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|-----------------|--------------------------|---|--|
|                 | <b>Thursday<br/>9.11</b> |   |  |
| 8:50 -<br>9:00  |                          | Symposium organizers  | Opening remarks  |
|                 |                          | <b>First session</b>  | <b>Forming molecular complexity</b>  |
| 9:00-<br>10:00  |                          | <b>Paul Higgs</b>   | <b><u>Keynote: Three Ways to Make an RNA Sequence: Linking Physics, Chemistry and Biology in the RNA World</u></b> |
| 10:00-<br>10:20 |                          | <b>BREAK</b>  |  |
| 10:20-<br>10:55 |                          | Pier Luigi Luisi  | What is Life?  |
| 10:55-<br>11:30 |                          | John Glass  | Design, Construction, and Analysis of a Synthetic Minimal Bacterial Cell   |
| 11:30-<br>12:05 |                          | Andrei Lupas  | Proteins from peptides   |
| 12:05-<br>13:00 |                          | <b>LUNCH</b>  |  |
|                 |                          | <b>Second session:</b>                                      | <b>Observing evolution</b>   |
| 13:00-<br>13:35 |                          | William Martin  | <i>Early evolution of microorganisms: Geochemical origin of life</i>   |
| 13:35-<br>14:10 |                          | Olivier Tenallion   | <i>TBA</i>   |
| 14:10-<br>14:45 |                          | Ellen Nisbet  | Gene expression in a remnant chloroplast: The <i>Plasmodium</i> apicoplast   |
| 14:45-<br>15:05 |                          | <b>BREAK</b>  |  |
|                 |                          | <b>Third session:</b>                                       | <b>Building blocks of life</b>   |
| 15:05-<br>15:40 |                          | Yilian Ding   | In vivo RNA structure profiling reveals novel mechanisms of post-transcriptional gene regulations                  |
| 15:40-<br>16:40 |                          | <b>Sarah Teichmann</b>                                      | <b><u>Keynote: Understanding cellular heterogeneity</u></b>  |
| 16:40-<br>17:10 |                          | <b>Redbull Networking break</b>                             |  |
| 17:10-<br>18:10 |                          | John Glass, Ivo Brant,<br>Brian R. Davis, Anna Lisa<br>Paul | <b>Science-ish (a round table discussion)</b>  |

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|-----------------|-------------------------|------------------------|--|
|                 | <b>Friday<br/>10.11</b> |                        |  |
| 9:00-<br>10:00  |                         | Mike Snyder            | <b><u>Keynote: Personal Omics profiling: Wearables and human disease</u></b>                             |
| 10:00-<br>10:20 |                         | <b>BREAK</b>           |  |
|                 |                         | <b>Fourth session:</b> | <b>Expanding the toolkit</b>   |
| 10:20-<br>10:55 |                         | Wouter de Laat         | <i>How genome structure influences genome function (using high throughput 3C and sequencing methods)</i> |
| 10:55-<br>11:30 |                         | Ivo Brants             | Monsanto and agricultural innovation   |
| 11:30-<br>12:05 |                         | Anna-Lisa Paul         | The physiological adaptation of plants to spaceflight – navigating in a novel environment                |
| 12:05-<br>13:15 |                         | <b>LUNCH</b>           |  |
|                 |                         | <b>Fifth session:</b>  | <b>Presenting the future</b>   |
| 13:15-<br>13:50 |                         | Steve Long             | <i>Improving photosynthesis in crops, plants engineered to replace oil</i>                               |
| 13:50-<br>14:25 |                         | Brian R. Davis         | <i>Development of stem/progenitor cell-based approaches (editing of human pluripotent stem cells)</i>    |
| 14:25-<br>15:00 |                         | Robert Ferl            | <b><u>Plants in the exploration schema – How do we get to the vision?</u></b>                            |
| 15:00-<br>15:20 |                         | <b>BREAK</b>           |  |
| 15:20-<br>16:20 |                         | Werner Gruber          | <b><u>TBA</u></b>  |
| 16:20-<br>16:40 |                         | Symposium organizers   | Closing remarks  |
| 16:40-<br>17:40 |                         | Ines Crisostomo        | PhD student awards   |
| 18:00-          |                         | dinner and party       |  |