

# ***MINOTI VIVEK APTE***

## **CURRICULUM VITAE**

<b>Qualifications, Current Position and Contact Details</b>	<b>2</b>
<b>Membership of Professional Societies</b>	<b>3</b>
<b>Prizes / Awards</b>	<b>3</b>
<b>Previous Appointments</b>	<b>4</b>
<b>Summary of Research, Service and Teaching Experience</b>	<b>5</b>
<b>Publications</b>	<b>16</b>
<b>Research Grant Income</b>	<b>23</b>
<b>Supervision of Research Students</b>	<b>29</b>
<b>Invited Lectures</b>	<b>30</b>
<b>Reviewer for Journals and Grant Applications</b>	<b>34</b>
<b>Editorial Roles</b>	<b>35</b>
<b>Committee Memberships</b>	<b>35</b>
<b>Supervision of students and staff</b>	<b>36</b>
<b>Other Published Works (Abstracts)</b>	<b>37</b>

## **CURRICULUM VITAE**

**Name :** Minoti Vivek Apte

**Nationality :** Australian

**Degrees :** **MBBS (Hons)**, University of Poona, India, 1982  
**M Med Sci**, University of Newcastle, Australia, 1985  
**PhD**, University of New South Wales, Australia, 1998

**Present Post and Address :** **Professor and Presiding Member**, Faculty of Medicine  
The University of New South Wales  
**Director**, Pancreatic Research Group  
**Postgraduate Research Coordinator**,  
South Western Sydney Clinical School  
The University of New South Wales  
Level 5, Wallace Wurth Building, UNSW  
Sydney, NSW 2052, Australia

**Telephone No:** 61-2-93858273  
**Facsimile No:** 61-2-93851389  
**Email:** m.apte@unsw.edu.au

***Membership of Professional Societies :***

Gastroenterological Society of Australia  
American Gastroenterological Association  
American Pancreatic Association  
Australasian Pancreatic Club  
Asian Oceanic Pancreatic Association  
Australian Society for Experimental Pathology  
Australian Society for Medical Research  
Indian Medical Association

***Prizes and/or Awards Received :***

- **State Prize** for 100% marks in Mathematics at the High School Certificate exam, 1974
- **University Prizes** for Pathology and Preventive & Social Medicine, 1978, 1980
- **Tow Prize** for best research presentation at the Coast Reunion Week held at Prince Henry Hospital, 1993.
- **Postgraduate Research Scholarship**, University of Newcastle, 1983, 1984.
- **Travel Award**, American Pancreatic Association, 1997.
- **Astra Travel Award** for presentation of paper at annual meeting of the American Gastroenterological Association, 1999.
- **Bushell (Postdoctoral) Fellowship**, Gastroenterological Society of Australia, 1999-2001.
- **Goldstar Maintenance Award**, The University of New South Wales, 2003-2004.
- **Hirshberg Foundation Award**, for best research abstract in pancreatic cancer, American Pancreatic Association, 2006.
- **Fellow, American Gastroenterological Association, Feb 2011-**

**Previous Appointments :** **Intern**, Dec 1980-Dec 1981. Sassoon General Hospitals, Poona, India

**Junior Resident** in Otolaryngology, Sassoon General Hospitals, Pune, India, Jan - Mar 1982. Resigned before coming to Australia.

**Research Assistant**, Dept. of Histopathology, University of Newcastle, Australia, Jun-Dec 1982

**Postgraduate Research Scholar**, University of Newcastle, Australia, Jan 1983 - Jan 1985.

**Research Assistant**, Dept. of Histopathology, University of Newcastle, Australia, Feb - Apr 1985

**Research Officer**, Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals, Sydney, Australia, Mar 1987 - May 1989 (NHMRC project grant, No. 870708 - "Effects of alcohol and protein deficiency on the pancreas")

**Research Officer**, Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals, Oct 1989 - Feb 1992 (NHMRC project grant, No. 890304 - "Ethanol, lysosomes and pancreatitis").

**Research Officer**, Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals, Sydney, Australia, March 1992- (NHMRC project grant, No. 920703 - "Effect of ethanol on pancreatic digestive enzyme synthesis")

**Research Officer**, Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals, Sydney, Australia, March 1995-December 1997. (NHMRC project grant, No. 950382 - "Alcohol and the pancreas")

**Senior Research Officer (by promotion)**, Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals and The University of New South Wales, Sydney, Australia, Jan 1998 - (NHMRC project grant, No. 980297 - "Pathogenesis of alcoholic pancreatitis")

**Senior Research Associate (Bushell Postdoctoral Fellow)**, The University of New South Wales and Dept. of Gastroenterology, Prince Henry & Prince of Wales Hospitals Sydney, Australia, Jan 1999 – March 2001

**Senior Lecturer**, SWS Clinical School, Faculty of Medicine, The University of New South Wales, 2001-2005

**Associate Professor**, SWS Clinical School, Faculty of Medicine The University of New South Wales, 2005-2007

## ***SUMMARY OF RESEARCH EXPERIENCE, SERVICE TO DISCIPLINE AND TEACHING***

### **RESEARCH ACHIEVEMENTS AND MEASURES OF ESTEEM**

The theme of my research from the outset has been related to the understanding of the mechanisms responsible for alcohol-induced organ damage, in particular, alcoholic liver and pancreatic injury. In the past few years, my research interests have expanded to include pancreatic fibrogenesis and pancreatic cancer. I assumed **leadership of the Pancreatic Research Group** (as its Director) in early 2001, after serving as an integral member of the Group with a key role in the Group's success in obtaining continuous National Health and Medical Research Council of Australia (NHMRC)/Dept of Veterans' Affairs (DVA) funding since 1987 to a cumulative total of over A\$ 5.4 million (details on pages 23-27).

I have a total of 86 peer-reviewed publications (original articles + reviews + book chapters), 113 abstracts, an h index of 26 and 2103 citations of my work. The average impact factor of the journals I have published since my PhD in 1998 is 7.3. These publications have made significant contributions to current knowledge in the areas of alcohol-related pancreatic injury, pancreatic stellate cell (PSC) pathobiology and pancreatic cancer. PSCs are now firmly established as key effector cells in fibrogenesis in the gland. I believe I have been instrumental in the rapid progress made in the field of pancreatic fibrogenesis over the past 12 years because I was the **first in the world** to develop a method to isolate and culture PSCs (this paper was published in 1998 in *Gut*, the #2 journal in gastroenterology, and was accompanied by a cover illustration; it has been cited 258 times). This development provided a much needed in vitro tool for the study of PSC biology and led to an explosion in research into pancreatic fibrosis as attested to by the exponential increase in related publications since 1998. The breakthrough with PSCs and the work I have published subsequently has led to an established **international reputation as a leader** in the chronic pancreatitis and pancreatic fibrogenesis field. Our Group is now recognised to be at the cutting edge of research in this area.

Recognition of my work both nationally and internationally is attested to by:

- a) the invitations to speak at major international scientific meetings (detailed on page...). These include lectures in USA (the American Pancreatic Association, the American Gastroenterological Association), Germany (the European Society for Biochemical Research on Alcoholism; ESBRA), Mexico (Mexican Digestive Disease Week), India (Indian Pancreas Club), UK (Novartis Foundation Symposium), Sydney (World Congress of the International Society for Biomedical Research into Alcoholism), and Japan (Asian Oceanic Pancreatic Association) (all lectures listed on pages 29-33).
- b) the visits to our laboratory by overseas scientists (USA, Germany, Mexico, Switzerland) for training in PSC methodology
- c) the arrival in late 2005 of a self-funded gastroenterologist from Switzerland to undertake research in our lab and the approaches from scientists in China and India requesting to be part of our Group
- d) the approaches from world renowned researchers in USA (and the subsequent granting) of postdoctoral positions in the United States for my PhD students
- e) the active interest shown by leading researchers in the USA, UK and Germany in collaborating with our Group. In this regard, collaborations have been established with Professor Markus Buchler, University of Heidelberg and Professor Helmut Friess, University of Munich, related to our work on the role of PSCs in the pathogenesis of pancreatic cancer. I have also established a collaboration with

Professor Stephen Pandol at UCLA - this resulted in a publication related to work on NADPH oxidase in PSCs. In addition, I act as an expert advisor to researchers working on PSCs with Dr David Fine, University of Southampton.

- f) the invited membership of Editorial Boards of the journal *Pancreas* (a prominent journal in pancreatology), the *World Journal of Gastroenterology*, *Pancreatology*, *Journal of Gastroenterology and Hepatology* and the *American Journal of Physiology*
- g) the invitations to review grant applications for major national and international funding bodies including the NHMRC, the National Medical Research Council (NMRC), Singapore, Wellcome Trust, UK, Cancer Research UK and Auckland Medical Research Council (AMRC), New Zealand and Health Research Council, New Zealand. I have also served on grant review panels (the equivalent of NIH Study Sections) for the NHMRC.
- h) the invitations to review manuscripts for major scientific journals (listed on page 4) as well as PhD theses (University of Sydney, University of Melbourne)
- i) the number of citations (2103 to date) of my work and an h index of 26.

## Research Leadership

Evidence of my active leadership in my chosen field of research comes from the following :

### **A) Leading the direction of research of the Pancreatic Research Group.**

I have played a leading role in the direction of research pursued by the Pancreatic Research Group since the completion of my PhD in 1998. As noted earlier, my work with pancreatic stellate cells (during my PhD) brought the Group to the attention of pancreatologists worldwide. Naturally, elucidation of PSC biology has been a prominent part of our work since then. We have made an invaluable contribution to the understanding of the processes mediating the production of fibrosis in the pancreas. Our work has involved i) a detailed characterisation of the morphology of pancreatic stellate cells in quiescence and in their activated phenotype [**published in Gut** (IF9.34) in 1998 and associated with a cover illustration]; ii) studies of PSC function including proliferation, protein synthesis and migration; iii) studies of the role of PSCs in synthesis and degradation of the extracellular matrix proteins that make up fibrous tissue; iv) studies of the agents/factors that promote PSC quiescence and activation; and v) studies of the signalling mechanisms responsible for mediating PSC activation. We have demonstrated that PSCs are activated by factors such as proinflammatory cytokines and oxidant stress (known to be upregulated during pancreatic injury) and by direct exposure to alcohol and its metabolite acetaldehyde. The latter study was **published in Gastroenterology**, the top journal in the field (IF 12.9), and again associated with a cover illustration. We have shown that activation of PSCs can be prevented by vitamin A (a compound that is stored by normal, resting PSCs and invariably lost during their transformation to an activated phenotype). This work has also been **published in Gut**. More recently, we have assessed the role of PSCs in alcoholic pancreatitis. We have developed a novel, physiologically relevant rat model of the disease indicating that bacterial endotoxin may be a trigger factor for the development of alcoholic pancreatitis. This was published in **Gastroenterology** in 2007. Ongoing studies with this model relating to the important clinical question of reversibility of established chronic pancreatitis have been funded by a 3 year NHMRC project grant (2010-2012). Findings related to this work have recently been accepted for publication in **Gut** (accepted June 2010)

Under my leadership, in addition to our successful work in the area of pancreatitis, our research has expanded to include the pathogenesis of pancreatic cancer and also the study of

basic pancreatic physiology related to the secretion of digestive enzymes by the pancreas. Using an idea that I conceived and developed, we commenced studies on the interactions between stromal cells and pancreatic cancer cells and the influence of such interactions on cancer progression. This is an emerging area of research that has now gained tremendous currency amongst oncology researchers around the world. Epithelial-stromal interactions are being studied extensively in breast and prostate cancer. **We were the first to establish that the stromal reaction in human pancreatic cancer was produced by PSCs.** We have since shown that human PSCs and cancer cells engage in significant cross-talk and that cancer cells actively recruit PSCs to provide a tumour facilitatory microenvironment. We were **successful in obtaining project grant funding from the NH&MRC** for this work. Furthermore, my presentation related to this topic was awarded the **Hirshberg Foundation Award by the American Pancreatic Association.** We have now developed a novel orthotopic model of pancreatic cancer that is more akin to the clinical situation than any animal model published to date, because the pancreatic tumours exhibit both the important components of human pancreatic cancer i.e. tumour elements and a striking stromal reaction. This work has been published in the highly ranked oncology journal **Cancer Research** (IF 7.543) and selected to feature as a 'highlighted' paper. Our further studies with this model are **also the subject of project grants funded by the NSW Cancer Council (2008-2010).** Our recent work demonstrating that metastatic potential is not limited to cancer cells alone, but that stromal cells (specifically pancreatic stellate cells) also travel to distant metastatic sites from the primary tumour, has been **accepted for publication** in the American Journal of Pathology (accepted June 2010).

A third stream of work currently being undertaken by our Group is related to pancreatic physiology, specifically to the role of PSCs in exocrine pancreatic secretion. I was responsible for developing the protocol and writing the grant application for a project that **was funded by the Australian Research Council (ARC) as part of its ARC Discovery grant scheme (2007-2009).** It is well known that secretion of digestive enzymes by the pancreas is the function of pancreatic acinar cells. The major secretagogue for digestive enzyme secretion is cholecystokinin (CCK, a hormone produced in the small intestine). Intriguingly, it has been shown that human pancreatic acinar cells lack functional receptors for CCK. The prevailing concept is that CCK acts via the vagus nerve which signals to intrapancreatic neurons that secrete the neurotransmitter acetylcholine (ACh), which then acts on the muscarinic receptors on acinar cells to stimulate digestive enzyme secretion. We propose that the pancreatic stellate cell may be the intermediary cell between CCK and acinar cells for exocrine secretion. This is based on the fact that PSCs exhibit markers of neural cells and they are situated in close proximity to acinar cells. Importantly, we have recently shown that PSCs exhibit CCK receptors and respond to CCK via activation of the mitogen activated protein kinase (MAPK) pathway. Furthermore, we have also found that PSCs have the capacity to synthesise acetylcholine since the cells express the ACh synthesising enzyme choline acetyl transferase as well as vesicular acetyl choline transporter, a protein present in the vesicles that transport ACh to the apical membrane of the cells for secretion. Our studies have the potential to significantly change the current concept of exocrine secretion pathways in the pancreas. A manuscript related to this work is currently undergoing revision as requested by the **Proceedings of the National Academy of Sciences.**

My **research and academic standing** is reflected in the following :

- invitations to **Editorial Boards** of American Journal of Physiology, Journal of Gastroenterology and Hepatology, Pancreas, Pancreatology and World Journal of Gastroenterology

- invitations to write **reviews, editorials and book chapters** on pancreatic disease
- invitations to **review grants** submitted to major funding bodies as outlined earlier
- appointment to the **National Health and Medical Research Council Grant Review panels** (equivalent to NIH Study Sections) in 2006 and 2007 and to the New Zealand Health Research Council Grant Review panel in 2009.
- invited membership of the **abstract selection committees of the American Pancreatic Association, the European Pancreatic Club and the Gastroenterological Society of Australia**
- **adjudication of scholarship/fellowship applications** as a member of the Research Committee of the Gastroenterological Society of Australia (GESA, the premier Society for gastroenterologists in the country) and adjudication of Young Investigator Awards at the annual scientific meeting of GESA
- invitations to **review manuscripts** for major scientific journals in the field including Gastroenterology, Gut, Pancreas, Pancreatology, Biochemical Pharmacology, Journal of Laboratory and Clinical Medicine, American Journal of Physiology, American Journal of Pathology, Free Radical Research, World Journal of Gastroenterology, Journal of Gastroenterology and Hepatology, Laboratory Investigation, Molecular Cancer. I routinely review 1-2 papers per week.
- invitation to be a **Founding Member of the Asian Oceanic Pancreatic Association (AOPA) with an active role in drafting its Constitution** (see page 10 for details).

