

# CRIC

ESRC Centre for Research on Innovation & Competition

# Annual Report

# 2003



THE UNIVERSITY  
*of* MANCHESTER



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# *CRIC Annual Report 2003*

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# *Director's Introduction & Overview of the Year*

**CENTRE FOR RESEARCH ON INNOVATION AND COMPETITION**

**UNIVERSITY OF MANCHESTER AND UMIST**

**ANNUAL REPORT TO ESRC**

**January 1<sup>st</sup> 2003 to December 31<sup>st</sup> 2003.**

## **1. Introduction**

This annual report is shorter than is normally the case and follows a different format. CRIC is in the middle of a Third-Term review for which significant documentation was produced and submitted in January 2004. It was agreed with ESRC, therefore, that this year's report would focus on performance indicators together with a brief commentary of activity since December 2002. This short document summarises the main developments during the year and identifies some highlights and issues which may be of interest to the Research Priorities Board. It can be read in conjunction with the documents for the Third-Term review and the Annual Report for 2003 for a sense of continuity. The Appendix contains the usual array of performance indicators.

## **2. Highlights**

Without question the highlight of the year was the official opening of the new building that houses CRIC and the other centres that constitute the newly formed Institute of Innovation Research in Manchester. We were particularly fortunate that Lord David Sainsbury (Minister for Science) agreed to perform the ceremony and give a lecture on the theme of innovation policy. This event was extremely well attended by colleagues from the University of Manchester and UMIST and was followed by a two day international conference organised under the title, 'Knowledge and Economic and Social Change: New Challenges for Innovation Studies'. Our new accommodation is a converted former Hall of Residence in the Manchester Business School complex, and the conversion cost of circa £5.7 million was met by a grant awarded under the JIF initiative.

In the past year the University of Manchester and UMIST have agreed to form a single University to begin operation in October 2004. Since CRIC has been a cross University institute from the outset, we do not foresee any difficulties in this merger, rather we expect there to be an enhanced emphasis on interdisciplinary research activity which will benefit CRIC.

Since September 2003, CRIC has devoted considerable effort in responding to the opportunity to bid for an exceptional third term of funding. The new 'light touch' approach to evaluation was appreciated, and it provided a useful opportunity to take stock of our programme and the directions in which it is evolving.

### **3. CRIC Advisory Committee**

The CRIC Advisory Committee met on four occasions over the year with two of the meetings devoted to the third term review. We have been able to welcome to the Committee Professor Maureen McKelvey (Chalmers University) and Professor Franco Malerba (Bocconi University), who are distinguished leaders of the international innovation research community in their own right.

We were very pleased to see that Alisdair Keddie was made CB in the New Year's Honours list of 2003.

As always, the contribution and counsel of the Advisory Committee is greatly appreciated; their steer helped materially to produce a concise but informative Evaluation Report. For this we thank Professor Amann and the other members most warmly.

### **4. Research Output**

The last twelve months have been a period of intensive effort as CRIC consolidated its research programme, developed new lines of enquiry and worked toward the delivery of results from several externally funded projects (See Annual Report 2002). In the period we have produced 3 books, 22 chapters in edited volumes and 27 papers in referred journals. A further 5 books, 14 chapters in books and 9 papers in referred journal are in press or have been accepted for publication during this reporting period. Included in the forthcoming volumes are the Proceedings of the Brisbane Club Meeting of 2002 (Edward Elgar) and the Proceedings of the CRIC Polanyi workshop of October 2002 (Manchester University Press)

We are particularly pleased that two of our ventures have led to special issues of good journals. A selection of the Papers from the Polanyi workshop has appeared in The Review of European Sociology, and the proceedings from the Paris workshop of 2001 appeared in the Revue d'Economie Industrielle. This style of publication is particularly pleasing in that it allows us to demonstrate the breadth of our research programme in a way that is rarely possible in a single article.

We have also begun in this period a process of writing three major books that draw together the work of CRIC around the themes of 'Knowledge and Innovation', 'Innovation and Consumption Practice' and 'Distributed Innovation Processes'. We expect these manuscripts to be ready for publication in early 2005 and we are currently exploring the options with publishers. Each book is the responsibility of a small team of authors and we hope to convey in each volume the distinctive cross disciplinary nature of our work.

It is part of the CRIC style to use workshops with twenty to thirty participants as intensive ways of engaging with the wider research community, and in the reporting period we have held four events: 'Industrial Ecology and Spaces of Innovation' (17<sup>th</sup>-18<sup>th</sup> June 2003), 'Digital Games Industries: Development Impact and Direction' (19<sup>th</sup>-20<sup>th</sup> September, 2003); 'Knowledge Intensive Services and Organisational Forms' (26<sup>th</sup>-27<sup>th</sup> November); and, 'Economic Sociology of Innovative Markets' (11<sup>th</sup>-13<sup>th</sup> June) CRIC was also a partner in arranging the inaugural conference for the Institute of Innovation Research on the theme 'Knowledge and Economic and Social Change' (7<sup>th</sup>-9<sup>th</sup> April 2003) which attracted over 150 delegates from around the globe. We have also undertaken preliminary planning for at least four workshops to be held in 2004 on 'Mobile Entertainment', 'Healthy Innovation', 'Organisations and Innovation: New Perspectives on Complexity' (organised jointly with the ESRC Nexus Programme) and 'Trust in Food'. It is our expectation, to produce conference proceedings for several of these workshops in the series published by Manchester University Press.

We continue to be active in international research networks including projects on Trust in Food, (EC funded), MGain (EC Funded) The Uneven Growth of Medical Knowledge (with Columbia University, New York and Università di Siena, Italy), and the Economic Transformation of Europe (a consortium of eight leading European research groups).

In September, Professors Coombs and Howells were recognised by the International Association for the Management of Technology for their 'active and prolific' contributions to research. Professor Metcalfe was elected to the Academy of Social Sciences.

## **5. External Engagement**

CRIC continues to engage with the wider community of academics and users whether in industry or government. The following are illustrative examples.

Drs Harvey and McMeekin, together with Professor Miles, organised a scenario workshop on Bioscience for Non-Food Crops in December 2003 for the Government Industry Forum on Non Food Uses of Crops. It was very well received by the client, who asked the authors to prepare a short summary for submission to Government Ministers.

Professor Metcalfe chaired an Academic panel for the DTI, one of the inputs into the recent Innovation Review, the report from which has been published as a DTI working paper. He also gave lectures at the University of Rio de Janeiro in November 2003 on the implications of the CRIC agenda for developing economies.

Professor Miles took part in the ECORYS-NEI, CRIC and WIFO study 'Business Services: Contribution to Growth and Productivity in the European Union' a first draft of which was presented to the European Commission, Enterprise Directorate-General, and was used in a Communication on Business Services in 2003; the final report will be submitted in spring 2004. Professor Miles has also contributed to UNIDO Foresight workshops in several countries, and together with Dr Tether and Professor Swann, he prepared a report for the

Council for Science and Technology in 2003 entitled 'Knowing How, Knowing Whom: A Study of the Links between the Knowledge Intensive Services Sector and The Science Base'.

Dr Randles has been establishing and coordinating an international e-group on Industrial Ecology which also includes members from UK industry and from the NW region.

Dr Rutter is carrying out work on the consumption of counterfeit goods for the Northern Ireland office and has been successfully engaged with various industrial users, including Microsoft and the Entertainment and Leisure Software publishers Association, on matters of copyright theft in the games industry.

Professor Warde has been a member of the ESRC commissioning panel for the Programme on Cultures of Consumption .He gave a public lecture at the University of Oslo and a presentation to the Unilever Consumer Science Foresight Group.

## **6. Staffing**

In 2003 we said goodbye to Dr. Mark Tomlinson, one of the founder members of the CRIC team. Mark has taken a position at the University of Galway as the Director of an innovation research group. Mark made a very significant input to the creation of CRIC and we are very grateful for all that he contributed. Other members of staff to leave include Dr Karenza Moore who has been appointed to Salford University and Dr Martin Hand who will take up a position at Queens University Ontario in 2004. We thank them and wish them every success as their careers develop. Karenza Moore and Elvira Ulyarra are to be congratulated for gaining their doctorates.

In September 2003, Dr Tether took up a part-time post as Senior Lecturer in Technology Management in UMIST. He continues to work actively on the CRIC programme.

## **7. Ph.D Students**

Andrea Mina completed his Ph.D in December 2003 and the oral examination is anticipated in early 2004.

## **8. Visitors**

CRIC continues to attract fellows from the Marie Curie scheme and we have recently welcomed Pier Paulo Patrucco (Universita di Torino), Miriam Ricci (Universita di Torino), and Francesco Crespi (Universita di Roma). Other short-term visitors included Olga Etchevskaya on a Ford Foundation Scholarship, Freda Wennerstrom (Chalmers University), Professor Hirooka Maasi (Kobe University), Professor Charles Edquist (Lund University) and Professor Antonio D'Agata (Universita di Catania)

## **9. New Grants and Contracts**

New grants and contracts raised during the period include:

Diffusion of Cultures of Consumption (ESRC, £128,500)

Digiplay: Experience and Consequences of Technology, (Seminar Series, £15,400 from ESRC)

Hi-Tech Innovation Seminar, (For the Director General Research Councils, £9,900)

Ecorys Study (£33,700, European Commission) Business Services: Contribution to Growth and Productivity in the European Union.

Technology Strategy evaluation in BNFL (£10,000)

Defining New Products and Processes (Scottish Enterprise, £7,000)

## **10. Summary**

It has been another busy and rewarding year for the CRIC programme and its staff. We continue to benefit from the long-term nature of Centre funding, achieving results that are not possible with a single grant. I thank all of my colleagues and Sharon Hammond and the CRIC Administrative staff in particular for their unstinting and vital support.

J.S. Metcalfe. 19<sup>th</sup> March, 2004.

## Appendix 1: Performance Indicators

### **Indicator Group A: Publications & Dissemination**

#### **A1: Books**

Calderini, M, Garrone, P & Sobrero (eds)  
Corporate Governance, Market Structure and Innovation, Edward Elgar 2003

Metcalf, J, S & Cantner, U (eds)  
Change, Transformation and Development, Physica-Verlag, Heidelberg, 2003

Miozzo, M & Miles, I (eds)  
Internationalisation, Technology and Services, Aldershot, Edward Elgar, 2003

#### **A2: Book Chapters**

Baker, P, Miozzo, M & Miles, I  
‘The Internationalisation of European Services – What Can International Service Transactions Tell Us?’ in Miozzo, M & Miles, I (eds) Internationalisation, Technology and Services, Aldershot, Elgar, A, I, pp 59 – 86, 2003

Bryce, J & Rutter, J  
‘The Gendering of Computer Gaming: Experience and Space’, in Fleming, S & Jones, I (eds), Leisure Cultures: Investigations in Sport, Media and Technology, Leisure Studies Association, pp 3 – 22, 2003

De Liso, N  
‘Globalisation, Tertiariation and Information & Communication Technologies’, proceedings of the IV International Colloquium on Globalisation, New Technologies and Economic Relations, by Teixeira, J (ed), University of Brasilia, pp 139 – 159, December 2003

Hipp, C, Tether, B & Miles, I  
‘The Effects of Innovation in Standardised, Customised and Bespoke Services: Evidence from Germany’ in Tidd, J (University of Sussex) & Frank, M, Hull Service Innovation: Organisational Responses to Technological Opportunities & Market Imperatives, London, pp 175 – 210, 2003

Howells, J  
‘Innovation in Service Industry: the Change of Paradigm’ in Boden M, & Wei J, (eds), Knowledge Intensive Business Service and Innovation, Science Press, Beijing (in Chinese), 2003

McMeekin, A, Green, K, Tomlinson, M, & Walsh, V  
'Innovation by Demand: An Introduction', in McMeekin, A, Green, K, Tomlinson, M, & Walsh, V, (eds) Innovation by Demand: Interdisciplinary Approaches to the Study of Demand and its Role in Innovation, Manchester University Press, 2002

Metcalfe, J, S  
'Institutions and the Knowledge Economy', in Bloch, H (ed) 'Growth and Development in the Global Economy', Edward Elgar, 2003

Metcalfe, J, S  
'Equilibrium and Evolutionary Foundations of Competition and Technology Policy: New Perspectives on the Division of Labour and the Innovation Process', in Pelikan, P & Gerhard Wegner (eds) The Evolutionary Analysis of Economic Policy, Edward Elgar, June 2003

Metcalfe, J, S  
'Knowledge of Growth and the Growth of Knowledge' in Metcalfe, J, S & Cantner, U (eds), Change, Transformation and Development, Physica-Verlag, Heidelberg, 2003.

