Developing a Career in Academic Surgery Course

Monday 6 May 2013
SKYCITY AUCKLAND CONVENTION CENTRE, NEW ZEALAND
Developing a Career in Academic Surgery

DCAS Course Organising Committee

Co-chairs:
Professor Andrew Hill
RACS Section of Academic Surgery
Professor Julie Ann Sosa
Association for Academic Surgery

Course Convener:
Mr Richard Hanney

Committee Members:
Mr Jason Chuen
RACS Younger Fellows Committee Representative
Dr Zoe Wainer
RACS Trainees’ Association Representative
Mr Wilson Petrushenko
SurgIN Representative
Assoc Prof Wendy Babidge
Director, RACS Research Audit and Academic Surgery
Mr Keith Hayes
Deputy Director, RACS Research Audit and Academic Surgery
Ms Sue Pleass
Scholarship Program Co-ordinator, RACS ResearchAudit and Academic Surgery

Course Organiser:
Ms Caroline Handley
RACS Conferences & 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 Category 4: Maintenance of Knowledge and Skills towards 2013 CPD totals.

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

Final Program

7:00am Registration and Breakfast

7:15am Welcome
New Zealand 4, Level 5
Michael Hollands (RACS President)

7:20am Introduction
Andrew Hill (Auckland)

SESSION 1: GENERAL PRINCIPLES
New Zealand 4, Level 5
Chairs: Mark Smithers (Brisbane) and Julie Ann Sosa (Durham, USA)

7:30am What is a career in academic surgery?
John Windsor (Auckland)

7:50am Research - How to get research started - ideas, grants, ethics and collaboration
Russell Gruen (Melbourne)

8:15am Academic surgery - the essentials - teaching, leadership and administration
Timothy Pawlik (Baltimore, USA)

8:40am Discussion

9:00am MORNING TEA
SESSION 2: TOOLS OF THE TRADE
New Zealand 4, Level 5
Chairs: Eric Kimchi (Hershey, USA) and Richard Hanney (Sydney)

9:15am HOT TOPIC IN ACADEMIC SURGERY - Stem Cells
Julie Ann Sosa (Durham, USA)

9:35am Bedside to bench to bedside
Lillian Kao (Houston, USA)

9:55am Basic science
Carlton Barnett (Denver, USA)

10:15am Randomised clinical trials
Andrew Hill (Auckland)

10:35am Comparative effectiveness research
Justin Dimick (Ann Arbor, USA)

10:55am Surgical education/simulation
Jeffrey Hamdorf (Perth)

11:15am Discussion

11:30am LUNCH - Faculty at tables with registrants as small group discussions

12:30pm KEYNOTE PRESENTATION - An Antipodean academic odyssey - between the siren call and the rocks
Charles McGhee (Auckland)

SESSION 3: CONCURRENT ACADEMIC WORKSHOPS:

Workshop 1: Interactive Workshop on Issues in Research
Marlborough 3, Level 5
Chairs: Mark Smithers (Brisbane) and Julie Howle (Sydney)

1:00pm Getting the most out of a team
Justin Dimick (Ann Arbor, USA)

1:20pm Multiple Faculty
Justin Dimick (Ann Arbor, USA)
Michael Edye (Sydney)
Jeffrey Hamdorf (Perth)
Timothy Pawlik (Baltimore, USA)
Julie Ann Sosa (Durham, USA)

Workshop 2: Career Development
Marlborough 2, Level 5
Chairs: Russell Gruen (Melbourne) and David Watson (Adelaide)

I want to be an academic surgeon. What can I do as a:
1:00pm Medical Student
Deborah Wright (Auckland)

1:15pm Intern
Marc Gladman (Sydney)

1:30pm SET Trainee
Gregory O’Grady (Sydney)

1:45pm Fellow
Win Meyer-Rochow (Hamilton)

2:00pm Consultant
Susan Neuhaus (Adelaide)

2:20pm Discussion

Workshop 3: Presenting Your Work
New Zealand 4, Level 5
Chairs: Lillian Kao (Houston, USA) and Arthur Richardson (Sydney)

1:00pm Writing an abstract
Eric Kimchi (Hershey, USA)

1:15pm Writing a paper
Rebecca Sippel (Madison, USA)

1:45pm Presenting a talk
Carlton Barnett (Denver, USA)

2:00pm Producing a poster
Eric Kimchi (Hershey, USA)

2:15pm Discussion

2:40pm AFTERNOON TEA

SESSION 4: A CAREER IN ACADEMIC SURGERY
New Zealand 4, Level 5
Chairs: Andrew Hill (Auckland) and Timothy Pawlik (Baltimore, USA)

3:00pm Choosing and being a mentor
Mark Smithers (Brisbane)

3:20pm Work-life balance
Julie Howle (Sydney)

3:40pm On the shoulders of giants - The legacy of the Otago University Department of Surgery
Andre van Rij (Dunedin)
Invited Speakers and Program Contributors

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

 Carlton Barnett Jr. MD
 Carlton Barnett was born and raised around Denver, Colorado. He attended Baylor University in Waco, Texas and returned to Colorado for Medical School and Residency in General Surgery.

 During residency, he was selected to work in the laboratory of Dr Ernest “Gene” Moore as an NIH Trauma research fellow. A clinical fellowship at UT MD Anderson followed residency, which included time as a post-doctoral fellow in the lab of Dr C. Wayne Smith in the Division of Leukocyte Biology at the Baylor College of Medicine.