### **B) Fostering of young researchers**

I strongly believe that mentoring and encouraging young research talent is one of the primary duties of a senior researcher and I have worked hard towards this goal at every opportunity in my postdoctoral career. I have supervised **three PhD students and an Honours student to successful completion**. Two of my PhD students were subsequently offered postdoctoral fellowships at the University of Massachusetts largely based on the strength of my reputation in the field. These students have now returned to Australia, having been successful in obtaining competitive Postdoctoral Fellowships – **one has re-joined my Group with a Fellowship from the Gastroenterological Society of Australia**, while the other has joined A/Prof Maria Kavallaris' group at the Children's Cancer Institute of Australia (CCIA) after being awarded the UNSW Faculty of Medicine Dean's Postdoctoral Fellowship. My third PhD student, a gastroenterologist, has set up his own research laboratory at the University of Geneva. Between 2001 and 2006, two additional students had enrolled for PhD degrees under my supervision, but they had to discontinue their studies for family reasons. Despite the interruption to their candidature, we have been able to publish their work – a paper in Pancreas, a leading specialty journal and one in Cancer Research - indicating that they were making good progress and would have successfully completed their degrees were it not for their difficult family situations.

Currently, I supervise **a PhD and a Masters by Research** and co-supervise a PhD student working on pancreatic cancer at an UNSW affiliated institute, the Garvan Institute. I believe that my commitment to provide appropriate opportunities and mentorship for young researchers has played a role in the decisions of the above students to work with our Group. It would not be unreasonable to anticipate that these individuals will develop into successful independent researchers in the future.

The new undergraduate medical program at UNSW enables medical students to gain research experience as part of an **Independent Learning Program (ILP)**. I am an enthusiastic supporter of this scheme (I represented the South Western Sydney Clinical School on the Faculty ILP committee for two years) and have **supervised a student** who studied the synergistic role of alcohol and cytokines on pancreatic stellate cells as part of her ILP project. I have also co-supervised another ILP student with Professor Peter McCluskey at the SWS Clinical School. Both students successfully completed the course in March 2008.

### **C) Initiating collaborative research**

I have been responsible for the initiation and implementation of collaborative research with both national and international research groups. A number of the international collaborations arose out of invitations by specific investigators for my input into their work.

**National collaborators** include Professor Rakesh Kumar, School of Pathology, UNSW, Professor David Goldstein, Department of Oncology, Prince of Wales Hospital, Sydney, Professor Peter McCluskey, Department of Ophthalmology, SWS Clinical School, UNSW, Dr Barry Allen, St George Hospital, Sydney and Dr Grant Ramm, Queensland Institute of Medical Research, Brisbane. These researchers are involved with our work related to pancreatic fibrogenesis and pancreatic cancer.

**International collaborators** include the world-renowned pancreatic surgeons and researchers Professor Markus Buchler, University of Heidelberg and Dr Helmut Friess, University of Munich, Germany, both of whom are closely involved in our work with stromal interactions in pancreatic cancer. This collaboration has resulted in a publication in *Pancreas* and both Professors Buchler and Friess are Associate Investigators on our current NHMRC funded grant on pancreatic cancer. At the invitation of Professor Stephen Pandol, VA Medical Center, UCLA, I was involved in the submission of a grant application to the National Institutes of Health (NIH), USA. Our work on the role of NADPH oxidase in PSC activation has been published in *Pancreatology* (an important specialty journal) this year. Currently, discussions are under way with Dr David Fine, University of Southampton, UK and Professor Ashok Saluja, University of Minnesota, USA for collaborative work with respect to the role of PSCs in pancreatic regeneration and the role of heat shock proteins (HSPs) in alcoholic pancreatic fibrosis respectively.

### **D) Involvement with UNSW committees related to research policy and research training**

I am involved with matters related to research policy and research training at University, Faculty and School levels. I am an **elected member of the Academic Board** and of the **Committee on Research of the Academic Board**. I was elected **Presiding Member of the Faculty of Medicine** for 2008-2009. I also serve on the **Higher Degree Committee, the Faculty Research Management Committee, and the Postgraduate Research Students' Subcommittee** of the Faculty of Medicine. In addition, I am the **Postgraduate Research Co-ordinator for SWS Clinical School**. In each of these roles I am an active contributor to deliberations and discussions related to issues that have the ultimate aim of enhancing the

University's research profile, including strategies to improve the recruitment and retention of high quality research staff, provision of substantial research support at University, Faculty and School levels, updating and implementation of the Code of Conduct for Research and revision of the Postgraduate Research Co-ordinators' Handbook.

#### **E) Involvement with external professional organisations for research enhancement**

I am a **Founding Member and Past President (2005) of the Australasian Pancreatic Club**. This Club, the only one of its kind in Australia, was formed in 2002 as a forum for clinicians and scientists with an interest in clinical and basic research into diseases of the exocrine pancreas. I was responsible for organising the incorporation of the Club and for directing the development of the APC website ([www.pancreas.org.au](http://www.pancreas.org.au)). The APC is now widely recognised by pancreatic associations around the world including the American Pancreatic Association, the European Pancreas Club, the International Association of Pancreatology, the Japan Pancreas Club and the Indian Pancreas Club. Membership of the APC comprises eminent gastroenterologists, surgeons and researchers from Australia, New Zealand, USA, China and Russia. I have had **primary responsibility for the organisation of the annual meetings of the APC** since its inception. The day-long meeting allows a unique opportunity to discuss current and future research directions in pancreatic pathobiology and to initiate collaborations with research groups around the country. In 2007, under the auspices of the APC, **I organised an international meeting on the exocrine pancreas** held in Sydney in October.

I serve on the **Research Committee of the Gastroenterological Society of Australia (GESA)** with responsibilities for adjudicating scholarship and fellowship applications, reviewing abstracts submitted to the Society for its annual meetings and as a member of the judging panel for the Young Investigator Awards presented by GESA. I have also **reviewed abstracts** for the annual scientific meetings of the **American Pancreatic Association** and have been elected to the **scientific abstract selection committee of the European Pancreatic Club** for 2008-2011.

I have been involved with the **founding of the Asian Oceanic Pancreatic Association (AOPA)** with the head office currently based in Japan. I played an active role in drafting the Constitution of the AOPA at its inaugural meeting held in Japan in July 2005. The AOPA has as its charter the fostering of young and upcoming basic scientists and clinicians with an interest in pancreatic pathobiology, particularly from nations in the Asian Oceanic region. A need for such an Association was recognised by the fact that most of the 'pancreatic' organisations were located in the developed world and participation from Asian countries at their meetings was often limited. The significant geographic differences of pancreatic disease patterns and aetiology in different Asian countries (compared to the West) was another rationale underpinning the formation of this new Association. AOPA is committed to enhancing and fostering research and education in all aspects of pancreatology via the conduct of biennial scientific meetings, fellowships and collaborative programming.

I was invited to serve on the **membership committee of the International Society of Biomedical Research into Alcoholism (ISBRA)** and was the **organiser and co-chair of a symposium** entitled "Alcohol-Induced Fibroproliferative Diseases" at the ISBRA World Congress, Sydney, September 2006.

## Future Directions of Research

In view of our international standing at the cutting edge of research in pancreatitis and pancreatic fibrogenesis, our future directions in the short-term are linked to the elucidation of the three primary areas of PSC biology (role in chronic pancreatitis, role in pancreatic cancer and role in pancreatic secretion). Each of these projects is funded by the NH&MRC / ARC / NSW Cancer Council and with the novel findings obtained in these fields we are confident of future applications to major funding bodies.

Importantly, I anticipate **significant expansion** of our research efforts with the existing and new collaborations with national and international colleagues. With the return of Dr Phoebe Phillips (who completed a PhD under my supervision and then moved to the United States for two years to work as a postdoctoral fellow with Professor Saluja, University of Massachusetts and University of Minnesota) to our Group, plans are under way to set up a new collaborative project with Professor Saluja regarding the role of **heat shock proteins in pancreatic disease**, particularly with respect to alcohol-induced pancreatitis and fibrogenesis using relevant transgenic mouse models. Phoebe's work in this area during her postdoctoral fellowship forms the platform for these studies. Discussions are also in train with Dr David Fine, University of Southampton, UK, with respect to studies assessing the role of PSCs in **pancreatic regeneration and repair**. Support from grants from the NSW Cancer Council ensures continued collaboration with A/Prof Andrew Biankin (a pancreatic surgeon and researcher based at the Garvan Institute) and Professor David Goldstein (an oncologist at Prince of Wales Hospital) to characterise the genetic make-up of cancer-associated stromal cells and to identify pathways mediating **epithelial-stromal interactions in pancreatic cancer and their role in cancer progression**. It is anticipated that these studies will lead to identification of potentially useful therapeutic targets that will be initially assessed in animal models and may inform future clinical trials.

## SERVICE

I have been actively involved in a significant number of service activities both within and outside the University, all of which indicate my serious commitment to making a worthwhile contribution to the University and the profession. Furthermore, I have proactively taken on leadership roles at every presented opportunity (these have been detailed under Research Leadership, pages 3-6). Below is a summary of my involvement related to service at University, Faculty and School levels as well as my work with professional organisations outside the University.

### University Level

2003 – current: **Academic Board** - this principal academic body of the University meets monthly to deliberate/discuss issues pertaining to academic policy and academic proposals. It plays a major role in coordinating the work of all faculties within UNSW and in fostering teaching, scholarship and research. I consider it important to voice my opinions on various issues being discussed by the Board, particularly those related to research policy and training.

2003 – current: **Committee on Research** – this Standing Committee of the Academic Board meets monthly. Its brief is to encourage research and research training and

to advise the Board on research policy and strategies to enhance research within the University.

2002 – 2006

**Member,**

2007 – Mar 2008

**Deputy Presiding Member, UNSW Animal Care & Ethics Committee (ACEC)**

**Presiding Member of Committee B of the ACEC** – meets monthly to evaluate applications for the appropriate and ethical use of animals in research. This is an extremely busy committee with an ever-increasing workload. A total of 713 applications have been reviewed during my time with the Committee. I am responsible for chairing and running the meeting of Committee B and for the oversight of the discussions and decisions made by Committee on the applications. Members of the ACEC are also responsible for inspecting all UNSW affiliated animal facilities twice a year to ensure compliance with the code of conduct for animal research. Currently, with the Presiding Member, A/Professor Michael Beal, I am responsible for advising and aiding the development and implementation of an **online ethics application** and decision process being undertaken by a working party convened by the DVC Research, Professor Les Field.

2005 – 2007

**University Promotions Committee (UPC) for Associate Professor Promotions** – meets annually for a day long meeting to consider University wide applications for promotion to Associate Professor, after the applications have been discussed at individual Faculty Promotions Committees. Typically, UPC members would have to review, rank and comment on 60-70 applications per meeting, an undertaking that involves a significant time commitment prior to the meeting.

### **Faculty Level**

2008 -

**Presiding Member, Faculty of Medicine** – responsible for oversight of academic issues related to the Faculty including the teaching curriculum (undergraduate and postgraduate courses) and research (higher degree research students, chairing the Higher Degree Committee). I also chair the Faculty Standing Committee and the Faculty Board.

2002 – current

**Higher Degree Committee** – meets monthly to discuss matters pertaining to postgraduate studies within the Faculty of Medicine. As Postgraduate Research Co-ordinator for the South Western Sydney Clinical School, I report to the Committee on postgraduate student reviews and progress, supervisor and/or student grievances, enrolments, admissions and successful completions.

2004 – current

**Postgraduate Research Students Subcommittee** – meets quarterly to discuss issues related to postgraduate research students including, among others, enrolments/admissions, research support, quality of supervision and grievance counselling. I am also responsible for assisting with the organisation of the Postgraduate Research Day held annually by the Faculty and for the adjudication of poster presentations by postgraduate students for Faculty awards on the day.

2005 – current

**Faculty Research Grants Management Committee** – meets quarterly to discuss research support strategies for early career researchers as well as established research groups within the Faculty. As a member of this Committee, I am also

responsible for reviewing grant applications submitted to the Faculty for Faculty Research Grants and early career research grants.

2006 – 2007            **Independent Learning Program Committee** – meets once in two months to oversee and discuss the ILP program of the New Medicine Curriculum. Members review ILP projects submitted by prospective supervisors, discuss student issues related to the program (with respect to supervision, ethics approvals, infrastructure, access to adequate facilities etc), and calibrate external assessment of ILP project reports.

2003 – current:            **Interviewer for prospective medical students** – I have regularly participated in these interview sessions forming one of the components for admission of students to the medicine course. Each two hour interview is conducted in partnership with a non-medical interviewer.

### **School Committees**

2001 – current            **Postgraduate Research Co-ordinator, SWS Clinical School** – in this role I am responsible for i) overseeing the enrolments of Masters and PhD students; ii) assessments of student progress via annual reviews; iii) organisation of postgraduate research seminars; iv) providing advice regarding facilities and support available to students to facilitate their studies; and v) providing advice to students about appropriate procedures for grievance resolution. I am also responsible for proposing and implementing appropriate courses for research students such as the Masters Qualifying Program that prepares students with a Bachelor's degree for enrolment in a Masters by Research course.

