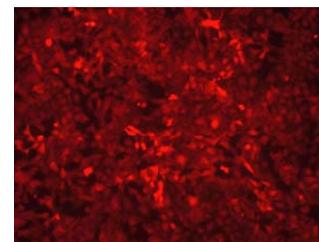
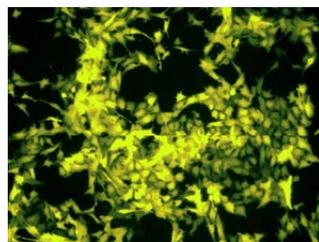
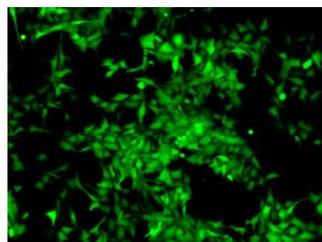


# *Multicolored Fluorescent Cell Lines for drug discovery*

**Enrique Zudaire  
Angiogenesis Core Facility  
NCI, NIH**

**In collaboration with:**

**Marta Aparicio Miguel, Changge Fang and Frank Cuttitta  
Angiogenesis Core Facility, NCI, NIH**



# The need

## Translational research and drug discovery require quantitative bio-imaging of complex co-culture systems

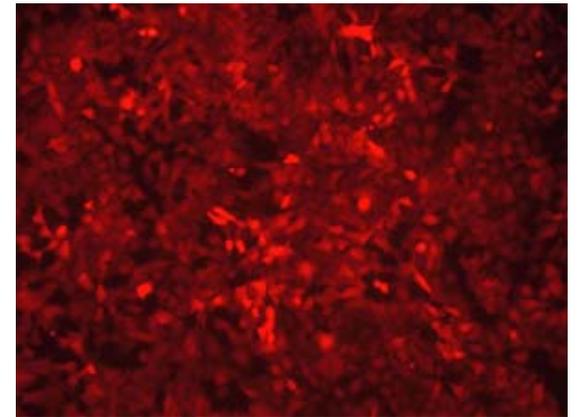
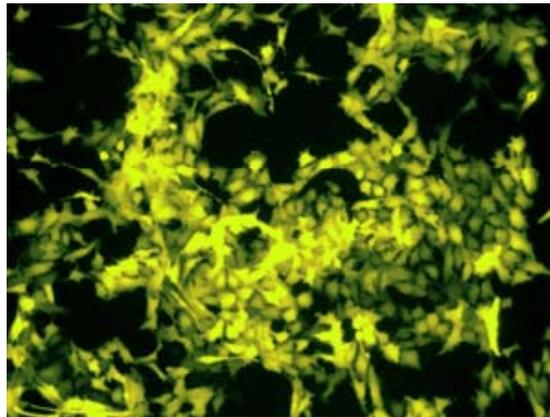
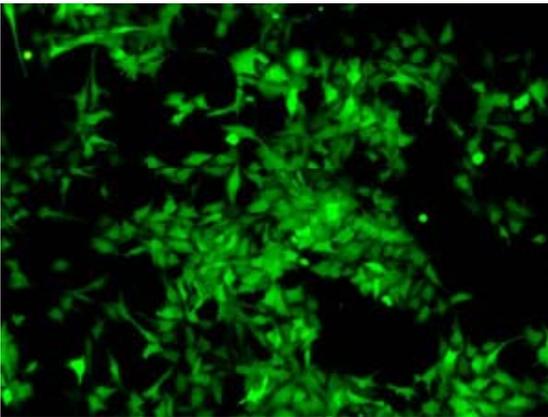
1. Single cell paradigm is not valid anymore
2. Cell-cell interactions
3. Complex *in vitro* systems which mimic the *in vivo* environment
4. Easy imaging, High Throughput Screening, fast, affordable

# The technology

## Fluorescent reporter cell lines, new assay systems, new software

1. Easy, fast, affordable, real time assessment of undisturbed cell behavior
2. Allows to generate complex co-culture systems
3. Suitable for High Throughput Screening
4. Designed to empower bio-imaging capabilities

