CURRICULUM VITAE

NAME: Robert Eric ROWTHORN

CURRENT POSTS: Emeritus Professor of Economics, University of Cambridge.

Fellow, King's College, Cambridge

<u>DEPARTMENT:</u> Faculty of Economics and Politics

DATE OF BIRTH 20 August 1939

PLACE OF BIRTH Newport, Wales

NATIONALITY British

EDUCATION 1957-60 - Mathematics Scholar, Jesus College, Oxford

1960-61 - Postgraduate Fellowship to study logic and methodology of science

at the University of California, Berkeley, USA

DEGREES 1960 - BA in Mathematics, Oxford, with

First Class Honours

1964 - B.Phil in Economics, Oxford

PRIZES 1960 - Junior Mathematical Prize for best mathematics

degree, Oxford

1981 - Isaac Deutscher Memorial Prize, for the book

Capitalism, Conflict and Inflation.

CAREER 1961-62 - Research student in mathematics, Jesus College, Oxford

1962-64 - Research student in economics, Nuffield College, Oxford
 1964-65 - Research Fellow (Title A), Churchill College, Cambridge.

1965-66 - College Lecturer, King's College, Cambridge

1966-71 - Fellow, King's College, Cambridge

1966-71 - University Assistant Lecturer, Faculty of Economics and Politics,

Cambridge University

1971-82 - University Lecturer, Cambridge University
 1982 - "Ad hominem" Reader, Cambridge University
 1991-2006 - "Ad hominem" Professor, Cambridge University
 2006- - Emeritus Professor, University of Cambridge

1991- - Fellow, King's College, Cambridge

2006- - Director of Studies in Economics, King College, Cambridge

Other posts:

Jan-April 1981 - Visiting Lecturer, University of Grenoble, France
July 1981 - Visiting Lecturer, National University of Mexico
May-June 1985 - Visiting Fellow, University of Tokyo, Japan.
June-Aug 1985 - Visiting Fellow, Research School of the Social
Sciences, Australian National University, Canberra.

July 1988 - Visiting Lecturer, University of Siena, Italy.
 Feb-June 1989 - Visiting Professor, University of Sydney

July 1991 - Visiting Professor, University of NSW Australia.

July 1992 - Visiting Professor, University of NSW Australia.

August 1993 - Visiting Professor, University of Musashi, Tokyo

April 1997 - Visiting Fellow, International Monetary Fund

September 1998 - Visiting Fellow, International Monetary Fund

Visiting Fellow, International Monetary Fund

Visiting Fellow, International Monetary Fund

June 2002 to

June 2005 - CMI Fellow

2004 onwards - Research Associate, Oxford Centre for Population Research

February 2005 - Official Visitor Santa Fe Institute

January 2007 - Official Visitor, Santa Fe Institute
May 2007 - Official Visitor University of Siena

Official Visitor University of Siena

September 2007 - Official Visitor Catholic University of Chile

June 2008 - Official Visitor Santa Fe Institute

General Contribution

Faculty and Department: Faculty Board 1970-1989; Appointments Committee 1982-1989, 1991-1994; DAE Advisory Committee 1989-1994; Acting Chairman, (Easter Term 1987); Faculty Chairman 2002-*College*: Undergraduate Supervisor, Churchill College 1964-65, undergraduate supervisor, King's College 1965 1971, College Council, King's College 1966-71and1999-2000, Estates Committee, King's College 1992-1999, Investment Committee, King's College 1999, Senior Salaries Committee, King's College since 2000-2005,

Other Cambridge: Land Economy Promotions Committee, Board of the Centre for Latin American Studies

Other Academic Member of the Royal Economic Society; Chairman of the Final Evaluation Committee for the ESRC Northern Ireland, Economic Research Centre 1997; current member of the Management Committee of the Northern Ireland Economic Research Centre; member of the government steering committee for economic policy in Northern Ireland; current Board member of the Vienna Institute for International Economic Studies (WIW); current member of the Editorial Board of *Economic Dynamics and Structural Change*

CONSULTANCY AND RELATED ACTIVITIES (since 1990)