2001 – current            **Clinical School Advisory Group** – comprises the Clinical Dean, Directors of Medical Student Education, Postgraduate Research Co-ordinator, Executive Officer and General Manager of SWS Clinical School. This Group meets weekly. I am responsible for informing and advising the Clinical Associate Dean in matters relating to postgraduate studies and ILP students at the School.

2002 – 2007            **Clinical School Executive** – this body provides an interface between the Faculty of Medicine, UNSW and Area Administration, Sydney South West Area Health Service in the development and implementation of all aspects of undergraduate and postgraduate medical education. The CSE met second monthly. I was responsible for providing a report at each meeting outlining the status of and any issues/concerns relating to the ILP component of the undergraduate medical curriculum and to postgraduate studies at the School.

### **Professional Organisations**

2002 – current            **Founding Member and Past President, Australasian Pancreatic Club (APC)** - my involvement and role with the APC are detailed on page 10.

2007                        **Co-Chair, Organising Committee, Pancreas in Paradise** meeting – this meeting was held under the auspices of the Australasian Pancreatic Club. It was the first of its kind in Australia, bringing to our shores world-renowned researchers and clinicians in pancreatology (Attachment C). I was responsible for driving all aspects of the organisation of this meeting including inviting and securing agreements from international and national

speakers, conducting sponsorship drives, booking the conference venue, developing and distributing publicity material and developing the scientific programme.

2005 – current        **Founding Member, Asian Oceanic Pancreatic Association** – my activities related to this Association are detailed on pages 10- 11.

2007 - current        **Member, Abstract Selection Committee, American Pancreatic Association; Elected Member, Abstract Selection Committee, European Pancreatic Club**

2001 – current        **Member, Editorial Boards of leading journals in the field including** American Journal of Physiology (2009 onwards), Journal of Gastroenterology and Hepatology (2009 onwards), World Journal of Gastroenterology (2005 onwards), Pancreas (2001 onwards) and        **Pancreatology (2009 onwards)**

1992 - current        **Member, Gastroenterological Society of Australia (GESA)**

2005 – current        **Member, Research Committee, GESA** - GESA is the premier body in Australia for clinicians and scientists with gastroenterological interests. My role with this organisation is detailed on page 10.

2006 – 2007        **Member, Grant Review Panel, National Health and Medical Research Council.** I have had responsibility as primary and secondary spokesperson for up to 15 grants a year; this involves writing reviews on the applications, appointing external independent assessors for each grant, collating the response of applicants to reviewers' comments and presenting/leading the discussion on these grants at the GRP meetings. As a Panel member I also have to review all other grant applications allocated to the Panel (approximately 60-70 per year) and contribute to the discussion of these applications at the GRP meetings.

2001 – current        **Reviewer of grants for major funding bodies** - I have reviewed project grant applications and fellowship applications for major national and international funding bodies including the NH&MRC, the Wellcome Trust, UK, Cancer Research, UK, Auckland Medical Research Council, New Zealand and the National Medical Research Council, Singapore.

2007        **Member, Strategic Research Partnership (STREP) Grants Review Committee, NSW Cancer Council** – this Committee reviewed and adjudicated upon applications submitted to the NSW Cancer Council with a view to setting up partnership projects with the Council. The major aim of the STREP initiative is to identify, publish and procure cancer research priorities. It is anticipated that these projects will enable the development of highly effective translational research groups and accelerate the progress of policy and practice focused research on cancer in NSW.

## TEACHING

Relative to opportunity, I have made a sustained contribution to teaching at the University. My postgraduate teaching in terms of **supervision of PhD, Masters and a BScMed Honours student** and my work as the **Postgraduate Co-ordinator for SWS Clinical School** has been detailed earlier. As noted above, the location of our Group at a hospital campus remote from the main University campus until late 2005, necessarily limited the opportunities for recruitment of Honours and higher degree students. It also meant fewer opportunities to become involved in undergraduate teaching.

However, since the Group's relocation to the University campus, I have accepted all offered opportunities for undergraduate teaching. In this regard, I have been a **Facilitator for the Health Maintenance course in 2006 and the Foundations course in 2007**. This involved 4 hours of face-to-face interaction per week, one hour per week of facilitator group meetings, additional preparation time for the weekly facilitation sessions as well as the marking of individual assignments and group projects. In addition to facilitation, I have been involved with the **Independent Learning Program (ILP) component of the medical curriculum**, via supervision / co-supervision of two current ILP students and membership of the ILP committee.

## List of Publications :

1. **Apte M**, Bhagwande SB, Husband AJ , Mawarring L . Circulating T-cell subsets in rats on a prolonged ethanol diet. IRCS Medical Sciences 12: 902-903, 1984.
2. Bhagwande SB, **Apte M**, Banathy L . Alcohol related hepatic lesions in young victims of road traffic accidents in Australia. IRCS Medical Sciences 13: 985 - 986, 1985.
3. Bhagwande SB, **Apte M**, Manwarring L. Hepatitis provoked by endotoxin in rats on a prolonged ethanol diet. Medical Science Research Biochemistry 15:303-304, 1987. [*citations 7*]
4. Bhagwande SB, **Apte M**, Manwarring L, Dickeson J. Endotoxin induced hepatic necrosis in rats on an alcohol diet. J Pathol, 152 (1): 47 - 53, 1987.
5. Wilson JS, Korsten MA, **Apte M**, Thomas MC, Haber PS, Pirola RC. Both ethanol consumption and protein deficiency increase the fragility of pancreatic lysosomes. J Lab Clin Med, 115 (6): 749-755, 1990.
6. Wilson JS, **Apte M**, Thomas MC, Haber PS, Pirola RC. Effects of ethanol, acetaldehyde and cholesteryl esters on pancreatic lysosomes. Gut, 33: 1099-1104, 1992.
7. Haber PS, Wilson JS, **Apte M**, Pirola RC. Fatty acid ethyl esters increase rat pancreatic lysosomal fragility. J Lab Clin Med 121:759-764, 1993.
8. **Apte M**, Norton ID, Wilson JS. Ethanol-induced acinar cell injury. Alcohol and Alcoholism, S2:365-368, 1994.
9. Haber PS, Wilson JS, **Apte M**, Pirola RC. Lipid intolerance does not account for susceptibility to alcoholic and gallstone pancreatitis. Gastroenterology 106:742-748, 1994.
10. Haber PS, Wilson JS, **Apte M**, Korsten MA, Pirola RC. Chronic ethanol consumption increases the fragility of rat pancreatic zymogen granules. Gut 35:1474-1478, 1994.
11. **Apte M**, Wilson JS, McCaughan GW, Haber PS, Norton ID, Korsten MA, Pirola RC. Ethanol-induced alterations in messenger RNA levels correlate with glandular content of pancreatic enzymes. J Lab Clin Med, 125:634-640, 1995.
12. **Apte M**, Wilson JS, McCaughan GW, Haber PS, Korsten MA, Pirola RC. Effects of ethanol and protein deficiency on pancreatic digestive and lysosomal enzymes. Gut 36:287-293, 1995.
13. Haber PS, Wilson JS, **Apte M**, Korsten MA, Pirola RC. Individual susceptibility to alcoholic pancreatitis - still an enigma. J Lab Clin Med, 125:305-312, 1995.

14. **Apte MV**, Norton ID, Haber PS, McCaughan GW, Korsten MA, Pirola RC, Wilson JS. Both ethanol and protein deficiency increase gene expression of pancreatic lithostathine. *Life Sciences*, 58:485-492, 1996.
15. **Apte MV**, Wilson JS, Korsten MA. Alcohol-related pancreatic damage. *Alcohol Health and Research World*, 21:13-20, 1997.
16. **Apte MV**, Norton ID, Haber PS, Applegate TL, McCaughan GW, Korsten MA, Pirola RC, Wilson JS. Chronic ethanol administration decreases rat pancreatic GP2 content. *Biochimica et Biophysica Acta*, 1336:89-98, 1997.
17. **Apte MV**, Haber, PS, Norton ID, Wilson JS. Alcohol and the pancreas. *Addiction Biology*, 3:137-150, 1998.
18. **Apte MV**, Norton ID, Haber PS, Applegate TN, McCaughan GW, Korsten MA, Pirola RC, Wilson JS. The effect of ethanol on pancreatic enzymes: a dietary artefact? *Biochimica et Biophysica Acta*, 1379:314-324, 1998.
19. Norton ID, **Apte MV**, Haber PS, Trent R, Pirola RC, Wilson JS. Cystic fibrosis genotypes and alcoholic pancreatitis. *Journal of Gastroenterology and Hepatology*, 13:496-499, 1998.
20. Norton ID, **Apte MV**, Haber PS, Applegate TN, Pirola RC, Wilson JS. Cytochrome P4502E1 is present in rat pancreas and is induced by chronic ethanol administration. *Gut*, 42:426-430, 1998.
21. Haber PS, **Apte MV**, Applegate TN, Norton ID, Korsten MA, Pirola RC, Wilson JS. Metabolism of ethanol oxidation by rat pancreatic acinar cells. *J Lab Clin Med* 132:294-302, 1998.
22. Norton ID, **Apte MV**, Lux O, Haber PS, Pirola RC, Wilson JS. Chronic ethanol administration causes oxidative stress in the rat pancreas. *J Lab Clin Med* 131:442-446, 1998.
23. **Apte MV**, Haber PS, Applegate TN, Norton ID, McCaughan GW, Korsten MA, Pirola RC, Wilson JS. Periacinar stellate shaped cells in rat pancreas: identification, isolation and culture of stellate cells from rat pancreas. *Gut*, 43:128-133, 1998. *[with cover illustration]*
24. **Apte MV**, Keogh GW, Wilson JS. Chronic pancreatitis: complications and management. *Journal of Clinical Gastroenterology*, 29:225-240, 1999.
25. Haber PS, Norris MD, **Apte MV**, Rodgers SC, Norton ID, Pirola RC, Roberts-Thomson IC, Wilson JS. Alcoholic pancreatitis and polymorphisms of the variable length polythymidine tract in the cystic fibrosis (CFTR) gene. *Alcoholism: Clinical and Experimental Research*, 23:509-512, 1999.

26. **Apte MV**, Haber PS, Darby SJ, Rodgers SC, Pirola RC, Korsten MA, McCaughan GW, Wilson JS. Pancreatic stellate cells are activated by proinflammatory cytokines: implications for pancreatic fibrogenesis. *Gut*, 44:534-541, 1999.
27. Haber PS, Keogh GW, **Apte MV**, Moran CS, Stewart NL, Crawford DHG, Pirola RC, McCaughan GW, Ramm GA, Wilson JS. Activation of pancreatic stellate cells in human and experimental pancreatic fibrosis. *American Journal of Pathology*, 155:1087-1095, 1999.
28. **Apte MV**, Phillips PA, Fahmy RA, Darby SJ, Rodgers SC, McCaughan GW, Korsten MA, Pirola RC, Naidoo D, Wilson JS. Does alcohol directly stimulate pancreatic fibrogenesis? Studies with rat pancreatic stellate cells. *Gastroenterology* 118:780-794, 2000. [*with cover illustration*]
29. **Apte MV**, Keogh GW, Wilson J. Conservative Management of Chronic Pancreatitis. *The Asian Journal of Surgery* 24:103-115, 2001.
30. Haber P, Nakamura M, Tsuchimoto K, Ishii H. Keogh GW, **Apte MV**, Moran CS, Stewart NL, Crawford DH, Pirola RC, McCaughan GW, Ramm GA, Wilson JS, Nishino H, Kohno M, Aizawa R, Tajima N, Maruyama K, Takahashi H, Matsushita S, Okuyama K, Yokoyama A, Nakamura Y, Shirakura K, Ishii H, Conigrave KM, Hu BF, Camargo CA Jr, Stampfer MJ, Willett WC, Rimm EB. Alcohol and the pancreas. *Alcoholism: Clinical & Experimental Research*. 25(5 Suppl ISBRA):244S-250S, 2001.
31. Apte M, **Wilson J**. Invited commentary on "Pancreatic stellate cells contribute to regeneration early after acute necrotising pancreatitis in humans" by Zimmermann et al (*Gut* 2002;51:574-578).  
[www.pancreasweb.com/Resources/commentary/commentary4.asp](http://www.pancreasweb.com/Resources/commentary/commentary4.asp) October, 2002.
32. Frenzer A, Butler WJ, Norton ID, Wilson JS, **Apte MV**, Pirola RC, Ryan P, Roberts-Thomson IC. Polymorphisms in alcohol metabolising enzymes, glutathione S-transferases and apolipoprotein E and susceptibility to alcoholic cirrhosis and chronic pancreatitis. *Journal of Gastroenterology and Hepatology*, 17:177-182, 2002.
33. Mews P, Phillips P, Fahmy R, Pirola R, Korsten M, Wilson J, **Apte M**. Pancreatic stellate cells respond to inflammatory cytokines: potential role in chronic pancreatitis. *Gut*, 50:535-541, 2002.
34. **Apte M**. Oxidative stress : does it initiate hepatic stellate cell activation or only perpetuate the process? (Editorial) *Journal of Gastroenterology and Hepatology*, 17:1045-1048, 2002.
35. Phillips P, Wu M-J, Doherty E, Kumar RK, McCarroll J, Park S, Pirola R, Wilson J, **Apte M**. Cell migration : A novel aspect of pancreatic stellate cell biology. *Gut* 52:677-82, 2003.
36. **Apte MV**, Wilson JS. Alcohol-induced pancreatic injury. *Best Practice Research and Clinical Gastroenterology* 17:593-612, 2003.

