

220221221

Microarray analysis from damsky et al 2015 cancer cell paper

Hypotheses

- If model of growth-arrest exists in mouse melanocytes/nevi then:

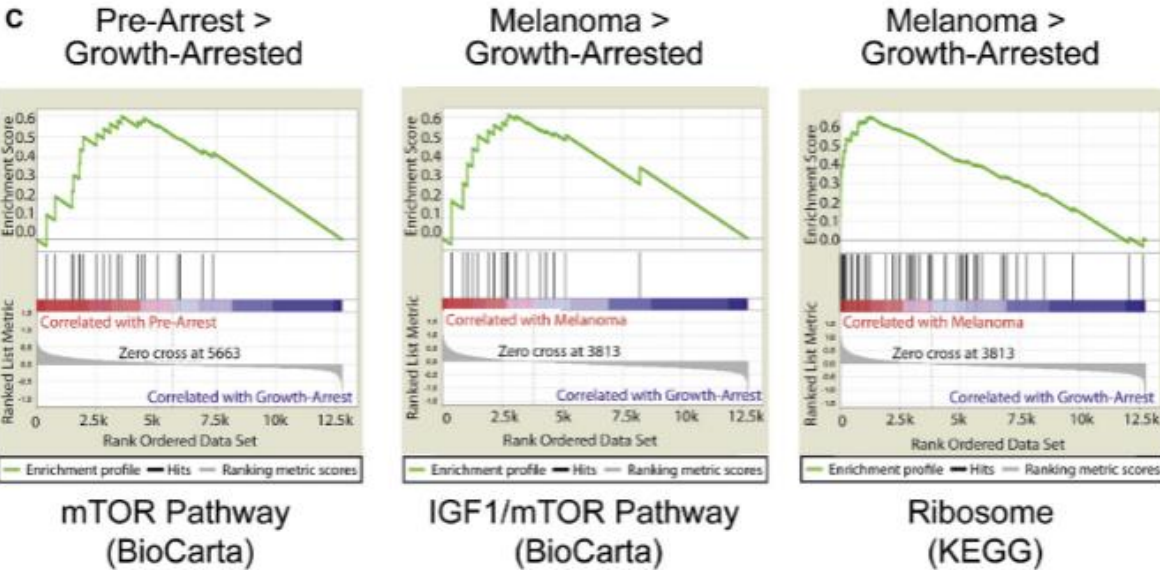
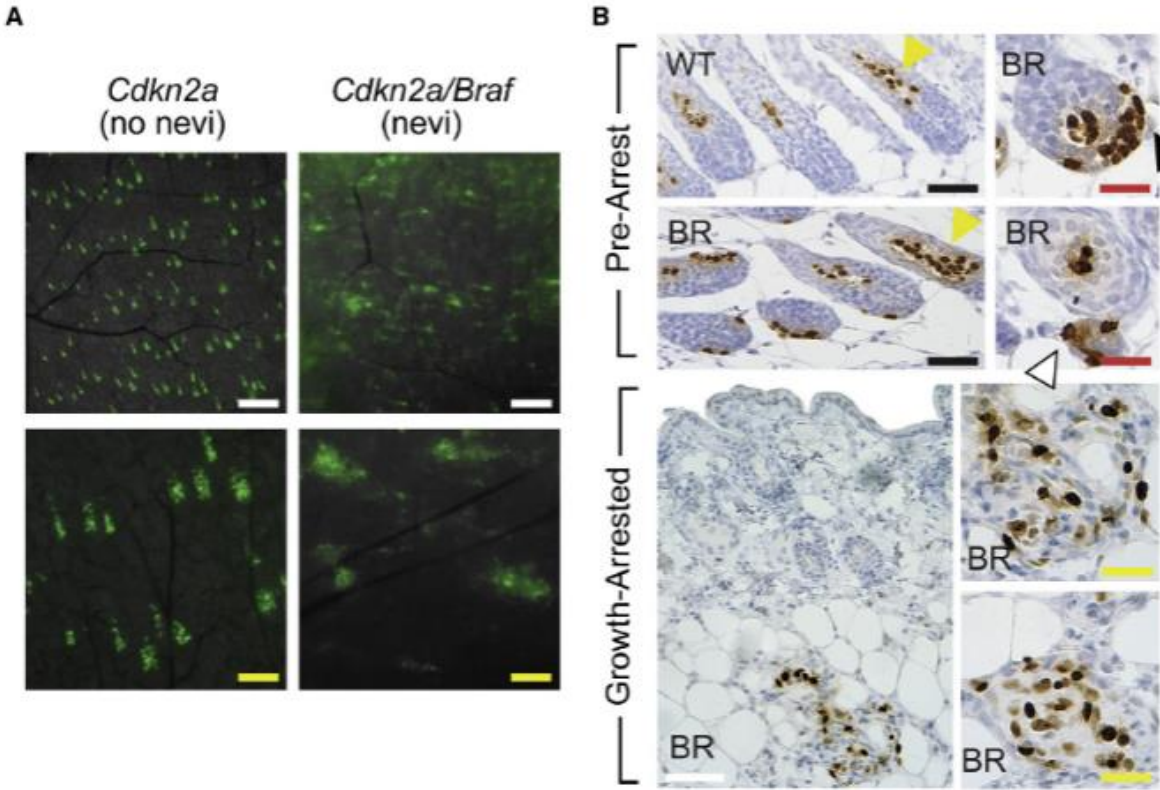
Mir-211 up in nevi, and AurkB is up in Melanoma

