

CURRICULUM VITAE

NAME J.A. Scott Kelso
Glenwood and Martha Creech Eminent Scholar Chair in Science
Professor of Complex Systems & Brain Sciences
Professor of Psychology and Neuroscience
Professor of Biological Sciences
Professor of Biomedical Sciences
Florida Atlantic University
Boca Raton, Florida 33431

Tel: 561-297-2230
FAX: 561-297-3634
E-mail: kelso@ccs.fau.edu

BORN February 27, 1947
Derry, N. Ireland

CITIZENSHIP
United States (Currently hold US, UK and Irish Passports)

EDUCATION
University of Wisconsin, Madison, Ph.D. 1975
University of Wisconsin, Madison, M.Sc. 1973
University of Calgary, Alberta, Canada B.S. 1972
Stranmillis University College, Belfast, N. Ireland 1965-1969

ACADEMIC POSITIONS

2009- Visiting Professor of Computational Neuroscience, University of Ulster

1985- Glenwood and Martha Creech Eminent Scholar Chair in Science
Professor of Complex Systems & Brain Sciences, Professor of Psychology and Neuroscience, Professor of Biological Sciences, Professor of Biomedical Sciences, Florida Atlantic University, Boca Raton, FL

1985-2005 Founder and Director, Center for Complex Systems and Brain Sciences

1995 Co-Director, Santa Fe Institute Summer School in Complex Systems

2000 Distinguished Visiting Professor, University of Marseille

1982-85 Senior Research Staff, Haskins Laboratories, Yale University
Professor, Departments of Psychology and Biobehavioral Sciences (Behavioral Genetics Unit), University of Connecticut.

- 1986 Guest Professor, USSR Academy of Sciences, Moscow
- 1984 Guest Professor, Institute for Theoretical Physics, University of Stuttgart
- 1983 INSERM Research Professor, Lyons, France
- 1978-82 Senior Research Staff, Haskins Laboratories, Yale University
Associate Professor, Departments of Psychology and Biobehavioral Sciences (Unit of Behavioral Genetics), University of Connecticut
- 1976-78 Assistant Professor and Director, Motor Behavior Laboratory
The University of Iowa
- 1976 Invited Assistant Professor (Summer Semester)
The University of Texas at Austin
- 1969-71 Schoolmaster, Coleraine Academical Institution, Coleraine, N. Ireland

HONORS AND AWARDS

- 2012 Fellow of The Society of Experimental Psychologists (SEP)
- 2011 Bernstein Prize, International Society of Motor Control (ISMC)
- 2010 Cathedra Chair, The Institute of Transdisciplinary Advanced Studies, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil
- 2008-2009 President, Foyle College (est. 1617) Former Pupils Association
- 2007 Pierre de Fermat Laureate
- 2007 Geraldine Pellecchia Memorial Lecture on Coordination and Cognition, University of Connecticut
- 2006 Director's Innovations Award, National Institute of Mental Health
- 2005 A.S. Iberall Memorial Lecture, University of Connecticut
- 2005 F.J. McGuigan Prize Lecture, American Psychological Association
- 2004 Fellow, AAAS: "For innovative use of brain imaging and behavioral techniques to uncover the principles and mechanisms of coordination"
- 2002 Docteur Honoris Causa, Republic of France and University of Toulouse (estab.1228)
- 2001 Neurosciences Research Program Fellow, La Jolla, CA
- 2000 *Rugby* Magazine, Feb 29, Voted All-time All-American USA Eagles
- 2000 Distinguished Lecture Series, International School for Computable Economics, Trento
- 1999 US Delegation to inaugurate the National Brain Research Institute of India, New Delhi
- 1999 Distinguished Scientist Award, NASPSA
- 1999 Smithsonian Institution Lecturer, Washington, DC
- 1999 Brain Bursary Lectures, London, UK
- 1998 Invited Fellow, Center for Advanced Studies in the Behavioral Sciences
- 1997 Senior Scientist Award, National Institute of Mental Health

