



Wild *A.poly* collected Great Barrier Reef Australia (18°38'24.3"S, 146°29'31.8"E)

7 Days exposure to  $CO_2 \text{ treatment;}$ Behavioral testing with CAC(chemical alarm cues from

conspecific fish)

(≥70% of time in CAC)

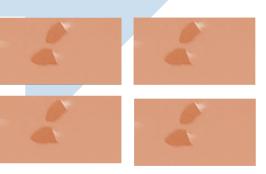
N= 8 Tolerant fish

1:1♀:♂ Breeding pairs

N=8 Sensitive fish

 $(\leq 30\%$  of time in CAC)

 $CO_2$  treatment = 754  $\mu$ atm vs Control = 414  $\mu$ atm estimate in 100 years vs modern average



## F1 offspring (n=72) 5-month-old

Transgenerational CO<sub>2</sub> treatment

n = 9 from tolerant parents

n = 9 from sensitive parents

Developmental

CO<sub>2</sub> treatment

n = 9 from tolerant parents

n = 9 from sensitive parents

Acute

CO<sub>2</sub> treatment

n = 9 from tolerant parents

n = 9 from sensitive parents

Control group

n = 9 from tolerant parents

n = 9 from sensitive parents