Private Sector

General Electric Company (GEC), Australian Manufacturing Council, Overseas Telecommunications (OTC) of Australia, contributor to a Crédit Suisse report on economic reform in the Soviet Union, Icelandic Manufacturing Federation on the impact of natural resources on manufacturing industry, Brazilian Confederation of Industry on the role of manufacturing in economic development, Union Bank of Switzerland (UBS) on globalisation

International and Governmental Organisations

Frequent consultant to UNCTAD on global integration and structural change, several times consultant to the IMF on globalisation and structural change, frequent consultant to the ILO on employment and wages, Research Advisor to the UN University (WIDER), Helsinki 1993-98, consultant to European Commission on the regional implications of 1992 (with PA Consultants), consultant to the UK Department of Trade and Industry on economic growth and regional inequality 2000, consultant to the Korean Ministry of Industry 2003 on economic growth and structural change, consultant to the UK Council for Science and Technology 2006, consultant to Telestra on the role of services in the Australian economy, 2007.

Publications

Books

- 1971 International Big Business 1957-67, Cambridge University Press. pp. viii, 112.
- 1980 Capitalism, Conflict and Inflation, Lawrence and Wishart, London. pp. 274.
- 1986 "The Geography of De-industrialisation", (ed) R Rowthorn and R L Martin, MacMillan, London. pp. xxiii, 365.
- 1987 *De-industrialization and Foreign Trade*, (with J Wells), Cambridge University Press, Cambridge. pp. xiii, 422.
- 1988 *Northern Ireland: The Political Economy of Conflict*, (with N Wayne) Polity Press, Cambridge. pp. vii, 230.

- 1992 *Social Corporatism: A Superior Economic System ?* (ed) J. Pekkarinen, M. Pohjola and R. E. Rowthorn, Oxford University Press, pp.xiii, 430
- 1995 *The Role of the State in Economic Change*, (ed) H-J. Chang and R.E. Rowthorn, Oxford University Press, ppxiii, 320
- 1996 Efficiency and Enterprise Democracy, (ed) U. Pagano and R.E. Rowthorn, Routledge, pp. xiii, 337
- 1998 Transnational Corporations and The Global Economy, (ed.) R. Kozul-Wright and R.E.Rowthorn, MacMillan, pp viii,437
- 2002 *The Law and Economics of Marriage and Divorce*, (ed.) Antony Dnes and Robert Rowthorn, Cambridge University Press, pp. ix, 232.

Published Academic Papers

- 1970 "Multinational corporations and international oligopoly" (with S Hymer), in: C P Kindleberger (ed), *The Multinational Corporation.*, pp. 57-91
- 1975 "What remains of Kaldor's Law", Economic Journal.
- 1975 "Reply to Lord Kaldor", Economic Journal.
- 1977 "Conflict, Inflation and Money", Cambridge Journal of Economics, .
- 1979 "A note on Verdoorn's Law", *Economic Journal*.
- 1979 "The effects of closing Corby Steel" (with Terry Ward), Cambridge Journal of Economics.
- 1981 "The Northern Irish Economy: a study in industrial decline", Cambridge Journal of Economics.
- 1982 "Real Wages and Economic Growth", Studii Economici, no. 18, pp 3-53
- 1985 "Malthus and the Theory of Economic Stagnation" (with Lelia Costabile) *Economic Journal*.
- 1986 "De-industrialisation in Britain" in R L Martin and R E Rowthorn (eds), *The Geography of De-industrialisation*, MacMillan, pp 1-30
- "Uneven development and the rate of profit" (with D J Harris) in *Essays in Honour of Paul Sweezy*, Monthly Review Press.
- 1988 "Corporatism and Structural Change" (with A Glyn) *American Economic Review*, Papers and Proceedings.
- 1989 "The Thatcher Revolution", *Economic Papers*, (Economic Society of Australia)Vol. 8, No.2, June, pp. 1-22
- "The Thatcher Revolution" in F. Green (ed) *The Restructuring of the UK Economy*. Harvester Wheatsheaf. (based on the previous item), pp 281-298.
- 1990 "The Diversity of Unemployment Experience Since 1973" (with A. Glyn), in S. Marglin and J. B. Schor (eds), *The Golden Age of Capitalism*, Oxford University Press, pp. 218-266
- 1990 "The Diversity of Unemployment Experience Since 1973" (with A. Glyn), *Structural Change and Economic Dynamics*, June (shortened version of the above),

. 4

1990 "Reply to Grazia Ietto-Gilles was deindustrialization in the UK inevitable", (with John Wells) *International Review of Applied Economics*, Vol. 4, No 2, June. pp. 224-235.

