



ROYAL COLLEGE OF  
PHYSICIANS OF IRELAND

MASTERCLASS

Royal College of Physicians of Ireland  
No. 6 Kildare St, Dublin 2

Thursday and Friday, 8–9 May 2008

## European Masterclass on Rheumatology



# Welcome

Dr John Donohoe  
*President, RCPI*



Dear Delegates,

Welcome to Ireland; welcome to Dublin; welcome to the Royal College of Physicians of Ireland.

I am very pleased to welcome you to The RCPI European Masterclass on Rheumatology. The Masterclass Meeting concept was developed to bring together experts in emerging or controversial topics and to provide a forum for in-depth review of the topic and, importantly, to provide an opportunity for all participants to address the issues.

The organisers of this meeting recognise the complexity and the sensitivity of the issues to be dealt with. I am, therefore, very pleased to warmly welcome all of our presenters both from Ireland and, very particularly, those coming from abroad and to welcome all the delegates. I hope that you will find this meeting educationally beneficial and helpful in shaping your practice.

I want to thank the Faculty of Fellows of the College – Prof Michael Molloy, Prof Barry Bresnihan, Prof Douglas Veale and Dr Paul O’Connell – who have constructed the programme. I am particularly grateful to Bristol-Myers Squibb for providing an unrestricted educational grant to support this meeting, and for their continued support of superior quality educational programmes.

We hope you enjoy your visit to Dublin and to an institution which fostered the golden age of Irish Medicine dominated by Graves, Stokes, Cheyne and Corrigan amongst others. We hope you will enjoy the blend of history and modern medicine.

Fáilte Romhat.

A handwritten signature in black ink, appearing to read 'John Donohoe'. The signature is fluid and cursive, written in a dark color.

Dr John Donohoe  
President  
Royal College of Physicians of Ireland

## Thursday, May 8, 2008

TIME	EVENT
19:30	<b>Welcome address</b> by Ms Mary Harney, Minister for Health in Ireland
20:00 – 22:00	<b>Welcome reception</b> at Royal College of Physicians of Ireland, No.6 Kildare Street, Dublin 2

## Friday, May 9, 2008

TIME	TITLE	SPEAKER	CHAIRPERSONS
9:00 – 9:30	<b>Registration</b>		
9:30 – 9:45	<b>Welcome</b> by Prof Michael Molloy, Vice President, Royal College of Physicians of Ireland		
9:45 – 10:15	Evolving Concepts in Therapeutics	<b>Prof Mary K Crow</b> , Professor of Medicine and Immunology at Weill Medical College of Cornell University, New York, USA	<b>Dr Gaye Cunnane</b> , Consultant Rheumatologist, St James's Hospital, Dublin, Ireland
10:15 – 10:45	T-cell Targeted Therapies and Therapeutic Tolerance	<b>Prof John Isaacs</b> , Professor of Clinical Rheumatology, Director of Centre and Head of Clinical Rheumatology, Newcastle University, Newcastle-Upon-Tyne, UK	<i>and</i> <b>Dr Alexander Fraser</b> , Consultant Rheumatologist, Mid-Western Regional Hospital, Limerick, Ireland
10:45 – 11:00	Discussion		
11:00 – 11:15	<b>Coffee Break</b>		
11:15 – 11:45	Treating Resistant RA – New Therapeutics	<b>Prof René Westhovens</b> , Professor, Department of Musculoskeletal Sciences Catholic University Leuven, Belgium	<b>Prof Geraldine McCarthy</b> , Consultant Rheumatologist, Mater Misericordiae University Hospital, Dublin, Ireland
11:45 – 12:15	Imaging Joint Deterioration and Disease Progression in RA: Experience with Newer Biologics	<b>Prof Harry Genant</b> , Emeritus Professor of Radiology, Medicine, Epidemiology and Orthopaedic Surgery, University of California School of Medicine, San Francisco, USA	<i>and</i> <b>Dr Paul O'Connell</b> , Consultant Rheumatologist, Beaumont Hospital, Dublin, Ireland
12:15 – 12:30	Discussion		
12:30 – 1:30	<b>Lunch</b>		
1:30 – 2:00	How to Handle Biologics in Clinical Practice – Focus on Safety	<b>Dr Michele Doran</b> , Consultant Rheumatologist, St James's Hospital, Dublin, Ireland	<b>Prof Michael Molloy</b> , Consultant Rheumatologist, Cork University Hospital, Ireland
2:00 – 2:30	Evolving and Novel Options for the Treatment of Osteoporosis	<b>Prof Laurence A. Rubin</b> , Professor, Faculty of Medicine, University of Toronto, Canada	<i>and</i> <b>Prof Douglas Veale</b> , Consultant Rheumatologist, St Vincent's University Hospital, Dublin, Ireland
2:30 – 3:00	Can We Achieve Remission in RA?	Panel discussion with speakers led by <b>Prof Douglas Veale</b>	
3:00 – 3:15	<b>Close of session</b>		

