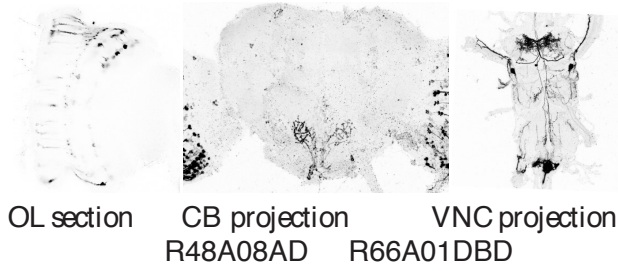
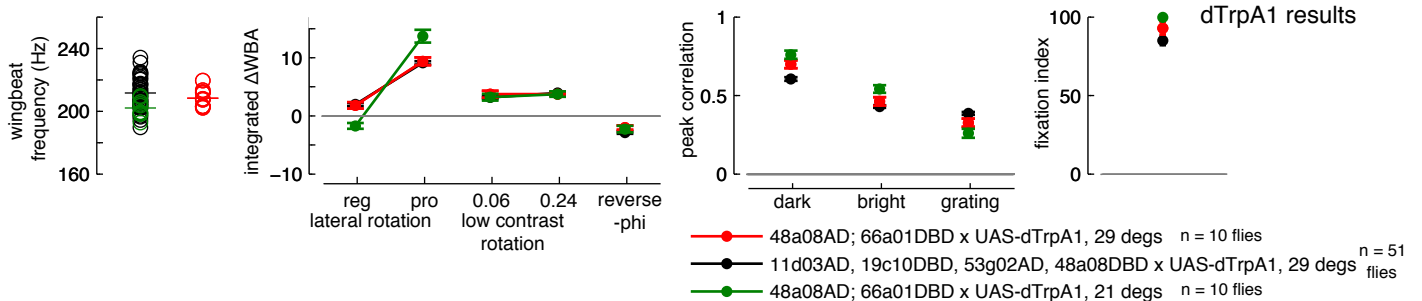
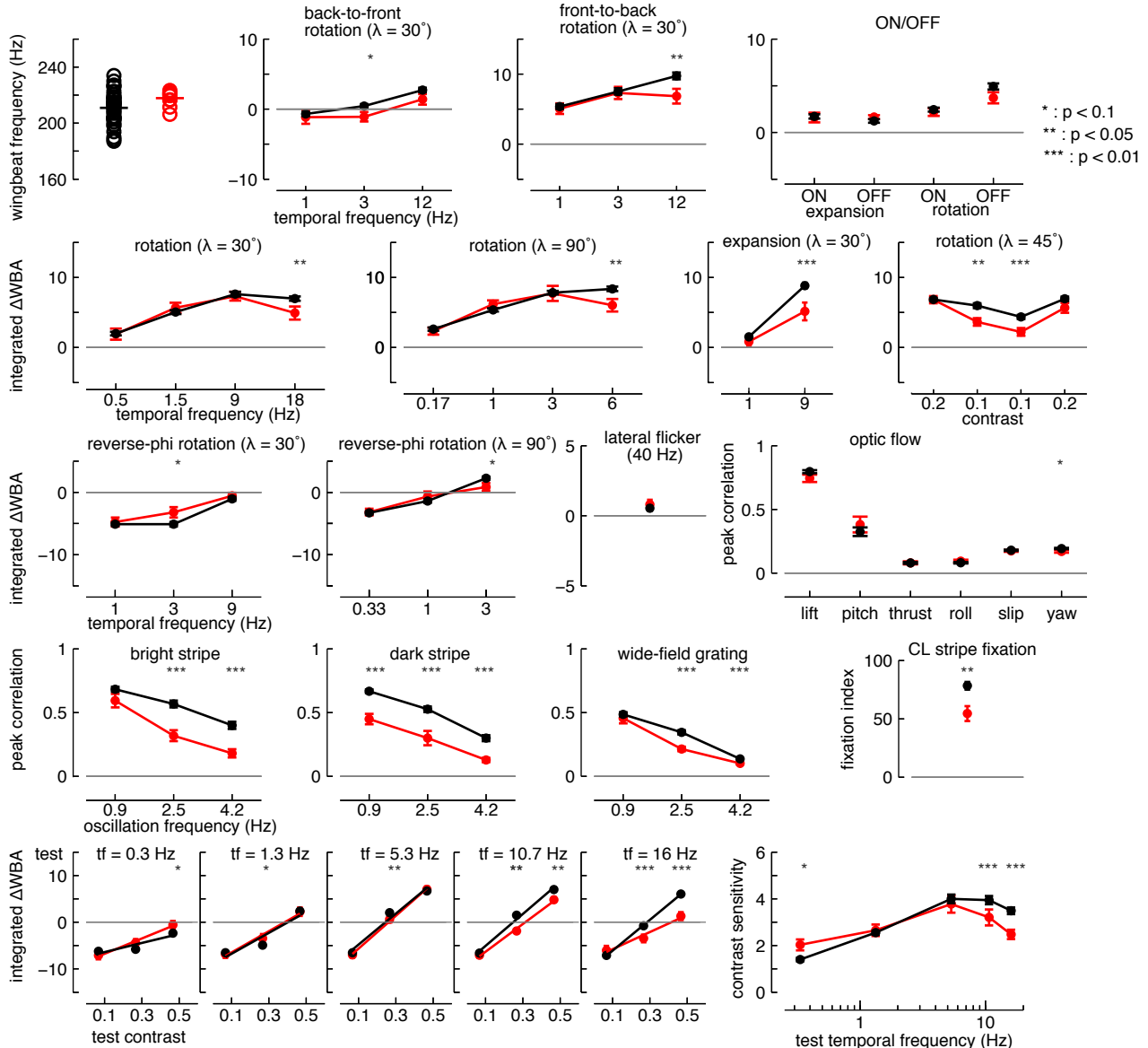


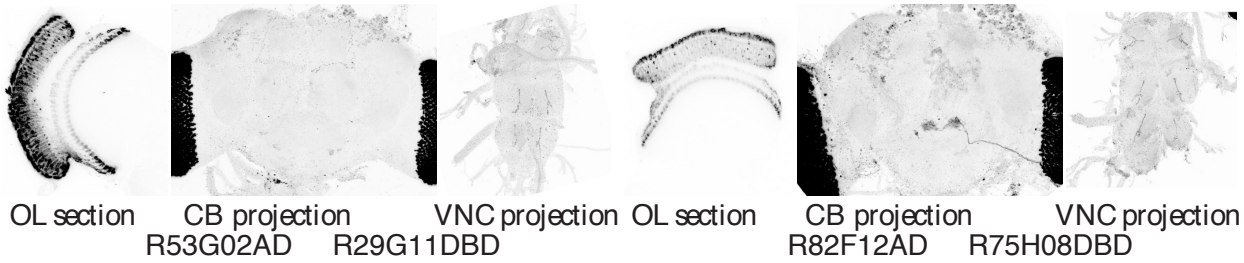
Lamina Monopolar Cell 1 (L1)



—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies
—●— 48a08AD; 66a01DBD x UAS-Kir2.1 n = 11 flies



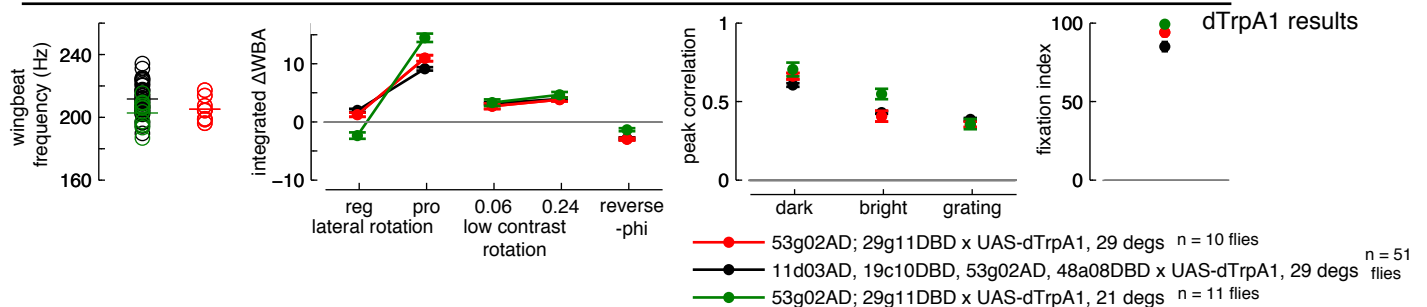
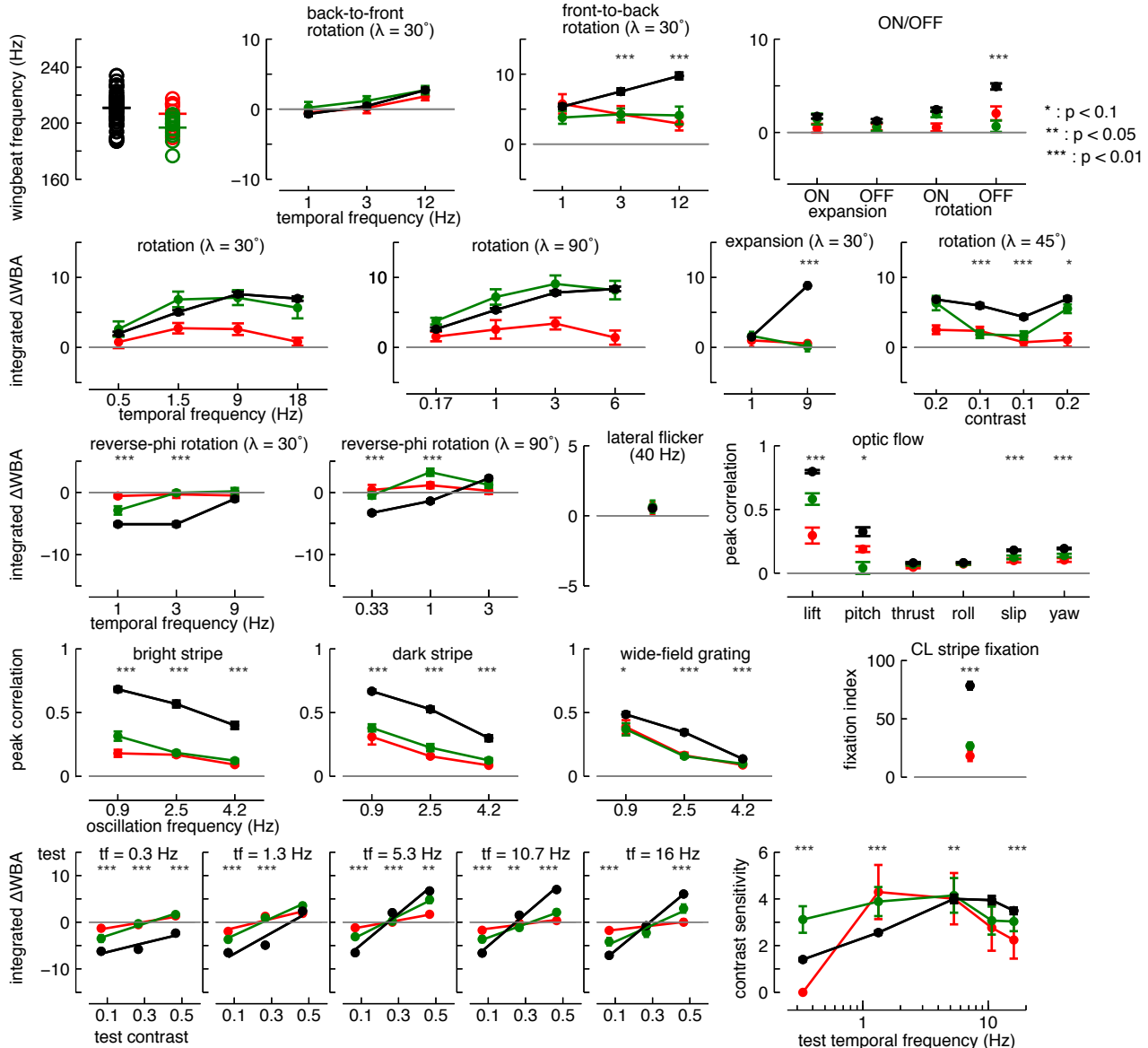
Lamina Monopolar Cell 2 (L2)



