

# Physiology Core



UNIVERSITY OF MINNESOTA

Driven to Discover<sup>SM</sup>

Rates effective 7/1/20 – 6/30/21

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## Core Services

All the core services can be customized depending on your experimental needs.

Service	Cost	Specifications
<b>Body Composition</b> (Echo MRI, Echo Medical System)	\$16/mouse <sup>1,2</sup>	6 mice minimum. Fat and Fat Free Mass, Total Water and Free Water content.
<b>Indirect Calorimetry</b> (Oxymax, Columbus Instrument; metabolic parameters recording VO <sub>2</sub> , VCO <sub>2</sub> , RER, Heat, activity).		
<i>24h energy expenditure</i>	\$610 (up to 12 mice) <sup>1,2</sup>	24 mice maximum. 3 days housing (habituation and recording of metabolic parameters. Temperature (4-30°C) and light controlled environment.
<i>Continuous sampling for acute challenge studies</i>	Cost to be determined with core director	Several hours continuous recording. Temperature (4-30°C) and light controlled environment.
<b>Automated Food Consumption – meal pattern analysis</b> (BioDAQ - Research Diets, Inc )	\$273/set of 12 mice <sup>1,2</sup>	32 mice maximum. Fees are based on 5-day habituation and 5-day food intake recording.
<b>Glycemia/GTT/ITT</b>	\$79/hour + current cost of blood glucose test strips	1 hour minimum (single glucose measure) or 3 hours minimum (GTT/ITT). 24 mice/day maximum.
<b>Telemetry for wireless measure of physiological parameters in mice</b> (models offered include: HD-X11: BP, ECG, temperature, activity; PAC10: BP, temperature, activity; ETAF10: ECG, temperature, activity; TAF10: Temperature; HDXG: blood glucose) at a fixed exchange fee.	\$613/mouse + cost of supplies <sup>1</sup>	20 mice maximum. Surgery on 5 mice maximum/day. The same transmitter can be reused on more than one mouse depending on battery life. Cost of additional mouse surgery \$41/mouse + cost of supplies. Further information of the DSI transmitter can be found here: <a href="https://www.datasci.com/products/implantable-telemetry/mouse-(miniature)">https://www.datasci.com/products/implantable-telemetry/mouse-(miniature)</a>
<b>Home-Cage Activity</b> (TechnoSmart)	\$280/study <sup>1,2</sup>	30 mice maximum. Passive infrared sensors-based technology. Fee is based on a 2 week duration.
<b>Non-Invasive Blood Pressure System</b>	\$100/set of 6 mice	
<b>Behavioral Tests</b> ( <i>Open Field Test; Elevated Plus Maze; Sucrose Preference; Forced Swim Test</i> )	\$79/hour	1 hour minimum.
<b>Running Wheels</b> (Lafayette Instrument)	\$64/day	24 mice maximum.
<b>Data Analysis</b>	\$59/hour	
<b>Surgical Services</b>	\$64/hour + cost of supplies	
<b>Use of facility</b>	\$11/hour	
<b>Equipment rental</b> Gas Anesthesia Vaporizer Thermal probe	\$11/hour; \$65 max/day	
<b>Housing in temperature controlled room</b> (range 4-30°C)	Standard RAR per <a href="#">diem rate</a> + \$0.13/cage	

<sup>1</sup> Costs not included in the fee above: standard RAR per [diem rate](#) + \$0.13/cage or Core-specific per diem rate for special cages, if housing in the core is required, mice purchase, diets (if not standard diet provided by RAR), transfer of mice to the Phenotyping Core. If weekend housing is required investigator's personnel should be available for animal check or specific arrangements can be made with RAR for extra cost.

<sup>2</sup> The fee for each service includes data generated by the proprietary software and is provided to the investigator in excel/txt file. Additional data analysis can be customized and performed by expert Core personnel at the cost of \$64/hour.