- 1997 MERIT Award, National Institute of Mental Health
 1997 Visiting Fellow, The Neurosciences Institute, San Diego, CA.
 1996 Professorial Excellence Award, State University System of Florida.
 1996 Sir Runrun Shaw Fellow, Chinese University of Hong Kong
 1995-1999 President, South Florida Chapter, Sigma Xi (Scientific Research Society)
 1991 W.J. Bryan Lectures in Cognitive Science, Indiana University
 1990 Founding Fellow, American Psychological Society
 1990 Distinguished Alumni Research Achievement Award, The University of Wisconsin, Madison (rec'd from Chancellor Donna Shalala)
 1989 Kenwood-Smith Lectures, University of North Carolina
 1989 Centennial Lecture, University of Tokyo, Japan
 1986 Fellow, American Psychological Association
 1986 American Society of Biomechanics (Honorary member)
 1984 Nominated Fellow, Center for Advanced Study in the Behavioral Sciences
 1984 Fellow, Center for Interdisciplinary Research (ZIF), Bielefeld, FRG.
 1979 Fellow, NATO Advanced Study Institute on Motor Control, Senanque, France.
 1977 Old Gold Fellow, University of Iowa.
 1973-1975 University Research Fellow, University of Wisconsin, Madison.

PROFESSIONAL SOCIETIES

American Association for the Advancement of Science (Fellow)
 American Psychological Association, Divisions 1 and 3 (Fellow)
 American Psychological Society (Fellow)
 International Neural Network Society
 Psychonomic Society
 Associate, Behavioral and Brain Sciences
 Sigma Xi, Scientific Research Society
 American Society of Biomechanics (Honorary member)
 Society for Neuroscience
 International Society of Motor Control
 New York Academy of Sciences

EDITORSHIPS

- 1981-1988 Executive Editor, *Journal of Motor Behavior*
 1981-1989 Editorial Board, *Journal of Experimental Psychology: Human Perception and Performance*
 1981- Editorial Board, *Journal of Motor Behavior*
 1988- Editorial Board (Founding Member) *Neural Networks*.
 1990-2000 Editorial Board, *International Journal of General Systems*
 1992- Editorial Board, *Human Movement Science*
 1996-2007 Editorial Board, *Motor Control*
 2002- Editorial Board, *Chaos and Complexity Letters*
 2002- Founding Editor, *Understanding Complex Systems*, Springer, Berlin-Heidelberg
 2004- Editorial Board, *Cognitive Processing*
 2006- Editorial Board, *Springer Series in Synergetics*

2011- Editorial Board, *Cognitive Systems Monographs (COSMOS)*, Springer Verlag
2013- Editorial Board, *Connection Science*

ADVISORY BOARDS

1982 Executive Board, International Society for Ecological Psychology.
Elected to the first Board of Directors
1995- Foundation for Biomusicology, Stockholm, Sweden and Florence, Italy
2003 - Scientific Advisory Board, Plexus Institute
1997- World Council, The Einstein Institutes
2009- Advisory Board, Intelligent Systems Research Institute, University of Ulster

SAMPLES OF SERVICE

Regular reviews for funding agencies around the world, including The Wellcome Trust (UK), The Riken Brain Institute (Professorial Tenure Committee), Japan, NSF, MRC (Canada), Australian Medical Research Council, Templeton Foundation, Israel Research Foundation, Netherlands Organisation for Scientific Research

Since 1987, organized regular satellite meetings to the Society for Neuroscience, sponsored by the National Institutes of Health (and occasionally the Office of Naval Research and the National Science Foundation), dealing with various topics surrounding neurobehavioral dynamical systems, including Dynamical Neuroscience I (1991) to XX (New Orleans, 2012).

Inaugural Review Panel, Theoretical/Mathematical /Computational Neuroscience, NIMH, 1989-1990

Special Emphasis Review Panel, NIH, *Neuroinformatics/ Human Brain Project*, Washington, D.C.

Consultant, NIMH, *New Directions for Neuroscience: The Next 10 Years*. Washington, D.C., 1995.

Advisory Board, *Restructuring NIH Peer Review Process and Study Sections in Cognitive and Behavioral Neuroscience*, Washington, DC 1997

Invited Speaker, *Future Career Opportunities in Neuroscience: Computational Neuroscience*. Special meeting for NIH Predoctoral Fellows. Washington, D.C., 1999.

NIMH/US delegation to inaugurate the National Brain Research Institute of India, New Delhi, 1999

Invited Speaker, NIH Training Director's meeting for recruitment of minority students in the Neurosciences: *Computational Neuroscience: The brain as a complex dynamical system*, Washington, D.C., 2000

Member, Review Panel for Sylvio O.Conte Centers for Neuroscience Research, NIH/NIMH, 2005

Member, Review Panel, NIH/NINDS Fellowship Program, 2005

Member, Review Panel, K99/R00 NIH Pathway to Independence Awards, 2012

NSF Reviewer, International Science Collaboration (ORA) Program, 2013.