- 1991 "UK Overseas investment and the balance of payments a theoretical and historical analysis", (with S. Solomou), *Economic History Review*, November, pp. 654-664
- 1991 "Efficiency Wage Theory and Differential Earnings" (with R. Ramaswamy, *Economica*, November.
- "International Trade and Investment under Oligopoly: the role of Market Size", *Economic Journal*, March, pp. 402-414
- "Centralisation, Employment and Wage Dispersion", *Economic Journal*, May, pp. 506-523...
- 1992 "US Productivity Growth and Economic Leadership", *Review of Income and Wealth*, December, pp. 479-496
- "Government Spending and Taxation in the Thatcher Era", in J. Michie (ed), *The Economic Legacy*, 1979-1992, Academic Press, pp. 261-293.
- "Corporatism and Labour Market Performance?" in M Pohjola, J Pekkarinen and R E Rowthorn (eds), *Social Corporatism: A Superior Economic System?*, Oxford University Press, pp. 82-131.
- 1992 ""The Political Economy of Privatisation" (with Ha-Joon Chang), *The Economic and Labour Relations Review*, December, pp. 1-17
- "Public Ownership and the Theory of the State", (with H. Chang) in Clarke T. and Pitelis C. (eds.), *The Political Economy of Public Ownership*, Routledge, London, pp. 54-69.
- 1993 "European Unemployment Policies", (with A. Glyn) in Michie J. and Grieve Smith J. (eds.), *Unemployment in Europe*, Academic Press, London, pp. 188-98.
- 1993 "Saving the Welfare State", New Economy, Vol. 1, No. 1, Autumn, pp. 36-40.
- "The Dynamics of Public Sector Deficits and Debt" (with W.A.H. Godley) in Michie J. and Grieve Smith J. (eds.), *Unemployment in Europe*, Academic Press, London pp. 199-208.
- "The Competitiveness of UK Manufacturing Industry: 1979-2003", (with A. Cosh and A. Hughes) in Hughes K. (ed.), *The Future of UK Competitiveness and the Role of Industrial Policy*, Policy Studies Institute, London, pp. 7-27.
- 1994 "Ownership, Technology and Institutional Stability", (with U. Pagano), *Structural Change and Economic Dynamics*, December,pp. 221-242.
- "Biodiversity, Economic Growth and the Discount Rate" (with Gardner Brown), in T. Swanson (ed), *The Economics of Biodiversity Decline*, Cambridge University Press, pp. 25-40
- 1995 "Capital Formulation and Unemployment", *Oxford Review of Economic Policy*, Spring, pp. 26 39.
- 1995 "A Simulation Model of North-South Trade", UNCTAD Review, pp. 35-66.
- "The Role of the State in Economic Change" in R. Rowthorn and J-J Change (eds), The Role of the State in Economic Change, Oxford University Press, pp 31-49

1996 "The Competitive Selection of Democrative Firms in a World of Self-Sustaining Institutions." (with U. Pagano) in U. Pagano and R.E. Rowthorn (eds), *Efficiency and Enterprise Democracy*, Routledge, pp 116-145

