**Centre for Advanced Imaging (CAI)**

**Radiochemistry and Molecular Imaging Project Application Form**

***Please complete after consultation with the Facility Manager(s):***

***Radiochemistry - Rajiv Bhalla*** *(*[*r.bhalla@uq.edu.au*](mailto:r.bhalla@uq.edu.au)*)* ***Send completed applications*** *to* [*radiochemistry@cai.uq.edu.au*](mailto:radiochemistry@cai.uq.edu.au)

***Inveon PET/CT; CT; Optical– Karine Mardon*** *(*[*k.mardon@uq.edu.au*](mailto:k.mardon@uq.edu.au)*)*

***Clinscan PET/MR – Gary Cowin*** *(*[*gary.cowin@cai.uq.edu.au*](mailto:gary.cowin@cai.uq.edu.au)*)*

***1. RESEARCH PROJECT DETAILS***

**Instrument/Facility to be used**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Radiochemistry | Clinscan PET/MR | Inveon PET/CT | Biodistribution | Autoradiography |
| CT | Optical |  |  |  |

**Project title**

Click here to enter text.

**Describe details of the project** *Provide project details summarising the background and aims of the study*

Click here to enter text.

**Anticipated start date of the project**

Click here to enter text.

**Anticipated end date and duration of the project (Maximum of 3 years)**

Click here to enter text.

**Principal Investigator** *(to be invoiced for this project)*

|  |  |
| --- | --- |
| Full name |  |
| School/Centre |  |
| Faculty/ Institute |  |
| Email |  |
| Tel |  |

**Co-Principal Investigator/s**

|  |  |  |
| --- | --- | --- |
| Full name/s |  |  |
| Unit / Department |  |  |
| University/Organisation |  |  |
| Email |  |  |
| Tel |  |  |

**Name of CAI collaborator if relevant:**

Click here to enter text.

**Project methodology** *Specify: a) number and type of samples eg. Animals,,( live or ex vivo, controls, mutant or treatment group), material or chemicals) b) experimental design, e.g. for longitudinal study or multiple ages of development; novel synthesis of chemicals c) Imaging sequences to be used; d) any ancillary equipment to be used). If you require support in the experimental design or implementation, please specify here (it is expected that any support of this kind will be recognised as an academic collaboration)*

Click here to enter text.

**2. RADIOTRACER PRODUCTION**

**Which radioisotope(s) are required for the study?**

Fluorine-18  Carbon-11  Copper-64  Iodine-124

Other  *please specify:*

Click here to enter text.

**Will you require CAI radiochemistry facility staff to perform radiolabelling studies?**

Yes  No

If no, please provide details of the nominated user and a copy of their ‘QLD Radiation Health user licence’?

Click here to enter text.

**Which radiolabelled compound(s) are required for the study?**

Click here to enter text.

**Are radiolabelling methods known for these compounds?**

Please provide details (references) if known.

Click here to enter text.

**Please identify any specific requirements for the radiolabelled compound(s) (e.g. radiochemical purity, chemical purity, formulation etc)**

Click here to enter text.

**Which CAI instruments are required for the radiochemistry?**

Hot Cell  Radiosynthesis Module  Fumehood  HPLC  radioTLC

Other  *please specify:*

Click here to enter text.

**Cyclotron run time and radioisotope production**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cyclotron** | | **Radiochemistry** | | |
| Number of cyclotron runs | Radioisotope and quantity required (GBq) | Hot cell/ fume hood time per run | Purification requirements | Purification time per run |
|  |  |  |  |  |
|  |  |  |  |  |

**3. IMAGING EXPERIMENTS**

**Does this project involve**  **Live,**  **Ex-vivo or**  **material imaging?**

**Number of scan sessions and duration of each scan session requested**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Modality** | **SCAN INFORMATION** | | **SESSION REQUIRED** | | |
|  | Number of Scans  (eg animals/samples) | Duration of Scans per animal/sample (hours) | Daytime (hours) | Overnights | Weekends |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**4. BIODISTRIBUTION EXPERIMENTS**

**Number of animals required?**

Click here to enter text.

**Time points required?**

Click here to enter text.

**5. OH&S AND OTHER RELEVANT DETAILS**

**Have you undertaken any risk assessment for this project?**

No  Yes. Please provide the numbers and titles of the risk assessments

Click here to enter text.

**Project funding details:** please specify any grant or research contract funding this project *(the box will expand)*

Click here to enter text.

**Splits:** *Please nominate the splits across faculties for the usage of the system*

|  |  |
| --- | --- |
| **Faculty/Institute** | **Contribution (%)** |
| **CAI** |  |
|  |  |
| **Total** |  |

***Please note – A completed UQ RISQ form signed by the authorised financial delegate submitted to the CAI Facility manager is required prior to the commencement of the project of UQ projects.***

**Is Ethics approval required?**

No  Yes. Please provide Ethics number:

Click here to enter text.

