### M Sc Molecular Life Sciences

**Special qualification Cell and Molecular Biology**

**Program for fall semester**

-> Please always check KSL for details and actual dates!

<table>
<thead>
<tr>
<th>KSL Nr.</th>
<th>Eligible for special qualification module CMS (or for general module)</th>
<th>ECTS</th>
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</thead>
</table>
| 2216    | "Oomics" - from genomes to metabolomes, Thu 14-16, ICB  
          Prof. Dr. C.R. Largiadèr, Dr. Rémy Bruggmann | 3    |
| 2222    | Dynamics of cellular contacts: Cell-cell contacts and cell motility, Thu 16-18, ICB  
          Prof. B. Engelhardt, PD J. Stein, and others | 3    |
| 4582    | Molecular Genetics of Model Organism Development (BEFRI), Tue 15-17, UniFri and UniBe  
          Prof. B. Suter, Dr. A. Puoti | 3    |
| 11470   | Cellular and Genetic Networks (BEFRI), Tue 17-19, UniFri and UniBe  
          Prof. P. Meister, Dr. B. Egger | 3    |
| 6983    | The genetic code, Thu 08-10, weeks 8-14, DCB (not shown in the table)  
          Prof. A. Schneider | 1.5  |
| 412058  | RNA Biology I (every 4th semester), Thu 16-18, DCB  
          Prof. N. Polacek | 3    |
| 412073  | RNA Biology II (every 4th semester), Thu 16-18, DCB  
          Prof. N. Polacek | 3    |
| 2221    | Colloquium on host-pathogen interactions, Fri 16.30-18.30, monthly, ICB  
          Prof. I. Roditi | 4 for 2 sem |
| 11502   | Molecular Life Science Journal Club, Wed 9-10, bi-weekly, DCB  
          Dr. A. Eberle | 2 for 2 sem |
| 4542    | Pathogenesis and evolution of infectious diseases, Fri 14-16, DCB  
          Prof. S. Hapfelmeier et al. | 3    |
| 3809    | Cellular and molecular immunology, Thu 10-12, ICB  
          Prof. Ch. Müller et al. | 3    |
| 414172  | Transporter Biology and Chemistry, Tue and/or Thu 17-19, DCB (not shown on table)  
          Prof. J.-L. Reymond | 3    |
| 435913  | From organelle biochemistry to human disease, Tue 10-12, ICB  
          PD Dr. JM Nuoffer et al. | 1.5  |

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<th>KSL Nr.</th>
<th>Eligible for general module only</th>
<th>ECTS</th>
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| 10437   | Advanced plant biology (B), lectures only: Mon 13-15, Thu 9-11, 3 separate blocks, IPS  
          Prof. C. Kuhlemeier, U. Feller, D. Rentsch | 5    |
| 10440   | Advanced plant biology*, lectures: Mon 13-15, Thu 9-11, practicals: Thu 11-17, Fri 9-17, 3 separate blocks, IPS  
          Prof. C. Kuhlemeier, U. Feller, D. Rentsch | 15   |
| 2225    | Laboratory safety. Block course, 3 days, registration in KSL, IPS  
          Dr. P. von Ballmoos, Prof. Dr. D. Rentsch | 1.5  |
| 3019    | Principles of nucleic acids, Fri 10-12, weeks 1-7, DCB  
          Drs S. Langenegger, O. Khorev | 1.5  |
| 3021    | Basic medicinal chemistry - principles of drug action, Fri 10-12, weeks 8-14, DCB  
          Dr. C. Fuhrer | 1.5  |
| 10610   | Chemical modification of proteins, Fri 13-15, DCB, weeks 8-14, DCB  
          Prof. M. Lochner | 1.5  |
| 26795   | Therapeutic Proteins and Peptides, Wed 8-10, DCB  
          Prof. J.-L. Reymond | 3    |
| 24822   | Neurochemistry, Wed 10-12, DCB  
          Dr. S. Uwryler | 3    |
| 1381    | Human genetic history. Weeks 8-14, Wed 13-15, Haller Auditorium  
          Prof. L. Excoffier | 1.5  |
| 25469   | Neurogenetics, Tue 13-15, UniFri and UniBe  
          Dr. B. Egger | 3    |
| 25455   | Mikroskopische Methoden mit Praktikum; Tue 16-17 and 3x Tue 13-16, IZB (not shown on time table)  
          Dr. M. Brauchle | 3    |
| 9256    | Cutting Edge Microscopy. Microscopy Imaging Center (MIC), Fri 8-10, institute of Anatomy  
          Coordination PD Dr. R. Lyck | 3    |

The special qualification module (SPQ-CMS) must comprise 15 ECTS points from the learning units shown in bold face.

For the general module (GEN), additional credits can be accumulated from master courses of all five specialisations. This module may also contain up to 10 ECTS points in learning units from the BSc programs in Biology, Biochemistry and Molecular Biology, or Chemistry and Molecular Sciences. If a learning unit is not already programmed in KSL, students should ask the head of studies for...
approval. On request, learning units from outside institutions and other programs (e.g. UNIFR or the Swiss Institute for Bioinformatics) may also be included.

The total number of credits of both modules must be at least 30 ECTS points.

Additionally, while the students are enrolled in the program, they must follow two hours per week of seminar series according to recommendations made by the prospective MSc supervisor. * Please note that space restrictions may apply to lab courses.

**Time table for fall semester**

*Learning units shown in dark blue qualify for the module SPQ-CMB*

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<th>Monday</th>
<th>Tuesday</th>
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<th>Thursday</th>
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<tbody>
<tr>
<td>08.15-09.00</td>
<td></td>
<td>Therapeutic proteins and</td>
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<td>Cutting Edge Microscopy</td>
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<td>09.15-10.00</td>
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<td>peptides</td>
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<td>10.15-11.00</td>
<td>Cell Biology Seminars</td>
<td>From organelle biochemistry to human disease week 1-7</td>
<td>Neurochemistry</td>
<td>Advanced plant biology</td>
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<td>11.15-12.00</td>
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<td>12.30-13.30 Cell Biology Progress Reports</td>
<td>Principles of nucleic acids</td>
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<td>12.15-13.00</td>
<td>Advanced plant biology</td>
<td>Neurogenetics</td>
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<td>Basic medicinal chemistry - principles of drug action</td>
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<td>13.15-14.00</td>
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<tr>
<td>14.15-15.00</td>
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<td>&quot;Omics&quot;</td>
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<td>Pathogenesis and evolution of infectious diseases</td>
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<td>15.15-16.00</td>
<td>Biochemistry seminars</td>
<td>Molecular Genetics of Model Organism Development (BEFRI)</td>
<td>Dynamics of cellular contacts</td>
<td>Colloquium on host-pathogen interactions</td>
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<td>16.15-17.00</td>
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<td>RNA Biology I or RNA Biology II</td>
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<tr>
<td>17.15-18.00</td>
<td>Cellular and Genetic Networks (BEFRI) (17-19)</td>
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