 Dr Barnett has held faculty positions at the Medical University of South Carolina, the University of Texas Southwestern Medical Center and his current position as Director of Surgical Oncology at Denver Health Medical Center and Professor of Surgery at the University of Colorado. Dr Barnett has held funding from the Department of Defense, the National Institute of Health and the American Cancer Society. His lab actively studies hepatic disease and metastases as well as the immunomodulatory effects of blood transfusion. His clinical interests are in GI Oncology and Hepatobiliary Disease.

 Justin Dimick MD MPH
 Justin B. Dimick, MD, MPH is the Henry King Ransom Professor/Associate Professor of Surgery, Chief of the Division of Minimally Invasive Surgery, and Associate Chair for Faculty Development at the University of Michigan. He is a clinically active general surgeon with a practice primarily devoted to advanced laparoscopy, including bariatric surgery. He is a national leader in surgical outcomes research, with over 140 peer-reviewed publications, including papers in NEJM and JAMA. His research focuses on performance measurement, variation in hospital quality, and cost-quality relationships. With funding from the Agency for Healthcare Research and Quality (AHRQ) and the National Institutes of Health (NIH), his current research is evaluating Center for Medicare and Medicaid Services (CMS) policies for improving surgical care, including selective referral, pay-for-performance, and episode bundled payments. Dr Dimick currently serves in several national organizations, including as Secretary of the Association of Academic Surgery (AAS), as a member of the Executive Committee of the Surgical Outcomes Club (SOC), and on the Editorial Board for Archives of Surgery. He has also served as an advisor on issues related to quality measurement and policy evaluation for the Medicare Payment Advisory Committee (MedPAC), the Institute of Medicine (IOM), The Leapfrog Group, and the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP).

 Lillian Kao, MD, MS
 Dr Kao is Associate Professor of Surgery and Critical Care and Co-Director of the Center for Surgical Trials and Evidence-based Practice (C-STEP) at the University of Texas Health Science Center at Houston (UT Health). She has a Masters Degree in Clinical Research and co-directs several courses for the Masters Program at UT Health including Clinical Trials and Advanced Clinical Study Designs. She has received two career development awards (NIH K23 and Robert Wood Johnson Physician Faculty Scholars Award) as well as other intra- and extramural grants. Her research interests are surgical infections, quality improvement and patient safety, and the dissemination and implementation of evidence-based measures in surgery. She is currently on the editorial board for the Journal of the American college of Surgeons and is a member of the steering committee for the Evidence-Based Reviews in General Surgery. She has recently completed a two-year term as Secretary of the Association for Academic Surgery becoming the AAS President in February of this year.

 Eric Kimchi MD FACS
 Eric Kimchi, MD, is tenured Associate Professor of Surgery & Medicine in the Section of Surgical Oncology at the Penn State University College of Medicine. He received his BS degree in Biology from Florida International University (Miami, Florida) and his Medical Degree from the University of Puerto Rico School of Medicine. He subsequently completed his surgical residency at Wayne State University (Detroit, Michigan) and a fellowship in surgical oncology at The University of Chicago. He accepted a faculty appointment at Penn State University in 2005. He is the Program Director of the Penn State Cancer Institute’s Hepato-Pancreato-Biliary Fellowship. In this position he has established one of 19 hepatobiliary fellowships in North America. His research effort is focused on the immune system’s response to liver cancer. Dr Kimchi is currently the Treasurer of the Association for Academic Surgery, the largest organization of academic surgeons in the world. He is married and has 3 children ages 5, 8, and 11.
Timothy Pawlik MPH FACS

Timothy M. Pawlik received his undergraduate degree from Georgetown University and his medical degree from Tufts University School of Medicine. He completed his surgical training at the University of Michigan Hospital and spent two years at the Massachusetts General Hospital as a surgical oncology research fellow. Dr. Pawlik went on for advanced training in surgical oncology at The University of Texas M. D. Anderson Cancer Center in Houston. Dr. Pawlik also 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.

Dr. Pawlik’s main clinical interests include alimentary tract surgery, with a special interest in hepatic and pancreatobiliary diseases. Dr. Pawlik has published over 125 peer-reviewed articles and 15 book chapters. He is a frequent national and international lecturer on management of hepatobiliary malignancies. Dr. Pawlik has served on the American Society of Clinical Oncology (ASCO) and American College of Surgeons Oncology Group (ACOSOG) Ethics committees. ACOSOG By-Laws committee, Association of Academic Surgery executive council, as well as on the Scientific Program Committee for ASCO. Dr. Pawlik has also served on the Society of Surgical Oncology Scientific Program Committee, as well as was recently elected Councilor-at-Large.

Dr. Pawlik is currently Professor of Surgery and Oncology, Chief of the Division of Surgical Oncology, the Hepatobiliary Surgery Program Director, and Director of the Johns Hopkins Medicine Liver Tumor Center. Dr. Pawlik is a Fellow of the American College of Surgeons and President-elect of the Association for Academic Surgery.

Rebecca Sippel MD FACS

Dr. Rebecca Sippel is an Associate Professor of Surgery and Chief of Endocrine Surgery at the University of Wisconsin. She also serves as Director of Medical Student Education and as the Endocrine Surgery Fellowship Director.

She started on faculty in 2007 after completing a fellowship in endocrine surgery at the University of California – San Francisco. She is a graduate of Washington University School of Medicine and completed her general surgery residency and a 2 year endocrine surgery research fellowship at the University of Wisconsin.

