

RADIOCHEMISTRY CORE POLICIES AND PROCEDURES

Radiochemistry Projects

Radiochemistry Projects—New projects

Requests for new projects (not in the current catalog) are made via an application form available on-line (link below). This form is available at:

<https://redcap.vanderbilt.edu/surveys/?s=VXMNh6>

Policies Regarding New Radiotracers¹.

1 Definitions. ‘New’ radiotracers are defined as those that have never been prepared at Vanderbilt before and may include tracers described in the literature as produced elsewhere or new chemistry produced at Vanderbilt. Since equipment, personnel, and the availability of supplies are subject to change, tracers that have been historically produced at Vanderbilt but not within the previous 12 calendar months are also considered ‘new’.

2 Exploration of feasibility. Though it is our utmost desire to fulfill every request, production of certain tracers may not be technically feasible in our Core for a variety of reasons. Since this may not be obvious without a limited amount of hands-on experimentation, the Core may conduct up to three exploratory productions to determine project feasibility. The primary goals of feasibility studies are typically to determine labeling potential, tracer stability, and to explore purification and/or quality control metrics. Feasibility studies will be conducted at no cost to the user and will be scheduled pending equipment and personnel availability, generally during times of non-scheduled Core activity. The project PI may be required to provide starting materials (such as precursors and standards), purification supplies (such as columns or solvents), or other consumables not inventoried by the Core. At the conclusion of feasibility studies, the Core will provide a report to the PI that summarizes the studies conducted, the results, and the Core’s determination of the feasibility of the project. At this time, the Core and the study PI will mutually agree to either move forward or discontinue the project. Additional research and development will be subject to cost recovery fees, as required and approved by the Office of Research. Document generation, as required for GMP production (humans), will be subject to cost recovery fees.

3 Determination of Core rates. Core rates are determined in conjunction with and approval from the Office of Research and reflect the actual cost to the Core for each production. Rates may differ among various tracers due to the differential cost of materials required, equipment utilized, and/or the intended use of the tracer (*e.g.* animal, human). Core rates are regularly reviewed by the Office of Research and are subject to change based upon actual costs to produce tracers. Decisions regarding the timing and communication of changes in Core rates are made jointly with the Office of Research. Potential issues necessitating a revision in core rates include changes in the cost and availability of supplies, service contracts, equipment upgrades, and fees absorbed by the Core. For a new tracer, a rate will be determined in conjunction with the Office of Research after the completion of feasibility studies. *Important: If you are planning to propose the use of a tracer in a grant*

¹ Policies have been reviewed and approved by the Vanderbilt University Office of Research.

application or similar proposal, please contact us four weeks prior to final submission to obtain the most up-to-date budgetary pricing. Though non-binding and subject to revision, this estimate will reflect the cost to produce the tracer at the time of proposal submission.

Radiochemistry Core Products/Services

Radiochemistry Core Products—Catalog Items

Items listed in the CORES catalog (see “CORES web site” below) are ordered by sending a “Radiochemistry Core Order Form” form by email to the Core Manager requesting the product amount and date needed. This form and instructions for using it are available at:

<http://www.vuiis.vanderbilt.edu/resources.php?forms=1>

Radiochemistry Core Products with Animal Imaging.

Items listed in the CORES catalog (see “CORES web site” below) that are to be produced and used for animal imaging will be requested using the CORES Scanner reservation form. Include the identity of the radiotracer to be produced in the “Comments” section of the request. (Note: The “Radiochemistry Core Order Form” does not need to be completed when using the CORES Scanner reservation form.)

CORES web site

Current unit prices are listed on the CORES web site, located online on the VUMC web site, accessible by navigating via <http://www.mc.vanderbilt.edu/>, “Research” button on the left, then click on the “Core” option located at the top of the page. Now click on the “CORES” icon towards the center of the page and locate the line “If you are already set up, you can access CORES [here](#).”, click on the “[here](#)”. Log in with your Vandy VUNet ID and password. Click on “Search for Services”, in the search box, enter “radiotracer” for radiotracers or “radiopharm” for radiopharmacy items and press the <Enter> key or click the “Search” button. Depending on your browser configuration, the following direct link may also work:

<https://cfuis.mc.vanderbilt.edu/login.cfm>

Scheduling Core Services

The current radiochemistry production schedule is posted on the VUIIS web site at <https://www.vuiis.vanderbilt.edu/cgi-bin/Calcium39.pl?CalendarName=Radiochemistry>. Click on “Login screen” and enter your VUNetID as your name and your unique password. If you do not have access, contact the Radiochemistry Core Technical Director. To schedule a radiochemistry core service, send a “Radiochemistry Core Service Request” by email to the Core Technical Director with the name of the service (e.g. FLT), the date desired, and the charging information (cost center number and PI). Note that core rules require a valid center number at the time the service is requested.

Cancellation Policy

A radiochemistry core request/order may be cancelled by sending an email with the same information as the original order, but with CANCELLED at the top and in the email subject. It is best to forward the original email order so that the cancellation can be matched to the original order and minimize confusion. Cancellation of an

order done as part of an animal study and cancelled through the Cores system will automatically generate cancellation e-mail with no need for the researcher to notify the Radiochemistry personnel.

The radiochemistry core requests that cancellation of all requested services be done no less than 24 hours before the scheduled delivery time. Repeated cancellations with less than 24 hours notice will result in the charging the full production cost to the PI. Notice/warnings will be given prior to charges being incurred. If the requested service is cancelled after the cyclotron has begun, the full unit price must be charged. If a radiotracer cannot be delivered due to cyclotron or production problems, there will be no charge. Once the radiotracer is produced and delivered, the radiochemistry core charge must be entered.

Radiochemistry Core Resources

A complete list of all products offered by the radiochemistry core can be found on the Cores website, see the “CORES web site” section of this document.

Use of the Radiochemistry Core Facilities

The Radiochemistry Core maintains multiple labs suited for the preparation of a variety of radioactive labeled compounds. These labs can be used by individuals to perform experiments or learn how to work with radioactive materials provided that the following criteria are met; in addition to the normal criteria for approving a project, all individuals who plan to work with radioactive material must be approved by virtue of institutional VEHS training as well as specific radiochemistry training and be specifically named on the authorized user's radiation safety license. Prior to being named on the authorized user's radiation safety license, no personnel will be allowed to be working in a lab without an approved user being present. There are no exceptions to this rule.