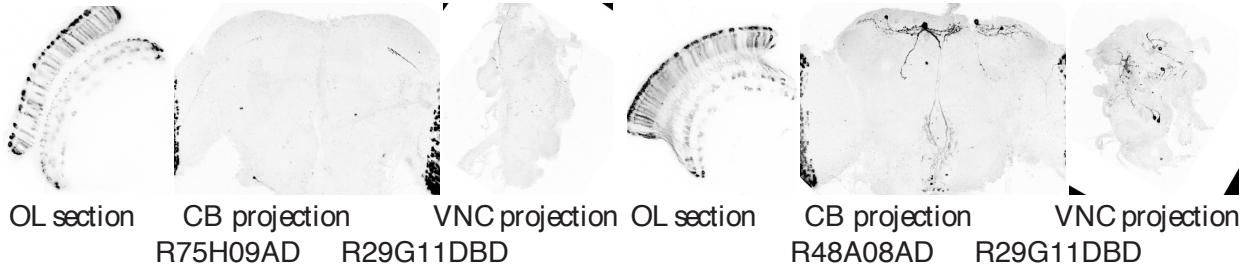
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 53g02AD; 29g11DBD x UAS-Kir2.1 n = 10 flies

—●— 82f12AD; 75h08DBD x UAS-Kir2.1 n = 12 flies



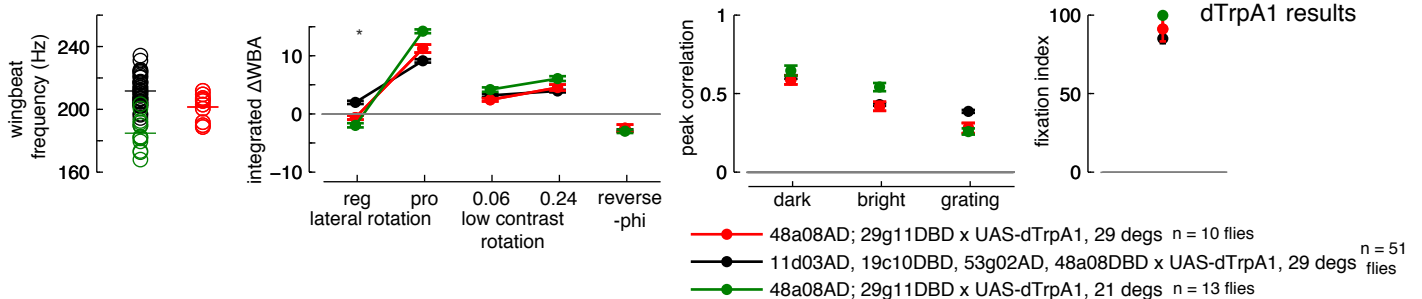
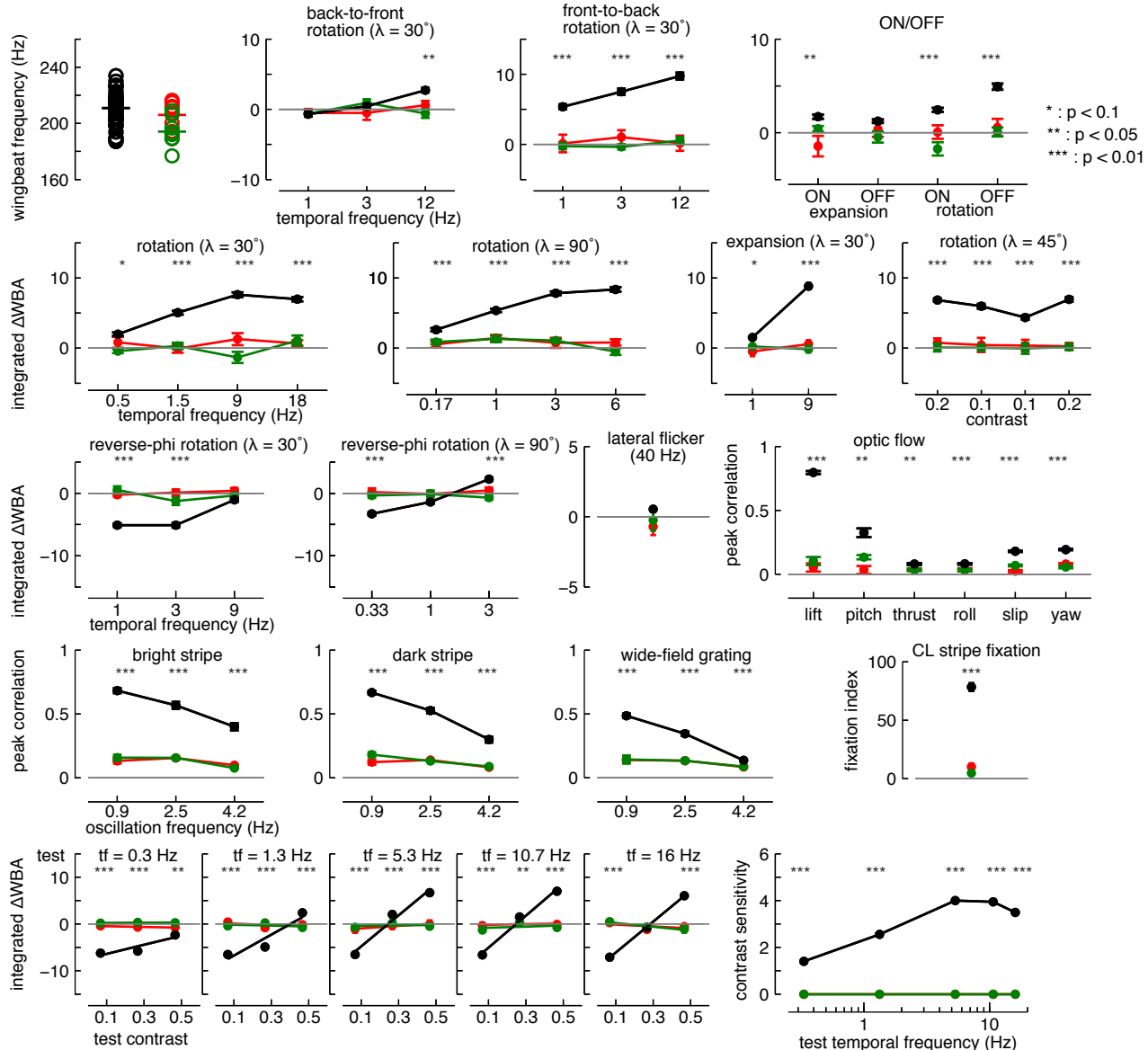
Lamina Monopolar Cells 1 and 2 (L1 +L2)



