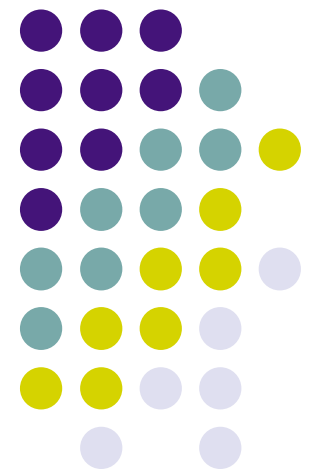
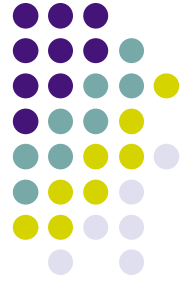


HDF Attachment and Proliferation *in vitro*

YYY

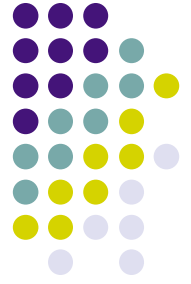
February 11, 2009





Objective

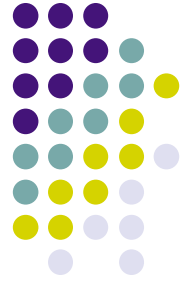
- To qualitatively and quantitatively assess the attachment of Human Dermal Fibroblasts (HDFs) on different substrates *in vitro*
- To qualitatively assess the proliferation of HDFs under different serum concentrations in media



HDF Attachment Assays

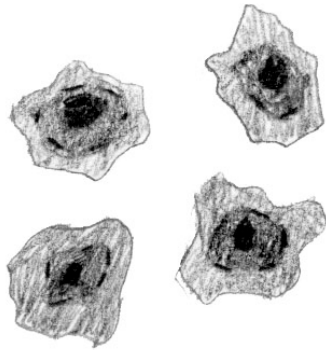
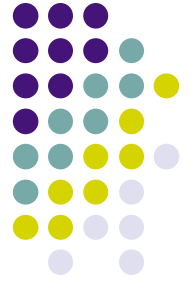
- Determining the effect of Fibronectin
 - Cells plated on non-TC-treated 24 well plates
 - Fibronectin brushed over none, part, or all of well
 - Attachment qualitatively assessed after 2 hours using the light microscope
- Qualitative assessment of different surfaces
 - Cells plated on TC-treated, untreated polystyrene, and Fn-coated polystyrene 24 well plates
 - Attachment quantitatively assessed after 30, 75, 150, after 240 minutes using the light microscope

Cell Proliferation and Serum Concentrations in DMEM

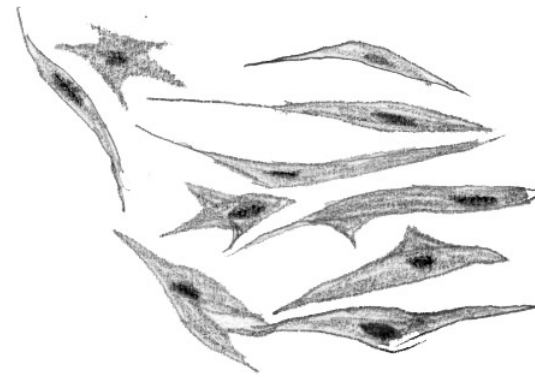


- Cells plated on TC-treated 24 well plate
- DMEM added with 1%, 5%, or 10% serum
- Cell number determined after 4 hours, 2 days, 5 days, and 7 days using data from the Coulter Counter

