

Richard Reilly, PhD

Trinity Centre for Bioengineering
School of Medicine and School of Engineering
Trinity College Dublin
+353-1-8964214
richard.reilly@tcd.ie

Advanced, original neural signal processing methods to create novel and leading-edge, patient-oriented neurodiagnostics methods along with neural prosthetics and therapeutic neuromodulation devices. Coupling unique and advanced neural engineering to patient needs from neurological disorders, brain trauma and insult through to understanding pathophysiology cognitive, sensory and motor functions.

Qualifications

- Member of the Royal Irish Academy (RIA), 2012
- Fellow of the European Alliance for Medical and Biological Engineering & Science (EAMBES) (2015)
- Fellow of the Royal Society of Medicine, 2012
- Fellow of the Royal Academy of Medicine in Ireland (RAMI), 2010
- Fellow of Trinity College Dublin, 2007
- MA *jure officii* (Trinity College Dublin), 2009
- Ph.D.(University College Dublin), 1992 in Biomedical Signal Processing
- M.Eng.Sc (University College Dublin), 1989 in Biomedical Engineering
- B.E. (University College Dublin) 1987 in Electronic Engineering

Current Professional Appointments

2008-present	Full Professor, Professor of Neural Engineering and Ageing, School of Medicine School of Engineering (joint appointment in two Schools) Trinity College Dublin
2008-present	Principal Investigator in the Trinity Centre for BioEngineering (TCBE)
2008-present	Principal Investigator in the Trinity College Institute of Neuroscience (TCIN)
2010-present	Principal Investigator in the Centre for Excellence in Ageing, St James's Hospital, Dublin
2006-present	Visiting Researcher, Department of Neurology, St. Vincent's University Hospital, Dublin 4
2017-present	Honorary Professor, Royal College of Surgeons in Ireland
2017-present	Member of the Board of the National Rehabilitation Hospital, Dublin

Professional Experience

2008-2013	Director, Trinity Centre for Bioengineering
2006-2007	Associate Professor, School of Electrical, Electronic and Mechanical Engineering, University College Dublin
2007-2008	Director, Technology and Research for Independent Living Centre (TRILCentre), Dublin
2006-2007	Vice-Chairman, Biomedical Division, Institution of Engineers of Ireland
2005-2006	Chairman, Biomedical Division, Institution of Engineers of Ireland
2006-2007	Director, Rehabilitation Engineering Laboratory, National Rehabilitation Hospital
2005-2006	Vice-Principal for Research and Innovation, University College Dublin
2002-2006	Senior Lecturer, Department of Electronic & Electrical Engineering, University College Dublin
1996-2002	College Lecturer (Tenured), Department of Electronic & Electrical Engineering, University College Dublin
1995-1996	Project Officer, European Commission, Brussels.
1993-1996	Research Fellow, Department of Electronic & Electrical Engineering, University College Dublin
1992-1993	Senior Research Officer, Enterprise Ireland (formerly EOLAS)
1990-1992	Biomedical Engineer, National Rehabilitation Hospital, Dublin
1988-1990	Design Engineer, Space Technology Ireland and the Dept. de Recherche Spatiale (CNRS) Paris. Developed flight equipment for the NASA WIND, SOHO and CLUSTER satellites

Professional and Technical Societies, Committees and Boards

- Member of the Health Products Regulatory Authority Committee on Medical Device (2016-2020)
- Member of the Board of the National Rehabilitation Hospital, Dublin (2017-present)
- Member of the American Association of Neurology (AAN) (2015-present)
- Member of the European Academy of Neurology (EAN) (2016-present)
- Member of the International Parkinson and Movement Disorders Society (MDS) (2013-present)
- Director of the Irish Institute of Clinical Neuroscience (2016- present)
- Vice-Chairman, Engineering and Computer Science Committee, Royal Irish Academy (2014-2017)
- Council Member of the European Alliance for Medical and Biological Engineering & Science (EAMBES) (2014-2018)
- Associate Editor & Editorial Board Member of IEEE Journal of Translational Engineering in Health and Medicine (JTEHM) (2013-present)
- Associate Editor & Editorial Board Member of the IET's Healthcare Technology Letters (2013- present)
- Editorial Board of Frontiers in Integrative Neuroscience, a specialty of Frontiers in Neuroscience (2009-present)
- Member of the Board of Tallaght Hospital, Dublin (2012-2017)
- Editorial Board of the International Journal of Artificial Organs (2011-2015)
- Senior Member, Institute of Electrical and Electronics Engineers (IEEE) & Engineering in Medicine and Biology Society (2006-present)
- Member of the Advisory Board Biomedical Engineering, Faculty of Mathematics & Natural Sciences, University of Groningen (2016-2018)
- Member of the Board of Directors of the Centre for Advanced Medical Imaging, St James's Hospital (2009-present)
- Member of the Institution of Engineering and Technology (IET) (1998-present)

- Member of the Institution of Engineers of Ireland (Engineers Ireland) (1988-present)
- Member of the Biomedical Engineering Society (BMES) (2008-present)
- Council member of European Society for Engineering and Medicine (ESEM) (2008-2015)
- President of the European Society of Engineering and Medicine (ESEM) (2011-2015)
- Member of International Neuromodulation Society and Neuromodulation Society of the United Kingdom and Ireland (2010-present)
- Member of the Society of Neuroscience (SFN) (2010-present)
- Member of the Irish Institute of Clinical Neuroscience (IICN) (2008-present)
- Member Management Committee, CPD and Education for Clinical and Biomedical Engineers, Engineers Ireland (2006-2010)
- Member, Executive Management Committee, Trinity Centre for Bioengineering (TCBE) (2008 – present)
- Member, Executive Management Committee, Trinity Institute for Neuroscience (TCIN) (2009 – present)
- Member, UCD-TCD Innovation Academy Executive Board (2010- 2013)
- Assistant Editor of the IEEE Transactions on Neural Systems and Rehabilitation Engineering (1999-2003)
- Member of Council, Institution of Engineers of Ireland, (2003–2004, 2004–2005 and 2005-2006)
- Founder Member of the Clinical Engineering Voluntary Registration Board, Engineers Ireland (2006-2010)
- Vice-Chairman, Biomedical Division, Institution of Engineers of Ireland (2003-2004 and 2004–2005)
- Chairman, Biomedical Division, Institution of Engineers of Ireland (2005-2006)
- Reviewer for journal including *Journal of Neural Engineering*, *Scientific Reports*, *PlosOne*, *Frontiers in Neuroscience*, *Frontiers in BioEngineering*, *IEEE Transactions on Biomedical Engineering*, *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, *IEEE Transaction on Multimedia*, *Physiological Measurement*, *IEEE Transactions on Industrial Electronics*, *Engineering in Medicine and Biology Magazine*, *International Journal of Circuit Theory and Application*, *IEE Journal Electronic Letters*, *Medical and Biological Engineering and Computing*, *IEE Proceedings Vision, Image & Signal Processing*, *IEEE Transactions on Knowledge and Data Engineering*, *IEEE Transactions on Information Technology in Biomedicine*, *IEEE Press*, *ESEM Technology and Health Care*, *Journal of Neuroscience*, *Journal of Applied Signal Processing*, *EURASIP Journal of Applied Signal Processing*, *Pattern Recognition*, *European Journal of Neurology*, *Wiley Publishers*.
- Grant reviewer for *Swiss National Science Foundation*, *US Alzheimer’s Association*, *Agence Recherche France*, *Parkinson’s Disease Society (UK)*, *Enterprise Ireland*, *Chief Scientist Office-Scottish Government*, *European Research Council*, *The US Alzheimer’s Association*.
- External Examiner for the *Technical University of Eindhoven*, *Technical University of Twente*, *Delft Technical University*, *The University of Groningen*, *Universitat de Barcelona*, *University of Vic-Central University of Catalonia*, *The Dublin Institute of Technology*
- PhD External Examiner for the *Czech Technical University in Prague (2010)*, *Universitat Politècnica de Valencia (2009)*, *Ecole Polytechnique Federale de Lausanne EPFL (2008, 2012)*, *Queens University, Belfast (2007, 2012)*, *University of Ulster (2009, 2017)*, *Universitat of Barcelona (2005, 2016)*, *University of Cape Town (2003, 2015)*, *Dublin City University (2005, 2002 and 2005)*, *University of Groningen (2015)*.

Research Focus

Neural engineering for diagnostic prediction of the human physiological and cognitive state. Advanced, original neural signal processing methods to create novel and leading-edge, patient-oriented neurodiagnostics methods but also neural prosthetics and neuromodulation devices. Analysis of human sensory and multisensory integration processes using high density electrophysiological analysis and multimodal fusion of information for neurological diagnosis and assessment. Research targeted a better understanding of the underlying pathophysiology of sensory and cognitive processing.

Research Funding

Competitively awarded **€10,033,075** for research as Principal Investigator, with **€2,598,184** in the past 5 years. These funds have been obtained from national and international agencies. Competitively awarded **€2,495,726** as Co-Investigator. Competitively awarded **€5,600,000** as Director of Research and a Principal Investigator as infrastructural funds for advanced PhD educational program. Competitively awarded **€15,000,000** (IDA+Intel) as the Founding Director and a Principal Investigator of the TRIL Centre for research into ageing.

Current research project funding:

- IBM Faculty Award “Cognitive Computing to Predict Speech Perception in Paediatric Cochlear Implant Users” \$40,000 (2017-2018)
- Health Research Board and Dystonia Ireland “Temporal Discrimination Threshold as an endophenotype in adult onset primary Dystonia” €427,706 (2013-2018) co-PI with Prof Michael Hutchinson
- Cochlear Research and Development Ltd “Neurophysiological based objective measures of speech perception in Cochlear Implant users” €120,000 (2014-2017)
- Enterprise Ireland “Development of a system to objectively and longitudinally assess adherence to respiratory medications” co-PI with Prof Richard Costello. €122,457 (2016-2018)
- “Postural Instability as an Endophenotype for early Dysfunction and Decline” Irish Research Council and Novartis, €95,000 (2017-2020)
- “Wearable neuromodulation: a noninvasive neural stimulation therapy for movement disorder patients” EIT-Health Innovation by Ideas, €140,000 Proposal ID: 17031 (2017-2019)
- Health Research Board “Multimodal Cardiovascular Modelling for Predicting and Preventing Disability in The Irish Longitudinal Study on Ageing” €370,000 (2017-2021)

Current research grants in review:

- “Mood disorder in patients with cervical dystonia and their unaffected siblings”, Dystonia Medical Research Foundation, €110,000
- “Temporal discrimination in musicians & musician’s dystonia: physiological, familial & environmental factors”, Wellcome Trust, €1,033,414.00

Scientific peer reviewed Publications

427 peer reviewed publications: International peer reviewed Journal Papers – 130; Editorials – 2; Booked Edited – 2; Book Chapters – 12; International Peer-review Conference Papers – 195; National Peer-Review Conference Papers – 102; Patents – 3.

Indices

H-index: 40 Citations: 7475 i10-index: 126

Conference Organisation Activities

Note that only major activities related to major conference events are listed.

1. Scientific Committee of the conference of the *European Medical and Biological Engineering Conference (EMBEC)* and the *Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC)*, in Tampere, Finland, in June 2017
2. Associate Editor, *7th International IEEE EMBS Conference on Neural Engineering*, Montpellier, France April 2015
3. Track chair of Neurological disorders and clinical neurophysiology of Neural and Rehabilitation Engineering for *IEEE-EMBS 35th Annual International Conference*, 2013, Osaka.
4. Program Committee member for the *LASTED International Conference on Biomedical Engineering (BioMed 2012)*, Innsbruck, 2012
5. Scientific Committee of the *Irish Gerontology Society*, 59th Annual Meeting, Dublin, 2011
6. Technical Program Committee member, *IEEE-EMBS 33rd Annual International Conference*, Boston, USA, 2011
7. Program Committee member, Irish Machine Vision and Image Processing Conference (IMVIP), September 2011, Dublin, 2011
8. Track Co-chair of the clinical neural engineering, *5th International IEEE-EMBS Conference on Neural Engineering*, Cancun, Mexico, 2011
9. Technical Program Committee member, *Irish Signals and Systems Conference (ISSC)*, Dublin 2011
10. Track chair and Technical Program Committee member, *Bioengineering in Ireland*, 16th Annual Conference, January 2010
11. Technical Program Committee member, *IEEE-EMBS 32nd Annual International Conference*, Buenos Aires, Argentina, 2010
12. Technical Program Committee member, *IEEE-EMBS 31st Annual International Conference*, Minneapolis USA, 2009
13. Technical Program Committee member, *4th International IEEE-EMBS Conference on Neural Engineering*, Antalya, Turkey, 2009
14. Track Chair for IEEE Engineering, Medicine and Biology Conference 2008, August 2008
15. Scientific Publication and Organisation Program Committee member for EUSIPCO 2008, September 2008
16. Program Committee member, Irish Machine Vision and Image Processing Conference (IMVIP), September 2007, Maynooth, 2007
17. Technical Program Committee, *IEEE-EMBS 29th Annual Internal Conference*, Lyon, France, 2007
18. Technical Program Committee member, *IEEE-EMBS 28th Annual International Conference*, New York USA, 2006
19. Organisation Committee and Technical Program Committee member for the International Multisensory Research Forum (IMRF), 2006
20. Program Committee for 18th International Conference on Pattern Recognition, Aug 2006
21. Technical Program Committee member, *2nd International Conference on Neural Engineering*, Washington, USA, 2005
22. Technical Program Committee member, *IEEE-EMBS 27th Annual International Conference*, Shanghai, China, 2005
23. Programme Committee for the 2006 Irish Machine Vision and Image Processing (IMVIP), September 2006
24. Co-chair and Scientific Organiser, International Conference AAATE, September 2003
25. Co-chair, *Advances in Investigative and Clinical Diagnosis in Neurology*, Dublin, January 2003
26. Technical Program Committee member, *IEEE-EMBS 24th Annual International Conference*, Houston, USA, 2002
27. Technical Program Committee member, *IEEE-EMBS 23rd Annual International Conference*, Istanbul, 2001
28. Program and Organisational Committee member Irish Signal and System Conference, June 2000
29. Member of the International program committee for the Biomedical Engineering Society/EMBS international conference, Atlanta, 1999.

Professional Honours, Awards and Fellowships

1. IBM Faculty Award (2016)
2. Fellow of the European Alliance for Medical and Biological Engineering & Science (EAMBES) (2015)
3. Samuel Houghton Silver Medal, Royal Academy of Medicine in Ireland (2013)
4. Fellow of the Royal Society of Medicine (2012)
5. Member of the Royal Irish Academy (RIA), 2012
6. Fellow of the Royal Academy of Medicine in Ireland (RAMI), 2010
7. Fellowship of Trinity College Dublin (2009)
8. Intel Award for Innovation (2007)
9. Excellence in Neural Engineering Award from the IEEE Engineering in Medicine and Biology Society, US National Science Foundation and US Office of Naval Research (2005)
10. Fulbright Scholar Award 2004 (multisensory integration with the Cognitive Neuroscience & Schizophrenia Program at Nathan S. Kline Institute for Psychiatric Research, New York)
11. President's Research Fellowship for research into biomedical multisensory integration, University College Dublin. (2004/2005)
12. Invited Lecturer for the Institution of Electrical Engineers (IEE) the Silvanus P. Thompson lecturer for two years. This is a distinguished Lecture series, alongside the Faraday Lecture and is available to all IEE centres worldwide (1998-2000).
13. Bronze Medal, Royal Academy of Medicine in Ireland and Speaker Award at the Annual Bioengineering in Ireland Conference (1995).
14. National Hewlett Packard Design Award for Engineering and Science (1987): Monitoring dynamic pressure on the alveolar ridge during speech articulation.

Postgraduate Supervision

Currently mentoring 3 postdoctoral fellows and supervising 6 PhD and 1 MSc researchers. Successfully supervised to completion 76 PhD/MSc and mentored 16 postdoctoral fellows.

Current Graduate students

Theme A (Active Implantable Devices)

1. Waechter S. (2014-), PhD: Electrophysiological Objective Measures of Auditory Temporal Perception in Cochlear Implants Users

Theme B (Neurophysiological Modelling and Control)

2. Munteanu T. (2015-), PhD: Electrophysiological based studies into the pathophysiology of Freezing of Gait in Parkinson's Disease
3. Narasimham S. (2014-), PhD: Neuroimaging investigations of mid-brain functional activity in Dystonia
4. O'Keefe C. (2016-), PhD: Postural Instability as an Endophenotype for early Dysfunction and Decline in Neurodevelopmental Disorders
5. O'Flaherty E. (2016-2018), MSc: Neurophysiology of eye tracking younger cohorts

Theme C (Neural Signal Processing and Neural Signal Processing with Application to Ageing)

6. O'Higgins C. (2014-), PhD: Neuroimaging of Cancer-related fatigue (co-supervision with Prof. Walsh, School of Medicine).

7. Newman L. (2017-), *PhD*: Cerebral haemodynamics in an older population: relationship with ageing, disease and health behaviours (co-supervision with Prof. Kenny, School of Medicine).

Former Graduate Students

Theme (Active Implantable Devices)

1. Hablani S. (2016-), *MSc*: Electrophysiological Objective Measures of Fine Temporal Processing in Cochlear Implants Users
2. Sechler S (2015-2016), *MSc*: Electrophysiological Measures of Spatial Awareness in Cochlear Implants Users.
3. Lopez-Valdes A. (2012-2016), *PhD*: Electrophysiological Objective Measures of Auditory Spectral Perception in Cochlear Implants
4. Lau C. (2015-2016), *MAI*: Electrophysiological Measures of Speech Perception in Cochlear Implants Users.
5. McNamara, H. (2013-2014), *MSc*: Neuronal substrate of procedural memory: Ensemble investigation of rodent basal ganglia
6. Leijssen A. (2013-2014), *MSc*: Spectral Ripple Mismatch Negativity in Speech Perception in Cochlear Implants Users.
7. Krijser L. (2010-2011), *MSc*: Thin filament electrode design for deep brain recording
8. Van Dort M. (2010-2011), *MSc*: Closed loop recording and stimulation in implanted devices.
9. Lopez-Valdes A. (2011-2012), *MSc*: Mathematical processing of audio cues for improve hearing with cochlear implants
10. Chah E. (2007-2012), *PhD*: Mathematical processing of electrophysiology with applications to implanted electrodes
11. Steinemann, N (2011-2012), *MSc*: Mathematical modelling of head direction cells
12. Noor S, (2011-2012), *MSc*: Recording of hippocampal place cells in freely moving animals

Theme (Neurophysiological Modelling and Imaging)

8. Quinlivan B. (2013-2017), *PhD*: Neurophysiological Analysis of cortico-basal ganglia interactions in Dystonia
9. McDevitt N. (2013-2017), *PhD*: Electrophysiological analysis of Neurodevelopmental Disorders (co-PI Prof. Gallagher, Sch. of Med.).
10. Taboada L (2016-), *MSc*: Postural Instability as an Endophenotype for early Dysfunction and Decline in Neurodevelopmental Disorders
11. Birsanu D. (2016-), *MSc*: Electrophysiological based studies into the pathophysiology of Parkinson and Parkinson's Disease
12. Sundararajan V. (2016-2017), *MAI*: Neuroimaging investigations of mid-brain functional activity in Dystonia
13. Fearon C. (2011-2016), *PhD*: Electrophysiological based studies into the pathophysiology of Freezing of Gait in Parkinson's Disease
14. Melis E. (2015-2016), *MSc*: Electrophysiological Connectivity analysis of Neuroimaging data from Neurodevelopmental Disorders
15. Killian O. (2015-2016), *MSc*: Neurophysiological Analysis of cortico-basal ganglia interactions in Dystonia
16. Baird E. (2015-2016), *MAI*: Electrophysiological Investigations into Freezing of Gait.
17. Narasimham S. (2014-2015), *MSc*: Electrophysiological investigations in Looming Stimuli and its relevance to movement disorders
18. Markicevic M (2014-2015), *MSc*: Neuroimaging of Cancer-related fatigue
19. Waechter S. (2013-2014), *MSc*: Neuroimaging during ambulation for a study of Freezing of Gait in Parkinson's Disease
20. Abdur R. (2013-2014), *MSc*: Electrophysiological investigations in Looming Stimuli and its relevance to movement disorders
21. Cheshire R. (2012-2013), *MSc*: Electrophysiological Investigations into Freezing of Gait.
22. Gallego, J. (2012-2013), *MSc*: Ambulatory neuroimaging of Freezing of Gait.
23. Anggraini, D. (2012-2013), *MSc*: Neuroimaging of interactions between motor and cognitive cognition.
24. McDevitt N. (2012-2013), *MSc*: Electrophysiological analysis of Autism Spectrum Disorder. (with Prof. Gallagher, School of Medicine).
25. Cosgrave N (2012-2023), *MSc*: Electrophysiological analysis of Autism Spectrum Disorder. (with Prof. Gallagher, School of Medicine).
26. Kiiski H. (2009-2012), *PhD*: Neurophysiological Assessment of cognitive impairment in multiple sclerosis.
27. Nolan H. (2008-2012), *PhD*: Multisensory Integration in the Vestibular System
28. Rueda-Delgado L. (2011-2012), *MSc*: Quantitative analysis of acute brain injury.
29. Bradley D. (2008-2012), *PhD*: Temporal Discrimination Threshold as an endophenotype in adult onset primary torsion dystonia
30. Meredith S. (2004-2011), *PhD*: Diffusion Imaging: A Fast Marching Approach to Tractography (with Dr. Kathleen Curran)
31. Power A. (2006-2011), *PhD*: Endogenous Auditory Spatial Attention in Auditory Cortex.
32. Sobolewski R. (2008-2011), *MSc*: An investigation of Cognitive Aging: an EEG study.
33. Nolan D (2009-2011), *MSc*: Analysis of the aortic valve dynamics using endoluminal measurements.
34. Cheung M (2010-2011), *MSc*: Assessment kinematic movement in fMRI.
35. Brennan C (2010-2011), *MSc*: Influence of dual tasking on gait variability
36. Browett G. (2009-2010), *MSc*: Artefact Rejection in movement based EEG Studies.
37. Moran R.C. (2004-2008), *PhD*: Neural Mass Models of the Electroencephalogram-a unifying framework.
38. Lalor E. (2004-2007), *PhD*: Neural Engineering Methods in Visual Neuroscience.
39. Greene B. (2003-2007), *PhD*: Quantification and Classification of Electrophysiological Seizure in the Neonate.
40. Kelly S. (2001-2005), *PhD*: Electrophysiological studies of the Human Attention System.
41. Smith R. (2003-2004), *MEngSc*: Signal Processing of EEG for Brain Computer Interfaces.
42. O'Dwyer M. (2003-2004), *MEngSc*: ECG Pattern Recognition using two level classifiers.
43. McCue M. (1998-2000), *MEngSc*: EMG Signal Analysis" (with Prof. Mark O'Malley)