- 1996 "Economics and Ethics and Economist's View", in P. Groenewegen (ed), *Economics and Ethics, Routledge*, pp. 15-31
- 1996 "Would Economics Democracy Reduce the Amount of Public Bads? A Comment", *Scandinavian Journal of Economics*, no.2, pp. 315-319.
- 1997 "Parenting and Labour Force Participation: The Case for a Ministry of the Family" (with S. Dex), in G. Dench (ed.) Re-Writing the Sexual Contract, Institute of Community Studies
- 1997 "Adapting to North-South Trade: A General Equilibrium Approach and Policy Options." (with Y. Akyuz and R. Kozul-Wright), Oxford Economic Papers, vol.47, pp. 483-503.
- 1997 "Manufacturing in the World Economy", *Economie Appliquée*, no. 4, pp. 63-96.
- 1998 "Spoilt for Choice? Multinational Corporations and the Geography of International Production" (with R. Kozul-Wright), *Oxford Review of Economic Policy*, Vol. 14, no. 2, pp. 74-92
- 1999 "When a High Discount Rate Encourages Biodiversity", (with G. Brown), *International Economic Review*, May, pp. 315-332.
- 1999 "Growth Trade and De-industrialisation", (with R. Ramaswamy) IMF *Staff Papers*, March, pp. 18-41
- 1999 "Marriage and Trust: Some Lessons from Economics", *Cambridge Journal of Economics*, July, pp.661-691.
- 1999 "Manufacturing Industry: Growth, trade and structural transformation" in *O Futuro da Industria no Brasil e no Mundo*, editoria Campus for the Confederaca Nacional da Industria, pp. 57-76
- 1999 "Unemployment, Wage Bargaining and Capital-Labour Substitution", *Cambridge Journal of Economics*, September,
- 2000 "The Political Economy of Full Employment in Modern Britain", Oxford Bulletin of Economics and Statistics", May, pp. 139-174.
- 2001 "Does Manufacturing Matter?",(with R. Ramaswamy), *Harvard Business Review*, November-December, pp. 2-3
- 2002 "Marriage as a Signal" in Antony Dnes and Robert Rowthorn (eds.) *The Law and Economics of Marriage and Divorce*, Cambridge, Cambridge University Press, pp. 132-156.

2002 "Using Antibiotics when Resistance is Renewable" (with Gardner M. Brown) in Ramanan Laxminarayan (ed.) *Battling Resistance to Antibiotics and Pesticides: An Economic Approach*, Resources for the Future, Washington D.C.

- 2004 De-industrialisation in Advanced Economies" (with Ken Coutts), *Cambridge Journal of Economics*, September
- 2005 "Accounting for Stability" (with Bill Martin), *CESifo Economic Studies*, Vol. 51, No.4, pp. 649-696.
- 2005 "The Economic Effect of Immigration into the United Kingdom" (with David Coleman), *Population and Development Review*, Vol. 30, No. 4, December, pp 579-624.
- 2006 "The Evolution of Altruism between Siblings: Hamilton's Rule Revisited", *Journal of Theoretical Biology*, Aug; vol 241 (issue 4): pp 774-90.
- 2006 "Convergence and Stability in US Regional Employment" (with Andrew Glyn), Berkley Electronic Journals, Contributions in Macroeconomics
- 2006 "Cherry-Picking: A Dubious Practice", *Around the Globe*, Vol. 3, no.2, Spring, Institute for the Study of Global Movements, University of Monash.
- 2006 "The Optimum Treatment of Disease under a Budget Constraint" in Ramana Laxminarayan (ed) Festschrift in Honor of Gardner Brown
- 2007 "When in Rome Do as the Romans Do: Learning to Conform and Punish" (with R. Guzman and C. Rodriguez-Sickert), *Evolution and Human Behavior* 28 (2): 112-117
- 2007 "Structural Change under News Labour" (with Ken Coutts and AndrewGlyn), Cambridge Journal of Economics
- 2008 "The Fiscal Impact of Immigration on the Advanced Economies", *Oxford Review of Economic Policy*
- 2008 "Male Worklessness and the Rise of Lone Parenthood" (with David Webster)

 Cambridge Journal of Regions, Economy and Society
- 2008 "Returns to Scale and the Economic Impact of Migration", *Journal of Spatial Economic Analysis*, vol. 3, issue 2, pages 151-158
- 2008 "Procedural Rationality and Equilibrium Trust" (with Rajiv Sethi), *Economic Journal*, July
- 2008 "The Renaissance of China and India", in *Issues in Economic Development and Globalization: Essays in Honour of Ajit Singh*, Edited by Philip Arestis and John Eatwell, New York, Palgrave MacMillan
- 2009 "Optimal Control of Epidemics in Metapopulations". (with Ramanan Laxminaryan and Christopher A. Gilligan) in *Interface* (Journal of the Royal Society), March 4.

