University Endocrine Surgery Unit in Melbourne. After completing surgical training, James undertook further subspecialty training in Endocrine Surgery both at Austin Health in Melbourne, and as the T.S. Reeve Fellow at Royal North Shore Hospital in Sydney. During the T.S. Reeve Fellowship, James was the inaugural international invitee to the Endocrine Surgery Unit at the Mayo Clinic, and the winner of best research paper in Endocrine Surgery at the RACS ASC in 2011 and 2012.

Following the clinical fellowships, James undertook full time research work at the Kolling Institute of Medical Research in Sydney, culminating in the award his PhD by the University of Sydney. His PhD thesis made significant contributions to the current understanding of the role of tumour and circulating miRNA biomarkers, specifically, in the recurrence of papillary thyroid cancer.

At present, through his appointments as Senior Lecturer at Monash University, and as the Younger Fellows Representative on the RACS Section of Academic Surgery Committee, James continues to pursue his academic interests alongside clinical practice. His clinical appointments are at The Alfred and Monash Health. Having attended the DCAS course several times during his training, James is honoured to join the DCAS faculty this year.

Guy Maddern FRACS
Adelaide
Professor Guy Maddern is the RP Jeppson Professor of Surgery and Head of the Discipline of Surgery at the University of Adelaide and Director of Surgery at The Queen Elizabeth Hospital and Royal Adelaide Hospital. He is Surgical Director of the Australian Safety and Efficacy Register of New Interventional Procedures – Surgical (ASERNIP-S). His clinical interests include the physiological impact of laparoscopic surgery, and more recently the development of techniques to manage metastatic hepatic disease. He has over 400 publications in scientific journals and has contributed to over a dozen surgical publications.

Professor Maddern is also Director of the Basil Hetzel Institute at The Queen Elizabeth Hospital charged with the responsibility of defining the future direction and development of research within The Queen Elizabeth Hospital campus. He has received in excess of $54,000,000 in research funding and his current research focus brings together the development, assessment and introduction of surgical techniques, processes and technologies into clinical practice.

KEYNOTE PRESENTER
Barry James Marshall AC, Nobel Laureate MB BS W.Aust., FRACP
Perth
Barry Marshall is the Clinical Professor of Medicine (University of Western Australia) and an Honorary Clinical Professor, Medicine and Pharmacology at the Sir Charles Gairdner Hospital, University of Western Australia.

In 2005 Barry Marshall and Robin Warren were awarded the Nobel Prize for Physiology or Medicine in recognition of their 1982 discovery that a bacterium, Helicobacter pylori, causes one of the most common and important diseases of mankind, peptic ulcer disease. This discovery was the first step in developing more effective treatments for ulcers and in understanding the causative link between H. pylori and stomach cancer.

In 1998 Professor Marshall was made a Fellow of the Royal Society. In 2008 he was elected as a Foreign Member of the prestigious US National Academy of Science, an institution that was established in 1863 by President Abraham Lincoln.

Professor Marshall’s skills and interests include: Profiling antibiotic resistance in H. pylori clinical isolates; Testing novel antibiotic compounds on H. pylori clinical isolates; Monitoring the cure rate of quadruple therapy against multi-drug resistant H. pylori strains; Genomic sequencing and analysis of bacterial genomes and Understanding H. pylori toxin and regulatory genes.

His future research includes: Basic and applied medical research in Helicobacter pylori (all Helicobacter strains); Genomics and the evolution of Helicobacter and Establishment of a Helicobacter type culture collection (bio bank).

Debra Nestel
Melbourne
Debra Nestel is Professor of Simulation Education in Healthcare, Monash University, Australia and has worked at the University of Hong Kong and Imperial College London. Debra is program lead on a Masters of Surgical Education (Department of Surgery, University of Melbourne and Royal Australasian College of Surgeons) and a Masters of Health Professions Education (Monash University). She is an honorary professorial fellow in the Departments of Surgery at the University of Melbourne and Imperial College, London. Debra is a Board Member of Simulation Australia and Chair of the Research Committee of the U.S. based Society for Simulation in Healthcare. In Australia, she leads a national program for simulation educators – NHET-Sim (www.nhet-sim.edu.au) and a state-based network in simulated patient methodology (www.vspn.edu.au).
Debra has published over 140 peer reviewed papers in the fields of clinical and operative skills, simulation as an educational method, especially the role of simulated patient methodology.