This meeting is approved for 4 CME credits by the Royal College of Physicians of Ireland

**Dr Gaye Cunnane**  
*Consultant Rheumatologist*  
*St James's Hospital, Dublin, Ireland*



*Dr Cunnane will co-chair Session 1, Friday, May 9 2008*

Gaye Cunnane is Consultant in Rheumatology and Internal Medicine at St James's Hospital and Senior Lecturer in Medicine at Trinity College Dublin. After completing her PhD studies of prognostic indicators in early inflammatory arthritis, she undertook a clinical and research Fellowship at the University of California, San Francisco

before moving to the UK as Senior Lecturer in Rheumatology at the University of Leeds. She is the National Specialty Director for Rheumatology and oversees a comprehensive training programme for Irish Rheumatology Specialist Registrars. Her particular interests include teaching, early arthritis, connective tissue disorders and cardiovascular disease.

**Dr Alexander Fraser**  
*Consultant Rheumatologist*  
*Mid-Western Regional Hospital, Limerick, Ireland*



*Dr Fraser will co-chair Session 1, Friday, May 9 2008*

Alexander Fraser is Consultant Rheumatologist, General Physician and Honorary Senior Lecturer Mid-Western Regional Hospitals, Dooradoyle, Limerick. He graduated in medicine from Trinity College Dublin in 1991. He began practicing Rheumatology in 1996 and the following year was appointed Specialist Registrar in Rheumatology at the Yorkshire Deanery. Training with Prof Paul Emery's group in Leeds he developed a research interest in clinical, immunological and therapeutic aspects of Rheumatoid Arthritis, Psoriatic Arthritis and the Seronegative Spondyloarthropathies. He was appointed

Consultant Rheumatologist and Honorary Senior Lecturer at the Leeds Teaching Hospitals NHS Trust, working at The Leeds General Infirmary and St James University Hospital, in October 2001 and working closely with Prof Emery and Prof Doug Veale he has published in the area of Angiogenesis, Vascularity and Inflammation in early and established arthritis and Biomarkers of cartilage turnover. Dr Fraser took up his current appointment as Consultant Rheumatologist, General Physician and Honorary Senior Lecturer in the Mid-Western Region in August 2006.

# Chairpersons

**Prof Geraldine McCarthy**  
*Consultant Rheumatologist*

*Mater Misericordiae University Hospital, Dublin, Ireland*

*Prof McCarthy will co-chair Session 2, Friday, May 9 2008*



Geraldine McCarthy graduated in Medicine from University College Dublin, National University of Ireland. Having trained in General Internal Medicine in Ireland, she completed her Fellowship in Rheumatology at the Medical College of Wisconsin in 1991 where she was mentored by Drs Daniel McCarty, Lawrence Ryan, Robert Wortmann and Herman Cheung. During her Fellowship training, she developed her interest in calcium crystal deposition diseases and received a post-doctoral fellowship from the Arthritis Foundation to pursue her research program which she has continued since then. Her research is focused on the biological effects of calcium-containing crystals in degenerative joint disease as well as in atherosclerosis and breast cancer and has been facilitated by funding from many sources. These include the National Institutes of Health, American Federation for Aging Research, US Department of Defence and the Wellcome Trust. She was promoted to Associate Professor of Medicine at the Medical College

of Wisconsin in 1996 where she remained until her return to Dublin, Ireland in 1998 when she moved her laboratory to the Royal College of Surgeons in Ireland where she was appointed Associate Professor of Molecular and Cellular Therapeutics, where part of her research program continues and where she teaches in Medicine and Pharmacy. She was appointed Consultant in Rheumatology at the Mater Misericordiae University Hospital, Dublin in 1999 where runs a busy clinical practice, has established a clinical research program. She teaches as part of the University College Dublin Faculty of Medicine where she has been appointed Associate Clinical Professor of Medicine. She is the author of over 80 publications and has spoken at many national and international meetings. She has established many national and international collaborations. She has been winner of several research and teaching awards and has mentored medicine and science graduates in clinical practice and in research.