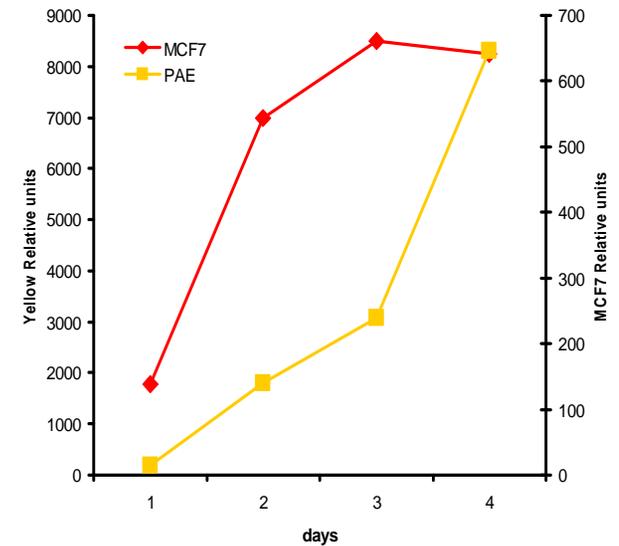
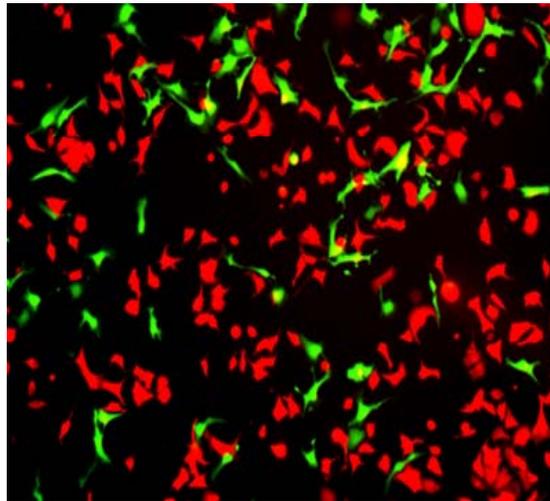
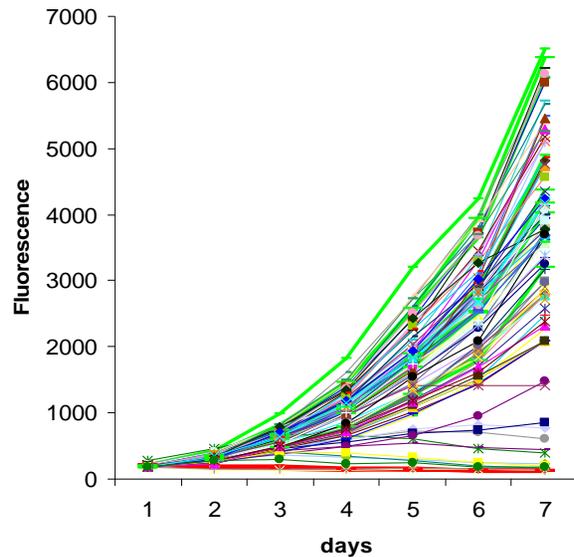
# *Technology and commercial applications*



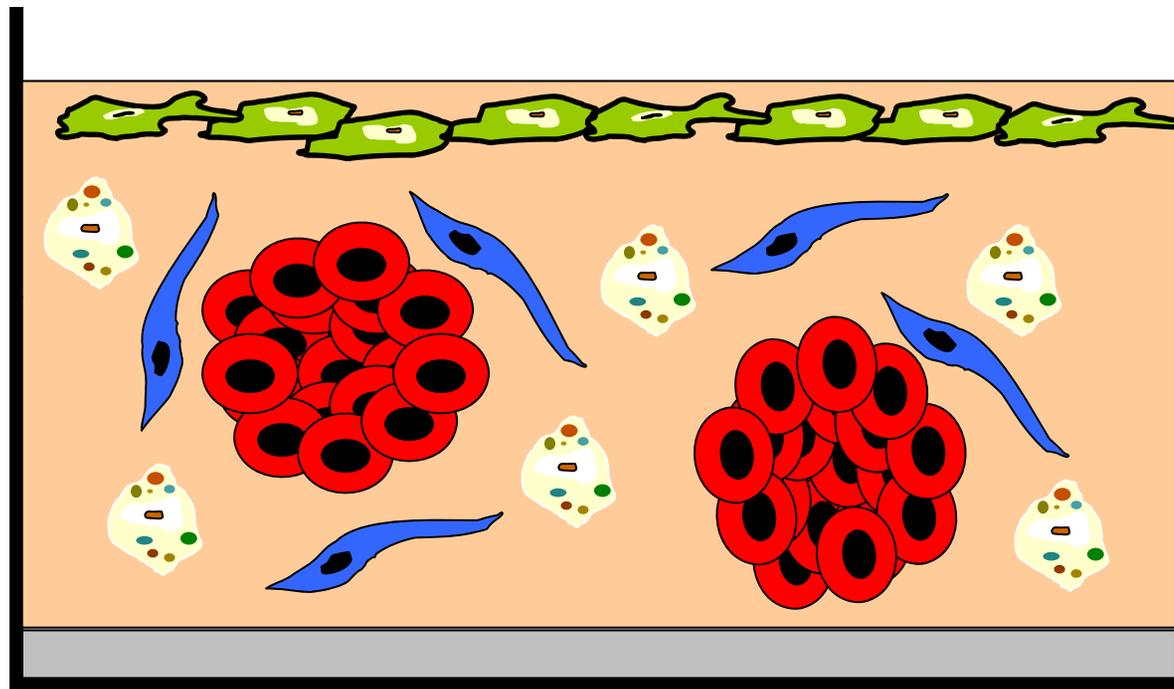
Stably transfected fluorescent cells from different anatomical origins: endothelium, fibroblast, immune system, pericytes, tumor cells, etc.