**Didier Palmer OAM FRCS FRCP FCEM FACEM**

*Darwin*

Didier originally trained in the UK. He has been Director of the Department of Emergency Medicine in the Royal Darwin Hospital since 2000, initially as a single handed consultant in an unaccredited ED and now in a multi-FACEM department seeing 70,000 patients per year with maximal specialist training accreditation. He has interests in many areas of emergency medicine including trauma systems, retrieval medicine, medical informatics, non-specialist emergency medicine education, disaster preparedness, crisis resource management and domestic violence interventions. He sits on various National and Regional committees and is the Chair of the Standards Committee for the Australasian College for Emergency Medicine. In his spare time he rides horses (show jumping and dressage) and rides a motorbike to work, hence his keen interest in the development of effective trauma systems in the Top End!

**Julian A. Smith MBBS, MS, MSurg Ed, FRACS, FACS, FCSANZ, FAICD**

*Melbourne*

Professor Julian Smith, a Cardiothoracic Surgeon, has been Professor and Head of the Department of Surgery (Monash Medical Centre) at Monash University and Head of the Department of Cardiothoracic Surgery at Monash Health (Monash Medical Centre) since 2001. His training in general and cardiothoracic surgery occurred in Melbourne, Stanford and Cambridge and during that time developed a particular clinical and research interest in cardiopulmonary transplantation and mechanical support of the circulation. He is currently a Councillor of the Royal Australasian College of Surgeons and the Chairman of Professional Development and the Academy of Surgical Educators. His previous College Council role was as Chairman of the Division of Research, Audit and Academic Surgery. He is a past-President of the Australian and New Zealand Society of Cardiac and Thoracic Surgeons and currently the Senior Examiner in Cardiothoracic Surgery. His main clinical and research interests are in less invasive cardiac surgery, robotically assisted surgery, mechanical support of the circulation, cardiothoracic surgery audit/databases, the use of evidence based medicine by surgeons and surgical education from which over 250 publications have arisen. He was recently amongst the first cohort of graduates to receive the Master of Surgical Education degree from the University of Melbourne.

**Mark Smithers MBBS(Qld), FRACS, FRCSEng, FRCSEd**

*Sydney*

Professor Michael Solomon is a consultant surgeon and Academic Head of the Department of Colorectal Surgery at the Royal Prince Alfred Hospital in Sydney. He is a Clinical Professor of Surgery and Director of Colorectal Research, both for Royal Prince Alfred Hospital and the University of Sydney and is a past President of the Colorectal Surgical Society of Australia & New Zealand (CSSANZ). He was previously the Chairman of the Post-FRACS Training Board in Colorectal Surgery of RACS & CSSANZ of which he remained a member for 16 years. He has been recently on the editorial board of DCR, Colorectal Disease & Int J Colorectal Diseases and is currently a
Board Member of the NSW State Cancer Institute. He has received an honorary fellowship from the Royal College of Surgeons of Ireland as well as an honorary membership of the Association of Coloproctology of Great Britain & Ireland. He recently was awarded the prestigious RPA Foundation Research Medal in 2014 being the first surgeon to be given this honour.

Professor Solomon has extensive experience in clinical surgical research and has published over 220 papers and obtained over 12 million dollars in peer reviewed research grants. He is the Founding Director and Head of the Surgical Outcomes Research Centre (SOuRCe) at the University of Sydney since 2004 which was established as a multidisciplinary, academic research unit dedicated to the advancement of evidence-based surgical practice through the conduct of outcomes-oriented surgical research. Professor Solomon has supervised 38 Masters and Honours degrees as well as 5 completed PhD’s with a further 3 currently in progress. Professor Solomon was recently appointed in 2014 the inaugural Chairman of the Institute of Academic Surgery at RPA. This novel Institute focuses on enhancing academic surgery by fostering and mentoring academic careers, surgical education, social media, global health, current surgical research and most critically the future of surgery.

