

# ISI Newsletter

## IRISH SOCIETY OF IMMUNOLOGY

OCTOBER 2005

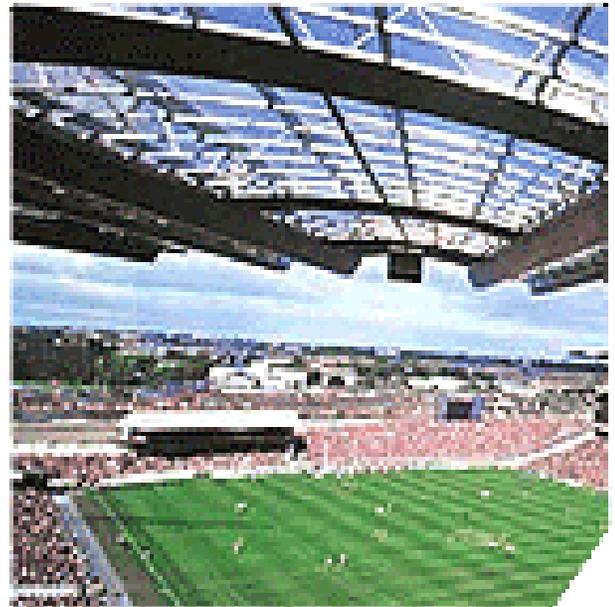
### THIS ISSUE

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### IRISH IMMUNOLOGIST AT CROKE PARK

The Irish Society of Immunology will host its Annual Meeting on 20-21st October 2005. This year the meeting will be held at Croke Park in Dublin which is fast becoming one of the most sought after locations for conferences due to its excellent facilities. It's a significant year for the ISI as it's the 20<sup>th</sup> Anniversary of our very first Annual Meeting and our very own Denis Reen will talk us through the history of the ISI at a special lecture during this years meeting. We have a fantastic programme which will incorporate a number of sessions such as "Immunoregulatory mechanisms in the gut: new targets for immunotherapy" and "Key players: cells that modulate inflammation, viral disease and malignancy". Our line up of speakers from home and abroad is world class this year - they include Christine Biron (USA), Cornelis Melief (Netherlands), Andrew MacPherson (Sweden), Luke O'Neill (Ireland) and Con Feighery (Ireland) to name but a few. There will also be open papers and posters, which are always of the highest standard. We

have a number of prizes this year which will include Best Student Poster €350, Best Oral Presentation €350 and Best Veterinary Poster €200. Our social event will take place on the Thursday night with a Banquet in Croke Park. It's always great opportunity to catch up with fellow Immunologists over a good meal and a few drinks and indeed forge new collaborations. All in all, this year promises to be our best yet. Looking forward to seeing you all there.



**Croke Park, Dublin**

## Maynooth's Matzinger Masterclass

It's quite clear that Immunology in Ireland is flourishing. The scientific output from the main research centres is growing exponentially and the quality of science published or patented has never been higher. However success creates new problems. Even five years ago, it was possible for a second year postgraduate student in Maynooth to know every Immunologist in the country mostly thanks to the annual ISI meeting; the increased scale of research has made that impossible. Likewise the opportunities for postgrads to present data (or even get posters viewed) are diminishing as the numbers of post-doctoral fellows increases. These thoughts emerged from a conversation between Polly Matzinger and postgrads during a quality review at the Institute of Immunology Maynooth, late in 2003. With Polly's help we established a new summer "Immunology Masterclass" specifically for postgraduate students to be held every July (after college semesters, but well before the ISI meeting). The first masterclass was held this summer and was limited to 40 participants representing Maynooth, Queens, TCD, DCU, UCD and UCC and guests from Oxford and Birmingham. During the morning a long relaxed poster session allowed Polly to have discussion time with each postgrad, before a speaker from the Wellcome Trust outlined how funding of fellowships can be used to build your own career in research. After coffee and another poster session, Dr Anne Forde from *Science Next Wave*, outlined the vast career possibilities open to scientists with PhDs in Immunology in a presentation "Scientific Careers: In and Outside the Ivory Tower". The fact that these discussions were a "supervisor-free" zone, meant that everyone opened up and a lively debate ensued. The outcome was that most students realised that the postgrad- postdoc-lectureship career path is in fact the exception and that the majority of scientists

use their skills in industrial settings (no, not working in a bank!). The clear message from the morning session was that postgrads should start building their career portfolios at the very start of their studies.