**For live animal scans, please email a copy of your Ethics application highlighting the relevant procedures, as well as the approval certificate.**

**Is Biosafety approval required?**

No  Yes. Please provide NLRD/IBC number:

Click here to enter text.

**If yes, please discuss the implications with your Facility Manager who may refer your project to CAI OHS Committee.**

*Note: applicants listed on this form and the relevant CAI staff*

*involved need to be listed as participant in the ethics application.*

I agree with the Conditions of Use of CAI facilities.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Principal Investigator’s Signature Date:

***Please note that you will be sent an email when your project is ready to start.***

**CAI OFFICE USE ONLY**

**Facility Manager**

The risk assessments relevant to the project (if any) have been discussed with CAI OHS Officer.

Ancillary equipment is available

The Short Title is:

Ethics have been received and sent to

[ethics@cai.uq.edu.au](mailto:ethics@cai.uq.edu.au) for archiving

**Conditions of Use of CAI Facilities**

**Safety**

All personnel using the facilities must adhere to all safety and operational guidelines. Each facility will have an assigned safety officer, who has the responsibility to ensure that safety guidelines are met, and the authority of the Director of CAI to enforce those guidelines.

All users working in the radiochemistry facilities must complete an induction with the Radiation Laboratory Facility Manager and have all the necessary radiation licences and provide copies to the CAI Radiation Safety Officer.

Independent access to the facilities may be granted once all mandatory requirements training requirement are completed.

**User fees**

User fees cover the generation of tracers and labelling of compound as discussed and agreed prior to the commencement of the project. Additional requirements, such as sample tubes, solvents, purification columns or other consumables will also be estimated and included in the final user fee.

Responsibility for experimental design, implementation, peripheral MR compatible devices and data analysis and interpretation is the responsibility of the user, unless there is a collaborative agreement with a staff member of CAI. Data backup is the responsibility of the user.

There will be no charge for a session when there is a technical failure of the spectrometer. If a session is booked and subsequently cancelled at shorter than 24 hours notice or not used at all without reasonable cause, the user will be charged for the session.

Please note that CAI reserves the right to adjust the charges detailed in these Conditions of Use from time to time in its absolute discretion.

**Recognition of CAI**

It is expected that any intellectual contribution to the research be reflected in co-authorship of all collaborators directly involved in the research, in accordance with the NHMRC *Australian Code for the Responsible Conduct of Research*, 2007. This will be jointly agreed before the project commences.

**Reporting of Research Outcomes**

It is a condition of use that a list of all publications (including conference abstracts) and grant awards arising from the use of CAI facilities be provided to CAI as part of the Centre’s reporting requirements. Users will be provided with a survey to complete this information annually.

**Ethics**

Ethics or Biosafety approvals (for your institution / UQ as applicable) are the responsibility of the user. A copy of the application and the approval must be provided to this Centre. In the event that the user does not need approval from The University of Queensland, the user must provide CAI with his/her ethics application and approval from his/her institution. A copy of these documents will be forwarded by CAI to the relevant University of Queensland Ethics Committee, to ensure that UQ staff are appropriately indemnified. If the user is operating the spectrometer, then the ethics must clearly state that this is the case, and that CAI staff are not involved.

**Pilot studies**

To allow researchers to test the feasibility of their proposed project, pilot studies on the instruments are permitted at a discounted rate. The number of scans are to be negotiated with the Facility Manager. These scans are not intended to be used to generate experimental data but for testing of experimental procedures. After a pilot study has been undertaken, a researcher applying for a grant should include a budgetary item for the appropriate user charges to fund future access required for the project.

**Data Analysis and archiving**

Data analysis and post-processing is the responsibility of the user unless a collaborative agreement has been made with a CAI staff member. There is no charge for access to off-line processing workstations. If data analysis and interpretation by CAI staff is required on a fee-for-service basis, this arrangement must be organized under the terms of a consultancy or research contract.

Users are responsible for backing up their own data. Data will be retained on spectrometers for a maximum of 2 months. Regular backup of data to central archiving is performed but users should not rely on this for long term data retrieval.

**Quotes**

CAI can provide quotes for prospective users, for example: commercial rates for industry, or to set an agreed payment regime for a project.

**Recording of usage: university funding**

All usage of CAI facilities and instruments will be recorded against the relevant UQ Faculty or Institute. This recording is integral to the university’s funding mechanism in which the UQ Faculties and Institutes contribute annually to CAI’s service function, based on the usage of the Centre’s instruments.