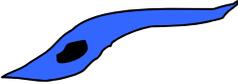
# Growth Assay

**Real time assessment of growth**  
**Single or multicell cultures**  
**Fast, affordable High Throughput screening**  
**Undisturbed cultures**  
**FACS sorting for subsequent analysis**



# Co-cultures in 3D models

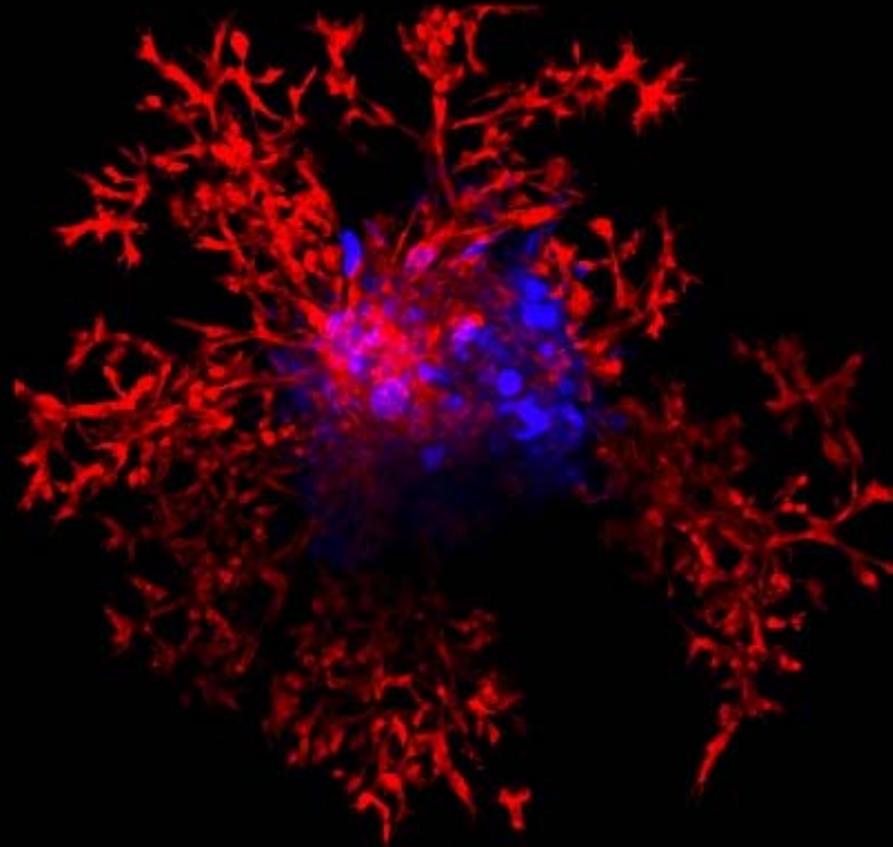


-  Tumor cell
-  Endothelial cell
-  Matrix
-  Agar
-  Inflammatory cell
-  Fibroblast and other accessory cells