Her clinical practice and research are in endocrine surgery with a special interest in thyroid and parathyroid disease. She has a busy clinical practice performing over 300 thyroid/parathyroid operations a year and has a national reputation as a leader in endocrine surgery. She has a productive clinical research program and has published >100 manuscripts in the area of endocrine surgery, focusing on the diagnosis and management of patients with endocrine disorders and the outcomes of patients after surgery. She has written 17 book chapters, served as Editor of the Handbook of Endocrine Surgery, and serves on several editorial boards. She is actively involved in the Association for Academic Surgery, the Association for Surgical Education, and the American Association of Endocrine Surgeons, and currently serves on the American College of Surgeons Board of Governors.

Julie Ann Sosa MD MA FACS

Julie Ann Sosa, MD MA FACS served as the Recorder of the Association for Academic Surgery and is Co-Chair of the Developing a Career in Academic Surgery course. She serves as the Chief of Endocrine Surgery and Director of Health Services Research in the Department of Surgery at Duke University, as well as the Leader of the Endocrine Neoplasia Diseases Group at the Duke Cancer Institute. Her clinical interest is in endocrine surgery, with a focus in thyroid cancer. Her research interests are in health services and clinical trials, as well as stem cell therapies. She is widely published in outcomes analysis, as well as cost-effectiveness analysis, meta-analysis, and survey-based research. She is on the editorial boards of the Journal of Thyroid Research and the Journal of Clinical Endocrinology and Metabolism, and serves as Associate Editor of the Journal of Surgical Research and Editor of the Endocrine Tumors Section of Current Opinion in Oncology. Dr. Sosa is the recipient of grants from the Paget Foundation, the Association for Academic Surgery, the Donaghue Foundation, the American Geriatrics Association/Hartford Foundation, and the Connecticut Stem Cell Research Fund. Dr. Sosa received her AB at Princeton, her MA at Oxford, and her MD at Johns Hopkins, where she also completed the Halsted residency program and served as Assistant Chief of Service.
Institute of Health Research which enabled him to
surgeons in the UK to be appointed by the National
Fellowship in Surgery. He was also one of the first
of England and The Worshipful Company of Cutlers’
HJ Windsor Prize of the Royal College of Surgeons
Newman Foundation Research Fellowship and the
He has won the prestigious Frances and Augustus
methodologies.
conditions using integrated basic science and clinical
understand the molecular, electrophysiological and
the care of patients, especially from a surgical
application of such knowledge to improve
large bowel function in health and disease and
His abiding research interest is the understanding
or knowledge translation in traumatic brain injury.
combine clinical work and postdoctoral research
studies in Europe and Australia.
He has written numerous textbooks, including the
forthcoming “Examination Surgery: A Guide to
Passing the FRACS in General Surgery” and the highly
acclaimed “Clinical Cases and OSCEs in Surgery”,
which has won recognition at the British Medical
Association national book awards. His interests in
surgical education focus on the development,
validation and implementation of competency-
based models that employ web-based and
multimedia platforms.

Marc A Gladman MBBS DRCOG
DFFP PhD MRcOG MRCS (Eng) FRCS (Gen Surg) FRACS
Marc is Professor of Colorectal
Surgery, Concord Clinical School,
School of Medicine, University of
Sydney, Head of the Academic
Colorectal Unit and Consultant
Colorectal Surgeon at Concord Hospital, Sydney,
Australia and Director, Translational & Epidemiological
Gastrointestinal Research Group, ANZAC Research
Institute, University of Sydney, Australia.

Marc is a colorectal surgeon whose chief clinical
interests are minimally invasive surgery for colon
and rectal cancer and inflammatory bowel disease
and functional colorectal and pelvic floor disorders.
Previously, he held the position of Foundation
Professor of Surgery at Blacktown Hospital and Chair
of Surgery at the University of Western Sydney before
taking over as Head of the Academic Colorectal Unit
at Concord Hospital in Sydney.

His abiding research interest is the understanding
of large bowel function in health and disease and
the application of such knowledge to improve
the care of patients, especially from a surgical
perspective. His current interests relate to trying to
understand the molecular, electrophysiological and
neuropathophysiological basis of gastrointestinal
conditions using integrated basic science and clinical
methodologies.

He has won the prestigious Frances and Augustus
Newman Foundation Research Fellowship and the
HJ Windsor Prize of the Royal College of Surgeons
of England and The Worshipful Company of Cutlers’
Fellowship in Surgery. He was also one of the first
surgeons in the UK to be appointed by the National
Institute of Health Research which enabled him to

Russell Gruen MBBS PhD FRACS
Russell Gruen is a general and
trauma surgeon at The Alfred,
Professor of Surgery and Public
Health at Monash University, and
Director of the National Trauma
Research Institute (NTRI). Under
Professor Gruen’s leadership,
the NTRI has developed research programs to
improve care of the injured through more effective
treatments, higher quality care, and better trauma
systems.

Professor Gruen graduated from the University of
Melbourne (1992) and completed a PhD on delivery
of surgical services to remote communities in Australia
as a Royal Australasian College of Surgeons (RACS)
Surgeon Scientist and trainee in general surgery. In
2002-2003 he was a Harkness Fellow in Health Policy
and a Fellow in Medical Ethics at Harvard University,
during which he focused on medical professionalism
and the contributions surgeons have made to quality
improvement and public health.