Forthcoming

"Combined and Uneven Development:Reflections on the North-South Divide" in J. McCombie (ed), *Cambridge Handbook of Applied Economics*

"The Economic and Demographic Impact of Immigration on Western Europe" in M. Halle & D. Lane (eds), *Migration and the Movement of People in Europe: Threat or Benefit?*

"Theories of the evolution of cooperative behaviour: a survey and some new results" (with Carlos Rodriguez-Sickert and Ricardo Andres Guzman) in proceedings of the TECT Conference, Barcelona, April 2008.

"Returns to Scale and the Economic Impact of Migration: Some New Considerations", *Journal of Spatial Economic Analysis*

Under Review by Journals

"Property Rights and the Neolithic Transition" (with Paul Seabright)

"The Economics of Early Social Stratification" (with Carlos Rodriguez-Sickert and Ricardo Andres Guzman)

Working Papers

- 1987 "The Diversity of Unemployment Experience", (with A. Glyn), Applied Economics Discussion, Paper No. 40, IES, Oxford.
- 1989 "International Trade and Investment under Oligopoly", DAE, Risk Project Paper No. 146, Cambridge.
- 1990 "Nash Bargaining and the Shrinking Pie Game", Department of Applied Economics, Risk Project Working Paper No. 153, Cambridge.
- 1990 "Wage Dispersion and Employment", DAE Working Paper No. 9001, Cambridge.
- 1990 "Efficiency Wages and Wage Dispersion", (with R. Ramaswamy), DAE Working Paper No. 9012, Cambridge.
- 1993 "The Competitiveness of UK Manufacturing Industry: 1979-2003", (with A. Cosh and A. Hughes), *Cambridge/Harvard Project Paper*, University of Cambridge (mimeo).
- "Centralized Bargaining, Efficiency wages and Flexibility (with R. Ramaswamy), IMF Working Paper, WP/ 93/25, March.
- 1995 "Employment in the United Kingdom: Trends and Prospects" (with Ken Coutts) ESRC Centre for Business Research Working Paper, WP3, February.
- 1995 "Capital formation and Unemployment", ESRC Centre for Business Research Working Paper, WP7, May.

1995 "A Simulation Model of North-South Trade", ESRC Centre for Business Research, WP9, May.

- 1995 "Korea at the Cross-Roads", ESRC Centre for Business Research, WP11, September.
- 1995 "The Role of Manufacturing in the National Economy", ESRC Centre for Business Research, WP13, September.
- 1995 "The Competitive Selection of Democratic Firms in a World of Self-Sustaining Institutions" (with U. Pagano), ESRC Centre for Business Research, WP15, September.
- 1996 "Unemployment, Wage Bargaining and Capital-Labour Substitution", ESRC Centre for Business Research, WP 38, September.
- 1996 "Replicating the Experience of the Newly Industrialising Countries", ESRC Centre for Business Studies, WP 57, June
- 1997 "De-industrialisation: Causes and Implications", IMF Working Paper WP/97/42
- 1997 "Parenting and Labour Force Participation: The Case for a Ministry of the Family" (with S. Dex), ESRC Centre for Business Research, WP74, December.
- 1998 "Globalisation and Economic Convergence: An Assessment", (with R. Kozul-Wright) UNCTAD Discussion Paper no. 131.
- 1998 "Deindustrialisation: The Case of Iceland" (with Ingolfur Bender), ESRC Centre for Business Research, WP94, June.
- 1998 "Marriage and Trust: Some Lessons from Business Organisation", ESRC Centre for Business Research, WP 113, December
- 1999 "Unemployment, Capital-Labor Substitution and Economic Growth", IMF Working Paper WP/99/43, March.
- "Women's Labour Supply Decisions in the Light of Possible Fiscal Reforms", (with M.
 L. Di Tommaso and S. Dex), Research Papers in Management Studies WP36/99, Judge Institute of Management, Cambridge
- 2000 "The Political Economy of Full Employment", ESRC Centre for Business Research, WP164, March
- 2002 "Unemployment, Wages and Capital; A Joint Analysis" (with Brian Henry), Working Paper, Economics Department, Oxford University.
- 2001 "Convergence and Stability in US Regional Employment" (with Andrew Glyn), Working Paper, Economics Department, Oxford University.
- 2002 "Partnered women's labour supply decisions in the light of possible fiscal reforms" (with Shirley Dex and Maria Laura di Tommaso), Working Paper, Judge Institute of Management.

