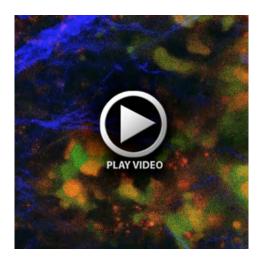
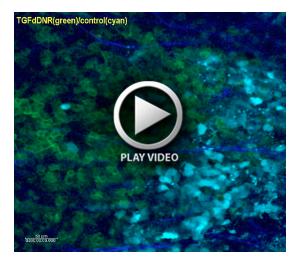


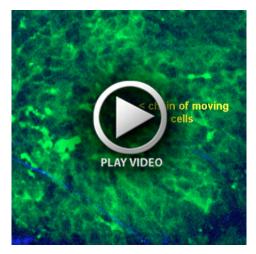
**Movie 1.** Cancer cells and macrophages move together *in vivo*. MTLn3 cells expressing EGFP-Mena<sup>INV</sup> cells (green) move in a single-cell file (streaming movement) with macrophages that are labeled by uptake of Texas-red dextran (red) in a primary tumor of a xenograft mouse. The movie loop contains 50 frames, with 2.5 minutes between each frame (with permission from Roussos et al., 2011).



Movie 2. Single cell migration in TGF-β activated cells. MTLn3E cells are labeled with GFP expressing SMAD2 (green) with collagen fibers shown in blue and nuclei labeled with orange fluorescent protein (OFP) fused to a nuclear localization signal. The movie is shown first with and then without the orange signal, and singly-moving cells are visualized in the middle of the field. Movie clip corresponds to 20 minutes of time-lapse imaging (with permission from Giampieri et al., 2009).



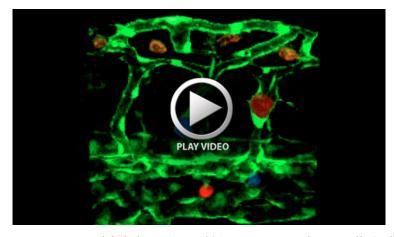
Movie 3. Single cell motility requires TGF-β signaling *in vivo*. Movie shows a heterogeneous tumor containing MTLn3E control cells (cyan) and MTLn3E cells expressing a dominant negative TGF-β receptor II, lacking the kinase domain, fused to GFP (TGF-βRDN, green). Collagen fibers are shown in blue. Many control cells move as single cells, while none of the TGF-βRDN –GFP expressing cells are motile. Movie clip corresponds to 20 minutes of time-lapse imaging (with permission from Giampieri et al., 2009).



**Movie 4.** Collective cell migration *in vivo*. MTLn3E breast cancer cells expressing myr-GFP (membrane localization sequence fused to GFP, green) with collagen fibers shown in blue. A chain of collectively-moving cells is shown in the middle of the field. Movie clip corresponds to 20 minutes of time-lapse imaging (with permission from Giampieri et al., 2009).



Movie 5. Vascular normalization following inhibition of VEGFR2 signaling. Time-lapse video of a MCaIV (murine mammary adenocarcinoma) tumor implanted in the dorsal skinfold chamber using optical frequency domain imaging. To monitor vascular dynamics, changes in tumor microvasculature were imaged starting 8 hours before treatment with VEGF-R blocking antibody, DC101, until 40 hours after. Tumor volume and mean intratumoral vessel diameter were imaged at 2-hour intervals for 48 hours. Immediately following VEGFR-2 blockade, the mean vessel diameter began to decrease while the tumor volume continued to expand, a trend that continued throughout the 48 hours (with permission from Vakoc et al., 2009).



**Movie 6. Extravasation of cancer cells.** RFP-labeled MDA-MB-231 mammary carcinoma cells (red) that are transfected with Twist extravasate while CFP-labeled MDA-MD-231 control cells (blue) are arrested in the GFP-labeled vasculature (green) of zebrafish embryos. Each frame is 15 minutes apart (with permission from Stoletov et al., 2010).