After completing a Fellowship in Trauma Surgery and
Surgical Critical Care at Harborview Medical Centre
in Seattle (2006), Professor Gruen returned to Australia
as an active clinician and researcher, first at the Royal
Melbourne Hospital and University of Melbourne and
then, from 2009, at The Alfred and Monash University.
In 2010 he was a James IV Association of Surgeons
Traveling Fellow, and in 2011 he became only the
third surgeon to be awarded an NHMRC Practitioner
Fellowship. In 2012 he was awarded the prestigious
RACS John Mitchell Crouch Fellowship.

Professor Gruen has over 100 peer-reviewed
publications, including many as first author, in leading
journals such as The Lancet, JAMA, BMJ, BJJS, and
Annals of Surgery, with over 1000 citations. He was
Series Editor for a Clinical Series on Trauma Surgery
published in the Lancet in September 2012. He has
received research funding totalling more than $15
million, leads a Centre of Excellence in Traumatic
Brain Injury Research for the Victorian Transport
Accident Commission, and a 5-year program grant
on knowledge translation in traumatic brain injury.
Developing a Career in Academic Surgery

He is lead investigator of an NHMRC-funded multicentre trial of pre-hospital tranexamic acid in severely injured patients.

Professor Gruen chairs the Australian Trauma Quality Improvement Program steering committee, co-convenes the Asia Pacific Trauma Quality Improvement Network, and is leading development of a trauma systems knowledge base for the WHO Global Alliance for Care of the Injured. He is a member of the RACS Trauma Committee, the RACS Board of Surgical Research, and is the Australian National Delegate to the International Society of Surgery.

Jeffrey Hamdorf MBBS PhD FRACS
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
Richard Hanney is a General Surgeon and Head of Department at Mount Druitt Hospital in Western Sydney, and a Clinical Senior Lecturer in the University of Sydney and Westmead Hospital. Within the RACS, he has chaired the Younger Fellows Committee and a working party reviewing the “3+2” General Surgical Training program, helped form the Trainees Association and established the Younger Fellows and Trainees’ dinner at the ASC. For the last 5 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 RACS can partner successfully with medical students aspiring to surgical careers.

Andrew Hill FRACS
Professor Andrew Hill completed an MD 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 the South Auckland Clinical School at Middlemore Hospital in 2002 where he now practices as a Colorectal Surgeon and is the Head of the South Auckland Clinical School. 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 140 peer-reviewed papers in these areas. Andrew leads the Auckland Enhanced Recovery after Surgery (AERAS), an interdisciplinary research group aiming to improve patient outcomes after major surgery. This group runs a once yearly international symposium on enhancing recovery.

Julie Howle FRACS
Dr Julie Howle is a surgical oncologist based at Westmead Hospital in Sydney and is a clinical lecturer at Sydney University. Since graduating with a MBBS (Hons I) from the University of Sydney in 1998, she has worked in many hospitals in the Sydney metropolitan area and rural NSW. In 2006 she obtained her FRACS in General Surgery and spent the subsequent 2 years in Sydney as the Fellow in the Head and Neck/Surgical Oncology Unit at Westmead hospital and Senior Registrar/Fellow in Breast and Surgical Oncology at Prince of Wales Hospital. She has worked as a consultant surgeon at Westmead Hospital since 2008 and completed a Master of Surgery degree during her first 2 years as a consultant. She is affiliated with the Melanoma Institute of Australia and her research interests include Merkel cell carcinoma, advanced non-melanoma skin cancer, melanoma and soft tissue tumours.

Charles McGhee MBChB, BSc(Hons), PhD, FRCS, FRCOphth, FRANZCO
Scottish born, Charles combined undergraduate medical and science degrees (1976-83) at the University of Glasgow, with a secondment to Harvard University. He held ophthalmology training posts in Glasgow (1986-92) including a Fellowship in Perth, Western Australia. Subsequently, he was Consultant Ophthalmic Surgeon and Professor of Ocular Therapeutics in Sunderland, England (1993-96) and Foundation Professor of Ophthalmology, University
of Dundee, Scotland (1996-99). Thereafter he was appointed Maurice Paykel Professor and Chair of Ophthalmology, University of Auckland (1999-present) and Clinical Director of Ophthalmology, Auckland District Health Board (1999-06). Charles is the foundation Director of the New Zealand National Eye Centre which brings together more than 120 ophthalmologists, optometrists and vision scientists in one of the largest visual sciences research groups in the southern hemisphere. He is past-Editor of Clinical and Experimental Ophthalmology (2002-10) the journal of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO). Clinical interests continue to occupy 50% of his post and include corneal disease, corneal transplantation, anterior segment trauma and complex anterior segment reconstruction. He has written or co-authored three books and more than 250 peer-reviewed scientific papers and chapters on: infective keratitis, corneal transplantation, cataract surgery, ocular pathology, refractive laser surgery, in vivo confocal microscopy, ocular stem cells and ocular therapeutics. He pursues electric blues guitar, sculpting, painting, and DIY in rare idle moments.

Win Meyer-Rochow FRACS
Dr Win Meyer-Rochow is an Academic Surgeon with a subspecialty interest in Endocrine Surgery. After completion of his General Surgical Fellowship in New Zealand he relocated to Sydney where he completed his subspecialty training and undertook a PhD at the University of Sydney. His research involved both clinical and laboratory based molecular work on Phaeochromocytomas and Paragangliomas. He is currently working as a Consultant Surgeon at Waikato Hospital and as a Senior lecturer at the Waikato Clinical School, University of Auckland.