37. McCarroll, J, Phillips P, Park S, Doherty E, Pirola R, Wilson J, **Apte M**. Pancreatic stellate cell activation by ethanol and acetaldehyde – is it mediated by the mitogen-activated protein kinase (MAPK) signalling pathway? *Pancreas* 27:150-160, 2003.
38. Wilson JS, **Apte MV**. Role of alcohol metabolism in alcoholic pancreatitis. *Pancreas* 27:311-315, 2003.
39. **Apte MV**, Wilson JS. Stellate cell activation in alcoholic pancreatitis. *Pancreas* 27:316-320, 2003.
40. Phillips PA, McCarroll JA, Park S, Wu M-J, Korsten MA, Pirola RC, Wilson JS, **Apte MV**. Rat pancreatic stellate cells secrete matrix metalloproteinases – implications for extracellular matrix turnover. *Gut*, 52:275-282, 2003.
41. **Apte MV**, Wilson JS. Mechanisms of pancreatic fibrosis. *Digestive Diseases* 22:273-279, 2004.
42. McCarroll JA, Phillips PA, Kumar RK, Park S, Pirola RC, Wilson JS, **Apte MV**. (2004) Pancreatic stellate cell migration: role of the phosphatidylinositol 3-kinase (PI3-kinase) pathway. *Biochemical Pharmacology*, 67:1215-1225.
43. Goldstein D, **Apte M**, Carroll S, Keogh G. Modern management of pancreatic cancer. *Internal Medicine Journal* 34:475-481, 2004.
44. **Apte MV**, Wilson JS. Pancreatitis in the older adult. *Geriatrics and Aging* 7:27-35, 2004.
45. Haber PS, **Apte MV**, Moran C, Applegate TL, Pirola RC, Korsten MA, McCaughan GW, Wilson JS. Non-oxidative metabolism of ethanol by rat pancreatic acini. *Pancreatology*, 4:82-89, 2004.
46. **Apte MV**, Park S, Phillips PA, Santucci N, Goldstein D, Kumar RK, Ramm G, Buchler M, Friess H, McCarroll JA, Keogh G, Merrett N, Pirola RC, Wilson JS. Desmoplastic reaction in pancreatic cancer – role of pancreatic stellate cells. *Pancreas*, 29:179-187, 2004.
47. **Apte MV**, Wilson JS. The importance of keeping in touch: regulation of cell-cell contact in the exocrine pancreas. *Gut*, 54:1358-1359, 2005.
48. Atomi Y, Sugiyama M, Go VL, Matsuno S, **Apte MV**, Leung PS, Roy TS, Shiratori K, Kim SW, Sollano JD, Yap CK, Yang KC, Tanaka M, Satake K. Asian-Oceanic Pancreatic Association: conception to actuality. *Pancreas* 31:405-412, 2005.
49. **Apte MV**, Wilson JS. Molecular mechanisms of alcoholic pancreatitis. *Digestive Diseases* 23:232-240, 2005.
50. **Apte MV**, Pirola RC, Wilson JS. Where there's smoke there's not necessarily fire. *Gut*, 54:446-7, 2005.

51. **Apte MV**, Zima T, Dooley S, Siegmund SV, Pandol SJ, Singer MV. Signal transduction in alcohol-related diseases. *Alcohol Clin Exp Res* 29:1299-1309, 2005.
52. **Apte MV**, Pirola RC, Wilson JS. The battle-scarred pancreas: Role of alcohol and pancreatic stellate cells in pancreatic fibrosis. *J Gastroenterol Hepatol.* 2006 Oct;21 Suppl 3:S97-S101.
53. **Apte MV**, Pirola RC, Wilson JS. Fatty acid ethyl esters : alcohol's henchmen in the pancreas? Invited editorial, *Gastroenterology* 130: 992-995, 2006.
54. McCarroll J, Phillips PA, Santucci N, Pirola RC, Wilson JS, **Apte MV**. Vitamin A inhibits pancreatic stellate cell activation: implications for treatment of pancreatic fibrosis. *Gut* 55:79-89, 2006.
55. Vonlaufen A, Wilson J, Pirola R, **Apte M**. Role of alcohol metabolism in chronic pancreatitis. *Alcohol Research and Health* 30:48-54, 2007.
56. Hu R, Wang Y-L, Edderkaoui M, Lugea A, **Apte MV**, Pandol SJ. Ethanol augments PDGF-induced NADPH oxidase activity and proliferation in rat pancreatic stellate cells. *Pancreatology*, 7:332-340, 2007.
57. Vonlaufen A, **Apte MV**, Imhof BA, Frossard JL. Role of inflammatory and parenchymal cells in acute pancreatitis. *The Journal of Pathology* 213:239-248, 2007.
58. **Apte MV**, Wilson JS. The desmoplastic reaction in pancreatic cancer: an increasingly recognised foe. *Pancreatology* 7:378-379, 2007.
59. **Apte M**, Witt H, Keim V, Wilson J. Chronic Pancreatitis: challenges and advances in pathogenesis, genetics, diagnosis and therapy. *Gastroenterology* 132:1557-1573, 2007.
60. A Vonlaufen, ZH Xu, B Daniel, S Joshi, C Toi, RK Kumar, R Pirola, J Wilson, **MV Apte**. Bacterial endotoxin – a trigger factor for alcoholic pancreatitis ? Evidence from a novel, physiologically relevant animal model. *Gastroenterology*, 133:1293-1303, 2007.
61. Apte M, Pirola R, Wilson J. Individual susceptibility to alcoholic pancreatitis. *Journal of Gastroenterology and Hepatology*, 23 Suppl 1:S63-8, 2008.
62. Tattersall S, **Apte M**, Wilson JS. Management of pancreatitis. *Australian Defence Force Health*, 9:24-33, 2008.
63. Tattersall S, **Apte M**, Wilson JS. Current concepts in chronic pancreatitis. *Int Med J*, 38: 592-8, 2008.
64. Apte M, Pirola R, Wilson J. Malnutrition as a cause of chronic pancreatitis : myth dispelled? . *Journal of Gastroenterology and Hepatology*, 23:1312-1314, 2008.

65. Vonlaufen A, Wilson JS, **Apte M**. Pathophysiology of pancreatitis. *Journal of Gastroenterology and Hepatology*, 23:1339-1348, 2008.
66. A Vonlaufen, S Joshi, CF Qu, PS Phillips, ZH Xu, NR Parker, CS Toi, R Pirola, J Wilson, D.Goldstein, **MV Apte**. Pancreatic stellate cells induce pancreatic cancer growth : findings of a novel orthotopic model of pancreatic cancer. *Cancer Research* 68:2085-2093, 2008. *[IF 7.657]*
67. Vonlaufen A, Phillips PA, Xu Z, Goldstein D, Pirola RC, Wilson JS V. **Apte M**. Pancreatic Stellate Cells and Pancreatic Cancer Cells: An Unholy Alliance. *Cancer Research*, 68:7707-7710, 2008.
68. **Apte M**, Pirola R, Wilson J. Alcoholic pancreatitis: it's the alcohol, stupid. *Nature Reviews Gastroenterology and Hepatology* 6:321-322, 2009.
69. **Apte M**, Pirola R, Wilson J. New insights into alcoholic pancreatitis and pancreatic cancer. *J Gastroenterol Hepatol*, 24:S51-S56, 2009.
70. Seth D, D'Souza El-Guindy NB, **Apte M**, Mari M, Dooley S, Neuman M, Haber PS, Kundu GC, Darwanto A, de Villiers WJ, Vonlaufen A, Xu Z. Phillips P, Yang S, Goldstein D, Pirola RM, Wilson JS, Moles A, Fernandez A, Collell A, Garcia-Ruiz C, Fernandez-Checa JC, Meyer C, Meindl-Beinker NM. Alcohol, signalling and ECM turnover. *Alcoholism: Clinical and Experimental Research*, 34:1-15, 2010.
71. A Vonlaufen, PS Phillips, ZH Xu, S Yang, E Fiala-Ber, R Pirola, J Wilson, **MV Apte**. Isolation of quiescent human pancreatic stellate cells; a useful in vitro tool to study hPSC biology. *Pancreatology*, 10:434-443,2010.
72. P Phillips, L Yang, A Shulkes, Poloak A, Bustamante S, A Vonlaufen, ZH Xu, A Warren, M Guilhaus, R Pirola, **M Apte\***, J Wilson\*. *\*Equal senior authors*. Pancreatic stellate cells synthesise and secrete acetylcholine : a possible role in pancreatic exocrine secretion. *Proceedings of the National Academy of Sciences*, 107(40):17397-402, 2010.
73. Apte M, Pirola RC, Wilson JS. Mechanisms of alcoholic pancreatitis. *Journal of Gastroenterology and Hepatology*, 25(12):1816-26,2010.
74. Z Xu, A Vonlaufen, P Phillips, Ea Fiala-Ber, X Zhang, L Yang, A Biankin, D Goldstein, RC Pirola, JS Wilson, **MV Apte**. Role of pancreatic stellate cells in pancreatic cancer metastasis. *American Journal of Pathology*, 177:2585-96, 2010.
75. **M Apte**, R Pirola, J Wilson. The Fibrosis of Chronic Pancreatitis : New Insights into the Role of Pancreatic Stellate Cells. *Antioxidants and Redox Signalling*, in press, accepted May 2010.
76. A Vonlaufen, P Phillips, Z Xu, X Zhang, L Yang, RC Pirola, JS Wilson, **MV Apte**. Withdrawal of alcohol promotes regression while continued alcohol intake promotes persistence of LPS-induced pancreatic injury in alcohol-fed rats. *Gut*. 2010 Sep 24. [Epub ahead of print] PMID: 20870739

### **Book Chapters :**

1. **Apte MV**, Wilson JS. “Alcohol Studies in the Pancreas” in *Methods in Pancreatic Research*, Lerch M, Senninger N (eds), Springer-Verlag, 1999.
2. **Apte MV**, Wilson JS. “Experimental models of pancreatic fibrogenesis and the role of stellate cells” in *Chronic Pancreatitis – Novel Concepts in Biology and Therapy*, Buchler M, Friess H, Uhl W, Malfertheiner P (eds), Blackwell Science, pp 113-133, 2002.
3. **Apte MV**, Wilson JS. Chronic pancreatitis : How and why is fibrosis initiated? In *Controversies in Pancreatology*, Permert J, Herrington M, Adrian TE (eds), Crlsson Communications, pp. 80-92, 2003.
4. **Apte MV**, Wilson JS. “What’s new in pancreatic stellate cell biology?” In *Pancreatic Disease*, Johnson C, Imrie C (eds), Springer-Verlag 17:201-225, 2003.
5. **Apte MV**, Wilson JS. Experimental models of pancreatic fibrogenesis. FALK Symposium Proceedings, October 2004.
6. **Apte MV**, Pirola RC, Wilson JS. Molecular mechanisms of alcoholic pancreatitis in “Alcohol and the Gastrointestinal Tract” Eds Manfred V. Singer, David Brenner, Karger Basel, pp 122-138, 2006.
7. **Apte MV**, Pirola RC, Wilson JS. Acetaldehyde and pancreatic MAP Kinases in “Acetaldehyde related pathology: bridging the trans-disciplinary divide”. Eds Chadwick DJ, Goode J, Wiley, UK, pp200-211, 2007.
8. **Apte MV**, Pirola RC, Wilson JS. Etiopathogenesis and epidemiology of alcohol-induced pancreatitis in *The Pancreas 2<sup>nd</sup> edition*. Eds Beger H, Rau B, Lerch M, Wiley, UK, pp 143-153, 2009.
9. **Apte MV**, Pirola RC, Wilson JS. Desmoplasia in pancreatic cancer : friend or foe? In “Surgery of Pancreatic Tumors” Eds Shrikhande S, Friess H, Buchler M, BI Publications, New Delhi, pp 30-40, 2008.
10. Rupert WL Leong, **Minoti V Apte**, Jeremy S Wilson. Chronic Abdominal Pain. In: *Pocketbook of Gastroenterology*. 2004 1<sup>st</sup> Ed. Talley, Weltman, Churchill Livingstone, Sydney, pp 125-136, 2008.

**Research Income :**

**Total Grant Funding to date :**

**\$5,756,773**

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
Genotype guided cancer therapy (Genomic theragnostics) PIs : A Biankin, S Grimmond, <b>M Apte</b> , D Goldstein, S Clarke, J Kench, J Samra, V Gebski, J Wu, S Mead, L Horvath	NSW Cancer Council Strategic Research Partnership Grant	2011	5 years	\$1,500,000
Salary for Senior Research Co-ordinator, Ingham Health Research Institute, Liverpool PIs : <b>M Apte</b> , P McNeil	UNSW MAJOR RESEARCH EQUIPMENT AND INFRASTRUCTURE INITIATIVE	2011	1 year	\$99,500
Applied Biosystems® ViiA7 Real-Time PCR System PIs : P Phillips, <b>M Apte</b> , K Bryant, P McNeil	UNSW MAJOR RESEARCH EQUIPMENT AND INFRASTRUCTURE INITIATIVE	2011	1 year	\$115,000
Guava® easyCyte™ 8HT Flow Cytometry System (Millipore Australia) PIs : K Bryant, P McNeil, P Phillips, <b>M Apte</b>	UNSW MAJOR RESEARCH EQUIPMENT AND INFRASTRUCTURE INITIATIVE	2011	1 year	\$95,250
Alcoholic chronic pancreatitis: induction, progression and reversal PIs: <b>MV Apte</b> , JS Wilson, R Pirola, R Kumar, P Phillips	NHMRC	2010	3 years	\$609,500

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
Accessing the third dimension in scanning electron microscopy for rapid, high resolution tomography of large samples Z Liu, S Perrier, YW Mai, PM Young, S Bandyopadhyay, FC Braet, RP Burford, GDHousley, <b>MV Apte</b> , P Thordarson	ARC LIEF	2011	1	250,000
Hitting the right target : use of growth factor inhibitors to inhibit stromal-epithelial interactions in pancreatic cancer. PIs : <b>MV Apte</b> , D Goldstein, JS Wilson, R Pirola	NSW Cancer Council	2009-2010	2 years	\$100,000
Alcoholic pancreatitis : induction, progression and reversion PIs: <b>M Apte</b> , J Wilson, R Pirola	Alcohol Health and Research Grants Scheme	2009	1 year	\$25,000
Aperio Scan Scope Virtual Slide Scanner for collaborative cancer histopathology” N Hawkins, R Ward, <b>MV Apte</b> , P Russell W Sewell	Cancer Institute of New South Wales Equipment Grant	2009	1 year	\$300,000

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
Growth factor receptor inhibitors: potential therapeutic agents in pancreatic cancer” PIs : <b>MV Apte</b> , D Goldstein, JS Wilson, R Pirola,	Amgen Incorporated	2009	1 year	\$148,433
Desmoplasia in pancreatic cancer: role of pancreatic stellate cells in cancer progression. <b>MVApte</b> , JS Wilson, D Goldstein, A Biankin, RC Pirola.	NSW Cancer Council	January 2008	3 years	\$300,000
Alcoholic pancreatitis: role of alcohol, endotoxin and pancreatic stellate cells”. <b>MV Apte</b> , JS Wilson, R Pirola	NH&MRC Project Grant	January 2007	3 years	\$482,000
Do pancreatic stellate cells play a role in exocrine pancreatic secretion? <b>MV Apte</b> , AS Shulkes, JS Wilson. R Pirola.	ARC Discovery Project Grant	January 2007	3 years	\$263,000
Postdoctoral Research Fellowship, Phillips P. Primary supervisor: <b>MV Apte</b>	Gastroenterological Society of Australia	May 2007	3 years	\$195,000
Tri-Carb Liquid Scintillation Counter. Burcher E, Jessup W, Brown A, Dawes I, Khachigian L, <b>Apte M</b> , Finch A.	NH&MRC Equipment Grant	2007	N/A	\$30,000