Theme (Neural Signal Processing and Neural Signal Processing with application to ageing)

44. Taylor T. (2013-2017), *PhD*: Bioacoustic analysis of respiratory function
45. Rice A. (2016-2017), *MAI*: Neuroimaging of Cancer-related fatigue
46. McNulty J. (2016-2017), *MAI*: Bioacoustic analysis of respiratory function
47. Creagh A. (2015-), *MSc*: Gait as a window into cognitive function.
48. MacCartan T. (2015-2016), *MSc*: Bioacoustic analysis of respiratory function.
49. Maguire F. (2015-2016), *MSc*: Gait as a window into cognitive function.
50. Holmes M. (2011-2015), *PhD*: Bioacoustic analysis of respiratory function.
51. Foran T. (2009-2015), *PhD*: Gait Analysis from triaxial accelerometry. (co-supervision with Prof. Kenny, School of Medicine).
52. Killane I. (2009-2014), *PhD*: Gait as a window into cognitive function.
53. Burke L. (2013-2014) *MSc*: Speech derived measures of cognitive impairment during chemotherapy
54. Newman L. (2013-2014), *MSc*: Neuroimaging of Cancer-related fatigue
55. Koller, S (2013-2014), *MSc*: Speech derived measures of cognitive impairment during chemotherapy
56. Killidil R. (2013-2014), *MSc*: Neuroimaging of Cancer-related fatigue
57. Rapcan V. (2007-2013), *PhD*: Speech and language processing in cognitive function assessment.
58. Hintze J. (2012-2013), *MSc*: Bioacoustic analysis of respiratory signals.
59. ASM Shamsul Arefin (2011-), *MSc* Quantitative EEG analysis of task induced epilepsy

60. Reynolds N., (2011-2012), MSc Diffusion Tensor Imaging of task induced epilepsy
61. Dabacan A. (2011-2012), MSc Temporal Discrimination Threshold Assessment in Dystonia
62. Fanning A. (2011-2012), MSc Temporal Discrimination Threshold Assessment in Dystonia
63. Mooney E. (2011-2012), MSc Tremor Assessment in Neurological Disorders.
64. Murphy C (2010-2011), MSc: Forced Oscillatory Measurements in Pulmonary Diseases
65. Pitorac D.M. (2008-2009), MSc: Automatically Adapting Mattress for the Prevention of Pressure Sores and Ulceration.
66. Lahart F. (2007-2008), MSc: Home based Stroke Rehabilitation.
67. Roche J. (2007-2008), MSc: Use of Abdominal Pressure for orthostatic tolerance in patients with autonomic failure.
68. Scanlon P. (2001-2005), PhD: Audio and Visual Features for Audio-Visual Speech Recognition.
69. Sharma P. (2000-2005), PhD: Face Detection with application to Video Segmentation.
70. Fox N. (2002-2005), PhD: Audio and Video based Person Identification.
71. Maguire C. (2003-2004), MEngSc: Automatic Classification for Vocal Pathology.
72. Gray M. (2002-2003), MEngSc: Video compression using for Wireless networks.
73. Kat Woon L. (2001-2003), MEngSc: Bluetooth based Video and Image Transmission.
74. McInerney S. (1999-2001), MEngSc: VLSI cores for Pattern Recognition applications.
75. Harper P. (1998-2000), MEngSc: Object Segmentation using Level Sets.
76. Bray D. (1998-1999), MEngSc: Abdominal Bowel Sounds” (with Dr Brendan McCormack)

Professional Directorships

- Director, Irish Institute of Clinical Neuroscience (2017-2019)
- Scientific Advisor, Acton Capital (2016- to date)
- Director, European Biometrics Forum (2003-2011)
- Director, Technology and Research for Independent Living Centre (TRILCentre), Dublin (2006-2008)
- Director, Rehabilitation Engineering Laboratory, National Rehabilitation Hospital, Dublin 2006-2007
- Founder, Scientific Advisor and Non-executive Director non-executive, Voxpilot Ltd, Dublin and Voxpilot SA, Paris (2000-2009)

Invited keynotes, addresses, or other invited lectures/presentations in past 10 years

- Centre for Neurology, University of Tuebingen, Germany, July 2017
- New Developments in Cochlear Implant Technology, IET, Dublin, Feb 2017
- Assessing Cognition Function with Speech and Gait, Hospital Clinic, Barcelona July 2016
- “Can you hear me now?”, Symposium hosted by the Electrical and Electronic division in association with IET, Dublin, Mar 2016
- Dept of Neurology, University Medical Centre Groningen, The Netherlands, Jan 2016.
- Institute fur Physiologie, RWTH Aachen, Germany, Dec 2015.
- Inaugural Lecture for the Program in Biomedical Engineering, Universitat de Barcelona, Sept 2015.
- Universitat de Vic, Universitat Central de Catalunya, April 2015
- Houghton keynote Lecture at the 19th Annual Conference of the Bioengineering Section of the Royal Academy of Medicine in Ireland, January 2013
- 6th International Joint Conference on Biomedical Engineering Systems and Technology, BIOSTEC 2013, Barcelona, February 2013
- Invited to deliver international level-10 course on Active Implanted Devices and Systems at RomaTre University, Italy. June 2013
- 59th Annual Irish Gerontology Society Conference, Dublin, September 2011
- 3rd Annual Scientific Meeting of the Faculty of Pain Medicine, College of Anaesthetists of Ireland, Dublin February 2011
- International Workshop on Neuroimaging of Neurodegenerative Disorders, Montreal, November 2010.
- Technology and Dementia Seminar, Dublin October 2010
- 6th European Union Geriatric Medicine Society, September 2010
- European Meeting of the International Psychogeriatric Association, April 2008
- Engineers Ireland Annual Conference, Dublin, April 2007
- Universitat Politècnica de Catalunya, Spain, December 2006
- University of Alcalá de Henares, Spain, June 2006
- The Nathan Kline Institute for Psychiatric Research, New York, March 2005
- Carnegie Mellon University, March 2005
- Universidad de Barcelona, Spain April 2005
- Universitat Pompeu Fabra, Barcelona, Spain April 2005
- Universidad de Sevilla, Spain May 2005
- New York University, October 2004
- Massachusetts General, Boston, September 2004
- Annual Engineers Ireland Conference Biomedical Session, “Translational Research can it influence Public Policy”, April 2007.
- European Governmental Summit, Farmleigh House, Dublin, “Multimodal Biometrics”, June 2004.
- Invited Lecturer for the 1998-2000 S.P. Thompson Touring Lecture. Based on my research work in signal processing, I was awarded by the Institution of Electrical Engineers (IEE) the Silvanus P. Thompson lecturer for 1998 - 2000. This is a distinguished Lecture series, alongside the Faraday Lecture and is available to all IEE centres worldwide.

Membership of Governmental Advisory Boards

Acted in a professional capacity for several international and national bodies.

- Member of the Board of Tallaght Hospital, Dublin (2012-2016)
- Member of the Health Products Regulatory Authority Committee on Medical Device (2016-present)
- European Commission (2005, 2006, 2015, 2016).
- External Reviewer of COST Action 275 – Pattern Recognition for Biometrics Applications.

- European Commission (2000) Expert as part of a high-level EU mission to Guatemala. Forum titled “EU-Latin America Co-operation in Education, Science and Technology”.
- European Commission (1994-2001). Rapporteur to the European Commission for evaluations in the 4th and 5th Framework.
- European Commission (1997). Expert as part of a high-level EU mission led by Sir Leon Brittan, Vice-President of the Commission, to Tokyo, Japan. Forum titled “EU-Japan Co-operation in Education, Science and Technology”.
- European Commission (1993-2004) Expert to DG-III and DG-XIII of the European Commission.
- Electro-Technical Council of Ireland (2003-2008) Technical Committee 10 (ECTI TC10).

RICHARD REILLY, PHD

REFEREED PUBLICATIONS

2018

1. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Viani L., **Reilly R.B.**, “Depth matters- towards finding an objective neurophysiological measure of behavioral amplitude modulation detection based on neural threshold determination” *Hearing Research*, Volume 359, March 2018, Pages 13-22. PMID 29291949.
2. Narasimham, S., McGovern, E., Killian, O., Beck, R., Farrell, M., O’Riordan, S., Hutchinson, M., & **Reilly RB**. Investigating Ensemble Learning for Multi-Modal Data Fusion and Classification in Cervical Dystonia”, *Proceedings of the Organisation of Human Brain Mapping, OHBM 2018*, Singapore, June 2018
3. Kosgallana P.C., Thapa J., Simoes-Franklin C., Walshe P., Glynn F., **Reilly R.B.**, Viani L. “New approach in programming sequentially implanted children: Effects of inter implant dynamic range differences on functional outcomes”, *Proc of the 15th International Conference on Cochlear Implants and Other Implantable Auditory Technology*, June 2018, Antwerp, Belgium.
4. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Smith J., Viani L., **Reilly R.B.**, “Investigation of the identity-MMN as a measure of amplitude modulation detection in cochlear implant users”, *Proceedings of the 8th Mismatch Negativity conference*, Helsinki, June 2018
5. Waechter S.M., Hablani S., **Reilly R.B.**, “Is auditory temporal fine structure processing encoded in the MMN? ”, *Proceedings of the 8th Mismatch Negativity conference*, Helsinki, June 2018
6. Kiiski, H., Jollans L., Ó Donnchadha S., Nolan H., Lonergan R. Kelly S., O’Brien M.C., Kinsella K., Bramham J., Burke T., Hutchinson, M, Tubridy N., **Reilly R.B.**, Whelan R, “Machine learning EEG to predict Cognitive Efficiency and Processing Speed over a 2-year Period in Multiple Sclerosis Patients” *Clinical Neurophysiology*, in press.
7. De Looze C., Kelly F., Crosby L., Vourdanou A., Lawlor B., **Reilly R.B.**, “Changes in Speech Chunking in Reading Aloud is a marker of Mild Cognitive Impairment and Mild-to-Moderate Alzheimer’s Disease”, *Current Alzheimer Research* (CAR-2017-0090), in press.
8. Walshe, P, Thapa, J, Ramli, R., Simoes-Franklin, C., **Reilly, R.B.**, Viani, L, “The usefulness integrity testing: a single institution experience of 86 tests over a period of 20 years”, *Clinical Otolaryngology*, COA-2017-0271
9. Taylor T.E., Zigel Y., Egan C., Hughes F., Costello R.W., **Reilly R.B.**, “Objective Assessment of Patient Inhaler User Technique Using an Audio-Based Classification Approach” *Scientific Reports*, Feb 1: 1;8(1):2164. doi: 10.1038/s41598-018-20523-w. PMID: 29391489
10. Cushen B., Sulaiman I., Greene G., MacHale E., Mokoka M., **Reilly R.B.**, Bennett K., van Boven J., Costello R.W. “The Clinical Impact of different adherence behaviours in patients with severe COPD”, *American Journal of Respiratory and Critical Care Medicine*. 2018 Jan 19. doi: 10.1164/rccm.201712-2469LE. PMID: 29351380
11. Taylor TE, Lacalle Muls H, Costello RW, **Reilly RB** “Estimation of inhalation flow profile using audio-based methods to assess inhaler medication adherence”, *PLoS One*. 2018 Jan 18;13(1):e0191330. doi: 10.1371/journal.pone.0191330. PMID: 29346430
12. Sulaiman I, Greene G., MacHale E., Seheult J., Mokoka M., D’Arcy S., Taylor T., Murphy D.M., Hunt E., Lane S., Diette G., FitzGerald J.M., Boland F., Sartini Bhreathnach A., Cushen B., **Reilly R.B.**, Doyle F., Costello R.W. “A randomised clinical trial of feedback on inhaler adherence and technique in patients with severe uncontrolled asthma”, *European Respiratory Journal*, 2018 Jan ; 51 (1): 1701126; DOI: 10.1183/13993003.01126-2017 PMID: 2930191
13. Beck R., McGovern E., Butler JS, Birsanu D., Beiser I., Narasimham. S., O’Riordan S, Hutchinson M, **Reilly RB.** “Measurement and Analysis of Temporal Discrimination Applied to Cervical Dystonia”, *Journal of Visualised Experiments*, 2018 Jan 27;(131). doi: 10.3791/56310. PMID: 29443021

2017

1. McGovern E., Killian O., Narasimham S, Quinlivan B., Beiser I., Williams L., Beck R., Butler J., O’Riordan S., **Reilly R.B.**, Hutchinson M. “Disrupted superior collicular activity may reveal cervical dystonia disease pathomechanisms”, *Scientific Reports* 7, Article number: 16753 (2017) doi:10.1038/s41598-017-17074-x PMID: 29196716
2. Conte A, Mc Govern E., Narasimham S., Beck R., Killian O., O’Riordan S., **Reilly R.B.**, Hutchinson M., “Temporal Discrimination: Mechanisms and Relevance to Adult Onset Dystonia”, *Frontiers Neurology*, 2017 Nov 28 2017;8:625. doi: 10.3389/fneur.2017.00625 PMID: 29234300
3. Hutchinson M., McGovern E., Narasimham S., Beck R., **Reilly R.B.**, Walsh C., Malone K., Tijssen M., O’Riordan S., “The pre-motor syndrome of cervical dystonia: disordered processing of salient environmental stimuli”, *Movement Disorders*, 2017 Dec 4. doi: 10.1002/mds.27229 PMID: 29205495
4. Killian O., McGovern E.M., Beck R., Beiser I., Narasimham S., Quinlivan B., O’Riordan S., Simonyan K., Hutchinson M., **Reilly R.B.**, “Practice does not make perfect; temporal discrimination in musicians with and without dystonia”, *Movement Disorders*, 2017 Oct 27. doi: 10.1002/mds.27185. PMID 29076564
5. Mamad O., McNamara H.M., **Reilly R.B.**, Tsanov M., “Place field assembly distribution encodes preferred spatial navigation”, *PLoS Biology* 2017 Sep12;15(9): e2002365. doi: 10.1371/journal.pbio.2002365 PMID: 28898248
6. Taylor T.E., Zigel Y., De Looze C., Costello R.W., **Reilly R.B.**, “Advances in Audio-Based Monitoring of Patient Inhaler Adherence”, *CHEST*, 2017 Sep 5. pii: S0012-3692(17)32680-6. Doi: 10.1016/j.chest.2017.08.1162. PMID: 28887061
7. Maguire F., Creagh A., Killane I., Donoghue O., Kenny RA, **Reilly R.B.** “Baseline Association of Motoric Cognitive Risk Syndrome with Sustained Attention, Memory and Global Cognition”, *Journal of the American Medical Directors Association*, J Am Med Dir Assoc. 2017 Sep 9. pii: S1525-8610(17)30428-0. doi: 10.1016/j.jamda.2017.07.016. PMID: 28899662
8. O’Keefe C., McDewitt N. L. Gallagher, **Reilly R.B.**, “Delineating Cognitive-Motor Interference in Postural Stability of Premutation Carriers using a Dual Task Paradigm” *Proceedings of 3rd International Conference on FMRI Permutation*, Jerusalem, Isreal, September 2017.

9. McDevitt N., O'Keefe C., L.Gallagher, **Reilly R.B.** "Is stress and anxiety in fMRI premutation carriers, in part, related to parenting a child with a developmental disability?" *Proceedings of 3rd International Conference on fMRI Permutation*, Jerusalem, Isreal, September 2017.
10. Simões-Franklin C. Flood I., Thapa J., Glynn G., Walshe P., **Reilly R.B.**, Viani L., "Sequential Bilateral Implantation in Older Children: Inter-Implant Map Differences and their effects in Functional Outcomes" *Proceedings of the 2017 Conference of Implantable Auditory Prostheses*, Lake Tahoe, July 2017.
11. Maguire F., Killane I., Creagh A., Kenny RA, **Reilly R.B.** "Uncorrelated Measures of Gait Performance under Single Task and Dual-Task in Older Adults", *Proceedings of The 65th Annual & Scientific Meeting of the Irish Gerontological Society*, September 2017
12. Fearon C., Munteanu T., Birsanu D., Newman L., Quinlivan B., Killane I., Magennis B., Butler J., **Reilly R.B.**, Lynch T., "Goal-directed movement in idiopathic Parkinson's disease and the effect of parkin mutations", *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
13. Fearon C., Killane I., Newman L., Beck, R., Munteanu T., Birsanu D., Butler J., Magennis B., **Reilly R.B.**, Lynch T., "Combined Motor and Cognitive Training Improves Motor and Cognitive Function in People with Parkinson's Disease and Freezing of Gait" *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
14. Beiser I., Quinlivan B., McGovern E., Williams L., Narasimham S., Killian O., Beck R., O'Riordan S., Butler J., **Reilly R.B.**, Hutchinson M., "Head turning onset and velocity in response to a peripheral visual stimulus in cervical dystonia patients, their unaffected relatives with and without abnormal temporal discrimination and healthy controls" *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
15. McGovern E., Killian O., Narasimham S, Quinlivan B., Beiser I., Williams L., Beck R., Butler J., O'Riordan S., **Reilly R.B.**, "Disrupted superior collicular activity may reveal cervical dystonia disease pathomechanisms", *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
16. Killian O., Simonyan K. McGovern E., Quinlivan B., Narasimham S, Beiser I., Butler J., Beck R., O'Riordan S., Hutchinson M., **Reilly R.**, "A Comparison of Temporal Discrimination Thresholds in Musicians with and without Dystonia", *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
17. Narasimham S, Sundararajan V., McGovern E., Quinlivan B., Beiser I., Beck R., O'Riordan S., Hutchinson M., **Reilly R.**, "Associations between functional networks and temporal discrimination thresholds in cervical dystonia patients and their unaffected relatives" *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
18. Fearon C., Butler J., Waechter S., Killane I., Newman L., Munteanu T., Birsanu D., Magennis B., **Reilly R.**, Lynch T., "EEG shows subclinical motor preparation deficits in Parkinson's disease patients with freezing of gait during locomotion", *Proceedings of 21st International Congress of Parkinson's Disease and Movement Disorders*, Vancouver, 2017
19. Mokoka MC, Lombard L, MacHale EM, Walsh J, Cushen B, Sulaiman I, Carthy DM, Boland F, Doyle F, Hunt E, Murphy DM, Faul J, Butler M, Hetherington K, Mark FitzGerald J, Boven JFV, Heaney LG, **Reilly RB**, Costello RW. "n patients with severe uncontrolled asthma, does knowledge of adherence and inhaler technique using electronic monitoring improve clinical decision making? A protocol for a randomised controlled trial" *BMJ Open*. 2017 Jun 15;7(6):e015367. doi: 10.1136/bmjopen-2016-015367, PMID: 28619778
20. O'Connor B., M. Markicevic, C. O'Higgins, L. Newman, R. Kallidil, P. Ui Dhuibhir, S. Cuffe, E. Hanrahan, **R. Reilly**, D.Walsh, "Cancer Related Fatigue: The role of Mobile Technology Assessment", *Proceedings of the Multinational Association of Supportive Care in Cancer, Annual Meeting on Supportive Care in Cancer*, Washington DC, USA June 2017
21. O'Higgins C.M., D. Joyce, A. Rice, B. O'Connor, D. Walsh, **R.B. Reilly**, "Objective and Subjective Measures of Cancer Related Fatigue with Myalgic Encephalomyelitis", *Proceedings of the Multinational Association of Supportive Care in Cancer*, Annual Meeting on Supportive Care in Cancer, Washington DC, USA June 2017
22. Birsanu D., Munteanu T., Fearon C., Newman L., Quinlivan B., Killane I., Magennis B., Butler J.S., O'Riordan S., Lynch T., **Reilly R.B.** "Old Habits Don't Die Hard: Understanding Goal-Directed Movement in Idiopathic Parkinson's Disease and in Parkin Associated Parkinson's Disease", *Proceeding of the Irish Neurological Association Annual Meeting 2017*, Dublin May 2017
23. Fearon C., Butler J., Waechter S., Killane I., Newman L., Munteanu T., Birsanu D., Magennis B., **Reilly R.**, Lynch T., "EEG shows subclinical motor preparation deficits in Parkinson's disease patients with freezing of gait during locomotion", *Proceeding of the Irish Neurological Association Annual Meeting 2017*, Dublin May 2017.
24. Killian OP., McGovern E., Quinlivan B., Narasimham S, Beiser I., Butler J., Beck R., O'Riordan S., Simonyan K., Hutchinson M., **Reilly R.**, "A Comparison of Temporal Discrimination Thresholds in Musicians with and without Dystonia", *Proceeding of the Irish Neurological Association Annual Meeting 2017*, Dublin May 2017.
25. Hablani S., Waechter S.M. **Reilly R.B.**, "Objective neurophysiological Assessments of Acoustic Temporal Processing with Impact for Implanted Neural Devices", *Proceeding of the Irish Neurological Association Annual Meeting 2017*, Dublin May 2017.
26. Sechler S.D., Lopez Valdes A., Waechter S.M., Simoes-Franklin C., Viani L., **Reilly R.B.**, "Virtual Reality Sound Localization Testing in Cochlear Implant Users", *Proceedings of 8th International IEEE EMBS Neural Engineering Conference*, Shanghai China, May, 2017.
27. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Smyth J., Viani L., **Reilly R.B.** "Preliminary results and challenges of artefact reduction in analysis of mismatch responses elicited by amplitude modulation detection in cochlear implant users", *XXV International Evoked Response Audiometry Study Group (IERASG) Biennial Symposium, Warsaw, May 2017*.
28. Simoes-Franklin C., Flood, I., Thapa J., Glynn F. Walshe P. **Reilly R.B.** Viani L., Sequential Bilateral Implantation in Older Children: Inter Implant Map Differences and their Effects on Functional Outcomes, *Proceeding of the Conference on Implantable Auditory Prosthesis 2017, Portugal, May 2017*
29. De Looze C., Kelly F., Crosby L., Vourdanou A., Lawlor B., **Reilly R.B.**, "Prosodic chunking in out-loud reading: a window into cognitive function in mild-to-moderate Alzheimer's disease", *Alzheimer's Association International Conference | July 16-20, 2017, London, England*
30. Matshediso Constantia M; Lombard L.; MacHale E.; Walsh J.; Cushen B., Sulaiman I., McCarthy D., Boland F., Doyle F., Hunt E., Murphy D., Faul J.; Butler M.; Hetherington K.; FitzGerald M.J.; Van Boven J.; Heaney L.G.; **Reilly R.B.**; Costello R.W., "In patients with severe uncontrolled asthma, does knowledge of adherence and inhaler technique improve clinical decision making? A protocol for a randomised controlled trial using electronic monitoring", *BMJ Open, in press*
31. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Viani L., **Reilly R.B.** "Investigating the relationship between evoked potentials, amplitude modulation detection and SPIN recognition in CI users-a study design proposal and pilot data ", *Speech in Noise Workshop 2017, Oldenburg, Germany*
32. Mc Govern, E; Butler, J; Beiser, I; Williams, L; Quinlivan, B; Narasimham, S; Beck, R; O'Riordan, S; **Reilly, R.** Hutchinson, M. "A comparison of stimulus presentation methods in temporal discrimination testing" *Physiological Measurement* Vol. 38, No. 2 Feb 2017, N57–N64, PMID: 28099169
33. Mc Govern, E; O'Connor E, Beiser, I; Williams, L; Butler, J; Quinlivan, B; Narasimham, S; Beck, R; O'Riordan, S; **Reilly, R.** Hutchinson, M. "Menstrual cycle and the temporal discrimination threshold" *Physiological Measurement*, Vol 38, No. 2 Feb 2017, N65-N72, PMID: 28099161

