

The Core

Emory University
School of Medicine

Summer 2009

New Rates are Coming!!!

We are instituting an important change in how we calculate and apply service center rates for all core lab facilities at Emory, effective immediately.

Going forward we will use 2 rates for core lab services: one for work supported by federal and/or non-profit grants/contracts, and a second rate for research funded by for-profit entities.

The federal/non-profit rate will apply to all research funded by either the federal government or a non-profit regardless of the institution the PI is affiliated with. The federal/non-profit rate that will be calculated in the same way we calculate our current internal rate. This rate will also be used for any research funded by the PI's discretionary/start-up funds and/or intramural grants.

The for-profit rate will be used for research funded by for-profit entities regardless of the institution the PI is affiliated with. This rate will include any departmental or institutional subsidy for core services. For the remainder of FY09, the for-profit rate will be set at the current external rate. We will incorporate the new calculation process when doing your FY10 rates.

Please contact me if you have any questions.

Patricia J. Haugaard
Assistant Dean for Research
Emory Univ. School of Medicine
404-727-3774

Workshop on Efficient Management and Utilization of Core Facilities

The National Center for Research Resources (NCRR) at the National Institutes of Health (NIH) recently held a two-day **Workshop on Efficient Management and Utilization of Core Facilities**. The purpose of this interactive workshop was to discuss the state of existing NIH-funded research core facilities, identify problems involving their operation and use, and to propose potential ways to address common challenges to their maximum use and efficiency. Prior to the workshop, NIH had released a Request for Information (RFI) on various aspects of the use and management of core facilities; Dr. Carolyn C. Meltzer, Associate Dean for Research and Director of the ACTSI Translational Technology Program, assembled the Emory institutional response with input from core directors, faculty, and others. Many of the issues raised in that response were included in the workshop agenda. (cont. next page)

Inside this issue:

| | |
|---|-----|
| <i>NINDS Core Funded Facilities</i> | 2 |
| <i>Center for Systems Imaging Update</i> | 3 |
| <i>New Technical Director joins NIH Tetramer Facility</i> | 3—4 |
| <i>Corelabs / Service Center Directory</i> | 4—5 |

Acknowledgements & Authorship

The Core Facilities at Emory are here to support your research. In order to ensure that the appropriate recognition is attributed to the facilities, please acknowledge the facilities on all publications.

Authorship

If your research project involved contributions from any of the School of Medicine's Core Facilities designed or conceiving the experiments, data analysis or interpretation, please recognize the core with co-authorship of papers.

Acknowledgement

If your research project was supported in part by any of the School of Medicine's Core Facilities (but not meriting co-authorship), we ask that you acknowledge the Core(s) in your publications, abstracts, presentations, posters, grant proposals, etc using variations of the following text:

"This research project was supported in part by the [insert name of the Core(s)] of the Emory University School of Medicine."

Workshop on Efficient Management and Utilization of Core Facilities

(continued)

Approximately 200 institutional officials, core directors, NIH staff, and research leaders participated in the NCRR event. There was a substantive exchange on enhancing core access, addressing obstacles related to administering core facilities under the current NIH policies, and leveraging opportunities for consolidation and regionalization of core facilities. The sustainability of core resources is another issue of concern to many as the current NIH policies prohibit the purchase of hardware upgrades and related costs from core user fees.

The growing national network of NIH/NCRR-supported Clinical and Translational Science Awards (CTSA) could provide a foundation for forming regional cores and optimizing the balance of utilization and expense for high-end technologies. Our own Atlanta Clinical and Translational Science Institute (ACTSI) – through its Translational Technologies Program (TTR) -- has helped to catalyze the formation of new cores such as the Genomics Core, brought new technologies to core facilities at Emory, Georgia Tech, and Morehouse School of Medicine, and taken the first steps to make it easier for faculty from each institution to access core facilities not on their own campus. .

The recommendations of this forward-looking workshop are likely to be encapsulated in a white paper and to shape future NIH policy related to core facilities.

Carolyn Meltzer, MD
William P. Timmie Professor and Chair of Radiology
Associate Dean for Research

NINDS Funded Core Facilities

To all Emory NINDS funded scientists are you aware of the NINDS-funded core facilities here at Emory that can provide you with access to many technologies and reagents at a greatly reduced price (typically **~75% discount!**), as a result of a grant from NINDS (Allan Levey, PI) the Emory Neuroscience NINDS Core Facilities (ENNCF) currently consists of five cores:

- 1) Microscopy, Gary Bassell Director, confocal and swept field microscopes...
- 2) Proteomics, Junmin Peng Director, high throughput and single band MS identification and related...
- 3) Viral Vector, Kerry Ressler Director, lentiviruses made with multiple entry vectors available...
- 4) Neuropath/Histopath, Marla Gearing Director, brain tissue banking, processing staining and more...
- 5) Genetics, Mark Bouzyk Director, with too many services to list here...