211 target genes are up in nevi compared to melanoma

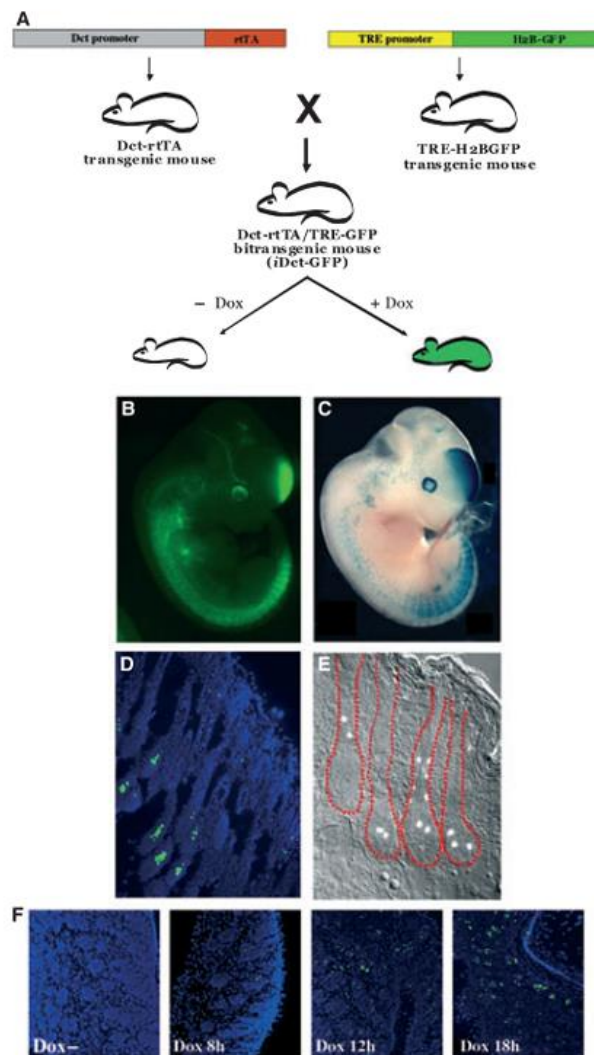
M state genes vs C state genes

mTORC1 Activation Blocks *Braf*^{V600E}-Induced Growth Arrest but Is Insufficient for Melanoma Formation

William Damsky,^{1,*} Goran Micevic,^{1,2} Katrina Meeth,² Viswanathan Muthusamy,³ David P. Curley,⁴ Manjula Santhanakrishnan,⁵ Ildiko Erdelyi,⁶ James T. Platt,¹ Laura Huang,¹ Nicholas Theodosakis,² M. Raza Zaidi,⁷ Scott Tighe,⁸ Michael A. Davies,⁹ David Dankort,¹⁰ Martin McMahon,¹¹ Glenn Merlino,¹² Nabeel Bardeesy,¹³ and Marcus Bosenberg^{1,2,*}



Data Sets (GSE61750)



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GSM1513348 Cdkn2a/Braf melanocytes (day 19), biol rep 1

GSM1513349 Cdkn2a/Braf melanocytes (day 19), biol rep 2

GSM1513350 Cdkn2a/Braf melanocytes (day 50), biol rep 1

GSM1513351 Cdkn2a/Braf melanocytes (day 50), biol rep 2

GSM1513352 Cdkn2a only melanocytes (day 19), biol rep 1

GSM1513353 Cdkn2a only melanocytes (day 19), biol rep 2

GSM1513354 Cdkn2a/Braf melanoma, biol rep 1

GSM1513355 Cdkn2a/Braf melanoma, biol rep 2

GSM1513356 Cdkn2a/Braf/Lkb1 melanoma, biol rep 1

GSM1513357 Cdkn2a/Braf/Lkb1 melanoma, biol rep 2

GSM1513358 Lkb1/Braf melanocytic proliferation, biol rep 1

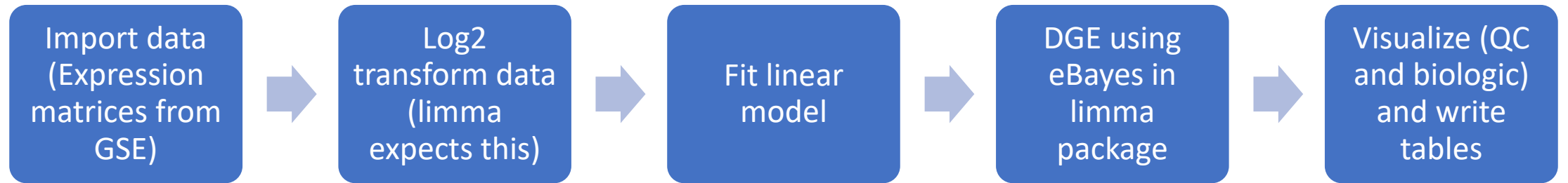
GSM1513359 Lkb1/Braf melanocytic proliferation, biol rep 2