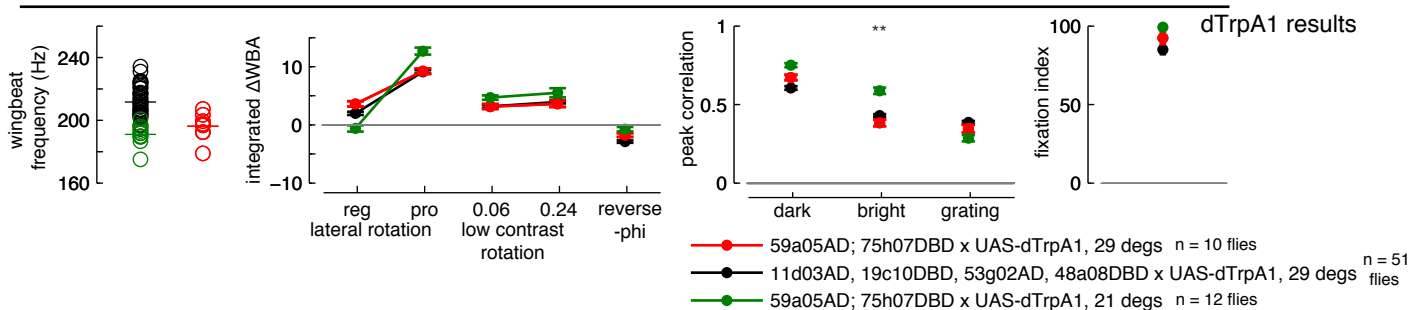
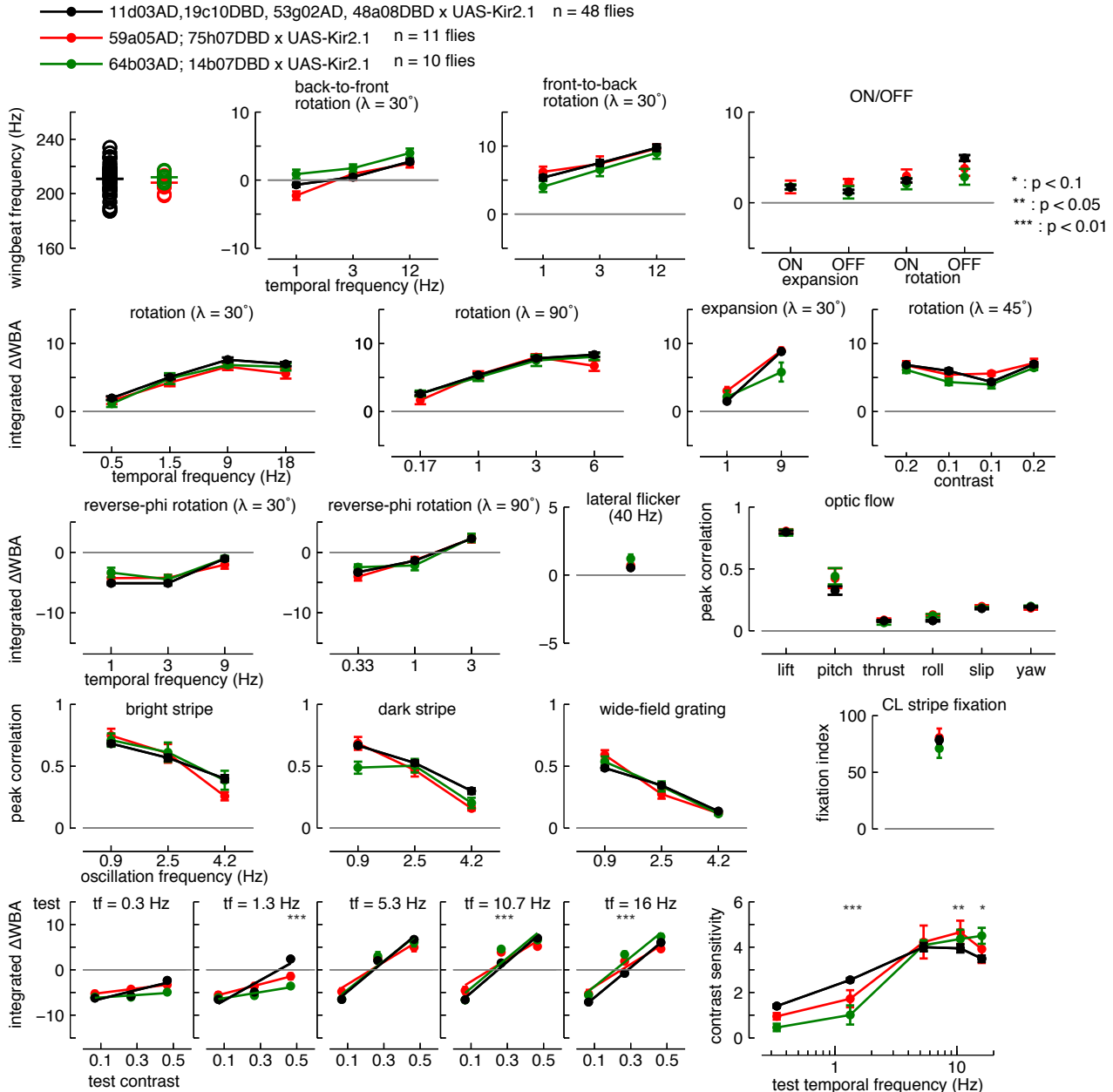
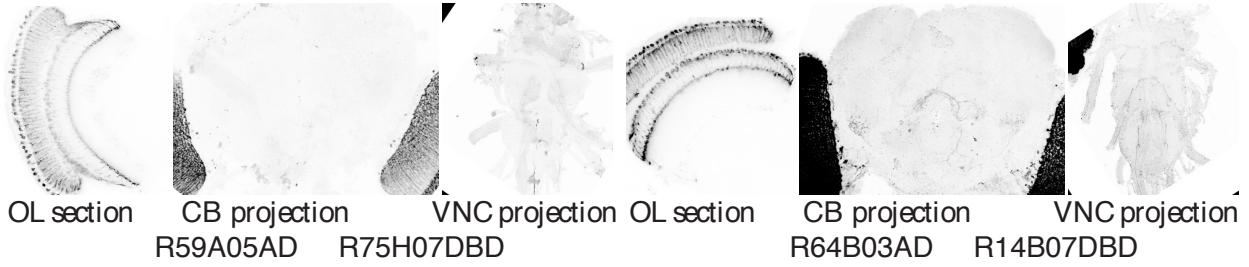
—●— 11d03AD; 19c10DBD; 53g02AD; 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 75h09AD; 29g11DBD x UAS-Kir2.1 n = 10 flies

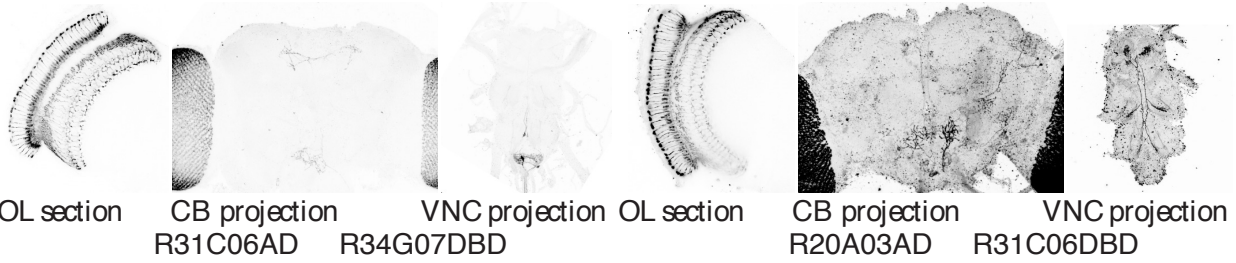
—●— 48a08AD; 29g11DBD x UAS-Kir2.1 n = 14 flies



Lamina Monopolar Cell 3 (L3)



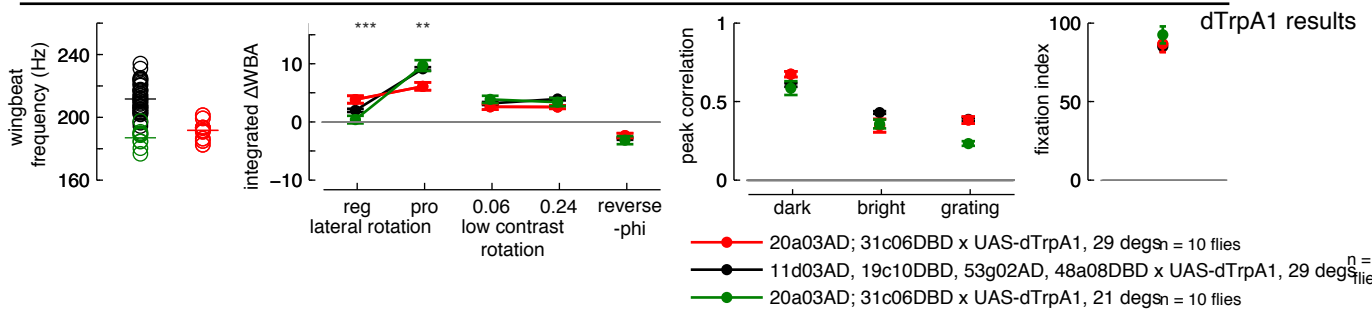
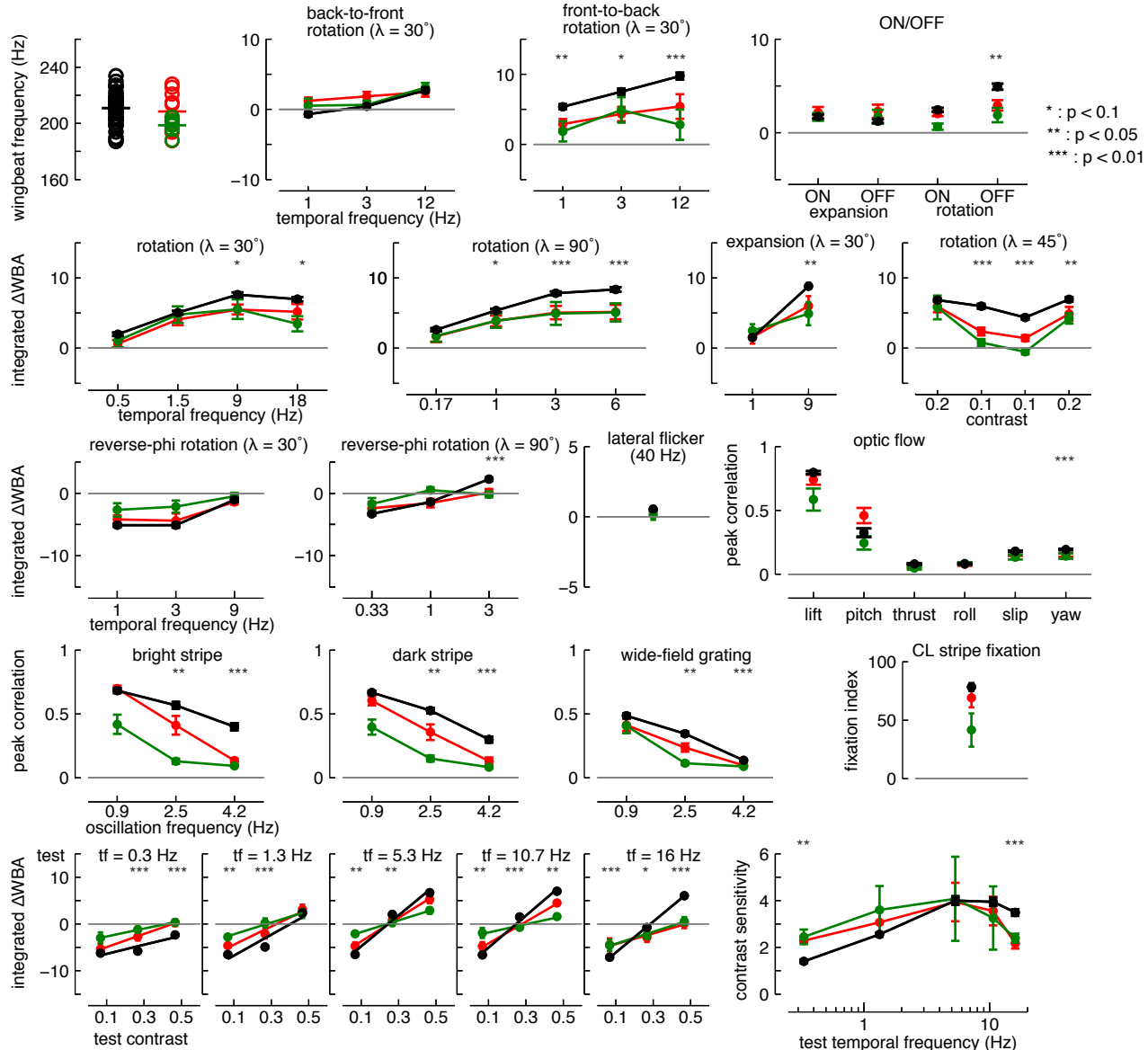
Lamina Monopolar Cell 4 (L4)



