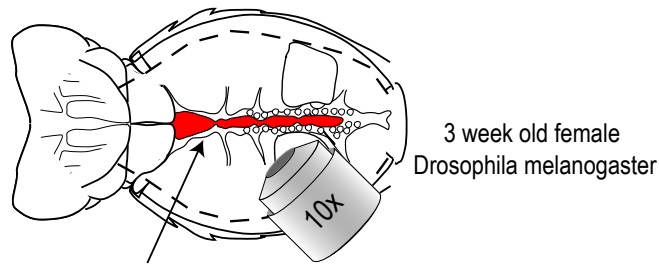


A

Loss of function strategy:  
Heart-specific (*Hand4.2 driver*) RNAi  
of 5H genes in post-mitotic CMs



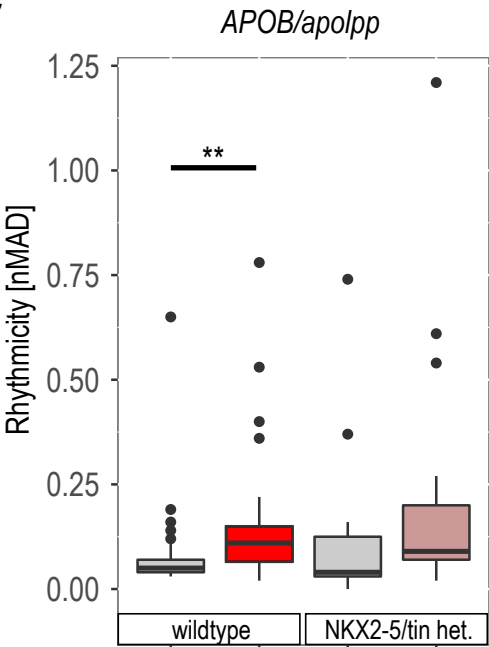
Kinetic imaging (30s@140fps) followed by automated  
and quantitative assessment of heart size and function

B

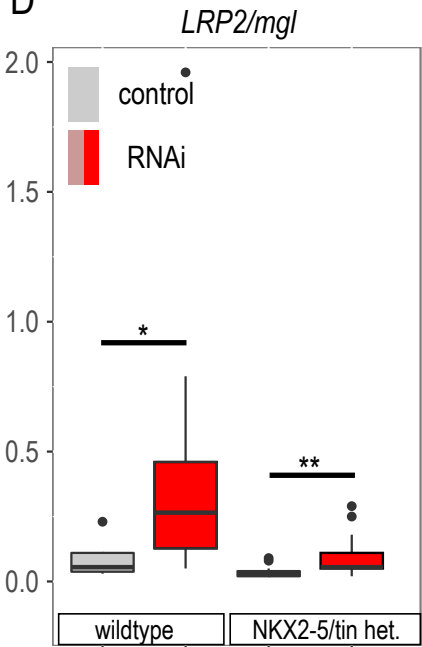
human gene	DIOPT* score	fly gene	heart phenotypes	NKX2-5 / tin interaction phenotype
<i>HSPG2</i>	9	<i>trol</i>	-/-	constriction
<i>APOB</i>	6	<i>apolpp</i>	arrhythmic	-/-
<i>LRP2</i>	11	<i>mg1</i>	dilation, arrhythmic	-/-
<i>SLC9A1</i>	5	<i>Nhe2</i>	-/-	-/-
<i>SDHD</i>	12	<i>SdhD</i>	-/-	constriction
<i>JPT1</i>	3	<i>Jupiter</i>	-/-	-/-
<i>JPT1</i>	2	<i>CG1943</i>	dilation	-/-
<i>ELF4</i>	5	<i>Eip74EF</i>	-/-	-/-
<i>HS6ST2</i>	9	<i>Hs6st</i>	-/-	-/-
<i>SIK1</i>	3	<i>Sik2</i>	-/-	-/-

Wilcoxon rank sum test,  $p < 0.05$

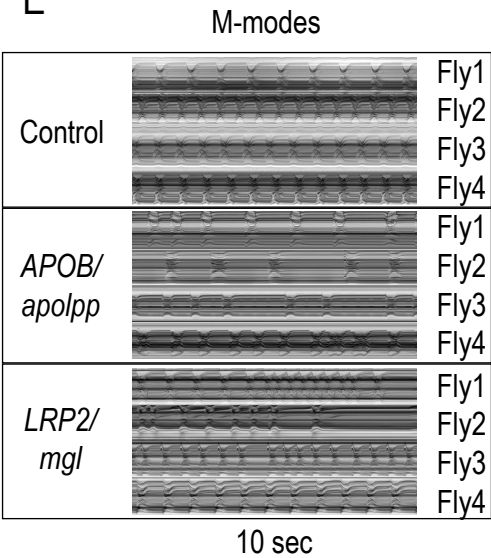
C



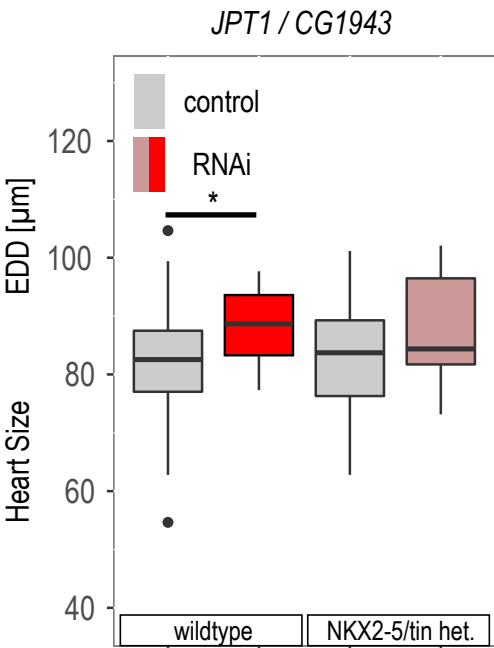
D



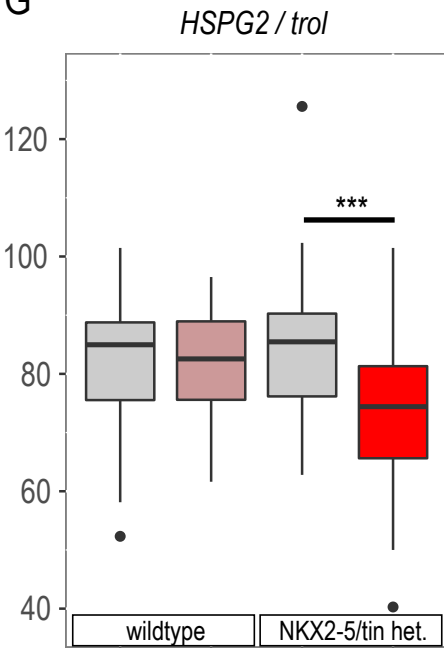
E



F



G



H