Lunch saw another poster session and animated conversations between Polly and the remaining postgrads. However after lunch the real fun began, six final year postgrads who had been nominated by their supervisors gave an oral presentation followed by a critique from Polly and a general discussion of the work. The spirit of the morning carried through and the discussion was dominated by postgrad contributions despite the reappearance of the more well known PIs. Mary O'Gorman (Maynooth) was on home turf and started the session with findings on CCL28's role in orchestrating mucosal immunity followed by Sheila Keating from Oxford who described T cell responses following immunisation with candidate malaria vaccines. Lydia Lynch (Conway, UCD) *Haematopoietic Stem cells in the human mucosa* Padraig Ross (DMMC, TCD) presenting work on adenylyl cyclase toxin immunomodulation. In a very clear presentation, Selinda Orr (Queen's Belfast) described how SOCS3 Targets the inhibitory receptor CD33 for degradation. Finally Oliver Haworth (U Birmingham) outlined the role of the stromal microenvironment in the pathogenesis of rheumatoid arthritis with characteristic gusto. The strength of the presenters was quite remarkable and to recognise their contribution the six students were awarded "Dorothy Price medals for postgraduate Immunology" (A history of Dr Dorothy Price and her contribution to Irish Immunology will appear in the next newsletter).

The formal aspect of the day was concluded by an enthusiastic keynote address from Polly Matzinger, outlining her latest refinement of the danger hypothesis. Always provocative, she began by ridiculing immunological models that couldn't accommodate materno-fetal

interactions (and indeed some of the scientists who had supported them). The presentation was a tour de force, relying on only three acetate overheads, but capturing the audience in a to-and-fro debate for over 90 minutes. The day turned into something very special indeed, it is this crucible of ideas that makes Immunology such an engaging discipline. The formal aspect of the day finished, but not the discussion, the Institute of Immunology provided a BBQ and the postgrads brought some cases of larger. We all sat on the grass behind the Institute and debated “danger” long into the evening while astute supervisors tried to secure email addresses and tempt the presenters with offers of post-doc vacancies, and the less astute tried to build a tower of empty cans. Before the sun set, there was an impromptu game of rounders (apparently it was teams of “Self” v “Non-self”). One of the main goals of the day had been to get postgrads networking, building friendships and connections that will help their careers, it seems to have been a great success. Next year’s Maynooth masterclass will be led by Dr Adrian Hayday on July 10, mark the date in your diary.

## ISI TRAVEL BURSARIES

Many congratulations to Padraig Ross, TCD, Mary O’Gorman, NUIM and Rowan Higgs, UCD who were recently awarded travel bursaries from the ISI. A report of the conferences they attended will appear in the next issue of the newsletter.

The ISI will be awarding **3 travel bursaries of €300 each** to ISI members whose work has been accepted for presentation at an international meeting. In the last year only a small number of applications were received and we would like to encourage more people to apply. The applications received and bursaries awarded are summarised below.

### ISI Bursary Applications 2004-2005

Bursaries awarded	7
Bursaries not awarded	1
Bursary applications ineligible due to non-ISI membership	3
Bursaries application withdrawn	1
<b>Total number of bursary Applications in 2004-2005</b>	<b>12</b>

Applications for consideration should be submitted to Michelle Armstrong (ISI secretary), Department of Medicine & Therapeutics, The Conway Institute, UCD, [michelle.armstrong@ucd.ie](mailto:michelle.armstrong@ucd.ie) by the 30<sup>th</sup> April 2005 for review to include the following:

1. Copy of your abstract.
2. Proof that your abstract has been accepted (an email or a letter from the meeting organiser)
3. A letter of support from your supervisor

Only current ISI members may submit applications and no retrospective applications will be considered. Please make sure to send in applications in plenty of time, as the deadline will be strictly adhered to. All those who receive a bursary will be expected to write a short meeting report for publication in the ISI newsletter.

## **DATE FOR YOUR DIARY: UP-COMING MEETINGS**

### **Education & Research Centre, St Vincent's University Hospital, & Conway Institute UCD, Annual Research Symposium 2005**

“Common Molecular Mechanisms in  
Inflammation & Malignancy”

2<sup>nd</sup> Dec 2005, ERC, St Vincent's Hospital,  
Dublin.

Abstract Deadline 30<sup>th</sup> October 2005

### **British Society for Immunology, Annual Congress 2005**

6-9<sup>th</sup> December 2005, Harrogate, UK.

