



Shared Resources Monthly Newsletter



Message from the **Executive Director for Programs**, Planning, and Evaluation

Ashley R. Hodel, Ph.D.

As Executive Director for the UC Davis Comprehensive Cancer Center Office of Programs, Planning, and Evaluation, I oversee the administration of the Cancer Center Support Grant (NCI P30 CA093373) and its associated Research Programs and Shared Resources.

The Office is pleased to partner with Shared Resource Management to develop and refine processes, tools, resources, and more to ensure that Cancer Center members and Shared Resource Directors are well supported. We also collaborate with the Office of Education, Training, and Career Development (ETCD) to offer a comprehensive workshop series on the value of the Shared Resources. Stay tuned, this series picks back up in April!

Thank you to members who completed our Annual Membership Survey. We had a record number of respondents and obtained valuable feedback that will be used to improve future services, programs, and communications. If you are a current Shared Resource user, you may also receive a short survey seeking your immediate feedback on services as we strive for continuous improvement. See the "Post Service Quick Evaluation" section of this newsletter for more details.

The Shared Resources provide the research community with centralized access to specialized scientific expertise, consultation, assistance, infrastructure, and equipment necessary to conduct cutting-edge scientific research. As a Cancer Center member conducting cancerrelated research, you are eligible to receive priority services at rates subsidized (10-30%) by the Cancer Center Support Grant.

I encourage you to see what the Cancer Center Shared Resources can do for you. Please visit the Comprehensive Cancer Center webpage for more details on our services.

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Shared Resources

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Biorepository (BRSR)

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Combinatorial **Chemistry and** Chemical Biology (CCCBSR)











Imaging

(IVTISR)

Mouse Biology (MBSR)

Molecular Pharmacology (MPSR)

Immune Modeling, Analysis and Diagnostics (IMADSR)

Biorepository Shared Resource (BRSR) Seasonal Newsletter

We are pleased to introduce the new Biorepository Shared Resources (BRSR) seasonal newsletter that will update you on upcoming BRSR events, new services/equipment, and current research interests. You can access the BRSR seasonal newsletter here. Email BRSR to learn more or if you would like to access their services.

Genomics Shared Resource (GSR) Free Consultation and Pop-in Workshops

The Genomics Shared Resource (GSR) next-generation sequencing technology is one of the most powerful genomics technologies to emerge in recent years and is accelerating the pace of advances in basic and translational research. GSR staff scientists help clients with samples at any point of the process, whether with already prepared sequencing libraries or in the early stages of a project. GSR has robust data analysis pipelines in place and works closely with clients to get the most out of experiments. Schedule a free <u>consultation</u> today!

Investigators are also invited to attend the monthly Genomics Pop-in Workshops for presentations on various topics in genomics and to discuss design and approaches for their own projects.

BYOP – Bring Your Own Projects and join us from **12-1 p.m.** on **Wednesday**, **March 27** either in person in **Room 1140** in Betty Irene Moore Hall, 2570 48th Street, Sacramento, or via Zoom!

Staff Spotlight – Stephenie Liu, B.A.

Stephenie Liu has served as a staff scientist and manager of the GSR since its inception in 2001. She is an experienced molecular biologist with considerable experience in the field of genomics, having worked on the Human Genome Project with the sequencing team at Lawrence Livermore National Laboratory and then on cancer genomics and pre-clinical therapeutics research projects at UC Davis for over 25 years.



Ms. Liu's work in the GSR has involved the establishment of services to provide key comprehensive genomics technologies to Cancer Center members including microarray profiling, Illumina next-generation sequencing, NanoString GeoMx Digital Spatial Profiling (DSP), and 10x Genomics Visium spatial analysis. She has also played a pivotal role in the pre-clinical design and validation of laboratory-developed tests. She routinely performs a variety of sample processing procedures, including nucleic acid isolation and QC, GeoMx DSP slide processing, and library preparation.

Ms. Liu provides administrative support in the management of the GSR, including in the areas of purchasing, billing, cost analysis, marketing, and grants and publication support. Additionally, she provides support for development of the GSR's educational programs and support for large-scale projects, including logistics and database management. Outside of work, Ms. Liu has far too many hobbies, but can most often be found swimming, cycling, paddleboarding, knitting, watching soccer or Formula 1 racing, traveling, and cooking. She usually shares her baking masterpieces at the Genomics Pop-In workshops!

You can email Ms. Liu with any administrative or billing needs and to schedule consultation appointments.

Biostatistics Shared Resource Virtual Office and Seminar Series

The Biostatistics Shared Resource (BSR) provides biostatistical support for clinical, population, and basic science researchers.

To better support the study design and data analysis efforts of our members, BSR offers weekly office hours in collaboration with the Clinical and Translational Science Center as follows:

- 1st and 3rd Monday from 1-2 p.m.
- Tuesdays from 12-2 p.m.

For more information, contact Dr. Lihong Qi or schedule an appointment today!

Winter 2024, BST 290

BST 290 is a seminar series intended to introduce biostatistics graduate students to a diversity of current research topics and applications of biostatistics. These seminars will be held on Tuesdays from 12:10-1 p.m. in the Math Sciences Building, Room 1147 until March 12, 2024.

Please visit <u>BST 290 Seminars</u> for details on the seminar series or contact <u>Danielle Harvey</u> with any questions.