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
NSW Pancreatic Cancer Network (NSWPCN). A Biankin, J Kench, D Goldstein, R Smith, <b>M Apte</b> , G Smith	NSW Cancer Council Strategic Research Partnership Grant	January 2006	5 years	\$1,250,000
Epithelial-stromal interactions in the pathogenesis of pancreatic cancer: role of pancreatic stellate cells. <b>MV Apte</b> , JS Wilson, D Goldstein, R Kumar, R Pirola	NH&MRC Project Grant	January 2005	3 years	\$419,750
Spectrophotometer Nanodrop analyser for DNA. Geczy C, Lloyd A, Tedla N, <b>Apte M</b> , Harvey C, Hsu K	NH&MRC Equipment Grant	2005	N/A	\$12,000
Alcohol and pancreatic stellate cells. <b>MV Apte</b> , JS Wilson, R Kumar, R Pirola	NH&MRC / Department of Veterans' Affairs Project Grant	January 2004	3 years	\$190,500
Alcohol-induced pancreatic fibrosis: role of vitamin A, alcohol and pancreatic stellate cells. <b>MV Apte</b> , JS Wilson	Australian Brewers' Foundation	January 2004	1 year	\$31,833
Alcohol, vitamin A and pancreatic stellate cells. <b>MV Apte</b> , JS Wilson	Health Research Foundation, Sydney South West	January 2003	1 year	\$25,000
Role of pancreatic stellate cells in the pathogenesis of pancreatic cancer. <b>MV Apte</b>	Goldstar Award, UNSW	January 2003	2 years	\$50,000

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
Tumour-epithelial interactions in the pathogenesis of pancreatic cancer. <b>MV Apte, JS Wilson</b>	UNSW Faculty Research Grants Program	January 2003	1 year	\$20,000
Signalling pathways mediating pancreatic stellate cell activation. <b>MV Apte, JS Wilson</b>	Health Research Foundation, Sydney South West	January 2002	1 year	\$23,000
The Role of Pancreatic Stellate Cells in the Pathogenesis of Pancreatic Cancer". <b>MV Apte, JS Wilson</b>	Health Research Foundation, Sydney South West	January 2001	1 year	\$20,000
Role of Pancreatic Stellate cells in the Pathogenesis of Alcohol-Induced Pancreatic Fibrosis. JS Wilson, <b>MV Apte</b> , R Kumar, R Pirola	NH&MRC / Department of Veterans' Affairs Project Grant	January 2001	3 years	\$390,000
Stellate cells and alcoholic pancreatic fibrosis. <b>MV Apte</b> , JS Wilson, RC Pirola	Australian Brewers' Foundation	January 2000	1 year	\$29,000
Bushell Postdoctoral Fellowship, <b>MV Apte</b>	Gastroenterological Society of Australia	January 1999	3 years	\$192,000
Pathogenesis of alcoholic pancreatic fibrosis. JS Wilson, RC Pirola, <b>MV Apte</b> , PS Haber	Clive and Vera Ramaciotti Foundations Equipment Grant	1998	N/A	\$15,000

<b>Project Title and Chief Investigators</b>	<b>Funding Body</b>	<b>Year commenced</b>	<b>Duration</b>	<b>Total Amount</b>
Pathogenesis of alcoholic pancreatic fibrosis. JS Wilson, RC Pirola, <b>MV Apte</b> , P Haber	Australian Associated Brewers' Association	January 1998	1 year	\$33,400
Pathogenesis of alcoholic pancreatitis. JS Wilson, <b>MV Apte</b> , P Haber, G McCaughan	NH&MRC Project Grant	January 1998	3 years	\$301,332
Pancreatic Ethanol Metabolism: a new approach to the pathogenesis of alcoholic pancreatitis. PS Haber, JS Wilson Co-investigators: RC Pirola, <b>MV Apte</b>	Clive and Vera Ramaciotti Foundations Equipment Grant	1996	N/A	\$10,000
How does alcohol damage the pancreas? PS Haber. Associate investigators: JS Wilson, RC Pirola, <b>MV Apte</b> , G Keogh	NH&MRC Project Grant	January 1996	3 years	\$126,750
Effects of ethanol on pancreatic digestive enzyme synthesis. JS Wilson, RC Pirola. Co-investigator: <b>MV Apte</b>	Clive and Vera Ramaciotti Foundations Equipment Grant	1993	N/A	\$10,000

## Supervision of Research Students :

Name	Degree	Year commenced	Year completed	Supervision
Joshua McCarroll	PhD	March 2001	March 2005	Primary
Phoebe Phillips	PhD	January 2001 (P/T)	March 2005	Primary
Sandra Park	PhD	January 2001	Student discontinued in 2003 due to family reasons	Co-Supervisor
Swapna Joshi	PhD	March 2005	Student discontinued in 2006 due to family reasons	Primary
Emily Colvin	PhD	January 2006	Ongoing	Co-supervisor
Alain Vonlaufen	PhD	January 2007	May 2009	Primary
Zhihong Xu	PhD	August 2007 (P/T)	Ongoing	Primary
Susan Yang	Masters by Research	July 2007 (P/T)	Ongoing	Primary
Peter Mews	BSc Med (Hons)	January 1999	January 2000	Day to day supervision of experimental protocol, supervision of thesis writing and presentations

## **Invited Lectures**

### **International Conferences :**

1. "Regulation of pancreatic stellate cells and pancreatic fibrosis." American Pancreatic Association Meeting, Chicago, USA, November, 1999.
2. "Role of pancreatic stellate cells in alcoholic pancreatic fibrosis." International symposium on "Development, fibrosis and transformation in the pancreas", University of Ulm, Germany, July, 2000.
3. "Stellate cells and alcoholic pancreatic fibrosis". International symposium on "The mechanism of pancreatitis – between bedside and laboratory", Japan Pancreas Society, Kitakyushu, July, 2001.
4. "What's new in pancreatic stellate cell biology?" International symposium "Pancreatic Disease 2001", 3rd Joint Southampton/Glasgow Meeting, Southampton, October, 2001.
5. "Stellate cell activation in alcoholic pancreatitis" NIAAA Symposium on Mechanisms of Alcoholic Pancreatitis, Chicago, USA, November 2002 .
6. "The Drinker's Pancreas : molecular mechanisms of alcoholic pancreatitis". Symposium, European Society of Biomedical Research into Alcoholism, Prague, September 2003.
7. "Ethanol induced acinar cell injury" Symposium on Signal Transduction in Alcohol Related Diseases, 12<sup>th</sup> World Congress Biomedical Alcohol Research, Heidelberg, Germany, September 2004.
8. "What's new in pancreatic fibrosis?" Colloquium Pancreatologicum, University of Rostock, October 2004.
9. "Stellate cells and inflammation - Pancreas" FALK Symposium, Freiburg, Germany, October 2004.
10. "Desmoplastic reaction in pancreatic cancer: friend or foe?" Department of Cancer Biology's Seminar Series, MD Anderson Cancer Center, Houston, May 2005.
11. "Pancreatology in Ausralia : current clinical practice and research" Inaugural International Meeting of the Asian Oceanic Pancreatic Association, Tokyo, July 2005.
12. "Does acute pancreatitis evolve into chronic pancreatitis: histopathological perspective" National Conference on Pancreatic Diseases, Indian Pancreas Club, New Delhi, August 2005.
13. "Desmoplasia in pancreatic cancer" National Conference on Pancreatic Diseases, Indian Pancreas Club, New Delhi, August 2005.
14. "Pancreatic stellate cells and fibrosis" National Conference on Pancreatic Diseases, Indian Pancreas Club, New Delhi, August 2005.

15. "Epithelial-stromal interactions in the pathogenesis of pancreatic cancer" Symposium on Inflammation and Fibrosis, Mexican Digestive Disease Week, Mexico City, November 2005.
16. "The battle-scarred pancreas : Role of alcohol and pancreatic stellate cells" The First International Symposium on Alcoholic Liver and Pancreatic Diseases, Los Angeles, to be May 2006.
17. "Pancreatic stellate cell signalling". AGA Research Symposium, Annual Meeting of the American Gastroenterological Association, May 2006.
18. "Acetaldehyde and pancreatic MAP kinases". Novartis Foundation Symposium Acetaldehyde-related pathology – bridging the trans-disciplinary divide, September 2006.
19. "Desmoplastic reaction in pancreatic cancer: friend or foe? World Congress of the International Society for Biomedical Research into Alcoholism, September 2006.
20. "What's new in alcoholic pancreatic fibrosis – role of pancreatic stellate cells". World Congress of the International Society for Biomedical Research into Alcoholism, September 2006.
21. "Pleasure today, pain tomorrow: alcohol and chronic pancreatitis". Symposium on Alcohol and the Pancreas, American Pancreatic Association and International Association of Pancreatology Joint Meeting, November 2006.
22. "Alcohol and the Pancreas" Symposium on Alcohol and Organ Damage, European Society for Biomedical Research into Alcoholism, September 2007.
23. "Exocrine pancreatic secretion-turning the current concept on it's head" Symposium on Pancreatology: what are the next big advances? Pancreas in Paradise, the annual meeting of the Australasian Pancreatic Club, October 2007.
24. "Pathogenesis of alcohol-induced pancreatic disease" 3rd International Symposium on Alcoholic Liver and Pancreatic Diseases and Cirrhosis, Bilbao, Spain July 2008.
25. "Pancreatic stellate cells: major players in alcoholic pancreatitis and pancreatic cancer" Symposium on Alcohol, Signaling and ECM turnover, Joint 2008 International Society for Biomedical Research into Alcoholism(ISBRA)/RSA, June 2008.
26. "Pancreatic stellate cells in chronic pancreatitis and cancer." The APA Lustgarten Symposium on the Chronic Pancreatitis to Pancreatic Cancer Continuum, American Pancreatic Association meeting, Chicago, USA, November 2008.
27. "Scrambled signalling in the pancreas - effects of ethanol and its metabolites." Annual Meeting of the Research Society on Alcoholism, San Diego, USA, June 2009.
28. "Pancreatic stellate cells: partners in crime with pancreatic cancer cells". Symposium on Integrated Signalling in Tumor/Stromal Interaction, Keystone Symposia on Molecular and Cellular Biology, to be held in Victoria, British Columbia, March 2010.

29. "Role of pancreatic stellate cells in chronic pancreatitis". Symposium on Chronic Pancreatitis : Pathogenesis to Treatment, Joint Meeting of the International Association of Pancreatology and the Japan Pancreas Society, Fukuoka, July 2010
30. "Alcohol and pancreatic cancer" ISBRA Satellite Meeting and Nordmann Award Meeting to be held in Heidelberg September 2010.
31. "Role of pancreatic stellate cells in chronic pancreatitis" Joint meeting of the International Association of Pancreatology and the Indian Pancreas Club, to be held in Kochi, India, February 2011.
32. "Pancreatic stellate cells" Consensus meeting on Pancreatic Stellate Cell Biology to be held in Ulm, Germany, March 2011.
33. "Pancreatic stellate cell biology: what's new? 43<sup>rd</sup> Meeting of the European Pancreatic Club to be held in Magdeburg, Germany, June 2011.
34. Session Chair "Recent Advances in Chronic Pancreatitis" Asian Oceanic Pancreatic Association Scientific Meeting, to be held in Seoul, Korea, September 2011
35. "Pancreatic stellate cells and pancreatic cancer" The 6<sup>th</sup> International Symposium on ALPD and Cirrhosis "From Stem Cells to Global Health" to be held in Fukuoka, Japan, October 2011.

### **National Conferences :**

1. "Desmoplastic reactions: what's happening at the tumour edge?" Australian Gastroenterology Week, Gastroenterological Society of Australia, October, 1999.
2. "Modern concepts in pathophysiology of pancreatitis." Australian Gastroenterology Week, Gastroenterological Society of Australia, October, 1999.
3. "New approaches to chronic pancreatitis". Symposium titled "Offerings from Science", Australian Gastroenterology Week, Cairns, October 2003.
4. "Pancreatic stellate cells : their claim to fame" Symposium titled "Researchers on the Move", Australian Gastroenterology Week, Cairns, October 2003.
5. "Stromal interactions: how it subverts the body and hosts and promotes cancer progression. Annual Scientific Meeting of the Australasian Gastrointestinal Trials Group, Sanctuary Cove, September 2004.
6. "Pancreatic cancer". Australian Institute of Medical Scientists National Scientific Meeting, Sydney, July 2005.

7. "Hepatobiliary and rare tumours: opportunities for translational research in clinical trials" Annual Scientific Meeting of the Australasian Gastrointestinal Trials Group, Brisbane, October 2005.
8. "New insights into pancreatic fibrogenesis" Australian Gastroenterology Week, Sydney, October 2009.
9. "Experimental models of alcoholic pancreatitis" Annual Meeting of the Australasian Pancreatic Club, Melbourne, November 2010.

***Other Invited Presentations :***

1. "Pathogenesis of alcoholic pancreatitis". Sydney Gut Club, April, 1993.
2. "Effects of ethanol on pancreatic digestive enzymes". Department of Surgery, Massachusetts General Hospital, Boston, USA, May, 1994.
3. "Alcoholic pancreatitis." Department of Gastroenterology, University of Rostock, Rostock, Germany, July, 2000.
4. "Role of pancreatic stellate cells in the pathogenesis of pancreatic cancer." Department of Pathology, Liverpool Hospital, Sydney, Australia, June 2001.
5. "The Drinker's Pancreas" Grand Rounds, South Western Area Gastroenterology Service, Bankstown-Lidcombe Hospital, August 2001.
6. "Role of pancreatic stellate cells in fibrogenesis" Australasian Pancreatic Club Meeting, Sydney, Australia, March 2002.
7. "Stellate cells and the drinker's pancreas" Gut Club, Sydney, Australia, November 2002.
8. "Pancreatic stellate cells : new kids on the block" Seminar, ANZAC Research Institute, Concord Hospital, September 2003.
9. "Alcohol and pancreatic stellate cells". Research Seminar, Department of Medicine, Veterans Affairs Greater Los Angeles Healthcare System, November, 2003.
10. "Pancreatic fibrogenesis" Department of Gastroenterology, University of Leipzig, Germany, October 2004.
11. "Tumour-stromal interactions in pancreatic cancer ; role of pancreatic stellate cells". Department of Gastroenterology, Endocrinology and Internal Medicine, University of Greifswald, Germany, October 2004.
12. "Desmoplastic reaction in pancreatic cancer: friend or foe?" Department of Cancer Biology's Seminar Series, MD Anderson Cancer Center, Houston, May 2005.
13. "Pancreatology in Australia : current clinical practice and research" Inaugural International Meeting of the Asian Oceanic Pancreatic Association, Tokyo, July 2005.

