Term Project (BioMEMS, Spring 2016)

Each student needs to work on a topic related to BioMEMS and Microfluidics. If you are participating in research, you are welcome to pick the topic related to your research. You need to conduct a very thorough literature survey of the selected topic including the most recent publications and provide critical reviews in both the presentation and the report.

- **Topic (April 29):** You should email Prof. Wang the topic of your project by April 29.
- **Report (Due May 13):** The report should cover (i) the background, (ii) comprehensive review of the start-of-art technologies of the selected topic, and (iii) discussions. The length of the report is up to 10 pages (single spacing, 12 font size).

Some suggested topics:

- Microfluidic single-cell analysis
- Digital PCR
- Microfluidic antibiotic susceptibility test for infectious pathogens
- Microfluidic point-of-care diagnostics
- Organ on a chip
- Micro/nano-channel chromatography
- High throughput screening
- Library preparation for next-gen DNA sequencing
- Cell separation, e.g. separation of bacterial cells from blood
- Optofluidics