Metcalfe, J, S  
'Knowledge, Understanding and the Epistemology of Innovative Firms', in Rizzello, S (ed), Cognitive Developments in Economics, Routledge, pp 193 - 217, 2003

Metcalfe, J, S  
'Science, Technology and Innovation Policy' in Wignaraja, G (ed) 'Competitiveness Strategy in Developing Countries: A Manual for Policy Analysis', Routledge Studies in Development Economics, London, 2003

Miles I,  
'Services Innovation: Coming of Age in the Knowledge-based Economy'. In Dankbaar, B (ed) Innovation Management in the Knowledge Economy, London, Imperial College Press, pp 59 – 81, 2003

Miles, I  
'Rethinking Organisation in the Information Society', in Bechmann, G, Krings, B-J & Rader, M (eds) Across the Divide: Work, Organisation and Social Exclusion in the European Information Society, Berlin: Edition Sigma, pp 65 – 89, 2003

Miles I  
'Knowledge Based Economy and Services', in Boden M, & Wei J,(eds), Knowledge Intensive Business Service and Innovation. Science Press, Beijing (in Chinese), 2003

Miles I, Wei J  
'Knowledge-Intensive Business Services', in Boden M, & Wei J,(eds), Knowledge Intensive Business Service and Innovation, Science Press, Beijing (in Chinese), 2003

Miles I, Boden M, Bolisani E

‘New Service Economy: the Development of e-Business’, in Boden M, & Wei J,(eds), Knowledge Intensive Business Service and Innovation, Science Press, Beijing (in Chinese), 2003

Miles I & Boden M

‘IPR Knowledge and Services’ in Boden M, & Wei J,(eds), Knowledge Intensive Business Service and Innovation, Science Press, Beijing (in Chinese), 2003

Miozzo, M & Miles, I

‘The relation between the Internationalisation of Services and the Process of Innovation: A Research Agenda’ in Miozzo, M & Miles, I (eds) Internationalisation, Technology and Services, Edward Elgar, pp 15 – 32, 2003

Miozzo, M & Miles, I

‘Introduction’ in Miozzo, M & Miles, I (eds) Internationalisation, Technology and Services, Edward Elgar, pp 1 – 11, 2003

Montobbio, F

‘Sectoral Dynamics and Structural Change. Stylized Facts and ‘System of Innovation’ Approaches, in Malerba, F (ed) Sectoral Innovations in Europe, Cambridge University Press, Ch. 2, 2003

Randles, S & Tether, B

‘Services, Scale and Structures of Internationalisation: Northwest England’s Environmental Technologies Firms’ in Miozzo, M & Miles, I (eds) Internationalisation, Technology and Services, Edward Elgar, Ch. 10, 2002

Warde, A

‘Continuity and Change in British Restaurants, 1951 – 2001: Evidence from the Good Food Guide’, in Jacobs, M & Scholliers, P (eds), Eating Out in Europe since the Late Eighteenth Century, Oxford, Berg, 2003

### **A3: Refereed Journal Papers**

Anderson, B, Kozul-Wright, Z & Kozul-Wright, R

‘Copyrights, Competition and Development: The Case of the Music Industry’, International Journal of Business and Society, Vol 3 No 1, pp 1 – 26, 2002

Bryce, J & Rutter, J

‘Gender Dynamics and the Social and Spatial Organisation of Computer Gaming’, Leisure Studies, 22 (1), pp 1 – 15, 2003

Calderini, M & Garrone, P

‘The Changing Nature of R & D Telecommunications’, Communication & Strategies, Vol 48 pp 53 – 72, 2002

Coombs R, Harvey M, Tether, B

'Analysing Distributed Processes of Provision and Innovation', Industrial and Corporate Change 12.5 1051-1081, 2003

De Liso, N & Filatrella, G

'Econophysics: The Emergence of a New Science?', Economia Politica, Vol 19 (1), pp 297 – 332, April 2002

Green, K, Harvey, M. and McMeekin A

'Transformations in Food Consumption and Production Systems', Journal of Environmental Policy and Planning, Vol 5 (2), pp 145 – 163, 2003

Harvey, M & Randles, S

'Market Exchanges & "Instituted Economic Process" An Analytical Perspective', Revue d'Economie Industrielle, Special Issue, Vol 101, pp 11 – 30, 2002

Hirooka, M

'Nonlinear Dynamism of Innovation and Business Cycles', Journal of Evolutionary Economics, Vol 13, pp. 549-576, 2003

Howells, J, James, A, and Malik, K

'The Sourcing of Technological Knowledge', R&D Management, Vol 33, pp 395-409, 2003

McMeekin, A & Harvey, M

'The Formation of Bioinformatic Knowledge Markets: An Economies of Knowledge Approach', Revue d'Economie Industrielle, pp 47 – 64, 2002

McMeekin, A, and Green, K

'Social and Economic Dimensions of Biotechnology: An Introduction', New Genetics and Society, Vol 21, No 2, pp 101 – 108, 2002

McMeekin, A, Green, K, and Coombs, R

'What Would Constitute Success for UK Biotechnology in 2005', New Genetics and Society, Vol 21, No 2, pp 213 – 227, 2002

Metcalf, J, S, Ramlogan, R, & Uyarra, E

'Competition, Innovation and Development: The Instituted Connection', Institutions and Economic Development, Vol. 1, No. 1, pp 21 – 62, 2003

Metcalf, J, S

'Industrial Growth and the Theory of Retardation: Precursors of an Adaptive Evolutionary Account of Economic Change', Revue Economique, Vol 54, pp 407 – 431, 2002

Metcalf, J, S

'Technology and Innovation Policy from an Evolutionary Standpoint', Revista Brasileira de Inovação, Vol 1 (3), pp 85 – 122, 2002

Miles, I & Keenan, M

'Two and a Half Cycles of Foresight in the UK', Theorie and Praxis, Vol. 12, Nr. 2, Jahrgang, pp 41 – 49, June 2003

Mina, A

'The Creation of the European Market for Mobile Telephony: Overview of an Instituted Process', International Review of Sociology, Vol. 13 (2), pp. 435-454, 2003

Montobbio, F

'An Evolutionary Model of Industrial Growth and Structural Change', Structural Change and Economic Dynamics, Vol. 13 (4), pp 387 – 414, December 2002

Montobbio, F

'Sectoral Patterns of Innovations and Market Share Dynamics', Cambridge Journal of Economics, Vol. 27, pp 523 – 545, 2003

Randles, S

'Issues for a Neo-Polanyian Research Agenda in Economic Sociology', International Review of Sociology, Vol. 2, pp 409 – 434, July 2003

Ray, K, Savage, M, Tampubolon, G, Warde, A, Longhurst, V & Tomlinson, M –

'The Exclusiveness of the Political Field: Networks and Political Mobilisation', Social Movement Studies, 2 (1), pp 37 – 60, 2003

Salazar, A, Hackney, R and Howells, J

'The Strategic Impact of Internet Technology in Biotechnology and Pharmaceutical Firms: Insights from a Knowledge Management Perspective', Innovation Technology and Management, Vol.4, pp 289-301, 2003

Schwerin, J & Werker, C

'Learning Innovation Policy Based on Historical Experience', Structural Change and Economic Dynamics, Vol. 14, (4) pp 385 – 404, December 2003

Southerton, D

'Squeezing Time': Allocating Practices, Co-ordinating Networks and Scheduling Society'. Time & Society, 12 (1) pp 5 – 25, 2003

Southerton, D

'Boundaries of Us and Them: Class, Mobility and Identification in a New Town', Sociology, Vol 36 (1), 2002

Tether, B., & Metcalfe, J.S

'Horndal at Heathrow? Co-production, Learning and Innovation – Investigating the Processes of Runway Capacity Creation at Europe's Most Congested Airports', Industrial and Corporate Change, Vol 12.3, 437-476, 2003

Warde, A, Tampubolon, G, Tomlinson, M, Ray, K, Longhurst, B & Savage, M  
'Trends in Social Capital: Membership of Associations in England and Wales', British Journal of Political Science, Vol 33 (2), pp 515 – 25, 2003

#### **A4: Non-Refereed Journal Papers**

Bryce, J & Rutter, J  
'Editorial Comment', in Bryce, J & Rutter, J (Eds), Information, Communication and Society, 6 (4), pp v – xi, 2003

Miles, I & Tether, B  
'Innovation in the Service Economy' IPTS report No 71 (available online at: <http://www.jrc.es/>), pp 45 – 51, February 2003

#### **A5: Other Publications**

Andersen, B, Howells, J, Miles, I & Roberts, J  
'Literature Review: Innovation and Protection in the Service Industries', in FhG-ISI: 2003, Patents in the Service Industries, Karlsruhe, FhG-ISI, available at: [ftp://ftp.cordis.lu/pub/indicators/docs/ind\\_report\\_fraunhofer1.pdf](ftp://ftp.cordis.lu/pub/indicators/docs/ind_report_fraunhofer1.pdf) , March 2003

Bryce, J & Rutter, J  
Special Issue 'Digital Games and Society, Information, Communication and Society' Vol. 6 (4), 2003

Bryce, J & Rutter, J  
Special Issue of Games Studies, 3 (1), June 2003

Hand, M, Shove, E & Southerton, D  
'Explaining Daily Showering: a Discussion of Policy and Practice', ESRC Sustainable Technologies Programme Working Paper, No. 2003/4

James, A  
Special Issue 'Healthy Business? Capabilities, Complexity and Restructuring in Pharmaceuticals', Technology Analysis and Strategic Management, V 14 (3), 2002

Keenan, M, Miles, I & Ova, J, K  
Handbook of Knowledge Society Foresight, European Foundation, Dublin, available at: <http://www.eurofound.eu.int/transversal/foresight.htm> 2003

Miles, I  
'The Transport Sector', Report FhG-ISI: 2003, Patents in the Service Industries, Karlsruhe, FhG-ISI, section 4.3.4.3, pp 102 – 10, March 2003, available at: [ftp://ftp.cordis.lu/pub/indicators/docs/ind\\_report\\_fraunhofer1.pdf](ftp://ftp.cordis.lu/pub/indicators/docs/ind_report_fraunhofer1.pdf)

Miles, I

'Scenario Planning' in Foresight Methodologies – Training Module 2, Vienna, UNIDO V.03-8775 (available online at: <http://www.unido.org/file-storage/download/?file%5fid=1657>) pp 69 – 98, 2003

Ramlogan, R & Harvey, M

Special Issue 'Polanyian Perspectives on Instituted Economic Processes, Development and Transformation', International Review of Sociology, Vol. 13, No. 2, 2003

Randles, S

Special Issue 'Healthy Business? Capabilities, Complexity and Restructuring in Pharmaceuticals', Technology Analysis and Strategic Management, Vol 14 (3), September 2002

### **A6: CRIC Working, Discussion and Briefing Papers**

The working, discussion and briefing paper series is an important vehicle for CRIC to present its preliminary research results. Discussion Papers are used by the Centre to communicate quickly work in progress to our audiences. Typically these papers are submitted for publication to academic journals after revision. Working Papers are more finalised pieces of work. They often relate quite closely to published work but may contain more detail or data than would be appropriate for an academic journal. Some of these papers may be the basis for future monographs. They have an ISBN number. Briefing Papers are prepared for specific, usually non-academic audiences. They provide a concise account of the main conclusions arising from a piece of CRIC research. The working, discussion and briefing paper series are edited by Professor Coombs. All working and discussion papers are refereed outside of CRIC. A full listing is available on the web site from which they may be downloaded. <http://les1.man.ac.uk/cric>

### **Discussion Paper Series**

Harvey, M & McMeekin, A

'Brazilian Genomics and Bioinformatics: Instituting Innovation Processes in a Global Context', CRIC Discussion Paper no. 61, January 2003

Harvey, M & McMeekin, A

'Symbiosis or Pathogenicity: Interactions between Academia and Industry in the Agrobacterium Tumefaciens. Genome Race', CRIC Discussion Paper no. 63, September 2003.