Professor Solomon’s surgical expertise is in minimally and maximally invasive colorectal surgery with the foundation of a multi-disciplined complex pelvic surgery for advanced and recurrent malignancy unit, expertise in inflammatory bowel disease and pelvic floor disorders as well as laparoscopic colorectal surgery. His current research interests lie in developing maximally invasive techniques for advanced pelvic malignancy, clinical trials of minimally invasive colorectal surgery and the assessment and performance of randomised and alternative clinical trial designs for surgical operations.

He obtained a Clinical Associate Professorship with the University of Sydney in 2003. From the beginning of 2009 he returned to Queensland to head the Breast and Endocrine unit at the Royal Brisbane and Women’s Hospital (RWBH) and join the academic department of surgery of the University of Queensland. His UQ professorial promotion was obtained in 2014.

He is a committed clinician, teacher, researcher and is principle investigator for a number of major Australian and New Zealand clinical trials relating to the management of the axilla and regional nodes in breast cancer. Through RACS he plays an active role in surgical training and has been a member of the Court of Examiners since 2008.

Owen has extensive administrative and management experience, obtained through various clinical leadership roles at State and National levels. Previous national representations include: board member of General Surgeons Australia (GSA), Chair of the Breast Section of the Royal Australasian College of Surgeons (RACS) and Chair of the Breast Group of the Clinical Oncology Society of Australia (COSA). He was elected to the RACS Queensland State Committee in 2011 and currently serves on the executive as deputy chairman.

Owen A Ung MBBS, FRACS
Brisbane

Owen Ung is a breast and endocrine surgeon in public and private practice. After graduating from Queensland University, he worked in rural and metropolitan hospitals throughout the state then completed his advanced surgical training at the Royal Brisbane Hospital. He undertook fellowships at Westmead Hospital in NSW and the University of Wales College of Medicine in the United Kingdom as a lecturer in surgery. From 1995 to 2008 he was a visiting consultant surgeon at Westmead Hospital in Sydney and Director of the Department of General Surgery.

Michael Wagels FRACS
Brisbane

Michael is a staff specialist plastic and reconstructive surgeon at the Princess Alexandra Hospital. He undertook surgical training in Adelaide, Brisbane and Perth and was awarded FRACS in plastic and reconstructive surgery in 2012. Michael interrupted training to undertake research and was awarded a PhD from the University of Queensland in 2013. His thesis evaluated the behaviour of auto-transplanted muscle to prevent late failures. He also completed a fellowship in hand surgery at St Vincent’s Hospital in Melbourne in 2013-14.

Michael has an interest in complex lower limb reconstruction, surgery of the hand and wrist, head and neck reconstruction, melanoma and craniofacial reconstructive surgery. He is a senior lecturer at the University of Queensland and is currently supervising four research higher degree candidates and seventeen minor research projects.
David Watson FRACS
Adelaide
Professor David Watson is Head of the Flinders University Department of Surgery, and an Oesophago-Gastric Surgeon Unit at Flinders Medical Centre in Adelaide, South Australia. He has clinical and research interests in the area of benign and malignant esophageal and gastric disease, including gastro-esophageal reflux and esophagogastric cancer. He has been active in the development of laparoscopic and endoscopic surgery, and has conducted 14 randomised controlled trials pertinent to this area. He also leads a molecular biology research group which is investigating the development of esophageal adenocarcinoma. Professor Watson has published more than 300 refereed research papers and book chapters. He is a Senior Editor of the ANZ Journal of Surgery, Section Editor - Gastro-esophageal Disorders for BMC Gastroenterology, and a member of the Editorial Boards of several Journals, including the Journal of Gastrointestinal Surgery, British Journal of Surgery, World Journal of Surgery & World Journal of Gastroenterology. He is currently a member of the Royal Australasian College of Surgeons (RACS) Global Health Committee, and he chairs the RACS China-ANZ committee. He was the founding President of the Australian and New Zealand Gastric and Oesophageal Surgery Association (ANZGOSA). He has been a recipient of the John Mitchell Crouch Fellowship of the RACS in 2002, and he was recently elected a Fellow of the Australian Academy of Health and Medical Sciences.