Please check out our new website that is loaded with information on services available, contacts, FAQs, equipment available (suitable for inclusion in grant preparation), and ordering services:

<http://www.neurology.emory.edu/ENNCF/>

Please be aware that those without current NINDS funding may also use the facilities and may even be able to take advantage of the steep discount offered to NINDS funded PIs. Enquire when ordering. Directors or their staff are available for consultation and training (when appropriate), but please check the information on the website first. Starting September 21, Nancy Ciliax (nciliax@emory.edu) is also available to answer general questions about the ENNCF.

Center for Systems Imaging Update

Multispectral In Vivo Fluorescence Imaging

A limiting factor for *in vivo* fluorescence imaging is the confounding signal from the autofluorescence of the animal. The multispectral imaging system utilizes full multispectral imaging and spectral unmixing algorithms; thus it is able to separate the tissue autofluorescence from the signal of interest, thereby greatly increasing sensitivity and signal-to-noise. The multispectral *in vivo* fluorescence imaging system could be used to guide the development and evaluation of new drugs, nanoparticles, quantum dots, and imaging probes. Therefore, this device would provide synergy among clinical research involving multiple emphasis areas: imaging, nanotechnology, cancer, the drug discovery, inflammation/vaccines, and animal models of human disease.

Fluorescence images of a tumor-bearing mouse after being injected with gold nanoparticle-conjugated photodynamic therapy drug at a) 1 min, b) 30 min, c) 120 min after intravenous tail injection. Unprecedented delivery efficiency and accumulation rate of the drug in the tumor is monitored via its fluorescence increase in the tumor area (white circle).

Cheng Y, C Samia A, Meyers JD, Panagopoulos I, **Fei B** (co-corresponding author), Burda C. "Highly efficient drug delivery with gold nanoparticle vectors for *in vivo* photodynamic therapy of cancer". *J Am Chem Soc.* 2008 Aug 13;130(32):10643-7.

Contact Information:

Baowei Fei, PhD, EngD

Assistant Professor of Radiology

Quantitative BioImaging Laboratory (QBIL)

Emory University School of Medicine

Phone: 404-712-5649

Fax: 404-712-5689

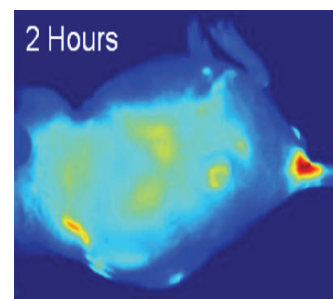
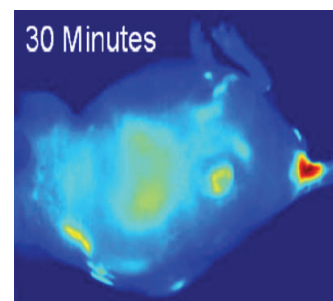
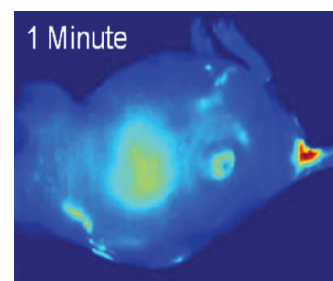
Email: bfei@emory.edu

Center for Systems Imaging (CSI)

Wesley Woods Health Center

1841 Clifton Road NE

Atlanta, GA 30329



New Technical Director joins NIH Tetramer Facility

The NIH Tetramer Facility, located at the Yerkes National Primate Research Center, is happy to announce that Dr. Rick Willis joined the staff as our new Technical Director in July. Rick received a Ph.D. in immunology from the University of Rochester and received postdoctoral training in cellular immunology at National Jewish Health. Among other accomplishments, he produced MHC tetramers in baculovirus-infected insect cells for his work on CD8 T cell competition. As technical director he supervises the lab and works on new methods for MHC tetramer construction and purification. (cont. next page)

New Technical Director joins NIH Tetramer Facility (continued)

In August, Wenyi (Amy) Wang and Volha (Olga) Pryshchep joined the NIH Tetramer Facility staff as Lead Research Specialists. Both Amy and Olga will assist with the production of class I and class II MHC tetramers.