**Prof Douglas Veale**  
*Consultant Rheumatologist*  
*St Vincent's University Hospital, Dublin, Ireland*

*Prof Veale will co-chair Session 3 and will lead the panel discussion at the end of Session 3, Friday, May 9, 2008.*



Douglas Veale is Adjunct Professor of Medicine, UCD, Consultant Rheumatologist and Medical Director of Research at St Vincent's University Hospital and a Principal Investigator at the Conway Institute of Biomolecular and Biomedical Research in Dublin, Ireland.

A graduate of the Royal College of Surgeons in Ireland (1984), Prof Veale completed his training at The Jervis Street Charitable Infirmary, Dublin, and the Waterford Regional Hospital. He commenced specialist and General Internal Medicine training in 1988 at Beaumont Hospital and St Vincent's University Hospital achieving an MD degree by thesis in 1992. After three years as lecturer in Medicine, Prof Veale completed his training in the University of Dundee and Ninewells Hospital, receiving JCHMT(UK) accreditation in 1994. He was then appointed Senior Lecturer in Rheumatology at Leeds University, where he established with colleagues a premiere Early Arthritis

Programme and Academic Musculoskeletal Centre, until his appointment at St Vincent's University Hospital in 2001.

Prof Veale is a Fellow of the Royal College of Physicians of Ireland and the Royal College of Physicians of London. He is a member of the American College of Rheumatology, the Irish and British Societies of Rheumatology, and the Society of Irish and American Rheumatologists, among others. He is an invited speaker at national and international meetings and a member of several advisory groups including The Health Research Board of Ireland, Arthritis Research Campaign (UK). The main focus of Prof Veale's research is Translational Medicine of early inflammatory diseases including Rheumatoid Arthritis, Psoriatic Arthritis, Psoriasis and Systemic Sclerosis to understand the cellular and molecular mechanisms of angiogenesis and cartilage degradation, in addition to Biomarker Development.

**Dr Paul O'Connell**  
*Consultant Rheumatologist*  
*Beaumont Hospital, Dublin, Ireland*

*Dr O'Connell will co-chair Session 2, Friday, May 9 2008*



Paul O'Connell is Consultant Rheumatologist in Beaumont Hospital, Dublin. His special interests are in rehabilitative aspects of Rheumatology, Osteoporosis, Osteoarthritis, and Clinical Therapeutics in Rheumatology.

He is a graduate of UCD in 1978. After general training in Dublin where he was first exposed to the specialty of Rheumatology under Prof Barry Bresnihan and Dr Jack Moloney, he trained in Rheumatology and subsequently in rehabilitation in the USA at Georgetown University in

Washington DC, Baylor College in Houston, Texas, and the National Institutes of Health in Bethesda Maryland. In 1992 he returned to Dublin to take up his current post at Beaumont.

**Prof Michael Molloy**  
*Consultant Rheumatologist*  
*Cork University Hospital, Ireland*

*Prof Molloy will co-chair Session 3, Friday, May 9 2008*



Michael G. Molloy is a Consultant Physician/ Rheumatologist at Cork University Hospital and University College Cork. He is Course Director of the Master of Medical Science, MMedSc, (Sport & Exercise Medicine) at Cork University Hospital. He qualified at University College Galway, and his postgraduate training was carried out in London, in the London Hospital, Whitechapel, and Kings College Hospital, Denmark Hill. He is past Dean of the Faculty of Sport and Exercise Medicine.

In 1979 he returned to Ireland to take up a post as Consultant/Physician Rheumatologist at Cork University Hospital. He is a Fellow of the Royal College of Physicians of Ireland and the Royal College of Physicians of London and a Member

of the American College of Rheumatology, The Irish and British Societies of Rheumatology and Society of Irish American Rheumatologists and is a past President of the latter two. His research interests include the genetics of rheumatoid arthritis and osteoporosis and has published also in the epidemiology of osteoporosis. His interest in Sports Medicine goes back to his playing career with University College Galway, London Irish and Ireland for which he played 27 times. Sports Medicine research has generated a large database of information on the incidence of sports and recreational injuries in Ireland. More recent research involves the collaboration with other major sporting federations carrying out research on concussion, sudden cardiac death and catastrophic injuries in sport.

