# Microbubble Symposium – Programme 2014

## Monday 14th July 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>12:00 – 13:00</td>
<td>Registration &amp; refreshments</td>
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<tr>
<td>13:00 – 13:10</td>
<td>Stephen Evans Welcome</td>
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### Session 1: Microbubble Fabrication and Characterisation

**Chair: Stephen Evans**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>13:50 – 14:30</td>
<td>Jose Manuel Gordillo Sevilla University</td>
<td>Application of the physics of bubble generation in the design of specific procedure for the mass generation of monodisperse, micron-sized coated bubbles</td>
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<tr>
<td>14:30 – 14:45</td>
<td>Guillaume Lajoinie University of Twente</td>
<td>Controlled drug delivery with microbubbles, physical mechanism and applicability.</td>
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<td>14:45 – 15:05</td>
<td>Tea/Coffee</td>
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**Chair: Richard Bushby**

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<tr>
<th>Time</th>
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<tr>
<td>15:20 – 15:45</td>
<td>Valeria Garbin Imperial College London</td>
<td>Interaction of oscillating bubbles with lipid membranes</td>
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<tr>
<td>15:45 – 16:10</td>
<td>Neil Thomson University of Leeds</td>
<td>Mechanical interrogation of lipid-shelled therapeutic Microbubbles using atomic force microscopy</td>
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<tr>
<td>16:10 – 16:25</td>
<td>Denis Koltsov British Standards</td>
<td>Industrial developments and Standardisation of Fine Bubble Technology.</td>
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<td>16:55 – 18:25</td>
<td>Drinks and Posters</td>
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## Tuesday 15th July 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>18:25 – 20:25</td>
<td>Symposium Dinner</td>
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<tr>
<td>20:25 - onwards</td>
<td>Wine Tasting</td>
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Session 2: Microbubble Ultrasound Characterisation
Chair: Steven Freear

09:15 – 09:50
Juergen Willmann
Stanford University
Molecular imaging with ultrasound for earlier disease detection and treatment monitoring.

09:50 - 10:10
Tim Segers
University of Twente
Tim Devling
iThera Medical
Bubble sorting boosts the scattering to attenuation ratio of UCA STAR modelling and experiments.

10:10 – 10:20
Tea / Coffee

10:20 – 10:50
Michiel Postema
University of Bergen
Bubbles and science fiction.

10:50 – 11:15
T.G. Leighton
University of Southampton
The correct bubble population for the task.

11:15 – 11:55
Lunch

Session 3: Microbubble Translational Applications
Chair: Louise Coletta

13:30 – 14:10
Alexander Klibanov
University of Virginia
High-efficiency translatable formulation of gas-filled microbubbles for ultrasound molecular imaging, via pre-synthesis of ligand-PEG-phospholipid conjugate.

14:10 – 14:30
Klazina Kooiman
University Medical Centre, Rotterdam
Resolving lipid coating behaviour using high-speed fluorescence imaging.

14:30 – 14:50
Ian Miller
Royal College of Surgeons, Dublin, Ireland
Mechanistic Assessment of changes in tumour blood flow dynamics using contrast enhanced ultrasound following combination bevacizumab therapy.

14:50 – 15:20
Tea / Coffee
Chair: Tony Evans

15:20 – 15:40
Nicola Ingram
University of Leeds
Pop Goes the Bubble: Targeted, triggered drug delivery for the treatment of colorectal cancer.

15:40 – 16:30
Edward Leen
Hammersmith Hospital
Dynamic contrast-enhanced ultrasound: Monitoring of therapy

16:30 – 16:50
Sir Alex Markham
Closing remarks