John Windsor FRACS
Auckland
Professor John Windsor is a surgeon who holds a personal chair in Surgery at the University of Auckland and is Director of Surgical Research. He founded the Pancreas Research Group (1992), Surgical Skills Centre (1993), HPB/UGI Unit (1994), and the Surgical Research Network (2007) which now encompasses ASML (Applied Surgery and Metabolism Laboratory) and SCORE (Surgical Centre for Outcomes Research and Evaluation). Surgical interests include the management of acute and chronic pancreatitis, pancreatic cancer, and gastro-oesophageal reflux and malignancy. His current research includes the role of toxic mesenteric lymph in the promotion of multiple organ failure, the investigation of specific mitochondrial therapies to restore cellular bioenergetics, the mapping and modulation of gastric electrical activity and the development of medical devices. He has published over 270 peer-reviewed manuscripts and given over 200 invited talks, including Visiting Professorships to Harvard, Oxford, Karolinska, Singapore, Capetown, Johannesburg and Delhi. He is co-founder and a director of the start-up SIMTICS Ltd that has developed the ‘Integrated Cognitive Simulator’ for procedural and surgical skills training. In the RACS he was involved in the development of the CLEAR, Surgeons as Teachers, DCAS courses and the Academy of Surgical Educators. He recently completed 5 year term as chairperson of the Section of Academic Surgery in the RACS (2013) and 4 year term as Secretary General of International Hepato-Pancreato-Biliary Association (2012). Recent appointments include Chairperson of the national HPB/Upper GI Tumour Stream and Patron TEDx Auckland. Awarded the Butland Distinguished Medical Science Award (1997), Butland Award for Excellence in Research Supervision (2009), Tertiary Teaching Excellence Award (2009), Gluckman Medal (2012) for distinguished contribution to research in the University of Auckland, elected as an Honorary Fellow of the American Surgical Association (2012) and the James IV Association of Surgeons (2013) and Fellow of the Royal Society of New Zealand (2014).

Deborah Wright
Dunedin
Deborah Wright is a SET 4 trainee in general surgery. Deborah completed a PhD investigating the molecular biology of colorectal cancer and the use of molecular tests in cancer care in 2014 supported by a personal award from the Health Research Council. She was awarded the Young Investigator Award by the Surgical Research Society that same year. In 2013 she received an RACS Certificate of Outstanding Service for her contribution as a member of the ASC executive committee. Deborah lives in Dunedin, New Zealand with her incredibly supportive husband and two young sons.
Abstracts

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MEDICAL COMPANIES
WHERE DO GOOD RESEARCH QUESTIONS COME FROM?
Professor Michael J. Solomon MB BCH (Hons) BAO MSc (Epid) FRCSI FRACS
Academic Head RPAH Department of Colorectal Surgery, Head of Surgical Outcome Research Centre (SOuRCE) & Chairman of RPA Institute of Academic Surgery, RPAH & University of Sydney

Innovation and new ideas in surgery are not necessarily synonymous. Whether the concepts are good or whether they diffuse into surgical practice defines the difference. Evidence based rather than confidence and financial based support are again not synonymous nor arguably the best models for novel thought. Where do ideas come from and what inspired or who do you collaborate with to inspire? Is it driven by patient treatment experiences, inspirational mentors and peers or perhaps even more junior staff working with surgeons who inspire the thought in the surgeon or who themselves create the concept synergistically and symbiotically? Thomas Edison stated “To have a great idea you have to have a lot of them” while Einstein states the need perhaps apt in surgery “The definition of insanity is doing the same thing over and over again and expecting a different result”. This talk explores the creation and development of new ideas, diffusion, mentoring and whether we can create a model of collaboration that inspires new ideas that lead to innovation? When does a novel idea become an innovation? What personality traits in mentors (competitiveness, role modeling, career facilitation) and innovators (narcissism, acceptance that failure often inspires conceptual design) are the best?

COMPARATIVE EFFECTIVENESS RESEARCH
Caprice C. Greenberg, MD, MPH
University of Wisconsin – Madison

Comparative effectiveness research (CER) is designed to inform healthcare decisions by providing evidence on the effectiveness, benefits and harms of different treatment decisions in real-world settings. The discipline of surgery is particularly well-suited for comparative effectiveness given our well-defined interventions and meaningful short-term outcomes. This lecture will provide an introduction to the key concepts of CER and an overview of the context which has led to a focus on this type of research. We will discuss design considerations for CER. A comparison of comparative effectiveness to traditional efficacy trials will be provided, along with the unique aspects of stakeholder engagement and implementation and dissemination that must be considered in designing a CER study.