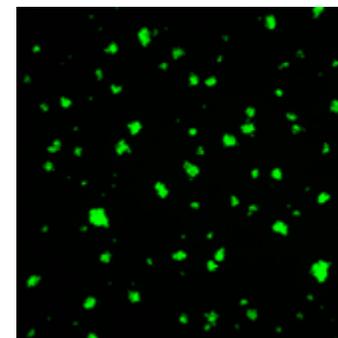
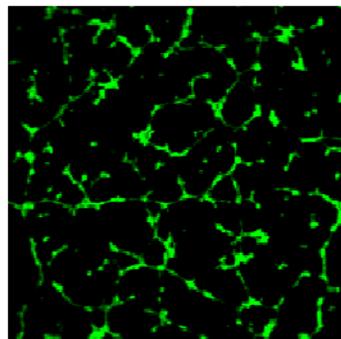
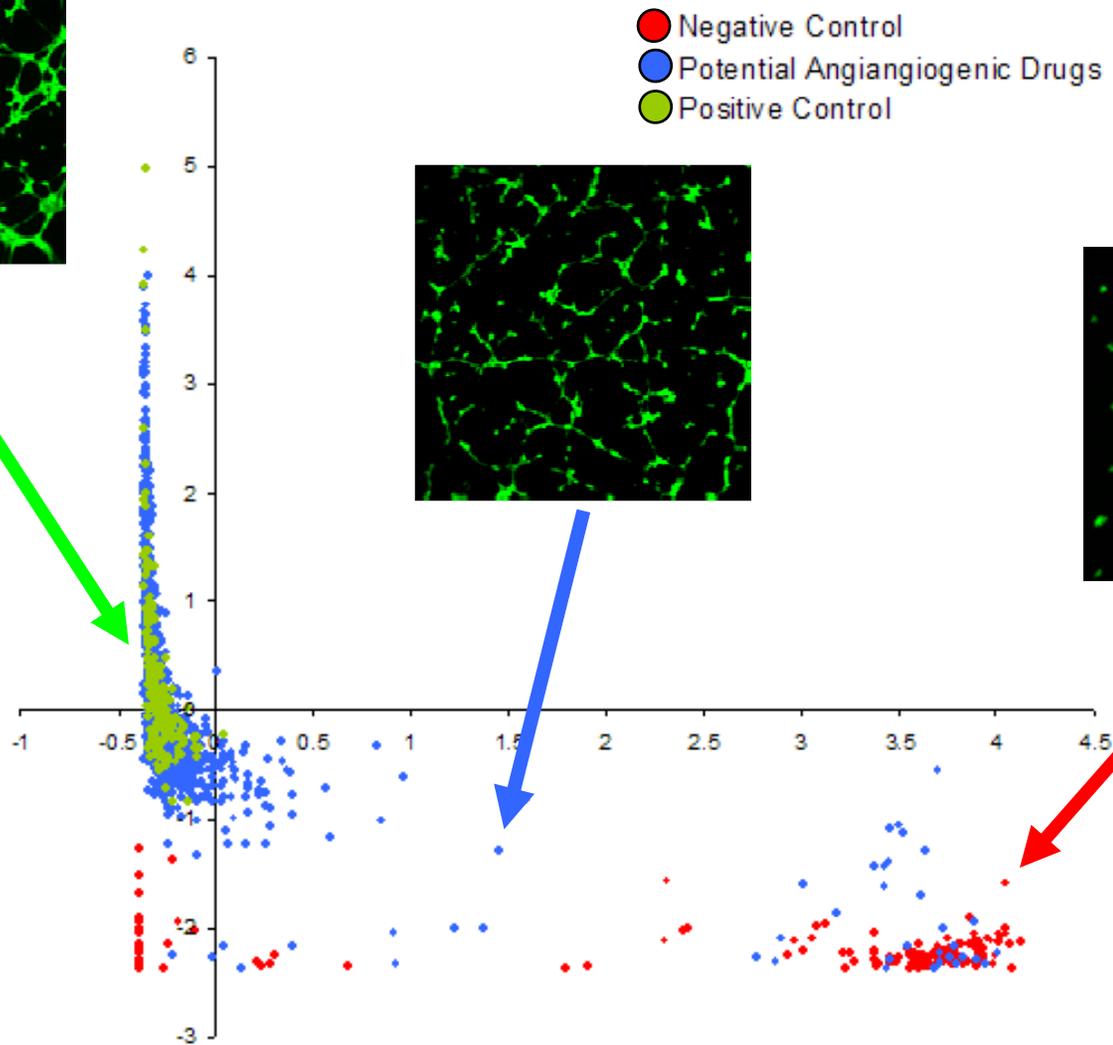
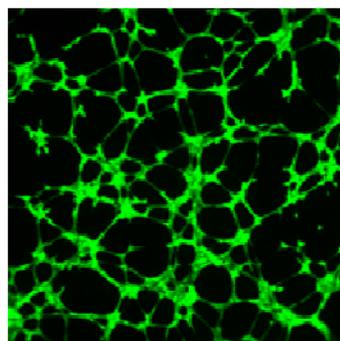


# *Co-cultures in 3D models*

NIST



# High Throughput Screening





# ***Collaboration Opportunities Licensing and CRADA***

**Focusing in existing technology and future research  
In vitro and in vivo systems**

## **Collaborations**

**Rush University  
University of Carolina  
NIH**

## **Private Sector**

**Vivo Biosciences Inc  
Millipore  
Invitrogen**



# Contact Information

## Collaboration

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***US Patent Application No. 60/976,732***