14. "Pathogenesis of pancreatic fibrosis" Dept of Surgery, Tufts New England Medical Center, Boston, May 2006.
15. "Role of pancreatic stellate cells in pancreatic cancer" Dept of Surgery, University of Massachusetts, Worcester, May 2006.
16. "Pancreatic stellate cells : partners in crime with pancreatic cancer cells" Department of Surgery, University of Minneapolis, Minneapolis, May 2008.
17. "Alcohol, endotoxin and the pancreas – To drink or not to drink, is that the question?" Department of Surgery, University of Minneapolis, Minneapolis, May 2008.
18. "Pancreatic stellate cells and pancreatic cancer cells: an unholy alliance" Novartis Pharmaceuticals, Boston, June 2008.
19. "Pancreatic stellate cells : partners in crime with pancreatic cancer cells" Department of Surgery, Royal North Shore Hospital, Sydney, October 2008.
20. "Alcoholic pancreatitis and pancreatic cancer – what's new?" Department of Gastroenterology and Hepatology, Kasturba Medical College, Manipal, India, November 2008.
21. "Pancreatic stellate cells and pancreatic cancer cells: an unholy alliance" Oncology Group, Prince of Wales Hospital, Sydney, April 2009.
22. "Role of pancreatic stellate cells in alcoholic pancreatitis, pancreatic cancer and exocrine secretion" Alcohol Research Group seminar, VA Medical Centre, UCLA, Los Angeles, June 2009.
23. "Pancreatic stellate cells – what's new? Centenary Research Institute Seminar Series, Royal Prince Alfred Hospital, Sydney, July 2009

**Reviewer of Manuscripts for :**

Gut  
 Gastroenterology  
 American Journal of Physiology  
 American Journal of Pathology  
 Pancreas  
 Pancreatology  
 Biochemical Pharmacology  
 Free Radical Research  
 Journal of Laboratory and Clinical Medicine  
 Journal of Gastroenterology and Hepatology  
 Laboratory Investigation  
 Molecular Cancer  
 World Journal of Gastroenterology

**Reviewer of PhD theses** : University of Sydney, University of Melbourne, Flinders University

**Appointed Editor-in-Chief of the journal Pancreatology (September 2010)**

**Member, Editorial Board, American Journal of Physiology**

**Member, Editorial Board, Pancreas**

**Member, Editorial Board, Pancreatology**

**Member, Editorial Board, World Journal of Gastroenterology**

**Member, Editorial Board, Journal of Gastroenterology and Hepatology**

***Reviewer of Grant Applications for :***

National Health and Medical Research Council, Australia

National Medical Research Council, Singapore

Wellcome Trust, UK

Cancer Research, UK

Auckland Medical Research Council, New Zealand

Health Research Council, New Zealand

***Membership of Committees :***

Member Academic Board, UNSW

Member Committee on Research of the Academic Board, UNSW

Deputy

Presiding Member (2007-2008) Animal Care and Ethics Committee B, UNSW

Member Ethics Online Steering Committee, UNSW

Member (2007-2008) Qualifications Committee (for A/Prof promotions), UNSW

Presiding Member Faculty of Medicine

Chair Faculty Standing Committee, Faculty of Medicine, UNSW

Chair Faculty Board, Faculty of Medicine, UNSW

Chair Higher Degree Committee, Faculty of Medicine, UNSW

Member Faculty Education Committee, Faculty of Medicine, UNSW

Chair Assessment Review Group, Faculty of Medicine, UNSW

Member Honours Sub-Committee, Faculty of Medicine, UNSW

Member (2007-2008) Independent Learning Program Committee, Faculty of Medicine, UNSW

Member	Postgraduate Research Students Subcommittee, Faculty of Medicine, UNSW
Member	Faculty of Medicine Research Management Committee
Member	Faculty Research Grants Program Assessment Committee
Founding Member and Past President	Australasian Pancreatic Club (APC)
Founding Member	Asian Oceanic Pancreatic Association (AOPA)
Member	Research Committee, Gastroenterological Society of Australia
Member	International Society for Biomedical Research in Alcoholism (ISBRA) Membership Committee
Member	Abstract Selection Committee, European Pancreatic Club
Member	Abstract Selection Committee, American Pancreatic Association

### ***Supervision of Students and Staff :***

#### **Supervisor for**

J McCarroll, PhD, 2001-2004	<b>PhD</b> , Project title : “Molecular mechanisms of pancreatic stellate cell activation”
P Phillips, PhD, 2001-2004	<b>PhD</b> , Project title : “Role of pancreatic Stellate cells in extracellular matrix remodelling”
S Park, PhD, 2001-	<b>PhD</b> , Project Title : “Role of pancreatic stellate cells in the pathogenesis of pancreatic cancer”. <i>(Student discontinued studies in 2003 for family reasons).</i>
S Joshi, PhD, 2005 -2006	<b>PhD</b> , Project Title : “Epithelial-mesenchymal interactions in pancreatic cancer : role of pancreatic stellate cells” <i>(Student discontinued studies in 2006 for family reasons).</i>
A Vonlaufen, 2007- 2009	<b>PhD</b> , Project title : “Pathogenesis of alcoholic pancreatitis”
Z.Xu, 2007-	<b>PhD</b> , Project title : “Pathogenesis of pancreatic cancer”
S Yang, 2007-	<b>MSc</b> , Project title : “Alcohol and the pancreas”
E Chow 2008	<b>BSc Honours</b> , Project title : “Gene profiling of pancreatic stellate cells in pancreatic cancer”

#### **Co-supervisor for**

E Colvin, PhD, 2006-	<b>PhD</b> , Project Title : “Molecular biology of pancreatic cancer”
----------------------	---

### ***Other Published Works (Abstracts) :***

1. Bhagwandeem SB, **Apte M**, Manwarring L, Dickeson J. Endotoxin induced hepatitis in alcoholic fatty livers of rats. Proc. Aust. Soc. for Exper. Pathol., 15th Annual Meeting, 1983. Oral presentation to the Australian Society for Experimental Pathology, 1983.
2. Bhagwandeem SB, **Apte M**, Banathy L. The spectrum of alcohol related hepatic injury in previously healthy road traffic accident victims. Oral presentation to the 28th Annual Conference of the Royal College of Pathologists of Australasia, 1983.
3. Bhagwandeem SB, **Apte M**, Manwarring L, Dickeson J. Alcoholic liver disease : Clinical and experimental aspects. Plenary Address, 24th Annual Congress of the South African Society of Pathologists, 1984.
4. Donnelly LP, Wilson JS, **Apte M**, Pirola RC. (1988) Chronic ethanol feeding depresses lipogenesis in rat adipose tissue. Aust NZ J Med, 18: 25. Oral presentation to the Australian Society of Medical Research, December, 1987.
5. Wilson JS, Donnelly LP, **Apte M**, Pirola RC. (1989) Effects of ethanol and protein deficiency on pancreatic lysosomes. Aust NZ J Med. 18: 68. Oral presentation to the Gastroenterological Society of Australia, May, 1988.
6. Wilson JS, **Apte M**, Thomas MC, Pirola RC. (1990) Cholesteryl esters may mediate the injurious effects of ethanol and protein deficiency on the pancreas. Gastroenterology, 98: A240.
7. Wilson JS, **Apte M**, Thomas MC, Pirola RC. (1990) Effect of cholesteryl esters on pancreatic lysosomes. Aust NZ J Med 20: 376. Oral presentation to the Gastroenterological Society of Australia, May, 1990.
8. **Apte M**, Wilson JS, Thomas MC, Pirola RC. (1990), Effects of ethanol, acetaldehyde and cholesteryl esters on pancreatic lysosomes. Proceedings of the 1990 World Congresses of Gastroenterology. Poster presentation to the World Congresses of Gastroenterology, August, 1990.
9. Haber PS, Wilson JS, **Apte M**, Pirola RC. (1991) Fatty acid ethyl esters increase pancreatic lysosomal fragility in vitro. Pancreas 6: 702. Poster presentation to the American Pancreatic Association, October, 1991.
10. **Apte M**, Wilson JS, McCaughan GW, Korsten MA, Haber PS, Pirola RC. (1993) Ethanol and dietary protein deficiency alter gene expression of pancreatic digestive enzymes. Gastroenterology 104: A293. Poster presentation to the American Gastroenterological Association, May, 1993.
11. Haber PS, Wilson JS, **Apte M**, Pirola RC. (1993) Chronic ethanol consumption increases rat pancreatic zymogen granule fragility. Gastroenterology 104: A307. Poster presentation to the American Gastroenterological Association, May, 1993.
12. **Apte M**, Wilson JS, McCaughan GW, Haber PS, Pirola RC. (1993) Effects of ethanol on gene expression of pancreatic digestive and lysosomal enzymes. J Gastroenterol

- Hepatol 8:A25. Oral presentation (plenary session) to the Gastroenterological Society of Australia, September, 1993.
13. **Apte M**, Wilson JS, McCaughan GW, Korsten MA, Haber PS, Pirola RC. (1994) Ethanol-induced alterations in gene expression correlate with the glandular content of pancreatic enzymes. *Gastroenterology* 106:A283. Oral presentation to the American Gastroenterological Association, May, 1994.
  14. **Apte M**, Wilson JS, McCaughan GW, Haber PS, Pirola RC. Ethanol-induced alterations in gene expression correlate with glandular content of pancreatic enzymes. Poster presentation to the International Society of Biomedical Research into Alcoholism, Gold Coast, June 1994.
  15. **Apte M**, Wilson JS, McCaughan GW, Norton ID, Pirola RC. (1994). Ethanol and dietary protein deficiency increase gene expression of pancreatic lithostathine. *J Gastroenterol Hepatol* 9:A93. Oral presentation (plenary session) to the Gastroenterological Society of Australia, September, 1994.
  16. Norton ID, **Apte MV**, Trent R, Pirola RC, Wilson JS. (1994) Heterozygosity for cystic fibrosis  $\Delta F$ -508 mutation does not predispose alcoholics to pancreatitis. *J Gastroenterol Hepatol* 9:A89. Poster presentation to the Gastroenterological Society of Australia, September, 1994.
  17. **Apte M**, Wilson JS, McCaughan GW, M Korsten, I Norton, Pirola RC. (1994) Ethanol and dietary protein deficiency increase gene expression of pancreatic lithostathine. *International Journal of Pancreatology*, 16:325. Oral presentation at the International Association of Pancreatology Meeting, November, 1994.
  18. Norton ID, **Apte MV**, Veronese M, McCaughan GW, Pirola RC, Wilson JS. (1995) Rat pancreatic cytochrome P-450 2E1 (CYP2E1) mRNA is not increased by chronic ethanol feeding. *Gastroenterology* 108:A380.
  19. **Apte M**, Norton I, Haber P, McCaughan G, Korsten M, Pirola R, Wilson J. (1995) Chronic ethanol administration increases gene expression of GP2 in rat pancreas. *Gastroenterology* 108:A342. Oral presentation to the American Gastroenterological Association Meeting, May, 1995.
  20. Norton ID, **Apte MV**, Dixon H, Trent RJ, Pirola RC, Wilson JS. Cystic fibrosis heterozygosity and alcoholic pancreatitis. *Gastroenterology* 108:A380. Poster presentation to the American Gastroenterological Association Meeting, May, 1995.
  21. **Apte M**, Norton I, Haber P, McCaughan G, Korsten M, Pirola R, Wilson J. (1995) Chronic ethanol administration decreases rat pancreatic GP2 content. *J Gastroenterol Hepatol* 10:A27. Oral presentation to the Gastroenterological Society of Australia, October, 1995.
  22. Haber P, **Apte M**, Norton I, Korsten M, Pirola R, Wilson J. (1995). Does the pancreas metabolise ethanol? *J Gastroenterol Hepatol* 10:A34. Oral presentation (plenary session) to the Gastroenterological Society of Australia, October, 1995.