Susan Neuhaus CSC PhD FRACS GAICD
Susan Neuhaus completed a PhD in laparoscopic tumour surgery in 2000 and the FRACS in 2002. She was awarded the Lumley Exchange Scholarship and undertook a Fellowship in Surgical Oncology at the Royal Marsden Hospital in 2004. As a Clinical Associate Professor of Surgery Susan works in private and public surgical oncology practice with a special interest in melanoma and sarcoma.

Susan is a Director of the Australasian Sarcoma Study Group (ASSG) and the Cancer Council South Australia and past Chair of the Surgical Oncology Group of the Clinical Oncological Society of Australia (COSA). Susan is a member of the Australian Melanoma Trials Group (ANTMTG) and appointed to the Court of Examiners in General Surgery. She has published extensively, served as a reviewer and editor and written multiple book chapters, journal articles and a book ‘Radiology in Surgical Practice’.

Susan has also completed an Army career spanning over 20 years. This included service in Cambodia, Bougainville and Afghanistan. Her military service was recognised with the Conspicuous Service Cross in the 2009 Queen’s Birthday Honours’ List. Susan remains actively involved in Veterans health issues, has published extensively on strategic defence health issues and holds a number of Board and representative roles, including as Chair of the Board of the Repat Foundation and Ambassador for the Defence Reserve Support Council, South Australia. In 2012 Susan was South Australian finalist for Australian of the Year. She is married with two beautiful daughters; both in primary school.

Gregory O’Grady
Dr Greg O’Grady is a senior registrar in general surgery, currently based at Westmead Hospital in Sydney. He is the immediate past Chair of the Royal Australasian College of Surgeons Trainees’ Association, and has served on the RACS Council and Education Boards. Greg completed his PhD in Surgery and Bioengineering at the University of Auckland in 2011, under the mentorship of Professor John Windsor. His primary research interest is in gut motility, particularly gut electrophysiology, with projects currently being funded by the US NIH and NZ Health Research Council. Greg has over 60 peer-reviewed research papers, chapters and patents and serves on the editorial board for Neurogastroenterology and Motility. His research has received several awards, including the prestigious Masters’ Award in Gastroenterology from the American Gastroenterology Association, and a shortlisting for NZ Emerging Scientist of the Year.

Mark Smithers MBBS (Qld), FRACS, FRCSEng, FRCSEd
Associate Professor, Deputy Head, Discipline of Surgery, University of Queensland.

Director, Upper Gastro-intestinal and Soft Tissue Unit, Princess Alexandra Hospital, Brisbane.

Chairman, Queensland Melanoma Project.
Executive, Section of Academic Surgery, RACS.
Member, Scientific Advisory Committee of the Australasian Gastro-Intestinal Trials Group.
President, Australia and New Zealand Gastric and Oesophageal Surgeons Association.
Senior Member, Association of Academic Surgeons
Clinical interests: malignant and benign conditions of the oesophago-gastric region; management of patients with sarcoma and malignant melanoma.

Clinical research into outcomes from treatment for oesophageal cancer, gastric cancer, GIST and melanoma. Investigator on grants assessing the epidemiology of Barrett’s oesophagus, the management of oesophageal cancer (NIH, USA and NH&MRC) and aspects of the management of melanoma (NH&MRC, Cancer Council of Queensland). Also institutional principal investigator on industry lead phase I, II and III studies of patients with advanced stages of melanoma.

David Watson FRACS
Professor David Watson is Head of the Flinders University Department of Surgery, and the Oesophago-Gastric Surgery Unit at Flinders Medical Centre in Adelaide, South Australia. He has clinical and research interests in the area of benign and malignant oesophageal disease, including gastro-oesophageal reflux and oesophageal 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 oesophageal 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 the past President of the Australian and New Zealand Gastric and Oesophageal Surgery Association.

John Windsor FRACS
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), 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. Over the last 5 years he has published 90 of his total 211 manuscripts, raised $6m in grants and given over 100 invited talks, including Visiting Professorships to Harvard, Oxford, Karolinska, Singapore, Cape Town, 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. Awarded the Butland Distinguished Medical Science Award (1997), Butland Award for Excellence in Research Supervision (2009), Tertiary Teaching Excellence Award (2009) Gluckman Medal (2012) from the University of Auckland and elected as an Honorary Fellow of the American Surgical Association (2012). In the RACS he was involved in the development of the CLEAR, Surgeons as Teachers, DCA Courses and the Academy of Surgical Educators. Currently chairperson of the Section of Academic Surgery in the RACS. He completed a 4 year term as Secretary General of International Hepato-Pancreato-Biliary Association in 2012. Recent appointments include Chairperson of the national HPB/Upper GI Tumour Stream, member of the Clinical Advisory Board of Health Innovation NZ, and Patron TEDx Auckland.

Deborah Wright
Deborah graduated from the University of Birmingham, UK with MBChB in 2002. During her time at Birmingham she also took the opportunity to complete an intercalated Bachelor of Medical Science in Cell and Molecular Pathology and to pursue and publish on her favourite sport: rock climbing.

Since moving to New Zealand in 2003 Deborah has wandered around the country supporting her husband through his anaesthetic training, has completed several years of the SET training programme in General Surgery and is now in the final stages of writing up a PhD at The University of Auckland. Deborah was delighted to have her first child in April 2012 and will return to clinical work in December 2013 following the birth of her second. These days she spends time outside work tramping, mountain biking and chasing her busy toddler.

