Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: The morphome. The raw morphome data and the list of 624 morphome

features measured from all 24 combinations of cell type and nanotopography.

File Name: Supplementary Data 2

Description: Gene expression data. The raw expression levels of 14 genes measured from all

24 combinations of cell type and nanotopography.

File Name: Supplementary Data 3

Description: Morphome features varied across cell type. The raw morphome data consisting of 185 features significantly varied across cell type. One-way ANOVA was used to determine the morphome features that significantly varied across 6 different cell types.

File Name: Supplementary Data 4

Description: Hierarchical clustering of morphome features. Membership of morphome

features into specific clusters as determined through silhouette analysis.

File Name: Supplementary Data 5

Description: Fitted parameters for models. Parameters beta were obtained from each Bayesian linear regression model fitted to predict expression level of a single gene using

morphome features.