Howells, J

'Innovation, Consumption and Knowledge: Services and Encapsulation' CRIC Discussion Paper 62 August 2003

Massini, S

'The Diffusion of Mobile Telephony in Italy and the UK: An Empirical Investigation', CRIC Discussion Paper No. 56, December 2002

Metcalf, J, S, Foster, J & Ramlogan, R

'Adaptive Economic Growth', CRIC Discussion Paper No. 59, September 2002

Metcalf, J, S

'Industrial Growth and the Theory of Retardation: Precursors of an Adaptive Evolutionary Theory of Economic Change', CRIC Discussion Paper No. 57, December 2002

Southerton, D & Tomlinson, M

'Pressed for Time' – the Differential Impacts of a 'Time Squeeze', CRIC Discussion Paper No 60, February 2003

Tether, B, S & Metcalf, J, S

'Services and 'Systems of Innovation', CRIC Discussion Paper no. 58, February 2003.

Tether, B, S, Swann G M P

'Sourcing Science. The Use by Industry of the Science Base for Innovation; Evidence from the UK's Innovation Survey' CRIC Discussion Paper no. 64, August 2003

### **Working Paper Series**

Consoli, D

'The Evolution of Retail Banking Services in United Kingdom: a retrospective analysis', CRIC Working Paper No. 13, September 2003

Tether, B, S, Miles, I, Blind, K, Hipp, C, De Lison, N & Gainelli, G

'Innovation in the Service Sector', CRIC Working Paper No. 11, November 2002

Tether, B, S

'Approaches to Distinguishing New Products and Processes from Existing Products and Process', CRIC Working Paper No. 12, August 2003

### **A7: Book Reviews**

Metcalf, J, S

'Foundations of Social Evolution' by Frank, S, A, The Journal of Bioeconomics, Vol 4, pp 89 – 91, 2002

Randles, S

'Productivity, Innovation and Knowledge in Services: New Economic and Socio-Economic Approaches' by Gadrey, J & Gallouj, F (eds), The Services Industries Journal, Issue 23.3, 2003

Southerton, D

'Gershuny, Changing Times: Work and Leisure in Post-Industrial Society', British Journal of Sociology, 53 (3), 500 – 501, 2002

### **A8: Official and Other Reports**

Baker, P, Miles, I & de Boer, V

Business Services: Contribution to Growth and Productivity in the European Union Report to European Commission, Enterprise Directorate-General, ECORYS-NEI and CRIC, Rotterdam/Manchester, 2003

Bergeaud-Blackler, F

'Institutional Mapping of EU food regulation' in project Trust in Food, a European Research Project on Social and Institutional Conditions for the Production of Trust Consumer Trust in Food, 2003

Bryce, J & Rutter, J

'Killing Like a Girl: Gendered Gaming and Girl Gamers' Visibility', CGDC Conference Proceedings, University of Tampere Press, Tampere, Finland, pp 243 – 255, 2002

Glynn S, Harvey M, McMeekin A, Miles I

'Prospecting Bioscience for the Future of Non Food Uses of Crops'. Report to the Government Industry Forum on Non Food Uses of Crops, December 2003

Harvey, M & McMeekin, A

'UK Bioinformatics: Current Landscapes and Future Horizons', DTI Report, official web-publication, 2002

Harvey M

House of Commons Adjournment Debate, on the Report Undermining Construction, Hansard Column 272WH, 20 pages, 28<sup>th</sup> September, 2002

Harvey, M

Workshop at the Union of Construction Allied Trades and Technicians, National Delegates Conference, 24<sup>th</sup> June, 2002

Harvey, M

Awarded Honorary Life Membership of the Union of Construction Allied Trades and Technicians, for work on tax and employment in the construction industry, first award of its kind, 24<sup>th</sup> June, 2002

Jarvis, D & Miles, I

New Dimensions for Manufacturing: A UK Strategy for Nanotechnology, London: Advisory Group on Nanotechnology DTI, 2002

<http://www.dti.gov.uk/innovation/nanotechnologyreport.pdf>

Keenan, M & Miles, I (eds)

Practical Guide to Regional Foresight in the United Kingdom (versions of this Report are published in every EU15 country except Luxembourg, with translations of the text prepared by Keenan, M & Miles, I), Luxembourg, European Commission, <http://www.foretech.online.bg/docs/CGRF.pdf>, 2003

McMeekin, A

Genomics and the ESRC Thematic Priorities: Scoping the Genomics Scenarios Task IAF/CRIC ESRC Genomics Scenarios Exercise, January 2002

Metcalf, J, S

'Technology and Economic Development: A Comparative Perspective', UNIDO Working Paper Series, available at <http://www.unido.org/userfiles/hartmany/IDR-metcalf-paper1.pdf>, 2002

Metcalf, J, S, Ramlogan, R & Uyarra, E

Economic Development and The Competitive Process, CRC (IDPM), Manchester, Working Paper No 36, December 2002

Metcalf, J. S

'Competing in the Global Economy-The Innovation Challenge', DTI Working Paper No 7. Department of Trade and Industry, London, 2003

Miles, I, Barreto, G, Flanagan, K, Green, L, Jackson, S, James, A, Malik, K, May, G, Swann, P, & Tether, B

Knowing How, Knowing Whom: A Study of the Links between the Knowledge Intensive Services Sector and The Science Base, Council for Science and Technology, DTI, 2003

Miles, I, Butler, J, Glynn, S, & Malik, K

'Innovation Tomorrow', European Commission, available at: [http://www.cordis.lu/innovation-policy/studies/gen\\_study7.htm](http://www.cordis.lu/innovation-policy/studies/gen_study7.htm) 2003

Miles, I & Tether, B

'Innovation in the Service Economy' IPTS Report No. 71, pp 45 – 51, online at: <http://www.jrc.es/> (available in German, French and Spanish) February 2003

Miles, I

Knowledge Intensive Services and their Clients, Report to Finnish Government, 2003

Miles, I, Flanagan, K, & Cox, D

Ubiquitous Computing : Towards Mapping Europe's Strengths and Weaknesses, Report to European Science and Technology Observatory, Paris, March, 2002

Miles, I

IRCE (STRATA-ETAN) European Commission, (Benchmarking National R & D Policies) The Impact of RTD on Competitiveness and Employment, CD-ROM Benchmarking National Research Policies; Executive Summaries of the 5 Benchmarking Reports, Brussels, June 2002

Rutter, J

'The Play's The Thing', Caterer & Hotelkeeper, Nov – Dec issue, pp 39, 2002

### **A9: Conference Papers and Other Seminar Presentations**

Coombs, R

'Sources of Competitive Advantage for Smaller Countries in Knowledge Intensive Industries: Lessons from Biotechnology', invited UMIST lecture delivered at Singapore Polytechnic, January, 2002

Coombs, R

'Are We Getting Any Better At Managing Innovation: And How Would We Know?', Seminar at Science Policy Research Unit, Sussex University, February 2002

Coombs, R

'The Impact of Innovation on the Company', presentation at one day conference on innovation organised by Smith and Nephew Woundcare Division, York, April, 2002

Green, K & Randles, S

'Industrial Ecology and Spaces of Innovation' with Foster, C & McMeekin, A, paper presented to 'Industrial Ecology and Spaces of Innovation' Conference, Manchester, 17 – 19 June 2003

Green, K & Randles, S

'Industrial Ecology and Spaces of Innovation: An Agenda for Research', environment 2003, online Conference, October 2003

Hand, M, Southerton, D & Shove, E

'The Jet Set: Infrastructures, Bodies, Temporal Orders and the Practice of Showering', paper presented to British Sociological Association Annual Conference, York University, April 2003

Harvey, M, Warde, A & McMeekin, A

'Qualities of Food: Alternative Theoretical and Empirical Approaches', University of Manchester, 10 – 11 January, 2002

Harvey, M, Warde, A, Bergeaud-Blackler, F & Wales, C

'The Institutionalisation of the Consumer', paper to CRIC-CEPN Workshop on 'Markets and the Organisation of Exchange', Manchester, June 2003

Harvey, M, Warde, A, Wales, C, Bergeaud-Blackler, F  
'The Institutionalisation of European Food Consumers: Markets, Trust and the Buying of Food', CRIC & CEPN, Manchester, 5 – 6 June 2003

Harvey, M, McMeekin, A & Gee, S  
'Bioinformatics in Europe and the USA: Distributing Innovation Processes', presented to CRIC/European Bioinformatics Institute Seminar, April 2003

Howells, J  
'Strategic Over the Horizon' Conference, World Strategy Conference SAID Business School, University of Oxford, 18 – 19 March, 2002

Howells, J  
'Know-How', Project workshop, Chancellors, University of Manchester, April, 2002

Howells, J  
'Inter-Firm Relations and Organisational Consumption' paper presented at 'Industrial Ecology and Spaces of Innovation' Conference, Manchester, 17 – 18 June 2003

Keenan, M & Uyarra, E  
'Why Regional Foresight? An Overview of Theory and Practice' keynote paper to the EC Conference on Regional Foresight Brussels, September 2002

McMeekin, A, Harvey, M, & Gee, S  
'Emergent Bioinformatics and Newly Distributed Innovation Processes, the Economics and Business of Bio-Sciences & Bio-Technologies: What Can Be Learnt From the Nordic Countries and the UK?', International Conference, Gothenburg, 25 – 27 September, 2002

McMeekin, A, Harvey, M, & Gee, S  
'Bioinformatics in Europe and USA: Economies of Bioinformatics Knowledge' presented to CRIC/European Bioinformatics Institute Seminar, April 2003

McMeekin, A, Randles, S & Warde, A  
'A Model for Analysing the Practice of Market Research', paper to CRIC Manchester, Consumption Seminar, 4 June 2003

McMeekin, A, Randles, S, & Warde, A  
'Professions, Firms and the Evolution of Knowledge: the Case of Market Research', paper to ASEAT/Institute of Innovation Conference, UMIST, April 2003

McMeekin, A  
'Chasing the Silent Thief of Sight: Innovation for Glaucoma', Columbia University, New York, March, 2003

Metcalf, J, S

'On the Self Transformation on Economies', ETE Workshop MPI, Jena, February 28, 2002

Metcalf, J, S

'Adaptive Economic Growth', Seminar, ECIS, Eindhoven, November 6, 2002

Metcalf, J, S

'The Entrepreneur and the Style of Modern Economics', Brasil em Desenvolvimento, University of Rio de Janeiro, November, 10<sup>th</sup> 2003

Miles, I

'Knowledge Intensive Business Services', guest lecture at University of Hohenheim, Germany, 11/12<sup>th</sup> April, 2002

Miles, I & Weber, M

'Governance, Social Attitudes and Politics: Implications for the Transformation of Manufacturing' paper presented at 'Industrial Ecology and Spaces of Innovation' Conference, Manchester, 17 – 18 June 2003

Miles, I

'Ten Years of Foresight', paper presented at NISTEP International Conference on Technology Foresight, Tokyo, Japan, February 27 – 28, 2003

Miles, I, Malik, K, Glynn, S & Butler, J

'Developing Policies for the Knowledge Economy in Europe', paper presented at ASEAT/IoIR Conference Knowledge and Economic and Social Change: New Challenges to Innovation Studies, organised by Advances in the Economic and Social Analysis of Technology (ASEAT) and the Institute of Innovation Research, Manchester, April 7 – 9, 2003

Moore, K & Rutter, J

'Does This Count as Entertainment, What I'm Doing Now?', Mobile Entertainment in Europe, Digital Games Industries: Developments, Impact and Direction, CRIC, University of Manchester, 2003

Ramlogan, R & Metcalf, J, S

'Between Command and Chaos: The NHS as a Complex System', NEXSUS Workshop, April, 2002