TECHNOLOGY ENHANCED LEARNING IN SURGERY
Anthony G Gallagher, Ph.D., D.Sc.
Professor of Technology Enhanced Learning, Director of Research The ASSERT (Application of Science to Simulation, Education and Research on Training) for Health Centre at UCC, University College Cork, Cork, Ireland

High profile error cases, reduced work hours and rapid developments in medical technologies have forced medicine to consider new approaches to training. Simulations and technology enhanced learning (TEL) for the acquisition and maintenance of skills has a growing role to play particularly for learning how to use new treatment and diagnostic technologies safely. Research has shown that TEL works best when it is integrated into a curriculum. Learning is optimal when trainees receive metric-based feedback on their performance. Metrics should unambiguously characterize important aspects of procedure or skill performance. They are developed from a detailed characterization of the procedure to be learned. The outcome of the characterization should also shape how training simulations look and behave. Metric-based performance characterization should be used to establish a benchmark (i.e., a level of proficiency) which trainees, no matter how experienced, must demonstrate before training progression and clinical implementation. Prospective, randomized and blinded clinical studies have shown that trainees who acquired their skills to a level of proficiency in the skills laboratory perform significantly better (i.e., 40 – 60%) in vivo in comparison to their traditionally trained colleagues. Although a TEL approach to medical education and training may be conceptually and intellectually appealing it represents a paradigm shift in how doctors are educated and trained. TEL also represent a better and safer way for new devices to be adopted and integrated into clinical practice.

EDUCATIONAL RESEARCH
Carla Pugh

For the surgeon scientist, an academic career based on education research can take a number of paths. To understand the path that is right for you, consider the following questions: What is your passion? Should you get an advanced degree? If you were successful beyond your wildest dreams what will you have accomplished? Some researchers have a passion for medical student education. Others have a passion for continuing medical education or lifelong learning. Some researchers are interested in how people learn complex psychomotor skills. Others are interested in memory, cognition or errors. This talk will outline the personal journey of a surgeon scientist’s career in education research. Major decision paths in building a research program in education will be discussed. Key points will be provided regarding the various venues for research funding; finding your niche; and how to build a multi-disciplinary team that is best suited to address cutting edge research questions.
The audience should be prepared to discuss hot topics including the pro’s and con’s of working with industry; partnering with the academic public relations office and other important topics including mentors, faculty positions and national leadership.

WRITING AN ABSTRACT, CHOOSING THE RIGHT MEETING
Julie Ann Sosa, MD
Duke University, Durham, NC USA

Writing an abstract can be a daunting task. The goal is to convey your work in a way that is concise, clear, and compelling so that readers are quickly drawn into the study design and outcomes. The first step is to familiarize yourself with the specific guidelines of the society and/or journal to which you are submitting your abstract. Don’t be a victim of rejection simply because you did not follow the rules of submission. You must then be able to streamline your thoughts so that only the most pertinent are included. Ultimately, your conclusions need to be supported by the results presented, and the results must be based on sound scientific methodology. If tables and figures are allowed, they can provide an excellent vehicle for summarizing data and conserving the text of the abstract. However, tables and figures should only be included if they supplement the results. Some additional tricks that can draw readers to your abstract include compelling titles, brief background statements that introduce dilemmas or controversies that will be addressed, and a definitive conclusion that provides the reader with your recommendations based on your research. This session will discuss the general concepts of abstract design, but will also further delineate some “tricks of the trade” so that abstract writing will be a successful art form for disseminating your research findings.