34. Moran C, Doyle F, Sulaiman I, Bennett K, Greene G, Molloy GJ, **Reilly RB**, Costello RW, Mellon L. "The INCA (Inhaler Compliance Assessment): A comparison with Established Measures of Adherence", *Psychol Health*. 2017 Oct;32(10):1266-1287. doi: 10.1080/08870446.2017.1290243. PMID: 28276739
35. Sulaiman I, Cushen B, Greene G, Seheult J, Seow D, Rawat F, MacHale E, Mokoka M, Moran CN, Sartini Bhreathnach A, MacHale P, Tappuni S, Deering B, Jackson M, McCarthy H, Mellon L, Doyle F, Boland F, **Reilly RB**, Costello RW. "Objective Assessment of Adherence to Inhalers by Patients with Chronic Obstructive Pulmonary Disease" *Am J Respir Crit Care Med*. 2017 May 15;195(10):1333-1343. doi: 10.1164/rccm.201604-0733OC. PMID: 27409253.
 - * Top 1% of the academic field of Clinical Medicine based on a highly cited threshold for the field and publication year.
36. Toboada L., O'Keefe C., McDevitt N. **Reilly R.B.** "Centre of pressure regularity as a marker for Fragile X syndrome premutation carriers" *Proceedings of BioEngineering in Ireland*, Dublin, 2017

2016

1. Fearon C., Butler J., Killane I., Waechter, S., **Reilly R.B.**, Lynch T., "Motor Preparation Rather Than Decision-Making Differentiates Parkinson's Disease Patients With And Without Freezing of Gait", *Clinical Neurophysiology*, 2016 Dec 28;128(3):463-471. PMID: 28160752
2. Quinlivan B., Butler J.S., Ridwan, R, Williams L., McGovern E, Beiser I., O'Riordan S., Hutchinson M., **Reilly R.B.**, Application of virtual reality head mounted display for investigation of movement: A novel effect of orientation of attention", *Journal of Neural Engineering*, 2016 Oct;13(5):056006. doi: 10.1088/1741-2560/13/5/056006, PMID: 27518212
3. Sulaiman I, Seheult J, MacHale E, D'Arcy S, Boland F, McCrory K, Casey J, Bury G, Al-Alawi M, O'Dwyer S, Ryder SA, **Reilly RB**, Costello RW. "Irregular and Ineffective: A Quantitative Observational Study of the Time and Technique of Inhaler Use.", *J Allergy Clin Immunol Pract*. 2016 Sep-Oct;4(5):900-909.e2. doi: 10.1016/j.jaip.2016.07.009. PMID: 27587321
4. Sulaiman I, Seheult J, MacHale E, Boland F, O'Dwyer SM, Rapcan V, D'Arcy S, Cushen B, Mokoka M, Killane I, Ryder SA, **Reilly RB**, Costello RW, "A Method to Calculate Adherence to Inhaled Therapy That Reflects the Changes in Clinical Features of Asthma", *Ann Am Thorac Soc*. 2016 Jul 28. PMID: 27467125
5. Sulaiman I, Cushen B, Greene G, Seheult J, Seow D, Rawat F, MacHale E, Mokoka M, Moran CN, Sartini Bhreathnach A, MacHale P, Tappuni S, Deering B, Jackson M, McCarthy H, Mellon L, Doyle F, Boland F, Reilly RB, Costello RW. "Objective Assessment of Adherence to Inhalers by COPD Patients." *Am J Respir Crit Care Med*. 2016 Jul 13. PMID: 27409253
6. Taylor T, Holmes M., D'Arcy S., Costello R., **Reilly R.B.** "Monitoring inhaler inhalations using an acoustic sensor proximal to inhaler devices", *Journal of Aerosol Medicine and Pulmonary Drug Delivery*, 2016 Oct;29(5):439-446. Epub 2016 Feb 9. PMID: 26859629
7. Sulaiman I., D'Arcy S., MacHale E., Seheult J., Holmes M.S., Hughes C., Sulaiman I., Hyland D., O'Reilly C., Glynn S., Al-Zaabi T., McCourt J., Taylor T., Keane F., Killane I., **Reilly R.B.**, Costello R.W., "A protocol for a randomised clinical trial of the effect of providing feedback on inhaler technique and adherence from an electronic device in poorly controlled severe asthma patients", *BMJ Open* 2016;6:e009350 doi:10.1136/bmjopen-2015-009350. PMID: 26729384
8. Maguire F., Killane I., Creagh A., Donoghue O., Kenny R.A., **Reilly R.B.** "Characterization of Motoric Cognitive Risk Syndrome from a Nationally Representative Sample", *Proceedings of The 64th Annual & Scientific Meeting of the Irish Gerontological Society*, September 2016
9. Bennett, G., Cushen, B., Killane, I., Maguire, F., Costello, R.W., **Reilly R.B.** "Investigating gait and cognition in elderly COPD patients hospitalised with an acute exacerbation", *Proceedings of The 64th Annual & Scientific Meeting of the Irish Gerontological Society*, September 2016
10. Creagh A., Killane I., Maguire F., Donoghue O., Kenny R.A., **Reilly R.B.** "Examining the links between domains of gait and tests of global cognition: a factor analysis approach", *Proceedings of The 64th Annual & Scientific Meeting of the Irish Gerontological Society*, September 2016
11. McCartan TA., Taylor T.E., Sulaiman I., Costello R.W., **Reilly R.B.** "Changes in inhaler inhalation acoustic features during induced bronchoconstriction: A pilot study", *Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* August 2016, Florida USA.
12. Killane I., Sulieman, I., MacHale E, Breathnach A, Taylor TE, Holmes MS, **Reilly R.B.**, Costello R., "Predicting asthma exacerbations employing remotely monitored adherence", *Healthcare Technology Letter* 2016 Mar 23;3(1):51-5. doi: 10.1049/htl.2015.0058. PMID: 27222733
13. O'Dwyer SM, MacHale E, Sulaiman I, Holmes M, Hughes C, D'Arcy S, Rapcan V, Taylor T, Boland F, Bosnic-Anticevich S, Reilly RB, Ryder SA, Costello RW. The effect of providing feedback on inhaler technique and adherence from an electronic audio recording device, INCA®, in a community pharmacy setting: study protocol for a randomised controlled trial", *Trials*. 2016 May 4;17(1):226. doi: 10.1186/s13063-016-1362-9. PMID: 27142873
14. Quinlivan B., Butler J.S., Ridwan, R, Williams L., McGovern E, Beiser I., O'Riordan S., Hutchinson M., **Reilly R.B.**, "Electrophysiological and Behavioural Measures of Motor Learning on a Trial by Trial Basis: implications for probing learning in neurological conditions", *European Journal of Neuroscience*, March 2016, DOI: 10.1111/ejn.13195. PMID: 26840918
15. Kiiski H, NiRiada S, Lalor EC, Gonçalves NR, Nolan H, Whelan R, Lonergan R, Kelly S, O'Brien MC, Kinsella K, Bramham J, Burke T, O'Donnchadha S, Hutchinson M, Tubridy N, **Reilly RB**, "Delayed P100 Latencies in Multiple Sclerosis: The Potential Clinical Utility of Visual Evoked Spread Spectrum Analysis", *PlosOne*, DOI: 10.1371/journal.pone.0146084. PMID: 26726800
16. Molloy A, Kimmich O., Williams L., Butler J., O'Riordan S., **Reilly RB**, Hutchinson M. "Sun exposure is an environmental factor for the development of blepharospasm" submitted to the *Journal of Neurology, Neurosurgery, and Psychiatry* - 2016 Apr;87(4):420-4. doi: 10.1136/jnnp-2014-310266. PMID: 25904812
17. Termsarasab P., Ramdhan R.A., Battistella G., Rubien-Thomas E., Choy M., Farwell I.M., Blitzer A., Velickovic M., Frucht S.J., Ozelius L.J., **Reilly R.B.**, Hutchinson M., Simonyan K. "Neural Correlates of Abnormal Sensory Discrimination in Laryngeal Dystonia: A combined behavioral testing and multi-modal brain imaging study", *NeuroImage: Clinical*, 2016; 10: 18–26. doi:10.1016/j.nicl.2015.10.016. PMID: 26693398
18. Beiser I., Quinlivan B., McGovern E.M., Williams L., Narasimham S., Killian O., Beck R., O'Riordan S., Butler J.S., **Reilly R.B.**, Hutchinson M., "Orientation of attention effects onset of head saccades: a novel representation of the Posner cueing effect", *Proceedings of 20th International Congress of Parkinson's Disease and Movement Disorders*, Berlin, 2016.
19. Beiser I., Quinlivan B., McGovern E.M., Williams L., Narasimham S., Killian O., Beck R., Colvert G. O'Riordan S., Butler J.S., **Reilly R.B.**, Hutchinson M., "Investigation of head tremor in cervical dystonia: Novel application of virtual reality head mounted display", *Proceedings of 20th International Congress of Parkinson's Disease and Movement Disorders*, Berlin, 2016
20. McGovern E.M., O'Connor E., Beiser I., Williams L., Butler J.S., Quinlivan B., **Reilly R.B.**, O'Riordan S., Hutchinson M. "Temporal discrimination threshold and the menstrual cycle", *Proceedings of 20th International Congress of Parkinson's Disease and Movement*

Disorders, Berlin, 2016

21. McGovern E.M., Narasimham S., Killian O., Beiser I., Williams L., Quinlivan B., Butler J.S., **Reilly R.B.**, O’Riordan S., Hutchinson M, “A functional magnetic imaging study of the response in the superior colliculus to looming stimuli in cervical dystonia patients and their relatives”, *Proceedings of 20th International Congress of Parkinson’s Disease and Movement Disorders*, Berlin, 2016
22. Munteanu T., Baird E.J., Fearon C., Waechter S.M., McDonnell C., Gallego J., Quinlivan B., Killane I., Butler J.S., Lynch T., **Reilly R.B.** “Freezing of gait (FOG) in PD: Is electroencephalography (EEG) a gateway to elucidating the pathophysiology?” *Proceedings of 20th International Congress of Parkinson’s Disease and Movement Disorders*, Berlin, 2016
23. Williams L., Butler J.S., Quinlivan B., Molloy A., McGovern E., Beiser I., Thirkettle M., O’Riordan S., Redgrave P., **Reilly R.**, Hutchinson M. “Impaired response times to luminance stimuli in dystonia patients indicate disordered superior colliculus processing”, *Proceedings of 20th International Congress of Parkinson’s Disease and Movement Disorders*, Berlin, 2016
24. Quinlivan B., Moran R., McGovern E., Narasimham S., Beiser I., Williams L., Killian O., Beck R., O’Riordan S., Butler J.S., Hutchinson M., **Reilly R.B.** “A dynamic causal model of the superior colliculus: Inhibitory activity increases with the temporal discrimination threshold” *Proceedings of 20th International Congress of Parkinson’s Disease and Movement Disorders*, Berlin, 2016
25. Fearon C, Butler JS, Killane I, Waechter SM, Magennis B, **Reilly RB**, Lynch T. “Motor Preparation And Decision-Making in Parkinson’s Disease Patients With And Without Freezing of Gait: An Event-Related Potential Study” *Proceedings of 52nd Annual Meeting of the Irish Neurology Association*, Limerick, May 2016.
26. McGovern EM, O’Connor E, Beiser I, Williams LW, Butler JB, Quinlivan B, **Reilly RB**, O’Riordan S, Hutchinson M. “Menstrual cycle and the visual temporal discrimination threshold”, *Proceedings of 52nd Annual Meeting of the Irish Neurology Association*, Limerick, May 2016.
27. McGovern EM, Butler JS, Beiser I, Williams L, Quinlivan B, O’Riordan S, **Reilly RB**, Hutchinson M. “Comparing stimulus-presentation methods in temporal discrimination (TDT) testing”, *Proceedings of 52nd Annual Meeting of the Irish Neurology Association*, Limerick, May 2016.
28. Lopez Valdes A., Mc Laughlin M., Viani L., Smith J, Walshe P., Zeng F.G., **Reilly R.B.** “Longitudinal Assessment of Spectral Ripple Discrimination and Speech Perception Evolution in Cochlear Implant Users: An Electrophysiological and Psychoacoustic Exploration”, *Proceedings of the 14th International Conference on Cochlear Implants and Other Implantable Auditory Technologies*, Toronto, May 2016
29. McDevitt N., Gallagher L., **Reilly R.B.** “Where should the focus of research into neurodevelopmental disorders be directed in the future? Lessons learned from an Irish Population”, *Proceedings of the 2016 International Meeting for Autism Research (IMFAR)*, Baltimore, May 2016.
30. McDevitt N., Gallagher L., **Reilly R.B.** “Investigation of face processing in Autistic Spectrum Disorder (ASD) for the development of clinical useful biomarkers: An Electroencephalographic approach”, *Proceedings of the 2016 International Meeting for Autism Research (IMFAR)*, Baltimore, May 2016.
31. Cervigon R., Castells F., **Reilly R.B.**, Moreno J., Millet J., “Heart rate regularity changes in older people with orthostatic intolerance”, *Proceedings of the XIV Mediterranean Conference on Medical and Biological Engineering and Computing*, MEDICON 2016, 31 Mar - 2 Apr, 2016
32. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Viani L., **Reilly R.B.** “Evaluation of the mismatch waveform elicited by amplitude modulated auditory stimuli as an objective measure for temporal discrimination abilities to aid future Cochlear Implant fitting”, *Proceedings of ARO Winter Meeting 2016*
33. Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Viani L., Reilly R.B. “Do speech-in-noise scores in normal-hearing humans correlate with amplitude modulation depth detection abilities?”, *SPIN Workshop, Groningen January 2016*
34. Maguire, F., Killane, I., **Reilly, RB**, “Gait, Cognition and Associated Risk Factors: Insights from Share and TILDA”, *Proceedings of BioEngineering in Ireland*, 2016.
35. Sechler S., Waechter S.M., Lopez Valdes A., Simoes-Franklin C., Viani L., **Reilly R.B.** “Using Head Related Transfer Functions and Oculus Rift to Measure Sounds Localization in Bilateral Cochlear Implant User”, *Proceedings of BioEngineering in Ireland*, 2016.
36. Bennett, G., Killane, I., Cushen, B., **Reilly, R.B** “Risk Factors for Hospital Re-Admissions in Chronic Obstructive Pulmonary Disease”, *Proceedings of BioEngineering in Ireland*, 2016.
37. McCartan, T., Taylor, T., Sulaiman, I., Costello, R.W., **Reilly, R. B.** “Changes in Inhaler Inhalation Acoustics may Detect Lung Function Decline in Asthma Patients”, *Proceedings of BioEngineering in Ireland*, 2016.
38. Ucar, B., **Reilly, R.B.**, Campbell, M “Development of in vitro Models of Neural Trauma and Assessment of Tau Deposition: implications for scalp neurophysiological measurements”, *Proceedings of BioEngineering in Ireland*, 2016
39. Melis E., McDevitt N. **Reilly, R.B.** “Electrophysiological investigation in autism spectrum disorders: focus on visual-perceptual processing”, *Proceedings of BioEngineering in Ireland*, 2016
40. Killian O., Narasimham S., Quinlivan B., McGovern E., Hutchinson M., **Reilly, R.B.** “Understanding Dystonia: Behavioural and fMRI Studies to looming stimuli on Controls and Patients” *Proceedings of BioEngineering in Ireland*, 2016

2015

1. Butler JS, Williams LJ, Molloy A, McGovern E, Beiser I, Kimmich O, Quinlivan B, O’Riordan S, **Reilly RB**, Hutchinson MA “Age-related sexual dimorphism in temporal discrimination and in adult-onset dystonia suggests GABAergic mechanisms”, *Frontiers Neurology*, 14 December 2016, <http://dx.doi.org/10.3389/fneur.2015.00258>. PMID: 26696957
2. Fearon C., Butler J., Newman L., Lynch T, **Reilly R.** “Audiovisual Processing is Abnormal in Parkinson’s Disease and Correlates with Freezing of Gait and Disease Duration” *Journal of Parkinson’s Disease* Oct 17;5(4):925-36. doi: 10.3233/JPD-150655. PMID: 26485427
3. Fearon, C. ; Newman, L. ; McDonnell, C. Waechter, S. Sons, K. Lynch, T. ; **Reilly, R.**, “Dual Motor-Cognitive Virtual Reality Training Impacts Dual-Task Performance in Freezing of Gait” *IEEE Journal of Biomedical and Health Informatics*, DOI 10.1109/JBHI.2015.2479625
4. Youssofzadeh V., Prasad G., Fagan A, **Reilly R.**, Martens S., Meaney J., Wong-Lin K "Signal propagation in the human visual pathways: An effective connectivity analysis" *Journal of Neuroscience* 30 September 2015, 35(39): 13501-13510; doi: 10.1523/JNEUROSCI.2269-15.2015 PMID: 26424894
5. Williams LJ, Butler JS, Molloy A, McGovern E, Beiser I, Kimmich O, Quinlivan B, O’Riordan S, Hutchinson M and **Reilly RB** (2015) Young women do it better: sexual dimorphism in temporal discrimination. *Frontiers in Neurology*. 6:160. doi: 10.3389/fneur.2015.00160 PMID: 26217303
6. Butler J.S., Molloy A., Williams L., Kimmich O., Quinlivan B., O’Riordan S., Hutchinson M., **Reilly R.B.** ‘Non-parametric Bootstrapping Method for Measuring the Temporal Discrimination Threshold for Movement Disorders. *Journal of Neural Engineering*, 2015 Aug; Vol(12) No.(4):046026. doi: 10.1088/1741-2560/12/4/046026 PMID: 26087478
7. Mamad O., McHamara H.M., **Reilly R.B.** Tsanov M., “Medial septum regulates the hippocampal spatial representation”, *Frontiers in Behavioral Neuroscience*, 2015 Jun 30;9:166. doi: 10.3389/fnbeh.2015.00166. PMID: 26175674