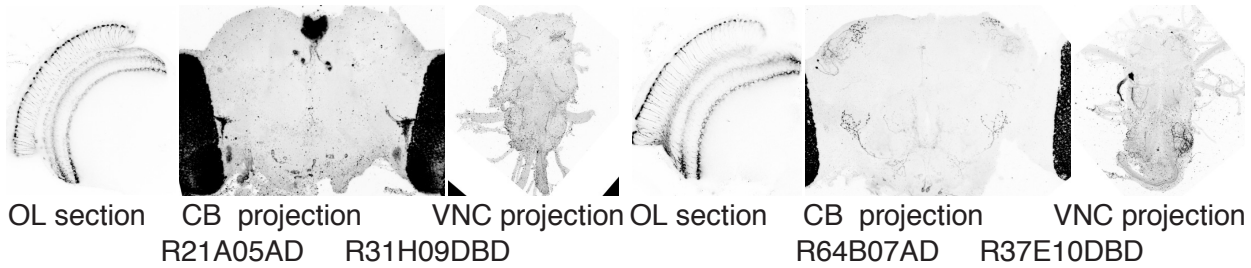
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 20a03AD; 31c06DBD x UAS-Kir2.1 n = 111 flies

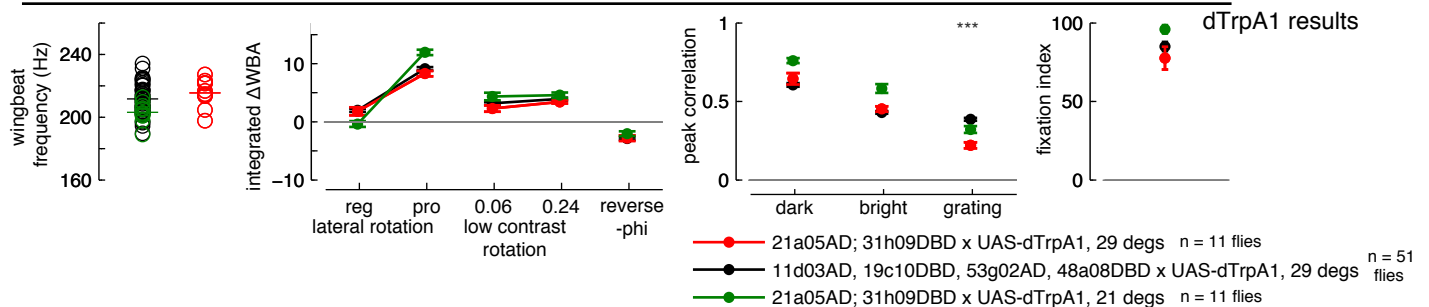
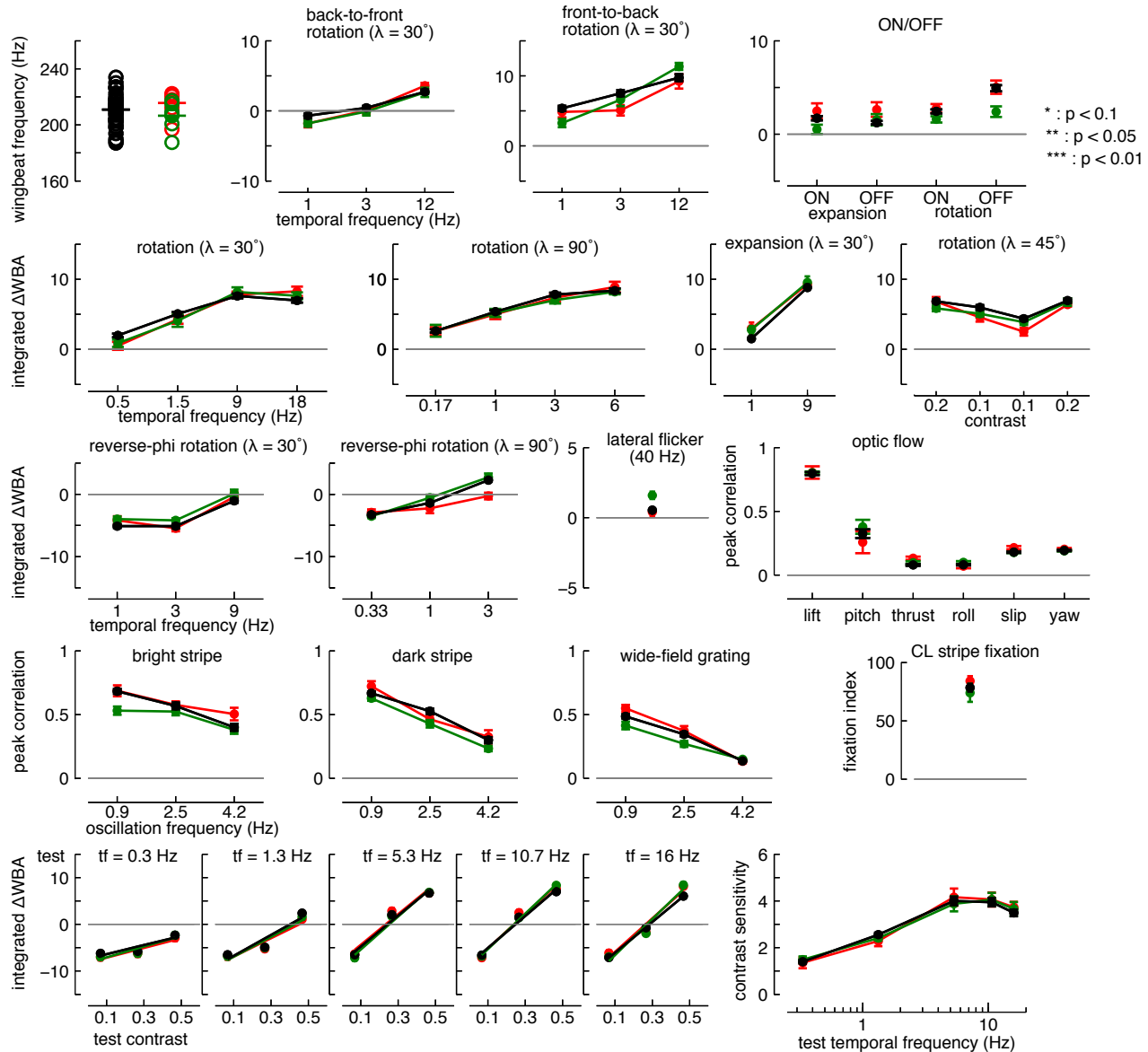
—●— 31c06AD; 34g07DBD x UAS-Kir2.1 n = 11 flies



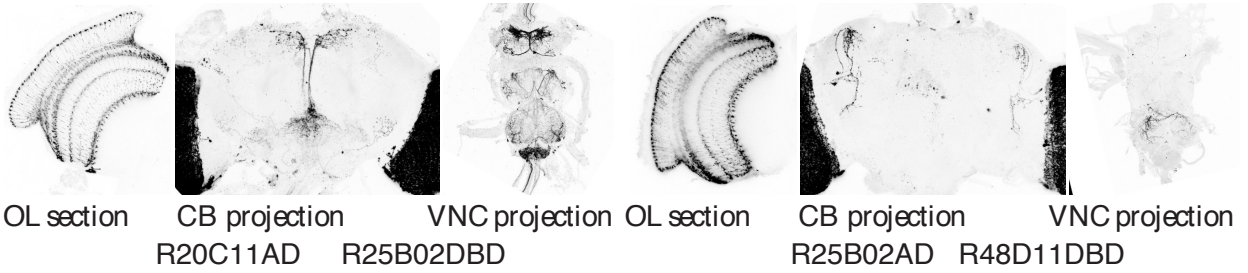
Lamina Monopolar Cell 5 (L5)



- 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies
- 21a05AD; 31h09DBD x UAS-Kir2.1 n = 10 flies
- 64b07AD; 37e10DBD x UAS-Kir2.1 n = 10 flies



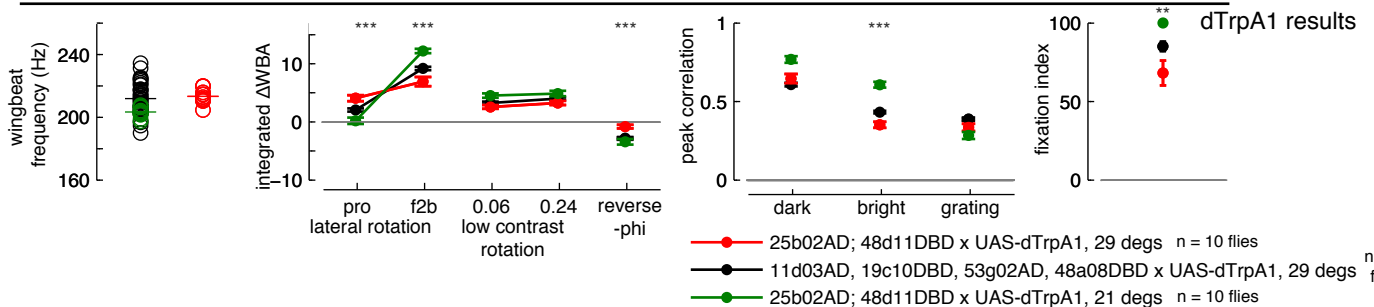
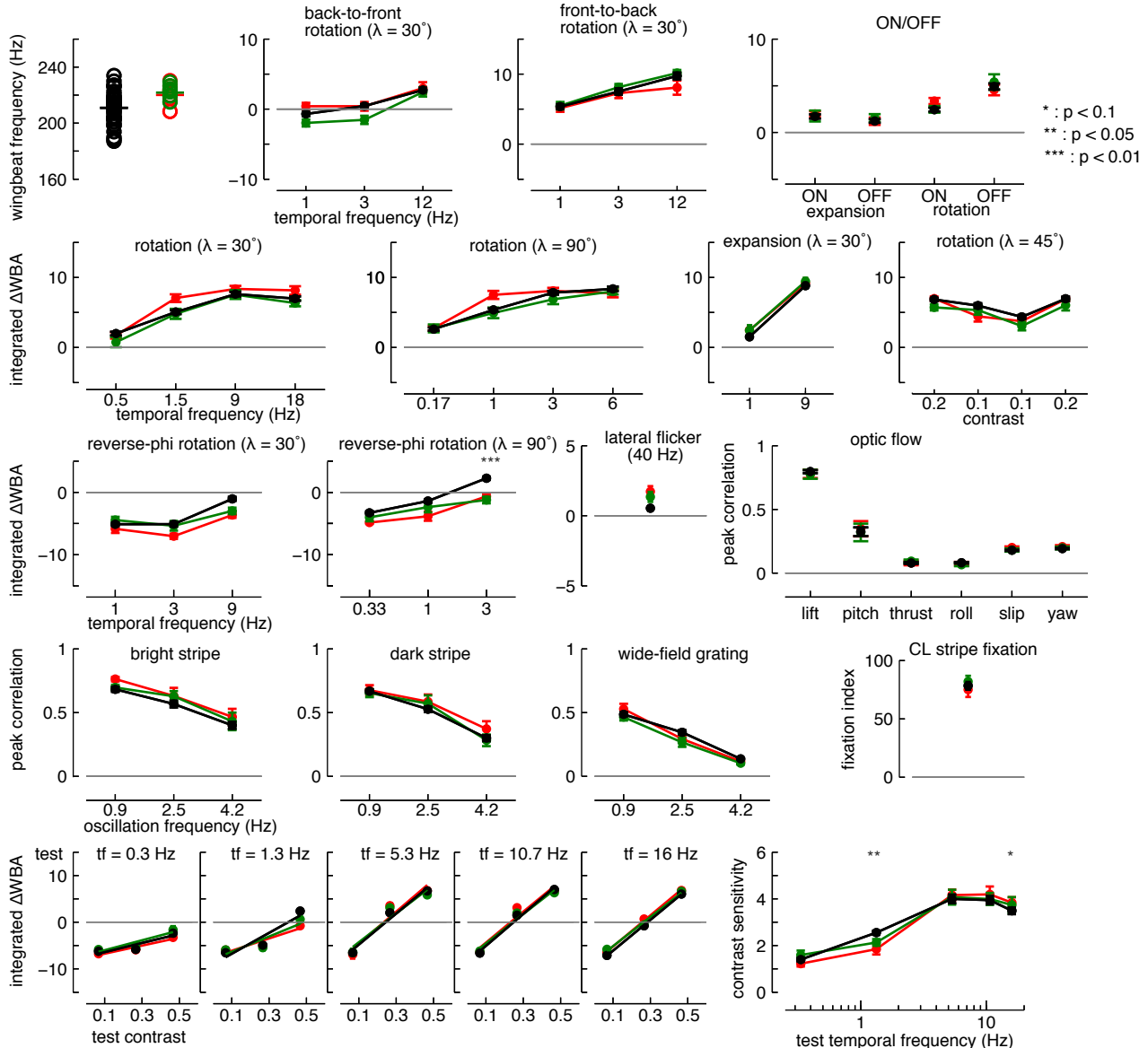
Centrifugal Cell 2 (C2)