Ramlogan, R & Venetucci, L

'Attacking the Heart: Problem Solving Coronary Artery Disease' presented to the Uneven Growth of Knowledge Workshop, Columbia University, March 14 – 15, 2003

Randles, S

'Complexity Applied: The Merger That Made GlaxoSmithKline', Visiting Lecturer, Cranfield University MBA programme, August, 2002

Randles, S

'The Legacy of Karl Polanyi/Issues for a Neo-Polanyian Research Agenda in Economic Sociology' paper presented at the CRIC Workshop, Polanyian Perspectives on Instituted Economic Development and Transformation, 23 – 25 October, 2002, Manchester

Randles, S

'From the Polanyian Double Movement to Jessop's Schumpeterian Competition State: Shifting Boundaries and New Pluralities in State-Market Relations', 9<sup>th</sup> International Karl Polanyi Conference, Montreal, November 2003

Randles, S, McMeekin, & A Warde, A

'Organisation of Exchange, Market Regulation and Interdependencies of Markets', paper to CRIC-CEPN Workshop on 'Markets and the Organisation of Exchange', Manchester, June 2003

Randles, S

'How Useful are Complex Systems Approaches?' presented to Lancaster University Management School Dept. Organisation, Work and Technology seminar series, 8 October 2003

Randles, S & Warde, A

'Ethics, Transformations, and Market Research', paper to Seventh Annual IACR Conference, Amsterdam August 2003

Rutter, J

'Virtual Methods: Prospects and Retrospects', (Invited Speaker) Panel Member with Green, N & Woolgar, S, University of Surrey, Dec 15<sup>th</sup> 2003

Savage, M, Tampubolon, G, & Warde, A

'Re-ordering Domestic Space: Constructing Normality in Narratives of Extension', paper to ESA Conference, Murcia, Spain, September 2003

Southerton, D & Shove, E

'Sustainable Technologies and the Sociology of Consumption' paper presented at 'Industrial Ecology and Spaces on Innovation' Conference, Manchester, 17 – 18 June 2003

Southerton, D, Hand, M, Shove, E & Warde, A

'Re-ordering Domestic Space: Constructing Normality in Narratives of Extension', paper to European Sociological Association Conference, Murcia, Spain, September 2003

Southerton, D, Scott, S & Martens, L

'All Consuming Babies: Adult Engagements in the Market for Children's Goods and Services', paper presented to the European Sociological Association, Murcia, Spain, September 2003

Southerton, D, Cheng, S, Warde, A & Olsen, W

'Convergence and Divergence in UK Practices of Consumption: a Prelude to Cross-cultural Analysis of the Diffusion of Consumer Culture'. Paper presented to the International Association of Time Use Research, Brussels, Belgium, September 2003

Tampbulon, G & Ramlogan, R

'Regional Patterns of Technological Development: Perspectives on Developing Countries', paper presented to ASEAT Conference, April 7 - 9, 2003

Urwin, P

Paper presented to International Labour Process Conference, "The Reorganisation of Work in the Provision of Local Public Services: The Introduction of a Call Centre at a North West Local Authority", University of Strathclyde, 2002

Uyarra, E

Paper presented to European Commission, IPTS Seville, 'Science & Technology Policy and Economic Development: Evaluation System and New Innovation Policy Procedures', 12th November 2003

Warde, A

'Consumption, Practices and the Development of Demand', paper presented at the 2<sup>nd</sup> ETE Workshop, Turin, January 31<sup>st</sup> - February 2<sup>nd</sup> 2003

Warde, A

'Consumption and Theories of Practice', paper presented to Institute of Social Research, Salford University, February, 2003

Warde, A

'The Dynamics of Ordinary Consumption', public lecture SIFO, Oslo, April 2003

Warde, A

'Reassessing Critiques of Consumer Society', paper presented to BSA Annual Conference, York, April 2003

Warde, A

'Field and Practice: New Concepts for the Sociology of Consumption?', paper to ESA Conference, Murcia, Spain, September 2003

Warde, A

'Bourdieu, Consumption and Theories of Practice', paper to Department of Sociology, Reading University, October 2003

### **B1: Distinctions and Membership of Committees**

Metcalfe, J, S

Academy of Social Sciences 2003

Metcalf, J, S

Honorary Visiting Professor, Department of Economics, University of Queensland, 2003 - 2006

**B2: Membership of Networks**

Southerton, D

European Sociological Association Research Network on Consumption, 2003

Southerton, D

European Science Foundation, 'Tensions of Europe', Research Network, 2003

**B3: Visitors to CRIC**

Marie Curie Fellows

Pier Paolo Patrucco – University of Turin, Italy

Francesco Crespi – University of Rome, Italy

Miriam Ricci – University of Turin, Italy

Frida Wennerstrom – Chalmers University, Sweden

Renato Redondi – University of Turin, Italy

Others (more than two week's duration)

Professor Charles Edquist – Linköping University, Sweden

Professor Maasi Hirooka – Kobe University, Japan

Professor Antonio Dagata – University of Catania, Sicily, Italy

Chiara Franzori – University of Turin, Italy

Nassef Hmimda – University of Paris, France

Francesco Rentocchini – University of Bologna, Italy

Davide Borghese – University of Bocconi, Italy

Olga Etchevskaya – University of Novosibirsk, Ford Foundation Scholarship, Russia

#### **B 4: Membership of Editorial Boards**

Coombs, R  
International Journal of Innovation Management

Harvey, M  
International Journal of Supply Chain Management

Howells, J.  
R&D Management, International Journal of Technology Transfer and Commercialisation.

Metcalf J.S.  
Economics, Innovation and New Technology, Journal of Evolutionary Economics, International Journal of Technology and Strategic Management, Mind and Society, Journal of Bioeconomics, Metroeconomica, Information Economics & Policy, Structural Change and Economic Dynamics, British Journal of Management, Industrial and Corporate Change.

Miles, I  
Foresight, International Journal of Services Technology Management, Technology Forecasting and Social Change.

Rutter, J  
Game Studies: The International Journal of Computer Game Research, Humour: International Journal of Humour Research.

Warde, A  
Journal of Consumer Culture, Sociology Press, Appetite, Anthropology of Food,

#### **B 5: Advice and Consultancy**

Rutter, J  
Arts Council England, North West – Jury Panel for Digital Art Residency, 2003

Rutter, J  
GamePlan, Media Training North West – Advisory Committee, 2003

Rutter, J  
Referee for AHRB, 2003

Rutter, J  
Referee for The Carnegie Trust for the Universities of Scotland, 2003

Southerton, D  
Member of Research Advisory Panel for Birmingham Institute of Art and Design, University of Central England, May 2003

Warde, A  
Presentation to Consumer Science Foresight Group, Unilever, Port Sunlight, 2003

Warde, A

Commissioning panel ESRC Programme on Cultures of Consumption, Phase II, 2003

**B6: Media - Newspapers**

Harvey, M

'Science Review Uncovers GM Angst', article in Times Higher Education Supplement, July 2003

Metcalf, J, S

'Politica tecnologica tem de ser pragmatica', Valor, Rio de Janeiro, 11 November 2003

Southerton, D

Interview and quoted in ESRC 'Social Sciences' magazine/newsletter, Issue 54, May 2003

Southerton, D

Interview and quoted in 'The Guardian' Society section, page 14, 'We know what she wants', pg 14, 6 June 2003

Southerton, D

Quoted and research discussed in Dave Hill's feature article 'Does It Matter if Your Child Wants One of These for Christmas?', The Guardian, November 11<sup>th</sup> 2003

**B7: Media - Radio / TV**

Harvey, M

Interview and feature on BBC Radio 4 'You Say Tomato', Thinking Allowed, Laurie Taylor, April 2003

Southerton, D

Interview and feature on BBC Breakfast television programme regarding research on time use and 'harriedness', October 2003

Southerton, D

Interview on time use for BBC Radio Lancashire, October 2003

**B 8: International Collaborative Research Projects**

Metcalf, J, S & Ramlogan, R

The Uneven Growth of Medical Knowledge, with Columbia University and the University of Sienna

Rutter, J

MGAIN – Mobile Entertainment – Mobile Entertainment Industry and Culture

**B 9: Other Conferences Attended**

Cheng, S, L

'Comparing Time – the 25<sup>th</sup> IATUR Conference for Time Use Research', Brussels, Belgium,  
September 17 – 19<sup>th</sup> 2003

Hammond, S

Association of University Administrators Conference, University of Derby, April 2003

## Appendix 2: Other Activities and Information

### 2.1: CRIC International Workshops 2003

**7-8 November, 2002**

#### ***Contrasting Theories of Consumption: a Workshop***

Organised by Dr Dale Southerton

The aim of this workshop was neither to celebrate achievements nor lament upon the weaknesses. Rather, we invited academics from a diversity of disciplinary backgrounds and theoretical positions to compare, contrast and debate what alternative theories of consumption bring to the field. The workshop was designed as a forum in which to review theoretical developments in the study of consumption and to anticipate areas in need of future empirical attention. Each contributor to the workshop delivered an empirically informed theoretical paper which set out a position in relation to one or more of the following themes:

- The relationship between processes of production and processes of consumption
- The relationship between the material and the cultural
- The role of consumption in mediating contemporary social relations
- The connection between consumption and forms of social protest
- A political economy of consumption
- The historical emergence of the 'consumer'

CRIC's current research in the area of consumption includes: a study of the changing temporalities of consumption; comparative analysis of the diffusion of consumer culture in European countries; domestic technologies and the relationship between innovation and consumption; the formation of tastes in the UK; and, the development of the market research industry and profession. In addition, previous research, which still has an on-going role in the CRIC consumption agenda, includes examination of trends and practices of food consumption, the diffusion of technologies and generation of routines, and the relationship between social networks and taste.

#### **Papers presented:**

***Staffan Hultén & Anna Nyberg (Stockholm School of Economics)***

'The Consumer in Marketing Research'

***Margaret Hogg & Emma Banister (UMIST, UK)***

'The Negative Self and the Refusal of Tastes in Consumer Behaviour'

***Paul De Gray (Open University, UK)***

'Self-Service: Shopping, Consumption and Personhood'

***Bonnie Erickson (University of Toronto, Canada)***

'Network Impacts on Politics as Delegated Consumption' or 'Who You Know and How You Want Government to Spend Your Money'

***Celia Lury (Goldsmiths College, UK)***

'The Brand as a Complex Object and Relations in Time with Consumers'

***Douglas Holt (Harvard Business School, USA)***

'Black Looks for Sale: Branding Race in the USA'

***Don Slater (London School of Economics, UK)***

'Modernity Under Construction: Comparative Ethnographies of Internet'

***Kaj Ilmonen (University of Jyväskylä, Finland)***

'Sicualty and Commitment to Goods'

***Irene Cieraad (Technical University of Eindhoven, The Netherlands)***

'Sense and Sensibility: Technology and Consumption'

***Ulrich Wengenroth (Munich Centre for the History of Science and Technology)***

'What Theories of Consumption Can Achieve in the 20<sup>th</sup> Century History of Technology: The Service Character and Semiotics of Everyday Technologies'

***7-9th April 2003***

***The ASEAT/Institute of Innovation Research Conference***

**Knowledge and Economic and Social Change: New Challenges to Innovation Studies**

Organised by 'Advances in the Economic and Social Analysis of Technology' (ASEAT) and the 'Institute of Innovation Research' (I of IR).

Innovation Studies has made great progress in the last 30 years, and has been a major contributor to revealing the powerful role of knowledge creation and exploitation in driving economic and social change. Furthermore, much of this progress has been achieved by cross-disciplinary work involving economists, sociologists, historians and political scientists. But the current developments in the global economy, in technologies and in political systems are continuing to pose new challenges to analysis. The purpose of this conference was to bring together the innovation studies community to take on these challenges.

The role of knowledge in the operation of the global economy is increasing in importance and complexity. There is a qualitative change in the conditions under which knowledge is exploited to create wealth, to improve the quality of life, and to move towards a sustainable ecosystem, economy and society. As the nature of the knowledge economy changes and is better understood, a distinctive new research agenda has emerged to study the management of innovation and to develop new innovation policies. These themes, and the research questions they pose, are the subject of this conference.