8. Devitt NM., Gallagher L., **Reilly R.B.** “Autism Spectrum Disorder (ASD) and Fragile X Syndrome (ASD): Two overlapping disorders reviewed through electroencephalography, what can we interpret from available information?” *Brain Science*, 2015 Jun; 5(2): 92–117. doi: 10.3390/brainsci5020092. PMID: 25826237
9. Quinlivan B., Butler J.S., Ridwan A.R., Williams L., Beiser I., McGovern E., O’Riordan S., Hutchinson M., **Reilly R.B.** “Investigation of head and eye movements using the Oculus Rift and electrooculography”, *Society for Neuroscience*, Chicago 2015
10. O’Sullivan J., **Reilly R.B.**, Lalor E. “Improved Decoding of Attentional Selection in a Cocktail Party Environment with EEG via Automatic Selection of Relevant Independent Components”, Proc of the *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Milan, August 2015
11. Taylor T, Holmes M., Sulaiman I., Costello R., **Reilly R.B.** “Influences of Gender and Anthropometric Features on Inspiratory Inhaler Acoustics and Peak Inspiratory Flow Rate”, Proc of the *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, 2015;2015:2227-30. doi: 10.1109/EMBC.2015.7318834. PMID: 26736734
12. Quinlivan B., Butler J.S., Ridwan A.R., Williams L., Beiser I., McGovern E., O’Riordan S., Hutchinson M., **Reilly R.B.** “Electrophysiological and behavioural measures of the dynamics of visuospatial learning: implications for probing learning in neurological conditions”, *Proceedings of Movement Disorders Society Annual Conference Meeting*, San Diego, 2015.
13. Butler J.S, Williams L., Beiser I., McGovern E., Nolloy A., Quinlivan B., O’Riordan S., Hutchinson M., **Reilly R.B.** “A New Non-parametric Bootstrapping Method for Measuring the Temporal Discrimination Threshold for Movement Disorders”, *Proceedings of Movement Disorders Society Annual Conference Meeting*, San Diego, 2015.
14. Beiser I., Quinlivan B., Foley N., Williams L., McGovern E., Nolloy A., O’Riordan S., Butler J.S, **Reilly R.B.**, Hutchinson M. “Using the Oculus Rift for Recording Head Turns”, *Proceedings of Movement Disorders Society Annual Conference Meeting*, San Diego, 2015.
15. Fearon, C, Butler J.B. , I. Newman, L. **Reilly R.B.**, Lynch T. “Differential Audiovisual Processing in Parkinson’s disease”, *Proceedings of Movement Disorders Society Annual Conference Meeting*, San Diego, 2015.
16. Hermann S., Thomas, P., **Reilly R.B.**, Burke M. “, Measuring Tissue Compression: A Circuit for Sensing and Signal Conditioning, *Proceedings of the International Conference on the Applications in Electronics Pervading Industry, Environment and Society*, Rome, May 2015
17. Lopez Valdes A., Mc Laughlin M, Viani L., Walshe P., Smith J., Zeng P-G, **Reilly R.B.**, “Electrophysiological Correlates of Spectral Discrimination for Cochlear Implant Users”, *Proceedings of the 7th International IEEE EMBS Neural Engineering Conference*, Montpellier, France, April 2015.
18. Fearon, C, Quinlivan, B., Butler, J.S., **Reilly R.B.**, Lynch T., “Investigation of Motor Learning in Parkinson’s Disease using an Action Acquisition Task” *Proceedings for the Association of British Neurologists*, Harrogate, May 2015
19. Leijsen A.M., Lopez Valdes A., Mc Laughlin M., Viani L., Walshe P., Smith J., **Reilly R.B.**, “An Approach to Develop an Objective Measure of Temporal Processing in Cochlear Implant Users Based on Schroeder-phase Harmonic Complexes”, *Proceedings of the 7th International IEEE EMBS Neural Engineering Conference*, Montpellier, France, April 2015.
20. Waechter S.M., Fearon C., Gallego J., Quinlivan B., Killane I., Butler J., Lynch T. **Reilly R.B.**, “The impact of dual tasking on cognitive performance in a Parkinson’s disease cohort with and without freezing of gait: an EEG and behavioral based approach”, *Proceedings of the 7th International IEEE EMBS Neural Engineering Conference*, Montpellier, France, April 2015.
21. Narasimham S., Butler J., Quinlivan B., McGovern E., Hutchinson M., **Reilly, R.B.** “Understanding Dystonia: Behavioural and fMRI Studies to looming stimuli on Controls and Patients”, *Proceedings of BioEngineering in Ireland*, 2015
22. Markicevic M., Newman L., O’Connor B., Walsh D., **Reilly, R.B.** “Investigating Cancer Related Fatigue via Corticomuscular Coherence Using EEG and EMG”, *Proceedings of BioEngineering in Ireland*, 2015

2014

1. Tsanov M, Chah E., Noor M.S., Egan C., **Reilly R.B.**, Vann S.D., Erichsen J.Y., Aggleton J.P., O’Mara S.M., “The irregular firing properties of thalamic head direction cells mediate turn-specific modulation of the directional tuning curve”, *Journal of Neurophysiology*, 112(9):2316-31, Nov. 2014, PMID: 25122712
2. Sridharan, R, **Reilly R.B.**, Buckley C.T., “Decellularized Grafts with Axially Aligned Channels for Peripheral Nerve Regeneration”, *Journal of the Mechanical Behavior of Biomedical Materials*, 41C:124-135, 2014. PMID: 25460409
3. Holmes M., D’Arcy S., Costello R., **Reilly R.B.**, “An Acoustic-Based Method to Detect and Quantify the Effect of Exhalation into a Dry Powder Inhaler”, *Journal of Aerosol Medicine and Pulmonary Drug Delivery*, 2015 Aug;28(4):247-53. doi: 10.1089/jamp.2014.1169. Epub 2014 Nov 13. PMID: 25393346
4. Molloy A, Kimmich O., Williams L., Butler J., Byrne N., Molloy F., Moore H., Healy D.G., Lynch T., Edwards M.J., Walhs C., **Reilly RB.**, O’Riordan S., Hutchinson M. “An evaluation of the role of environmental factors in the disease penetrance of cervical dystonia”, *Journal of Neurology, Neurosurgery & Psychiatry*, 2014 Jun 24. pii: jnnp-2014-307699. doi: 10.1136/jnnp-2014-307699. PMID: 24963124
5. D’Arcy S., MacHale E., Seheult J., Holmes M.S., Hughes C., Sulaiman I., Hyland D., O’Reilly C., Glynn S., Al-Zaabi T., McCourt J., Taylor T., Keane F., Killane I., **Reilly R.B.**, Costello R.W, “A validated means of assessing adherence to inhaler medication through recorded audio of inhaler use”, *PLoS One*. 2014 Jun 6;9(6):e98701. doi: 10.1371/journal.pone.0098701. eCollection 2014. PMID: 24963124
6. Molloy A, Kimmich O., Williams L., Quinlivan B., Dabacan A., Fanning A., Butler J., O’Riordan S., **Reilly RB.**, Hutchinson M. “A headset method for measuring the visual temporal discrimination threshold in cervical dystonia”, *Tremor and Other Hyperkinetic Movements*, 2014 Jul 18;4:249. doi: 10.7916/D8TD9VF6. PMID: 25126450
7. Hutchinson M., Isa T., Molloy A., Williams L., Kimmich O, Molloy F., Moore H., Healy D.G., Lynch T., Walsh C., Butler J., Reilly R.B, Walsh R., O’Riordan S., “Cervical dystonia: a disorder of the midbrain network for covert attentional orienting”, *Frontiers in Neurology*, 2014, Apr 28; 5:54. doi: 10.3389/fneur.2014.00054. PMID: 24803911
8. Holmes M., D’Arcy S., Costello R., **Reilly R.B.** “Acoustic Analysis of Inhaler Sounds from Community-Dwelling Asthmatic Patients for Automatic Assessment of Adherence” *Journal of Translational Engineering in Health and Medicine*, Volume: 2 Issue: 1, pp1-10, January 2014. PMID: 25393346
9. Seheult J., Holmes M., Geraghty C., D’Arcy S., **Reilly R.B.**, Costello R., "The Acoustic Features Of Inhalation Can Be Used To Quantify Aerosol Delivery From A Diskus™ Dry Powder Inhaler", *Pharmaceutical Research*, 31(10):2735-47. doi: 10.1007/s11095-014-1371-x., Oct 2014. PMID: 24867420.

10. DiRosa E., Breenan S., Rapcan V., **Reilly R.B.**, Robertson I.H. "Reliability and validity of the Automatic Cognitive Assessment Delivery (ACAD)", *Frontiers in Aging Neurosciences*, 6:6:34. doi: 10.3389/fnagi.2014.00034. Mar 2014, PMID: 24639648.
11. Lopez Valdes A., McLaughlin M; Viani L.; Walshe P.; Smith J.; Zeng P-G; **Reilly R.B.**, "Objective assessment of spectral resolution in cochlear implant listeners using cortical evoked potentials". *PlosOne*, 2014 Mar 5;9(3):e90044. doi: 10.1371/journal.pone.0090044. eCollection 2014. PMID: 24599314
12. Mothersill O., Morris D.W., Kelly S., Rose E.J., Fahey C., O'Brien C., Lyne R., **Reilly R.**, Gill M., Corvin A.P., Donohoe G. "Effects of MIR137 on fronto-amygdala functional connectivity", *Neuroimage*, 90:189-95. doi: 10.1016, Apr 2014. PMID: 24361663.
13. Kimmich O., Malloy A., Whelan R., William L., Bradley D., Balster J., Molloy F., Lynch T., Healy D., Walsh, C. O'Riordan S., **Reilly R.B.**, Hutchinson S., Hutchinson M., "Temporal discrimination, a cervical dystonia endophenotype: penetrance and functional correlates", *Movement Disorders*, May;29(6):804-11. doi: 10.1002/mds.25822. Epub 2014 Jan 30. PMID: 24482092
14. Quinlivan, B., Butler, J.S., Hutchinson, M., Ridwan AR., O'Riordan, S., **Reilly, R.B.**, "Electrophysiological and Behavioral Measures of Visuo-Motor Learning for Application in Dystonia," *Proceedings of the 36th Annual International IEEE EMBS Conference of the IEEE Engineering in Medicine and Biology Society*, Chicago, Illinois, USA, August, 2014. 2014;2014:3533-6. doi: 10.1109/EMBC.2014.6944385. PMID: 25570753
15. Taylor T, Holmes M., D'Arcy S., Costello R., **Reilly R.B.**, "An Acoustic Method to Automatically Detect Pressurized Metered Dose Inhaler Actuations", *Proceedings of the 36th Annual International IEEE EMBS Conference of the IEEE Engineering in Medicine and Biology Society*, Chicago, Illinois, USA, August, 2014. 2014;2014:4611-4. doi: 10.1109/EMBC.2014.6944651. PMID: 25571019
16. Lauteslager T., O'Sullivan J., **Reilly R.B.**, Lalor L., "Decoding of Attentional Selection in a Cocktail Party Environment from Single-Trial EEG is Robust to Task", *Proceedings of the 36th Annual International IEEE EMBS Conference of the IEEE Engineering in Medicine and Biology Society*, Chicago, Illinois, USA, August, 2014, 2014:1318-21. doi: 10.1109/EMBC.2014.6943841. PMID:25570209
17. Loughnane G., Meade E., **Reilly R.B.**, Lalor L., "Towards a Gaze-Independent Hybrid-BCI based on SSVEPs, Alpha-Band Modulations and the P300", *Proceedings of the 36th Annual International IEEE EMBS Conference of the IEEE Engineering in Medicine and Biology Society*, Chicago, Illinois, USA, August, 2014. 2014;2014:1322-5. doi: 10.1109/EMBC.2014.6943842. PMID: 25570211
18. McNamara H.M., Tsanov M., **Reilly R.B.**, "Cholinergic Neuromodulation from medial Septum Affects spatial representations encoded by hippocampal place cells", Spitsbergen 2014: Neural Networks in the Arctic, June 2014
19. Molloy A, Kimmich O, Williams L, Butler J, Byrne N, Molloy F, Moore H, Healy D.G, Lynch T, Edwards M.J, Walsh C, **Reilly RB**, O'Riordan S, Hutchinson M., "The Evaluation Of Environmental Factors In The Disease Penetrance Of Cervical Dystonia", *American Academy of Neurology June 2014 and Neurology April 2014 vol. 82 no. 10 Supplement P2.043*.
20. Iyer P., Michaels B., Lalor, **Reilly RB**, Hardiman O., "Functional Connectivity Measured By Spectral EEG As Potential Biomarker For Amyotrophic Lateral Sclerosis", *American Academy of Neurology June 2014 and Neurology April 2014 vol. 82 no. 10 Supplement P4.104*.
21. Tee K.C., Holmes M., D'Arcy S., Sulaiman I., MacHale E., **Reilly R.**, Costello R.W., Seheult J.N. "Sensitivity And Specificity Of An Acoustic Method For Calculating Peak Inspiratory Flow Rate And Inspiratory Volume Through A Diskus Dry Powder Inhaler" *Proceeding of: American Thoracic Society 2014*
22. Sulaiman I., Long D., Seheult J.N., D'Arcy S., Costello R.W., **Reilly R.**, "A Change In Inhaler Policy To Reduce In Hospital Inhaler Errors", *Proceeding of: American Thoracic Society 2014*
23. Leijsen A., Lopez Valdes A., McLaughlin M, Viani L., Walshe P., Smith J., **Reilly R.B.**, "Using Schroeder-phase Harmonic Complexes to Develop an Objective Measure of Temporal Processing in Cochlear Implant Listeners", *Proceedings of Objective Measure Conference*, Toronto, September 2014.
24. Lopez Valdes A., McLaughlin M, Viani L., Walshe P., Smith J., **Reilly R.B.**, "Longitudinal assessment of spectral ripple discrimination and speech perception in cochlear implant users with a cortical evoked potential approach", *Proceedings of Objective Measure Conference*, Toronto, September 2014
25. McNamara H., Reilly R.B., Tsanov M., "The medial septum regulates the spatial properties of hippocampal place fields", *Proceedings of the Neural Networks Conference: Neural Networks in the Arctic, Spitzbergen-2014, June 2014*.
26. Functional connectivity measured by spectral EEG as potential biomarker for Amyotrophic Lateral Sclerosis, *Proc. of the American Academy of Neurology 66th Annual Meeting*, April 2014 Philadelphia, USA
27. Nolan H., Butler J.S, Killane I., Buelthoff H.H., Reilly R.B., Electrophysiological Recording of Jerk Component of Linear Vestibulo-ocular Reflex in Humans, *Proceedings of the Joint World Congress of ISPGR and Gait & Mental Function*, Vancouver, Canada 2014
28. Foran T., Reilly R.B., Kenny R.A., Lyapunov exponents in the nonlinear analysis of gait in falls and frailty, *Proceedings of the Joint World Congress of ISPGR and Gait & Mental Function*, Vancouver, Canada 2014.
29. Killane I., Cosgrave N., McDevitt N., Foran T., Sheehan K.J., Gormley J., Kenny R.A., **Reilly R.B.**, "Comparison of Standard and Poincare Measures", *Proceedings of the Joint World Congress of ISPGR and Gait & Mental Function*, Vancouver, Canada, June 2014.,
30. Killane I., Donoghue O.A., Savva G.M., Cronin H., Kenny R.A., **Reilly R.B.**, "Contributions of the Montreal Cognitive Assessment (MOCA) to Dual Task Gait Performance", *Proceedings of the Joint World Congress of ISPGR and Gait & Mental Function*, Vancouver, June, Canada 2014.
31. C. Fearon, J Gallego, B Quinlivan, R Cheshire, N McDevitt, E Roudaia, B Magennis, E Harrington, **R.B. Reilly**, T. Lynch, "Electroencephalography and Gait Analysis using Virtual Reality Environments in Freezing of Gait", *Proc. of the First International Freezing of Gait Congress*, Feb 2014.
32. Sridharan, R, **Reilly R.B.**, Buckley C.T., "Decellularized Grafts with Longitudinal Oriented Channels for Peripheral Nerve Regeneration", *Proceedings of the 60th Annual Meeting of the Orthopaedic Research Society*, New Orleans, 2014.
33. Walsh D.V., Quinlivan B., Butler J.S., Hutchinson M., **Reilly R.B.**, "Using the Oculus Rift for recording head turns", *Young Neuroscience Ireland*, September 2014.
34. Butler J.S., Ridwan R.A., O'Connell R.G., Quinlivan B., Hutchinson M., **Reilly R.B.**, "Time to contact decision making with and without sensory evidence", *Young Neuroscience Ireland*, September 2014.
35. Waechter S., Fearon C., McDonnell C., Butler J.S, Gallego J., Quinlivan B., Killane I., Lynch T., **Reilly R.B.**, "The role of cognitive load on freezing of gait in Parkinson's disease: an approach based on EEG and gait analysis using a virtual reality environment", *Young Neuroscience Ireland*, September 2014.
36. Lopez Valdes A., McLaughlin M; Viani L.; Walshe P.; Smith J.; Zeng P-G; **Reilly R.B.**, "Auditory Cortical Evoked Potentials as a window to Cochlear Implant Performance", *Young Neuroscience Ireland*, September 2014
37. Fearon C, Wächter S., Beck R.B., Butler J., Magennis B., **Reilly R.B.**, Lynch T. "Ambulatory Electroencephalography and Virtual Reality Environments in Freezing of Gait in Parkinson's Disease", *Proceedings of the 50th Annual Meeting of the Irish Neurological Association*, May 2014.
38. Taylor T, Costello R., **Reilly R.B.**, "Identification of pressurised metered dose inhaler drug actuations using the continuous wavelet transform" *Proceedings of the 18th Bioengineering in Ireland Conference*, January 2014.
39. Holmes M., Costello R., **Reilly, R.B.**, "Acoustic analysis of inhaler sounds can be used to automatically evaluate patient inhaler technique"

40. Quinlivan, B., Butler, J.S., Hutchinson, M., Ridwan AR., O'Riordan, S., Reilly, R.B. "Electrophysiological and behaviours study of movement learning in Controls," *Proceedings of the 18th Bioengineering in Ireland Conference*, January 2014.

