# BioMetals Symposium 2018
## Preliminary Conference Agenda

### Sunday - July 15, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:00 pm to 5:00 pm</td>
<td>Registration</td>
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<tr>
<td>5:00 pm to 5:15 pm</td>
<td>Welcoming remarks</td>
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<td>Keynote speaker: <strong>Tracey Rouault</strong> (National Institutes of Health, USA), &quot;Unsuspected regulatory roles of iron sulfur clusters in multiple mammalian pathways&quot;</td>
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<tr>
<td>5:15 pm to 6:30 pm</td>
<td>Reception</td>
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### Monday - July 16, 2018

#### SESSION 1: METAL TRANSPORT AND TRAFFICKING IN EUKARYOTES

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00 am to 8:30 am</td>
<td><strong>Greg Anderson</strong> (QIMR Berghofer Medical Research Institute, Australia) - &quot;Mechanisms and regulation of iron intake in early infancy&quot;</td>
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<tr>
<td>8:30 am to 9:00 am</td>
<td><strong>Frank Thévenod</strong> (University of Witten/Herdecke, Physiology, Germany) - &quot;Channels, transporters and receptors for cadmium and cadmium complexes: Facts and alternative facts&quot;</td>
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<tr>
<td>9:00 am to 9:30 am</td>
<td><strong>Prem Ponka</strong> (McGill University, Canada) - “The Path of Iron from Plasma Transferrin to Hemoglobin”</td>
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<td>9:30 am to 10:00 am</td>
<td><strong>Ann Smith</strong> (University of Missouri-Kansas City; USA) - “Safe coordinated trafficking of heme and iron with copper maintain cell homeostasis: modules from the cytoprotective hemopexin system”</td>
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<tr>
<td>10:00 am to 10:30 am</td>
<td>Break</td>
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#### SESSION 2: METAL TRANSPORT IN BACTERIA