Member (ex officio) NIMH Board of Scientific Counselors, June, 2014.

Member, Special Emphasis Panel, BRAIN Initiative, NIH/NINDS, July, 2014.

SELECTED INVITED LECTURES

In the U.S.: *Brandeis University, Brown University, Rockefeller University, Harvard University, MIT, Yale University, Columbia University, University of Pennsylvania, Duke University, University of Miami, University of Florida, Emory University, University of Chicago, University of Illinois, University of Minnesota, University of Wisconsin, Madison, Indiana University, University of Colorado, Penn State University, Ohio State University, University of Texas, Austin, USC, UC San Diego, UCLA, University of Oregon, Rutgers University, etc.*

In South America: *Sao Paulo, Brazil, UFMG, Belo Horizonte, Ouro Preto*

In Canada: *McGill University, University of Montreal, York University, Laval, Waterloo, Western Ontario, Calgary, Simon Fraser, U. British Columbia, etc.*

In the U.K. and Ireland: *Oxford, Cambridge, Trinity College Dublin, Queens University Belfast, University of Ulster, University of Sheffield, NUI Galway, UCD, etc.*

In Australia and New Zealand: *Universities of Queensland, Melbourne, Adelaide, Sydney, Western Australia (Perth), University of Otago (Dunedin)*

In Europe: Finland (*Helsinki*); Germany (*Bielefeld, Stuttgart, Berlin, Potsdam, Munich, Leipzig, Schloss Elman*); France (*Marseilles, Lyons, Arc et Senanque, Toulouse, Paris, Nice, Montpellier*); Italy (*Bologna, Trieste, Milano, Perugia, Trento, Elba*); Portugal (*Sintra, Lisbon*); Spain (*Barcelona*); Sweden (*Royal Swedish Academy of Sciences; Foundation for Biomusicology, Sigtuna, etc.*) Switzerland (*Maccolin, Ascona*); The Netherlands (*Free University of Amsterdam, Royal Dutch Academy of Science; Technical University Delft*); Belgium (*Free University of Brussels; KULeuven*)

In Russia: *Moscow (Academy of Sciences), Suzdal*

In Japan: *University of Tokyo; ATR Kyoto.*

In India: *The National Brain Research Institute, New Delhi*

In China and Taiwan: *Chinese University of Hong Kong, National University of Taiwan*

SELECTED KEYNOTE ADDRESSES

International Neuropsychology Symposium, Oxford, England, "Toward a theory of apractic syndromes" (1978).

NATO Advanced Study Institute: "Coordinative Structures as Dissipative Structures: Theory and Experiment", Abbaye de Senanque, France (1979)

International Conference on Attention and Performance, "Contrasting Perspectives on Order and Regulation in Movement", Jesus College, Cambridge (1980)

Nonlinearities in Brain Function, Kroc Foundation, Santa Barbara, USA (1982)

Complex Systems: Operational Approaches in Neurobiology, Physics and Computers, Schloss Elmau, Germany (1984)

VII Commonwealth Games International Conference, Brisbane, Australia (1982)

Physics of Complexity, International Center for Theoretical Physics, Trieste, Italy (1986)

American Society of Biomechanics (1987)

51st Meeting of the German and British Physical Societies, Berlin, Germany (1987)

Centennial Symposium, Information creation in biological complex systems, University of Tokyo, Tokyo, Japan (1989)

Kenwood-Smith Lectures, University of North Carolina, Greensboro (1989)

Sigma Xi Lecturer (1990)

Solvay Foundation Symposium, Self-organization, emergent properties and learning, University of Texas, Austin (1990)

W. J. Bryan Lectures in Cognitive Science, Indiana University (1991)

IVth Waddington Memorial Conference, Significance and Form in Nature and Art, Spello-Perugia, Italy (1993)

25th Anniversary Symposium, Nonlinear Systems in Medicine and Biology, Purdue University (1994)

Man, Mind, and Music, Milano, Italy (1994)

Sports, Dance, Movement, and the Brain, Art Institute of Chicago (1995)

Gordon Conference on Multisegmental Motor Control: Neural, Behavioral, and Biomechanical Approaches, New Hampshire (1995)

International Conference on Intentional and Perceptual Dynamics, Amsterdam (1995)

The Fourth International Conference on Simulation of Adaptive Behavior, Cape Cod, MA (1996)

Sir Runrun Shaw Lectures, Chinese University of Hong Kong (1996)

Developmental Science and the Holistic Approach, Wiks Castle and the Nobel Institute Stockholm (1997)

Smithsonian Institution Lecture, Washington, D.C., "How the brain changes its mind" (1999)

Distinguished Lecture Series (5), Guarantors of *Brain*, London, England, "The self-organizing coordination dynamics of brain and behavior" (1999)

Plenary talk, NIH delegation to inaugurate the National Brain Research Institute of India, Delhi, October (1999; Gandhi's birthday).