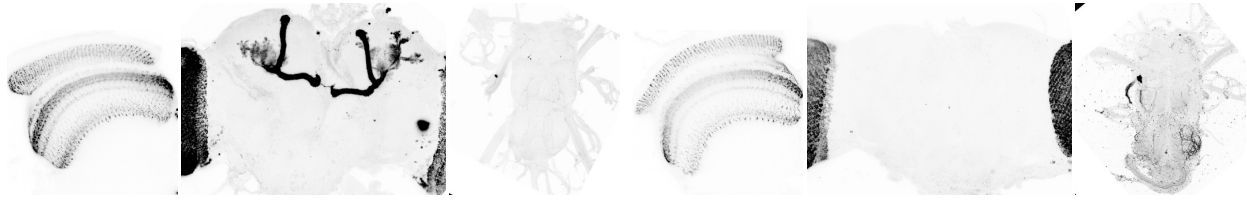
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 20c11AD; 25b02DBD x UAS-Kir2.1 n = 12 flies

—●— 25b02AD; 48d11DBD x UAS-Kir2.1 n = 11 flies



Centrifugal Cell 3 (C3)

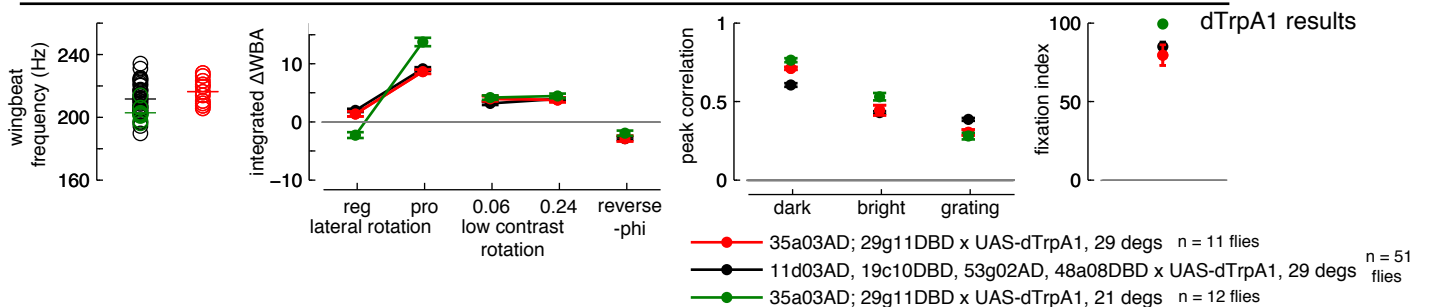
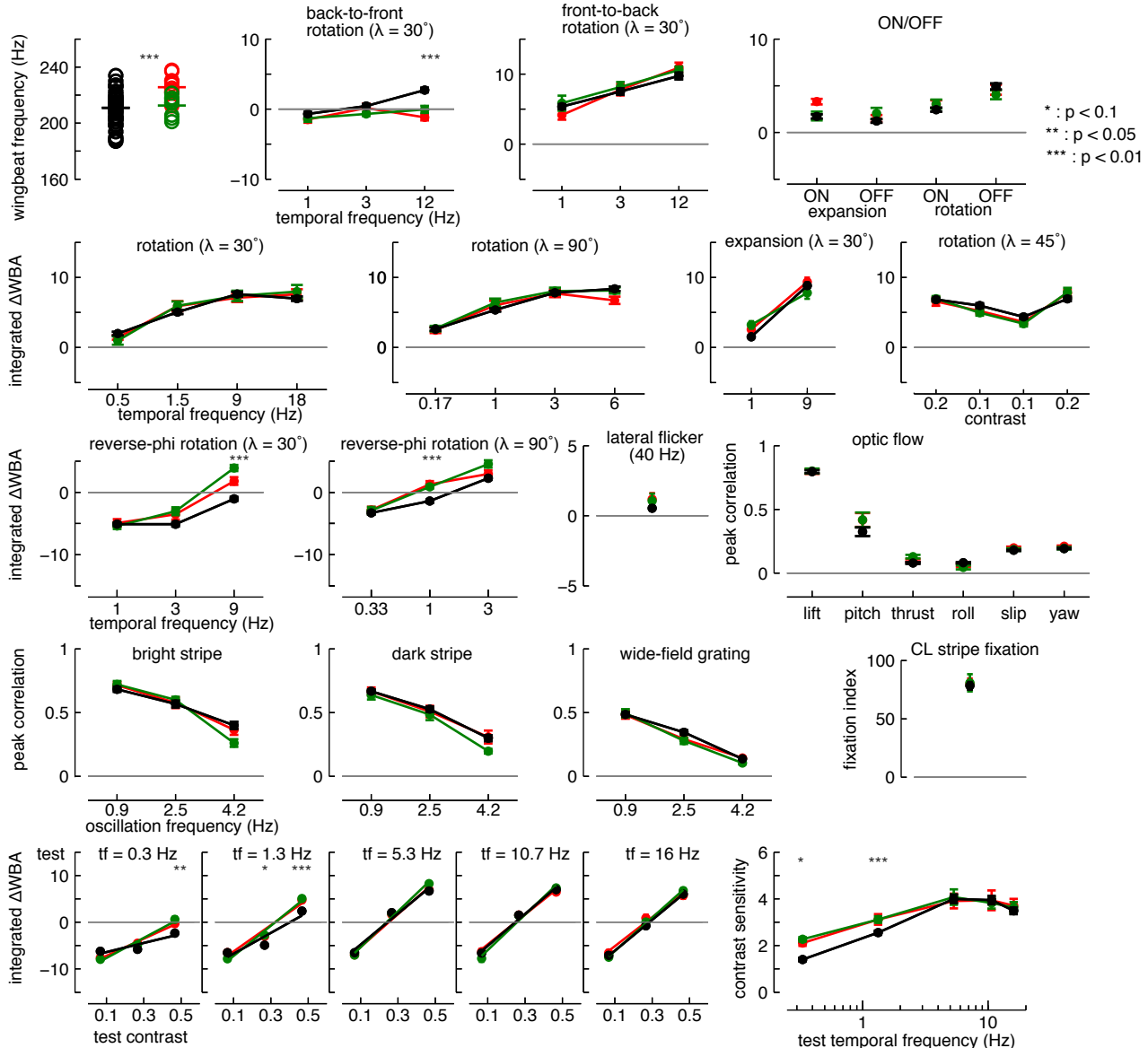


OL section CB projection VNC projection OL section CB projection VNC projection
R35A03D R29G11DBD R26H02AD R29G11DBD

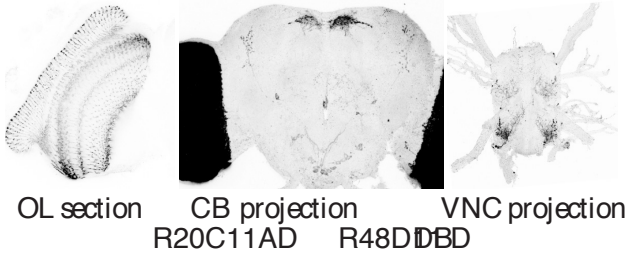
— 11d03AD; 19c10DBD; 53g02AD; 48a08DBD x UAS-Kir2.1 n = 48 flies