Fibronectin Promotes Adhesion and Spreading

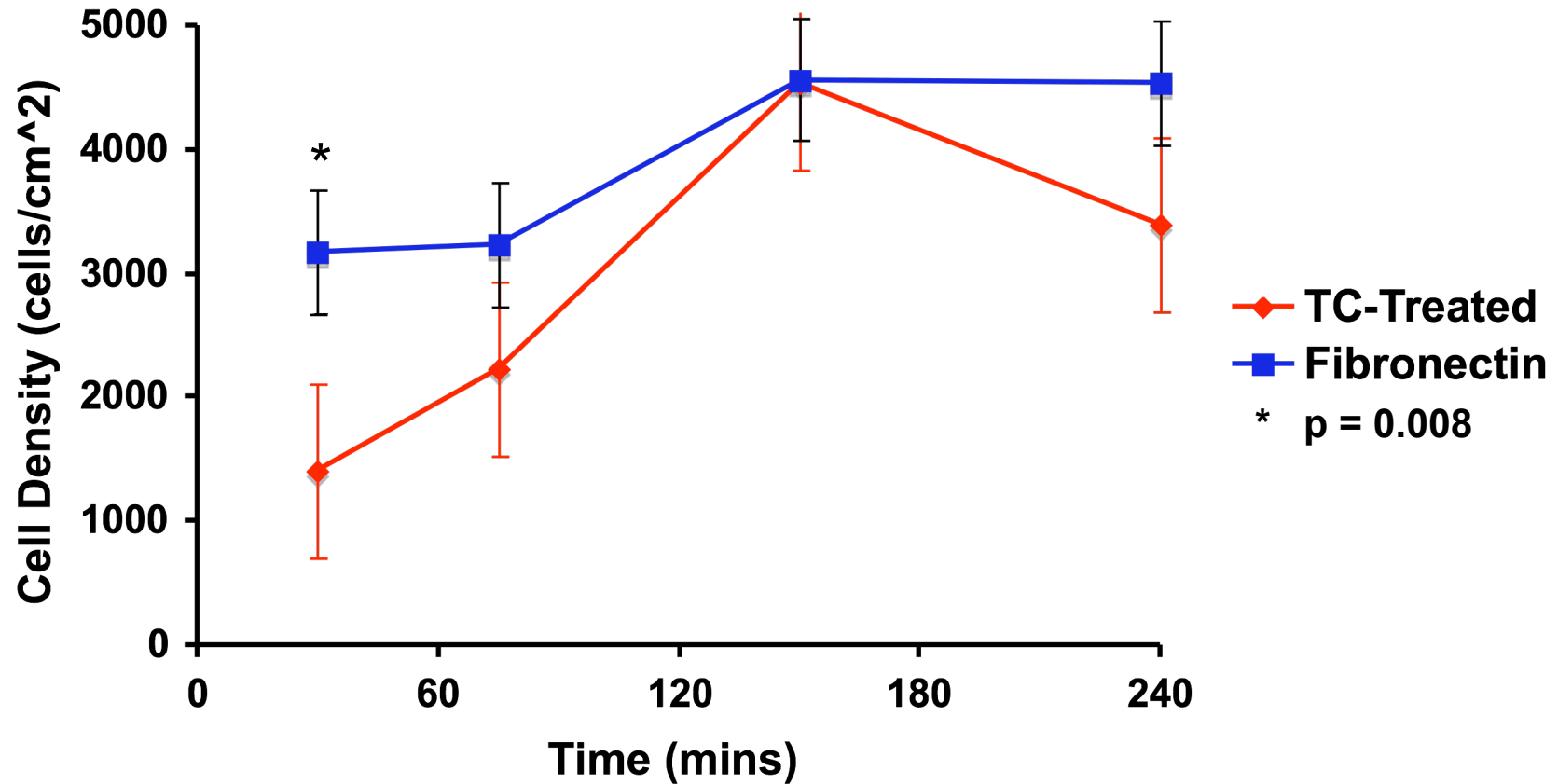