Flow Cytometry Shared Resource (FCSR) New Equipment and Upcoming Events

The Flow Cytometry Shared Resource (FCSR) provides cell sorting and analytical flow cytometry services. The core's expert and friendly staff can assist with experimental design and data analysis of routine and cutting-edge cytometry applications. The FCSR has three laboratory sites in Davis and Sacramento. Detailed information on FCSR facilities, services, rates and instrumentation can be found at:

https://health.ucdavis.edu/cancer/research/sharedresources/flowcytometry/facilities.html

We have new equipment now available to support your research at Davis and Sacramento Campuses.

Davis Campus (Tupper Hall Flow Cytometry Core)

- User-operable 12-color cell sorter: Sony "MA-900" multi-application cell sorter contact us for training!
- Need 18+ color cytometry try the Cytek "Aurora" 5-laser, user-friendly "spectral" flow cytometer its spectral detection will improve biomarker resolution!
- Looking for answers in sub-micron particles? Accelerate your EV and microparticle characterization studies using the new Small Particle Enhancement Module on our Cytek "Aurora". Contact us for more information!

Sacramento Campus (Institute for Regenerative Cures Cytometry Core)

- 5-laser 148-detector Sony "ID7000" flow cytometer with "spectral" detection, autofluorescence explorer and elimination and fast plate-based sample loading now available, contact us for training
- LSRII 3-laser 10 color flow cytometer easy to use and features familiar DIVA software interface get trained now
 for this workhorse flow cytometer that will support straightforward applications.

FluoroFinder Live Demo Webinar: Monday 1 p.m. March 11

Need help designing multi-color staining panels for your Flow Cytometry experiments? Join us <u>ONLINE</u> on Monday March 11 at 1:00 p.m. PST to learn about the free-to-use tools available to all UC Davis researchers in FluoroFinder.

FluoroFinder's advanced tools bring together the reagent catalogs of all of the most useful suppliers and hosts the optical configurations of all of the Flow Cytometry Core's flow cytometers and sorters. Their site brings together information on reagent brightness and the antigen density of each of your biomarkers to help you choose fluorescent reagents based on sound panel-design principles.

Set up a free user account at <u>www.fluorofinder.com</u> and browse to the UC Davis Flow Core to find our local instruments. Don't miss this webinar to learn about all the advanced tools freely available to you by our partners at FluoroFinder!

Flow Cytometry Online Training Course: June 24-28

Did you miss February's Comprehensive Flow Cytometry Course?

Avoid FOMO by marking your calendar now for the next offering, June 24-28, 2024. The course is designed to teach the fundamental concepts of how flow cytometers work and discuss best practices in sample preparation. A limited number of competitive scholarships are available for CCC members. Don't miss this opportunity to receive comprehensive training in this important analysis technique. Registration will open this spring.

Here's what students had to say about the Flow Cytometry's most recent online training class:

"This was an excellent introduction to flow cytometry. I was thoroughly impressed by the expertise of the instructors and the thoughtfulness with which they designed the lectures and activities for the course. Thank you!"

"Although the course was online, as someone who has done flow cytometry a handful of times, this course was extremely valuable and covered information that will be helpful as I continue my flow cytometry journey."

Please contact Bridget McLaughlin for more information.

February 2024

Research Program Featured Speaker

A joint Comparative Oncology Program (COP) and Molecular Oncology Program (MOP) meeting will be held on Thursday, April 4th from 10-10:50 a.m. Mouse Biology Shared Resource (MBSR) Director Dr. Kent Lloyd will give a 25-minute talk followed by Q&A. Zoom meeting details and seminar flyer are below:



Shared Resources Upcoming Meetings and Outreach Activities

- Quarterly Shared Resource
 Directors Meeting: April via
 hybrid (in-person and Zoom),
 details to follow
- Joint COP & MOP Meeting: 10-11a.m. Thursday, April 4 via Zoom
- Shared Resources Workshop
 Series: 1-2 p.m. Thursday, April
 11 via hybrid (in-person and
 Zoom), details to follow
- UC Davis Research Expo: 10a.m. – 3 p.m. Thursday, April 18 @ UC Davis Conference Center
- 8th Annual Spotlight on Early Career Investigators: 10 a.m. – 3 p.m. Thursday, April 25 in the Education Building, 1st floor lobby and Lecture Hall 2222, Sacramento Campus

Shared Resources Post Service Evaluation

Shared Resource Management introduced the new bi-annual post-service evaluation in January to get immediate and anonymous feedback from users.



January evaluations were sent to BSR, BRSR, and GSR users. Thank you to those who completed the evaluations.

We will send February evaluations to IVTISR (CMGI/CIS/EMIC), IMADSR and FCSR users.

Users who respond to this request will be given the opportunity to provide their contact details to be entered into a drawing to win gift cards!

NOTICE TO ALL NIH-FUNDED INVESTIGATORS

Shared Resources are funded by the UC Davis Comprehensive Cancer Center Support Grant (CCSG) awarded by the National Cancer Institute (NCI P30CA093373). Publications that have utilized facility resources, services or scientific data generated using shared resources should acknowledge the shared resource(s) or the assistance provided by their staff and cite the CCSG (NCI P30CA093373). An electronic copy of the publication should also be sent to the directors of the SRs that were used.

National Institutes of Health (NIH) public access policy

CONTACT SHARED RESOURCES

To view previous newsletters, please visit: Shared Resources Monthly Newsletter

For articles or questions, please email: Cancer Center Shared Resources

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