**EXAMPLE:**

**FACILITIES AND RESOURCES**

**FACILITIES: List the facilities to be used and briefly indicate their capacities, pertinent capabilities, relative proximity and extent of avail­ability for the project.**

**Laboratory:**

UCR Stem Cell Core houses a tissue culture suite with three clean culture rooms and five tissue culture biosafety cabinets (level II) for cell culture. All hoods are certified for culturing human cells, generating virus, transfection and virus transduction. Human embryonic stem cells (HESCs), induced pluripotent stem cells (iPSCs), mouse embryonic fibroblast and human foreskin fibroblast cells will be cultured in the Stem Cell Core.

A standard inverted microscope is available in each tissue culture room, one of which with fluorescence optics is also available.

Fume hood for handling hazardous chemicals is available.

Biostation CT for live cell imaging is located in the tissue culture suite.

An inverted microscope with fluorescence optics and high-resolution deconvolution module (Nikon Eclise TI) and a dissecting microscope (Nikon SMZ 800) are located in Microscope Room in the Stem Cell Core.

The Core has an Analytical Room for conducting molecular work. Analytical Room houses a 96-well PCR machine, 384-well real time quantitative PCR, gel imaging instrument, a 3-color and UV Cell Lab SC Quanta flow cytometer (Becton Dickinson), a luminometer and a Qubit fluorometer.

A Stem Cell Core Annex, small extension of the Core and is merely 100 feet away. The Annex houses a Luminex instrument.

**Computer:**

The Core has three Windows PCs for analysis of images and videos collected from Biostation CT and three Window PCs connected to fluorescence and stereomicroscopes.

**Other:**

Genomics Core, located directly adjacent to the Stem Cell Core offers other instruments including a FACS cell sorter, Applied Biosystems and Illumina DNA Sequencer, and Affymetrix Genechip services (if needed).

Microscopy Core, also located directly adjacent to the Stem Cell Core houses several confocoal microscopes and a scanning electron microscope (if needed).

**MAJOR EQUIPMENT: List the most important equipment items already available for this project, noting the location and pertinent capabilities of each.**

A 384-well real time quantitative PCR instrument, Stem Cell Core for high throughput quantitative PCR gene expression analysis.

An inverted microscope with fluorescence optics and high-resolution deconvolution module (Nikon Eclise TI) for immunocytochemistry analysis, Stem Cell Core.

A magnetic activated cell sorter (MACS) instrument, Stem Cell Core. MACS instrument will be used for isolating differentiated cells following incubation with magnetic bead-conjugated primary or secondary antibodies.

A Cell Lab SC Quanta flow cytometer (Becton Dickinson) capable for 3-color fluorescence and cell cycle analysis (with UV lamp equipped), Stem Cell Core.

Biostation CT real-time cell imaging bioincubator, capable for capturing images of cultured cells over an extended period of time and CL Quant bioinformatic tools are located in the Stem Cell Core.

A Luminex instrument for protein and cytokine multiplexing is located in the Stem Cell Core Annex (merely 100 feet away from the Core).

A BD FACSARIA III cell sorter (BD Biosciences) for fluorescence-activated cell sorting is located in Genomics Core, directly adjacent to the Stem Cell Core.