— 35a03AD; 29g11DBD x UAS-Kir2.1 n = 12 flies

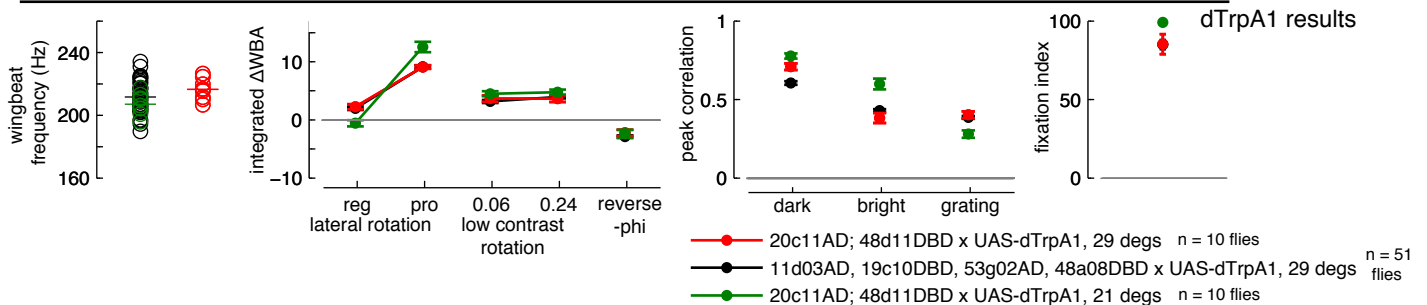
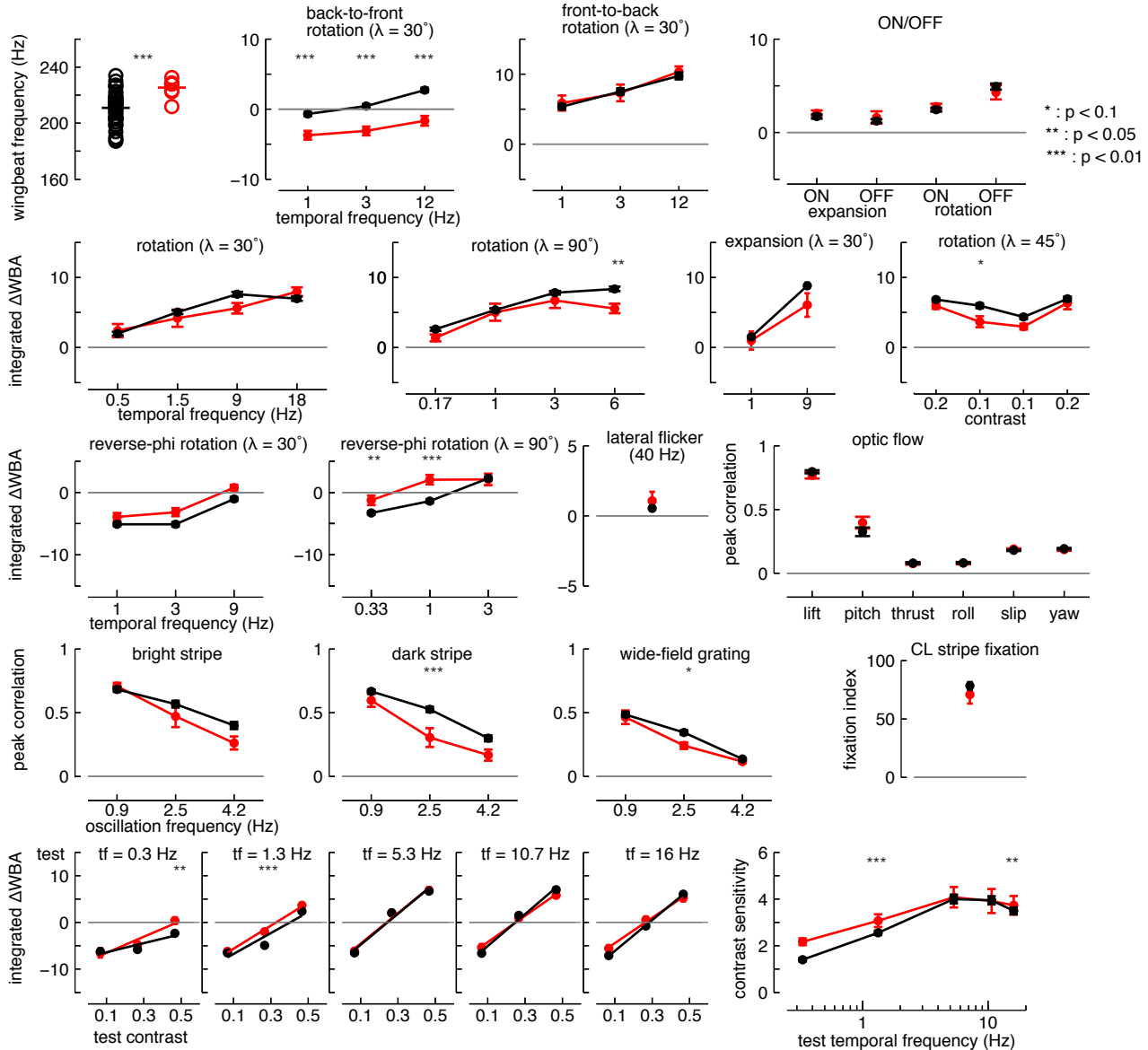
— 26h02AD; 29g11DBD x UAS-Kir2.1 n = 10 flies



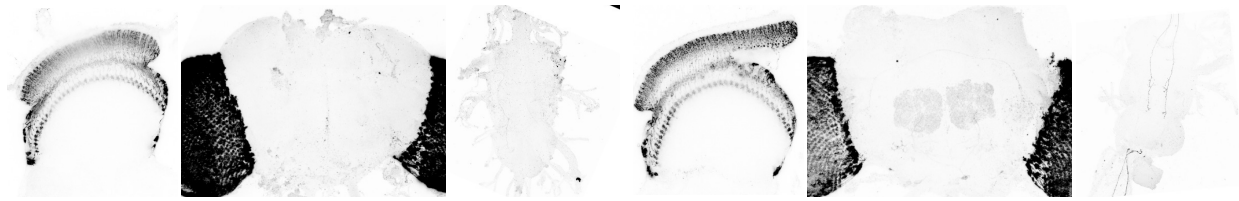
Centrigual Cells 2 and 3 (C2+C3)



—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies
 —●— 20c11AD; 48d11DBD x UAS-Kir2.1 n = 10 flies



T1 Cell

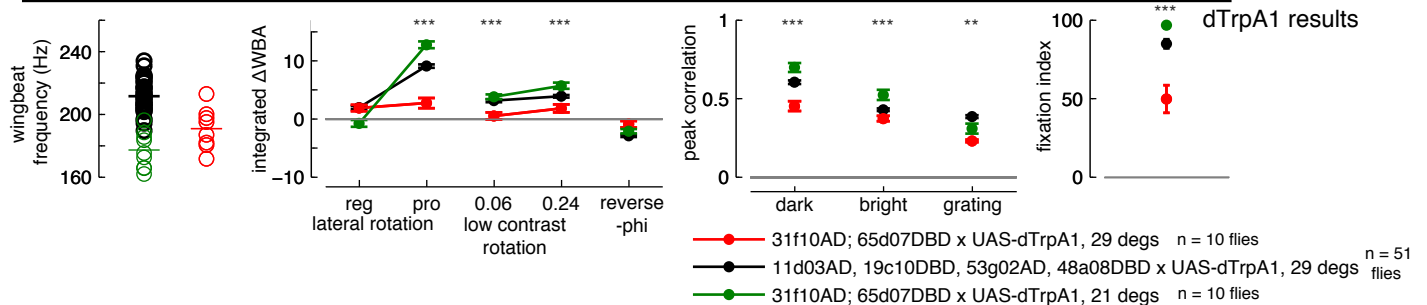
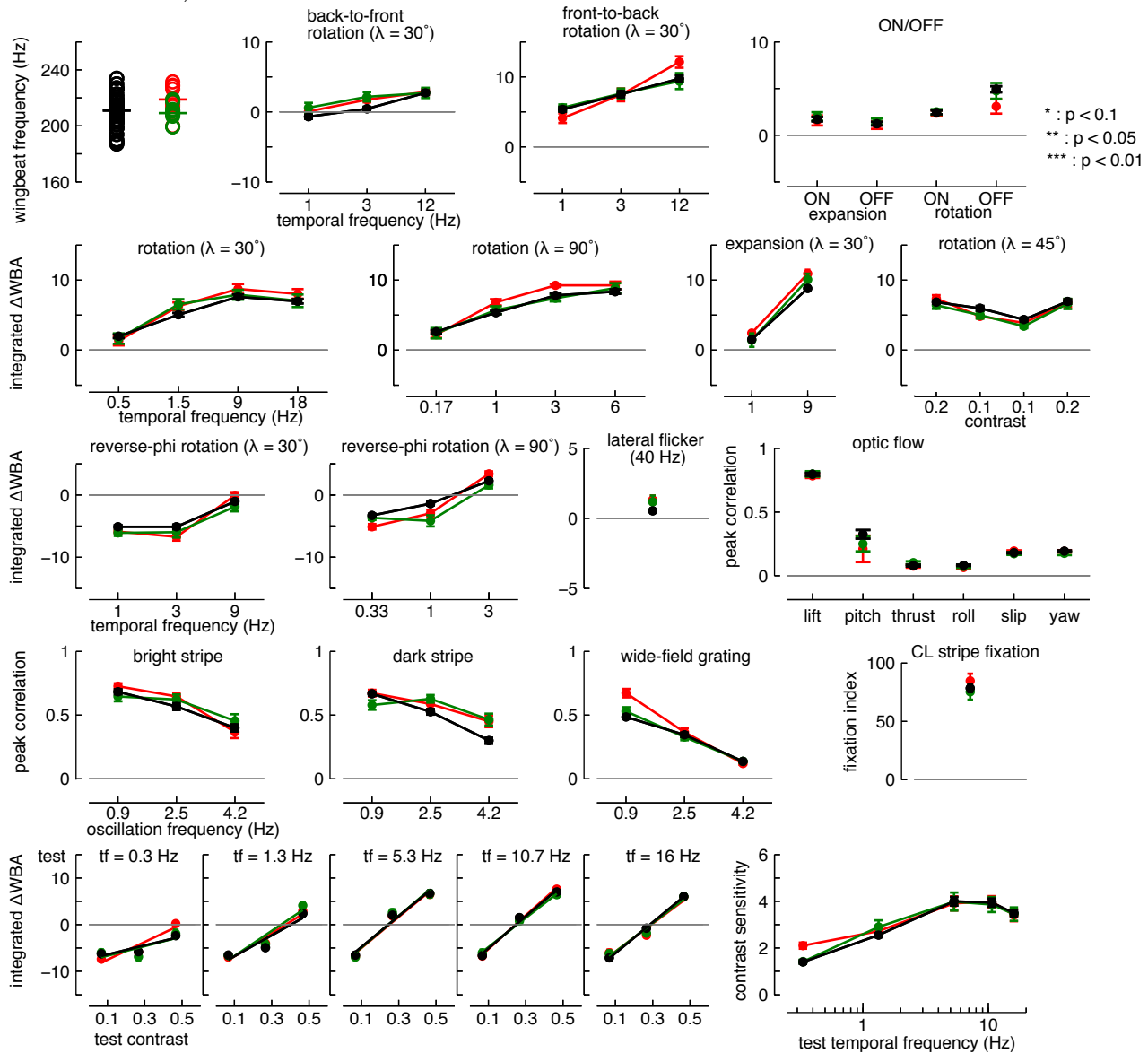


OL section	CB projection	VNC projection	OL section	CB projection	VNC projection
	R31F10D	R30F10DBD		R31F10AD	R65D07DBD