# Session 1: Friday, May 9, 2008

9.45 — 10.15

## Evolving Concepts in Therapeutics

*Prof Mary K Crow, Professor of Medicine and Immunology at Weill Medical College of Cornell University, New York, USA*



### Biographical Sketch

Peggy Crow is Professor of Medicine at Weill Medical College of Cornell University and Benjamin M. Rosen Chair in Autoimmunity and Inflammation Research, Senior Scientist, and Director of Rheumatology Research at Hospital for Special Surgery in New York City. She is also Co-Director of the Mary Kirkland Center for Lupus Research and was previously the Director of the Immunology Graduate Program at Weill Graduate School of Medical Sciences. Prof Crow received her M.D. at Cornell, Internal Medicine and Rheumatology subspecialty training at New York Hospital, and post-doctoral research training at Rockefeller University.

Prof Crow's first research contribution was the observation that T lymphocytes can be activated by autologous antigen presenting cells and generate immunosuppressive T cell activity. While at Rockefeller University, in the laboratory of Dr Henry Kunkel, she was among the first to characterize and study the functional properties of human dendritic cells. At Hospital for Special Surgery, Prof Crow has studied the effects of superantigens on T cell-dependent immune responses; characterized the oligoclonal T cells that comprise the cellular infiltrate in the rheumatoid synovium; studied the functional consequences for B lymphocytes of cognate help from T cells; and demonstrated the altered regulation of CD40 ligand in lupus T cells. Prof Crow's most recent work has defined the role of interferon-alpha in systemic lupus erythematosus. She continues to investigate the underlying triggers and mediators of autoimmunity in the prototype rheumatic diseases, SLE and rheumatoid arthritis, and the cellular and cytokine mediators of uncontrolled immune system activation in those disorders.

Prof Crow has been active in leadership roles in professional organizations and foundations. She was President of the American College of Rheumatology from 2005-2006 and is President of the Henry Kunkel Society.

### Overview of Presentation

In SLE, the prototype systemic autoimmune disease, proteins present in intracellular particles, along with the DNA or RNA bound by those proteins, are targeted by lymphocytes and antibodies of the immune system, resulting in inflammation and widespread tissue damage. This autoreactive immune response is mediated by CD4+ helper T cells that orchestrate a coordinated program of immune and inflammatory functions through interactions with B cells, macrophages, dendritic cells, as well as cells outside the immune system, such as the endothelial cells that line blood vessels. Recent data from SLE patients support an important role for immune complexes containing autoantibodies specific for RNA-binding proteins (anti-RBP) or DNA in the activation of the innate immune response, resulting in induction of the type I interferon (IFN)

pathway in systemic lupus erythematosus (SLE). Components of these complexes, including nucleic acids, induce IFN- $\alpha$  after activation of Toll-like receptor pathways. We have studied the genetic contributors to IFN- $\alpha$  production in SLE, the mechanisms involved in IFN- $\alpha$  induction by lupus immune complexes, and the clinical and laboratory correlates of IFN pathway activation in SLE. Our data implicate an important role for genetic variants as well as autoantibodies and their associated RNA in the activation of the type I IFN pathway in SLE. Elucidation of the interaction between genetic risk factors contributing to innate immune activation, resulting in IFN pathway activation, and to adaptive immune activation, resulting in autoantibody production, are guiding the development of new therapeutic approaches for systemic autoimmune diseases.

## Session 1: Friday, May 9, 2008

10:15 – 10:45

### T-cell Targeted Therapies and Therapeutic Tolerance

Prof John Isaacs, *Professor of Clinical Rheumatology, Director of Centre and Head of Clinical Rheumatology, Newcastle University, Newcastle-Upon-Tyne, UK*



#### Biographical Sketch

John Isaacs is Professor of Rheumatology at Newcastle University, where he also directs the Wilson Horne Immunotherapy Centre. He runs a translational research group with a focus on novel T-cell targeted immunotherapies and therapeutic tolerance. His involvement with biological therapies extends back over 20 years: his PhD focused on antiglobulin responses and monoclonal antibody effector function, following which he co-ordinated some of the first biologics studies in rheumatoid arthritis. He is a member of the Department of Health's Expert Advisory Group on Clinical Trials and also chairs the Arthritis Research Campaign's Clinical Study Group for Inflammatory Arthritis.

