1. History and Mission

The Centre for Strategic Economic Studies (CSES) was established by the Council of Victoria University in May 1993. One of the six Designated University Centres, the CSES is located at the City Campus of Victoria University, 300 Flinders Street, Melbourne.

Professor Peter J. Sheehan is the Founding Director of the Centre. He is supported by a team of professional staff involved in research and business activities and by graduate students enrolled in both PhD and DBA degree programs.

The mission of the Centre is to:

- address long-term, strategic economic and social issues of international concern and significance;
- consider, in doing so, the role of both general ideas and specific institutions, and the relationship between ideas and institutions;
- develop a specific focus on basic issues relevant to Australia’s future, with special reference to the Asian region; and
- develop and train a body of graduate students with the motivation and skills to address these strategic issues in the future.

In fulfilling this mission, the Centre pursues activities in three main areas: research on long-term economic, social and technological issues; commercial activities, including publications, conferences and electronic data services; and postgraduate research training.

2. Research Programs

The Centre’s research programs focus on the massive processes of economic, technological and social change taking place in the contemporary world. They seek to develop an understanding of the causes and consequences of these global processes of change, and of the appropriate policy responses in different situations to the challenges arising. The Centre’s six main research programs are noted below.

Growth, trade and development

This program concerns the nature and causes of the emerging global knowledge economy and the implications of these trends for individual industries regions and countries. Particular attention is given to the effects of the integration of economies through trade, financial markets and knowledge flows, and to the policy implications – at regional, national and international levels – of this integration.

Governance and regional economies

This program addresses the impact of economic and social change on regional economies, both sub-national and supra-national, and the appropriate policy responses at different levels of government to the new trends. Particular attention is given to
impacts at or below the state or province level, and to the effect of these changes on existing institutions and structures, such as fiscal arrangements between national and regional governments.

**Inequality and work**

The global changes noted above are bringing about fundamental changes in the nature of work, in the supply of jobs and the skills required, and in the distribution of the rewards from working. This program addresses these issues, exploring their implications for increasing inequality across individuals, families and regions, as well as potential policy responses.

**Information technologies and the information industries**

This program focuses on the economic and organisational impacts of Information and Communication Technologies (ICTs), including information industry development and policy; the application of ICTs across the economy; consequent structural changes in the economy; emerging business models for information-based businesses; and statistical indicators of information industries and information infrastructure development.

**Sustainable development and the environment**

This program focuses on the issues involved in achieving a sustainable development path, both nationally and internationally. Particular emphasis has been given to the development of numerical growth models incorporating environmental effects, including climate change, to the impact of technological change and to optimal policy responses.

**Technology, innovation and industrial change**

Work in this program investigates processes of innovation and technological change in both developed and developing economies. Emphasis is placed on the impact of the information technology revolution and the growth of knowledge intensive industries, but the role of innovation across all industrial and service sectors is also a focus of concern.

Within the broad areas of research focus, the Centre has developed a special emphasis on a number of technologies and/or industries. These include:

- information and communications technologies;
- biotechnology and pharmaceuticals, and
- environmentally sustainable technologies.

The Centre has over a period of years built a small but highly qualified team capable of producing high quality research outputs in applied economics with a focus on better understanding the forces of globalisation, the development of the knowledge economy and their implications for economic, social and political change.
3. Projects summary

The Centre has now been in existence for over a decade and has used this time to build a reputation for producing high quality research outputs in applied economics with a focus on better understanding the forces of globalisation, the development of the knowledge economy and their implications for economic, social and political change. More recently, the emphasis has increasingly moved to research programs assessing the impact of new technologies – biotechnology, information technology and nanotechnology. The Centre is largely self-funded and its resources are constrained by its ability to attract grant and contract research income.

The Pharmaceutical Industry Project, funded by the Merck Company Foundation, the Victorian Government and a range of grants from the industry is an important component of the Centre’s external research income. In addition to better understanding the industry, one of the important purposes of the project is to formulate a policy framework, which at once stimulates the development of the biomedical sector and places pharmaceutical pricing in Australia on a more sustainable long term basis. So far over 20 working papers have been produced as part of this program. In March 2004, Prof Peter Sheehan, Bruce Rasmussen and Kim Sweeny attended a conference in Philadelphia to present the results of the project to date.