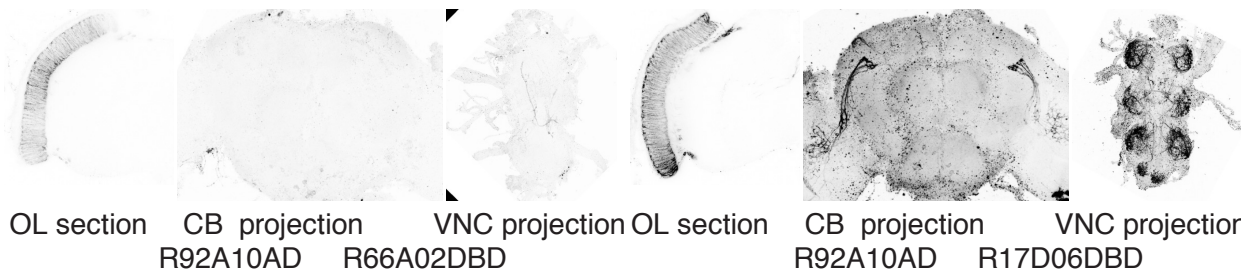
● 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 31f10AD; 30f10DBD x UAS-Kir2.1 n = 10 flies

—●— 31f10AD; 65d07DBD x UAS-Kir2.1 n = 12 flies



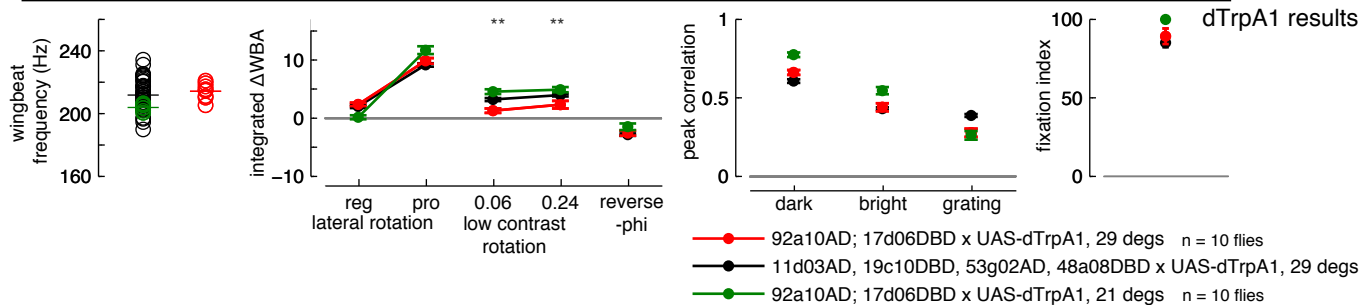
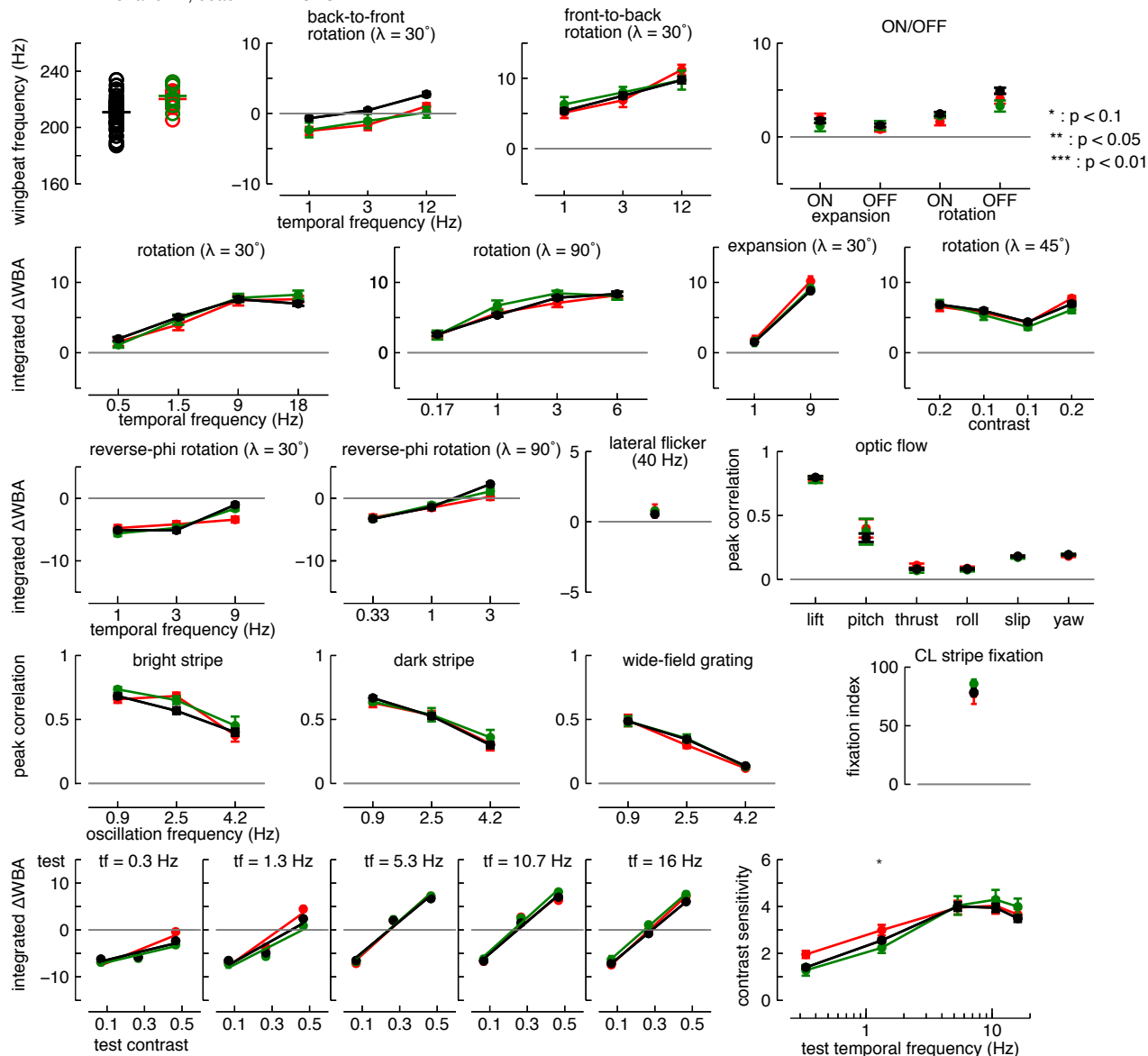
Lamina Intrinsic (Lai)



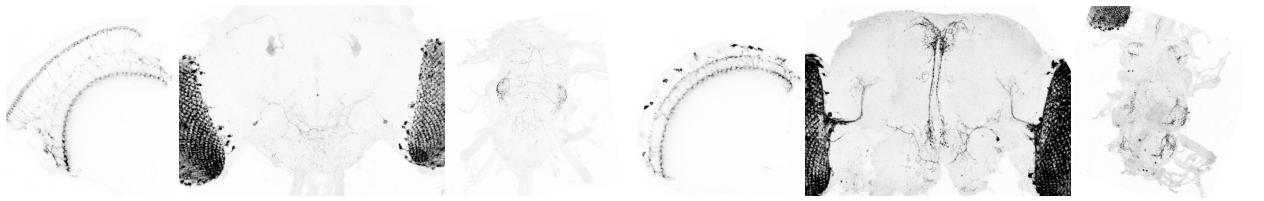
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 92a10AD; 17d06DBD x UAS-Kir2.1 n = 12 flies

—●— 92a10AD; 66a02DBD x UAS-Kir2.1 n = 10 flies



Lamina Wide-Field 1 (Lawf1)

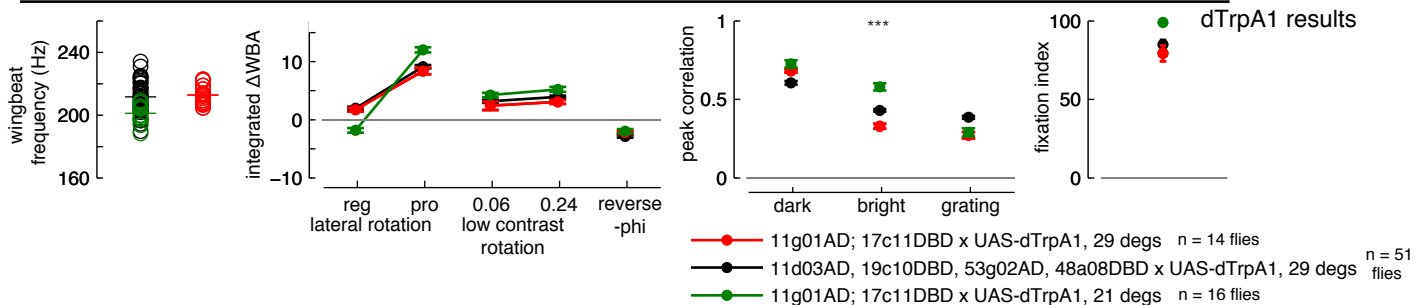
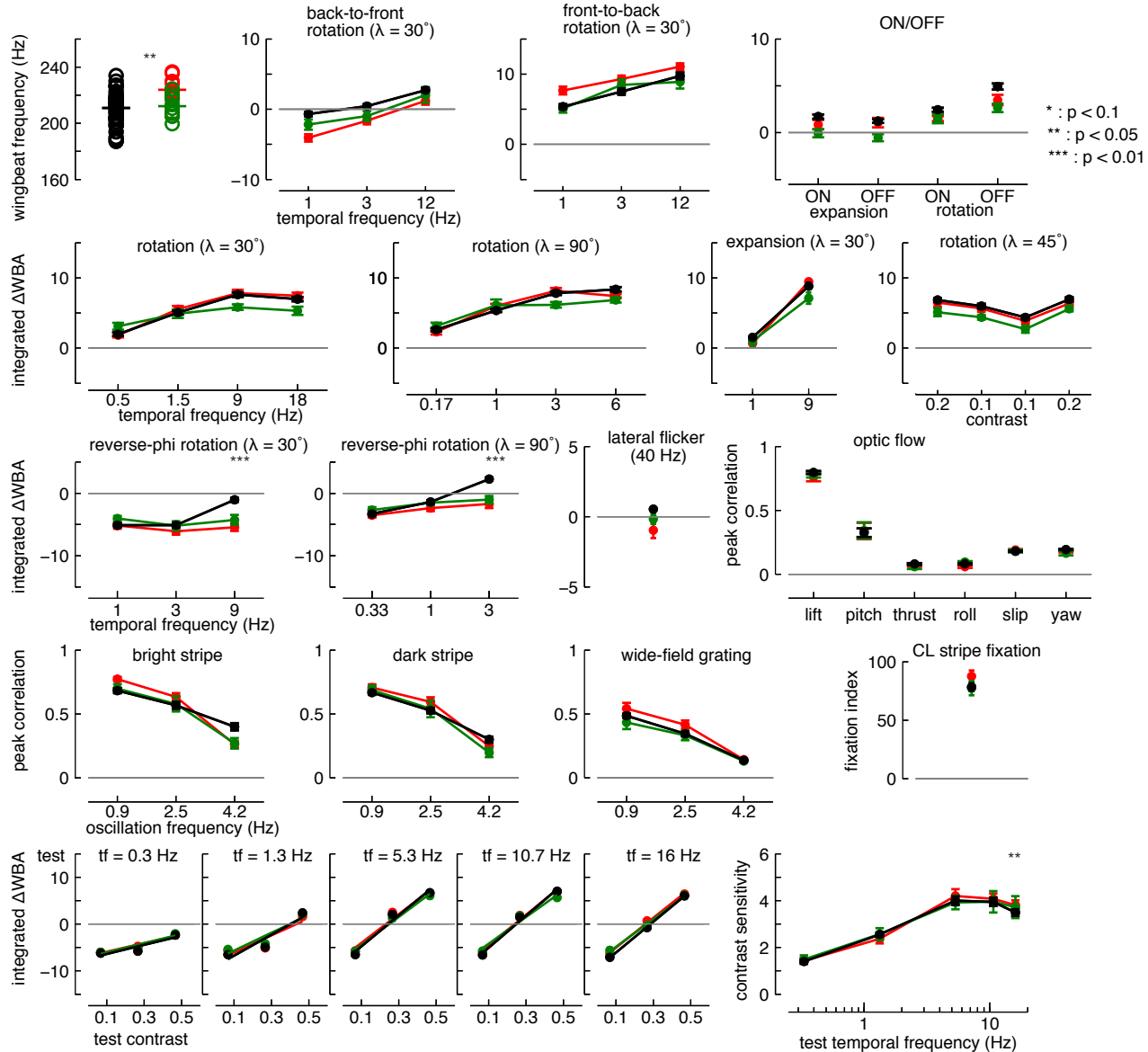