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<th>Time</th>
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<tr>
<td>10:30 am to 12:10 am</td>
<td><strong>Shelley Payne</strong> (University of Texas, USA) - &quot;Feo: New insights into an ancient iron transporter&quot;</td>
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<td>11:00 am to 11:30 am</td>
<td><strong>Judith Behnsen</strong> (University of Illinois at Chicago, USA) - &quot;Probiotic <em>Escherichia coli</em> Nissle 1917 Uses Zinc Transporters&quot;</td>
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<td>Time</td>
<td>SESSION 4: METAL TRAFFICKING</td>
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<td>8:00 am to 10:30 am</td>
<td><strong>John Helmann</strong> (Cornell University, USA) - &quot;Zinc buffering, mobilization and chaperone-dependent trafficking in <em>Bacillus subtilis</em>&quot;</td>
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<td>8:00 am to 8:30 am</td>
<td><strong>Deborah Zamble</strong> (University of Toronto, Canada) - &quot;Biosynthesis of the [NiFe]-Hydrogenase Enzyme: Unidirectional nickel selective transfer between the metallocenter assembly accessory proteins&quot;</td>
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<td>8:30 am to 9:00 am</td>
<td><strong>Kam-Bo Wong</strong> (The Chinese University of Hong Kong, Hong Kong) – &quot;Structural insights into nickel delivery to urease&quot;</td>
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<td>9:00 pm to 9:20 pm</td>
<td><strong>Benoit Desguin</strong> (Université catholique de Louvain, Belgium) – &quot;Biosynthesis and functions of the nickel-pincer cofactor&quot;</td>
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<td>9:20 pm to 9:40 pm</td>
<td><strong>Artem Melman</strong> (Clarkson University, USA) – &quot;Reductive mobilization of iron from intact ferritins: Effect of oxygen concentration and physiological relevance&quot;</td>
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<td>9:40 pm to 10:10 pm</td>
<td><strong>Fadi Bou-Abdallah</strong> (SUNY Potsdam, USA) – &quot;Mutant L-Chain Ferritins that Cause Neuroferritinopathy Significantly Alter Ferritin Functionality and Iron Permeability&quot;</td>
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<td>10:10 pm to 10:30 pm</td>
<td>Break</td>
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<tr>
<th>Time</th>
<th>SESSION 5: METAL IN HEALTH AND DISEASE</th>
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<tr>
<td>10:50 am to 12:10 am</td>
<td><strong>Hans Vogel</strong> (University of Calgary, Canada) “Calcium-binding to plastins/fimbrins: regulation of actin-bundling”</td>
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<td>10:50 am to 10:50 am</td>
<td><strong>Anthony White</strong> (QIMR Berghofer Medical Research Institute, Australia) - &quot;Glial cell copper regulation as a key target to control neuroinflammation&quot;</td>
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<td>10:50 am to 11:30 am</td>
<td><strong>Stefano L. Sensi</strong> (University of Chieti-Pescara, Italia) - &quot;The Ying and Yang of brain zinc in dementia&quot;</td>
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<td>11:30 am to 11:50 am</td>
<td><strong>Charareh Pourzand</strong> (University of Bath, UK) - &quot;Mitochondria-targeted&quot;</td>
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<tr>
<td>11:50 am to 12:10 am</td>
<td>iron chelators to protect Friedreich’s ataxia skin cells from Ultraviolet A-induced cell death</td>
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<td>12:10 am to 1:30 pm</td>
<td>Lunch – Posters</td>
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<tr>
<td>1:30 pm to 4:30 pm</td>
<td>SESSION 5B: METAL IN HEALTH AND DISEASE</td>
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<tr>
<td>1:30 pm to 2:00 pm</td>
<td>“Metal speciation: exploring different forms of the metal ions and their biological activities”</td>
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<td>2:00 pm to 2:30 pm</td>
<td>“Small molecule and biometal adjuvant for oncolytic immunotherapy”</td>
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<td>2:30 pm to 2:50 pm</td>
<td>“Restored Iron Transport by a Small Molecule Molecular Prosthetic Promotes Absorption and Hemoglobinization in Animals”</td>
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<td>2:50 pm to 3:10 pm</td>
<td>“Anticancer and Antimicrobial Activity of Novel Non-toxic Ruthenium Metal Complexes of Bis-benzimidazole and Polydentate Pyridine-based Ligands”</td>
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<td>3:10 pm to 3:30 pm</td>
<td>Break</td>
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<tr>
<td>3:30 pm to 5:00 pm</td>
<td>SESSION 5C: METAL IN HEALTH AND DISEASE</td>
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<td>3:30 pm to 3:50 pm</td>
<td>“Tungstate Accumulation and Transformation in the Bone”</td>
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<td>3:50 pm to 4:10 pm</td>
<td>“Biochemical effects of Eu3+ and Cm3+ on eukaryotic cell metabolism – a case study”</td>
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<td>4:10 pm to 4:30 pm</td>
<td>“How proteins match Zn(II) affinity to fit their function? Relationship between thermodynamics and free zinc status”</td>
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<td>4:30 pm to 5:00 pm</td>
<td>Group Photo</td>
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<td>5:00 pm to 6:30 pm</td>
<td>Posters</td>
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<td>8:00 am to 9:50 am</td>
<td>SESSION 6: METAL HOMEOSTASIS</td>
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<td>9:50 am to 10:20</td>
<td>Break</td>
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<tr>
<td>10:20 am to 11:50 am</td>
<td>SESSION 6B: METAL HOMEOSTASIS AND IRON-SULFUR CLUSTERS</td>
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<tr>
<td>11:50 am to 1:30 pm</td>
<td>Lunch - IBS General meeting</td>
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<tr>
<td>1:30 pm to 3:40 pm</td>
<td>SESSION 7: SIDEROPHORES</td>
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siderophores with new properties and new functions from precursor-directed biosynthesis"
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<tr>
<td>9:30 am to 9:50 am</td>
<td>Kamila Stokowa-Soltys (University of Wroclaw, Poland) - &quot;F. nucleatum adhesion proteins increase the prooxidative activity of metal ions&quot;</td>
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<td>9:50 am to 10:10 am</td>
<td>Break</td>
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<tr>
<td>10:10 am to 11:10 am</td>
<td>SESSION 10: METALS AND THE MICROBIOME</td>
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<tr>
<td>10:10 am to 10:40 am</td>
<td>Sebastian Winter (UT Southwestern Medical Center, USA) - &quot;Precision editing of the gut microbiota&quot;</td>
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<td>10:40 am to 11:10 am</td>
<td>Manuela Santos (Université de Montréal, Canada) - &quot;Iron supplements modulate gut microbiota composition and probiotic efficiency in mice&quot;</td>
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<td>11:10 am to 11:20 am</td>
<td>Presentation of BioMetals 2020</td>
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<td>11:20 am to 11:40 am</td>
<td>Award session</td>
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<td>11:40 am to 11:50 am</td>
<td>Address from the IBS president</td>
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<td>11:50 am to 12:00 am</td>
<td>Closing remark</td>
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