

Assembling and computerizing an indirect calorimeter

Week: January 26 – February 1

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Team: Kyle Herzog – Team Leader
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Tim Pearce – BWIG
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Problem Statement

The goal of the project is to assemble the pieces on an indirect calorimeter into a functioning unit and computerizing the system with the existing software. This unit will be used to continuously collect the real-time (24~48 hours) data on mouse oxygen consumption, CO₂ production, activity and food intake. The instrument will be very useful in studying the genetic and pharmacological effects of Professor Cai's targets on the treatment and prevention of obesity-diabetes. Professor Cai has all components of an indirect calorimeter, mainly including oxygen sensors, CO₂ sensors, air flow controls, mouse chambers, pipes, wires, computer, all types of switches and controls, software, and manual instructions.

Last Week's Goals

- Choose project
- Form team and exchange information
- Begin work on design notebook
- Have first meeting with Professor Cai

Accomplishments

- We were assigned our project and all team members exchanged all relevant contact information with one another
- Team member roles were decided upon

COURSE DELIVERABLES														
PDS														
Mid-semester Report														
Mid-semester Presentation														
Final Report														
Final Presentation														
Weekly Reports														
Notebooks														
MEETINGS														
Team Meetings														
Client Meetings														
Advisor Meetings														
BSAC Meetings														
OTHER														
Web Page														
Special Lectures														

Expenses to Date: \$0.00