

**Algorithms in Genome Research
Winter 2009/2010**

Exercises

Number 9, Discussion: 2010 January 08

1. Describe typical goals of a DNA microarray experiment.
2. What are the main difficulties in probe selection for a DNA microarray?
3. Is the Microarray Production Shortest Common Supersequence Problem important? Motivate your answer.
4. Find the/a shortest deposition sequence for the following set of probes:
GTACCGA, TAGACTG, GAGATGA, CAGCTAA
Which deposition sequence that is a period of length 4 gives the smallest number of masks?
5. List as many sources as possible that may cause noise in a DNA microarray experiment.
6. Which recent developments may decrease the importance of microarrays in the future?

Frohe Weihnachten und einen guten Rutsch!!!