During the year the Centre commenced work on two projects on generic drugs. One for Medicines Australia, the pharmaceutical industry body, has proved to be instrumental in having the Federal Government substantially revise its proposed policy on the pricing of generics and branded drugs. The other for Pfizer is a more in depth study of the implications for the industry of branded drugs loosing their patent protection.

Also of relevance to developments in the pharmaceutical industry, the Centre began work, with funding from an ARC Linkage grant, to study the convergence of the general purpose technologies, information technology, nanotechnology and biotechnology.

Under funding by an ARC Linkage Grant, the Centre continued to work on a three-year program titled Climate Change, Industrial Structure and the Knowledge Economy involving Prof. Sheehan, Dr Islam and Dr Clarke. The Industry Partners include key stakeholders, the Australian Greenhouse Office, the Department of Industry, Tourism and Resources and the Business Council of Australia. A monograph based on the research output from this project is currently in progress. With the strong interest in climate change this will be a timely contribution to the debate.

Another ARC Linkage project on social indicators was completed in 2004, with a report and presentation to about 40 staff of the two industry partners, the Victorian Department of Premier and Cabinet and World Vision.

There was ongoing activity in the ICT research program, which included Prof. Houghton’s contribution to the OECD Communications Outlook and OECD Information Technology Outlook. Professor Houghton also published a number of
papers based on his report (with Colin Steele of ANU) for DEST on Changing Research Practices, which has created considerable domestic and overseas interest. It suggested that the traditional citation based measures of research quality were much less relevant now that so much research was published on the web. Dr Cheng continued his work on microfinance in China. He has also been leading, on behalf of the World Bank, a survey of Chinese migrant workers to study the methods they use to remit income to their families.

During the year the Centre was contracted by seek.com, the leading internet based recruitment firm to construct an employment index from its job listings data. It is envisaged that in time the index will become established as one of the leading indices of economic activity.

The Director Prof. Peter Sheehan continued in his role as Vice Chair (Academic) of the APEC Life Sciences Forum chaired by the Deputy Prime Minister of Thailand. The Forum attracts participation from senior government and industry representatives in the region.

4. CSES Research Outputs and Activities

The research activities of CSES reflect the broad range of such activities, including preparation and publication of books, research articles, reports, and working papers; conference presentations; internal and external seminar presentations; training programs; workshops; and dissertations of postgraduate research students. Details of these activities for 2004 are presented below.

This year was one in which the Centre made significant progress in expanding its research programs to achieve its overall objectives. This is evident in the comprehensive list of research activities provided in the table below.

<table>
<thead>
<tr>
<th>CSES Research Activities 2004</th>
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<tbody>
<tr>
<td><strong>CSES Research Reports</strong></td>
</tr>
<tr>
<td>The CSES produced a series of research reports during 2004. Below is a short summary of each. Early in the year the CSES finalized a report for the Australian Synchrotron Project titled: <em>The Australian Synchrotron Project: An Economic Impact Study</em>. This was a pathbreaking assessment of a large technology project which included returns to innovation as well as an input output analysis impact study. <strong>Peter Sheehan, Neelam Majaraj</strong> and <strong>Peter Davenport</strong> produced a report for the Catholic Education Commission of Victoria on <em>The Contribution of Catholic Schools to the Victorian Economy and Community</em>. The research was commissioned in response to the Victorian Treasurer, the Hon. John Brumby’s suggestion in mid 2003, that Catholic education demonstrate the contribution it makes to the well-being of the Victorian community and the economy. This was in the context of a discussion about the resourcing needs of Victorian Catholic schools. <strong>Kim Sweeny, John Houghton, Nick Pappas</strong> and <strong>Peter Sheehan</strong> finalised a report to DSTC (Distribution Systems Technology Centre, University of Queensland) in July titled <em>The Economic Benefits of the Research Program of the Proposed CRCIKC</em>. The CSES was asked by the proponents of the Cooperative Research Centre for Interconnected Knowledge Communities (CRCIKC) to assist them in preparing estimates of the economic benefits to Australia of the proposed CRC’s research program. Some of the information in this report was included in the business case developed as part of the CRC application. <strong>John Houghton</strong> (CSES) and Lyndal Thorburn (Advance Consulting &amp; Evaluation)</td>
</tr>
</tbody>
</table>
produced a report titled *The Victorian Electronics Industry Cluster*, prepared for the Victorian Department of Industry, Innovation and Regional Development on behalf of the Australian Electrical and Electronic Manufacturers Association (AEEMA). This report is a contribution to a better understanding of the entire electronics value chain – from the design and manufacture of components and inputs to electronics manufacturing, through manufacturing and assembly, wholesale and retail distribution, installation, maintenance and repair of electrical and electronic equipment.