## **A NOTE FROM THE EDITOR**

Hi all. I hope you enjoyed this edition of the ISI newsletter. It has been a very successful year for the Newsletter, which is now published three times per year. The job of the editor is a difficult one –my time is spent convincing people to write articles and then constantly bombarding them with emails begging them to actually submit the agreed article for publication!!! I welcome any article as long as it will be of interest to our readers. Those of you attending conferences could write a meeting report and young researchers are encouraged to submit articles highlighting their area of research. Illustrations and cartoons are particularly welcomed. All articles should be emailed to me at [Christine.Loscher@dcu.ie](mailto:Christine.Loscher@dcu.ie) . I look forward to hearing from you all soon (of your own free will!!!!).

# **2005 ANNUAL MEETING OF THE IRISH SOCIETY FOR IMMUNOLOGY (I.S.I)**

## **PROGRAMME**

**HOGAN MEZZANINE, CROKE PARK  
October 20<sup>th</sup> and 21<sup>st</sup> 2005**

### **Thursday, 20<sup>th</sup> October**

- 10:00 – 11:00**      **Registration & Trade Exhibition**  
Tea/Coffee
- 11:00 – 11:05**      **Conference Open/Welcome**  
**Cliona O’Farrelly, President, Irish Society for Immunology**

**Session 1:                      **Contemporary Immunotherapies: The Way Forward or a Path to More Disease?****

- 11:05 – 11:40**      **Keynote Address: New Targets for Treatment of Inflammatory Diseases.**  
*Luke O’Neill, Ireland*
- 11:40 – 11:55**      **The vaccinia virus protein A46R interferes with Toll-like receptor signalling and contributes to virulence.**  
*Stack J, Martina Schröder (Trinity College Dublin), Haga IR, Smith GL, Bowie A.*
- 11:55 – 12:30**      **Immunobiologics in Clinical Practice.**  
*Oliver FitzGerald, Ireland.*
- 12:30 – 12:45**      **Modulation of the transcriptional activity of the nuclear receptor NURR1 by pro-inflammatory mediators.**  
*Carol Aherne (University College Dublin), Mix KS, Murphy EP.*

**12:45 – 13:00**      **Effect of the P13-kinase/PTEN pathway on PKC phosphorylation in Jurkat T lymphocytes.** *Michael Freeley* (Royal College of Surgeons, Dublin), *Volkov Y, Park J, Wange R, Kelleher D and Long A.*

**13:00 – 14:10**      **Lunch, Posters and Trade Exhibition**

**13:30 – 13:45**      **Talk by Michael Simonds, StemCell Technologies.**

**Session 2:      **Key Players: Cells that Modulate Inflammation, Viral Disease and Malignancy.****

**14:10 - 14:45**      **Induction of protective IgA by Intestinal Dendritic Cells Carrying Commensal Bacteria**  
*A. MacPherson, Canada/Switzerland*

**14.45 – 15:00**      **Toll-like receptor 3 (TLR3) stimulation suppresses relapsing autoimmune encephalomyelitis by inducing endogenous interferon-beta.** *Touil T, Fitzgerald D, Rostami AM, Bruno Gran* (Thomas Jefferson University and University of Nottingham).

**15:00 – 15:15**      **CD14-, CD3-human immune cells control CD3+ T cell proliferation: novel mechanism to limit immune damage during viral infection.** *Cariosa Noone* (NUI, Maynooth), *Lewis E, Loetscher M, Newman R, Johnson P.*

**15.15- 15.50**      **Regulation of Early Responses to Viral Infections**  
*Christine Biron, United States.*

**15:50 - 16:15**      **Tea/Coffee**

**16:15 - 16:45**      **Dendritic Cell Immunotherapy: Mapping the Way.**  
*Cornelius J Melief, Netherlands.*

**17:10 - 17:25**      **20<sup>th</sup> Anniversary Celebratory History of the I.S.I**  
*Denis Reen, Recipient of 2005 I.S.I Public Lecture Award.*

**17:30 - 19:30**      **Wine Reception, Posters and Trade Exhibition**

**19:30 – late**      **Banquet Dinner, Hogan Mezzanine, Croke Park.**  
**Friday, 21<sup>st</sup> October.**

**09:00 – 09:30**      **Breakfast**

**Session 3:**      **Immunoregulatory Mechanisms in the Gut: New  
Targets for Immunotherapy.**

**09:30 - 10:00**      **Initiation of Inflammation in the Gut: a role for  
hypoxia.**  
*Cormac Taylor, Ireland*

**10:00 – 10:15**      **The role of protein kinase A and MAP kinases in  
endogenous and pathogen-induced anti-  
inflammatory signalling in dendritic cells.** *Corinna  
Brereton (Trinity College Dublin) Sutton C, Lavelle  
EC, Mills KHG.*