#### Overview of Presentation

Accumulating evidence suggests that rheumatoid arthritis (RA) is a T-cell mediated autoimmune disease. Animal models have clearly demonstrated that T-cell mediated immunopathology can be switched off by appropriate targeting of T-cells (immune reprogramming or therapeutic tolerance induction). Early attempts at therapeutic tolerance induction in RA, however, were severely hampered by a lack of biomarkers of autoreactivity. Recently, however, costimulation blockade has emerged

as an effective treatment for RA and, alongside a greatly improved mechanistic understanding of immune regulation, this has rekindled hopes for authentic and robust immune programming. The final pieces of the jigsaw are not yet in place for RA but, in other disciplines, emerging treatment paradigms such as non-mitogenic anti-CD3 mAbs, autoantigenic peptides, and even cellular therapies are providing hope for a future in which immunopathology can be specifically and vigorously curtailed.

## Session 2: Friday, May 9, 2008

11:15 – 11:45

### Treating Resistant RA – New Therapeutics

Prof René Westhovens, *Professor, Department of Musculoskeletal Sciences Catholic University Leuven, Belgium*



#### Biographical Sketch

René Westhovens obtained his M.D. degree from the Katholieke Universiteit Leuven, Belgium, in 1979 and was trained in Internal Medicine and Rheumatology in Leuven from 1979 to 1984.

In 1993, Prof Westhovens joined the Department of Rheumatology in the University of Leuven, where he is now head of the clinic. His main interests are in the treatment of Rheumatoid Arthritis with special focus on the multidisciplinary approach. His PhD degree was obtained in 1999 with the thesis "Prognostic factors and outcome in rheumatoid arthritis".

He took part in several international collaborative studies as the Cobra Project on Intensive Combination Therapy in Early RA and in ECRAF on a genome screen for RA susceptibility loci. Prof Westhovens was also involved in a number of multicenter clinical trials in phase 1, 2 and 3 of various pharmacological agents for the treatment of RA.

Currently he is Professor at the Medical Faculty and the Faculty of Kinesiology and Rehabilitation Sciences of the Catholic University of Leuven.

#### Overview of Presentation

TNF-blockers altered the clinical evolution of many previously refractory patients suffering from rheumatoid arthritis but data from registries and cohort studies make clear that many patients still have insufficient response, lose their initial response or have to stop because of specific side effects. In case of failure of a TNF-blocker, the common strategy is to try a second TNF-blocker, but careful analysis of patient registries shows that if a first TNF-blocker is discontinued for efficacy or safety reasons, the second

TNF-blocker is likely to fail for the same reasons and a second switch to a third TNF blocker is even less successful. In a recent Swiss study it is suggested that a drug with another mechanism of action, in casu Rituximab, has more potential in these situations. Abatacept, the first second signal blocker, is shown to be very effective also in TNF refractory patients and extension data up to 2 year are published. Whereas the increasing number of therapeutic options is good news for patients, the rheumatology

11:15 – 11:45

### Treating Resistant RA – New Therapeutics

*Continued*

community is confronted with the dilemma which treatment to use in which situation and in which order, and the question rises how to monitor and evaluate these agents in daily practice. Rheumatologists discuss on the longterm impact on the immune system of the different biologicals and literature clearly shows that combining biologicals is associated with more side effects.

Concerning general efficacy no major differences are to be expected based on the available clinical trials (ATTAIN and REFLEX trials report similar ACR responses for Abatacept and Rituximab resp.), although head to head clinical trials comparing different biologicals are lacking. The only currently available blinded randomized trial

comparing biologicals was not powered to show a difference between Abatacept and Infliximab (ATTEST trial), but confirmed small differences in efficacy profile and safety, suggesting that not all biologicals are the same. Differences in daily practice effectiveness are also to be expected with the incorporation of these agents with different modes of action in different therapeutic strategies and their use in patients with different disease characteristics, risk profiles and comorbidities. Also patient preferences are expected to play a role in future decision making. Last but not least, the quality of care programs in which these highly effective drugs are going to be used could be at least as important as their intrinsic level of efficacy.