Fondazione Carlo Erba meeting on "The Emergence of Mind" Milano, Italy, April (2000)

Keynote Speaker, "Great Unsolved Problems in Biology". Society for Experimental Biology, Cambridge, England, August (2000)

Distinguished Lecture Series (3) on Coordination Dynamics at The International School for Computable Economics, October (2000), Trento, Italy.

Herbstakademie on "Self- Organization of Cognition and applications to psychology", Nov. (2000), Monte Verita, Switzerland. "Cognitive Coordination Dynamics"

Opening address, "Directed self-organization", International Conference on Coordination Dynamics 2002, Delray Beach, May, 9-12, 2002.

Keynote Speaker, International Conference on "Uncertainty and Surprise", Ilya Prigogine Center, University of Texas, Austin, April, 2003

Opening address, Cognitive Science in the 21st Century, Sao Paulo, Brazil, April, 2003.

Invited Speaker, Royal Dutch Academy of Science meeting on "Binding and its Breakdown", Amsterdam, The Netherlands, September, 2003.

Distinguished Lecturer, "New vistas for the plasticity of brain" National Yang-Ming University, Taiwan, February, 2004

Jane Goodall Distinguished Scientist Lecture, CREST, Portland, Oregon, March, 2004

Presidential (Human Kinetics) Lecture, NASPSPA, Vancouver, BC, June, 2004.

Plenary Speaker, Symposium on "Dynamic Approaches to Consciousness", Antwerp, Belgium, June, 2004

FJ McGuigan Prize Lecture for Understanding the Mind, APA Convention, Washington, DC, August, 2005

A S Iberall Distinguished Lecture on Life and the Sciences of Complexity, University of Connecticut, December 2, 2005

Keynote speaker, International meeting on Cognitive Neuroscience and Motor Control, Dunedin, New Zealand, 7-9 December, 2005

Keynote address, Inaugural Meeting of EuCognition, A European Union research programme to

develop Artificial Cognitive Systems, Nice, France, Feb., 16, 2006.

Conference Exceptionnelle du Pr. J.A.Scott Kelso, «Coordinating Brains » Dr Honoris Causa de l'Université Paul Sabatier, Oct., 27, 2006.

Keynote address, IBM Almaden Institute Symposium on “Navigating Complexity”, San Jose, California, April, 10-11, 2007.

Invited speaker, Templeton Foundation Symposium on “Top down causation and volition”, Yosemite, California, April 19-21, 2007.

Opening address, International Symposium on “Brain-Mind in Probabilistic Hyperspace” Istanbul, Turkey, October 19-21, 2007.

Inaugural Geraldine Pellecchia Memorial Lecture on Coordination and Cognition, University of Connecticut, Storrs, October 26, 2007.

Invited Speaker, 8th Olympiad of the Mind Symposium, “Brain Research: Improving Global Harmony”, National Academies of Science, Washington, DC, November, 14-16, 2007.

Invited Speaker, Parmenides Foundation “Dynamics in and of attractor landscapes”, Elba, May 21-23, 2008.

Keynote Speaker, Delft School of Design “Trans_Thinking the City: Architecture in Mind, Delft, Holland, October 31-Nov 1, 2008.

Pierre de Fermat Lecture, “A brief history of coordination”. Symposium on ‘Brain, Behavior and Beyond’ held in honor of J.A. Scott Kelso, Pierre de Fermat Laureate, University of Toulouse, April, 24, 2009.

B.F. Skinner Lecture, “The complementary nature of coordination dynamics”, Advanced Behavioral Analysis International, Phoenix, Arizona, May, 2009.

Invited Lecture, Society for Psychology and Philosophy, “Mechanisms and principles of adaptive change” Bloomington, Indiana, June, 2009

Keynote Speaker, International Workshop on Rhythmicity and Motor Control, “Coordination dynamics of rhythmic behavior” Sheffield, England, July1-4, 2009.