***Papers Presented:***

***Robert Tijssen (Leiden University, The Netherlands)***

‘The Marketisation of Corporate Research and its Effect on Public Knowledge Production: a View of Recent Worldwide Trends in Corporate Basic Research Outputs’

***Andrew McMeekin, Sally Randles & Alan Warde (all from CRIC, University of Manchester, UK)***

‘Professions, Firms and the Evolution of Knowledge: The Case of Market Research’

***Eric Jolivet, Philippe Laredo & Elizabeth Shove (Lancaster University, UK)***

‘Managing Breakthrough Innovations: Theoretical Implications from (and for) the Sociology of Science and Technology’

***Jessika Kersting & Jelte Theisens (both from Ministry of Affairs, The Netherlands)***

‘International Knowledge and National Policy’

***Tony Fu-Lai Yu (University of South Wales, Australia)***

‘National Capabilities and Economic Development: A Subjectivist View’

***Naubahar Sharif (Cornell University, Ithaca)***

‘The Role of Firms in the National Innovation System Framework: Examples from Hong Kong’

***Marcela Miozzo (Manchester School of Management, UK), Ken Green & Paul Dewick (both from UMIST, UK)***

‘Globalization and the Environment: The Long Term Effects of Technology on the International Division of Labour’

***Jaco Quist (Delft University of Technology, The Netherlands)***

‘Regime Shifts and Sustainability: the STD Programme Revisited’

***Katarina Larsen (Royal Institute of Technology, Sweden)***

‘Science Parks and Integration of Environmental Policy’

***Margarida Fontes (Instituto Nacional de Engenharia e, Portugal)***

‘Distant Networking? The “out-cluster” Strategies of New Biotechnology Firms’

***Elizabeth Garnsey (St John’s College, Cambridge, UK)***

‘Selection Processes and the Development of Biotechnology Ventures’

***Finn Valentin (Copenhagen Business School, Denmark) & Rasmus Lund Jesen***

‘New Science and Old Industries: The Adoption of Biotechnology in European Food Companies’

***Diana Hicks (CHI Research Inc., USA)***

‘Serial Innovators in the Markets for Technology’

***Kieron Flanagan (PREST. University of Manchester, UK)***

‘Chasing the Leading Edge: from Research Infrastructure Policy to Policy for Infrastructure-Intensive Research – Findings from a Comparative Study of the Purchase, Management and Use of Large-Scale Research’

***Magnus Karlstöm & Björn Andersson (Chalmers University of Technology, Sweden)***

‘Assessing and Selecting Strategic Niches: the Case of Fuel Cells and Hydrogen Systems’

***Massaki Hirooks (Kyoto, Japan)***

‘Nonlinear Dynamism of Innovation and Knowledge Transfer’ (paper without figures)

***Dimitri Assimakopoulos (Grenoble Graduate School of Business, France) & Stuart***

***MacDonald (Sheffield University of Management School, UK)***

‘Personal Networks in IT Innovation within the Esprit and IST Programmes: Some Evidence from the UK’

***Harro van Lente (University of Utrecht, The Netherlands)***

‘Role Finding and Positioning Theory: How Intermediary Organisations Operate in Innovation Systems’

***Francesco Quatraro (University of Bari, Italy)***

‘An Ethno-linguistic Approach to the Role of Services in Knowledge Transfer: the Evidence of Innovation Relay Centre of Southern Italy’

***Désiré Vencatachellum (Cirnao & HEC Montreal, Canada) & Bruno Versaevel (GATE, UMR, CNRS & E.M. Lyon, France)***

‘R & D Outsourcing in Duopoly with Spillovers’

***Tone Haraldsen (University of Oslo, Norway)***

‘Local Interactions, National and International Connections – the Sources of Competitiveness of the Kongsberg Industry’

***Beth Perry (University of Salford UK)***

‘Is UK Science and Innovation Policy Region-Blind? A View from the English Regions’

***Song Wand & Hiro Izushi (both from Coventry Business School, UK)***

‘An Evolutionary Approach to Understanding External Linkages for Innovation: Case of firms in British Industrial Heartland’

***Robert van den Hoed & Philip J. Vergragt (both from Delft University of Technology, The Netherlands)***

‘Mechanisms for Technological Change in Established Industries’

***Björn Andersson (Chalmers University, Sweden)***

‘Technology Path Assessment’

***Fabiana Scapolo & Anton Geyer (both from European Commission, Spain)***

‘European Manufacturing in Transition: the Challenge of Sustainable Development – Scenarios for 2020’

***Ellen Moors & Ruud Smits (both from Utrecht University, The Netherlands), Christien Enzing & Annelieke van der Giessen (both from TNO Strategy, Delft, The Netherlands)***

‘User-Producer Interactions in Functional Genomics Innovations’

***Katherine Barker, Deborah Cox & Luke Georghiou (all from PREST, University of Manchester, UK)***

‘The Evolution of Public Sector Laboratories in Europe’

***Stefano Brusoni (SPRU, Brighton, UK)***

‘The Premature Obituary of the Master Manufacturer: Cognition and Authority in the Modular Age’

***Ruud Smits (Utrecht, The Netherlands) & Stefan Kuhlmann (ISI-Fruanhofer Institute, Utrecht, The Netherlands)***

‘The Rise of Systemic Instruments in Innovation Processes and Systems’

***Elaine Franco (University of Oxford, UK)***

‘Identifying Patterns of Technological Efforts of Transnational Corporations Affiliates in Brazil’

***Gindo Tampubolon & Ronnie Ramlogan (both of CRIC, University of Manchester, UK)***

‘Regional Patterns of Technological Development: Perspectives on Developing Countries’

***Dominique Jolly (CERAM Sophia Antipolis, France)***

‘Sino-foreign Joint Ventures as Exogamic Partnerships’

***Ian Miles, Khaleel Malik Steve Glynn & Jeff Butler (all of PREST, University of Manchester, UK)***

‘Developing Policies for the Knowledge Economy in Europe’

***David Rooney, Bernard McKenna & Greg Hearn***

‘The Knowledge-Based Economy: Savant or Sage?’

***Daniel Coronado (Universidad de Cadiz) & Manuel Acosta MaDolores Leon***

‘Scientific Knowledge use in Spain: Private Applications of Science Analysed fro Patent Data’

***Nassef Hmimda, Staffan Hultén & Nicolas Pasquet (all from Laboratoire Startégie & Technologie, Ecole Centrale, Paris)***

‘Bifurcation of Technological Trajectories – the Role of Events’

***Rajendra Prasad (CSIR, New Delhi)***

‘Transformation of National Innovations Systems towards Knowledge Economy in Globalised World with Special Reference to Key Industrial Sectors in India’

***Gil Avnimelech & Morris Teubal (both from The Hebrew University, Jerusalem)***

‘Evaluating Venture Capital Policies: Methodological Lessons from the Israeli Experience’

***J Kohler (University of Anglia, UK)***

‘Technological Change and Long Waves: Insights for Climate Change Modelling’

***Dr Adrian Smith (University of Sussex, Brighton, UK)***

‘Alternative Technology Niches and Sustainable Development’

***F W Geels (Eindhoven University, The Netherlands)***

‘Processes and Mechanisms in Technological Transitions’

***Vitor Gilsing, Theo Roelandt (both from Erasmus University, Rotterdam) & Marianne van der Steen (Directorate-General for Innovation Ministry of Economic Affairs, The Netherlands)***

‘The Evolution of Intellectual Property Regimes in the Knowledge-Based Economy; Balancing Knowledge Production and Knowledge Diffusion’

***Christiano Antonelli (Universita di Torino, Italy)***

‘The Economics of Governance: The Role of Localized Knowledge in the Interdependence Among Transaction, Coordination and Production’

***Joaquin M Azagra Caro (Universidad Politecnica de Valencia, Spain) & Patrick Llerena (Université Louis Pasteur, Strasbourg, France)***

‘Types of Contractual Funding and University Patents: from Analysis to a Case Study’

***Hiro Izushi (Coventry University, UK)***

‘R & D-Based Economic Growth in Europe’

***Frederic Tournemaine (GREMAQ, Toulouse, France)***

‘Knowledge, Human Capital, Rising Population and Growth’

***Adam Holbrook & Monica Salazar (Simon Fraser University, Vancouver, Canada)***

‘Regional Innovation Systems within Federal Nations: are there any Particularities to Address?’

***Jeremy Howells (PREST, University of Manchester)***

‘Innovation, Consumption and Knowledge’

**Silvia Massini (CROMTEC, UMIST, Manchester, UK), Arie Y Lewin (Fuqua School of Business, USA) & Henrich R Greve (Norwegian School of Management Norway)**  
'Comparison Groups and Adaptation Patterns of Organisational Routines'

**Diego Iribarren**  
'From Economic Activity to Understanding Spaces'

**Christine Divry (Univresite de Technologie de Compiegne) & Helio-Gilberto Amaral**  
'From the Boundaries of BA to the Boundaries of Firm: The Role of the Industrial Designer in an Innovative Process. Learning from the Experience of a Large Supermarket Chain'

**Elizabeth Chell (UMIST, Manchester, UK) & Ray Oakey (Manchester Business School, UK)**  
'Knowledge Creation, its Transfer, and the Role of Science Enterprise Education in Prompting this Progress'

**Sally Davenport (Victoria Management School, New Zealand)**  
'SME Access to Technological Knowledge: Perhaps Proximity Doesn't Matter?'

**Maureen McKelvey (Chalmers University of Technology, Sweden)**  
'Innovative Search Activities and Dynamic Selection Regimes'

**John Howells (Aarhus School of Business, Denmark)**  
'The Response of Old Technology Incumbents to Technological Competition – Does the Sailing Ship Effect Exist?'

**Davide Consoli (CRIC, University of Manchester, UK)**  
'Frozen Couples and Rugged Patterns: the Co-evolution of Technology and Services in Retail Banking'

**Rob Raven & Geert Verbong (both from Eindhoven University, The Netherlands)**  
'Technological Regimes and Rules'

**Satish Kumar Beella, J C Brezet & J C Diehi (all from Delft University of Technology, The Netherlands)**  
'Innovation, Sustainability and Quality of Life of New Delhi'

**Murat Mirata (Lund University, Sweden)**  
'A Review of Industrial Symbiosis Networks and Experiences Gained from Programmes in the UK'

**Joe Ravetz (School of Planning & Landscape, University of Manchester, UK)**  
'Regional Industrial Ecology and Resource Productivity – New Approaches to Analysis and Communication'

**Richard Pearce**

‘Industrial Symbiosis in the UK’

**James Baldwin (University of Sheffield, UK), Belinda Winder & Keith Ridgway**

‘Simulating the Complex Cladistic Evolution of Manufacturing: A Tool for Sustainable Re-Engineering?’