OL section CB projection VNC projection OL section CB projection VNC projection
R52H01AD R17C11DBD R11G01AD R17C11DBD

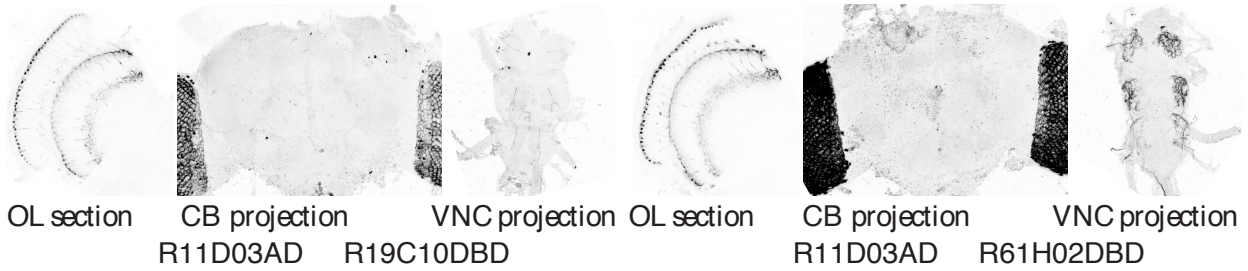
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

—●— 11g01AD; 17c11DBD x UAS-Kir2.1 n = 12 flies

—●— 52h01AD; 17c11DBD x UAS-Kir2.1 n = 11 flies



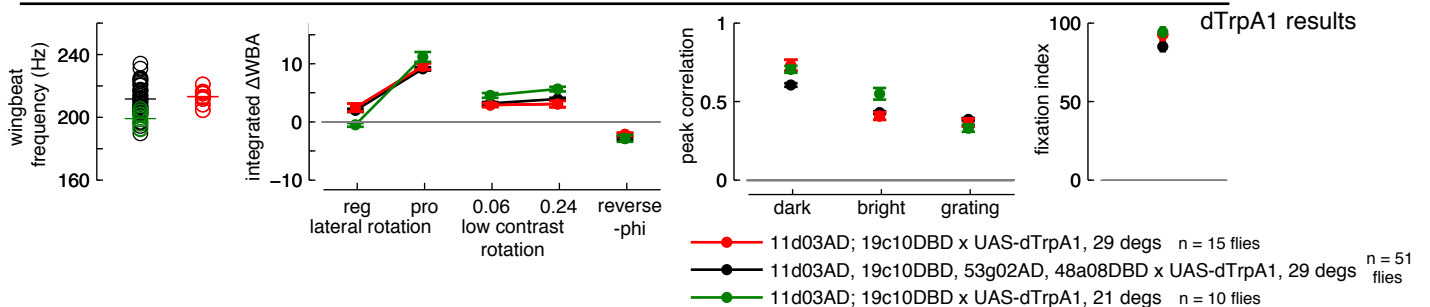
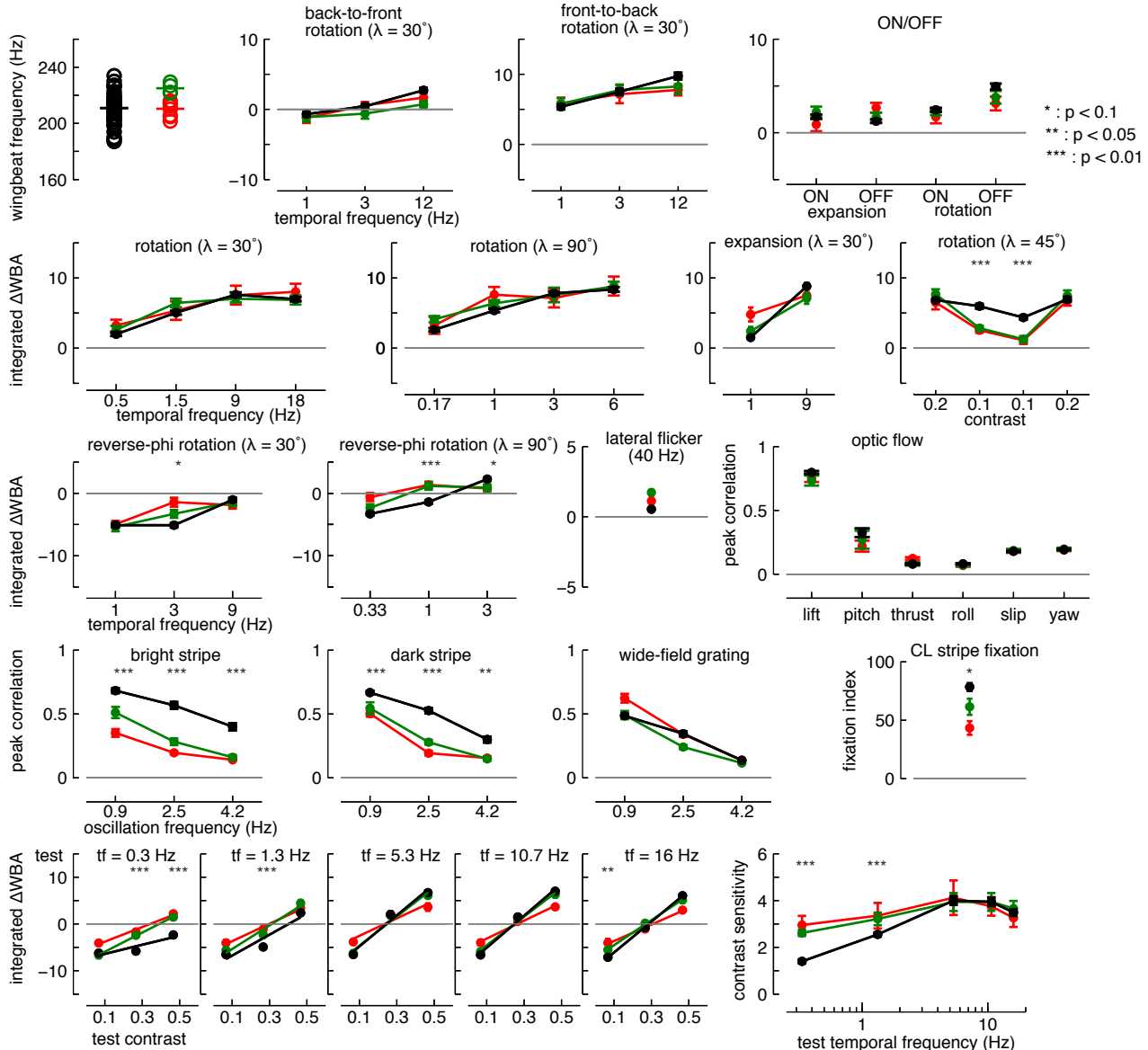
Lamina Wide-Field 2 (Lawf2)



— 11d03AD; 19c10DBD, 53g02AD, 48a08DBD x UAS-Kir2.1 n = 48 flies

— 11d03AD; 61h02DBD x UAS-Kir2.1 n = 11 flies

— 11d03AD; 19c10DBD x UAS-Kir2.1 n = 14 flies



OL section CB projection VNC projection

R16G04AD R55B04DBD

Figure 1 displays 18 psychophysical response plots showing behavioral responses (d' or fixation index) to various dynamic patterns. The plots are organized into four rows and four columns. Each plot compares responses between normal (black circles) and amblyopic (red circles) groups. Error bars represent standard error. Significance levels are indicated by asterisks: * : $p < 0.1$, ** : $p < 0.05$, *** : $p < 0.01$.

- Row 1:**
 - back-to-front rotation ($\lambda = 30^\circ$)
 - front-to-back rotation ($\lambda = 30^\circ$)
 - ON/OFF expansion and rotation
- Row 2:**
 - rotation ($\lambda = 30^\circ$)
 - rotation ($\lambda = 90^\circ$)
 - expansion ($\lambda = 30^\circ$)
 - rotation ($\lambda = 45^\circ$)
- Row 3:**
 - reverse-phi rotation ($\lambda = 30^\circ$)
 - reverse-phi rotation ($\lambda = 90^\circ$)
 - lateral flicker (40 Hz)
 - optic flow
- Row 4:**
 - bright stripe
 - dark stripe
 - wide-field grating
 - CL stripe fixation
- Row 5:**
 - test contrast at various temporal frequencies (tf = 0.3 Hz, 1.3 Hz, 5.3 Hz, 10.7 Hz, 16 Hz)
 - contrast sensitivity vs. test temporal frequency (Hz)

A wingbeat frequency (Hz)

B integrated ΔWBA

reg pro 0.06 0.24 reverse
lateral rotation low contrast rotation -phi

C peak correlation

dark bright grating

D fixation index

—●— 16g04AD; 55b04DBD x UAS-dTrpA1, 29 degs n = 14
—●— 11d03AD, 19c10DBD, 53g02AD, 48a08DBD x UAS-dTrpA1, 29 degs n = 14
—●— 16g04AD; 55b04DBD x UAS-dTrpA1, 21 degs n = 13