



June 3, 2025

UPLC guidelines – revised

The ACQUITY UPLC H-Class (UPLC) is part of the Animal Biosciences department equipment. It was purchased in 2008. Currently, the UPLC is used for feed and plasma amino acid analyses.

Based on the department equipment guideline, UPLC is to be used primarily to support the research programs of Animal Biosciences faculty, with use for outside collaborative projects the next priority, and after that contract use for outside groups. User fees are outlined below and are used to recovery the running costs, maintenance and operation.

- **ABSc Users (departmental faculty user):** \$15/sample run by ABSc user. A minimum of 30 samples (which may include combined runs from multiple labs) is required to initiate a UPLC run. Alternatively, a **minimum charge of \$350** will be applied to cover the base cost of consumables for smaller batch requests.
- **University Users (faculty in other departments):** \$35/sample run by University user. We encourage coordinating runs with ABSc users whenever possible to reduce costs. Otherwise, a minimum of **15 samples** is required to initiate a UPLC run. For smaller batches, a **minimum charge of \$500** will apply to cover the base cost of consumables and technician time.
- **External Users (outside University):** services for external user only when the UPLC has the excess capacity, but this would require ample notification and approval by the Research Committee. A minimum of 20 samples is required, and the charge is on per run basis.
 1. Blood plasma free pool amino acids: \$75/sample.
 2. Tissue free pool amino acids: \$80/sample.
 3. Feed / digesta / milk: \$80/sample x number of the hydrolysis
 - 1) Regular hydrolysis: Amino acid profile without Met, Cys and Trp.
 - 2) Oxidized hydrolysis: Amino acid profile without Tyr and Trp
 - 3) Alkaline hydrolysis: Trp only

Julia Zhu is the technician responsible for UPLC maintenance, booking, training and billing.

All users need to contact Julia Zhu czhu@uoguelph.ca for access UPLC. Users have to be trained and approved prior to processing samples. UPLC account will provide all consumable supplies.

Guiding principles for shared equipment use in the Department of Animal Biosciences

- Departmental equipment is to be used primarily to support the research programs of Animal Biosciences faculty, with use for outside collaborative projects the next priority, and after that contract use for outside groups.
- Faculty in Animal Biosciences should have equal opportunity to access equipment for their research. The equipment may be booked for use through our internal booking system.
- Equipment could be used to provide services for outside groups if there is excess capacity, but this would require ample notification and approval by the Research Committee and be done on a fee basis. Any profits would be used to support the maintenance and operation of that equipment.
- Some equipment may require specialized training and/or assistance with operation. In the case department technical support is needed, users should contact that person to make appropriate arrangements for assistance with operation or to have necessary training to use the equipment.

APPROVED
ABSc Research Committee
June 2025