**John Houghton** has also produced 2 reports for the OECD and there are another 2 forthcoming in 2005. See section below on OECD visits and reports.

Later in the year **Peter Sheehan** (CSES) and John Wiseman (ICEPA) finalized a report to Victoria University prepared by the CSES and the Institute for Community Engagement and Policy Alternatives (Victoria University) to inform future investment choices for the western region of Melbourne. Its purpose is to bring together existing data and research on trends and prospects for the region, to provide an analytical starting point for a more integrated and strategic approach to future regional policy development and investment priorities.

Lastly, **Enjiang Cheng** produced two reports listed below , see entry Microfinance projects in the section.

<table>
<thead>
<tr>
<th>APEC Life Sciences</th>
<th>In 2003, <strong>Peter Sheehan</strong> was given one of 4 Vice Chairs in the APEC Life Sciences Innovations Forum (LSIF). Chaired by H.E. Suwit Khunkitti, Deputy Prime Minister of Thailand, one of the main objectives of the LSIF Experts Group Meeting is to develop a Life Sciences Matrix of Best Practices. Professor Sheehan travelled to Thailand in February 2004 (12–13) to the Experts Meeting in Khon Kaen, where life sciences experts from the Asia-Pacific Region met as the first step in developing the APEC LSIF Strategic Plan. He travelled to Washington DC on 10–11 June 2004 to attended a meeting of the leaders of the Forum. And on 16–17 September 2004 he presented a paper titled: ‘A Framework for Success in the Asia Pacific Region: Implementing the Leaders’ Instructions for the Life Sciences Innovation Strategic Plan’, at the Second Annual APEC LSIF in Penang, Malaysia.</th>
</tr>
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<tbody>
<tr>
<td>Invited conference papers</td>
<td>Centre staff presented a series of invited conference papers. The complete list can be seen in the Publications section below. A total of 23 papers were presented of which 8 were overseas. <strong>Peter Sheehan</strong> was invited keynote speaker for two at them, an ABN AMRO Morgans Generic Drug Conference and the Technology Futures Conference, National Electronics Industry Conference.</td>
</tr>
<tr>
<td>Merck Project PPPI Conference USA</td>
<td>On 1–2 March 2004, <strong>Peter Sheehan</strong>, <strong>Bruce Rasmussen</strong> and <strong>Kim Sweeny</strong> travelled to Pennsylvania to present two papers at the Merck Company Foundation Program on Pharmaceutical Policy Issues (PPPI), Policy Conference 2004 as part of the ongoing CSES project on Global Change and Local Regulation in the Pharmaceutical Industry. Financial support for this project is provided by the Victorian Government and the Merck Company Foundation Program on Pharmaceutical Industry Issues. The Merck Program involves an international group of leading centres conducting research into the pharmaceutical industry, which meet biennially to discuss the progress of their research.</td>
</tr>
</tbody>
</table>
| ARC Discovery and Linkage Grants | In 2004, the Centre had 3 ARC grants in progress. The first was an ARC Linkage Grant titled General Purpose Technologies, Complementarities and the Convergence of Industries: A Comparative Study of Information Technology, Biotechnology and Nanotechnology, commencing in 2003, with $150,000 granted over 3 years. Chief Investigators from the CSES are **Peter Sheehan**, **John Houghton** and **Greg Tegart**; and Partner Investigator is David Charles from the Allen Consulting Group. Industry Partners were the Commonwealth Department of Industry, Tourism and Resources, Starpharma, AusBiotech, IBM and the Victorian Department of Innovation, Industry and Regional Development.

A second ARC Linkage Grant reached its final year in 2004 titled Climate Change, Industrial Structure and the Knowledge Economy, commencing in 2002, with $189,000 granted over 3 years. The Chief Investigators from CSES are **Peter Sheehan** and **Sardar Islam**; with John Phillimore from Murdoch University as Chief Investigator and Mohan Munasinghe from the United Nations as Partner Investigator.