2013

1. Tsanov M., Chah E., **Reilly R.B.**, O'Mara S. "Respiratory cycle entrainment of septal neurons mediates the fast coupling of sniffing rate and hippocampal theta rhythm", *European Journal of Neuroscience*, Dec 11 2013, PMID: 24329896
2. Sheedy C., Loughlin G., Power A., **Reilly R.B.**, Lalor E. "Endogenous Auditory Frequency-Based Attention Modulates Obligatory Sensory Activity in Humans", *NeuroReport* Nov 14 2013. PMID: 24231831
3. Hutchinson M., Kimmich, O., Molloy, A., Whelan, R., Molloy, F., Lynch, T., Healy, D., Walsh, C., Edwards, M., Ozelius, L., **Reilly, R.**, O'Riordan, S., "The endophenotype and the phenotype: Temporal discrimination and adult-onset dystonia", *Movement Disorders, Oct 2013* - PMID: 24108447
4. Holmes M., Seheult J., Geraghty C., D'Arcy S., Costello R., **Reilly R.B.**, "A method of estimating inspiratory flow rate and volume from an inhaler using acoustic measurements", *Physiological Measurement*, 34(8), pp903-14, Aug 2013, PMID: 23892977
5. Verkerke G.J., Van der Houwen J., Broekhuis A.A., Bursa J., Catapano G., McCullagh P., Mottaghy K., Niederer P., **Reilly R.**, Rogalewicz V., Segers P., Verdonschot N. "Science versus Design; comparable, contrastive or conducive?", *J Mech Behaviour of Biomed Materials*, Vol. 21, pp195-201, May 2013 PMID: 23566771
6. D'Arcy S., Rapcan V., Gali A., Burke N., Crispino O'Connell G., Robertson I.H. , **Reilly R.B.**, "A study into the automation of cognitive assessment tasks for delivery via the telephone: lessons for developing remote monitoring applications for the elderly", *Technology and Health Care, International Journal of Health Care Engineering*, 21(4), pp387-96, 2013. PMID: 23949180
7. McLaughlin M., Lopez Valdes A, **Reilly, R.B.**, Zeng, F-G, "Cochlear Implant Artifact Attenuation in Late Auditory Evoked Potentials: A Single Channel Approach", *Hearing Research*, August 2013, PMID: 23727626
8. Hutchinson, M., Kimmich O., Molloy, A. Whelan, R., Williams, L., Bradley, D., Balsters, J., Molloy, F., Lynch, T, Healy, D., Walsh, C., O'Riordan, S., **Reilly, R.** Temporal discrimination, a cervical dystonia endophenotype penetrance and functional correlates, *Brain*, 2013,
9. Ó Donnchadh S, Burke T., Bramham J., O'Brien M.C., Whelan R., **Reilly R.B.**, Kiiski K., Lonergan R., Kinsella K., Kelly S., McGuigan C., Hutchinson M., Tubridy N "Symptom overlap in anxiety and multiple sclerosis", *Multiple Sclerosis Journal*, Vol 19 (10), Feb 2013 PMID: 23413298
10. McLaughlin M., **Reilly R.B.**, Zeng FG, "Rate and onset cues can improve cochlear implant synthetic vowel recognition in noise", *Journal of the Acoustic Society of America*, 2013 Mar;133(3):1546-60. PMID 23464025
11. Long D, **Reilly R.B.**, "Inhaler use and misuse on the wards of Hospital", *Thorax* 2013; 68:A178 doi:10.1136/thoraxjnl-2013-204457.377
12. García F., Cogan L., **Reilly R.**, Millet J., Cervigón R, "Haemodynamic Parameters for Assessment of Orthostatic Intolerance in Older People", *Proceeding of Computers and Cardiology 2013*, Zaragoza, September 2013.
13. Lonergan R, McCarthy A, Shamsu A, Byrne J, Merwick A, **Reilly R.** Lynch T, McGuigan C, Connolly S, "Reading between the lines: a case series in Primary Reading Epilepsy", *Journal of neurology, neurosurgery, and psychiatry*, 84, (11), 2013, pe2
14. Hermann S., **Reilly R.B.**, Power D. "The Ballistocardiogram as a Contactless Registration Method for Cardiovascular Parameters" submitted to the *European Society for Artificial Organs (ESAO) Conference*, September 2013, Glasgow, UK
15. McLaughlin M., Lopez Valdes A, **Reilly, R.B.**, Zeng, F-G, "Expanding Cochlear Implant Neural Response Measurement Capabilities", *Proceedings of the 2013 Conference on Implantable Auditory Prostheses is the 16th in a series of biennial international research conferences on cochlear implants and auditory brainstem implants*, Lake Tahoe, July 2013.
16. Holmes M., D'Arcy S., Costello R., **Reilly R.B.**, "An acoustic method of automatically evaluating patient inhaler technique", *Proceedings of the 35th Annual International IEEE EMBS Conference*, Osaka, Japan, July 2013.
17. Holmes M., Seheult J., Geraghty C., D'Arcy S., Costello R., **Reilly R.B.**, "Using acoustics to estimate inspiratory flow rate and drug removed from a dry powder inhaler", *Proceedings of the 35th Annual International IEEE EMBS Conference*, Osaka, Japan, July 2013. PMID: 24111322
18. Lopez-Valdes A., **Reilly R.B.**, Zeng F-G, Smith J., Viani L., Walshe L., McLaughlin M. "Auditory Mismatch Negativity in Cochlear Implant Users: A Window to Spectral Discrimination", *Proceedings of the 35th Annual International IEEE EMBS Conference*, Osaka, Japan, July 2013.
19. Killane I., Donoghue O., Savva G., Cronin H., Kenny R.A., **Reilly R.B.**, "Variance Between Walking Speed and Neuropsychological Test Scores During Three Gait Tasks Across The Irish Longitudinal Study On Aging (TILDA)", *Proceedings of the 35th Annual International IEEE EMBS Conference*, Osaka, Japan, July 2013. PMID: 24111336
20. Killane I., Browett G., **Reilly R.B.**, "Measurement of Attention During Movement: Acquisition of Ambulatory EEG and Cognitive Performance from healthy Young Adults", *Proceedings of the 35th Annual International IEEE EMBS Conference*, Osaka, Japan, July 2013. PMID: 24111205
21. Lonergan R, **Reilly R.B.**, "Pick 'n' mix: neuropathological detection of peri-tumour tauopathy", *The Association of British Neurologists*, Glasgow, May 2013
22. Killane I., Donoghue O.A, Saava G.M., Cronin H., Kenny R.A., **Reilly R.B.**, "Associations between gait variability and sustained attention in a community dwelling nationally representative population sample", *Proceedings of the Joint World Congress of ISPGR and Gait & Mental Function*, Japan, June 2013.
23. Fearon C., Roudaia E, Nolan H, Gallego J, Quinlivan B, O'Leary C., Magennis B., **Reilly R.B.**, Lynch T., "Efficacy of interventions for freezing of gait in Parkinson's disease and implications for underlying pathophysiology," *Proceedings of 17th International Congress of Parkinson's Disease and Movement Disorders*, Sydney, Australia, June 2013.
24. McLaughlin M., Lopez Valdes A., Viani L., Walshe, P., Smith J., **Reilly R.B.**, Zeng F.G. "A Mismatch Negativity Paradigm for Objectively Assessing Spectral Resolution in Cochlear Implant Users", *Proceedings of the 36th MidWinter Meeting of the Association for Research in Otolaryngology*, Baltimore, February 2013
25. Roudaia E., Gallego J., Nolan H., Fearon C., Newell F., Reilly RB, "Sensorimotor synchronization to auditory and visual cues in ageing and Parkinson's disease", *EU Cost Action TIMELY*, February 2013.
26. Cosgrave N., **Reilly R.**, Gallagher L. "Investigations into the Electroencephalography of Visuospatial Processing: An Initial Study into Atypicalities in Autism Spectrum Disorder", 3rd Annual Frontiers in Neurology Meeting, Dublin Nov 2013.

27. Fearon C., Reynolds N., Joseph S., **Reilly R.B.**, Reid V., O'Rourke K. "Functional magnetic resonance imaging and video electroencephalography in an adult with eyelid myoclonia with absences (Jeavons's syndrome)", *Proceedings of the Irish Neurological Association*, April 2013
28. Killane I, Donoghue O., Savva G., Cronin H., Kenny R.A., **Reilly R.B.**, "Can meaning be found behind mean temporal Gait Parameters in an older Irish population sample? Correlations between stride time variability and attention?" *Proceedings of the 19th Annual Bioengineering in Ireland*, January 2013
29. Holmes, M.S., Taylor, T., Seheult, J.N., Geraghty, C., D'Arcy, S., Kelly, E., Keane, F., Costello, R.W., **Reilly R.B.**, "An acoustic method of predicting peak inspiratory flow rate (piFR) and Total emitted dose (TED) from a Dry powder inhaler", *Proceedings of the 19th Annual Bioengineering in Ireland*, January 2013
30. Lopez Valdes A., McLaughlin M., Viani L., Smith J., Zeng F.G., **Reilly R.B.**, "Estimating Physiological Spectral Ripple Discrimination in Cochlear Implant Users using a Mismatch Negativity Approach", *Proceedings of the 19th Annual Bioengineering in Ireland*, January 2013
31. Fanning A. Dabacan, A. Reilly R.B. "Temporal Discrimination Monitoring" *Proceedings of the 19th Annual Bioengineering in Ireland*, January 2013

2012

1. Mulroy E, Quigley G, Roberts K, Cummins G, Magennis B, Fortune G, O'Brien D, Blunnie WP, Harrington E, Gillivan-Murphy P, Kavanagh E, Gilligan P, **Reilly R.** Scolai PO, Kelly S, Murray M, Lynch T, "Deep brain stimulation in Ireland for Parkinson's disease and essential tremor", *Irish Journal of Medical Science*, 2012 Sep;105(8):278-80. PMID: 23155918.
2. Cervigon R., Castells F., **Reilly R.B.**, Moreno J., Millet J., "Quantification of anaesthetic effects on atrial fibrillation rate by partial least squares", *Physiological Measurement*, 2012 Oct;33(10):1757-68. PMID: 23011052.
3. Kiiski H., **Reilly R.B.**, Lonergan R., Kelly R., O'Brien MC., Kinsella K., Bramham J., Burke E.T., O'Donnchadha Sean., Nolan H., Hutchinson M., Tubridy N., Whelan R. "Only Low Frequency Event-Related EEG Activity is Compromised in Multiple Sclerosis: Insights From an Independent Component Clustering Analysis", *PLoS ONE* 2012; 7(9): e45536. doi:10.1371/journal.pone.0045536. PMID: 23029079.
4. Lochlainn M., Gubbins S., Connolly S., **Reilly R.B.**, "The vegetative and minimally conscious states: a review of the literature and preliminary survey of prevalence in Ireland", *Irish Journal of Medical Science*, 2012 Apr 24. PMID: 22528253.
5. Nolan H, Butler J.S., Whelan R., Foxe J.J., Bühlhoff H.H., **Reilly R.B.**, "Neural Correlates of Oddball Detection in Self-Motion Heading: A High-Density Event-Related Potential Study of Vestibular Integration" *Experimental Brain Research*, 2012 May; 219(1):1-11. PMID: 22434342
6. Power A.J., Foxe J.J., Forde, E.J., **Reilly R.B.**, Lalor E, "At what time is the cocktail party? A late locus of selective attention to natural speech", *European Journal of Neuroscience*, 2012 May;35(9):1497-503. PMID: 22462504
7. Hok V., Chah E, **Reilly R.B.**, O'Mara S.M. "Hippocampal Dynamics Predict Inter-Individual Cognitive Differences in Rats", *Journal of Neuroscience*, 2012 Mar 7;32(10):3540-51. PMID: 22399776.
8. Bradley, D., Whelan R., Kimmich O., O'Riordan S., Mulrooney N., Brady P., Walsh, R., **Reilly, R.B.**, Hutchinson, S., Molloy, F., & Hutchinson, M. Temporal discrimination thresholds in adult-onset primary torsion dystonia: an analysis by task type and by dystonia phenotype. *Journal of Neurology*, 2012 Jan; 259(1):77-82. PMID: 21656045
9. Killane I., Donoghue O.A, Saava G.M., Cronin H., Kenny R.A., **Reilly R.B.**, "Exploring Correlations between Walking Speed and Cognitive Function using Montreal Cognitive Assessment (MOCA) subscores from the Irish Longitudinal Study on Ageing (TILDA)", *Proceedings of the British Geriatrics Society 2012 Autumn Meeting*.
10. Foran T.G., Fan C.W., Cunningham C., Crosby L., **Reilly R.B.**, Kenny R.A. "Orthostatic Hypotension as a Mediator of Increased Gait Variability in Older Adults", *Proceedings of the British Geriatrics Society 2012 Autumn Meeting*
11. Reuda Delgado L., **Reilly R.B.**, "Connectivity changes in the EEG resting state network with subject's own name", *Proceedings of the 3rd Biennial Conference on Resting State Brain Connectivity*, Magdeburg, Germany, September, 2012
12. Lopez Valdes A., McLaughlin M., Viani L., Smith J., Zeng F.G., **Reilly R.B.**, "Using Cortical Evoked Potentials to Estimate Speech Perception in Cochlear Implant Users" *Proceedings of the 7th International symposium on Objective Measures in Auditory Implants*, Amsterdam, September 2012.
13. McLaughlin M., Lopez Valdes A., **Reilly R.B.**, Zeng F.G., "Cochlear Implant Artifact Cancellation Using a High Bandwidth High Sample Rate Approach", *Proceedings of the 7th International symposium on Objective Measures in Auditory Implants*, Amsterdam, September 2012.
14. Rochford I., Rapcan V, D'Arcy S, **Reilly R.B.**, "Dynamic Minimum Pause Threshold Estimation for Speech Analysis in Studies of Cognitive Function in Ageing", *Proceedings of the 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, San Diego, August 2012.
15. Ó Donnchadh S, Burke T., Bramham J., O'Brien M.C., Whelan R., **Reilly R.B.**, Kiiski K., Lonergan R., Kinsella K., Kelly S., McGuigan C., Hutchinson M., Tubridy N., "Symptom overlap in anxiety and multiple sclerosis: on the need for caution", *Proceedings of the 28th Congress of the European Committee for the Treatment of Multiple Sclerosis*, Lyon October 2012.
16. Holmes MS, LeMenn M., D'Arcy S., Rapcan V., MacHale E., Costello R.W., **Reilly R.B.**, "Automatic Identification and Accurate Temporal Detection of Inhalations in Asthma Inhaler Recordings", *Proceedings of the 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, San Diego, August 2012.
17. Steinemann N.A., Tsanov M., **Reilly R.B.**, O'Mara S.M., "Assessing Attractor Models as a means to Explain Sense of Head-Direction during Theta Sleep in Rodents", *Proceedings of the 8th Federation of European Neuroscience Societies Forum (FENS)*, July Barcelona 2012.
18. Noor M.S, Tsanov M, **Reilly R.B.**, O'Mara S.M., "Theta burst stimulation to medial septum enhances spatial coherence of hippocampal place cell representation", *Proceedings of the AREADNE: Research in Encoding And Decoding of Neural Ensembles 2012*, Santorini, Greece, June 2012.
19. Killane I., Brennan C., Savva G., Donoghue O., Cronin H., Kenny RA, **Reilly R.B.**, "Comparisons between simple and complex gait tasks across different executive function groups and tertiles - cross sectional data from The Irish Longitudinal Study on Aging (TILDA)", *Proceedings of the Joint World Congress of ISPG and Gait & Mental Function*, Trondheim June 2012.

20. Kimmich O., Molloy A., Bradley D., Whelan R., O’Riordan S., **Reilly R.B.**, Hutchinson S., Hutchinson M. “Penetrance of abnormal temporal discrimination thresholds in unaffected first-degree relatives of adult onset primary torsion dystonia patients”, *Proceedings of 16th International Congress of Parkinson's Disease and Movement Disorders*, Dublin, Ireland, June 2012.
21. Molloy A., Kimmich O., Bradley D., **Reilly R.B.**, O’Riordan S., Hutchinson M. “Using an endophenotype to evaluate the effect of environmental factors in disease penetrance of adult onset primary torsion dystonia”, *Proceedings of 16th International Congress of Parkinson's Disease and Movement Disorders*, Dublin, Ireland, June 2012.
22. Killane I., Malloy A., Roberts K., Kimmish O., Whelan R., O’Riordan S., Hutchinson M., **Reilly R.B.**, “New systems for the assessment of visual temporal discrimination thresholds in dystonia”, *Proceedings of 16th International Congress of Parkinson's Disease and Movement Disorders*, Dublin, Ireland, June 2012.
23. Kimmich O, Molloy A, Bradley D, Whelan R, O’Riordan S, **Reilly RB**, Hutchinson S, Hutchinson M., “The penetrance of an abnormal temporal discrimination threshold as an endophenotype in unaffected first degree relatives of adult onset primary cervical dystonia patients is age-related”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*
24. Ó Donnchadha S, Burke T, Bramham J, O’Brien MC, Whelan R, **Reilly RB**, Kelly SB, Lonergan R, Kinsella K, Kiiski H, McGuigan C, Hutchinson M, Tubridy N., “Usefulness of the Beck Anxiety Inventory (BAI) for the assessment of anxiety in multiple sclerosis”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*
25. Iyer PM, Lalor E, **Reilly R**, Hardiman O, “Novel Biomarkers for ALS & ALS-FTD”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*
26. Wallace E, Rueda L, **Reilly RB**, Doherty CP., “The limitations of neuroimaging – a possible role for quantitative Electroencephalography”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*
27. Fearon C., Nolan H., **Reilly R.B.**, Lynch T., “Use of Multimodal Virtual Reality Environments to Understand and Overcome Freezing of Gait in Parkinson’s Disease”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*
28. Reynolds N., Shamsul A.S.M, MacCarthy A., Lynch T., **Reilly R.B.**, “Diffusion Imaging Study of Reading Epilepsy”, *Proceedings of the Irish Neurological Association, Cork, May 2012.*

2011

1. McHugh J, **Reilly R.B.**, Connolly S, “Examining the effects of age, sex, and BMI on normative median motor nerve excitability measurements”, *Clinical Neurophysiology*, 122, 2081–2088, Oct 2011. PMID: 21511529
2. Kimmich O., Bradley D., Whelan R., Mulrooney N., **Reilly R.B.**, Hutchinson S., O’Riordan S., Hutchinson M., “Sporadic adult onset primary torsion dystonia is a genetic disorder by the temporal discrimination test”, *Brain*, 134; 2656–2663, September 2011, PMID: 21840890
3. Tsanov M., Chah E, Vann S.D., **Reilly R.B.**, Erichsen J.T., Aggleton J.P., O’Mara S.M., Theta-Modulated Head Direction Cells in the Rat Anterior Thalamus, *Journal of Neuroscience*, 31(26):9489-9502, June 2011. PMID:21715614
4. Setti A, Finnigan S., Sobolewski R., McLaren L., Robertson I.H., **Reilly R.B.**, Kenny R.A., Newell F.N., “Audiovisual temporal discrimination is less efficient with ageing: An ERP study”, *NeuroReport*, Vol 22, Iss 11, 554-558, August 2011. PMID: 21691233
5. Kiiski, H., **Reilly, R.B.**, Lonergan, R., Kelly, S., O’Brien, M., Kinsella, K., Bramham, J., Burke, E.T., O’Donnchadha, S., Nolan, H., Hutchinson, M., Tubridy, N, & Whelan, R. Change in PASAT performance correlates with change in P3 ERP amplitude over a 12-month period in multiple sclerosis patients. *Journal of the Neurological Sciences*, 305, 45-52, June 2011. PMID:21457995.
6. Kiiski, H., Whelan, R., Lonergan, R., Nolan, H., Kinsella, K., Hutchinson, M., Tubridy, N., **Reilly, R.B.** Preliminary Evidence for Correlation Between PASAT Performance and P3a and P3b amplitudes in progressive multiple sclerosis. *European Journal of Neurology*, 18, 792-795, May 2011. PMID:20666835.
7. Chah E, Hok V, Della-Chiesa A., Miller J.J.H, O’Mara S.M, **Reilly R.B.**, “Automated spike sorting algorithm based on laplacian eigenmaps and k-means clustering” *Journal of Neural Engineering*, 8(1), Feb 2011. PMID:21248378
8. Tsanov M., Chah E, Vann S.D., **Reilly R.B.**, Erichsen J.T., Aggleton J.P., O’Mara S.M., “Oscillatory Entrainment of Thalamic Neurons By Theta Rhythm In Freely-Moving Rats”, *Journal of Neurophysiology*, 105(1):4-17, Jan, 2011. PMID: 20962067
9. Power A., Lalor E, **Reilly R.B.**, “Endogenous Auditory Spatial Attention Modulates Obligatory Sensory Activity in Auditory Cortex” *Cerebral Cortex*, Vol. 21(6), pp1223-30, June 2011. PMID: 21068187
10. Hermann S., Power D., **Reilly R.B.**, “RQA – a means of Predicting Pressure Relief Movements in the Prevention of Pressure Ulcers?”, *Proceedings of the 4th International Recurrence Plot Symposium*, Hong Kong, December 2011.
11. Kimmich O., Bradley D., Whelan R., Mulrooney N., **Reilly R.B.**, Hutchinson S., O’Riordan S., Hutchinson M., “Sporadic AOPTD is a genetic disorder – evidence by the temporal discrimination threshold”, *Proceedings of the 5th International Dystonia Symposium*, Barcelona Spain, Oct 2011.
12. Foran TG, Ni Scanaill C, Greene B, O’Donovan K, **Reilly R.B.**, Kenny R.A., “Testing For Determinism In Gait Data In Fallers Using Body Worn Inertial Sensor”, *Proceedings of the European Medical Physics and Engineering Conference*, Dublin, Sept 2011.
13. Hermann S., Reilly, R.B., Power D. “Novel method for detection of blood flow in both young and older subjects at rest, as a model for identifying risk of pressure ulcers in vulnerable movement-restricted elderly subjects”, *Proceedings of the 7th Congress of the European Union Geriatric Medicine Society, also the Proceedings of the 53rd Congress of the SEG and the Proceedings of the 32nd Congress of the SAGG*, Malaga, September 2011
14. Chah E., Hok V., O’Mara S.M., **Reilly R.B.**, “A Waveform Independent Cell Identification Method to Study Long-term Variability of Spike Recordings”, *Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Boston, August 2011.
15. Power A., **Reilly R.B.**, Lalor E. “Comparing linear and quadratic models of the human auditory system using EEG”, *Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Boston, August 2011.
16. Nolan H., Butler J., Whelan R., Foxe J.J., **Reilly R.B.**, “Motion P3 Demonstrates Neural Nature of Motion ERPs”, *Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Boston, August 2011.
17. Cervigon Abad R., **Reilly R.B.**, Castells F.V., “Principal Component Analysis to Quantify Anaesthetic Effects on Atrial Fibrillation Morphology”, *Proceedings of the 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Boston, August 2011.

