# Skills course

**Interventional bronchoscopy**  
19-21 November 2024  
Heidelberg, Germany  

## Tuesday, 19 November 2024

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 08:30–09:00 | Welcome and introduction  
| 09:00–09:05 | Course registration  
| 09:05–09:30 | Introductory lecture  

### Session 1 - Updates in IP (COPD and ILD)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 09:30–09:50 | Endoscopic lung volume reduction (ELVR): Valves, Coils, AeriSeal, BTVA etc. - K. Klooster  
| 09:50–10:10 | Interventional treatment of chronic bronchitis and exacerbations - K. Kontogianni  
| 10:10–10:30 | Update on lung volume reduction surgery - F. Eichhorn  
| 10:30–10:50 | Invasive procedures for patients with ILD - cryobiopsy – V. Poletti  
| 10:50–11:00 | Q&A - All faculty  
| 11:00–11:30 | Coffee break  

### Session 2 - COPD, ILD and lung cancer

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 11:30–11:50 | Case 1 – ELVR board; obstruction and hyperinflation – K. Klooster, K. Kontogianni, F. Eichhorn, C. P. Heussel  
| 11:50–12:10 | Case 2 – ELVR board; chronic bronchitis and exacerbations - K. Kontogianni, J. Brock, L. Klotz, C. P. Heussel  
| 12:10–12:30 | Case 3 – ILD - board - S. Dittrich, V. Poletti, C. P. Heussel,  
| 12:30–12:50 | Case 4 – Tumor board, peripheral node - F. Trudzinski, C. P. Heussel, L. Klotz  
| 12:50–13:00 | Q&A - All faculty  
| 13:00–14:00 | Lunch break  

---
**Session 3 - The peripheral node**

14:00–14:20  
Best approach to peripheral nodule diagnostics and treatment from radiologist perspective; photon counting CT, SBRT - C. P. Heussel

14:20–14:40  
Best approach to peripheral nodule diagnostics from ‘bronchologist’ perspective, navigation - F. Herth

14:40–15:00  
Robots in bronchoscopy - J. Brock

15:00–15:20  
Best approach to peripheral nodule treatment from ‘bronchologist’ perspective, microwaves, RFA, vapor ablation – A. Bugalho

15:20–15:40  
Best approach to peripheral nodule diagnostics and treatment from surgeons’ perspective - H. Winter

15:40–15:50  
Q&A - All faculty

15:50–16:30  
Coffee break

**Session 4 - The central lesion**

16:30–16:50  
Update linear EUS(B) technique, performance, complications - J. Annema

16:50–17:10  
Recanalization ‘hot and cold’ techniques - M. Munavvar

17:10–17:30  
Ultrasound guided pleural interventions – N. Rahman

17:30–17:40  
Q&A - All faculty
Wednesday, 20 November 2024

**Session 5 - Live cases and patient handling: Live demo 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:45</td>
<td>Pre-procedure</td>
<td>S. Dittrich</td>
</tr>
<tr>
<td>08:50</td>
<td>Procedure</td>
<td>F. Herth, A. Bugalho</td>
</tr>
<tr>
<td>09:20</td>
<td>Discussion and feedback</td>
<td>K. Kontogianni</td>
</tr>
<tr>
<td>09:30</td>
<td>Preparation of the patient</td>
<td>J. Brock</td>
</tr>
</tbody>
</table>

**Session 5 - Live cases and patient handling: Live demo 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:50</td>
<td>Pre-procedure</td>
<td>S. Dittrich</td>
</tr>
<tr>
<td>09:55</td>
<td>Procedure</td>
<td>K. Kontogianni, J. Annema</td>
</tr>
<tr>
<td>10:20</td>
<td>Discussion and feedback</td>
<td>J. Brock</td>
</tr>
<tr>
<td>10:30</td>
<td>Sedation in bronchoscopy</td>
<td>M. Scheiner</td>
</tr>
</tbody>
</table>

10:50–11:30 *Coffee break*

**Session 6 - More IP updates and live cases**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>Update on stents</td>
<td>F. Herth</td>
</tr>
<tr>
<td>11:50</td>
<td>Update on BAL</td>
<td>F. Trudzinski</td>
</tr>
<tr>
<td>12:10</td>
<td>Update on radial EBUS</td>
<td>M. Munavvar</td>
</tr>
<tr>
<td>12:30</td>
<td>ROSE and histopathology in IP</td>
<td>V. Poletti</td>
</tr>
<tr>
<td>12:50</td>
<td>Q&amp;A</td>
<td>All faculty</td>
</tr>
</tbody>
</table>

13:00–14:10 *Lunch break*
Session 6 - More IP Updates and Live cases: Live demo 3

Live demo 3 - F. Herth, V. Poletti
14:10–14:15 Pre-procedure - S. Dittrich
14:15–14:45 Procedure - F. Herth, V. Poletti
14:45–15:00 Discussion and feedback - J. Brock

Session 7 – New techniques and instruments in use and IP future

15:00–15:20 EBUS cryobiopsy of mediastinal and hilar lymph nodes - K. Kontogianni
15:20–15:40 Building up an endoscopy service – A. Bugalho
15:40–16:00 Single use bronchoscopes - M. Munavvar
16:00–16:20 Innovations in interventional pulmonology: pushing boundaries - F. Herth
16:20–16:30 Q&A - All faculty
Thursday, 21 November 2024

Session 8 - Workshops

GROUP A
WS1 – Stents – A. Bugalho and local faculty
WS2 – Lung volume reduction – K. Klooster and local faculty

GROUP B
WS3 - EUS (B) handling – K. Kontogianni and local faculty
WS4 - Flexible bronchoscopy and pleural catheres – N. Rahman and local faculty

GROUP C
WS5- Rigid bronchoscopy, APC and kryo – V. Poletti and local faculty
WS6 - Electromagnetic navigation – J. Brock and local faculty

09:00–09:45     Round 1
09:45–09:55     Rotation
09:55–10:40     Round 2
10:40–10:50     Rotation
10:50–11:35     Round 3
11:35–11:45     Rotation
11:45–12:30     Round 4

12:30–13:00     Lunch break

13:00–13:45     Round 5
13:45–13:55     Rotation
13:55–14:40     Round 6