**Staffan Hultén, Anna Nyberg (both from Stockholm School of Economics, Sweden) & Lamia Chetioui (Laboratoire Stratégie & Technologie, Ecole Centrale, Paris)**

‘Consumers and Suppliers as Co-producers of Technology and Innovation in Electronically Mediated Banking’

**Riccardo Leoncini (University of Bologna, and IDSE-CNR, Milan, Italy), Sandro Montesor (University of Bologna, Italy) & Giovanna Vertova (University of Bergamo, Italy)**

‘Dynamic Capabilities: Evolving Organisations in Evolving (Technological) Systems’

**Michael W Zhang (Manchester Metropolitan University Business School, UK)**

‘The Roles of Knowledge and Technology Played in the Process of Industrialisation: An East Asian Perspective’

**Laurens Rook & Jan van den Ende (both from Erasmus University, Rotterdam) & Nachoem Wijnberg (University of Groningen, Holland)**

‘Bandwagons and Networks: Origins of and Approaches to Herd Behaviour’

**Derek Bosworth & Laura Stanciu (both from Manchester School of Management, UK) & Silvia Massini (CROMTEC, UMIST, UK)**

‘Changes in the Global Concentration of R & D, Invention and New Product Launch Activity: An Empirical Study’

**Pier Paulo Saviotti, Marie Angele de Looze, Lionel Nesta & Nanette Mauperthuis**

‘The Knowledge Base of the Firm in Biotechnology based Sectors: Properties and Performance’

**Ivan Hernandez (National University of Colombia, South America)**

‘Structural Change And The Nature of Innovative Activity: Legal form and Firm Performance in the Manufacturing Industry of Columbia’

**Paulina Ramirez (CROMTEC, UMIST, UK) & Andrew Tylecote**

‘The Globalisation of Innovation and Corporate Governance in Pharmaceuticals: The Shift of European Investment to the USA’

**Duo Wang (Manchester School of Management) & Marcel Miozzo (CROMTEC, UMIST, UK)**

‘Corporate Governance and Innovation in China’

***Dinesh Abrol (National Institute of Science, India)***

‘Design of Innovation Intensive Environments in Dual Economies: Lessons from the Indian Experience of S & T for Weaker Sections’

***Nicolleta Corroche, Franco Malerba & Fabio Montobbio (all from CRESPI, Universita Bocconi, Italy)***

‘How do New Technologies Emerge? A Patent-Based Analysis of ICT-related New Industrial Activities’

***Francisco Fatás-Villafranca & Dulce Saura Bacaicoa (both from Universidad de Zaragoza, Spain)***

‘Understanding the Demand Side of Economic Change’

***Denis Anderson & Tim Foxon (both form Imperial College Centre for Energy, Policy and Technology)***

‘Dynamic Modelling of Energy Systems’

***Marko Hekkert, Road Suus, Evert Nieuwlaar & Marius Meeus (all from Utrecht University, The Netherlands)***

‘An Actor Oriented Approach for Assessing Technological Transitions of Energy Systems’

***Virginia Acha (University of Sussex) & John Finch (University of Aberdeen, UK)***

‘The Path to Deep-Water in the Petroleum Upstream Industry’

***Emily Leung Suk Man***

‘Managing Technology and Innovation across the Boundaries of Firms: A Case Study of Third Party Logistics’

***Stefano Busoni, Aldo Geuna (both from SPRU, University Of Sussex) & Paola Criscuolo (SPRU & MERIT, University of Sussex)***

‘The Knowledge Bases of the World’s Largest Pharmaceuticals Groups: What do Patent Citations to Non-patent Literature Reveal?’

***Luca Berchicci & Sacha Silvester (both from Delft University of Technology, The Netherlands)***

‘Mapping Networks’

***17<sup>th</sup> – 18<sup>th</sup> June 2003***

***Industrial Ecology and Spaces of Innovation***

Organised by Dr Sally Randles

To date, social scientists of innovation have not pro-actively and systematically engaged with industrial ecology scholars, to see what can be gained from bringing understandings about the innovation process - its embeddedness in structures of social relations (including those that inform consumption patterns and practices), industrial relations, technological relations,

and capital/investment relations to perspectives already well developed by those directly working with industrial ecology concepts, either in an academic, consultancy, corporate or policy context. This concentrated two-day workshop brings together people actively involved across these areas of interest. We anticipate developing new and interesting lines of enquiry contributing equally to both. We are bringing together contributions from academia, industry, practitioners and policy makers working in - or potentially across - these fields. The papers presented will draw together examples of models, systems and technological approaches to IE with more sociological/institutional and governance/regulation questions. There will be case studies drawn from a variety of contexts and scales, from regional to national, and comparative e.g. comparative European and Indian field studies. Two papers will be corporate case studies and a variety of industrial contexts will be included, for example construction and chemicals. Of course the ultimate aim is to identify practice, opportunities and determinants contributing to, and preventing change aimed at reversing environmental degradation and the depletion of natural resources. The workshop situates under the Institute's Theme 4 (Institute of Innovation Research a joint initiative which houses research teams from the University of Manchester and UMIST in Manchester - CRIC, PREST, CROMTEC, the Tyndall Centre North) entitled 'Innovation and Sustainability: the Political and Economic Imperatives of Sustainability and Quality of Life' and links with existing CRIC work on forms of competition (industrial organisation, and models involving a multiplicity of institutions), distributed innovation processes, the sociology of consumption, and instituted economic processes involving the structured interdependencies of market and non-market exchange and determinants contributing to, and preventing change aimed at reversing environmental degradation and the depletion of natural resources.

***Papers presented:***

***Ken Green & Sally Randles (with Chris Foster, Eugeos & Andrew McMeekin)***  
'Industrial Ecology and Spaces of Innovation'

***Jamie McGlade, Rob Murray, Jim Baldwin, Belinda Winder & Keith Ridgeway***  
'A Co-evolutionary Framework for Understanding Transformation & Resilience of Industrial & Societal Systems: the Example of South Yorkshire Mining Communities'

***Richard Pearce & Murat Mirata***  
'Industrial Symbiosis in the UK'

***Suren Erkman***  
'Cleaner Production at the System Level: Industrial Ecology as a Tool for Development Planning (Case Studies in India)'

***Claude Culem***  
'Industrial Ecology Codified in Law as part of the Local Agenda 21 : Case study of Geneva'

***Dale Southerton & Elizabeth Shove***  
'Sustainable technologies and the sociology of consumption'

***Paul Dewick & Marcela Miozzo***

‘Sustainable Technologies and the Construction Industry: An International Assessment of Regulation, Governance and Firm Networks’

***Ian Miles, Mateus Weber & Kieron Flanagan***

‘Governance, Social Attitudes and Politics’

***Paper provided by Stuart Hill (School of Social Ecology, University of Western Australia)***

‘Redesign as Deep Industrial Ecology: Lessons from Ecological Agriculture and Social Ecology’

***Jeremy Howells***

Industrial Consumption and Innovation’

***Frans Berkhout***

‘Rapporteur – Summing Up, Issues Further Questions and Research’

***19-20th September 2003***

***Digital Games Industries: Developments, Impact and Direction***

Organised by Dr Jason Rutter and Dr Karenza Moore

One of the major distinguishing features of modern capitalism is its restlessness. New activities emerge from within to compete with older, more established, rivals displacing them in the process or succumbing to competitive pressures themselves. But as these new activities become embedded in economic systems and old ones disappear there are profound effects on the structure of economies, as well as on production, consumption, demand, technology and employment. The digital gaming industry is one of the more important recent examples of this phenomenon of creative destruction. The study of this industry allows us to gain new insights about innovation, the creation of new consumption and economic activities, the growth of business opportunities and the development of the market in terms of demand and consumption as well as supply.

Against the backdrop of the highly competitive economic environment of gaming platforms, software and new game-enabled consumer technologies, the ESRC Centre for Research on Innovation and Competition (CRIC) will be hosting a two day workshop on the socio-economics of digital gaming. The workshop aims to bring together international delegates from academic, policy and commercial circles for an in-depth discussion on nature and characteristics of this emerging sector: the 'drivers', key 'players', the 'current state of play', and the impact of the industry on the modern economy and the framework of its evolution

***Papers presented:***

***Chris Bateman***

‘History of Digital Gaming: Hardware, Software, and Wetware’

***Stuart Slater***

‘Are Reusable Engines the Future of Games Development?’

***Helen Mullen & Kate Oakley***

‘The Good, The Bad and The Indifferent: An International Examination of Interventions in the Commercialisation Process in the Games Industry’

***William H. Kelly***

Video Games and the Games Industry on Japan: A Preliminary Overview’

***Edward Castronova***

‘Theory of the Avatar’

***Susan B Kretchmer***

‘The Emergent Advergaming Industry: Developments, Impacts and Direction’

***Aphra Kerr***

‘The Digital Games Industry: A Case Study of Ireland’

***Alberto Alvisi & Marco Zamarian***

‘Learning from others or learning from self? Effects of Vertical Integration and Focalization on Performance in the Game Developing Industry. The Case of Sony PlayStation’

***Hardy Dreier***

‘Buy or Die? Microsoft, Nintendo & Sony: The Clash for the Console Market’

***Magnus Holmén***

‘The emergence and growth of digital gaming: the case of first person shooters’

***Ren Reynolds***

‘Between the Human and the Virtual: Players, Player-characters and Organ Donors’

***Mia Consalvo***

‘Cheat Codes, Strategy Guides, and Walkthroughs: Official and Unofficial Economies of Cheating and Help in the Digital Games Industry’

***Hector Postigo***

‘From Pong to Planet Quake: Post-industrial Transitions from Leisure to Work’

***Ian Miles***

‘A Postal Strike: Playing by Mail on the Online World’

***Susana Tosca***

‘Press Start Button for Entertainment to Begin: Computer Games Industry and its Consumers’

***Karenza Moore & Jason Rutter***

'In the Future your Games will go with you? Mobile Entertainment in Europe'

***26<sup>th</sup> – 27<sup>th</sup> November 2003***

***Knowledge Intensive Services and Changing Organisational Forms***

Organised by: Dr Marcela Miozzo, Damian Grimshaw and Professor Rod Coombs

IT outsourcing and management consultancy services are two areas that have shown remarkable growth in recent years. Moreover, these services are provided in increasingly complex inter-organisational arrangements, with, for example, the emergence of 'mega-contracts' for IT services and 'business process outsourcing' in the area of consulting. This workshop has two aims. First, it seeks to explore the influence of a country's institutional arrangements on the evolution of knowledge intensive services - namely, the IT (software and computer services) sector and the management consulting services sector. Secondly, it aims to analyse the implications for organizational performance and for questions regarding the boundaries, control and co-ordination of the modern enterprise. For example, suppliers of IT and consulting services are often locked in to the business strategy of their client firms, suggesting that the nature of the inter-organisational relationship (contractual and interpersonal) plays a key role in shaping organizational performance. Moreover, the extent to which performance is evenly distributed among clients and suppliers may vary, reflecting market position (power), the strength of trusting relations (risk) and the wider institutional environment.

***Papers presented:***

***Marcela Miozzo & Damien Grimshaw (both from Manchester School of Management, UK)***

'The Other Side of IT Outsourcing: the New Boundaries and Coordination of the Large Innovating Firm'

***Leslie Willcocks (Warwick Business School)***

'Global Information Technology Outsourcing in the USA and UK'

***Volker Mahnke & Mikkel Lucas Overby (Copenhagen Business School)***

'Make and/or buy of IT Enabled Innovation: The Role of Knowledge-creation and Dissemination Risk'

***Jeremy Howells (University of Manchester)***

'Outsourcing and National Systems'

***Mark Lehrer (University of Rhode Island)***

'The Outsourcing of the German Software Function in Historical and Comparative Perspective'

***Glen Morgan & Andrew Sturdy (Warwick Business School and School of Management, Imperial College)***

‘The Impact of National Institutions and Globalisation on Management Consultancies’

***Bart Nooteboom (Universiteit Rotterdam)***

‘An Intergrated Survey of Theory on Sourcing, Inter-firm Collaboration and Networks’

***Damien Grimshaw & Marcela Miozzo (Manchester School of Management)***

‘IT Outsourcing in the UK and Germany: a Comparison of Contracting Relations and Performance’

## 2.2: CRIC Staff

### *Directors*

#### **Professor Rod Coombs**

Is Professor of Technology Management at UMIST. After a physics degree at Kent, he worked in biophysics research at Oxford for two years. An MSc and PhD at Manchester in the economics of innovation converted him into a social scientist. Since then he has developed a broad portfolio of research, teaching and consultancy in the areas of innovation and technology management. He is particularly interested in the organisation of business to achieve innovation, and in the integration of technology into strategy.

#### **Professor Jeremy Howells**

He has a PhD from the University of Cambridge on R&D in innovation and he has worked at the Universities of Oxford and Newcastle upon Tyne before returning to the Judge Institute of Management Studies at Cambridge. In 1996 he moved to PREST where he is a Director, a post which he holds on a half time basis with his Directorship at CRIC. He has written and co-authored seven books on research and innovation as well as co-editing a further two books and is currently completing two books, one on industry-academic links, knowledge transfer and innovation and another on knowledge and innovation.

#### **Professor J Stanley Metcalfe CBE - Executive Director**

Stanley Jevons Professor of Political Economy and Cobden Lecturer at the University of Manchester. During his career has lectured at the Universities of Manchester and Liverpool. He is an Honorary Professor of Economics at the University of Queensland. He has been actively involved in the development of science and technology policy in the UK, being a member first of ACORD and subsequently ACOST. He was, until October 1997, a member of the Monopolies and Mergers Commission. His research interests are currently focused upon evolutionary economics and the modelling of evolutionary processes in relation to innovation, competition and economic growth.

