



NEWS & UPDATES



GREETINGS FROM THE SAIF LAB STAFF!



Sheila Bright

Researcher V. Sheila joined the department in May 2017. She specializes in PET/CT images and a variety of animal procedures such as IV, oral gavage, minor surgeries and biodistributions. She loves live music and spoiling her granddaughters.



Sharon Samuel

Lab Manager. Sharon is knowledgeable about IACUC protocols, experiment logistics, and technical details related to imaging. She enjoys volunteering in her community and introducing elementary and high school students to new topics of science.



Jordyn Lawrence

Program Administrator. Jordyn graduated from UAB with her bachelor's in Biology in December 2016. Outside of the office, she enjoys working out, taking her pup to the dog park and attending any UAB sport

function.



Samuria Thomas

Researcher I. Samuria has been a part of The SAIF since 2016. She specializes in MRI. Outside of the lab, she enjoys watching movies and spending time with her son.



Adriana Massicano, Ph. D.

Researcher IV. Adriana is a pharmacist trained in antibody radiolabeling, small animal studies, including minor surgeries and biodistribution, PET/CT and imaging processing. She joined the SAIF team in December 2018. She likes outdoor activities and making experiments in her kitchen.



John Totenhagen, Ph. D.

Researcher V. John specializes in supporting MRI research in clinical and pre-clinical settings. His background is in electrical and computer engineering. Prior to UAB, he worked in research labs at the University of Arizona and North Dakota State University.



Erika McMillian

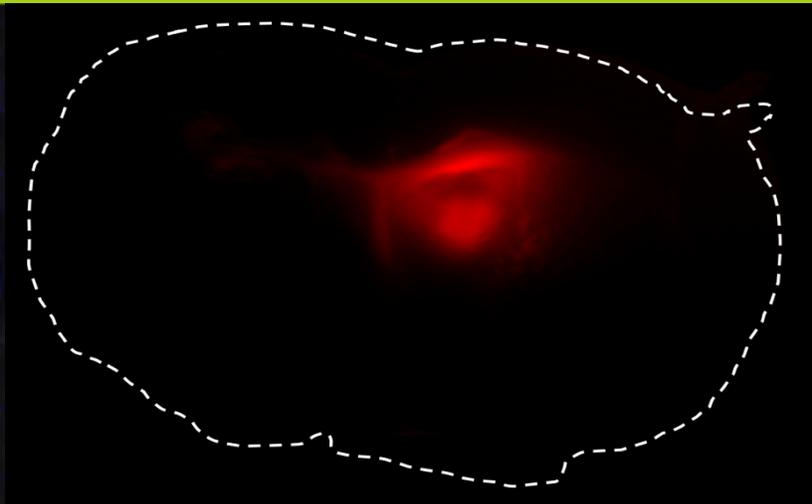
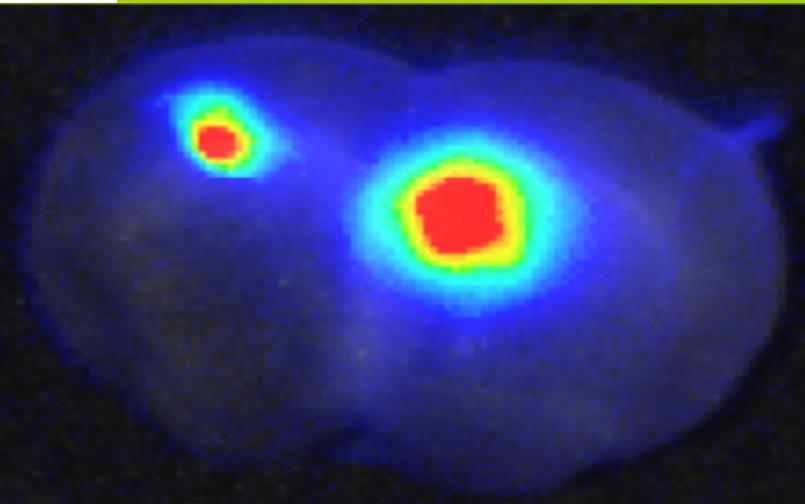
Researcher I. Erika assists with training and imaging on the XSPECT-CT and IVIS systems. She loves animals and any opportunity to laugh and use her creative expertise in graphic design.

**WOULD YOU LIKE YOUR IMAGE FEATURED
IN THE UPCOMING SAIF NEWSLETTER?**

SEE PAGE 5 FOR MORE DETAILS.



FEATURED IMAGE OF THE QUARTER



GLIOBLASTOMA MULTIFORME IN MOUSE BRAIN

Image-guided surgical resection of brain tumors recently became an FDA-approved procedure with the approval of 5-aminolevulinic acid (5-ALA), a heme precursor, as a fluorescence imaging agent. However, studies have shown that 5-ALA is a poor tumor-specific contrast agent that often produces diffuse signal in tumor tissue while enhancing normal tissue. To compare 5-ALA sensitivity and specificity with a more targeted fluorescence agent, panitumumab-IRDye800 (Left) and 5-ALA (Right) were administered to the same orthotopic tumor-bearing mouse. There is detection of a contralateral lesion in the panitumumab-IRDye800 channel that is absent in the 5-ALA channel. This type of imaging can be especially challenging as the combined fluorescence spectrums of the two agents are incompatible with many image devices.