18. McLaughlin M., **Reilly R.B.**, Zeng F-G., “Improved vowel recognition in noise in electric hearing”, *Proceedings of The 2011 Conference on Implantable Auditory Prostheses, 15th Biennial International Research Conferences on Cochlear Implants and Auditory Brainstem Implants*, Pacific Grove, California, July 2011.
19. Whelan, R., Bradley, D., Kimmich O, O’Riordan S., **Reilly, R.B.**, Hutchinson M., Hypoactivation of the putamen bilaterally during a temporal discrimination task for adult onset primary distortion patients vs. controls. Movement Disorders Symposium, *Proceedings of the 15th International Congress of Parkinson’s Disease and Movement Disorders*, Toronto, June 2011
20. Bradley D., Kimmich O., Whelan R., Walsh R., Brady P., Mulrooney N., **Reilly, R.B.**, Hutchinson S., Molloy F., Hutchinson M., “The Temporal Discrimination Threshold in sporadic AOPTD: Utility in the investigation of patients and their first degree relatives”, *Proceedings of the 15th International Congress of Parkinson’s Disease and Movement Disorders*, Toronto, June 2011
21. Nolan H, Butler J.S., Whelan R., Foxe J.J., Bühlhoff H.H., **Reilly R.B.**, “Electrophysiological Source Analysis of Passive Self-Motion”, *Proceedings of the 5th IEEE International Conference on Neural Engineering*, Mexico, April 2011.
22. Hok, V., Chah, E., **Reilly, R.B.**, O’Mara, S.M. “Place cell discharge variability predicts individual neurocognitive performance in rats”, *Proceedings of the 10th Colloque de la Société des Neurosciences*, Marseilles, 2011
23. Galli A., Garattini C., Burke N., Rapcan R., D’Arcy S., **Reilly R.B.**, Robertson I.H. “Cognitive function monitoring using temporal speech dynamics”, *Proceedings of the International Association of Gerontology and Geriatrics-VII European Congress* Bologna, April 2011.
24. Foran TG, Ni Scanaill C, Greene B, O’Donovan K, **Reilly R.B.**, Kenny R.A., “Influence of Gait Speed on Variability and Stability in Fallers”, *Proceedings of the 2nd International Conference on Ambulatory Monitoring of Physical Activity and Movement*, Glasgow, May 2011.
25. Killane I, Barnett G., **Reilly R.B.**, “Measuring Neural Responses during Mild Exercise”, *Proceedings of the 2nd International Conference on Ambulatory Monitoring of Physical Activity and Movement*, Glasgow, May 2011.
26. Kiiski H., Whelan R., Lonergan R., Nolan H., Kinsella K., Hutchinson M.; Tubridy N; **Reilly R.B.**, “Change in PASAT Performance Correlates with Change in P3 ERP Amplitude over a 12-month period in Multiple Sclerosis Patients” *Proc of the 10th International Conference on AD/PD*, A-316-0027-01853, Barcelona March 2011.
27. Verkerke GJ, Segers P, Mottaghy K, **Reilly RB**, Rogalewicz V, “Training students in Biomedical Engineering on a European level”, *Proc. of the 1st Middle East Conference on Biomedical Engineering*, Feb. 2011, Sharjah, UAE
28. Rogalewicz V, Verkerke GJ, **Reilly RB**, Catapano G., “Multidisciplinary teamwork training for progress in developing and using medical technology”, *Proc. of the 1st Middle East Conference on Biomedical Engineering*, Feb. 2011, Sharjah, UAE
29. Hermann S., **Reilly, R.B.**, Power D. “The ballistocardiogram as a tool to quantify cardiovascular changes associated with aging to inform pressure ulcer risk assessment in movement-compromised elderly subjects”, *Proceedings of the 53rd Annual Irish Gerontological Society Conference*, Dublin, September 2011
30. Kiiski H., Whelan R., Lonergan R., Nolan H., Kinsella K., Hutchinson M., Tubridy N, **Reilly R.B.**, “Change in PASAT performance correlates with change in P3 ERP Amplitudes over a 12-month period in Multiple Sclerosis patients”, *Proceedings of the Irish Neurological Association*, Sligo, May 2011.
31. Ó Donnchadha S, Bramham J, Burke T, O’Brien M.C, Whelan R, **Reilly R**, Lonergan R, Kinsella K, Kiiski H, McGuigan, Hutchinson M, Tubridy N, “A longitudinal study of processing speed and working memory in multiple sclerosis as measured by the Paced Auditory Serial Addition Test (PASAT)”, *Proceedings of the Irish Neurological Association*, Sligo, May 2011.
32. Burke N., Rapcan R., Galli A., D’Arcy S., **Reilly R.B.**, Robertson I.H. “Improving the sensitivity of the animal naming category fluency test using temporal speech features”, *Proceedings of the 8th Annual Psychology, Health and Medicine Conference*, Galway, April 4th, 2011
33. Hermann S., Vredeveld E, Power D, **Reilly R.B.**, “The effects of body position on the IJK complex of the ballistocardiogram”, *Proceedings of the 17th Annual Bioengineering in Ireland*, January 2011
34. Killane I, Barnett G., **Reilly R.B.**, “Measuring Neural Responses during Sitting, Cycling and Walking”, *Proceedings of the 17th Annual Bioengineering in Ireland*, January 2011.

2010

1. Moran RJ, Campo P, Maestú F, **Reilly RB**, Dolan RJ and Strange BA. “Peak frequency in the theta and alpha bands correlates with human working memory capacity”, *Front. Hum. Neurosci.* 4:200. Nov 2010. PMID:21206531
2. Nolan H, Whelan R, **Reilly R.B.** “FASTER: Fully Automated Statistical Thresholding for EEG artifact Rejection”, *Journal of Neuroscience Methods*, 192(1):152-62, September 2010, PMID: 20654646
3. Rapcan V., D’Arcy S., Yeap S., N, Thakore J., **Reilly R.B.**, “Acoustic and Temporal Analysis of Speech: A Potential Biomarker for Schizophrenia” *Medical Engineering & Physics*, 2010 Nov;32(9):1074-9. PMID:20692864.
4. Cervigon R., **Reilly R.B.**, Castells F., Moreno J., Millet J., “Entropy Measurements in Paroxysmal and Persistent Atrial Fibrillation”, *Physiological Measurement*, 2010 Jul; 31(7):1011-20. PMID: 20577034
5. Whelan R, Lonergan R, Kiiski H, Nolan H, Kinsella K, Hutchinson M, Tubridy N, **Reilly RB**. “Impaired information processing speed and attention allocation in multiple sclerosis patients versus controls: A high-density EEG study”. *J Neurol Sci.* 2010 Jun 15;293(1-2):45-50. PMID: 20399448
6. Whelan R, Lonergan R, Kiiski H, Nolan H, Kinsella K, Bramham J, O’Brien MC, **Reilly RB**, Hutchinson M, Tubridy N. “A high-density ERP study reveals latency, amplitude, and topographical differences in multiple sclerosis patients versus controls”. *Clin Neurophysiol.* 2010 Sep;121(9):1420-6. PMID: 20381418.
7. Bradley, D., Whelan, R., Walsh, R., O’Dwyer, J., **Reilly, R.B.**, Hutchinson, S., Molloy, F., Hutchinson M., “Comparing endophenotypes in Adult-onset Primary Torsion Dystonia”, *Movement Disorders*, 2010 Jan 15;25(1):84-90. PMID:19938165.
8. Keyes, H, Bardy H., **Reilly R.B.**, Foxe, J.J. “My face or yours? Event-related potential correlates of self-face processing”, *Brain and Cognition*, 2010 Mar;72(2):244-54 PMID: 19854553
9. Hok V., Chah E., **Reilly R.B.**, O’Mara S.M. “Late-onset hippocampal place cells activity in aged rats” *Proc of Society for Neuroscience*, San Diego, Nov 2010
10. Lalor E.C., Barrett J., **Reilly R.B.**, “The timing of coherent motion processing in human visual cortex”, *Proc of Society for Neuroscience*, San Diego, Nov 2010
11. Nolan, D, O’Dea J. **Reilly R.B.**, “Measuring the Diameter of the Aortic Valve using the EndoFLIP® Endolumenal Measurement Catheter” *Proc of Transcatheter Cardiovascular Therapeutics Conference*, Washington DC, Sept 2010. *J. Am. Coll. Cardiol.* 2010;56:B78, doi:10.1016/j.jacc.2010.08.403

12. Nolan H., Butler J., Whelan R., Foxe J.J., **Reilly R.B.**, Bühlhoff H.H., “Multisensory Self-Motion Oddball Paradigm Evokes a P3 Response”, *Proceedings of the 11th Annual Meeting of International Multisensory Research Forum*, Liverpool, UK, June, 2010.
13. Barnett-Cowan, M., Nolan H., Butler J., Whelan R., Foxe J.J., **Reilly R.B.**, Bühlhoff H.H., “Latent reaction time and event-related potentials to passive physical motion”, *Proceedings of the 11th Annual Meeting of International Multisensory Research Forum*, Liverpool, UK, June, 2010.
14. Bradley D., Whelan R., Mulrooney N, Walsh R., **Reilly R.**, Hutchinson S., Molloy F., Hutchinson M., “The Utility of Visual, Tactile and Mixed Tasks in the Adult-Onset Primary Torsion Dystonia”, *Proceedings of the 62nd American Academy of Neurology Annual Meeting*, Toronto, April 2010
15. Barnett-Cowan M., Nolan H., Butler J., Foxe J. J., **Reilly R.B.**, Bühlhoff, H.H., “Reaction time and event-related potentials to visual, auditory and vestibular stimuli”, *Proc. of the 10th Annual Meeting Vision Sciences Society*, Florida, USA, May 2010
16. McHugh J.C., **Reilly R.**, Connolly S., “Examining the effects of gender, sex, and BMI on normative median motor nerve excitability measurements”, *Clinical Neurophysiology*, Volume 121, Supplement 1, Page S207 October 2010, 29th International Congress of Clinical Neurophysiology
17. Power D, Whelan R, Nolan H, **Reilly R.B.** “A high density EEG study of a spatially rotated oddball stimulus”, *Proceedings of 4th Neuroscience Ireland Annual Conference*, Dublin, Ireland, September 2010.
18. Nolan H., Whelan R., **Reilly R.B.**, “A Fully Automated Method for Artifact Detection in High-Density EEG Data”, *Proceedings of 4th Neuroscience Ireland Annual Conference*, Dublin, Ireland, September 2010.
19. Ó Donnchadha S, Bramham J, Burke T , O’Brien M.C , Whelan R , **Reilly R.** Lonergan R , Kinsella K , Kiiski H , Hutchinson M , Tubridy N , “A longitudinal analysis of cognitive functioning in multiple sclerosis”, *Proceeding of: Psychological Society of Ireland Annual Conference*, Athlone, Ireland, 2010.
20. Hermann S, **Reilly R.** “The use of recurrence plots and recurrence quantification analysis in detecting behaviour related to seat interface pressure” *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010.
21. Bradley D, Whelan R, Walsh R, **Reilly RB**, Hutchinson S, Molloy F, Hutchinson M “Temporal Discrimination Threshold as an Endophenotype in Adult Onset Primary Torsion Dystonia”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010.
22. Whelan R, Lonergan R, Kiiski H, Kinsella K, Nolan H, Hutchinson M, **Reilly RB** , “Genes, Brains, and Neuroimaging: How EEG and MRI can inform the genetics of neurological disorders”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010.
23. D’Arcy S., Rapcan V., Robertson I.H., **Reilly R.B.** “Technology for remote assessment of cognitive function of the elderly” *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
24. Whelan R, Lonergan R, Kiiski H, Kinsella K, Nolan H, Hutchinson M, **Reilly RB**, “A high-density ERP study reveals latency, amplitude, and topographical differences in multiple sclerosis patients versus controls”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
25. Nolan H, Whelan R, **Reilly RB**, “Automated artefact detection for high-density”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
26. Power A., Lalor E, **Reilly RB**, “Responses extracted using the novel auditory-evoked spread spectrum analysis (AESPA) are not modulated by attention”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
27. Rapcan V., D’Arcy S., **Reilly RB**, “Speech analysis as a monitoring tool for schizophrenia”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
28. Sobolewski R., Finnegan S., Robertson I.H., **Reilly R.B.** “The effects of aging on multimodal integration: A high density EEG study”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010
29. Chah E., O’Mara S., **Reilly R.B.**, “Automated spike sorting algorithm based on Fast Fourier transform”, *Proceedings of the 16th Annual Bioengineering in Ireland*, January 2010

2009

1. Yeap S., Kelly S.P., **Reilly R.B.**, Thakore J.H., Foxe J.J., “Visual sensory processing dysfunction as a common endophenotype for bipolar disorder and schizophrenia”, *Journal of Psychiatry and Neuroscience*, 2009 Nov;34(6):459-64. PMID:19949722.
2. Cervigon R., Moreno J., **Reilly R.B.**, Mateo J., Villacastin J, Castells F. “Ventricular Rhythm in Atrial Fibrillation under Anaesthetic Infusion with Propofol”, *Physiological Measurement*, 2009 Aug;30(8):833-45. PMID: 19590112
3. Bradley D, Whelan R, Walsh R, Molloy F., Hutchinson S., **Reilly R.** Hutchinson M “Temporal Discrimination Threshold: VBM evidence for an endophenotype in adult onset primary torsion dystonia”, *Brain*, 2009 Sep;132(Pt 9):2327-35, PMID: 19525326
4. Lalor E, Power A, **Reilly R.B.**, Foxe J.J. "Resolving Precise Temporal Processing Properties of the Auditory System Using Continuous Stimuli" *Journal of Neurophysiology*, 2009 Jul;102(1):349-59, PMID: 19439675
5. Walsh R., Whelan R., O’Dwyer JP, O’Riordan S., Hutchinson S., O’Laoide R., Malone K., **Reilly R.**, Hutchinson M. “Striatal morphology correlates with sensory abnormalities in unaffected relatives of cervical dystonia patients”, *Journal of Neurology*, 2009 Aug;256(8):1307-13. PMID: 19353218.
6. Cervigon R., Castells F., Moreno J., **Reilly R.B.**, Villacastin J, Sanchez C., Millet J., “Quantification of Propofol Effects on Atrial Fibrillation Organization”, *Medical & Biological Engineering and Computing*, 2009 Mar;47(3):333-41. PMID: 19018581
7. Rapcan V., D’Arcy S., Pénard N., Robertson I.H., **Reilly R.B.**, “The Use of Telephone Speech Recordings for Assessment and Monitoring of Cognitive Function in Elderly People”, *Proceedings of Interspeech 2009*, Brighton, UK, September 2009.
8. Pénard N., Counihan S.U.E., D’Arcy S., Rapcan V., **Reilly R.B.**, Robertson I.H. “Investigating speech as a source of biomarkers for changes in cognition, executive function and mood” 47th Annual Meeting of the Academy of Aphasia. Boston, Massachusetts, September 2009.
9. Nolan H, Whelan R, **Reilly R.B.**, Bühlhoff H.H., Butler J, “Acquisition of Human EEG Data during linear Self-Motion on a Stewart Platform”, *Proceedings of the 10th Annual Meeting of International Multisensory Research Forum*, New York, USA, June, 2009

10. Whelan R, Bradley D, Walsh R, Reilly RB, Hutchinson SMolloy F, Hutchinson M., "Temporal discrimination thresholds in AOPTD - voxel-based morphometry in unaffected relatives validates a new endophenotype", *Journal of Neurology Neurosurgery Psychiatry*, *ABN joint annual meeting 2009 with the Spanish Society of Neurology*, Arena and Convention Centre, Liverpool, 2009, 22–26 June, 80, (11), *BMJ*, 2009,
11. Finnigan S, O'Connell R, **Reilly R**, Robertson IH. "Electrophysiological indices of cognitive control decrements in ageing and cognitive decline", *49th Annual Meeting of the Society for Psychophysiological Research, 2009. Conference abstracts published in Psychophysiology*, October 2009, Berlin, Germany
12. Bradley D., Whelan R., Walsh R., **Reilly R.**, Hutchinson S., Molloy F., Hutchinson M., "Temporal discrimination thresholds in familial AOPTD Pedigrees – Use of a new endophenotype", *Proceeding of the Movement Disorder Society*, Paris, June, 2009
13. McHugh J., **Reilly R.**, Connolly S., "The effects of age, sex, and BMI on nerve excitability testing", *British Society for Clinical Neurophysiology*, Scientific Meeting, London, UK, October 2009.
14. Whelan R., Bradley D., Walsh R., **Reilly R.**, Hutchinson S., Molloy F., Hutchinson M., "Temporal discrimination thresholds in AOPTD – Voxel based morphometry in unaffected relatives validates a new endophenotype", *Proceeding of the Movement Disorder Society*, Paris, June, 2009
15. Whelan R., Bradley D., Walsh R., **Reilly R.B.**, Hutchinson S., Molloy F., Hutchinson M., "Discrimination Thresholds in AOPTD – Voxel Based Morphometry in unaffected relatives validates a new endophenotype", *Proceedings of the Association of British Neurologists*, Liverpool, England, June 2009
16. D'Arcy S., Pénard N., Counihan S., Rapcan V., Robertson I.H., **Reilly R.B.**, "Corpora for Assessment of Cognitive Function in older Persons", *Proceedings of the 3rd Advanced Voice Function Assessment International Workshop*, Madrid, Spain, May 2009.
17. Lalor E, Power A, **Reilly R.B.** "Extracting Separate Responses to Simultaneously Presented Continuous Auditory Stimuli: An Auditory Attention Study", *Proceedings of the 4th IEEE International Conference on Neural Engineering*, Turkey, April 2009
18. Nolan H, Whelan R, **Reilly R.B.**, Bühlhoff H.H., Butler J, "Acquisition of Human EEG Data during linear Self-Motion on a Stewart Platform", *Proceedings of the 4th IEEE International Conference on Neural Engineering*, Turkey, April 2009
19. Sobolewski R., Finnegan S., Dockree P. Robertson I.H., **Reilly R.B.** "Monitoring of Cognitive Processes in Older Persons" *Proceedings of the 4th IEEE International Conference on Neural Engineering*, Turkey, April 2009
20. Thakore, J, Rapcan, V., D'Arcy, S., Yeap, S., Afzal, N. Reilly, R., "Acoustic and temporal analysis of speech: a potential marker for Schizophrenia", *International Clinical Psychopharmacology*, September 2011 - Volume 26 - Issue - p e131 : 10.1097/01.yic.0000405855.63819.e2, *The 15th Biennial Winter Workshop in Psychoses*, 15-18 November 2009, Barcelona, Spain.
21. Meredith S, Mascot C, Colgan N, **Reilly R.B.**, Curran, K, "Using Cutting Edge Medical Imaging to Assist the Teaching and Understanding of Neuroanatomy for Medical Students and Medical Researchers" *Proceedings of the 3rd Annual Conference of the National Academy for Integration of Research & Teaching & Learning*, Dublin, November 2009
22. Lalor E.C., Lonergan R., Kiiski H., Kinsella K., **Reilly R.B.**, Hutchinson M., Tubridy N., Whelan R., "A Method for the Rapid Assessment of Visual Processing Latencies in Multiple Sclerosis" *Proceedings of the Neuroscience Ireland*, Dublin, September 2009.
23. Kiiski H., Lonergan R., Whelan R., Nolan H., Kinsella K., O'Brien M, **Reilly R.B.**, Hutchinson M., Tubridy N., "P3 Abnormalities in Multiple Sclerosis as a Function of Oligoadenylate Synthetase Genotype" *Proceedings of the 3rd Annual Conference Neuroscience Ireland*, Dublin, September 2009
24. Kiiski, H., Lonergan, R., Whelan, R., Nolan, H., Kinsella, K., O'Brien, M., Reilly, R.B., Hutchinson, M., Tubridy, N. (2009). P3 abnormalities in multiple sclerosis as a function of oligoadenylate synthetase genotype. *Irish Journal of Medical Science*, 179, 3, S123.
25. Finnegan S.P., O'Connell R.G., **Reilly R.**, Robertson I.H. , "Electrophysiological Indices of Attentional Decrements in Mild Cognitive Impairment", *Proceedings of the Neuroscience Ireland*, Dublin, September 2009
26. Nolan H., **Reilly R.B.**, Whelan R. "A Fully Automated Method for Artifact Detection in High-Density EEG Data" *Proceedings of the Neuroscience Ireland*, Dublin, September 2009
27. Whelan R., Lonergan R., Kiiski H., Nolan H., Kinsella K., Bramham J., O'Reilly M, **Reilly R.B.**, Hutchinson M, Tubridy N. "ERP Abnormalities in Multiple Sclerosis Patients: A High-Density EEG Study", *Proceedings of Neuroscience Ireland*, Dublin, Sept 2009:
28. McLaren L., Sobolewski R., Setti A., Finnigan S., **Reilly R. B.**, Robertson I. H., Newell F. N., "The Role of Ageing on Efficient Audio-Visual Integration in the Brain: An EEG Study", *Proceedings of the Irish Signal and Systems Conference*, Dublin, June 2009.
29. Rapcan V., D'Arcy S., **Reilly R.B.**, "Automatic Breath Sound Detection and Removal for Cognitive Studies of Speech and Language", *Proceedings of the Irish Signal and Systems Conference*, Dublin, June 2009.
30. Whelan R, Lonergan R, Kiiski H, Kinsella K, Nolan H, **Reilly RB**, Hutchinson M, Tubridy N "P3 latencies are delayed in multiple sclerosis patients with low PASAT scores", *Proceedings of the Irish Neurological Association Meeting*, Dublin, May 2009
31. Bradley D, Whelan R, Walsh R, **Reilly RB**, Hutchinson S, Molloy F, Hutchinson M, "Temporal discrimination thresholds in familial AOPTD Pedigrees–use of a new endophenotype" *Proceedings of the Irish Neurological Association Meeting*, Dublin, May 2009
32. Whelan R, Bradley D, Walsh R, **Reilly RB**, Hutchinson S, Molloy F, Hutchinson M, "Temporal discrimination thresholds in AOPTD - voxel-based morphometry in unaffected relatives validates a new endophenotype" *Proceedings of the Irish Neurological Association Meeting*, Dublin, May 2009

