# **Experiment HP-8: The Galvanic Skin Response (GSR) and Investigation into 'Cheating'**

This iWorx lab experiment was graciously provided by Dr. Paul Wagner and Dr. Tracy Wagner, Asst. Professors, Washburn University, Topeka, KS.

*Note:* These exercises are best performed in groups of 4 or 6 individuals. Plan accordingly so that each group has enough members so that some are investigators and some are suspects.

## SEE APPENDIX FOR PERTINENT INSTRUCTIONS FOR THIS EXPERIMENT.

## **Equipment Required**

PC or Mac Computer IXTA, USB cable, IXTA power supply iWire-B3G GSR amplifier and electrodes PT-104 Pulse plethysmograph Folder of 10 Photographs - include neutral and emotional photos Directions for the Investigators and Subjects

### Start the Software

- 1. Click on LabScribe
- 2. Click Settings  $\rightarrow$  Human Psychophysiology  $\rightarrow$  GSR-Investigation
- 3. Once the settings file has been loaded, click the **Experiment** button on the toolbar to open any of the following documents:
  - Appendix
  - Background
  - Labs
  - Setup (opens automatically)

## GSR and PT-104 Setup

- 1. Locate the PT-104 pulse plethysmograph and plug it into the Channel A5 input of the IXTA (Figure HP-8-S1).
- 2. Locate the iWire-B3G galvanic skin response amplifier and GSR electrodes (Figure HP-8-S2) in the iWorx kit.
- 3. Plug the connector on the iWire-B3G galvanic skin response amplifier into the iWire 1 input of the IXTA (Figure HP-8-S3)

#### Note: Connect the iWire-B3G to the IXTA prior to turning it on.

4. Attach the GSR electrodes to the pointer and ring finger of the subject's hand. Make sure the fingers are not too cold or too dry.

Note: The GSR unit is precalibrated. No other calibration is needed.



Figure HP-8-S1: PT-104 pulse plethysmograph.



Figure HP-8-S2 The iWire-B3G galvanic skin response amplifier.



Figure HP-8-S3: The equipment needed to record GSR. The PT-104 plugs into Channel A5.