PRESENTING YOUR WORK
Muneera Kapadia

The very best research can be all but meaningless if it is not effectively communicated. Presenting at meetings, either with poster or oral presentations, is one of the ways that research is disseminated and the opportunity to present your research to colleagues is an honor. Whenever constructing a talk, knowing the audience is paramount. It will guide how you construct your presentation. Whether delivering a poster or an oral, most presentations have the same format: introduction, methods, results and conclusion. The introduction should highlight important background material pertinent to why the research was conducted. At the end of the introduction, the research hypothesis should be stated. Next, the research methods should be described to explain how the research was conducted. The results should then be presented and this is where most of the presentation time should be spent. Presenting the data in a clear, organized and logical format is critical. Figures and tables should be utilized where appropriate to enhance the message. Following the results, there should be a discussion of the limitations of the study and implications of the data. As with anything, attention to detail will make the presentation more polished. Finally, practicing on your own and with colleagues will give you confidence and make your presentations flow smoothly.

BUILDING A CAREER PATHWAY: OPPORTUNITIES, OBSTACLES AND GETTING PAST THEM
Amir A. Ghaferi, MD, MS

Every young academic surgeon enters residency with high hopes and aspirations. We are shaped by our experiences during training and develop into well-trained clinicians who enter the work force often guided by ideals and blind to the sometimes harsh realities of academic surgery. There are invariably early stumbling blocks, successes, failures, triumphs, and disappointments. In this talk I hope to impart some wisdom, encouragement, and tools for aspiring academic surgeons to navigate the choppy waters of their budding careers.

A SUCCESSFUL CAREER - OUR “DIRTY LITTLE SECRETS”
Dr Deborah Amott (MBBS, FRACS)
Northern Health

Looking at the resumes of senior clinicians and researchers often leaves the impression that their career is the result of an orderly, planned ascent to their current position of authority. However, behind this ‘logical’ progression is often a series of quirky decisions, random encounters and entirely unexpected outcomes that can result in a very satisfying career. The nature of these will be explored.

GETTING STARTED AS AN ACADEMIC SURGEON
Ian Bissett
University of Auckland

Becoming an academic surgeon involves a long journey including appropriate clinical and research training and usually obtaining a postgraduate degree. The work, however, has only just begun on being appointed to an academic surgical post. Immediately there are conflicting pressures, each of which threatens to derail career progression. As a new surgical consultant, it is vital to demonstrate clinical excellence in your chosen surgical speciality, as a new senior lecturer, teaching and research outputs are the currency of recognition, and in both spheres there are service opportunities that many expect their new colleague to take up. Strategies that will help include: identifying a mentor, finding a doctoral student to co-supervise alongside an experienced supervisor, ring-fencing university time, taking on undergraduate students’ research projects, building relationships with collaborators who are already producing, and limiting service commitments to those that are personally enjoyable.
Progression within the university system however requires demonstrable achievements in teaching, research and service. Time is the rate limiting step. Most new academics are also at a challenging stage in their personal lives with young children, a move into a new and unfamiliar neighbourhood and significant financial burdens. My advice would be; ‘Pace yourself’, ‘Have a life outside hospital and university’, ‘Make time for your family’ and ‘Don’t beat yourself up’.

WHY A TRAINEE SHOULD CONSIDER FULL-TIME RESEARCH
Deborah M Wright
Dunedin Hospital, Southern District Health Board, New Zealand

All surgical trainees are required to undertake a research project during training but what are the benefits of undertaking an additional period of full-time research? This presentation, by a trainee who has recently completed a PhD, aims to encourage those considering a period of full-time research by offering a realistic overview of the pros, whilst also commenting on the cons. It will explore the skills that will be gained during this time, including in scientific writing, critical thinking and public speaking, and how they might be useful in any future career, whether formally “academic” or not. It will also elucidate some of the other professional opportunities that can arise during a period of full-time research, for example in teaching and leadership, as well as the benefits of a more flexible work schedule for personal and family life. In addition, this presentation will provide insights into the negative aspects of interrupting training, including the financial impact and bureaucratic process, and will discuss how these can be mitigated.

THE DOCTORATE - THE (?) ULTIMATE HIGHER DEGREE?
Dr Sarah Aitken
Concord Hospital, University of Sydney

Doing a PhD is fundamentally about research - the successful doctoral student is beginning a lifetime of research and academic pursuits. Despite the attraction of research mastery, less than half of doctoral candidates complete their higher degree [Gardener 2008]. Competing demands such as clinical workload, time, family and external measures of success are often cited as the reason for failure to complete PhDs. Educational research into those candidates who do not complete doctorates actually shows that a poor fit between topic, candidate and supervisor is the predominant reason for withdrawal from doctoral programs. Developing the groundwork of research skills, specialised clinical knowledge and strong relationships with mentors prior to enrolling in a doctoral program will assist with ensuring completion [James 2010].