Untreated TC well plate

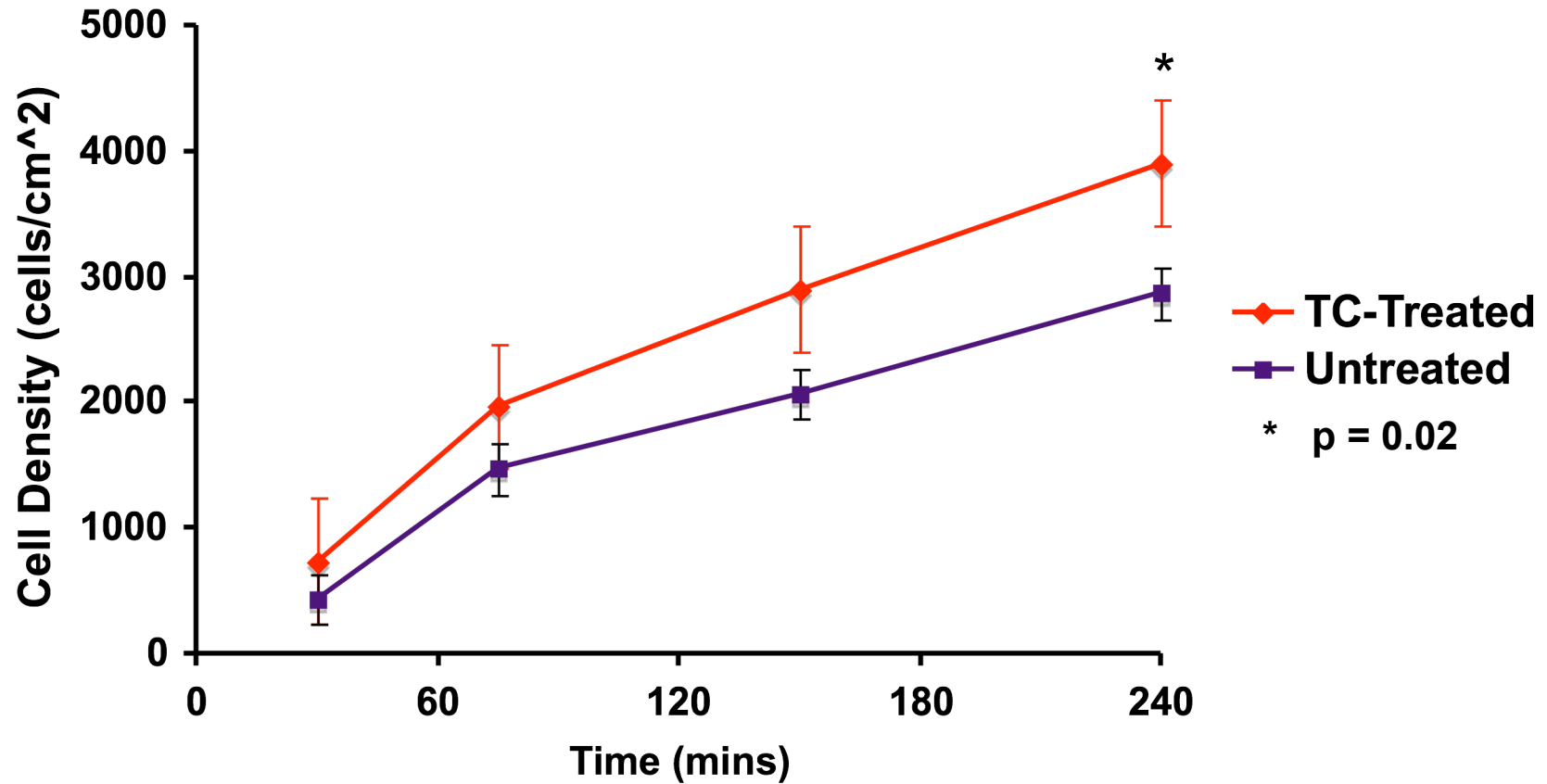
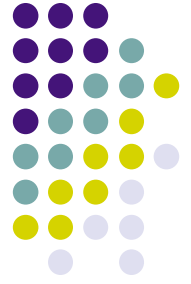