Arthur Richardson FRACS

Andre van Rij FRACS
Abstracts

The Association for Academic Surgery together with the RACS Section of Academic Surgery sincerely thanks the generous support of Johnson & Johnson MEDICAL COMPANIES.
Developing a Career in Academic Surgery

WHAT IS A CAREER IN ACADEMIC SURGERY?
John A Windsor
A career in surgery is easy to recognize, but a career in academic surgery is less so. Some have said a career academic surgeon is when you are employed by a University. Others have suggested that academic surgeons are those who can not survive the competition of private surgery. Still others have recognised that some colleagues have made the effort to develop additional skills to make a long-term contribution to the development of surgery. Some have likened a career in academic surgery to a three legged stool, implying that stability derives from the addition of research and teaching to clinical surgery. In his address to the RACS, as first president, Sir Henry Newland stated that the two most important duties of the College are the training of surgeons and the promotion of research in surgery. While the former is world famous, the latter has not received as much emphasis. The reality is that the future of surgery depends on the acquisition and evaluation of new knowledge (research) and the dissemination of that knowledge (training). This is especially true today with the rapidly evolving and scientifically sophisticated context of surgical practice. Without surgeons committed to developing skills in research and teaching, surgery will languish. The challenge is to develop an academic training curriculum and a supported training pathway for academic surgery, to ensure that surgical leaders are developed with the knowledge, skills and attitudes necessary to take surgery forward.

RESEARCH – HOW TO GET RESEARCH STARTED – IDEAS, GRANTS, ETHICS AND COLLABORATION
Russell Gruen MBBS PhD FRACS
Good ideas are often unplanned and come unexpectedly. Turning them into successful research projects requires discipline, precision and attention to detail in clarifying the topic, mobilising resources and support, and navigating barriers and obstacles. Surgeons will often depend on others to move aspects of their projects forward. This presentation will highlight the challenges in getting a good project going, and will present helpful tips and lessons learned, including how not to do it, from the author’s experience.

HOT TOPICS IN ACADEMIC SURGERY – STEM CELLS
Julie Ann Sosa MD MA FACS
Stem cells are cells with the potential to develop into many different types of cells in the body. There are two main types of stem cells: embryonic stem cells (hESCs) and adult stem cells. In the U.S., this field of research has been politically charged, which has affected funding and access to stem cell lines. Scientists are excited about stem cells because they have potential in many different areas of health and medical research. Studying stem cells may help explain how serious conditions such as birth defects and cancer come about. Studies of hESCs will yield information about the complex events that occur during human development. A primary goal of this work is to identify how undifferentiated stem cells become the differentiated cells that form the tissues and organs. Scientists know that turning genes on and off is central to this process. These stem cells may one day be used to make cells and tissues for therapy of many diseases, including Parkinson’s disease, Alzheimer’s disease, spinal cord injury, heart disease, diabetes and arthritis.

An example of a stem research project will be presented, “Stem cells for cell therapy for hypoparathyroidism.” This project’s purpose is to induce an undifferentiated human embryonic stem cell population to develop into parathyroid cells for use of cellular replacement therapy for congenital and acquired hypoparathyroidism, which is most commonly a complication of thyroid surgery, or aggressive parathyroid surgery. This changes the quality of life for patients radically, with daily, and sometimes hourly, oral calcium replacement needs. Parathyroid hormone replacement is not easily available due to the very short half-life of the hormone. The goal of the project is to define conditions that can induce an undifferentiated human embryonic stem cell population to develop into parathyroid cells that can then replace the patient’s own non-functioning parathyroid glands. This could promise a cure for this difficult condition. Our unique approach is to develop stem cells that would express specific parathyroid genes and develop into mature parathyroid cells. We plan to grow these parathyroid cells by implanting them into muscle with an excellent blood supply, where they are known to easily grow and produce parathyroid hormone normally. Once the cells have been created, testing the cells in special mice which do not produce parathyroid hormone would be achievable.

BASIC SCIENCE
Carlton Barnett Jr. MD
The words Basic Science are often terrifying to the Surgical Trainee or even older surgeons as we progress through our training. But this should not be. Looking back along the course of your education, it was likely that you were one of the brightest children in your elementary school. This fact was evident in your early teens, late teens and for many continued on through your undergraduate experience. Suddenly however, other factors begin to intervene. Long hours in medical school were likely not spent in the chemistry lab or working out diffusion coefficients as you did in your undergraduate. However, as a surgeon, you still have the same base degree as others who varied course slightly and went after the PhD. In fact, you are not really as far from those people as you think and there are multiple ways to close the gap.
Surgeons in general are “‘problem solvers”. We have pliable minds that allow us to adjust rapidly from situation to situation in order to help patients, all of whom are somewhat different, in terms of physiology, disease and expectation. These are outstanding attributes to take into the basic science lab. Beyond this surgeons tend to be perfectionists, which allows us to perform experiments better than many of our scientist colleagues. Finally, surgeons tend to be skeptical, which prevents us from becoming too wed to hypotheses and experiments that are not exactly meeting our hypothesis.

As with any other type of research, the keys to experiencing success in basic science are enjoying this type of work, having (or getting the training) necessary to be able to perform this work and finding a job/boss-mentor who will give you the time, resources and support necessary to succeed.