11:45 – 12:15

### Imaging Joint Deterioration and Disease Progression in RA: Experience with Newer Biologics

Prof Harry Genant, *Emeritus Professor of Radiology, Medicine, Epidemiology & Orthopaedic Surgery, University of California School of Medicine, San Francisco, USA*



#### Biographical Sketch

Harry K Genant received his medical degree from Northwestern University in Chicago, Illinois and completed his internship on the Osler Service at Johns Hopkins University in Baltimore, Maryland. He received residency training in Medicine and in Radiology at the University of Chicago. He assumed a faculty position at the University of California, San Francisco, achieving the rank of Professor of Radiology, Medicine, Epidemiology and Orthopaedic Surgery. He founded the Osteoporosis and Arthritis Research Group (OARG) in the Department of Radiology, UCSF, and served as its Executive Director. This group, once numbering over 130 physicians, scientists and research associates, was recognized as a leading source of research on the development and assessment of noninvasive and quantitative imaging methods for osteoporosis, arthritis and orthopaedics. In 1998 he co-founded Synarc, Inc, a global, contract research organization (CRO) specializing in management of quantitative imaging and biomarkers in large, multicenter, multinational, pharmaceutical drug trials. He serves as a Member of the Board for Synarc.

Prof Genant has been editor or co-editor of more than 30 books and author or co-author of more than 170 chapters or invited articles, over 500 articles in peer-reviewed scientific and medical journals, and over 1500 abstracts presented at national and international scientific and professional gatherings. He is on the editorial boards of Osteoporosis International and the Journal of Clinical Densitometry, and he is an Associate Editor of Bone.

He has served as President of the Association of University Radiologists, Scientific Chair or President of the First through Sixth International Congresses on Osteoporosis in China, President of the International Skeletal Society, Chair of the WHO Task Force on Osteoporosis, and member of the Board of Directors of the International Osteoporosis Foundation and Co-Director of its Global Initiatives on Vertebral Fracture Assessment and on Measures of Bone Quality.

## Session 2: Friday, May 9, 2008

11:45 – 12:15

### Imaging Joint Deterioration and Disease Progression in RA: Experience with Newer Biologics

*Continued*

#### Overview of Presentation

This presentation will address the important subject of imaging evaluation of joint destruction and disease progression in patients with rheumatoid arthritis (RA), emphasizing imaging developments and applications in clinical trials. The mainstay evaluation for clinical efficacy of traditional DMARDs and Biologics, regarding joint deterioration, has been conventional radiography of the hands and feet. A number of standardized, moderately sensitive and reproducible methods have evolved over the past 25 years, including the Larsen, Sharp, van der Heijde-modified Sharp and Genant-modified Sharp scoring systems, each of which will be reviewed briefly, contrasting their advantages and disadvantages. These widely applied techniques variously score the joints for erosion and joint space narrowing on a multi-point scale. More recently, standardized approaches for

magnetic resonance (MR) evaluation of joint disease have been developed, providing the capability to evaluate not only osseous erosive changes but also the periarticular soft tissues and features of synovitis. The MR methodology is far more complex and difficult to perform, and the interpretation of the many serial images in different planes requires extensive training, beyond that already necessary for reliably scoring conventional radiographs. Nevertheless, early experience suggests substantial sensitivity for detecting and monitoring early RA joint involvement with this innovative technique. The application of these conventional and newer imaging methods, especially in clinical trial assessment of newer biologics will be discussed and extensively illustrated. Examples will be drawn from personal experience in the AIM trial with abatacept and from the REFLEX trial with rituximab.

## Session 3: Friday, May 9, 2008

1:30 – 2:00

### How to Handle Biologics in Clinical Practice – Focus on Safety

Dr Michele Doran, *Consultant Rheumatologist, St James's Hospital, Dublin, Ireland*



#### Biographical Sketch

Michele Doran graduated from University College Dublin in 1993, and carried out her training in Rheumatology in Ireland, in Bath UK, and at Mayo Clinic, USA. While at Mayo Clinic, Dr Doran completed her MD thesis on Epidemiology of Rheumatoid Arthritis, and also graduated with a Master's Degree in Clinical Research.

She was appointed to St James's Hospital in 2003 where she is in clinical practice as Consultant Rheumatologist. She has published 14 original papers in peer-reviewed journals, in addition to editorials and review articles.

