Supplementary Materials

Multi-objective Optimization of Experiments using Curvature and Fisher Information Matrix

Erica Manesso$^{1,2}$, Srinath Sridharan$^3$, Rudiyanto Gunawan$^{1,2,*}$

1 Institute of Chemical and Bioengineering, ETH Zurich, 8093 Zurich, Switzerland
2 Swiss Institute of Bioinformatics, 1015 Lausanne, Switzerland
3 Saw Swee Hock School of Public Health, National University of Singapore, Singapore 117549, Singapore

* rudi.gunawan@chem.ethz.ch

Figure S1: Pareto frontier of the MOO MBDOE using curvatures and a FIM-based criterion: (A) D-optimal, (B) A-optimal, (C) E-optimal, (D) modified E-optimal. The axes are normalized in the range 0 to 1. The optimal design corresponds to the solution nearest to the origin according to Euclidean distance (shown in magenta).
Figure S2: Pareto frontier of the MOO MBDOE using correlation and a FIM-based criterion: (A) D-optimal, (B) A-optimal, (C) E-optimal, (D) modified E-optimal. The axes are normalized in the range 0 to 1. The optimal design corresponds to the solution nearest to the origin according to Euclidean distance (shown in magenta).