There have been a wealth of studies elucidating the complex interplay between environmental factors, immune cell subsets and cellular sensors driving chronic inflammation. Emerging data suggests that environmental factors, including commensal microbes and dietary components, can influence immune cell development and disease. Several studies are clarifying which particular cell types are responding to these factors, as well as the sensors in these cells triggering the production of inflammatory mediators. This symposium aims to take a broad look at emerging data in this field, surveying how recent developments in our understanding of immune homeostasis and inflammatory disease can be harnessed to develop new therapeutics to treat disease.

Thursday, November 6

I. ENVIRONMENTAL TRIGGERS

2:00-3:00 Registration

3:00-4:00 Keynote address
Jenny Ting (University of North Carolina, Chapel Hill, USA)

4:00-6:00 Session 1: Host-microbe interactions
Gerard Eberl (Institut Pasteur, France)
Wendy Garrett (Harvard University, USA)
Andrew Macpherson (University of Bern, Switzerland)

6:00-7:00 Welcome Reception

Friday, November 7

9:30-11:30 Session 2: Dietary influences on immunity
Eugene Chang (University of Chicago, USA)
Ajay Chawla (University of California San Francisco, USA)
Benjamin Marsland (University of Lausanne, Switzerland)
Short talk (to be determined)

11:30-12:30 Lunch

12:30-2:30 Poster session

II. IMMUNE CELL SUBSETS

2:30-4:30 Session 3: Innate lymphoid cells
Yang-Xin Fu (University of Chicago, USA)
Andrew McKenzie (Medical Research Council, UK)
Jenny Mjosberg (Karolinska Institute, Sweden)
Gregory Sonnenberg (University of Pennsylvania, USA)

4:30-5:00 Refreshment break

5:00-7:00 Session 4: Cellular mediators
Thomas Korn (Technische Universitat Munchen, Germany)
Venizelos Papayannopoulos (Medical Research Council, UK)
Immo Prinz (Hannover Medical School, Germany)
Caetano Reis e Sousa (London Research Institute, UK)

Saturday, November 8

III. CELLULAR SENSORS AND SIGNALING

9:30-11:30 Session 5: Innate immune receptors and signaling
Veit Hornung (University of Bonn, Germany)
Marco Prinz (University of Freiburg, Germany)
Tim Sparwasser (Hannover Medical School, Germany)
Short talk (to be determined)

11:30-12:30 Lunch

12:30-2:30 Session 6: The inflammasome
Thirumala-Devi Kanneganti (St. Jude’s Children’s Research Hospital, USA)
Vishwa Deep Dixit (Louisiana State University, USA)
Fayyaz Sutterwala (University of Iowa, USA)
Short talk (to be determined)

2:30-3:30 Panel discussion

3:30 Meeting adjourned