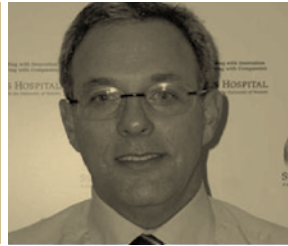
#### Overview of Presentation

The talk will give an up to date review of safety considerations relating to use of the 5 biologic therapies currently in clinical use in treatment of Rheumatoid Arthritis.

2:00 – 2:30

### Evolving and Novel Options for the Treatment of Osteoporosis

Prof Laurence A. Rubin, *Professor, Faculty of Medicine, University of Toronto, Canada*



#### Biographical Sketch

Laurence A. Rubin graduated Magna Cum Laude from the University of Ottawa (1977), completed speciality training in Internal Medicine (1982) and Rheumatology (1983) at the University of Toronto. From 1983-1986, he was awarded an Arthritis Society Research Fellowship to pursue further postgraduate studies at the National Cancer Institute/NIH in Bethesda, Maryland, USA. In 1986 he returned to Canada as Assistant Professor, Departments of Medicine and Immunology, U of T and staff member, Division of Rheumatology, Sunnybrook Health Science Centre. In 1992, he was promoted to Associate Professor, moved to Women's College Hospital to become Division Head of Rheumatology, and Founding Director, Multidisciplinary Osteoporosis Program. In July 1994, he was appointed Associate Physician-in-Chief at Women's College, and in 1997-98 served as Acting Physician-in-Chief at that site.

In 2000, Prof Rubin assumed his current position of Head, Division of Rheumatology and Staff Member, Metabolic Bone Clinic at St Michael's Hospital. In 2003, he was promoted to Professor, Medicine, University of Toronto.

He held a Clinical Associateship from The Canadian Arthritis Society from 1986-1992 and in 1992 received the Sanofi Winthrop Canadian Rheumatism Association Young Investigator's Award. He has been the recipient of peer reviewed grant support from the Arthritis Society, the Medical Research Council, Heart and Stroke Foundation, the Leukaemia Research Fund, the Physicians' Services Incorporated Foundation, Dairy Farmers and the Natural Science & Engineering Research Council (NSERC) and has published over 60 peer reviewed papers. Dr Rubin's main research interests have focused on hereditary factors that contribute to autoimmune inflammatory disorders, metabolic bone disease and osteoporosis.

#### Overview of Presentation

The objectives of the presentation are to describe current approaches to Osteoporosis Treatment; review novel options for anti-resorptive therapy; and review the biologic basis for anabolic manipulation and potential for application.

The present approach to the treatment of Osteoporosis provides effective, cost efficient intervention in a majority of the at-risk population, but absolute fracture reduction remains an as yet unattainable

goal. Our rapidly expanding understanding of the basic molecular and biochemical mechanisms underlying basic bone physiology and the critical components of the "remodeling" cycle has opened the possibility of developing novel interventions that may complement or exceed current modalities. This lecture will provide the attendee with an overview of current practice as well as insights and understanding of the biology of these novel modalities that may represent the future of OP therapy.

# Notes

**Thursday and Friday, 8–9 May 2008**

## European Masterclass on Rheumatology

### Directions from Dublin Airport by Taxi

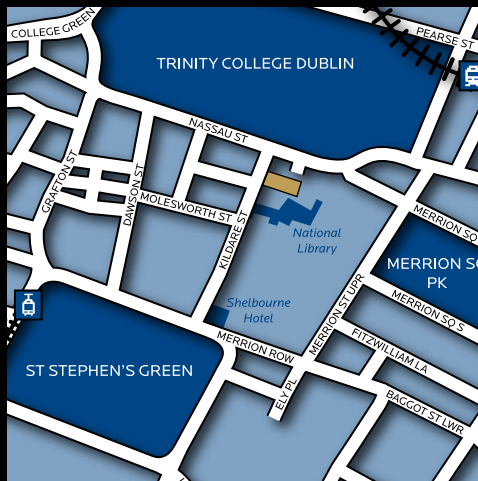
The journey time via taxi from Dublin Airport to the Royal College of Physicians of Ireland in the city centre tends to vary from 30 to 45 minutes.

### By Rail

The nearest DART station is Pearse Street Station within 10 minutes walk.

### Travel and Accommodation

Travel and accommodation details will be emailed to delegates on receipt of Registration Form.



■ Royal College of Physicians of Ireland  
No. 6 Kildare St, Dublin 2