A third ARC Linkage grant also was finalised in 2004 titled S. M. N. Islam, A Universal Approach to Sustainable Development: Economic, Environmental and Social Indicators in Australia and Southeast Asia, commencing in 2003 with $87,000 granted over 2 years. Chief Investigators were Sardar Islam from CSES and Phillip Lawn from Flinders University. |
| OECD visit and reports | In 2004, **John Houghton** visited the Paris-based Organisation for Economic Cooperation and Development (OECD) during September and October, as well as working as an |
external consultant to the OECD during the year. The primary purpose of the visit was to contribute to the 2005 edition of the OECD's flagship Communications Outlook report. This work involved researching and writing chapters on Broadband and Internet Infrastructure, Trade in Communications Equipment, and Employment and Productivity in Communications. While there, John was also able to complete other work for the OECD relating to Digital Delivery in Services and Content Industries, involving the preparation of three reports on digital delivery in Transport and Logistics, Travel and Tourism and Scientific Publishing. Previous work for the OECD has included contributions to the OECD's Information Technology Outlook reports in 2002 and 2004, and reports on Digital Delivery of Business Services in 2004.

Microfinance projects China

Enjiang Cheng worked on several projects on microfinance in China. Firstly he was chief investigator in a project to conduct a ‘Study on Domestic Money Transfer for Migrant Workers in China’, organized by the CGAP of the World Bank. Secondly he produced two report and International Microfinance Specialist title: ‘AUSAID Qianjiang Poverty Reduction Project, Mid term Assessment’ and ‘Jinyuan and Jintai Poverty Reduction Project’, a design mission for designing the community fund program in Gansu of China organized by NZAID.

Pfizer lunch

On 30 September 2004, the Centre hosted a lunch on behalf of the Vice Chancellor for Dr. Peter Corr. He is Vice President, Science and Technology, Pfizer Inc (USA) and is global head of Pfizer’s research and development programme. Along with other guests from Pfizer, the Centre assembled a cross-section of guests from academia, business and government for Dr. Corr to meet.

ALP National Conference

At the invitation of Senator Kate Lundy (then Shadow Minister for IT and The Arts) John Houghton was guest speaker at the National ALP Conference in Sydney in January 2004, where he led discussion on ICT policy in the ALP Fringe Event ‘Tackling the ICT Trade Deficit’.

WIDER Working Paper

Matthew Clarke was asked to write a working paper at the World Institute for Development Economics Research (WIDER) (United Nations University, Helsinki), titled E-development? Development and the New Economy (2004, UNU/WIDER Policy Brief No. 7). WIDER’s mission is to undertake multidisciplinary research and policy analysis on structural changes affecting the living conditions of the world's poorest people.

Xining Meeting

The Asian Development Bank (ADB) and China's Ministry of Finance organised the seminars in August 2004 in Xining (Qinghai province) for disseminating knowledge about fiscal policy, fiscal coordination and fiscal management. Senior officials from the Ministry of Finance as well as Provincial Finance Bureaus were invited to attend the seminars. National and international presenters were invited to discuss key issues under pre-assigned topics. Each presentation was followed by a discussion during which questions were raised from the floor. Bhajan Grewal and Peter Sheehan were both among the invited experts. Their participation is valuable for both CSES and Victoria University not only for the recognition accorded to them, but also for facilitating future professional contacts in China and the ADB.

ADB Financial Training

The Centre for Strategic Economic Studies was selected by the Asian Development Bank (ADB) to coordinate a training program for China's Ministry of Finance in February 2004. A group of 20 officials came to Australia from 9 to 27 February for this purpose.

As a part of a broader project that is aimed at strengthening China’s capacity for fiscal management, the training program was designed to provide a clear understanding of Australia’s fiscal management framework – its legal basis, key elements, fiscal rules, forecasting and reporting requirements, key institutional structures, and how the framework relates to international best practice benchmarks. Bhajan Grewal of the CSES, and a former member of staff of the Department of Treasury and Finance, was Team Leader for the overall ADB project. Training sessions were carried out in Melbourne, Sydney, Canberra and Brisbane and involved the State Treasury Departments, Commonwealth Treasury and the Reserve Bank of Australia. Presentations to the group were made by Peter Sheehan (2), Bhajan Grewal (2) and Bruce Rasmussen (1).

Impact of Nanotechnology Report

The Department of Innovation, Industry and Regional Development (DIIRD) of the Victorian Government sought input into the development of the a small-scale technologies strategy to address the issues raised in the CSES report prepared for DIIRD (Small Scale Technologies: Directions for Victoria, 2003). The comments and suggestions, along with outputs generated by industry focus groups, will inform the development of a SST strategy by identifying opportunities that will guide Victoria’s future investment in small scale technologies. Responses were required by 7 May 2004. The document was made available at:
Three papers have been identified citing CSES authors.


