Animal Stress Level Evaluation

TAIL-CUFF METHODS	VOLUME PRESSURE RECORDING – VPR	PHOTOPLETHYSMOGRAPHY
Sensor Technology:	Differential Pressure Transducer	Photo/LED light sensor
Measurement Source:	Tail blood volume, non-pulse dependent	Tail pulse, pulse dependent
Animal Containment	Animal is placed in a clear acrylic holder with a built-in nose cone. – unrestricted breathing – visible to researcher – seven holder sizes available	Animal is confined to a "one size fits all" black box without proper ventilation or lighting. – restricted breathing – no visibility to researcher – only two sizes available
Tail Mobility	Tail is unrestrained to allow for regular tail movement.	Tail is completely immobilized by a heavy magnetic bar or positioning block that prohibits any tail movement.
Animal Temperature	If the environment is cool, only slight indirect warming is necessary to maintain tail blood volume: normal thermoregulation.	Forceful heating is required to generate a tail pulse for photo light sensor measurements: abnormal thermoregulation.
OUTCOME	REDUCE STRESS LEVEL	INCREASE STRESS LEVEL