**10:15 – 10:30**      **Intestinal epithelial cell-pathogen interactions: an  
*in vitro* model for examining the role of the mucus  
gel layer and potential barrier therapies.** *Simon  
Keely (University College Dublin), Feighery L, Baird  
A, Carrington S, Haddleton DM, Brayden DJ.*

**10:30 – 11:00**      **AB5 Toxins: Intervention in inflammatory disease.**  
*Neil Williams, United Kingdom.*

**11:00 - 11:30**      **Tea/Coffee**

**11.30 –12.00**      **Differential effects of ADP-ribosylating toxins on  
antigen-presenting cells in the marginal zone:  
implications for adjuvant function.**  
*Nils Lycke, Sweden.*

**12.00 – 13:00**      **Short Presentations from Selected Student Posters.**  
*(6 x 4min talk + 2min questions)*

**13:00 – 14:00**      **Lunch, Posters and Trade Exhibition.**

**Session 4: Breakdown of Oral Tolerance: Role in Generation of Disease**

- 14:00 – 14.30**      **Coeliac Disease: THE model of oral tolerance breakdown.**  
*Con Feighery, Ireland*
- 14:30 – 14:45**      ***Bifidobacterium infantis* exerts immunomodulatory activities on human intestinal epithelial cells.** *Ann O’Hara (University College Cork), O’Regan P, Fanning Á, MacSharry J, Bienenstock J, O’Mahony L, Shanahan F.*
- 14:45 – 15:00**      **Bacterial infection promotes T cell recognition of self-glycolipids: relevance to bacterial associated autoimmune disease.** *Anthony Moran (NUI, Galway), De Libero G, Gober H-J, Rossy E, Shamshiev A, Chelnokova O, Mazorra Z, Vendetti S, Sacchi A, Prendergast MM, Sansano S, Tonevitsky A, Landmann R, Mori L.*
- 15:00 – 15:40**      **Plenary Lecture: Food Allergy: breakdown in oral tolerance or induction of IgE immunisation.** *J. Hourihane, Ireland*
- 15:40 –16:10**      **Tea/Coffee**
- 16:10 – 16:20**      **Awarding of prizes for best oral presentation and best student poster presentation (€350 each). €200 Veterinary Prize Sponsored by StemCell Technologies**
- 16.20**              **End of Conference /Farewell**  
*Cliona O’Farrelly, President of the Irish Society for Immunology,*
- 16:30 – 17.00**      **Irish Society for Immunology,**  
Annual General Meeting.



**St. Vincent's University Hospital Annual Research  
Symposium  
with  
The Conway Institute, UCD**

*COMMON MOLECULAR MECHANISMS IN INFLAMMATION AND  
MALIGNANCY*

**Friday December 2<sup>nd</sup> 2005**

**Venue: The Education and Research Centre,  
St. Vincent's University Hospital**

**Prof. Des FitzGerald, Vice President for Research, U.C.D. to open**

**Topics to include**

- **Basic Molecular Mechanisms in Malignancy**  
Speakers to include: **Prof. Joellen Welsh & Prof. Tom Cotter**
  
- **Basic Molecular Mechanisms in Inflammation**  
Speakers to include: **Prof. Tim Cawston and Dr. Paul Moynagh**

*also*

- **A lively poster session to be chaired by  
Prof. Jo Ellen Welsh and Prof. Tim Cawston**

*Keynote speakers:*

**Prof. Joellen Welsh, University of Notre Dame**  
**Prof. Tim Cawston, University of Newcastle Upon Tyne**

**Closing Date for Abstracts October 30<sup>th</sup> 2005**

**Prize for best oral and poster presentations**

For further information contact [geraldine.laniganryan@ucd.ie](mailto:geraldine.laniganryan@ucd.ie)

**Meeting sponsored by Pfizer**



St. Vincent's University Hospital  
**Annual Research Symposium**  
with  
**The Conway Institute U.C.D.**

*Friday 2<sup>nd</sup> December 2005*

*12 noon – 6.30pm*

*Lecture Hall, Education & Research Centre,  
St. Vincent's University Hospital*

***COMMON MOLECULAR MECHANISMS IN  
INFLAMMATION & MALIGNANCY***

### **Abstract Submission**

Abstracts will be selected by the organising committee for 10 min. oral presentations. On the day of the meeting, additional posters will be selected for brief oral presentation and two will receive prizes.

Abstracts should be no more than 300 words and should use the following format: Title (in capitals), authors (presenting author underlined), affiliation, Introduction, Materials & Methods, Results Conclusions.

Abstracts must be submitted electronically to  
[geraldine.laniganryan@ucd.ie](mailto:geraldine.laniganryan@ucd.ie)

**Deadline for submissions is 30<sup>th</sup> October 2005**