There are also a series of reports and documents citing **John Houghton’s** work and his papers are on some reading lists also. A sample of some of these are:

- UK House Of Commons Science and Technology Committee Vol 2 [http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39902.htm](http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39902.htm)
- ILO via Belgium [http://www.bib.ulb.ac.be/cdrom/wer_lawitie/back/haw_end.htm](http://www.bib.ulb.ac.be/cdrom/wer_lawitie/back/haw_end.htm)
- EMCC European Foundation [http://www.emcc.eurofound.eu.int/content/source/tn04004s.html?p1=sector&p2=Consultancy_Business_Services](http://www.emcc.eurofound.eu.int/content/source/tn04004s.html?p1=sector&p2=Consultancy_Business_Services)
- Reading lists:
  - U Conn [http://www.lib.uconn.edu/about/publications/scholcommreadinglist.htm](http://www.lib.uconn.edu/about/publications/scholcommreadinglist.htm)
  - Johns Hopkins [http://openaccess.jhmi.edu/readings.cfm](http://openaccess.jhmi.edu/readings.cfm)

There are also many citations to his OECD reports.

**Review of CSES book**


“This visionary book comes at a particularly critical time in China’s history as it seeks to pursue more market-oriented reforms while integrating itself more fully with the global economy. …[i]t takes a snapshot of a diverse landscape of viewpoints, drawing on contributions from some of the key policy makers from China as well as in the Asian region. … Overall this book is an enlightening read for policymakers directly working with knowledge economy issues… [i]t incorporates a broad range of perspectives and the editors must be commended for weaving these together into a coherent and informative whole. The book is also a very interesting model, as similar volumes could be produced for other developing countries seeking to navigate the global knowledge economy.”
CSES Total Output 2004 (* DEST approved)

**Summary**

- Books: 3
- Chapters in books: 3
- Forthcoming chapters in books: 11
- Journal articles refereed: 12
- Journal articles refereed forthcoming: 10
- Contract and technical reports: 14
- External working papers: 1
- Invited conference presentations: 25
- Conference publications refereed (also listed in presentations): 3
- Conference presentations refereed: 8
- Conference presentations others: 6
- External seminars: 3
- Internal seminars (incl. Financial Modelling Program): 2
- Working papers: 8
- Other outputs: 7
- Book reviews: 3

**Books**


**Chapters in books**


**Journal articles refereed**


Contract and technical reports

External working papers

Conference publications refereed*
Economic Cooperation and Development (OECD), OECD, Paris.


Invited conference presentations


Conference presentations referred


Other conference presentations


5. December.


External seminars and training


Internal seminars


Financial Modelling Program seminars


Working papers


Other outputs


Book reviews of CSES publications


   ‘This visionary book comes at a particularly critical time in China’s history as it seeks to pursue more market-oriented reforms while integrating itself more fully with the global economy. …[it] takes a snapshot of a diverse landscape of viewpoints, drawing on contributions from some of the key policy makers from China as well as in the Asian region. … Overall this book is an enlightening read for policymakers directly working with knowledge economy issues… [it] incorporates a broad range of perspectives and the editors must be commended for weaving these together into a coherent and informative whole. The book is also a very interesting model, as similar volumes could be produced for other developing countries seeking to navigate the global knowledge economy.’

2. Erik Baark (Hong Kong University of Science and Technology) 2004, ‘Book review of China’s Future in the Knowledge Economy’, Asian-Pacific Economic Literature, vol. 18, no. 1, p. 62

   ‘…this volume provides an excellent overview of the key challenges for China and a range of valuable scholarly analysis of economic trends and policy issues.’


5. Staff and Students

The Centre has over a period of years built a small but highly qualified team capable of producing high quality research outputs in applied economics with a focus on better understanding the forces of globalisation, the development of the knowledge economy and their implications for economic, social and political change.
As well as supervising PhD students enrolled directly with Centre, CSES staff are also involved as supervisors of the thesis component of a number of DBA students enrolled with the Faculty. In some instances CSES also supervises PhD students enrolled outside the Centre.