#### **Professor Ian Miles**

Is Director of PREST (Policy Research in Engineering, Science and Technology), an Institute of the University of Manchester. Before coming to Manchester in 1990, he was for 18 years a researcher at the Science Policy Research Unit at the University of Sussex; and before then he received a first class honours BSc in Psychology at Manchester. His research interests include: innovation studies; foresight; indicators; service sectors. He has over a hundred publications spanning these areas.

### **Professor Alan Warde**

He joined the University of Manchester as Professor of Sociology in September 1999. He has degrees in politics and sociology and has formerly been employed at Leeds and Lancaster Universities. He has research interests in the sociology of consumption, economic sociology, political sociology and the study of social change and has published widely in these areas. Recent research projects have focused on food consumption, including a study of eating out and an analysis of trends in household consumption in Britain. He plans to develop further work on consumption and on service provision in line with the long-term research plan of CRIC.

### ***Administration***

#### **Sharon Hammond - Centre Administrator**

She has an MA (Econ) in Development Studies, and a BA (Hons) degree in Combined Studies (History and Social Sciences) from the University of Manchester, and also read for an arts degree with the Open University. She has held a number of administrative posts in the University of Manchester, including Personal Assistant to the Head of the School of Epidemiology and Health Sciences in the University of Manchester Medical School.

### ***CRIC Secretaries***

#### **Sharon Dalton**

Professor Metcalfe's secretary. She has Diploma in Secretarial Skills from Leigh and Wigan College. She is on secondment from the School of Economic Studies.

#### **Angie Lewis**

CRIC Centre Secretary. She has an RSA Diploma in Secretarial Skills and NVQ Level 3 in Business Administration from Wilberforce College in Hull.

#### **Joyce Wilson**

Accounts Assistant, has a C.L.A.I.T certificate from Tameside College of Technology, and an RSA in English.

### ***Web Administrator***

#### **Ishtiaq Hussain**

He has a BA in Business Information Technology and an Msc in Designing Worldwide Interactive Systems from Huddersfield University. He is the Web Developer/Information Officer to develop and maintain the CRIC Web site. He is responsible for providing Web support and training for those staff members who wish to develop their own web pages for the site. Ishtiaq is also the list manager for the Innovation-Competition mailing list. Details of this can be found on the [mailing list page](#).

## ***Research Staff***

### **Dr Florence Bergeaud-Blackler – Research Associate**

Dr Florence Bergeaud-Blackler is attached to a European study on Trust in Food, and Researcher Associate in the Maison Française d'Oxford (URA 1953 CNRS). She had previously carried out post-doctoral research on Anthropology of Food and Consumption. On a project funded by the French Ministry of Agriculture she led research on the trade and consumption of meat ritually slaughtered amongst Muslim population living in France. Her current research interests include: Sociology and Anthropology of Food, Food Policy and Institutions, Religious and Ritual aspects of Food, Immigration, Religious policies and institutions.

### **Dr Shu-Li Cheng – Research Associate**

Shu-Li joined CRIC in April 2003 as Research Associate (The Diffusion of Cultures of Consumption: a comparative analysis). She is attached to a project with Professor Alan Warde, Dr Dale Southerton and Dr Wendy Olsen, examining the diffusion of consumer culture across five countries (France, Italy, Norway, UK & USA) since 1970's. The project is funded within the ESRC Cultures of Consumption Programme. Her current research interests include: Labour Market; Sociology and Economics of Education; Categorical data analysis; Monetary Economics.

### **Dr Martin Hand – Research Associate**

Martin joined CRIC in January 2003 as Research Associate (Sustainable Domestic Technologies). He is attached to a project with Dr Dale Southerton, Professor Alan Warde, and Dr Elizabeth Shove (Lancaster University) exploring the practices, conventions, and potential sustainability of domestic technology use, as part of the ESRC's Sustainable Technologies Programme. Previously, Martin has conducted research with SATSU (Science and Technology Studies Unit, University of York) on the consumption of digital cameras in Europe. His doctoral work (in the Department of Sociology, University of York) has explored the sociology of Internet governance and self-transformation, in the contexts of public Internet access, and the financial services industry.

### **Dr Mark Harvey - Senior Research Fellow**

Studied History at Oxford University and obtained a PhD in Sociology at the LSE in 1969. From there he went to a research fellowship at the International Centre for Genetic Epistemology in Geneva. After he had been a lecturer at Brunel University, he spent many years in the construction industry where he was a senior shop steward. His research interest is to develop a comparative framework for studying varieties of capitalism, using the concept of 'instituted economic process' to analyse competition, market formation, and innovation. His current empirical fields include biotechnology, genomics; trust in food, welfare state regimes and innovation in developing countries. He is also working on 'economies of knowledge', labour markets, the state and taxation systems. He is also working on 'economies of time'

and 'economies of knowledge'.

**Mr Andrew James – Research Fellow**

He works jointly at CRIC and PREST, University of Manchester. Andrew joined the University of Manchester in 1993 after working as economic and industrial policy adviser to the Labour Party's Spokesperson on Industry in the House of Commons. His first degree was in Government at the London School of Economics and Political Science, followed by an MSc in Industrial Relations and Personnel Management (for which he received a distinction), also at LSE. Andrew's principal research focus is on company technology strategy and management. His interests include the study of technology management issues in mergers and acquisitions as well as innovation and strategy in the aerospace and defence sector. At present, he is working at CRIC on a European Commission TSER-funded study on sectoral systems of innovation within which he is focusing on medical services. Andrew is joint academic co-ordinator of the European Commission TSER Thematic Network "Managing European Technology, Defence and Competitiveness Issues" and a member of the EPSRC Technology Management Network. He holds a number of major research grants from UK and European bodies, including the ESRC/EPSRC Innovative Manufacturing Initiative for a study on the sourcing of technological knowledge by leading UK companies.

**Dr Andrew McMeekin - Research Fellow**

Has a first degree in management and chemical sciences and a PhD in management from UMIST, which sandwiched an MSc in Science policy from the Science Policy Research Unit at Sussex University. He has been a Research Fellow at CRIC since its establishment in January 1997. Before joining CRIC he worked as a research associate at CROMTEC, Manchester School of Management, conducting research on corporate innovation management. Current research at CRIC is focused on the economic and social analysis of innovation processes, including *upstream* interactions between 'public' and 'private' science and technology and *downstream* associations between innovation, markets and consumption activities. These issues have most recently been investigated through empirical studies of genomics, bioinformatics, health technologies and the market research industry.

**Dr Karenza Moore – Research Associate**

Karenza has joined CRIC from The University of Surrey where she was doing her PhD research at the Digital World Research Centre. She will be working for 19 months with Dr. Jason Rutter on the European Commission funded MGAIN project looking into the development of mobile technologies in Europe and their use for entertainment. Her work will specifically centre on end users' behaviours and attitudes toward current and future mobile entertainment products highlighting relevant legislation and regulation aspects such as DRM, certification, and consumer trust management.

### **Dr Ronnie Ramlogan – Research Fellow**

Ronnie obtained an MSc (Economics) from the University of the West Indies in 1985 and his PhD (Economics) from the University of Manchester in 1995. Prior to joining CRIC he was a tutor at the School of Economic Studies at Manchester and he also consulted with the private sector on IT related projects and business process re-engineering. Ronnie has various research interests including industrialisation, economic growth and development, steel sector economics, complex adaptive systems, economics of competition and the process of innovation.

### **Dr Sally Randles – Research Fellow**

After graduating in Management Sciences from the University of Lancaster, Sally worked in a variety of applied market and social research roles including as a Survey Officer for the Consumers' Association. She was an advisor at the enterprise agency for Hammersmith & Fulham and then managed a training company assisting unemployed youth and adults in Spitalfields to access employment in the City of London. For the next four years she held the post of Principal Economic Development Officer at Bedfordshire County Council working on local economic strategy formulation and urban regeneration. She holds an MBA from the University of Kingston and a PhD with the School of Geography at the University of Manchester. At CRIC her main research interests are at the interface of economic geography and economic sociology, looking at 'competition' in a variety of contexts, evolutionary political-economy, scale and economic development policy, market research, expert services and their professionalisation, and industrial ecology.

### **Dr Jason Rutter – Research Fellow**

Jason studied at Loughborough before completing his PhD, 'Stand-up as Interaction Performance and Audience in Comedy Venues', in the Sociology Department at the University of Salford. He worked as a research fellow on the Manchester Airport funded project Commuter-Mediated Interaction: Local Newsgroups and the Development of Sociability on the Net before taking up a post at CRIC in 1998. His current research and publication interest focus on use of leisure technologies including digital games and mobile phones. Whilst at CRIC he has organised two major conferences and a series of high level workshops. He is Vice-President of the international Digital Games Research Association (DiGRA), has held funding for both UK and European projects, sits on the editorial board for several international journals and on advisory committees for a number of European-funded projects

### **Dr Dale Southerton – Research Fellow**

Dale has a first degree in Geography and Sociology from Keele University and a PhD from Lancaster University where he spent four years in the Department of Sociology. He specialises in the study of consumption and has previously conducted research exploring this topic in relation to: identity formation, senses of belonging and distinction; the social worlds of caravanning; the normalisation of freezers. He joined CRIC in 2000 and is currently

conducting research on consumption and: time-use; sustainable domestic technologies; cultural convergence and divergence across Europe and the USA; changing tastes and demand; the child – parent relationship. More generally, Dale's work focuses on developing theories of social change with particular emphasis on the relationship between innovation and consumption.

#### **Dr Bruce Tether – Senior Research Fellow**

Graduated in Geography from the University of Newcastle upon Tyne and has a PhD from the Science Policy Research Unit at the University of Sussex. He has been a Research Fellow at CRIC since the establishment of the Centre in January 1997. Within the centre, his work mainly concerns the economics of innovation, particularly with reference to services and 'systems of innovation', or 'distributed innovation processes'. He also has a strong interest in how competition shapes innovation, and innovation competition. Prior to joining CRIC, he was for two years a Research Fellow at Warwick Business School, working in the Centre for Small and Medium Sized Enterprises.

#### **Mr Peter Urwin – Research Associate**

Has a degree in Economics and Social Policy and a Masters in Labour Studies, both from the University of Manchester. He is currently writing-up his PhD entitled "The Reorganisation of Work in the Provision of Local Public Services" at Manchester School of Management, UMIST. He has been employed on a part-time basis at CRIC since October 2003 as part of an EU-funded research network looking at social rights over resources across seven countries. His research interests include the role of call centres in the public sector, the division of labour in clerical work, and privatisation.

#### **Dr Elvira Uyarra – Research Associate**

A graduate of Economics, she holds an MSc in Technical Change and Regional Development from the University of Cardiff and a PhD from PREST, University of Manchester. Elvira joined CRIC in October 2002 as a Research Associate. She is working with Jeremy Howells and Bruce Tether on the EU funded project *Innovation in Services: Issues at Stake and Trends* (INNO-3). During 2002, she has also collaborated on several research projects with CRIC, such as the ESRC funded *Innovative Health Technologies* programme. Earlier in 2001 / 02, she was a Marie Curie Fellow for 12 months at the University of Manchester within PREST/CRIC, supervised by Jeremy Howells.

#### **Dr Corinne Wales – Research Associate**

Dr. Corinne Wales is a Research Associate at CRIC where she is attached to a European study on Trust in Food. She had previously carried out post-doctoral research into the UK food risk and policy domain at the University of Leeds. On a project funded by the Food Standards Agency (FSA) she was part of a research team aiming to increase understanding of how to develop sensitive, effective risk communication and to explore the efficacy of multi-stakeholder workshops as a forum to develop and test communication strategies. The multi-

disciplinary project combines qualitative and quantitative methodologies and a wide range of stakeholders and lay publics. She is still actively involved in co-authorship of publications resulting from this study, which is ongoing until March 2003.

