Biocenter Oulu Virus Core Laboratory organizes a practical course:

"Retrovirus-mediated RNA interference"

Place Biocenter Oulu Meeting Room 487B, 4th floor of the Main Building of the Medical Campus and the Biocenter Oulu Laboratories of the Main Building of the Medical Campus, University of Oulu, Aapistie 5A, P.O.Box 5000, FIN-90014 Oulu, Finland

Time 9th to 13th May, 2011

Credits 3.0 ECTS

Organisers Biocenter Oulu Doctoral Programme, Biocenter Oulu Virus Core Laboratory, University of Oulu, P.O. Box 5000, FIN-90014 University of Oulu, Finland

Type of course A hands-on course on retrovirus-mediated RNA interference technology including general lectures on viral vectors and RNA interference.

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Email aki.manninen@oulu.fi
URL: http://www.biocenter.oulu.fi/

Registration Registration obligatory. Only 12 participants are accepted. The application with a short description of your research project should be sent to Aki Manninen by April 29, 2011. The course is in principle open for everybody, but the preference will be given to Ph.D. students whose projects best benefit from the excercises carried out during the course.

PRELIMINARY PROGRAM

<table>
<tr><th>Time</th><th colspan="2">Mon 9.5.2011</th><th colspan="2">Tue 10.5.2011</th><th colspan="2">Wed 11.5.2011</th><th colspan="2">Thu 12.5.2011</th><th>Fri 12.5.2011</th></tr>
<tr><td rowspan="2">9-12</td><td colspan="2">Intro lecture – Course material distribution – Assignment of Journal Club articles for the groups</td><td>Groups 1&2:
• Medium change
• 2nd infection</td><td>Groups 3&4:
• cDNA synthesis</td><td rowspan="2">Groups 1&2:
• qPCR
• designing shRNAs</td><td rowspan="2">Groups 3&4:
• 1st virus collection
• 3rd infection
• antibiotic selection</td><td rowspan="2">Group 1&2: 2nd virus collection + 2nd selection (dead cells washed)</td><td rowspan="2">Group 3&4: design your own shRNA</td><td>Check up of antibiotic selected cells</td></tr>
<tr><td>Groups 1&2:
• Transfection of packaging cells
• 1st infection of target cells</td><td>Groups 3&4:
• RNA extraction</td><td>Groups 1&2:
• cDNA synthesis</td><td>Groups 3&4:
• Medium change
• 2nd infection</td><td>Journal club on selected papers
(1 article / group) 15min + discussion
Course wrap up</td></tr>
<tr><td>12-13</td><td colspan="2">Lunch</td><td colspan="2">Lunch</td><td colspan="2">Lunch</td><td colspan="2">Lunch</td><td>Lunch</td></tr>
<tr><td>13-14</td><td colspan="2">Common lecture: Viral vectors</td><td colspan="2">Common lecture: Designing shRNAs</td><td colspan="2">Common lecture: RNAi & applications</td><td colspan="2">qPCR analysis of KD efficiencies</td><td rowspan="2"></td></tr>
<tr><td>14-17</td><td>Groups 3&4:
• Transfection of packaging cells
• 1st infection of target cells</td><td>Groups 1&2:
• RNA extraction</td><td></td><td></td><td>Groups 1&2:
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