Our interaction with patients and clinical problems makes us keenly and uniquely aware of the needs of basic science research. Surprisingly our wiser “Basic Scientist” colleagues are keenly aware of our practical skills. Surgeons should not sell themselves short in terms of intelligence and intangibles. A perfect way to close the gap is to attend lab meetings of basic scientists. The experience may be fascinating and can open doors to arenas you would have never imagined.

**COMPARATIVE EFFECTIVENESS RESEARCH**

**Justin Dimick**

This lecture will provide a brief overview of the increasingly important field of comparative effectiveness research. Comparative effectiveness research is designed to inform health-care decisions by providing evidence on the effectiveness, benefits, and harms of different treatment options. The evidence is generated from research studies that compare drugs, medical devices, tests, surgeries, or ways to deliver health care. This lecture will provide an overview of the field, introduce relevant study designs (observational vs. experimental studies), discuss the difference between efficacy and effectiveness studies, and review exciting opportunities in this field for surgeon scientists.

**TOOLS OF THE TRADE: SURGICAL EDUCATIONAL/SIMULATION**

**Jeff Hamdorf MBBS, PhD, FRACS**

Simulation has emerged as a valuable tool in the surgical education armamentarium. A variety of simulators is available allowing trainees access to educational opportunities in a predictable and safe environment. Virtual reality simulators employ high fidelity/high tech situations and these include commercial available devices such as LapSim and the Mentor series allowing both navigation through virtual orifices and hollow viscera with user metrics and some interventional utility, as well as the opportunity to undertake some laparoscopic procedures. Low fidelity simulation refers to those situations where cadaveric and animal tissues are employed, but also includes the use of “box trainers” to support laparoscopic skills acquisition.

There appears to be genuine desire by surgical trainers, training bodies and health services to embrace simulation as a component of training courses in some form or another. This is desirable as patients can be assured that trainees have had some experience prior to exposure to patients, the political implications of “safe working hours” policies and increases in medical graduate numbers have limited trainees access to clinical material. Trainees may be exposed to standardised material delivered in a reproducible and predictable fashion in a controlled environment through simulation facilities. Yet there is a risk that the unregulated proliferation of facilities and haphazard purchase of expensive capital items will result in expensive kit gathering dust. The major challenge facing supervisors and academics in this area is the demonstration that simulation techniques result in increased training capacity. Research embarked on so far has mainly concentrated on validation of various simulation tools and comparing individual trainers. This is an area of academic vocation which is currently looking for expertise and energy.

**AN ANTIPODEAN ACADEMIC ODYSSEY – BETWEEN THE SIREN CALL AND THE ROCKS**

**Charles McGhee**

I have kindly been invited to present my personal experience of being an academic in surgery – in my case a veritable international ophthalmic odyssey. It could more simply be called “my story” in tabloid parlance but although I provide an individual view I hope many of the opportunities and barriers, the rewards and drawbacks, the academic blind alleys and serendipitous successes are common to understanding “our story” as clinician-scientists. In short this is a tale of a boy initially more interested in observing Scottish rain than pursuing the three “Rs” who through opportunity, mentorship, industry and a dollop of good luck developed a successful, sustainable, academic surgical career in the Antipodes. En route, in a presentation I hope will both educate and entertain, there will be stories of unrequited love, brain transplants, broken bones, mistaken identity and of course the unexpurgated workings of a career in academia.
I WANT TO BE AN ACADEMIC SURGEON – WHAT CAN I DO AS A MEDICAL STUDENT
Deborah Wright
Drawing on examples from her personal experience Deborah will outline actions and attitudes that she believes can assist budding academics during their time at medical school. She will discuss seeking out opportunities, finding mentors and combining personal and research interests at the start of an academic career.

I WANT TO BE AN ACADEMIC SURGEON – WHAT CAN I DO AS A SET TRAINEE?
Gregory O’Grady
SET training is arguably the optimal time to develop a serious research interest. You are advanced enough in your career path to align your clinical and research training, and are experienced enough to make a very significant contribution to the science team.

But where do you begin? Much depends on the depth of your academic interest, and the type of research you would like to do. This talk will provide specific advice for most trainee scenarios, as well as general advice for anybody with a surgical research interest.

I WANT TO BE AN ACADEMIC SURGEON – WHAT CAN I DO AS A CONSULTANT?
S.J Neuhaus CSC MBBS, PhD, FRACS, GAICD
The position of Clinical Academic is one of extreme ambiguity.

A number of benchmarks have been used to quantify success in academic medicine, including number of publications, grants, lectures, research collaborations and leadership positions. However, as consultant surgeon and clinical academic you will be judged primarily by your clinical productivity, clinical reputation and teaching skill, not your research output. Research activities need to be balanced with clinical responsibilities and there are significant challenges for the clinical academic to find the structures, resources, support or recognition from the University sector.

Clinical academia offers unique challenges, but provides rewarding professional insights and opportunities. The likelihood of success as a clinical academic is dependent on developing robust skill sets, networks and independent funding. This paper will discuss some tips for choosing and completing projects, securing funding and developing an academic career within consultant surgical practice.

WRITING AN ABSTRACT
Eric Kimchi MD FACS
Clear and concise abstract writing is a critical element for effective communication of one’s research. A well written abstract should provide a comprehensible summary to the interested reader. The ability to communicate effectively in a limited number of words can make the difference between having one’s research accepted for presentation or publication. It is critical to adhere to the given format and to present the data in a logical fashion. The goal of this presentation is to provide a general structure for writing a successful abstract.

