Course Description

Course title: Cell Processing and Purification

Course organizer: Dr. Matthias Schiemann

Email address: matthias.schiemann@tum.de

Institute/Clinic: Institut für medizinische Mikrobiologie, Immunologie und Hygiene

Maximum number of participants: 15

Level (Basic or Advanced): basic and advanced

Prerequisites for attending (list all skills, techniques, theoretical knowledge needed to participate in this course, especially if this is an advanced course):

None

Describe the contents and context of this course (e.g.: Are you teaching certain techniques in the context of a specific disease or system? If so, how does that affect the way the course is taught? Or are you teaching certain techniques as widely used tools focusing on their theoretical background? How and why? Is the course about how to perform a technique, which techniques to use for a certain question or about developing the experimental design? Etc.):

Flow cytometry related course with focus to clinical cell-therapy. Flow cytometry basics - also advanced aspects and practical work included.

This workshop will cover a variety of topics related to cell processing and purification, including advances in instrumentation and techniques, software for FCS analysis, intracellular cytokine detection, advances in methods to measure T cell proliferation and advances in the usage of reversible reagents. We have invited experts to discuss their work in an informal lecture setting, discussion and workshop groups.

List the techniques that will be taught in this course:

- Flow cytometry and cell sorting and experimental setup
- Software for FCS analysis
- Data analysis/statistic
- practice on intracellular cytokine staining, methods to measure T cell proliferation and reversible reagents, clinical cell processing

Type and Duration of Exam:

written Exam – multiple Choice – 90 minutes
Provide a schedule of the course including the following information:

<table>
<thead>
<tr>
<th>Day/Date</th>
<th>Location</th>
<th>Start Time</th>
<th>End Time</th>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.09.2016</td>
<td>MIH</td>
<td>9.00</td>
<td>16.00</td>
<td>basics flow cytometry and cell sorting</td>
<td>Matthias Schiemann, Markus Gerhard</td>
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<tr>
<td>19.09.2016</td>
<td>MIH</td>
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<td>FCS analysis, data analysis/statistic Intracellular cytokine staining</td>
<td>Kilian Schober, Michael Neuenhahn</td>
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<tr>
<td>20.09.2016</td>
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<td>16.00</td>
<td>reversible reagents - clinical cell processing T cell proliferation</td>
<td>Veit Buchholz</td>
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<tr>
<td>21.09.2016</td>
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<td>16.00</td>
<td>T cell proliferation FACS, GMP and clinical cell processing</td>
<td>Martin Hildebrand</td>
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<tr>
<td>22.09.2016</td>
<td>MIH</td>
<td>9.00</td>
<td>16.00</td>
<td>QC and viability examination and discussion</td>
<td>Immanuel Andrä, all Tutors</td>
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</tbody>
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