1. In *Catharanthus roseus* cell suspension cultures salicylic acid is synthesized from isochorismate (this thesis).

2. Salicylic acid and 2,3-dihydroxybenzoic acid in *Catharanthus roseus* cell cultures are produced at different times and/or in different compartments (this thesis).

3. Purification is a critical step in a retrobiosynthetic experiment of a plant hormone like salicylic acid, which is produced in the cells in trace amounts (this thesis).

4. Quantitative changes in metabolites levels observed through time as found by NMR-based metabolomics can be seen as an indicator for major rerouting of precursors in the metabolic network (this thesis).

5. In metabolomics, the difference between metabolic profiling and metabolic flux analysis (fluxomics) is like taking a picture or making a film.

6. Basic science is the substrate for healthy growth of applied science, but commercial people seem to consider it less important than the applied science.

7. Different genotypes may be found in a cell suspension culture derived from one plant, showing that the same environment does not guarantee that all cells will differentiate in the same way.

8. Not only genotype, but also communication with the environment contributes to differentiation.

9. The presence or the absence of something in a living organism must have a reason.

10. The more one learns about life, the more one is amazed by its complexity and the more one seeks the meaning of life.

11. Unconsciously people seem to place themselves outside nature and believe that they can control nature.

12. The Netherlands is a proof that a good administration and law-enforcement in combination with norms like justice and solidarity result in prosperity for most of the people in the country.

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