2002 "On Setting Global Disease Priorities", (with Ramanan Laxminarayan), Working Paper, Resources for the Future, Washington DC

- 2004 "Will Stability Last?" (with Bill Martin), Working Paper No.1324, November, CESifo, Munich
- 2004 "Don't Cross Your Bridges until You Come to Them A Sceptical View of Scotland's Demographic Crisis", Working Paper No. 26, Oxford Centre for Population Research, Oxford. University
- 2005 "A Simulation Model of the Fiscal Effects of Immigration, Fertility and Employment", Working Paper No. 27, Oxford Centre for Population Research, Oxford University.
- 2005 "The Evolution of Altruism between Siblings", Working Paper, 05/06/021, Santa Fe Institute.
- 2006 "Male Worklessness and the Rise of Lone Parenthood" (with David Webster), Working Paper No. 30, Oxford Centre for Population Research, Oxford University
- 2006 "The Renaissance of China and India", UNCTAD Working Paper
- 2007 "Procedural Rationality and Equilbirium Trust" (with Rajiv Sethi), Working Paper, Santa Fe Institute.

Unpublished Papers

- 1991 "Privatisation in the UK", written for Crédit Suisse.
- 1991 "Notes on Competition and Public enterprise", written for OTC.
- 1993 "A Full Employment Strategy for Europe", paper delivered at a conference in Dublin organised by the Lord Mayor.
- "European Employment Policies" (with Andrew Glyn), paper delivered at the conference "Combatting Unemployment", Cambridge, May 13.
- 1994 "Measuring Employment Performance", report for the ILO.
- 1994 "Korea at the Cross-Roads", report for the Korean Parliamentary Committee on Industrial Competitiveness.
- "The Competitive Role of UK Manufacturing Industry: 1950-2003" (with A.D. Cosh and A. Hughes), A Case Analysis for the Harvard Business School.
- 1995 "Employment, Equality and Justice in Northern Ireland", paper for the Committee for the Administration of Justice.
- 1996 "Alternatives to Centralised Wage Bargaining", paper for the ILO.

- 1997 "The Evolution of Altruism between Siblings", paper for the Economics and Biology Discussion Group, Cambridge University
- 2000 "Information Technology and the New Economy", background paper for the ILO World Employment Report 2001 *Life at Work in the Information Economy*.
- 2000 "Taxation and Female Labour force Participation", paper for the Economics of the Family Seminar, Cambridge University
- 2001 "UK Competitiveness, Productivity and the Knowledge Economy", paper for the Cambridge-MIT Institute (CMI) Competitiveness Summit 2001.
- 2002 "Growth and the Balance of Payments: The Role of Manufacturing" (with Ken Coutts), paper for the CMI Conference, "Manufacturing Matters", New Hall, Cambridge
- 2004 "Unemployment, wages and capital: a joint analysis" (with S.G. Brian Henry)
- 2005 "Don't Cross Your Bridges Until You Come to Them A Sceptical View of Scotland's Demographic Crisis" Paper for the EDAS Conference, Edinburgh, June.
- 2006 "Services in the Balance of Payments" for the UK Council for Science and Technology
- 2008 "The Social Benefit of Slow Learners" (with Carlos Rodriguez-Sickert and Ricardo Andres Guzman) Paper presented at the TECT Conference, Barcelona, April

Pamphlets, Reports etc.

- 1974 Britain's Economic Crisis (with Frank Wilkinson and others), Nottingham.
- 1985 Report on Home Helps in Northern Ireland, National Union of Public Employees.
- 1986 *The British Economy: Recent History and Medium-Term Prospects* (with Wynne Godley and others), DAE, Cambridge.
- 1990 Prospects for the U.K. Economy in the 1990s (with Wynne Godley and others), Institute for Public Policy Research, London.
- 1990 Public Sector Pay Policy (with W.A. Brown), Fabian pamphlet.
- 2007 Australia's Future and the Challenge for SMEs, report for Telstra, Australia.
- 2007 *The Economic Impact of Immigration*, Evidence to the House of Lords Select Committee on Economic Affairs, November
- 2007 The Economic Impact of Immigration: Commentary on the Cross-Departmental Submission, Evidence to the House of Lords Select Committee on Economic Affairs, November

Book Reviews etc.

