

## TUTORIAL 3

### Telemetry monitoring of physiologic parameters for conscious animals

Date: Tuesday, August 26  
Time: 09:00-10:30  
Location: Athens  
Instructor: Anne Brumagim (Data Sciences International)

#### Benefits

Participants will learn about the possibilities offered by implantable telemetry devices; learn about the basic surgical considerations; learn how to apply the Dataquest ART 4.1 software to a specific protocols also involving Behavioural Monitoring. If you would like a specific topic to be covered, please email the tutor at: [abrumagim@datasci.com](mailto:abrumagim@datasci.com)

#### Features

This tutorial will present current techniques and materials available to collect data from free moving animals via implantable radio-telemetry devices developed and manufactured by Data Sciences International (DSI). The DSI implantable telemetric devices allow researchers to collect data parameters such as: Temperature, Pressure (blood pressure, venous pressure, bladder, intra-ocular, left-ventricular, etc), Bio-potential signals (ECG, EEG, EMG, EOG), Respiration Rate, Motor Activity, etc. A small device is surgically implanted in the animal and a nearby receiver collects data. From the receiver, data is sent to a computerized data collection system.

This tutorial will review:

- The basic techniques for surgical implantation of the telemetric devices
- Considerations for system set-up
- Discuss how different protocols in behavior or other studies can be approached
- Use of the DSI software for data collection.
- Examples of different devices, basic hardware and software will be presented

#### Audience

This tutorial is for researchers new to the concept of telemetry monitoring, and for researchers who want to refine their use of the Dataquest ART 4.1 software for use in conjunction with behavioural studies.

#### Instructor's resume

Anne Brumagim has nearly 20 years of experience as Technical Sales Representative for DSI in Europe. Anne has assisted many laboratories in Academia and Private research with the set-up of telemetry monitoring techniques.