Invited speaker, Computer Science Research Institute Workshop, University of Ulster “Challenges for Computational Neuroscience: How to handle complexity”, Belfast, N. Ireland, July 7-8, 2009.

Invited address, 7th International Congress on Progress in Motor Control, “Control and Coordination Dynamics”, Marseille, France, July 22-25, 2009.

Invited participant, Ernst Strüngmann Forum, “Dynamic Coordination in the Brain: From Neurons to Mind”, Frankfurt am Main, Germany, August 16-21, 2009.

Invited response to Dr Bert Sakmann, International Conference on Cognitive Robotics, University of Ulster, L'Derry, N. Ireland, September, 2009.

Invited address “Coordination, Complementarity and Understanding” NSF Meeting on Neurocognitive Networks, Boca Raton, Fla, Jan 28-29, 2010

Keynote speaker, “Coordination, Chimeras and Complementarity”, International Conference on Brain Coordination Dynamics, March 1-5, 2010.

Keynote Speaker, Nour Foundation Symposium on “Shifting Realities”, New York Academy of Sciences, May 12, 2010

Invited Lecture Series (6) “The Science of Coordination: Coordination Dynamics” Technical University of Lisbon, June 1-2, 2010

Keynote Speaker, 21st International Conference on Artificial Intelligence and Cognitive Sciences (AICS 2010), Aug 30-Sept 1, 2010

Invited Speaker, Opportunities and Challenges in Social Neuroscience, Utrecht, The Netherlands, March 21-23, 2011

Grande Conferencia, “Coordination and The Complementary Nature”, Programa Cathedra, UFMG, Brazil, June 27, 2011.

Keynote Speaker “Music, Mind and Movement”, Belo Horizonte, Brazil, July 1, 2011.

Invited speaker, International Conference on Perception and Action XVI, “Some consequences of bidirectional coupling between humans, machines and nervous systems. Ouro Preto, Brazil, July 9, 2011

Keynote Speaker, International Conference of the European SKILLS project, Montpellier, France, Dec 15-16, 2011 “How humans learn new skills”.

Opening address, International Conference on Rethinking Meaning, “The Four Ms: Matter, Meaning, Movement and Myth”, University of Bologna, Italy, April 12-13, 2012.

Invited Speaker, NIH Conference on Criticality in Neural Systems, "Criticality and coordination in people and brains", Natcher Auditorium, April 30-May, 1, 2012.

Keynote Speaker, European Cooperation in Science and Technology Meeting on The Physics of Competition and Conflict, “Coordination, Conflict and Complementarity”, Aras Moyola, Galway, Ireland, July 11-14, 2012.

Co-Organizer and Invited Speaker, NIMH sponsored Dynamical Neuroscience XX, "The neural choreography of social interaction: How people and brains couple". New Orleans, October 11-12, 2012

Invited participant, Round Table on "Life and Movement", New Helix Center, New York City, October 26, 2012.

Invited Speaker, Tribute to the work of Maxine Sheets-Johnstone, SPEP, University of Rochester, November, 2-4, 2012.

Invited Seminar, NINDS Human Motor Control Section “The Neural Choreography of Behavior: Multiscale Coordination Dynamics”, November, 30, 2012.

Keynote Speaker, Intelligent Systems Research Summit, "Brain breakthroughs: From cells to society", Derry~Londonderry, N. Ireland, June 11-12, 2013.

Plenary Speaker, 4th International Conference on Cognitive Neurodynamics, "Bidirectional coupling between humans, machines and nervous systems", Sigtuna, Sweden, June, 23-27, 2013.

Plenary Speaker, 18th European College of Sports Science, "The neural choreography of coordinated behavior", Barcelona, Spain, June 26-29, 2013.

Keynote Speaker, International Conference on Complexity, Cognition, Urban Planning and Design, "Cities as Coordinative Structures", Delft, Holland, 10-12 October, 2013.

Invited Speaker, International Conference on Diversity in Macroeconomics. Economic & Social Research Council (UK), Colchester, England, 24-25 Feb., 2014.

Invited Colloquium, Cognitive Science Program, University of Connecticut, “Coordinative structures, criticality and Crick’s conjecture”, April 3-4, 2014.

Invited Speaker, International Conference on Social Science, “The neural choreography of social coordination”, Honolulu, Hawaii, May 28-31, 2014.

Invited Speaker, 2014 IEEE International Conference on Systems, Man & Cybernetics, “Coordination Dynamics: Bidirectional coupling between humans, machines and brains”. San Diego, CA, Oct 5-8, 2014