chemotaxis (110) 20 -20 **-** AX4 rapgapB - tgrB1 tgrB1 rapgapB ⁻ tgrC1 ⁻AX4 L846F tgrC1⁻ rapgapB ⁻ 16 -16 hours of AX4 development 12 12 -8 -8 4 -4 -8 12 16 20 8 12 16 20 hours of mutant development