GSM1513360 Lkb1/Braf melanocytic proliferation, biol rep 3

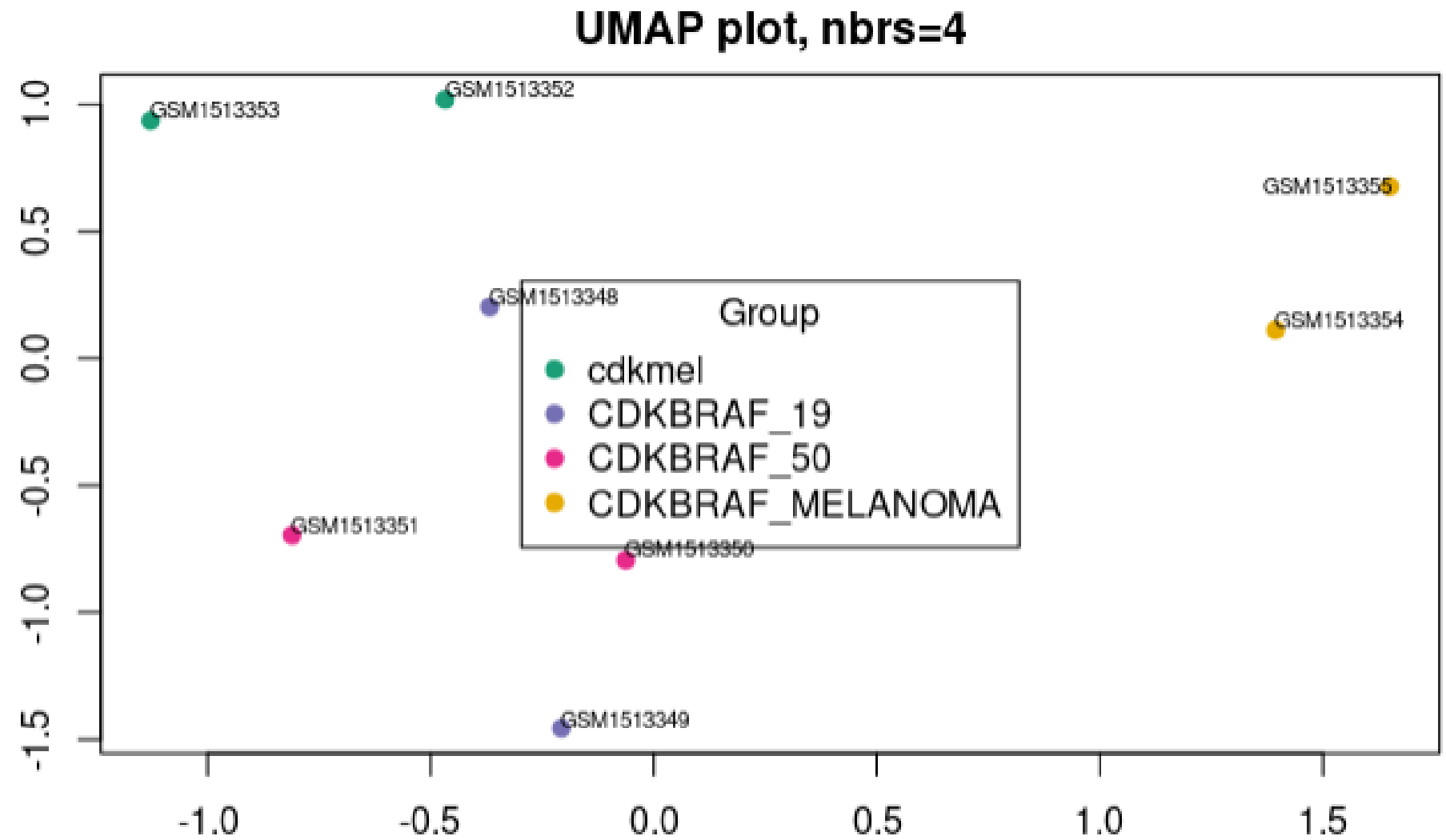
A genetically engineered mouse model with inducible GFP expression in melanocytes

[M. Raza Zaidi](#), [Thomas J. Hornyak](#), and [Glenn Merlino](#)

Workflow



UMAP



CDKBRAF_50-CDKBRAF_MELANOMA