Numerous book reviews, newspaper and magazine articles and the like.

Work In Progress

- 1) The optimal control of epidemics in a meta-population model of disease with Professor Gilligan from the Department of Plant Biology and Dr. R. Laxminarayan from Recources for the Future. This is a follow-up on our forthcoming paper on this topic in *Interface* (The Journal of the Royal Society).
- 2) The evolution of preferences with Ricardo Guzman and Carlos Rodriguez-Sickert from PUC, Chile. This is a follow-up on our already published work in *Evolution and Human Behavior*. This research is being done under the aegis of the European Science Foundation in the international TECT project (The Evolution of Cooperation and Trading).

Items Related to Bio-Economics and Evolution

Publications (including forthcoming)

Optimal Control of Disease

- "Biodiversity, Economic Growth and the Discount Rate" (with Gardner Brown), in T.
 Swanson (ed.), *The Economics of Biodiversity Decline*, Cambridge University Press,
 25-40.
- 1999 "When a High Discount Rate Encourages Biodiversity", (with G. Brown), *International Economic Review*, May, pp. 315-332.
- 2002 "Using Antibiotics when Resistance is Renewable" (with Gardner M. Brown) in Ramanan Laxminarayan (ed.) *Battling Resistance to Antibiotics and Pesticides: An Economic Approach*, Resourceds for the Future, Washington D.C.
- 2006 "The Optimum Treatment of Disease under a Budget Constraint" in Ramana Laxminarayan (ed) *Festschrift in Honor of Gardner Brown*.
- 2009 "Optimal Control of Epidemics in Metapopulations" (with Ramanan Laxminaryan and Christopher A. Gilligan) in *Interface* (Journal of the Royal Society) **forthcoming**

Evolution of Institutions

- 1994 "Ownership, Technology and Institutional Stability", (with U. Pagano), *Structural Change and Economic Dynamics*, December, pp. 221-242.
- 1995 "The Competitive Selection of Democratic Firms in a World of Self-Sustaining Institutions" (with U. Pagano), ESRC Centre for Business Research, WP15, September.
- 1996 "The Competitive Selection of Democrative Firms in a World of Self-Sustaining Institutions." (with U. Pagano) in U. Pagano and R.E. Rowthorn (eds), *Efficiency and Enterprise Democracy*, Routledge, pp 116-145

Evolution of Altruism and Cooperation

- 1996 "Economics and Ethics and Economist's View", in P. Groenewegen (ed), *Economics and Ethics*, Routledge, pp. 15-31
- 2005 "The Evolution of Altruism between Siblings", Working Paper, 05/06/021, Santa Fe Institute
- 2006 "The Evolution of Altruism between Siblings: Hamilton's Rule Revisited", *Journal of Theoretical Biology*, Aug; vol 241 (issue 4): pp 774-90
- 2007 "When in Rome Do as the Romans Do: Learning to Conform and Punish" (with R. Guzman and C. Rodriguez-Sickert), *Evolution and Human Behavior* 28 (2): 112-117.

2009 "Theories of the evolution of cooperative behaviour: a survey and some new results" (with Carlos Rodriguez-Sickert and Ricardo Andres Guzman) in proceedings of the TECT Conference, Barcelona, April 2008 – **forthcoming**

2008 "Procedural Rationality and Equilibrium Trust" (with Rajiv Sethi), *Economic Journal*, July, Vol. 118, No. 530, pp. 889-905, July

Under Review by Journals

"Warfare and the Multiple Adoption of Agriculture after the Last Ice Age" (with Paul Seabright)

"The Economics of Early Social Stratification" (with Carlos Rodriguez-Sickert and Ricardo Andres Guzman)

Work In Progress

- 1) The optimal control of epidemics in a meta-population model of disease with Professor Gilligan from the Department of Plant Biology and Dr. R. Laxminarayan from Recources for the Future. This is a follow-up on our forthcoming paper on this topic in *Interface* (The Journal of the Royal Society).
- 2) The evolution of preferences with Ricardo Guzman and Carlos Rodriguez-Sickert from PUC, Chile. This is a follow-up on our already published work in *Evolution and Human Behavior*. This research is being done under the aegis of the European Science Foundation in the international TECT project (The Evolution of Cooperation and Trading).