Her research interests include: Democratic theory, deliberative democracy and practice e.g. innovations such as consensus conferences, stakeholder forums, citizens' juries. The sociology and politics of risk, risk perception and communication.

### **2.3: CRIC Associates**

CRIC Project Associates are members of the full-time teaching staff of the University of Manchester, UMIST and the Manchester Business School who are actively involved in CRIC projects, sometimes taking on the role of project leader.

**Professor David Auckland** - Campus Ventures, University of Manchester

**Ms Kate Barker** - PREST, University of Manchester

**Professor Peter Dicken** - Department of Geography, University of Manchester

**Professor Diane Elson** - Department of Sociology, University of Essex

**Professor Luke Georghiou** - PREST, University of Manchester

**Professor Ken Green** - Manchester School of Management, UMIST

**Dr Damien Grimshaw** – Manchester School of Management, UMIST

**Dr Keith Julian** - PREST, University of Manchester

**Professor Denis Loveridge** - PREST, University of Manchester

**Dr Silvia Massini** - Manchester School of Management, UMIST

**Dr Marcela Miozzo** - Manchester School of Management, UMIST

**Professor Jill Rubery** – Manchester School of Management, UMIST

**Dr Vivien Walsh** - Manchester School of Management, UMIST

**Dr Mo Yamin** - Manchester School of Management, UMIST

## **2.4 Honorary Associate Fellows**

To further the development of the research programme CRIC has appointed Associate and Visiting Fellows who work closely with CRIC staff in the development of the research programme.

At the time of writing, the following scholars have been appointed honorary associate fellows with the Centre:

**Dr Ed Amann**

University of Manchester

**Professor Cristiano Antonelli**

Professor of Economics, University of Torino, Italy

**Professor Gilberto Antonelli**

Professor of Economics, University of Bologna, Italy

**Dr Paul Artes**

Dalhousie University, Halifax, Nova Scotia, Canada

**Dr Suma Athreye**

The Open University

**Dr Jo Bryce**

University of Central Lancashire

**Professor Mario Caldernini**

Politecnico di Torino, Italy

**Dr William Cannell**

Member of the European Commission DGXII (Science Research and Development)

**Professor Robin Cowan**

MERIT, University of Limburg, Maastricht, Holland

**Dr Collette Fagen**

University of Manchester

**Dr David Fishlock**

Former Science Correspondent, Financial Times

**Professor Dominique Foray**

Directeur de Recherche at the Centre National de la Recherche Scientifique, at the University of Paris-Dauphine, France

**Professor John Foster**

Professor of Economics, Head of Department, University of Queensland, Brisbane

**Professor Peter Hall**

Professor of Economics and Management, University College, University of New South Wales, ADFA, Canberra

**Professor Masaaki Hirooka**

President, Institute of Technoeconomics, Kyoto, Japan

**Professor Steve Klepper**

Professor of Economics and Social Sciences, Carnegie Mellon University, Pittsburgh, USA

**Dr David Marshall**

Department of Business Studies, University of Edinburgh

**Dr Lydia Martens**

University of Stirling

**Professor Jonathon Michie**

Birbeck College, London

**Professor Klaus Nielson**

Professor of Social Science and Institutional Theory, University of Roskilde, Denmark

**Dr Elizabeth Shove**

Director of the Centre for Science Studies, University of Lancaster

**Dr Roberto Simonetti**

The Open University, Milton Keynes

**Professor Morris Teubal**

Professor of Economics, The Jerusalem Institute for Israel Studies

**Dr Robert Whelan**

UK National Physical Laboratory/Smith Institute

**Professor Ulrich Witt**

Professor of Economics and Director of Max Planck Institute, Jena, Germany

## **2.5: CRIC Advisory Committee**

The Advisory Committee advises the Director on all matters to do with the operation and development of the Centre and on relations between the Centre and ESRC. As of November 2002, it has the following distinguished members:

### **Professor Ron Amann (Chairman)**

Professor Amann retired recently from the post of Director General of the new Centre for Management and Policy Studies, Professor Amann's principal tasks were to create a resource at the heart of government for the development and dissemination of best practice in both the formulation and implementation of policy; and to ensure that the Civil Service is cultivating the right skills, culture and approaches to perform its task. In practical terms this involved the development of networks across both the public and private sectors in order to identify and absorb best practice which will find expression in new programmes of training, research and policy evaluation. The CMPS, which was founded in June 1999, is located within the Cabinet Office and incorporates the Civil Service College.

Previously, Professor Amann was Chief Executive and Deputy Chairman of the Economic and Social Science Research Council (ESRC). Prior to that he was Pro-Vice-Chancellor and Professor of Comparative Politics at the University of Birmingham, specialising in problems of innovation and science policy in centrally planned economies.

### **Professor John Bessant**

John Bessant is Professor of Innovation Management at Cranfield University, and is linked with the Operations and Project Management Group. He graduated from Aston University with a degree in Chemical Engineering in 1975 and later obtained a PhD (also from Aston) for work on innovation within the chemical industry. After a spell in industry he took up full-time research and consultancy in the field of technology and innovation management working at Aston's Technology Policy Unit, the Science Policy Research Unit at Sussex University and at Brighton University where he held the Chair in Technology Management since 1987.

Prior to joining the faculty at Cranfield, John was Director of Brighton University's Centre for Research in Innovation Management which he set up in 1987. He oversaw its development into a research institute with a staff of thirty people working on around fifty projects for public and private sponsors in the field of effective innovation management. His areas of research interest include the management of discontinuous innovation, strategies for developing high involvement innovation and enabling effective inter-firm collaboration and learning in product and process innovation. He is the author of 20 books and many articles on the topic and has lectured and consulted widely around the world. He has acted as advisor to various national governments and to international bodies including the United Nations, The World Bank and the OECD.

His most recent book – 'Managing innovation' (John Wiley and Sons) – was awarded the 'best book' prize by the European Association for Creativity and Innovation in 2001.

### **Dr Alan Calder CBE**

Graduated from Aberdeen University with a BSc and a PhD in Organic Chemistry in 1968 after which he joined ICI Nobel Division. He held a variety of positions within the company becoming Research Manager, Colours and Fine Chemical in 1987. Until 1996 he was General Manager, Research and Development, for Zeneca Specialities. In 1993 he was appointed Chairman of the SERC (EPSRC) Chemistry Committee and in April 1994 he became Chairman of the UK Chemical Industry Foresight Panel. His involvement with Foresight continues as a member of the new LINK Board.

### **Dr Phil Gamlen**

Phil Gamlen is a member of ICI's Technology Board, and a Director in the ICI Group Technology Office with particular responsibility for the Group Technology Strategy; the ICI Collaborative R & D programmes; Technology Sourcing, and Communications and PR issues as they relate to Technology. A career in ICI has spanned manufacturing, product management, R & D and technology. Research activities have been highly diverse ranging from mining to upper atmosphere chemistry and physics, and all phases in between. In the past few years he has been particularly concerned with practices and policies to enhance innovation, and with the management of intellectual capital during acquisitions and divestment.

### **Professor Ray Hudson**

Is Professor of Geography at the University of Durham and an economic geographer, with particular interests in relationships between economic restructuring, labour market change and territorial development policies. He is Director of the ONS National On-Line Manpower Information System, and Chair of the International Centre for Regional Regeneration and Development Studies. He has a BA, PhD and DSc from Bristol University and Honorary DSc from Roskilde University Denmark. He is currently a Vice President of the Royal Geographical Society.

### **Professor Alan Hughes**

Is Director of the ESRC Centre for Business Research at the University of Cambridge, and Fellow of Sidney Sussex College. His research interests include the financing, growth, innovative behaviour and survival of small firms; take-overs and corporate governance; manufacturing competitiveness, and competition and industrial policy. He has acted as a consultant in these and other areas to the Office of Fair Trading, the Department of Trade and Industry, the World Bank, the United Nations and the European Commission.

### **Dr Alistair Keddie**

He was Head of DTI's Innovation Unit, until mid 2003. Prior to his current job he was Head of DTI's Single Market Unit. Before that he was Head of the international science and

technology branch in DTI's Research and Technology Policy Division, a member of the Policy's Planning Unit; and before moving to DIT Headquarters in 1984 was head of the Air Pollution Division at the then Warren Spring Laboratory.

### **Professor Franco Malerba**

Professor Franco Malerba received his PhD from Yale University and has subsequently followed an academic career divided between the United States; he is Visiting Professor at Stanford University, and Italy, where he is Director of CESPRI – the research centre on Innovation and Internationalisation at Bocconi University. He is one of the leading authorities in the field of innovation studies and is currently editor of Industrial and Corporate Change and Advisory Editor of Research Policy. He is the current President of the International J A Schumpeter Society.

### **Professor Maureen McKelvey**

Holds the chair in Economics of Innovation at Chalmers University of Technology, Gothenburg, Sweden. She is also Vice Head of the Department of Industrial Dynamics in that University. Her work is focused on the Intersection of two fields of study, in relation to the Economics of Innovation and Innovation Management. Understanding the main issues in the field of this research is of increasing importance theoretically, and for the practice of policy makers and firm managers. Much of her research is focused around radically new innovations most of which are knowledge intensive. This involves both empirical and technological fields ranging from software development, mobile telecommunications and modern biotechnology and bioscience. She is the author of several books and many papers in this research field. In 1996 she was awarded the International J A Schumpeter prize for her book Evolutionary Innovations.

### **Professor Bridget Rosewell**

Professor Rosewell is an economist and a founding director and executive chairman of the economic and market analysis firm Volterra Consulting. Professor Rosewell, a visiting professor at City University Business School, is chief economic advisor to the British Retail Consortium and special advisor on economic policy to the House of Commons Treasury Select Committee. She joined the Board of Britannia Building Society in 1999. Bridget lives and works in London. A former member of the Chancellor's Independent Panel of Forecasters, she is frequent broadcaster and commentator.

### **Dr Evind Sto**

Is Director of SIFO (Norwegian Institute for Consumer Research), an independent Governmental Research Institution established in 1939. SIFO research activity is divided into four units dealing with 1) Consumers, 2) Goods and Services, 3) Consumer Markets, 4) Consumer Policy. SIFO is involved in the coordination of two projects within the EU Fifth Framework programme, ToolSust and Trust in Food. SIFO also is coordinator for three projects under the EU Consumer Political programme.

**Dr Sandy Thomas**

Received her Ph.D. from the University of London. She lectured in genetics at London University for several years before moving to the Science Policy Research Unit at the University of Sussex, U.K. Over the next nine years she developed a wide-ranging research program on biotechnology policy and has published several articles on intellectual property issues. In 1997, she became the Director of the Nuffield Council on Bioethics.

## 2.6 Staff Training

### Courses Attended

CRIC staff have attended the following training courses over the reporting year

Angie Lewis	Business Objects Course	Manchester University
Angie Lewis	Presenting a Professional Image	UMIST
Angie Lewis	Influential Communications	Manchester University
Angie Lewis	Coping with Stress	Manchester University
Angie Lewis	Professional Development	Manchester Metropolitan
	Certificate in Business Studies	University Business School
Jason Rutter	Appraiser Training (Academic Staff)	Manchester University
Dale Southerton	ESRC Media Training Course	ESRC
Dale Southerton	Training in Equality and Diversity	Manchester University

CRIC staff have received training during the year in the construction of web pages. This training has been provided by the CRIC webmaster Ishtiaq Hussain. Furthermore, CRIC staff have attended the University of Manchester Equality Opportunity and Diversity Course.

## **2.7 PhD Programme**

Postgraduate training within CRIC for PhD's in their first year is undertaken in conjunction with PREST as an ESRC recognised postgraduate training outlet (MAN14000). These programmes are also run within wider Federal School of Business and Management and Faculty of Social Sciences and Law postgraduate training modules. With the merger of the two universities these postgraduate courses and training programmes are under review, but CRIC will remain part of a strong postgraduate training environment for those interested in undertaking PhD involved in research on innovation within a social science or management perspective.

## 2.8 CRIC Staff Contact Details

All general enquiries to the Centre should be made to: 0161 275 7365, fax: 0161 275 7361

Also, you can contact us through the CRIC web site at: <http://les1.man.ac.uk/cric>

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