The merits of when to do a doctorate, how to set up good supervision and find a topic, gain funding and utilise a doctorate for further academic career progression will be discussed. Personally, doing my doctorate after specialist training has provided deeper insight and understanding into my research topic. I will share my experiences of being in a doctoral program as well as reflections from others who have had different pathways through their doctorates.

References:

MASTERS BY COURSE WORK
Professor Julian A. Smith
Department of Surgery (Monash Medical Centre), Monash University and Department of Cardiothoracic Surgery, Monash Health, Clayton, Victoria, Australia

As an alternative to the research only/thesis pathway to the Master of Surgery degree a number of local and international institutions now offer a Master of Surgery or related degree by coursework. Various combinations of core and elective units/subjects with or without an additional research/dissertation/thesis component are offered either face to face or on line. Enrolment may be on a part or full time basis over a one or two year period. Many of the courses feature training in biostatistics, epidemiology, surgical education, basic and advanced surgical skills, surgical simulation and research methodology etc., each with relevance to surgery in general but also with application to the various surgical sub-specialities. These courses have been taken up in increasing numbers by pre-vocational surgical aspirants, surgical trainees and practicing surgeons. A particular attraction is the flexibility afforded and the ability to combine such courses with active clinical practice. Completion of the Master of Surgery degree in this way may be a stepping stone to acceptance into surgical training, a forerunner to enrolment for a PhD, and/or an introduction into a career in academic surgery.
IS A “MASTERS” BY RESEARCH WORTH THE EFFORT?
Guy Maddern FRACS PhD MD MS
University of Adelaide

With increasing competition in the surgical workforce the ability to demonstrate additional skills and experiences always has merit. The pursuit of a Masters degree and the associated value this brings is well worth considering. Whether it is done as a Masters by coursework or by research is an important decision. A research Masters indicates usually two years of dedicated time being given to the pursuit of a particular topic. This may be done as a gateway to continuing on to a PhD or may, indeed, be the end qualification sought.

Research degrees require one to review the topic thoroughly, research an area of unanswered interest and ultimately to publish the results for the wider audience. Unless these three aspects are diligently pursued the Masters by research will not be completed. The value, however, is not particularly in the results obtained, although these can be important and very satisfying, but is far more to teach the student the issues involved with conducting research, the problems that arise, the challenges in obtaining a solution to these problems, understanding the difficulties of coordination, ethics committees, funding, collaboration and team work, all of which will be essential for successful completion of any significant research effort. It also provides the great self-satisfaction of obtaining a unique understanding of not only the research process often not grasped by those who have not gone through a rigorous research experience but also a sense of achievement in developing knowledge of a topic previously unchartered.

The skills obtained from a significant piece of research are many, however the most important may well be the ability to contribute to others’ research endeavours, supervise junior colleagues and to be able to critique and read other research.

There are very few reasons why research by Masters should not be recommended, however the most significant one is perhaps the cost. Usually scholarships can be obtained and the opportunity to spend some time performing part-time surgical practice is usually possible.

OVERSEAS EXPERIENCE - WHY, WHAT AND WHEN
Dr Warren Hargreaves
St Vincent’s Hospital Sydney

It has long been considered a rite of passage for new surgeons to travel overseas for further training. However, over the past decade legislative and workforce changes in many countries have had a significant impact on this practice. This lecture will consider the issue of traveling overseas for further surgical experience. Travel may be undertaken for further clinical practice or to be involved in research.

I will outline some of the reasons for spending a period of time overseas and discuss the potential benefits and pitfalls. I will discuss some of the practical aspects of overseas training using examples from recently returned fellows.