WRITING A MANUSCRIPT
Rebecca Sippel MD FACS
Publication of scientific work is a critical part of academic success. Publication of your work allows dissemination of your scientific findings, peer review validation, and aids in promotion and career advancement. The manuscript is the method of communicating with the clinical and scientific community both the results of your work, but also your interpretation of those results. Writing a manuscript is an important skill that requires practice and skill. Manuscript preparation must be carefully planned and coordinated with coauthors. Authorship issues should be clarified prior to manuscript preparation including which collaborators will present the data at meetings, order of authorship, and delegation of responsibility among authors for authorship preparation. Manuscript writing should be done well in advance of deadlines to allow time for adequate review and revisions. The title should be succinct but also grab the readers’ interest. The Background/Introduction needs to highlight the “deficit” in knowledge that the work attempts to address, cite the hypothesis, and be succinct and focused. The Methods need to outline the techniques utilized to collect and analyze the data in a clear and detailed enough format that someone could reproduce your work if needed. Results should be reported in a logical fashion that “tells a story.” Results in the text and tables should not be redundant but should complement each other. The Discussion puts the work into the larger context of what is known in the literature, while highlighting the importance of the current work. The discussion should also acknowledge and address some of the limitations of the study. Although there are many different approaches to writing a manuscript, this session will highlight a few broad points regarding a successful approach to manuscript preparation.
HOW TO PRESENT A RESEARCH TALK

Carlton Barnett Jr. MD

The opportunity to present your research is a validation of the time, attention to detail and “thought work” that you have spent in the lab, clinic or developing a new operative technique amongst other things. The honor of presenting is, in and of itself quite a reward. Unfortunately without attention to detail and some direction this can be an unnerving or perhaps even terrifying experience. This is your opportunity to present your work to the scientific community, medical community or perhaps even the lay community as a part of a fundraising event that will allow you to continue your research efforts. Following a few simple steps will make this process easier and as with everything else, experience really helps.

First, it is important to remember that you know more about your project than anyone else in the room, even if there are “experts” in the audience. You are the one who did the work and wrote the abstract, so take comfort in the fact that you know more than you think! Second, be aware of your audience. If you are trying to explain your research to a group from the lay community then you need to avoid medical colloquialism. Third, “practice makes perfect”. There are many delivery styles- all of which work better with lots of practice.

The easy part is actually the talk, if you structure it after your abstract or manuscript. Start with the introduction. During a few slides you want to give a brief background the literature on your subject. Use this time to highlight controversy or problems that need answers. It is always best to end the background with a purpose, or perhaps better, the hypothesis that you are testing. This is an important time to be in touch with your audience as you want them to be convinced that you are addressing a significant issue with your hypothesis. Methods should be relatively brief, but focus on how you worked to answer your hypothesis. Next come the results, which is truly your chance to shine. Remember this is YOUR data, so take your time on the results. It is often tempting to move rapidly through this part of the presentation, but avoid that temptation. At this point you should intentionally slow down so you can explain your graphs and tables well. This is, after all what you really want the audience to know. From your results you can finish with your conclusion and stick to the data. Wild conclusions that cannot be supported by your results can ruin an otherwise great talk when it comes to the question and answer time. After the Conclusions section, presenters should acknowledge any important contributors who are not coauthors as well as any sources of funding or other critical resources.

PRODUCING A POSTER

Eric Kimchi MD FACS

The goal of this presentation is to provide guidelines for producing an effective poster presentation. An effective poster presentation should allow a casual viewer to obtain the pertinent information from a reasonable distance. The poster should succinctly present the hypothesis and explain how the results and conclusions confirm or refute this hypothesis. Graphical presentation of the material is the most effective method to convey a large amount of data and minimize the amount of text.

CHOOSING AND BEING A MENTOR

Mark Smithers MBBS (Qld), FRACS, FRCSeng, FRCSed

A mentor has been defined as someone who imparts wisdom to and shares knowledge with a less experienced colleague. Within the academic arena, there is evidence to support effective mentorship will produce faculty who are productive, promoted more quickly and more likely to stay in that academic institution.

An individual’s career moves from being an undifferentiated medical student through to graduation and along the way a decision with respect to their future role. This will be influenced by such things as personality, cultural and social issues and exposure to role models in the various medical specialties. Once the decision is made to do surgery the same influences are present. But the influence of those who teach directly or indirectly cannot be denied. One person will have multiple role models. Mentorship is a more intensive relationship between two people and carries responsibilities on both sides. There may be multiple mentors in an individual’s career involving research, clinical practice and overall career.

One would expect the successful mentor to develop a reciprocal relationship, have mutual respect, clear expectations, a personal connection and shared values. He or she will be seen as a role model who offers sound guidance, advice and has a network and connections. The mentor should accept that it is a privilege to be in a position to prepare future leaders but should not do this by creating a mirror image of him or herself. The mentor should accept one measure of success is to have a mentee whose output and success is more than that of the mentor. When choosing a mentor, look at the individual, the personality, the type of person, a role model within the professional and general community, track record and connections. The individual seeking a mentor should be open to feedback, be an active listener, be responsible, respect the time and input of the mentor and should take responsibility for driving the relationship. Failed mentorships occur due to poor communication, lack of direction, lack of connections, personality differences and there may be a perceived (or real) sense of competition.

“The true teacher defends his pupils against his own personal influence. He inspires self-trust. He guides their eyes from himself to the spirit that quickens him (her). He [She] will have no disciple”. Orphic Sayings: THE TEACHER; 1840.