

## Program

# Mining the Chemical Proteome

## Target Discovery using Chemical Probes and their Application in Medicine and Biology

Symposium, 12-14 April 2015, Oxford

### Sunday 12<sup>th</sup> April 2015, Natural History Museum, Parks Lane, Oxford

17:15	Registration (-20:00)
18:00	Welcome Address Renier / Benedikt
18:15	<b>'From glycosidase inhibitors to activity-based glycosidase probes'</b> Professor Hermen Overkleeft, Leiden University, NL
19:00	Welcome reception (-21:00)

### Monday 13<sup>th</sup> April 2015, Somerville College, Woodstock road, Oxford

	<b>Session 1</b> (Chairs: Galia Blum & Steven Verhelst)
9:00	<b>'Targeting protein lipidation in cancer, fish, hedgehogs and the common cold'</b> Professor Ed Tate, Imperial College London, UK
9:45	<b>'Synthesis of novel phosphonocarboxylates derived from 3-IPEHPC as potential Rab GGTase inhibitors'</b> Dr. Katarzyna Błażewska, Lodz University of Technology, PL
10:10	<b>'Latent fluorophores based on novel 7-hydroxy-2-iminocoumarin and sulforhodol scaffolds for bioimaging and biosensing applications'</b> Benoît Roubinet, University of Rouen, FR
10:25	Coffee and posters
10:55	<b>'Chemical tools for the study of protein activities and interactions'</b> Dr. Robin Bon, University of Leeds, UK
11:20	<b>Bromotriazine: a covalent probe for bromodomains</b> Dr. Melissa D'Ascenzio, University of Oxford, UK
11:40	<b>'Flavonoid chemical probes for the identification of enzyme partners involved in DNA methylation in cancers'</b> Dr. Marie Lopez, ETAC-CNRS, FR
11:55	<b>'Iodotubercidin-based jasmonate signalling inhibitors'</b> Jan Krahn, University of Duisburg-Essen, DE
12:10	Lunch and posters
	<b>Session 2</b> (Chairs: Maja Köhn & Katarzyna Błażewska)
13:20	<b>'Chemical-proteomic strategies to investigate reactive cysteines'</b> Dr. Eranthie Weerapana, Boston College, USA
14:05	<b>'Kinome Affinity Matrices for Chemical Proteomics'</b> Dr. Guillaume Médard, Technical University Munich, DE
14:30	<b>'T-cell vaccines'</b> Jolien Luimstra, Netherlands Cancer Institute, NL
14:55	Coffee and posters
15:15	<b>'The role of peptide antibiotics in host-pathogen interactions'</b> Professor Roderich Suessmuth, Technical University Berlin, DE
15:40	<b>'Novel strategies for identifying targets of cysteine-reactive inhibitors by mass spectrometry'</b> Dr. Alexander Adibekian, University of Geneva, SW
15:55	<b>'Systematic analysis of substrate preferences of 20S proteasomes using peptidic epoxyketone inhibitors'</b> Gerjan de Bruin, Leiden University, NL
16:10	<b>'Opioid peptides at the host-pathogen interface'</b> Dr. Megan Wright, Technical University Munich, DE
16:25	<b>'Target validation against hedgehog acyltransferase: chemical proteomics and ligand design'</b> Dr. Markus Ritzefeld, Imperial College London, UK
16:40	Free evening (optional: city tour)

# Tuesday 14<sup>th</sup> April 2015, Somerville College, Woodstock road, Oxford

	<b>Session 3</b> (Chairs: Michael Meijler & Marie Lopez)
9:00	<b><i>'Protein TAILS tell remarkable tales. System-wide analysis of proteolytic regulation of signaling networks'</i></b> Professor Chris Overall, University of British Columbia, CA
9:45	<b><i>'Bacterial translocase as a potential target for novel antibiotics'</i></b> Professor Christian Ducho, Saarland University, DE
10:10	<b><i>'Shine a light: photoaffinity labeling in diverse settings'</i></b> Dr. Sara Stolze, Leiden University, NL
10:25	<i>Coffee and posters</i>
10:55	<b><i>'Chemical baits for the detection of phosphatases and their interacting proteins'</i></b> Dr. Maja Köhn, EMBL Heidelberg, DE
11:20	<b><i>'From glycosidase activity profiling in plants to inhibitor discovery in Pseudomonas syringae'</i></b> Balakumaran Chandrasekar, University of Oxford, UK
11:40	<b><i>'Photoaffinity probes for studying bacterial signalling'</i></b> Ysobel Baker, Cambridge University, UK
11:55	<b><i>'Chemoproteomic approaches to study protein fatty acylation in model biological systems'</i></b> Dr. Remi Serwa, Imperial College London, UK
12:10	<i>Lunch and posters</i>
	<b>Session 4</b> (Chair: Robin Bon)
13:20	<b><i>'Proteomics for functional assignment of oxygenases (is hard work)'</i></b> Professor Chris Schofield, University of Oxford, UK
14:05	<b><i>'Unraveling chemical communication between species with reactive probes'</i></b> Dr. Michael Meijler, Ben-Gurion University, IL
14:30	<b><i>'Profiling of retaining glycosidases in live zebrafish with fluorescent activity-based probes'</i></b> Dr. Wouter Kallemeijn, Leiden University, NL
14:45	<i>Coffee and posters</i>
15:15	<b><i>'Chemo-enzymatic transformation of antibody fragments: new tumor imaging agents'</i></b> Professor Hidde Ploegh, Whitehead Institute, USA
16:00	Closing remarks Benedikt / Renier
16:05	<i>Free time (3 hrs)</i>
18:30	<i>Pre-diner drinks at Terrace of Somerville College</i>
19:00	<i>Closing Diner at Somerville (dress code: smart casual)</i>