BUILDING A CAREER PATHWAY: OPPORTUNITIES, OBSTACLES AND GETTING PAST THEM
Timothy Pawlik

Good ideas and building a good team are critical in achieving academic success. While some research ideas can be unplanned and come unexpectedly, trainees should find an academic environment that cultivates and fosters ongoing generation of new and exciting ideas for research. This may involve working with mentors, colleagues, as well as other individuals outside your discipline. Mentors are critically important in helping a trainee develop a career pathway, as well as help identify research ideas, turn such ideas into successful research projects. The road to success often requires perseverance, identifying resources and support, and navigating barriers and obstacles. The young academic surgeons will often depend on others to move aspects of their career forward. In this session, we will discuss challenges to getting your academic career off to a good start, and will present helpful tips and lessons learned, including how to take advantage of collaboration and “team-research.”

BUILDING A CAREER PATHWAY: OPPORTUNITIES, OBSTACLES, AND GETTING PAST THEM
Clifford S. Cho, MD, FACS
Associate Professor
Chief, Section of Surgical Oncology
University of Wisconsin School of Medicine and Public Health
Madison, Wisconsin, USA

The notion of career opportunities and obstacles presupposes the existence of a goal or direction to one’s career. Put another way, the extent to which you may perceive events as opportunities or obstacles (or neither) will largely depend on the things you hope to accomplish over the course of your career. All too often, we take on more ambitions than are necessary or possible; in addition to being a lot of work, this exposes us to a much broader array of potential challenges and obstacles. In this presentation, we will explore the difficult but critical process of honestly identifying and prioritizing one’s career goals. Using the presenter’s autobiographical account of the many errors and occasional fortunes that have marked his career path (as a surgical oncologist with an interest in laboratory research), we will then attempt to identify strategies to correctly recognize/maximize career opportunities, while preparing for/mitigating common career obstacles.
GRANT WRITING
David I Watson
Flinders University Department of Surgery, Flinders Medical Centre, Adelaide, South Australia, Australia

To undertake research that addresses big questions, funds are needed. Obtaining funds is a competitive process and requires a successful application to a granting body. In Australia the major funding scheme is run by the NHMRC, and in recent years competition for this funding has intensified. Many secondary funders also use NHMRC assessments to determine their funding priorities. Hence, applications via the NHMRC are the key to significant research grant funding in Australia.

Keys to writing a successful grant application include:

- Have a great idea, that will solve an important problem
- Develop a compelling “sales pitch”
- Follow the instructions to the letter
- Assemble a team that can deliver
- Make sure the team has a track record of research grant success and outcomes
- Collaborate with successful researchers to develop track record
- Address an important health problem, and make sure everyone else knows why it is important
- Make sure your research will solve the important problem
- Write so the non-expert can understand - not everyone who assesses your grant application works in your area.
- Have clear hypotheses that will be addressed by the research plan
- Have good preliminary data to present that confirms your proposal is feasible
- Plan a manageable workload - don’t put too much in the application - an ambitious proposal won’t get funded.
- Make sure the aims are independently achievable across the time frame, and avoid aims that depend on earlier steps being successful.
- Develop your track record and make sure it is competitive. This might require a strategic approach across 5-10 years
- Publish all of your previous research. Publications underpin success!

THE FUTURE OF ACADEMIC SURGERY
John Windsor
Auckland

A recent president of the RACS said that ‘the future of surgery is academic surgery’, suggesting that academic surgery makes a core contribution, and that the future is secure. This is far from so and there are numerous threats to the future of academic surgery including the perceptions of success, the influence of income, fee-for-service, sophisticated science, and career prospects. Despite these threats, there are some signs that academic surgery is on the rise. While encouraging, there is no room for complacency. The last of the nine RACS SET competencies is titled ‘scholar and teacher’, and while some definitions have been articulated, there remains no cohesive approach to delivering this competency in the various training programs. The Section of Academic Surgery is working to establish a curriculum that ensures that all trainees have the opportunity to learn core research and education knowledge, skills and attitudes. That is not easy with 9 specialty training programs. The Section of Academic Surgery is also working towards the establishment of a deliberate and integrated academic training pathway for those few trainees who seek to train for a career in academic surgery. That is also not easy with multiple colleges and stakeholders. But the future is what we make it, collectively and individually, and there is every reason to expect that the future of academic surgery is more assured than it has ever been.
For further information
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