Important facts

Date
January 20 and 21, 2012
Start: 12:45 h on January 20
End: 13:30 h on January 21

Venue
Fraunhofer Institute for Toxicology and Experimental Medicine ITEM
Nikolai-Fuchs-Str. 1
(please use the main entrance via Stadtfelddamm)
30625 Hannover, Germany
www.item.fraunhofer.de

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Secretariat at the Fraunhofer ITEM:
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How to find us

The Fraunhofer ITEM is located east of the city center, in Hannover’s Medical Park, and can easily be reached by car via the express highway A 37 (“Messechnellweg”).

Public transport is also available: If you fly into Hannover, a suburban train takes you directly from the airport to Hannover main train station (“Hauptbahnhof”) in 17 minutes. From the main train station, there are two different routes available to travel by underground and then by bus to the bus stop “Nobelring”, from where you can walk to the Fraunhofer ITEM in about 10 minutes. Right at this bus stop, you will also find the two hotels we recommend to workshop participants because of their proximity to the workshop venue: the Mercure Hotel Hannover Medical Park and the Hotel ibis Hannover Medical Park.

If you choose to take a taxi when you arrive in Hannover, please note that a ride from Hannover airport to the Fraunhofer ITEM will take at least 25 minutes, from the main train station between 15 and 30 minutes, depending on the time of the day.

For more detailed information on how to reach us by car or by public transport, please refer to our homepage at www.item.fraunhofer.de and click on “Contact”. A print version of our travel instructions can also be downloaded there. Workshop participants should go to the institute’s main entrance (via Stadtfelddamm).

Have a nice trip to the Fraunhofer ITEM!

Registration

The registration fee includes dinner on the first day of the workshop and is
100 euros for participants from academia and
200 euros for participants from industry.
We will be pleased to help you with hotel reservations.
For an easy and quick registration, please use the electronic registration form on our homepage (http://www.item.fraunhofer.de).

We will send you a confirmation as soon as possible.

Fax: +49 511 5350-155
We will send you your registration by January 7, 2012.

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MODELS OF ASTHMA AND COPD

Inflammatory lung diseases like asthma and COPD are a major health problem in western societies. Asthma is an allergic airway disease characterized by chronic inflammation and episodes or attacks of airway narrowing. COPD (chronic obstructive pulmonary disease) is a term for a disabling condition that includes different patterns of symptoms and varying amounts of damage and inflammation in the lung, usually as a result of smoking. The burden from asthma and COPD in western societies has increased over the past decades. However, the exact physiological mechanisms of the development of these respiratory disorders, in particular the complex interaction of chronic inflammation with resident lung cells, are still unknown.

For the understanding of these diseases and subsequent development of new effective drugs, the use of predictive models is essential. Since several newly developed, highly specific anti-inflammatory drugs were very effective in murine asthma models, but failed to be effective in patients, the discussion about adequate models emerged and continues to be relevant today.

It is the aim of this eleventh workshop "Models of Asthma and COPD", organized by the Fraunhofer ITEM in cooperation with the DFG Collaborative Research Center SFB 587 ("Immune Reactions of the Lung in Infection and Allergy") and GRK 1441 (Research Training Group "Regulation of the Allergic Inflammatory Response in Lung and Skin"), to discuss the current possibilities of experimental asthma and COPD research and compare different models and experimental approaches.

The workshop is open to all interested persons from industry, academia, and authorities.

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<thead>
<tr>
<th>Program</th>
<th>Saturday, January 21, 2012</th>
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<tr>
<td>1. News from models of asthma and COPD</td>
<td>3. Pharmacological lung targeting</td>
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<td>Chair: Armin Braun, Fraunhofer ITEM, Germany</td>
<td>Chair: Norbert Krug, Fraunhofer ITEM, Germany</td>
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<tr>
<td>13:00 New discoveries in asthma and COPD immunopathology and their implication for improved experimental models Jonas S. Erjefält, Lund, Sweden</td>
<td>09:00 Beyond the deposition of pharmaceutical aerosols: cellular and non-cellular barriers to pulmonary drug delivery</td>
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<td>13:30 Development mouse models of asthma: need to move beyond the Th2 paradigm to represent the heterogeneity of phenotypes and mechanisms in human disease Dominic Corkill, MedImmune, UK</td>
<td>Claus-Michael Lehr, Saarbrücken, Germany</td>
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<td>14:00 A tiered approach to test anti-inflammatory drugs in different species Sascha Knauf, Fraunhofer ITEM, Germany</td>
<td>09:30 Lung deposition in the deep lungs. What remains to be done?</td>
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<td>14:30 Coffee break</td>
<td>Gerhard Scheuch, Activaero, Germany</td>
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<td>15:00 Human ex-vivo models of asthma for the study of allergic inflammation Donna Davies, Southampton, UK</td>
<td>10:00 Coffee break</td>
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<td>15:30 Cigarette smoke concentration determines dynamics of inflammatory cell recruitment in an acute COPD model Ali Önder Yildirim, Munich, Germany</td>
<td>10:30 CGRP as a nerve-derived DC modulator Sabrina Voedisch, Fraunhofer ITEM, Germany</td>
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<td>16:00 Regulatory T cells in different types of airway inflammation Christian Taube, Leiden, The Netherlands</td>
<td>11:00 Muscarinic receptor signaling in the pathophysiology of asthma and COPD Reinoud Gosens, Groningen, The Netherlands</td>
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<td>16:30 Coffee break</td>
<td>11:30 Coffee break</td>
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<td>2. Imaging of the lung</td>
<td>5. Special issue “Early life and prevention of asthma”</td>
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<td>Chair: Jens Holffeld, Fraunhofer ITEM, Germany</td>
<td>Chair: Gesine Hansen, Hannover, Germany</td>
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<td>17:00 Hyperpolarized xenon-129 imaging of lung microstructure Isabel Dregely, Munich, Germany</td>
<td>12:00 Epigenetics, allergy and early environmental exposures – the role of DNA methylation and histone modifications in the development of asthma Dörthe A. Kesper, Marburg, Germany</td>
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<td>17:30 Proton MRI for non-invasive monitoring of asthma and COPD Jens Vogel-Claussen, Hannover, Germany</td>
<td>12:30 Human epigenetics in asthma and allergy Michael Kabesch, Hannover, Germany</td>
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<td>18:00 Microscopy-based assessment of structural alterations in mouse models of emphysema Matthias Ochs, Hannover, Germany</td>
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<td>18:45 Dinner at the Fraunhofer ITEM</td>
<td>6. Special lecture “Capital”</td>
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<td>Chair: Armin Braun, Fraunhofer ITEM, Germany</td>
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<td>13:00 Boehringer Ingelheim Venture Fund: How to generate innovation by corporate venturing? Frank Kalkbrenner, Boehringer Ingelheim Venture Fund, Germany</td>
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<td>13:30 End of workshop</td>
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