**CSES Staff 2004**

Prof. Peter J. Sheehan  Director
Mr Bruce Rasmussen  Deputy Director
Prof. John Houghton  Professorial Fellow
Prof. Bhajan Grewal  Professorial Fellow (part-time)
Prof. Sardar M.N. Islam  Director, Sustainable Development and the Environment Project
Prof. Greg Tegart  Visiting Professor
Mr Kim Sweeny  Principal Projects Officer
Dr Enjiang Cheng  Senior Research Fellow
Dr George Messinis  Research Fellow
Dr Matthew Clark  Research Fellow
Dr Dana Nicolau  Research Fellow (part-time)
Dr Fiona Sun  Research Fellow (part-time)
Ms Alison Welsh  Research Analyst
Mrs Margarita Kumnick  Research Information Coordinator
Mrs Gordana Volkanovska  Administrative Officer

**CSES PhD students 2004**

<table>
<thead>
<tr>
<th>Student</th>
<th>Thesis Title</th>
<th>Supervisor</th>
<th>Year commenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex Es posto</td>
<td>The Impact of Technology on Earnings Inequality in Australia</td>
<td>Peter Sheehan</td>
<td>1998</td>
</tr>
<tr>
<td>Baliira Kalyebara</td>
<td>Using Expected Value of Perfect Information (EVPI) to Improve Capital Budgeting Decision Making</td>
<td>Sardar Islam</td>
<td>2004</td>
</tr>
<tr>
<td>Prabodh Malhotra</td>
<td>Pharmaceutical Industry and Public Health in Developing Countries: A Comparison Study of India and China</td>
<td>Bhajan Grewal</td>
<td>2002</td>
</tr>
<tr>
<td>Valerie McGown</td>
<td>The Effectiveness of Quality Control Systems in Australia and Japan: A Comparative Analysis</td>
<td>Peter Sheehan</td>
<td>1996</td>
</tr>
<tr>
<td>Sonia Mussawir</td>
<td>Material Wealth and the Prisoner's Dilemma: An Approach to Sustainability</td>
<td>Peter Sheehan</td>
<td>2004</td>
</tr>
<tr>
<td>Quynh Anh Pham</td>
<td>Industrialisation in Vietnam: An Analysis of Manufacturing Competitiveness and Policy Options</td>
<td>Peter Sheehan</td>
<td>2004</td>
</tr>
<tr>
<td>Kashif Rashid</td>
<td>Option Pricing and Corporate Governance for the Emerging Financial Markets</td>
<td>Sardar Islam</td>
<td>2004</td>
</tr>
<tr>
<td>Bruce Rasmussen</td>
<td>Development Paths of Australian Biomedical Companies</td>
<td>Peter Sheehan</td>
<td>2003</td>
</tr>
</tbody>
</table>
CSES DBA Students 2004 (enrolled with FBL)

<table>
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<tr>
<th>Student</th>
<th>Title of Thesis</th>
<th>Supervisor</th>
<th>Year started</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arun Anton</td>
<td>Project Appraisal Methods</td>
<td>Sardar Islam</td>
<td>1995</td>
</tr>
<tr>
<td>Socrates Karagiannidis</td>
<td>Mergers And Acquisitions in Australia: Reasons and Timing</td>
<td>Peter Sheehan</td>
<td>1999</td>
</tr>
<tr>
<td>Christina Mak</td>
<td>Cost-Benefit Analysis Related to Pharmacoeconomics</td>
<td>Sardar Islam</td>
<td>1996</td>
</tr>
<tr>
<td>Shahram Sajjadi-Emami</td>
<td>Capital Budgeting</td>
<td>Sardar Islam</td>
<td>1998</td>
</tr>
<tr>
<td>Mohammad Rusydi</td>
<td>The Determination of the Efficient Exchange Rate: Mathematical Models and Applications to Indonesia</td>
<td>Sardar Islam</td>
<td>2003</td>
</tr>
</tbody>
</table>

6. External Collaborators

Australian Greenhouse Office
Australian National University (Professor Bob Gregory)
Bristol Myers Squibb
Business Council of Australia
Department of Industry, Tourism and Resources
Department of Innovation, Industry and Regional Development, Victoria
Department of Premier and Cabinet, Victoria
Eli Lilly (Australia)
Ford Foundation
IBM Life Sciences
Medicines Australia
Merck Company Foundation
Merck, Sharp and Dohme (Australia)
Nanjing Agricultural University
OECD (Dr Graham Vickery and others)
Otemon Gakuin University (Japan)
Pfizer
Russell Sage Foundation
StarPharma
Tsinghua University (China)
University of Melbourne (Professor Jeff Borland)
World Bank
World Vision