Untreated TC well plate coated with Fibronectin

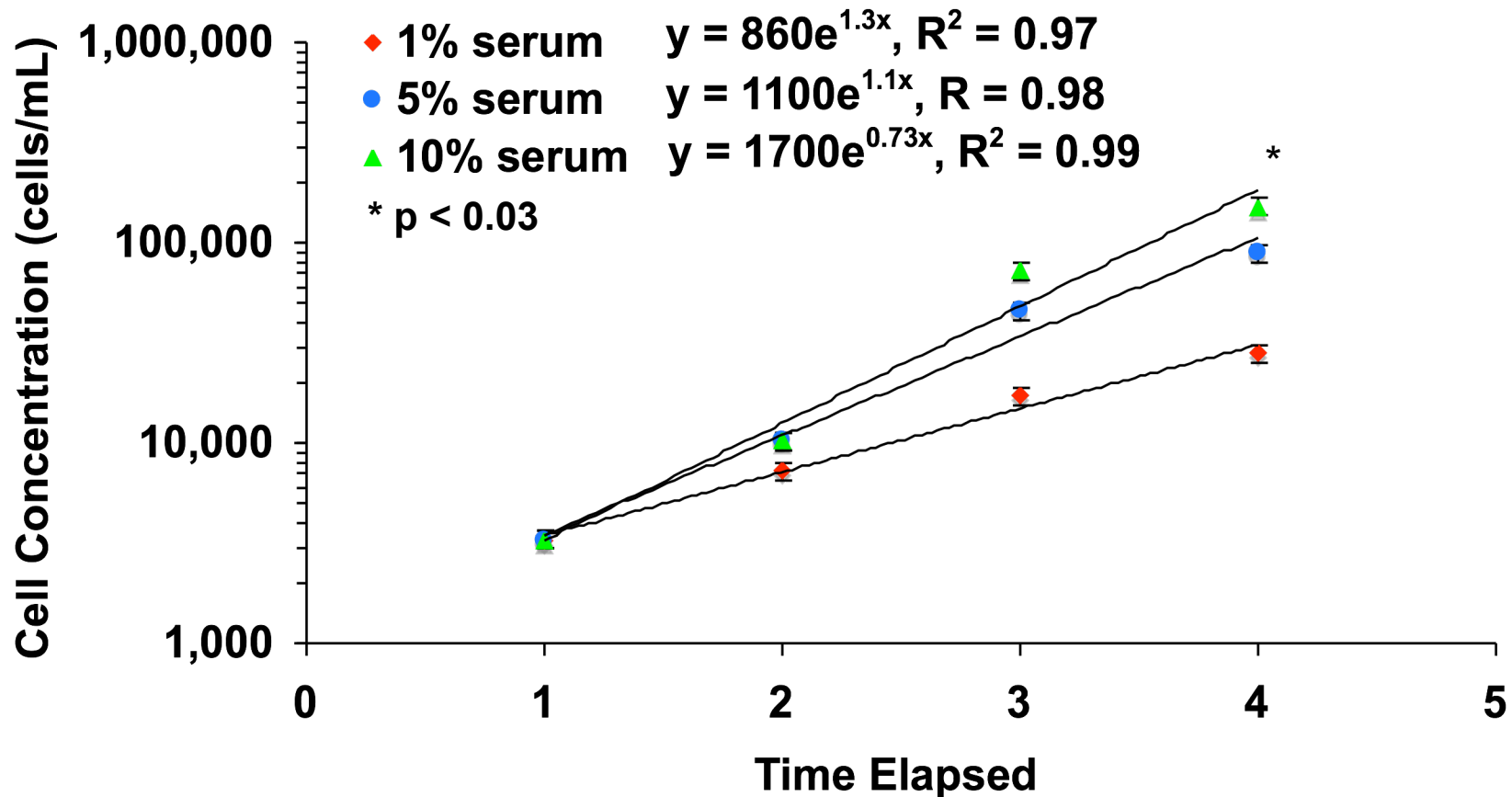
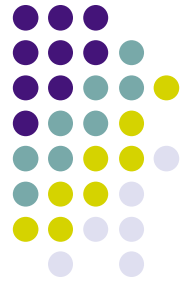
Fn Promotes Initial Adhesion More than TC-Treated Plates



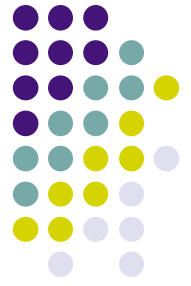
TC-Treated Plates Promote More Adhesion Than Untreated



HDF Proliferation in 10% Serum is Higher than 5% or 1%



Results



- TC-treated and Fn coated plates promote HDF adhesion and spreading
- Fn coatings promote adhesion more than TC-treated plates
- Cell proliferation rates are highest in 10% serum DMEM when compared to 5% or 1%
 - Due to signals that are present in serum and encourage proliferation

References

- Data on slide 7 is from XXX
- All other data is my own

