

### Abnormal Environment (Cold Stress) induction of Behavioral Stress

#### Cold temperature exposure

320 Birds will undergo exposure to cold temperature (20°C and 15°C) stress as a result birds may experience distress. Any anesthetic, analgesic or tranquilizing drugs would adversely affect the stress response results required in this study. Cold temperature has been demonstrated in peer-reviewed publications to elicit a temporary neurohormonal stress response in the birds. We do not anticipate harm to birds with this limited cold temperature exposure. In brief, this cold exposure will occur for 6 hours per day on days 3, 4, 5, and 19, 20, and 21 of age. For the remaining 18 hours on each of those days, and for all other days of the study the temperature will be maintained at normal, age-appropriate housing temperature. All temperatures will be confirmed using the housing built-in temperature monitoring system and National Institute of Standard and Technology (NIST) certified thermometers.