The NIH Tetramer Facility provides reagents to researchers worldwide. The Tetramer Facility, though not an official Emory University core facility, is an excellent resource available to Emory faculty. Clients often pay only for shipping costs, as most production expenses are covered by an NIH contract. For more information or to request reagents, please visit our website at

<http://tetramer.yerkes.emory.edu/index.html>



Pictured from left to right: Amy Wang, Rick Willis, and Olga Pryshchep

Amy Stout, PhD
Manager, Research Projects
Yerkes National Primate Research Center

Corelabs & Service Centers Available @ Emory

BimCore

Contact: Kim Gernert
gernert@emory.edu

Biomarker Core @ Yerkes

Contact: Ilana Garza
icbrown@emory.edu

Biomedical Imaging Technology Center (BITC)

Contact: Katrina Gourdet
kgourde@emory.edu

Biostatistics Core @ CFAR

Contact: Kirk Easley
keasle2@sph.emory.edu

Biostatistics Core @ WCI

Contact: Teresa Stille
tstille@emory.edu

Cell Imaging & Microscopy Core

Contact: Laura Bender
WCIcellimaging@emoryhealth-care.org

Center for Systems Imaging

Contact: Patricia Williams
pawill2@emory.edu

Clinical Research Core @ CFAR

Contacts: Jeff Lennox
jlennox@emory.edu and
Mark Mulligan
mmulli2@emory.edu

Clinical Trials Core @ WCI

Contact: Edmund Waller
ewaller@emory.edu

Emerson Center for Scientific Computing

Contact: Jamal Musaev
dmusaev@emory.edu

Emory Biomarker Service Center

Contact: Mark Bouzyk
mbouzyk@emory.edu and
Carlos Moreno
cmoreno@emory.edu

Emory Clinical Pathology Translational Research Core

Contact: James Ritchie
jritchi@emory.edu or
Ross Molinaro
rjmolin@emory.edu

Corelabs & Service Centers Available @ Emory

Emory GRA Genome Center

Contact: Tim Read
tread@emory.edu

Flow Cytometry

Contact: Robert Karaffa
rkaraff@emory.edu

Genetics & Expression Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Glycomics Center

Contacts: David Smith
dfsmith@emory.edu and
 Richard Cummings
rdcummi@emory.edu

High Performance Computing Core

Contacts: Steve Pittard
wsp@emory.edu and
 Alex Kaledin
kaledi@emory.edu

Human Tissue & Pathology Core

Contact: Charles Butler
cebutle@emory.edu

Hybridoma Core @ Center for Neurodegenerative Disease

Contact: Craig Heilman
cheilma@emory.edu

Imaging Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Imaging Core @ Yerkes

Contact: Leonard Howell
leonard@rmy.emory.edu

Immunology Core @ CFAR

Contact: Chris Ibegbu
cibegbu@rmy.emory.edu

Mass Spectrometry Core

Contact: Frederick Strobel
fstrobe@emory.edu

Microscopy Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Neuropathology & Histochemistry Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Nuclear Magnetic Resonance Core

Contact: Shaoxiong Wu
shaoxiong.wu@emory.edu

Proteomics Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Robert P Apkarian Integrated Electron Microscopy Core

Contact: Elizabeth Wright
erwri@emory.edu or
 Hong Yi
hyi@emory.edu

Rodent Behavioral Core

Contact: Jason Schroeder
jschroeder@genetics.emory.edu

Social & Behavioral Science Core @ CFAR

Contact: Arnel Montenegro
amonten@sph.emory.edu

Tetramer Core

Contact: Amy Stout
akstout@emory.edu

Tissue Bank Core @ Center for Neurodegenerative Disease

Contact: Ami Rosen
arosen3@emory.edu

Transgenic Mouse & Gene Targeting Core

Contact: David Martin
dwmartin@emory.edu

Viral Vector Core @ Center for Neurodegenerative Disease

Contact: Nancy Ciliax (eff 9/21)
nciliax@emory.edu

Virology & Drug Discovery Core @ CFAR

- Clinical Virology Lab
 Contact: Jess Ingersoll
jingers@emory.edu
- Pre-Clinical Virology Lab
 Contact: Natalia Kozyr
nkozyr@emory.edu
- Drug Discovery Core Lab
 Contact: Jelly Detorio
jdetori@emory.edu

X-Ray & Crystallography Core

Contact: Kenneth Hardcastle
khardca@emory.edu

If you would like your Corelabs/Service Center represented on this page or you need to update your information please email us at corelabs@emory.edu