# Immune Tolerance and Autoimmune Disease

## 26-27 April 2012
Emmanuel College, University of Cambridge

## PROGRAMME

### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1</th>
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<tbody>
<tr>
<td>08.30 – 09.25</td>
<td>Registration</td>
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<tr>
<td>09.25 – 09.30</td>
<td>Welcome and Introductions</td>
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</tbody>
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#### Session 1: Basic Mechanisms of Immune Tolerance

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>09.30 – 10.00</td>
<td>Ludger Klein (Munich, Germany) Thymic epithelium and central T cell tolerance</td>
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<tr>
<td>10.00 – 10.30</td>
<td>Mark Shlomchik (Yale University, US) B cells vs myeloid cells: how is self tolerance lost in Lupus?</td>
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<tr>
<td>10.30 – 10.45</td>
<td>Gretel Nusspaumer (University of Basel, Switzerland) On the consequences of in vivo ablation of Aire-expressing medullary thymic epithelial cells</td>
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**10.45 – 11.15** Morning Break

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11.15 – 11.45</td>
<td>Fiona Powrie (Oxford University, UK) Gut Reactions: Immune pathways that control intestinal homeostasis</td>
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<td>11.45 – 12.00</td>
<td>Arno Haenninen (University of Turku, Finland) Ex vivo imaging of whole intestine reveals inflammatory activity in the small intestine of NOD mice</td>
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<td>12.00 – 12.30</td>
<td>Claudia Mauri (University College London, UK) IL-10 secreting regulatory B cells are arbiters of autoimmunity in both mouse and man</td>
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<td>12.30 – 12.45</td>
<td>Abcam</td>
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**12.45 – 13.45** Lunch

#### Session 2: Factor Governing Autoimmunity

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>13.45 – 14.15</td>
<td>Agnes Lehuen (Inserm, France) Regulatory role of iNKT cells, from viral infection to type 1 diabetes</td>
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<tr>
<td>14.15 - 14.30</td>
<td>Susanna Cardell (University of Gothenburg, Sweden) Tolerization of diabetogenic CD4+ T cells by intranasal treatment with CTA1R7K-DD containing specific peptide through the induction of FoxP3+ Treg cells</td>
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<td>14.30 – 15.00</td>
<td>Lucy Wedderburn (UCL Institute of Child Health, UK) Gene expression and Juvenile Idiopathic Arthritis: from mechanisms to predictors for use in the clinic?</td>
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**15.00 – 15.30** Afternoon Break

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<tr>
<td>15.30 – 16.00</td>
<td>Marina Botto (Imperial College London, UK) Complement, atherosclerosis and SLE: lessons from animal models</td>
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<td>16.00 – 16.15</td>
<td>Wei Cao (MD Anderson Cancer Center, US) Nucleic Acid-Containing Amyloid Fibrils Potently Induce Type I Interferons and Stimulate Systemic Autoimmunity</td>
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<tr>
<td>16.15 – 16.30</td>
<td>Janine Gotot (IMMEI Uniklinikum Bonn, Germany) Direct PD-1-mediated suppression of autoreactive B cells by regulatory T cells</td>
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**16.30 – 19.00** Drinks Reception & Poster Session
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<tr>
<th>Session 3</th>
<th>Mediators of Autoimmunity/Pathogenesis</th>
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<tr>
<td>09.00 – 09.30</td>
<td>Katie Haskins (University of Colorado, US)  &lt;br&gt; <em>Antigens for autoreactive T cells in Type 1 diabetes</em></td>
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<td>09:30 – 09.45</td>
<td>Ashish Marwaha (Child and Family Research Institute, UBC, Canada)  &lt;br&gt; <em>Tregs from T1D subjects with a susceptible IL-2R gene SNP, respond aberrantly to IL-2 stimulation.</em></td>
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<td>09.45 – 10.00</td>
<td>Su Metcalf (University of Cambridge, UK)  &lt;br&gt; <em>Nanoparticle-formulation of leukaemia inhibitory factor (LIF) promotes Treg and suppresses TH17 cells</em></td>
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<tr>
<td>10.00 – 10.30</td>
<td>Gitta Stockinger (MRC, London, UK)  &lt;br&gt; <em>Regulation of interleukin-17 mediated immune responses: from controlled inflammation to autoimmunity</em></td>
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<tr>
<td>10.30 – 11.00</td>
<td>Morning Break</td>
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<tr>
<td>11.00 – 11.30</td>
<td>Ton Rolink (Basel, Switzerland)  &lt;br&gt; <em>Autoimmunity and aging</em></td>
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<td>11.30 – 11.45</td>
<td>Isharat Yusuf (MedImmune, US)  &lt;br&gt; <em>B cells support T follicular helper cell maintenance in autoimmune and immunization models</em></td>
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<td>11.45 – 12.00</td>
<td>Graham Britton (University of Bristol, UK)  &lt;br&gt; <em>Modulation of T-cell receptor proximal signalling during peptide tolerisation</em></td>
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<td>12.00 – 12.30</td>
<td>Hartmut Wekerle (Martinsried, Germany)  &lt;br&gt; <em>The autoimmune spiral: Initiation of anti-myelin autoimmunity in gut and brain associated lymphatic tissues</em></td>
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<td>12.30 – 13.30</td>
<td>Lunch</td>
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**Session 4** | Strategies for Therapeutic Intervention |
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<td>13.30 – 14.00</td>
<td>Falk Nimmerjahn (University of Erlangen, Germany)  &lt;br&gt; <em>Molecular and cellular pathways involved in the pro- and anti-inflammatory activity of IgG</em></td>
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<td>14.00 – 14.15</td>
<td>Nicola La Monica (Idera Pharmaceutical, US)  &lt;br&gt; <em>Modulation of endosomal TLRs for the treatment of autoimmune diseases</em></td>
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<td>14.15 – 14.45</td>
<td>Herman Waldmann (Oxford, UK)  &lt;br&gt; <em>Harnessing regulation for therapeutic purposes</em></td>
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<td>14.45 – 15.15</td>
<td>Afternoon Break</td>
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<td>David Wraith (Bristol, UK)  &lt;br&gt; <em>Antigen-specific immunotherapy for treatment of autoimmune diseases</em></td>
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<td>15.45 – 16.00</td>
<td>Isis Ludwig-Portugall (Institute of Experimental Immunology, Germany)  &lt;br&gt; <em>Regulatory T cells curb generation and deposition of glomerular antigen-specific autoantibodies</em></td>
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<td>16.00 – 16.30</td>
<td>David Sansom (University of Birmingham, UK)  &lt;br&gt; <em>Context-dependent regulation of T cell responses by CTLA-4</em></td>
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<td>16.30</td>
<td>Close</td>
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