23. Norton I, **Apte M**, Haber P, McCaughan G, Korsten M, Pirola R, Wilson J. (1996) P4502E1 is present in rat pancreas and is induced by chronic ethanol administration. *Gastroenterology* 110:A1280, 1996. Poster presentation to the American Gastroenterological Association, May, 1996.
24. Norton I, **Apte M**, Haber P, McCaughan G, Korsten M, Pirola R, Wilson J. (1996) P4502E1 is present in rat pancreas and is induced by chronic ethanol administration. *J Gastroenterol Hepatol* 11:A87. Oral presentation to the Gastroenterological Society of Australia, September, 1996.
25. Norton I, **Apte M**, Haber P, Applegate T, Tuch B, Crouch R, McCaughan G, Pirola R, Wilson J. (1996) Pancreatic apoptosis and oxidant stress in a rat model of chronic iron overload. *J Gastroenterol Hepatol* 11:A113. Poster presentation to the Gastroenterological Society of Australia, September, 1996.
26. Haber PS, **Apte MV**, Norton ID, Korsten MA, Pirola RC, Wilson JS. (1996) Ethanol oxidation by pancreatic acinar cells is comparable to that of hepatocytes. *Gastroenterology* 110:A394, 1996. Poster presentation to the American Gastroenterological Association.
27. Norton I, **Apte M**, Haber P, Applegate T, Tuch B, Crouch R, McCaughan G, Pirola R, Wilson J. (1996) Pancreatic apoptosis and oxidant stress in a rat model of chronic iron overload. *Pancreas* 13:A452. Poster presentation to the American Pancreatic Association, November, 1996.
28. **Apte M**, Norton I, Haber P, Applegate T, McCaughan G, Korsten M, Pirola R, Wilson J. Ethanol-induced increases in pancreatic enzyme content - a dietary artefact? *Gastroenterology* 112:A426,1997. Poster presentation to the American Gastroenterological Association, May, 1997.
29. Haber PS, Norton ID, **Apte MV**, Applegate TL, Korsten MA. Identification of stellate cells in the rat pancreas. *Gastroenterology* 112:A446,1997. Poster presentation to the American Gastroenterological Association, May, 1997.
30. **Apte M**, Haber P, Applegate T, Norton I, Korsten M, Pirola R, Wilson J. Generation of fatty acid ethyl esters by rat pancreatic acini: comparison of oxidative and non-oxidative ethanol metabolism. *Gastroenterology* 112:A426,1997. Poster presentation to the American Gastroenterological Association, May, 1997.
31. **Apte M**, Norton I, Haber P, Applegate T, McCaughan G, Korsten M, Pirola R, Wilson J. Ethanol-induced increases in pancreatic enzyme content - a dietary artefact?. *J Gastroenterol Hepatol*, 12:A54, 1997. Poster presentation to the Gastroenterological Society of Australia, October, 1997.
32. Norton I, **Apte M**, Haber P, Lux O, Pirola R, Wilson J. Chronic ethanol administration causes oxidative stress in the rat pancreas. *J Gastroenterol Hepatol*, 12:A34, 1997. Poster presentation to the Gastroenterological Society of Australia, October, 1997.
33. **Apte MV**, Haber PS, Applegate TL, Norton ID, Pirola, RC, Wilson JS. Identification, isolation and culture of stellate cells from rat pancreas. *J Gastroenterol Hepatol*,

- 12:A69, 1997. Oral (plenary) presentation to the Gastroenterological Society of Australia, October, 1997.
34. **Apte MV**, Haber PS, Applegate TL, Norton ID, Pirola, RC, Wilson JS. Identification, isolation and culture of stellate cells from rat pancreas. *Pancreas* 14:A495, 1997. Oral presentation to the American Pancreatic Association, November, 1997.
  35. Haber PS, Norton ID, Norris MD, **Apte MV**, Pirola RC, Roberts-Thomson IC, Wilson JS. Is the 5T mutation in intron 8 of the cystic fibrosis gene associated with alcoholic pancreatitis? *Gastroenterology*, 114:A466, 1998. Poster presentation at the annual meeting of the American Gastroenterological Association, May 1998.
  36. Haber P, Keogh G, **Apte M**, Moran C, Pirola R, McCaughan G, Korsten M, Wilson J. Pancreatic stellate cells are activated in human and experimental pancreatic fibrosis. *Gastroenterology*, 114:A466, 1998. Poster presentation at the annual meeting of the American Gastroenterological Association, May 1998.
  37. Haber PS, Norton ID, Norris MD, **Apte MV**, Pirola RC, Roberts-Thomson IC, Wilson JS. Is the 5T mutation in intron 8 of the cystic fibrosis gene associated with alcoholic pancreatitis? *J Gastroenterol Hepatol*, 13:A165, 1998. Poster presentation at the annual meeting of the American Gastroenterological Association, May 1998.
  38. **Apte MV**, Haber PS, Moran CS, McCaughan GW, Korsten MA, Pirola, RC, Wilson JS. Pancreatic stellate cells produce collagen and other extracellular matrix proteins and exhibit a proliferative response to platelet-derived growth factor (PDGF). *Gastroenterology*, 114:A438, 1998. Oral presentation at the annual meeting of the American Gastroenterological Association, May 1998.
  39. Haber P, Keogh G, **Apte M**, Moran C, Pirola R, McCaughan G, Korsten M, Wilson J. Pancreatic stellate cells are activated in human and experimental pancreatic fibrosis. *J Gastroenterol Hepatol*, 13:A181, 1998. Miniposter presentation at the annual meeting of the Gastroenterological Society of Australia, October, 1998.
  40. **Apte MV**, Haber PS, Moran CS, McCaughan GW, Korsten MA, Pirola, RC, Wilson JS. Pancreatic stellate cells produce collagen and are activated by proinflammatory cytokines. *J Gastroenterol Hepatol*, 13:A181, 1998. Miniposter presentation at the annual meeting of the Gastroenterological Society of Australia, October, 1998.
  41. Haber P, Keogh G, **Apte M**, Moran C, Pirola R, McCaughan G, Korsten M, Wilson J. Pancreatic stellate cells are activated in human and experimental pancreatic fibrosis. *Pancreas* 44:437, 1998. Oral presentation at the annual meeting of the American Pancreatic Association, November, 1998.
  42. **Apte MV**, Haber PS, Darby SJ, Rodgers SC, McCaughan GW, Korsten MA, Pirola, RC, Wilson JS. Fibrogenic effect of oxidant stress on pancreatic stellate cells. *Pancreas* 44:424, 1998. Oral presentation at the annual meeting of the American Pancreatic Association, November, 1998.
  43. Norton I, Butler W, Roberts-Thomson I, Frenzer A, **Apte MV**, Pirola RC, Wilson JS.

Do polymorphisms in the cytochrome P450E1 gene predispose heavy drinkers to pancreatitis or cirrhosis? *Gastroenterology*, 116:A1153, 1999.

44. **Apte MV**, Haber PS, Darby SJ, Rodgers SC, McCaughan GW, Korsten MA, Pirola RC, Wilson JS. Activation of pancreatic stellate cells by ethanol and its metabolite acetaldehyde: implications for alcohol-induced pancreatic fibrosis. *Gastroenterology*, 116:A1176, 1999. Poster presentation at the annual meeting of the American Gastroenterological Association, May 1999.
45. **Apte M**, Darby S, Phillips P, Fahmy R, McCaughan G, Pirola R, Wilson J. Alcohol causes pancreatic fibrosis via activation of pancreatic stellate cells : an in vitro study. *J Gastroenterol Hepatol*, 14:A115, 1999. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 1999.
46. **Apte M**, Darby S, Phillips P, Fahmy R, McCaughan G, Korsten M, Pirola R, Wilson J. Role of pancreatic stellate cells in the pathogenesis of alcoholic pancreatic fibrosis. *Pancreas*, 14:414, 1999. Oral presentation at the annual meeting of the American Pancreatic Association, November, 1999.
47. Mews PJ, Phillips PA, Fahmy RG, McCaughan GW, Korsten MA, Pirola RC, Wilson JS, **Apte MV**. Pancreatic stellate cells are activated by tumour necrosis factor  $\alpha$  (TNF $\alpha$ ) - implications for pancreatic fibrogenesis. *Gastroenterology* 118:A424, 2000. Poster presentation at the annual meeting of the American Gastroenterological Association, May 2000.
48. Mews P, Phillips P, Korsten M, Pirola R, Wilson JS, **Apte MV**. Collagen synthesis by pancreatic stellate cells - response to inflammatory cytokines. *Digestion* 61:258, 2000. Oral presentation at the annual meeting of the European Pancreatic Club, July 2000.
49. Mews P, Phillips P, Korsten M, Pirola R, Wilson JS, **Apte MV**. Collagen synthesis by pancreatic stellate cells - response to inflammatory cytokines. *Journal of Gastroenterology and Hepatology* 15:J18, 2000. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2000.
50. Phillips P, Pirola R, McCaughan G, Korsten M, Wilson J, **Apte M**. Pancreatic stellate cells secrete matrix metalloproteinases - implications for extracellular matrix turnover. *Journal of Gastroenterology and Hepatology* 15:J74, 2000. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2000.
51. Phillips P, Pirola R, McCaughan G, Korsten M, Wilson J, **Apte M**. Pancreatic stellate cells secrete matrix metalloproteinases - implications for extracellular matrix turnover. *Pancreas* 21:470, 2000. Oral presentation to the American Pancreatic Association, November, 2000
52. **Apte M**, Keating J, Phillips P, Friess H, Buchler M, Kosten M, Pirola R, McCaughan G, Korsten M, Wilson J. Endogenous expression of proinflammatory cytokines and nerve growth factor by pancreatic stellate cells - implications for fibrosis and neural changes in chronic pancreatitis. *Journal of Gastroenterology and*

- Hepatology 16:A114, 2001. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, September, 2001.
53. Phillips P, Wu M-J, McCarroll J, Park S, Korsten M, Wilson J, **Apte M**. Migratory capacity of pancreatic stellate cells and its stimulation by platelet-derived growth factor (PDGF). *Pancreas* 23:455, 2001. Oral presentation to the American Pancreatic Association, November, 2001.
  54. **Apte M**, Keating J, Phillips P, Friess H, Buchler M, Kosten M, Pirola R, McCaughan G, Korsten M, Wilson J. Endogenous expression of proinflammatory cytokines and nerve growth factor by pancreatic stellate cells - implications for fibrosis and neural changes in chronic pancreatitis. *Pancreas* 23:428, 2001. Oral presentation to the American Pancreatic Association, November, 2001.
  55. McCarroll J, Phillips P, Wu M-J, Park S, Korsten M, Wilson J, **Apte M**. Both ethanol and acetaldehyde induce MAP kinase activity in pancreatic stellate cells. *Pancreas* 23:450, 2001. Poster presentation at the annual meeting of the American Pancreatic Association, November, 2001.
  56. Phillips P, Wu M-J, McCarroll J, Park S, Korsten M, Wilson J, **Apte M**. Migratory capacity of pancreatic stellate cells and its stimulation by platelet-derived growth factor (PDGF). Poster presentation to the World Congress of Gastroenterology, 2002.
  57. McCarroll J, Phillips P, Wu M-J, Park S, Korsten M, Wilson J, **Apte M**. Both ethanol and acetaldehyde induce MAP kinase activity in pancreatic stellate cells. Poster presentation to the World Congress of Gastroenterology, 2002.
  58. Phillips P, Wu M-J, McCarroll J, Park S, Korsten M, Wilson J, **Apte M**. Pancreatic stellate cell migration: Effect of basement membrane components and role of the phosphatidylinositol 3' kinase (PI3 kinase) pathway. *Gastroenterology*, 122: A4152, 2002. Poster presentation at the annual meeting of the American Gastroenterological Association, May 2002.
  59. J. McCarroll, P. Phillips, S. Park, E. Doherty, R. Pirola, J. Wilson, **M. Apte**. Activation of pancreatic stellate cells by ethanol and acetaldehyde is mediated by the p38 kinase pathway. *Journal of Gastroenterology and Hepatology* 17:A183, 2002. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2002.
  60. S. Park, P. Phillips, R.K Kumar, E. Doherty, J. McCarroll, R. Pirola, J. Wilson, **M. Apte**. Tumour-stromal interactions in the pathogenesis of pancreatic cancer. *Journal of Gastroenterology and Hepatology* 17:A184, 2002. Poster presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2002.
  61. P. Phillips, M-J. Wu, E. Doherty, R.K. Kumar, J. McCarroll, S. Park, R. Pirola, J. Wilson, **M. Apte**. Cell migration : A novel aspect of pancreatic stellate cell biology. *Journal of Gastroenterology and Hepatology* 17:A184, 2002. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2002.

62. S. Park, P. Phillips, R.K Kumar, E. Doherty, J. McCarroll, R. Pirola, J. Wilson, **M. Apte**. Tumour-stromal interactions in the pathogenesis of pancreatic cancer. *Pancreas* 25:444, 2002. Oral presentation at the annual meeting of the American Pancreatic Association, November, 2002.
63. J. McCarroll, P. Phillips, R. Pirola, J. Wilson, **M. Apte**. Oxidant stress induces the MAP kinase pathway in pancreatic stellate cells. *Gastroenterology* 24:A-616, 2003. Poster presentation to the American Gastroenterological Association, May 2003.
64. JA McCarroll, PA Phillips, N Santucci, R Pirola, J Wilson, **M Apte**. Vitamin A induces quiescence in culture-activated pancreatic stellate cells – potential as an anti-fibrotic agent? *Journal of Gastroenterology and Hepatology* 18:B122, 2003. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2003.
65. PA Phillips, JA McCarroll, RK Kumar, S Park, R Pirola, JS Wilson, **M Apte**. Cross-talk between two major platelet derived growth factor (PDGF) - induced signalling pathways in pancreatic stellate cells. *Journal of Gastroenterology and Hepatology* 18:B110, 2003. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2003.
66. JA McCarroll, PA Phillips, N Santucci, R Pirola, J Wilson, **M Apte**. Oxidant stress stimulates mitogen activated protein kinase (MAPK) and protein kinase C (PKC) activation in pancreatic stellate cells. *Journal of Gastroenterology and Hepatology* 18:B118, 2003. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2003.
67. JA McCarroll, PA Phillips, N Santucci, R Pirola, J Wilson, **M Apte**. Vitamin A induces quiescence in culture-activated pancreatic stellate cells – potential as an anti-fibrotic agent? *Pancreas* 27:396, 2003. Oral presentation at the annual meeting of the American Pancreatic Association, November, 2003.
68. PA Phillips, JA McCarroll, RK Kumar, S Park, R Pirola, JS Wilson, **M Apte**. Cross-talk between two major platelet derived growth factor (PDGF) - induced signalling pathways in pancreatic stellate cells. *Pancreas* 27:402, 2003. Oral presentation at the annual meeting of the American Pancreatic Association, November, 2003.
69. P. Phillips, J. McCarroll, N. Santucci, R. Pirola, J. Wilson, M. Apte. Chronic alcohol feeding activates pancreatic stellate cells in vivo - role in alcoholic pancreatic fibrosis. Submitted for the annual meeting of the American Gastroenterological Association to be held in May 2004.
70. JA McCarroll, PA Phillips, N Santucci, R Pirola, J Wilson, **M Apte**. Vitamin A induces quiescence in culture-activated pancreatic stellate cells – potential as an anti-fibrotic agent? Oral presentation at the annual meeting of the Australasian Pancreatic Club, April 2004.
71. PA Phillips, JA McCarroll, RK Kumar, S Park, R Pirola, JS Wilson, **M Apte**. Cross-talk between two major platelet derived growth factor (PDGF) - induced signalling pathways in pancreatic stellate cells. Oral presentation at the annual meeting of the Australasian Pancreatic Club, April 2004.