2008

1. Wormald R.N., Moran R.J, **Reilly R.B.**, Lacy P.D. "Performance of an Automated, Remote System to Detect Vocal Fold Paralysis", *Annals of Otolaryngology, Rhinology and Laryngology*, 2008 Nov;117(11):834-8. PMID: 19102129.
2. Lécuyer A., Lotte F., **Reilly R.B.**, Leeb R., Hirose M., Slater M., "Brain-Computer Interfaces, Virtual Reality, and Videogames," *Computer*, vol. 41, no. 10, pp. 66-72, Oct., 2008
3. Greene BR, Marnane W, Lightbody G, **Reilly RB**, Boylan GB, "Classifier Models and Architectures for EEG based Neonatal Seizure Detection", *Physiological Measurement*, 2008 Oct;29(10):1157-78. PMID: 18799836
4. Moran R., Kiebel S.J, Stephan K.E, Bombach N. O'Connor W.T., Murphy K.J. **Reilly R.B.** Friston K.J., "Bayesian estimation of synaptic physiology from the spectral responses of neural masses", *NeuroImage*. 2008 Aug 1;42(1):272-84. PMID: 18515149
5. Moran R., Molholm S. Reilly R.B., Foxe J.J., "Changes in effective connectivity of human superior parietal lobule under multisensory and unisensory stimulation", *European Journal of Neuroscience*, 2008 May;27(9):2303-12. PMID: 18445221
6. Lalor E.C., Yeap S., **Reilly R.B.**, Pearlmutter B.A., Foxe J.J., "Dissecting the cellular contributions to early visual sensory processing deficits in schizophrenia using the VESPA evoked response," *Schizophrenia Research*, 2008 Jan;98(1-3):256-64. PMID: 17996424

7. Minogue CM, Crowe LM, Caulfield BM, Lowery M, **Reilly RB**, "Evaluation of a Hill model in predicting the energetics of sub-tetanic electrical stimulation of muscle", *Proceedings of the 13th International Functional Electrical Stimulation Society Conference*, October 2008
8. Chah E, Glynn S, Atiyeh M., Costello RW., **Reilly R.B.**, "Investigating the Relationship between Breath Acoustics and FEV1 During Histamine Challenge" *Proceedings of the 4th European Congress of the International Federation for Medical and Biological Engineering, Antwerp, November 2008.*
9. Walsh R, Whelan R., O'Dwyer JP, O'Riordan S., Hutchinson S., O'Laoide R., Malone K., **Reilly R.**, Hutchinson M. "Abnormalities of sensorimotor structures in cervical dystonia and unaffected relatives: The sensory endophenotype", *Journal of Neurology, Neurosurgery and Psychiatry*, 79(3) pp341-342, Meeting Abstract, Mar 2008 .
10. Whelan R, Longergan R, Killane I, **Reilly R.** Hutchinson M, Tubridy N "Cognitive impairment in multiple sclerosis correlates highly with a delayed P3 component in event-related potential testing? *Proceedings of the World Congress on Treatment and Research in Multiple Sclerosis*, joint meeting of *ACTRIMS, ECTRIMS and LACTRIMS*, Montreal September, 2008 and in *Journal Multiple Sclerosis: Clinical and Laboratory Research*.
11. D'Arcy S., Rapcan V., Pénard N., Morris M.E., **Reilly R.B.**, Robertson I.H. "Speech as a Means of Monitoring Cognitive Function of Elderly Subjects", *Proceedings of Interspeech, Brisbane, Australia, 22-26 September 2008.*
12. Bradley D, Whelan R, Walsh R, **Reilly R.B.**, Hutchinson M, "Temporal Discrimination Threshold (TDT) and Spatial Discrimination Threshold (SDT) – comparing endophenotypes in Adult-onset Primary Torsion Dystonia (AOPTD)", *Proceedings of the 12th International Congress of Parkinson's Disease and Movement Disorders*, Chicago, June 2008.
13. Whelan R, Bradley D, Walsh R, **Reilly R.B.**, Hutchinson M, "Hyperactivation of the putamen during a discrimination task in unaffected relatives of patients with familial primary torsion dystonia", *Proceedings of the 12th International Congress of Parkinson's Disease and Movement Disorders*, Chicago, June 2008
14. Pénard N., D'Arcy S., Rapcan V., Dockree P., Besani C., O'Sullivan K., **Reilly R.**, Robertson I. "Investigating Speech as a Diagnostic Tool for Abnormal Ageing", *Proceedings of the 2008 British Psychological Society Annual Conference*, Dublin, April 2008.
15. Chah, E, Greene BR, Boylan G, **Reilly R.B.** "A Comparison of Entropy Measures for Detection of Seizures in the Neonate", *Proc. of Biosignal*, Portugal 2008.
16. Whelan R, Bradley D, Walsh R, **Reilly R.** Hutchinson M "Hyperactivation of the putamen during a discrimination task in unaffected relatives of patients with familial primary torsion dystonia", *Proceedings of the Irish Neurological Association Meeting*, Cork, May 2008
17. Bradley D, Whelan R, Walsh R, **Reilly R.** Hutchinson M. "Temporal Discrimination Threshold (TDT) and Spatial Discrimination Threshold (SDT) – comparing endophenotypes in Adult-onset Primary Torsion Dystonia (AOPTD)", *Proceedings of the Irish Neurological Association Meeting*, Cork, May 2008
18. Bradley D, Whelan R, Walsh R, **Reilly R.** Hutchinson M. "The Temporal Discrimination Threshold (TDT) in patients with adult onset primary torsion dystonia (AOPTD) and their relatives – a better endophenotype?" *Proceedings of the Irish Neurological Association Meeting*, Cork, May 2008

1991-2007

1. Lalor E, Kelly S.P., Perlmutter, B., **Reilly, R.B.**, Foxe, J.F "Isolating endogenous visuo-spatial attentional effects using the novel Visual Evoked Spread Spectrum Analysis (VESPA) technique", *European Journal of Neuroscience*, 2007 Dec;26(12):3536-42. PMID: 18088279
2. Moran R., Kiebel S.J, Stephan K.E, **Reilly R.B.**, Daunizeau J., Friston K.J., "A Neural Mass Model of spectral responses in electrophysiology", *NeuroImage*, 2007 Sep 1;37(3):706-20. PMID: 17632015
3. Dockree P.M., Kelly S.P., Foxe J.J., **Reilly R.B.** and Robertson I.H., "Optimal sustained attention is regulated by the spectral content of background EEG activity: Greater ongoing tonic alpha (~10Hz) power supports successful phasic goal activation", *European Journal of Neuroscience*, Volume 25, No. 3, pp. 900-907, February 2007.
4. N. Fox, R. Gross, J. Cohn, **R.B.Reilly**, "Robust Biometric Person Identification Using Automatic Classifier Fusion of Speech, Mouth, and Face Experts", *IEEE Trans on Multimedia*, Vol. 25, No.1, pp. 701-715, June, 2007.
5. Greene B.R., deChazal P., Boylan G., Connolly S., **Reilly R.B.**, "Electrocardiogram based Neonatal Seizure detection" *IEEE Trans on Biomedical Engineering*, Vol 54, No.4, pp673-681 April 2007
6. Greene BR, Boylan G, **Reilly RB**, de Chazal P, Connolly S. 'Combination of EEG and ECG for improved Neonatal Seizure Detection', *Clinical Neurophysiology*, Volume 118, Issue 6, Pages 1348-1359, June 2007.
7. P.Scanlon, D. Ellis, **R.B. Reilly**, "Using Broad Phonetic Group experts for Improved Speech Recognition", *IEEE Transaction on Speech & Audio Processing*, Volume 15, Issue 3, pp 803 – 812, March 2007
8. Walsh R, Whelan R., O'Dwyer JP, O'Riordan S., Hutchinson S., **Reilly R.**, O'Laoide R., Malone K., Hutchinson M. "Bilateral cortico-striate grey matter changes support the sensory endophenotype hypothesis in familial adult onset dystonia: A voxel based morphometry study", *Journal of Neurology, Neurosurgery and Psychiatry*, 78(9), pp1027-1028, Meeting Abstract, Sept 2007.
9. Walsh R, Whelan R., O'Dwyer JP, O'Riordan S., Hutchinson S., **Reilly R.**, O'Laoide R., Malone K., Hutchinson M. "Bilateral cortical grey matter changes support the sensory endophenotype hypothesis in familial adult onset primary torsion dystonia: A VBM study", *European Journal of Neurology*, 14, Suppl.1, Meeting Abstract, pp 77, Aug 2007.
10. Sobolewski, R, Knapp, R.B., O'Mullane B.A., **Reilly R.B.** "A Portable Neurological Monitor for use in Cognitive Function Studies", *Proc. of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Lyon, August 2007
11. Power A, Lalor E.C, **Reilly R.B.**, "Eliciting Audio Evoked Potentials Using Continuous Stimuli", *Proc. of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Lyon, August 2007.
12. Minogue C.M., Caulfield B., **Reilly R.B.**, "What are the electrical stimulation design parameters for maximum VO2 aimed at Cardio-Pulmonary rehabilitation?", *Proc. of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, Lyon, August 2007.
13. Lalor E.C., Kelly S.P., Perlmutter B.A., **Reilly R.B.**, Foxe J.J., "The Timecourse of the Division of the Attentional Spotlight", *Proc. of the Annual Meeting of the Cognitive Neuroscience Society*, May 2007
14. Donohoe G, **Reilly RB**, Clarke S, Meredith S, Greene B, Morris B, Nangle JM, Schwaiger S, Gill M, Corvin A, Garavan H, Robertson I "Do Antisaccade Deficits In Schizophrenia Provide Evidence Of A Specific Inhibitory Function?", *Journal of the International Neuropsychology Society*, Vol.12, No.6, pp901-6, Nov 2006.
15. Lalor E.C., Perlmutter B.A., **Reilly R.B.**, McDarby G., Foxe J.J., "The VESPA: a method for the rapid estimation of a visual evoked potential", *NeuroImage*, Volume 32, Issue 4, 1 Pages 1549-156, Oct 2006.

16. deChazal P, **Reilly R.B.** "A Patient Adapting Heartbeat Classifier using ECG Morphology and Heart-Beat Interval Features", *IEEE Trans on Biomedical Engineering*, Volume: 53, Issue: 12, Part 1 pp 2535-2543, Dec. 2006.
17. Kelly S.P., Lalor E., **Reilly R.B.**, Foxe J.J. "Alpha-Based Suppression Mechanisms Facilitate Sustained Spatial Selection during Continuous Bilateral Visual Stimulation", *Journal of Neurophysiology*, Vol. 95, pp3844 – 3851, Jun 2006.
18. Hannigan T.J., Fleury L.M., **Reilly R.B.**, O'Mullane B.A. and deChazal P. "Survey of 1276 shoeprint impressions and development of an automatic shoeprint pattern matching facility", *Science & Justice*, Vol. 46 No.2, pp79 – 89, 2006.
19. Greene B.R., deChazal P., Boylan G, O'Brien C., **Reilly R.B.**, Connolly S., "Autonomic Changes in the Neonate during Seizure" *Medical & Biological Engineering and Computing*. Volume 44, Numbers 1-2, pp27 – 34, March 2006
20. Moran R., **Reilly R.B.**, deChazal P., Lacy P, "Telephony Based Voice Pathology Assessment using Automated Speech Analysis", *IEEE Trans on Biomedical Engineering*. Vol. 53, No. 3, 468- 477, March 2006.
21. **Reilly R.B.** "An Overcomplete Signal Basis Approach to Non-linear Time-Tone Analysis for Robust Speech Recognition", *EURASIP Journal of Applied Signal Processing*. Volume 2006, Article ID 65431, Pages 1-5, DOI: 10.1155/ASP/2006/65431
22. Greene B, **Reilly R.B.**, Boylan G., deChazal P., Connolly S., "Multi-channel EEG based Neonatal Seizure Detection", *Proc. of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, New York, August 2006.
23. Power A, Lalor E.C, **Reilly R.B.**, "Can Visual Evoked Potentials be used in Biometric Identification?", *Proc. of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, New York, August 2006.
24. Moran R.J., **Reilly R.B.**, "Neural Mass Model of Human Multisensory Integration", *Proc. of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, New York, August 2006.
25. Lalor E, Perlmutter B, Foxe J.F., **Reilly R.B.**, "A Spectrum of Colors: Measuring the Temporal Frequency Characteristics of the Human Visual System Using a System Identification Approach", *Proc. of the 28th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, New York, August 2006.
26. Greene B.R., deChazal P., Boylan G., **Reilly R.B.**, Connolly S. "Heart Rate Variability in Neonates with Seizures", *7th European Congress on Epileptology*, Helsinki, July 2006 and in *Epilepsia*, Volume 47 Issue s3, Pages 27 – 28.
27. Meredith S, Crettenand S, Hoptman M., **Reilly R.B.** "Advancing DTI Tractography Algorithms based on Qualitative and Quantitative Comparison of Algorithmic Performance", *Proceedings of the 7th Annual Meeting of the International Multisensory Research Forum*, Dublin June 2006.
28. Moran R, Molholm S, Foxe J.F., **Reilly R.B.** "Fitting Intracranial multimodal ERPs to an exploratory, hierarchically arranged neural mass model", *Proceedings of the 7th Annual Meeting of the International Multisensory Research Forum*, Dublin June 2006.
29. Lalor E, Perlmutter B, Foxe J.F., **Reilly R.B.** "Investigating Multisensory Integration using Spread Spectrum Stimulation", *Proceedings of the 7th Annual Meeting of the International Multisensory Research Forum*, Dublin June 2006.
30. Greene B, Boylan G., Connolly S., **Reilly R.B.** "Integrating Information from Multiple Signals for the Robust Detection of Neonatal Seizures", *Proceedings of the 7th Annual Meeting of the International Multisensory Research Forum*, Dublin June 2006.
31. Greene B.R., deChazal P., Boylan G., **Reilly R.B.**, Connolly S., "Neonatal Seizure Detection using a combination of EEG and ECG analysis" *Proceedings of the XXVIII International Congress of Clinical Neurophysiology, Edinburgh*, September 10-14, 2006.
32. Wormald R.N., Moran R.J., **Reilly R.B.**, Walsh R.M., Lacy P.D. "Performance of an automated, remote system to detect vocal cord paralysis", *Proceedings of the 12th British Academic Association on Otorhinolaryngologists*, Birmingham, July 2006
33. Lalor E, Perlmutter B., **Reilly R.B.**, Foxe, J.F, "The VESPA: a Method for the Rapid Estimation of a Visual Evoked Potential," *Proceedings of the Annual Meeting of the Organization for Human Brain Mapping*, Florence June 2006.
34. Crettenand S, Meredith S, Hoptman M., **Reilly R.B.** "Quantitative Analysis and Comparison of Diffusion Tensor Imaging Tractography Algorithms", *Proceedings of the Irish Signals and Systems Conference*, Dublin June 2006.
35. Dockree P.M., Kelly S.P., Robertson I.H, **Reilly R.B.**, Foxe J.J. "Neurophysiological Markers of Alert Responding during Goal-Directed Behaviour: A high Density Electrical Mapping Study", *NeuroImage*, Volume 27, Issue 3, September 2005, Pages 587-601
36. Kelly S.P., Lalor E., **Reilly R.B.**, Foxe J.J. "Visual Spatial Attention Tracking using High-Density SSVEP Data for Independent Brain-Computer Communication", *IEEE Trans on Neural Systems and Rehabilitation Engineering*, Vol. 13, Issue 2, pp 172 – 178, June 2005.
37. Kelly S.P., Lalor E, Finucane C., **Reilly R.B.**, McDarby G., "Visual Spatial Attention Control in an Independent Brain Computer Interface", *IEEE Trans on Biomedical Engineering*, Vol.52, No. 9, pp 1588 – 1596, Sept. 2005
38. Lalor E, Kelly S.P., Finucane C., Burke R., Smith R., **Reilly R.B.**, McDarby G., "Steady-state VEP-based Brain Computer Interface Control in an Immersive 3-D Gaming Environment", *EURASIP Journal on Applied Signal Processing*, Vol. 19, pp3156–3164, Nov 2005.
39. Clarke S., Donohoe G., 2; Corvin A.; **Reilly R.**; Garavan H.; Gill M.; Morris M.; McGee K.; Nangle J.; Schwaiger S.; Greene B.; Meredith S.; Robertson I. "Evidence of Independence Between Antisaccade And Working Memory Task Performance In Schizophrenia", *Schizophrenia Bulletin* 31 (2), 353-353, April 2005.
40. Burke D., Kelly S., de Chazal P., **Reilly R.B.**, Finucane C. "A Parametric Feature Extraction and Classification Strategy for Brain-Computer Interfacing", *IEEE Trans on Neural Systems and Rehabilitation Engineering*, Vol.13, No. 1, pp 12-17, March 2005.
41. de Chazal P., Flynn J., **Reilly R.B.**, "Automated Processing of Shoeprint Images based on the Fourier Transform for use in Forensic Science", *IEEE Trans on Pattern Analysis and Machine Intelligence*, Vol.27, No.3 pp 341-350, March 2005.
42. **Reilly R.B.**, Fox N., "Speaker Identification based on Automatic Crossmodal Fusion of Audio and Visual Data", *Proceedings of the 6th Annual Meeting of International Multisensory Research Forum*, Trento, Italy, June, 2005
43. Kelly S.P., Lalor E., **Reilly R.B.**, Foxe J.J. "Independent Brain Computer Interface Control using Visual Spatial Attention-Dependent Modulations of Parieto-occipital Alpha", *IEEE International Conference on Neural Engineering*, March 2005.
44. Clarke S., Donohoe G., 2; Corvin A.; Reilly R.; Garavan H.; Gill M.; Morris M.; McGee K.; Nangle J.; Schwaiger S.; Greene B.; Meredith S.; Robertson I. "Evidence of Independence Between Antisaccade And Working Memory Task Performance In Schizophrenia", *Proc of the World Congress on Schizophrenia*, Savannah, Georgia, March 2005.
45. Greene B.R, Boylan G.B, deChazal P, Reilly R.B, Ryan C.A., "Analysis of Heart Rate Change in Neonates with Seizures", *1st Annual Interdisciplinary Conference*, University College Cork, November 2005.
46. Lalor E, Kelly S.P., Finucane C., Burke R., **Reilly R.B.**, McDarby G., "Brain Computer Interface based on the Steady-state VEP for Immersive Gaming Control", *Biomedizinische Technik*, 49(1): 63-64, 2004.
47. Nakatsu, R.; **Reilly, R.**, "Mini Issue on Multimedia Human-Computer Interface", *Journal of Applied Signal Processing*, Vol. 2004, No. 11, pp 1617-1618, September 2004.
48. Ohya, J.; **Reilly, R.**; Li, C.-S. "Editorial Special Section on Multimodal Interfaces and Applications", *IEEE Transactions on Multimedia*, Vol. 6, Issue 3, pp 397, June 2004.
49. Burke D., Murphy K., Garavan H., **Reilly R.B.**, "Parametric Detection of Single-trial event related fMRI", *Medical & Biological Engineering and Computing*, Vol. 42, No. 5, p604-609, September 2004.
50. Dockree P.M., Kelly S.P., Roche R.A.P, Hogan M.J., Reilly R.B., Robertson I.H. "Behavioural and Physiological Impairments of Vigilant Attention after Traumatic Brain Injury", *Cognitive Brain Research*, Vol.20, No. 3, pp 403-414, 2004.