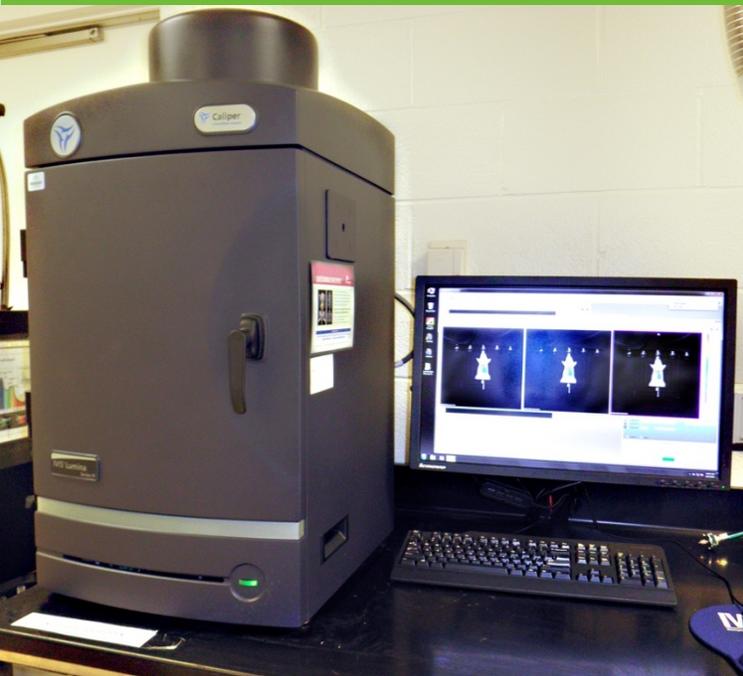
Left: Antibody-conjugated fluorescent dye, panitumumab-IRDye800CW, imaged in mouse brain showing two sites of glioblastoma multiforme. Image was taken using Pearl Impulse, LI-COR Biosciences.

Right: Current standard-of-care glioblastoma imaging agent, 5-aminolevulinic acid (5-ALA). Image was taken using Leica MZ FL III Stereomicroscope.

Image credit: Tiara Napier, PhD student, Warram Laboratory



FEATURED INSTRUMENT



IVIS LUMINA SERIES III

The IVIS Lumina Series III is a user-friendly imaging system for both fluorescent and bioluminescent imaging of mice, rats, and tissue. It is equipped with a highly-sensitive CCD camera and a light-tight chamber that allows the acquisition of high-resolution images for both *in-vivo* and *in-vitro* imaging. Imaging analysis software provides numerous tools for qualitative and quantitative analysis of bioluminescent and fluorescent imaging. With this, users are able to effectively monitor tumor growth, metastasis, and even track cell activity with the help of luciferase reporters and fluorescent labeling. The SAIF offers two Lumina III instruments, housed in WTI and Volker Hall.

CONTACT US

MRI
ULTRASOUND

PET/CT

OPTICAL

SPECT/CT

Anna Sorace
Ph. D.
asorace@uabmc.edu

Suzanne Lapi
Ph. D.
slapi@uabmc.edu

Jason Warram
Ph. D.
jwarram@uabmc.edu

Harrison Kim
Ph. D.
hyunkikim@uabmc.edu

SAIF LAB PERSONNEL

Sheila Bright
brightsj@uab.edu

Adriana Massicano Ph. D.
amassicano@uabmc.edu

Erika McMillian
erikanmc@uab.edu

Sharon Samuel
ssamuel@uab.edu

Samuria Thomas
samuriathomas@uabmc.edu

John Totenhagen Ph. D.
jtotenha@uab.edu

LOCATIONS

Volker Hall Laboratory
1670 University Blvd.
Rm. G082G, 975-6465

WTI Imaging Suite
WTI 630D

MRI 9.4T Imaging Suite
LHL B15, 934-0265

Volker Hall Imaging Suite
VH B21A, 975-6466

SAIF MODALITY PRICING



Labor charges are **\$40 per hour** (for each personnel), when assisted during imaging.

Prices effective 11/1/2018.



Training is available on some modalities, **free of charge**.

MODALITY	COST*	INSTRUMENT
Bioluminescence	\$7/mouse OR \$55/hour (reagent dependent)	IVIS Lumina III
Fluorescence	\$55/hour	IVIS Lumina III
		Custom Leica microscope with Nuance CRI spectral camera
Ultrasound	\$75/hour	Vevo 660
MRI	\$125/hour	Bruker 9.4T
SPECT/CT	\$100/hour + dosing	X-SPECT system
PET/CT	\$200/hour + dosing	Sofie GNEXT PET/CT
Gamma Camera	\$20/hour + dosing	Picker Camera with Numa computer
Specialty Fluorescent Imaging	\$100/hour	Li-Cor Pearl Impulse
		Luna/SPY Systems
Staff Image Analysis	\$40/hour	

Image Submissions

Submit images that you would like featured in the newsletter to erikanmc@uab.edu. Please include PI's name, modality, brief experiment summary, and species.

Publication Reference

If you have received services through this core for grants and publications, please acknowledge support by citing **UAB Comprehensive Cancer Center's Preclinical Imaging Shared Facility Grant P30CA013148**.

For published data obtained with the IVIS Lumina III systems, please cite S10 instrumentation grant **1S10OD021697**.