72. N Santucci, S Park, P Phillips, M Buchler, H Friess, D Goldstein, J McCarroll, N Merrett, R Pirola, J Wilson, **M Apte**. Tumour cell – stromal cell interactions in the pathogenesis of pancreatic cancer. Oral presentation at the annual meeting of the Australasian Pancreatic Club, April 2004.
73. PA Phillips, JA McCarroll, RK Kumar, S Park, R Pirola, JS Wilson, **M Apte**. Chronic ethanol feeding induces TIMP2 secretion by pancreatic stellate cells - role in alcoholic pancreatic fibrosis. *Journal of Gastroenterology and Hepatology* 19:A249, 2004. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2004.
74. McCarroll J, Phillips P, Santucci N, Pirola R, Wilson J, **Apte M**. Alcoholic pancreatic fibrosis: role of the phosphatidylinositol-3 kinase (PI3-k) and protein kinase C (PKC) pathways in pancreatic stellate cells. *Journal of Gastroenterology and Hepatology* 18:A245, 2004. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2004.
75. N Santucci, P Phillips, S Park, M Buchler, H Friess, D Goldstein, J McCarroll, N Merrett, R Pirola, J Wilson, **M Apte**. Interaction between stromal and epithelial cells: role in the pathogenesis of pancreatic cancer. *Journal of Gastroenterology and Hepatology* 19:A284, 2004. Poster presentation at the annual meeting of the Gastroenterological Society of Australia, October, 2004.
76. PA Phillips, JA McCarroll, RK Kumar, S Park, R Pirola, JS Wilson, **M Apte**. Chronic ethanol feeding induces TIMP2 secretion by pancreatic stellate cells - role in alcoholic pancreatic fibrosis. *Pancreas* 29:346, 2004. Poster presentation at the annual meeting of the American Pancreatic Association, November, 2004.
77. McCarroll J, Phillips P, Santucci N, Pirola R, Wilson J, **Apte M**. Alcoholic pancreatic fibrosis: role of the phosphatidylinositol-3 kinase (PI3-K) and protein kinase C (PKC) pathways in pancreatic stellate cells. *Pancreas* 29:347, 2004. Oral presentation at the annual meeting of the American Pancreatic Association, November, 2004.
78. Richard Hu, Y-L Wang, Peggy Hong, Mouad Edderkaoui, Mo Shahsahebi, Aurelia Lugea, **Minoti V. Apte**, Anna Gukovskaya and Stephen J. Pandol. Pancreatic stellate cell NADPH oxidase system and its regulation by ethanol and growth factors. Poster presentation at the annual meeting of the American Gastroenterological Association, May 2005.
79. McCarroll J, Phillips P, Santucci N, Pirola R, Wilson J, **Apte M**. Does chronic ethanol administration sensitise rat pancreatic stellate cells to proinflammatory cytokines? Poster presentation at the annual meeting of the American Gastroenterological Association, May 2005.
80. Xu XH, Qu CF, McCarroll J, Phillips P, Pirola R, Wilson J, **Apte M**. Cholecystokinin activates intracellular signalling pathways in pancreatic stellate cells. *Pancreas* 31:479, 2005. Oral presentation at the annual meeting of the American Pancreatic Association held in November 2005.

81. Qu CF, Phillips P, Joshi S, Pirola RC, Wilson J, Goldstein D, **Apte M**. Epithelial-stromal interactions in pancreatic cancer : do pancreatic cancer cells actively recruit host stromal cells for their own benefit? Poster presentation at the Peter McCallum Cancer Institute Workshop, Melbourne, November 2005.
82. Qu CF, Phillips P, Joshi S, Pirola RC, Wilson J, Goldstein D, **Apte M**. Tumorstromal interactions in pancreatic cancer. Poster presentation at the annual meeting of the American Association of Cancer Research to be held in Philadelphia, USA April 2005.
83. Vonlaufen A, Xu ZH, Joshi S, Daniel B, Kumar RK, Pirola RC, Wilson JS, **Apte MV**. Bacterial endotoxin – a trigger factor for alcoholic pancreatitis? Findings of a novel physiologically relevant model. *Pancreas* 33:505, 2006. Oral presentation at the American Pancreatic Association meeting, Chicago, November 2006.
84. Joshi S, Vonlaufen A, Xu ZH, Kumar RK, Goldstein D, Pirola RC, Wilson JS, **Apte MV**. Pancreatic stellate cells stimulate pancreatic cancer growth and metastasis. Evidence from a novel, orthotopic model. *Pancreas* 33:472, 2006. Oral presentation at the American Pancreatic Association meeting, Chicago, November 2006.
85. Xu Z, Vonlaufen A, Shulkes A, Pirola RC, Wilson JS, **Apte MV**. Do pancreatic stellate cells play a role in exocrine pancreatic secretion? Poster presentation at the annual meeting of the American Gastroenterological Association, May, 2007.
86. Vonlaufen A, Xu Z, Daniel B, Joshi S, Kumar RK, Pirola RC, Wilson JS, **Apte MV**. Bacterial endotoxin – a trigger factor for alcoholic pancreatitis? Evidence from a novel, physiologically relevant animal model. Oral presentation at the Hepatology and Luminal Workshop, Gastroenterological Society of Australia, June 2007.
87. Vonlaufen A, Joshi S, Qu CF, Phillips P, Xu Z, Parker N, Pirola RC, Wilson JS, Goldstein D, **Apte MV**. Pancreatic stellate cells stimulate pancreatic cancer growth and metastasis : findings of a novel orthotopic model of pancreatic cancer. Oral presentation at Australian Gastroenterology week, October 2007.
88. Vonlaufen A, Xu Z, Yang L, Phillips P, Pirola RC, Wilson JS, **Apte MV**. Isolation of quiescent (normal) human pancreatic stellate cells : a useful in vitro tool for studies of human pancreatic stellate cell biology. Poster presentation at the annual meeting of the American Pancreatic Association, November 2007.
89. Vonlaufen A, Xu ZH, Yang S, Phillips P, J Zhang, Pirola RC, Wilson JS, **Apte MV**. Abstinence promotes regression while continued alcohol intake promotes progression of LPS-induced pancreatic injury in alcohol-fed rats. Selected for poster presentation at the annual meeting of the American Gastroenterological Association, to be held in May 2008 and the Joint 2008 International Society for Biomedical Research into Alcoholism(ISBRA)/RSA to be held in June 2008.
90. Phillips PA, Yang L, Vonlaufen A, Xu Z, Pirola R, Wilson JS and **Apte MV**. Heat shock proteins are differentially regulated during pancreatic stellate cell activation. *Journal of Gastroenterology and Hepatology* 23:A308, 2008. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October 2008.

91. Vonlaufen A, Xu ZH, Yang S, Phillips P, J Zhang, Pirola RC, Wilson JS, **Apte MV**. Abstinence promotes regression while continued alcohol intake promotes persistence of LPS-induced pancreatic injury in alcohol-fed rats. *Journal of Gastroenterology and Hepatology* 23:A308, 2008. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, October 2008.
92. Z Xu, A Vonlaufen, PA Phillips, E Fiala-Ber, L Yang, A Biankin, D Goldstein, R Pirola, J Wilson, **M Apte**. Pancreatic stellate cells stimulate angiogenesis in pancreatic cancer and accompany pancreatic cancer cells to distant metastatic sites. *Pancreas* 37(4): 502, 2008. Oral presentation at the annual meeting of the American Pancreatic Association, November 2008.
93. Vonlaufen A, Xu ZH, Yang S, Phillips P, J Zhang, Pirola RC, Wilson JS, **Apte MV**. Abstinence promotes regression while continued alcohol intake promotes persistence of LPS-induced pancreatic injury in alcohol-fed rats. *Pancreas* 37(4): 499, 2008. Poster presentation at the annual meeting of the American Pancreatic Association, November 2008.
94. Vonlaufen A, Xu ZH, Yang S, Phillips P, J Zhang, Pirola RC, Wilson JS, **Apte MV**. Abstinence promotes regression while continued alcohol intake promotes progression of LPS-induced pancreatic injury in alcohol-fed rats. *Gastroenterology* 134:A585, 2008. Poster presentation at the annual meeting of the American Gastroenterological Association, May 2008.
95. Phillips PA, Yang L, Vonlaufen A, Xu Z, Pirola R, Wilson JS and **Apte MV**. Heat shock proteins are differentially regulated during pancreatic stellate cell activation. *Pancreas* 37(4): 489, 2008. Oral presentation at the annual meeting of the American Pancreatic Association, November 2008.
96. PA Phillips \*, E Chow \*, A Vonlaufen, Z Xu, L Yang, A Biankin, D Goldstein, R Pirola, J Wilson, and **MV Apte**. Gene expression profiling of human pancreatic stellate cells and their roles in pancreatic cancer progression. Poster presentation at the annual meeting of the American Association of Cancer Research, Denver Colorado, April 2009.
97. PA Phillips, L Yang, A Vonlaufen, Z Xu, A Biankin, D Goldstein, R Pirola, JS Wilson and **MV Apte**. Heat shock proteins are induced during pancreatic stellate cell activation in pancreatic cancer. Poster presentation at the annual meeting of the American Association of Cancer Research, Denver Colorado, April 2009.
98. Vonlaufen A, Phillips P, Xu ZH, Zhang X, Yang L, Wilson JS, **Apte MV**. Alcohol withdrawal promotes regression of pancreatic fibrosis via induction of pancreatic stellate cell (PSC apoptosis). *Gastroenterology* 136:A589-590, 2009. Poster presentation at the American Gastroenterological Association, May 2009.
99. PA Phillips, L Yang, A Vonlaufen, Z Xu, A Biankin, D Goldstein, R Pirola, JS Wilson and **MV Apte**. Heat shock proteins are induced during pancreatic stellate cell activation in pancreatic cancer. *Gastroenterology* 136:A277, 2009. Poster presentation at the American Gastroenterological Association, Chicago, May 2009.

100. Phillips PA, Yang L, Vonlaufen A, Xu Z, Pirola R, **Apte M\*** and Wilson J\*. Pancreatic stellate cells synthesise and secrete acetylcholine: a potential role in enzyme secretion. \*Equal senior authors. Oral presentation at the European Pancreatic Club, Szeged, Hungary, July 2009.
101. PA Phillips, L Yang, A Vonlaufen, Z Xu, A Biankin, D Goldstein, R Pirola, JS Wilson and **MV Apte**. Heat shock proteins are induced during pancreatic stellate cell activation in pancreatic cancer. *Journal of Gastroenterology and Hepatology* 24: A 334, 2009. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, Sydney, October 2009.
102. Phillips PA, Yang L, Vonlaufen A, Xu Z, Pirola R, **Apte M\*** and Wilson J\*. Pancreatic stellate cells synthesise and secrete acetylcholine: a potential role in enzyme secretion. \*Equal senior authors. *Journal of Gastroenterology and Hepatology* 24: A335, 2009. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, Sydney, October 2009.
103. PA Phillips, E Chow, A Vonlaufen, Z Xu, L Yang, A Biankin, D Goldstein, R Pirola, J Wilson, and **MV Apte**. Gene expression profiling of human pancreatic stellate cells and their roles in pancreatic cancer progression. *Journal of Gastroenterology and Hepatology* 24: A333, 2009. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, Sydney, October 2009.
104. Vonlaufen A, Phillips P, Xu ZH, Zhang X, Yang L, Wilson JS, **Apte MV**. Alcohol withdrawal promotes regression of pancreatic fibrosis via induction of pancreatic stellate cell (PSC apoptosis). *Journal of Gastroenterology and Hepatology* 24: A333, 2009. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, Sydney, October 2009.
105. Z Xu, PA Phillips, A Vonlaufen, E Fiala-Ber, X Zhang, L Yang, AV Biankin, D Goldstein, RC Pirola, JS Wilson, and **MV Apte**. Pancreatic stellate cells (stromal cells) migrate with pancreatic cancer cells to distant metastatic sites. *Journal of Gastroenterology and Hepatology* 24: A334, 2009. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, Sydney, October 2009.
106. L Yang, PA Phillips, A Vonlaufen, W Kaplan, M Cowley, R Pirola, J Wilson, and **MV Apte**. Gene expression profiling of rat pancreatic stellate cells. *Pancreas* 38: 1064, 2009. Poster presentation at the annual scientific meeting of the American Pancreatic Association to be held in Honolulu, November 2009.
107. PA Phillips , L Yang , A Poljak , S Bustamante , A Shulkes , A Vonlaufen , Z Xu , M Guilhaus , R Pirola , **M Apte\*** and J Wilson\*. \*Equal senior authors. Pancreatic stellate cells stimulate acinar enzyme secretion via the production of acetylcholine. *Pancreas* 38: 1038, 2009. Poster presentation the annual scientific meeting of the American Pancreatic Association to be held in Honolulu, November 2009.
108. Z. Xu, P.A. Phillips, A. Vonlaufen, E. Fiala-Ber, L. Yang, A. Biankin, D. Goldstein, R. Pirola, J. Wilson, **M. Apte**. Normal pancreatic stellate cells facilitate pancreatic cancer progression, exhibit transendothelial migration and accompany

- cancer cells to distant metastatic sites. *Pancreas* 38: 1062, 2009. Oral presentation at the American Pancreatic Association to be held in Honolulu, November 2009.
109. J Liu, J McCarroll, **MV Apte**, J Youkhana, M Kavallaris and PA Phillips.  $\beta$ -Tubulin mediates sensitivity to chemotherapeutic drugs in pancreatic cancer cells. Poster presentation at the annual meeting of the European Pancreatic Club, Stockholm, June 2010.
  110. Yang L, Phillips PA, Vonlaufen A, Kaplan W, Cowley M, Pirola R, Wilson J, **Apte MV**. Collagen I induces the expression of transgelin and lumican (regulators of cell migration) in pancreatic stellate cells. Poster presentation at the annual meeting of the European Pancreatic Club, Stockholm, June 2010.
  111. Yang L, Phillips PA, Xu Z, Youkhana J, Vonlaufen A, Pirola R, Wilson J, **Apte MV**. Collagen I induces the expression of transgelin and lumican (regulators of cell migration) by activated pancreatic stellate cells. Poster presentation at the annual meeting of the Gastroenterological Society of Australia, to be held on the Gold Coast, October 2010.
  112. Liu J, McCarroll J, **Apte MV**, Youkhana J, Kavallaris M and Phillips PA. Beta-tubulin mediates sensitivity to chemotherapeutic drugs in pancreatic cancer cells. Poster presentation at the annual meeting of the Gastroenterological Society of Australia, to be held on the Gold Coast, October 2010.
  113. Fiala-Ber E, Xu Z, Phillips PA, Yang L, Goldstein D, Pirola R, Wilson JS, and **Apte MV**. Role of pancreatic stellate cells in pancreatic cancer: the urokinase plasminogen activator system. Oral presentation at the annual meeting of the Gastroenterological Society of Australia, to be held on the Gold Coast, October 2010.
  114. Hepatocyte growth factor: a potential therapeutic target in pancreatic cancer. Arun SJ, Xu Z, Fiala-Ber E, Phillips PA, Goldstein D, Biankin A, Pirola R, Wilson JS, **Apte MV**. Accepted for poster presentation at the annual meeting of the American Association of Cancer Research (AACR), to be held in Orlando, Florida, April 2011.