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**Conversations in the tumor microenvironmentation:
experimental models of fibroblast driven cancer cell inv**
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Conversations in the tumor microenvironment:

Experimental models of fibroblast
driven cancer cell invasion

Pranav Mehta

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Experimental models of fibroblast driven cancer cell invasion

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Dedication

*For my parents, who asked for a doctor and got one,
eventually, in the most inconvenient way possible.*

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List of Abbreviations

Abbreviation	Full term
2D	Two-dimensional
3D	Three-dimensional
ALK	Activin-like kinase
α -SMA	Alpha-smooth muscle actin
APCAF	Antigen-presenting cancer-associated fibroblast ATCC American Type Culture Collection
BB94	Batimastat
BLEB	Blebbistatin
CAF	Cancer-associated fibroblast
CAV	Caveolin
CM	Conditioned medium
CXCL-12	C-X-C motif chemokine ligand 12 DDR Discoidin domain receptor
E/M	Epithelial / mesenchymal
ECL	Enhanced chemiluminescence
ECM	Extracellular matrix
EGF	Epidermal growth factor
EGFP	Enhanced green fluorescent protein
EMP	Epithelial–mesenchymal plasticity
EMT	Epithelial–mesenchymal transition
FAK	Focal adhesion kinase
FITC	Fluorescein isothiocyanate
Gal	β -galactosidase
GelMA	Gelatin methacryloyl
GFP	Green fluorescent protein
H&E	Hematoxylin and eosin Heterospheroids Heterogenous spheroids
hTERT	Human telomerase reverse transcriptase iCAF Inflammatory cancer-associated fibroblast
IFF	Interstitial fluid flow
IFP	Interstitial fluid pressure
IGF	Insulin-like growth factor
IL-6	Interleukin-6
IP	Pixel Intensity
LOX	Lysyl oxidase
MAPK	Mitogen-activated protein kinase
MAT	Mesenchymal–amoeboidal transition

Abbreviation	Full term
MET	Mesenchymal–epithelial transition
MMP	Matrix metalloproteinase
myCAF	Myofibroblastic cancer-associated fibroblast NK cells
	Natural killer cells
NSCLC	Non-small cell lung cancer
PCK	Pan-cytokeratin
PEI	Polyethylenimine
PI3K/AKT	Phosphoinositide 3-kinase / AKT signaling pathway PSR
	Picrosirius red
RFP	Red fluorescent protein
ROCK	Rho-associated coiled-coil containing protein kinase TAMs
	Tumor-associated macrophages
TBST	Tris-buffered saline with Tween-20 TEMTIA
	The EMT International Association TFs
	Transcription factors
TGF- β	Transforming growth factor beta
TME	Tumor microenvironment
TPMT	Transmitted photomultiplier tube TRITC
	Tetramethylrhodamine isothiocyanate
TRPM7	Transient receptor potential melastatin 7 ULA
	Ultra-low attachment
VEGF	Vascular endothelial growth factor
VF	Void fraction
VIM	Vimentin
Y27	Y-27632
ZO	Zonula occludens