51. Brady, N; Boushel, C; **Reilly, R**; Maguire, A; "Neurophysiological correlates of face recognition: A comparison of 'self' and familiar others". *Perception* 33 (NA) 109 – 110, 2004.
52. deChazal P, O'Dwyer M., **Reilly R.B.** "Automatic Classification of Heart-Beats using ECG Morphology and Heart-Beat Interval Features", *IEEE Trans on Biomedical Engineering*, Vol. 51. No. 7, pp 1196-1206, July 2004.
53. Brady N., Boushel C., **Reilly R.B.**, Maguire A., "Neurophysiological correlates of face recognition: a comparison of 'self' and familiar others", *Proceedings of European Conference on Visual Perception*, Hungary, 2004.
54. Moran R., **Reilly R.B.**, Lacy P., "Voice Pathology Assessment based on a Dialogue System and Speech Analysis", *Proc. of the AAAI Fall Symposium on Dialogue Systems for Health Communication*, Washington DC, October 2004.
55. Kelly S.P., Lalor E, Finucane C., **Reilly R.B.**, "A Comparison of Covert and Overt Attention as a Control Option in a Steady-State Visual Evoked Potential-based Brain Computer Interface", *Proc. of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, San Francisco, September 2004.
56. Fox N.A., **Reilly R.B.**, "Robust Multi-modal Person Identification with Tolerance of Facial Expression", *Proc of the IEEE International Conference on Systems, Man and Cybernetics*, The Hague, The Netherlands, October 2004.
57. Mohr, P., **Reilly, R.B.**, Connolly, S. Developing a study of Dystonia; An Engineers perspective, *National Neuroscience Network Meeting, Dublin, 11th November 2004*
58. B.R.Greene, **R.B.Reilly**, P.D.Lacy "Objective Measurement of Eye Movement during Surgery using the Electrooculogram", *Annual Scientific Meeting of the Biomedical/Clinical Engineering Association of Ireland*, Tullamore, October 2004.
59. Brady N., Boushel C., **Reilly R.B.**, "Face Recognition: A Brain Event-Related Potential Study", *Proceedings of the Irish Signals and System Conference*, Belfast, 2004.
60. Sharma P., **Reilly R.B.**, "Performance Evaluation Measures For Face Detection Algorithms", *Proceedings of the Irish Signals and System Conference*, Belfast, 2004.
61. Greene B., Meredith S., **Reilly R.B.**, Donohue G., "A novel, portable eye tracking system for use in Schizophrenia Research", *Proceedings of the Irish Signals and System Conference*, Belfast, 2004.
62. Moran R., **Reilly R.B.**, deChazal P., Lacy P "Telephone Based Voice Pathology Assessment using Automated Speech Analysis and VoiceXML", *Proceedings of the Irish Signals and System Conference*, Belfast, 2004.
63. de Chazal P., Heneghan C., Sheridan E., **Reilly R.**, Nolan P., O'Malley M., "Automated Processing of the Single Lead Electrocardiogram for the Detection of Obstructive Sleep Apnoea", *IEEE Trans. of Biomedical Engineering*, Vol. 50, No.6, pp 686 – 696, June 2003.
64. "Person Identification based on the Integration of Audio, Image and Video Methodologies", N. Fox, R. Gross, P. de Chazal, J. Cohn, **R.B.Reilly** *Proc. of the ACM SIGMM 2003 Multimedia Biometrics Methods and Applications Workshop*, Berkeley, California, November 2003.
65. "Automatic classification of voice pathology using speech analysis", C. Maguire, P. de Chazal, **R.B.Reilly**, P. Lacy, Proc of the 3rd Intl. Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications, pp 259-262, Dec 2003 Florence, Italy.
66. "Automatic classification of voice pathology using speech analysis", C. Maguire, P. de Chazal, **R.B.Reilly**, P. Lacy, *Proc. of the World Congress on Medical Physics and Biomedical Engineering*, Sydney, September 2003.
67. "Using Mutual Information to Design Class-Specific Phone Recognisers", P.Scanlon, D. Ellis, **R.B.Reilly**, *Proceedings of EuroSpeech 2003*, August 2003.
68. "Visual Feature Analysis for Automatic Speechreading" P. Scanlon, **R.B.Reilly**. *Proceeding of the ITRW Audio Visual Speech Processing Conference*, pp 127 –132, St. Jorioz, France, September 2003.
69. "Automatic Classification of Shoeprints for use in Forensic Science based on the Fourier Transform", P.de Chazal, C. Huynh, D. McErlean, **R.B.Reilly**, T.J. Hannigan, L.M. Fleury, *Proc of IEEE International Conference on Image Processing, Barcelona, September 2003*.
70. "Audio-Visual Speaker Identification based on the use of Dynamic Audio and Visual Features", N. Fox, **R.B.Reilly** *Proc. of the 4th International Conference on Audio-and Video-Based Biometric Person Authentication* , pp 743-751, Guildford, UK, June 2003.
71. "A Color Face Image Database for benchmarking of automatic Facial Detection Algorithms", P.Sharma, **R.B.Reilly** *Proc of the 4th European Conference of Video/Image Processing and Multimedia Communications*, pp, 423 - 428, July 2003.
72. "EEG Alpha Power and Coherence time courses in a Sustained Attention Task", S.P. Kelly, P. Dockree, **R.B.Reilly**, I.H. Robertson. *Proc. IEEE International Conference on Neural Engineering*, March 2003.
73. "Automatic Classification of ECG Beats using Waveform Shape and Heart Beat Interval Features" P. deChazal, **R.B.Reilly**, *Proc. 2003 IEEE Int. Conf. Acoustics, Speech and Signal Processing*, Hong Kong, April 2003.
74. "Automatic Classification of Shoeprints for use in Forensic Science", C. Huynh, P.de Chazal, J. Flynn, **R.B.Reilly**, *Proc. of the Irish Machine Vision and Image Processing Conference, September 2003*.
75. "Automatic Texture-Based Facial Region Segmentation in Still Images and Videophone Sequences using k-Means Clustering", P.Sharma, **R.B.Reilly** *Proc. of the Irish Machine Vision and Image Processing Conference, September 2003*.
76. Dockree, P.M., Kelly, S. P., Roche, R. A. P., Hogan, M. J., **Reilly, R. B.**, & Robertson, I. H. (2003). Impairments of vigilant attention and alpha desynchronization after traumatic brain injury. *National Neuroscience Network Meeting, Trinity College Dublin, 25th - 26th September, 2003*.
77. "A Simultaneous Filtering and Feature Extraction Strategy for Direct Brain Interfacing", D.Burke, S.Kelly, P.deChazal, **R.B.Reilly**. *Proc. of 24th Annual International Conference on Engineering in Medicine and Biology*, October 2002
78. "Fast Marching Methods applied to Face Location in Videophone Applications using Colour Information", P. Sharma, **R.B.Reilly**. *Proc. of the IEEE International Conference on Multimedia and Expo*, Lausanne, August 2002
79. "Facial Expression Analysis for Assisted Technology", **R.B.Reilly**, P. Scanlon, N.Fox. *Proc. of the 4th International Conference on Methods and Techniques in Behavioral Research*, Amsterdam, August 2002.
80. "Automatic Sleep Apnoea Detection using Measures of Amplitude and Heart Rate Variability from the Electrocardiogram", P. de Chazal, C. Heneghan, **R.B.Reilly**. *Proc. of the 16th International Conf. on Pattern Recognition*, Quebec, August 2002
81. "Parametric Models and Spectral analysis for Classification in Brain-Computer Interfaces", S.Kelly, D.Burke, P.deChazal, **R.B.Reilly**. *Proc. of 14th International Conference on Digital Signal Processing: DSP2002*, Vol. 1, pp 307-310, Santorini, July 2002.
82. S.Kelly, D.Burke, P.deChazal, **R.B.Reilly** "Parametric Models and Classification for Direct Brain Interfaces", *Proc. of the Irish Signals and Systems Conf.*, Cork, June 2002
83. "Applying Level Set Theory to Digital Video Segmentation", P. Kehoe, **R.B.Reilly** *Proc. of the 2001 International Workshop on Very Low Bitrate Video Coding, IEEE International Conf. on Image Processing*, Greece, October 2001
84. "Feature Analysis for Automatic Speech Reading", P. Scanlon, **R.B.Reilly**. *Proc. of the IEEE International Conference on Multimedia Signal Processing*, pages 625-630, Cannes, October 2001
85. "Lessons from SpeechReading", P. Scanlon, **R.B.Reilly**. *Proc. of the IEEE International Conference on Multimedia and Expo*, pages 736-739, Tokyo, August 2001

86. P. Scanlon, **R.B.Reilly** "Automatic Speechreading", *Proc. of the Irish Signals and Systems Conf.*, pages 374-379, Maynooth, June 2001
87. P.Kehoe, P. Sharma, **R.B.Reilly** "Digital Video Segmentation using Level Set Theory", *Proc. Irish Signals and Systems Conf.*, pages 331-335, Maynooth, June 2001
88. "Using Wavelet Coefficients for the Classification of the Electrocardiogram" P. deChazal, **R.B.Reilly**. *Proc. World Congress on Medical Physics and Biomedical Engineering*, pages 64-67, July 2000.
89. "A Comparison of the ECG Classification Performance of Different Feature Sets", M.O'Dwyer, P. deChazal, **R.B.Reilly**, *Proc. of the Computer in Cardiology 2000 Conf.*, pages 327-330, Boston, September 2000
90. "Automatic Classification of Sleep Apnea Epochs using the Electrocardiogram", P. deChazal, C.Heneghan, E.Sheridan, **R.B.Reilly**, P. Nolan and M O'Malley *Proc. of the Computer in Cardiology 2000 Conf.*, pages 745-748, Boston, September 2000
91. "Beat Classification for use in Arrhythmia Analysis", M.O'Dwyer, P. deChazal, **R.B.Reilly**, *Proc. of the Computer in Cardiology 2000 Conf.*, pages 395-398, Boston, September 2000
92. A Comparison of the Use of Different Wavelet Coefficients for the Classification of the Electrocardiogram" P. deChazal, **R.B.Reilly**, *International Conf. on Pattern Recognition*, pages 255-258, September 2000.
93. "Color Video Segmentation using Level Sets", P. Harper, **R.B.Reilly** *Proc. of the IEEE International Conf. on Image Processing*, pages 480-483, Vancouver, September 2000
94. "Classification of the Electrocardiogram using Selected Wavelet Coefficients and Linear Discriminants" P. deChazal, **R.B.Reilly**, G.McDarby, B.Celler. *Proc. 2000 IEEE Int. Conf. Acoustics, Speech and Signal Processing*, pages 3590-3593, Istanbul, June 2000.
95. M.O'Dwyer, P. deChazal, **R.B.Reilly**, "Classification of Arrhythmias using P-R and R-R Intervals", *Proc. of the Irish Signals and Systems Conf.*, pages 495-502, Dublin, June 2000
96. R. Duff, **R.B.Reilly**, P. deChazal, P. Nolan. "Quantification of the Effects of Transient EEG Arousals on the Respiratory System", *Proc. of the Irish Signals and Systems Conf.*, pages 503-510, Dublin, June 2000
97. **R.B.Reilly**, M.J.O'Malley, "Adaptive Gesture Based Interfaces for Augmentative Communication", *IEEE Transactions on Rehabilitation Engineering*, Vol. 7, No.2, pages 174-183, June 1999.
98. S.J.Dorgan, **R.B.Reilly**, "A Model for Human Skin Impedance during Surface Functional Neuromuscular Stimulation", *IEEE Transactions on Rehabilitation Engineering*, Vol 7, No. 3, pages 341-348, September 1999.
99. "A Wavelet Based Classifier of the Electrocardiogram", P. deChazal, G.McDarby, **R.B.Reilly** *Proc. of the European Medical Biology Conference*, Vienna, October 1999
100. "Exaction of the Optic Disk Boundary in digital Fundus Images", F. Mendels, C. Heneghan, P. D. Harper, **R.B.Reilly**, and J.-Ph. Thiran. *Proc. 21st Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, Atlanta, page 1139, October 1999.
101. "Hybrid Multiplier/CORDIC Unit for Online Handwriting Recognition" S. McInerney, **R.B.Reilly**, *Proc. 1999 IEEE Int. Conf. Acoustics, Speech and Signal Processing*, pages 1909-1912, March 1999.
102. P. Harper, **R.B.Reilly** "Applications of Level Set Methods for Image and Video Processing", *Proc. of the Irish Machine Vision and Image Processing Conference*, pages 37-44, Dublin, September 1999
103. S. McInerney, **R.B.Reilly**, "Pre-processing for Online Handwriting Recognition", *Proc. of the Irish Signals and Systems Conf.*, Galway, June 1999
104. P. Harper, **R.B.Reilly** "Application for Level Set Methods for Video and Image Segmentation", *Proc. of the Irish Signals and Systems Conf.*, Galway, June 1999
105. D.Bray, **R.B.Reilly**, B.A.O. McCormack, "Investigation of Abdominal Bowel Sounds", *Irish Journal of Medical Science*, Vol. 167. No. 4, pages 257 – 258, December 1998.
106. "An Uncoupled Oscillator Model of the Hoffmann Reflex", S.J.Dorgan, **R.B.Reilly**, *Proc. 20th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 3112-3115, Hong Kong, November 1998.
107. "A Model for Human Skin Impedance during Surface Functional Neuromuscular Stimulation", S.J.Dorgan, **R.B.Reilly**, C.D.Murray, *Proc. 19th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 1770-1773, Chicago, October 1997.
108. "Assessing Motility through Abdominal Sound Monitoring", D.Bray, **R.B.Reilly**, L.Haskin, B.McCormack, *Proc. 19th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 2398-2400, Chicago, October 1997.
109. "An Uncoupled Oscillator Model for Evoked Potential Dynamical Modelling", **R.B.Reilly**, T.E.Ward, A.M.dePaor, *Proc. 18th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 1760-1761, Amsterdam, November, 1996.
110. "Biosignal Processing and Analysis in Rehabilitation Engineering", A.M.dePaor, **R.B.Reilly**, H.J.Larkin, T.E.Ward. *Proc. 13th Intl. Conf. on Biosignal*, Brno, Czech Republic, June, 1996.
111. **R.B.Reilly** and A.M.dePaor , "Analysis of Evoked Potentials using Positive Transitions of Maximum Length Sequences and Volterra Kernels", *Proc. of the Irish DSP and Control Conf.*, Dublin, June 1996.
112. C.Murray, **R.B.Reilly**, "Transcutaneous Modelling from Voltage and Current Pulse Investigations", *Annals of Biomedical Engineering Society*, Vol. 23, Supplement 1, no. 553, October 1995.
113. "Some Modelling and Measurement Studies arising from Rehabilitation Engineering", A.M.dePaor, **R.B.Reilly**, C.D. Murray, A.M.Hanson. *Proc. of Model Based BioMeasurements*, Stará Lesná, High Tatras, Slovakia, September, 1995.
114. "Gesture Recognition for Augmentative Human Computer Interaction", **R.Reilly**, A.Hanson, *Proc of the 17th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 1275-1276, Montreal, Canada, September 1995.
115. **R.Reilly**, A.Hanson, "LAMP: A non-contact Human Computer Interface", *Proc. Annual Meeting of the Irish Association of Rehabilitation Medicine*, Sept. 29th, 1995, Dublin, Ireland.
116. **R.Reilly**, A.Hanson, "Human Computer Interaction involving Speckle Analysis and Gesture Recognition for Alternative and Augmentative Communication Systems". *Proc. of 1st Annual Conference in Bio-Engineering in Ireland*, Blessington, Wicklow, January 27-29th, 1995.
117. A.M.dePaor, **R.B.Reilly**, B.J.Daly, C.M.Flynn, "The Precision and Cylindrical Grip Evaluator for use in Occupational Therapy", *Innovation et Technologie en Biologie et Medecine*, Vol. 13, No 6, pages 672 – 678, 1992.
118. C.D.Murray, J.D.Delaney, A.M.de Paor, **R.B.Reilly**. "Stimulation, Capture and Display Device for the Hoffmann Reflex" *Innovation et Technologie en Biologie et Medecine*, Vol. 13, No 6, pages 641–652, 1992.

119. "Advances in a Speech Recording/Playback unit for the Handicapped: Employing Waveform Coding and Graphical User Interfaces" **R.B.Reilly**, A.M.dePaor. *Innovation et Technologie en Biologie et Medecine*, Vol. 13, No 6, pages 679-685, 1992.
120. "Further Developments on the Hand Function Analyser for the Study of the Dynamics of the Hand", AM. dePaor, **R.B.Reilly**, E.B.Casey. *Irish Journal of Medical Science* Vol. 161, No. 6, page 440, June 1992.
121. "A Personal Communicator of the Vocally Handicapped" **R.Reilly**, A.M. dePaor. *Proc. 14th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 1523 - 1524, Sept. 1992, Paris, France.
122. "A Digital Signal Processing Index of hand Tremor", **R.Reilly**, A.M. dePaor. *Proc. 14th Ann. Int. Conf. IEEE Eng. Med. Biol. Soc.*, pages 1474 - 1476. Sept. 1992, Paris, France.
123. **R.Reilly**, A.M. dePaor, E.Casey & B.McCormack, "An Instrument for Studying the Dynamics of Cylindrical and Precision Grips", *Irish Journal of Medical Science* Vol. 160, No. 1, page 31, Jan 1991.
124. "The SpeakEasy and SIFE Communication aids" **R.Reilly**. *International Society for Augmentative and Alternative Communication Conference*, October 1991, Mansfield, Nottingham.
125. "Personalised ADPCM Play-back Devices for the Handicapped" IEE Colloquium on Man-Machine interaction using Speech I/O, **R.Reilly**, A.M.dePaor, pages 3/1- 3/3, Savoy Place, London, March 1991.
126. A.M.dePaor, **R.Reilly**, "The SIFE and PACE Instruments as Therapeutic and Diagnostic Aids" *Ulster BioMedical Society Annual Meeting*, Virginia, Co. Cavan, May 1991.
127. **R.Reilly**, A.M.dePaor, E.Casey. "Further Developments on the Hand Function Analyser for the Study of the Dynamics of the Hand" *Irish Conference of Rheumatology*, Mater Misericordiae Hospital, November 1991.
128. J.D.Delaney, **R.Reilly**, C.Murray & A.M.dePaor. "Stimulation, Capture and Display Device for the Hoffmann Reflex" *JULster BioMedical Engineering Society*, Annual Meeting , Virginia, Co. Cavan, May 1991.
129. **R.Reilly**, A.M.dePaor "Communication Play-back Devices for the Handicapped". *Ulster BioMedical Engineering Society*, Annual Meeting, Virginia, Co. Cavan, May 1991.

PATENTS

1. Moran RJ, Reilly R, De Chazal P, O'Mullane B, Lacy P. (filed: 29.6.2005, Issued: 25.11.2008) US Patent 7457753, Telephone pathology assessment. U.S. Class: 704/270; 600/529; 600/538; 704/206; 704/246; 704/250; 704/E17.002; 715/767.
2. European Patent Application "System and Method for Monitoring Use of a Device", Aug 2012. Assigned Application No. EP12182189.6
3. PCT application "Ballistomat Pressure sore relief device", Sept 2012. Assigned number PCT/EP2012/067677
4. US Patent Application "Cochlear Implant Artefact Attenuation In Late Auditory Evoked Potentials: A signal Channel approach", U.S. Patent and Trademark Office on March 8, 2013. Assigned Application No. 61/775,345.

BOOKS AND BOOK CHAPTERS

1. **R.B.Reilly**, "Neurology-Central nervous system", in *The Physiological Measurement Handbook*, John G. Webster, Ed., CRC Press. 2015
2. Bodke, A.L.W., Meaney J.F., Sheehy N.P., **Reilly R.B.**, Abrahams S., Doherty C.P., "Advances in Diagnostics for Neurodegenerative Disorders", in *Neurodegenerative Disorders: A Clinical Guide* edited by Hardiman O, Doherty CP, ISBN 978-1-84996-010-6 e-ISBN 978-1-84996-011-3
3. **Reilly R.B.**, Lee T.C. "Electrograms" in *Basic Engineering for Medics and Biologists*, Eds Lee T.C., Neiderer P. ISBN 978-1-90750-526-6
4. **Reilly R.B.**, Lee T.C. "Biosensors" in *Basic Engineering for Medics and Biologists*, Eds Lee T.C., Neiderer P. ISBN 978-1-90750-526-6
5. Fox N., O'Mullane B., **Reilly R.B.**, "Robust Automatic Human Identification Using Face, Mouth, and Acoustic Information" *Audio and Video Based Biometric Person Authentication. Lecture Notes in Computer Science, Vol. 3723*. Eds. W. Zhao, S.Gong, X.Tang, pages 777 - 786, Springer-Verlag, ISBN: 3-540-29229-2, 2005
6. Fox N., O'Mullane B., **Reilly R.B.**, "Audio-Visual Speaker Identification via Automatic Fusion using Reliability Estimates of both Modalities" *Audio and Video Based Biometric Person Authentication Lecture Notes in Computer Science, Vol. 3546*. Eds. T. Kanade, A.K. Jain, N.K. Ratha, pages 787 - 796, Springer-Verlag, ISBN 3-540-27887-7, 2005
7. Fox N., O'Mullane B., **Reilly R.B.**, "The Realistic Multi-modal VALID database and Visual Speaker Identification Comparison Experiments", *Lecture Notes in Computer Science, Vol. 3546*. Eds. T. Kanade, A.K. Jain, N.K. Ratha, pages 777, Springer-Verlag, ISBN 3-540-27887-7, 2005
8. **R.B.Reilly**, "Digital Electronics, Analysis and Design", Dept of Electronic and Electrical Engineering, UCD, ISBN: 1902277732, 2003.
9. G.M.Craddock, L.McCormack, **R.B.Reilly**, HT.P.Knops, "Assistive Technology- Shaping the Future", IOS Press, ISBN: 1 58603373 5, 2003.
10. N. Fox, **R.B.Reilly**, "Audio-Visual Speaker Identification based on the Use of Dynamic Audio and Visual Features", in *Lecture Notes in Computer Science, Vol 2688*. Eds. J. Kittler, M.C. Nixon, pages 743-751, Springer Verlag, ISBN: 3-540-40302-7, 2003
11. **R.B.Reilly**, "Applications of Face and Gesture Recognition for Human-Computer Interaction", in *Applications of Face and Gesture Recognition and their Applications*, eds. J. Ohya, R. Nakatsu, R.B.Reilly, pages 20-27, ACM Press, ISBN: 1-58113-163-1, 1998.
12. J. Ohya, R. Nakatsu, **R.B.Reilly**, "Proceedings of the sixth ACM international conference on Multimedia: Face/gesture recognition and their Applications", ACM Press, ISBN: 1-58113-163-1 8, 1998.
13. L.Clarke, P. Harper, **R.B.Reilly**, "Video Based Gesture Recognition for Augmentative Communication", in "Improving the Quality of Life for the European Citizen", eds. I. Placencia Porrero, E. Puig de la Bellacasa. pages 306-309, IOS Press, ISBN 90- 5199 406 0, 1998.
14. J.Colineau, V.Specacenero, **R.Reilly** JC.Gabus, M.Butler, "Laser Mouse", in "The European Context for Assistive Technology", eds. I. Placencia Porrero, E. Puig de la Bellacasa. pages 290-293, IOS Press, ISBN: 90 5199 220 3, 1995.