

Shared RESOURCES

www.roswellpark.org

NEWSLETTER



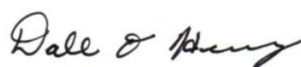
A Message from our Chief Scientific Operations Officer

This is a very exciting time for research at Roswell Park. Our faculty and staff numbers are the highest they have ever been. With this increase in research activity, our Shared Resources have upgraded their facilities to better support the research being done at Roswell Park. We have purchased new equipment in many of our shared resource facilities, including but not limited to, Genomics, Flow and Image Cytometry, Immune Analysis, and Bioanalytics, Metabolomics and Pharmacokinetics.

We have expanded and diversified our highly knowledgeable team of directors: ♦ Dr. Spencer Rosario, from the Bioinformatics & Biostatistics Department, has extended her support to include users of our BMPK Shared Resource as their new Associate Director ♦ Dr. Henry Withers, also from the Bioinformatics & Biostatistics Department, has become an Associate Director of the newly named Drug Discovery Core Shared Resource, teaming up with Dr. Katerina Gurova ♦ Dr. Devi Jeyachandran has joined Nancy Crenshaw in directing the Clinical Research Laboratory Services division of the Pathology Network Shared Resource ♦ Dr. Minhyung Kim joined Drs. Sandra Sexton and Leslie Curtain in the newly named Comparative Oncology Shared Resource, enhancing the surgical expertise within the facility.

It is our mission to continue expanding our knowledge and skills, as well as continuously improving the equipment and services our shared resources provide. We have some of the best Shared Resources at Roswell Park, rivaling the top research cancer centers in the nation. All of these advancements help us to continue providing the highest quality services to our users, allowing us to facilitate ever increasing and improved scientific interactions and accomplishments at Roswell Park.

Sincerely,



Dale Henry, MBA
Chief Scientific Operations Officer
CCSG Associate Director of Administration

In This Issue

Leadership Message	P1
Shared Resources Highlights	P2 - 6
Personnel Updates	P6

Roswell Park Shared Resources

[ATLAS Studios Shared Resource \(ATLAS\)](#)

[Bioanalytics, Metabolomics & Pharmacokinetics Shared Resource \(BMPK\)](#)

[Bioinformatics Shared Resource \(BIOINF\)](#)

[Biomedical Research Informatics Shared Resource \(BRISR\)](#)

[Biostatistics & Statistical Genomics Shared Resource \(BSGSR\)](#)

[Comparative Oncology Shared Resource \(COSR\)](#)

[Data Bank & Biorepository Shared Resource \(DBBR\)](#)

[Drug Discovery Core Shared Resource \(DDCSR\)](#)

[Experimental Tumor Model Shared Resource \(ETM\)](#)

[Flow & Image Cytometry Shared Resource \(FICSR\)](#)

[Gene Modulation Services Shared Resource \(GMSR\)](#)

[Gene Targeting & Transgenic Shared Resource \(GeTT\)](#)

[Genomics Shared Resource \(GSR\)](#)

[Hematologic Procurement Shared Resource \(HPSR\)](#)

[Immune Analysis Facility \(IAF\)](#)

[Investigational Drug Service Shared Resource \(IDS\)](#)

[Nicotine & Tobacco Product Assessment Shared Resource \(NICOTAR\)](#)

[On-site Research Supply Center Shared Resource \(ORSC\)](#)

[Pathology Network Shared Resource \(PNSR\)](#)

[Scientific Editing & Research Communication Core Resource \(SERCC\)](#)

[Therapeutic Cell Production Facility \(TCPF\)](#)

[Translational Imaging Shared Resource \(TISR\)](#)

[Vector Development Production Facility \(VDPF\)](#)

CONGRATULATIONS!



[Dr. Hans Minderman](#) received an [R50 renewal](#) as the Associate Director of Flow and Image Cytometry.



In October, [Dr. Deanna Connors](#) was awarded a [Science Communication Training Award from the Society of Toxicology \(SOT\)](#), which culminated in her participation in an online workshop with the Alan Alda Center for Communicating Science at Stony Brook University.



Annmarie Nowak, MBA was promoted to Director of Biospecimen Operations Management and Systems Integration. In her new role, Annmarie will maintain oversight of all biobank study sample operational activities including planning, coordinating, and sample tracking across biospecimen shared resources. She will work closely with Biobanking leadership and Biospecimen Committees to provide strategic planning and to implement biospecimen management policies.

SHARED RESOURCES HIGHLIGHTS

Comparative Oncology Shared Resource (COSR)

NEW NAME

In order to encompass all of the existing and new services that the Laboratory Animal Shared Resource provides, they have changed their name to **The Comparative Oncology Shared Resource (COSR)**. This new name reflects a distinct discipline of experimental medicine that uses animal models of human and animal diseases in translational and biomedical research, as well as a branch of medicine that is concerned with the prevention, diagnosis, treatment, and study of cancer. Stay tuned... the COSR is currently developing their new web page which will be included on our external website.



We would like to announce that the C57BL/6 and BALB/c mice from our aging colony will be reaching a year of age in March!

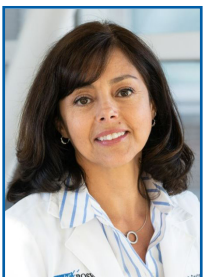
Plan your experiments and take advantage of the cost savings of these valuable aged animals from our colony maintained at Roswell Park. To order your mice, reach out to [Venessa Bazinet](#) and use the "[COSR In House Mouse Colony Purchase Requisition form](#)" found in [i2](#).

Great ideas are being developed from the Aging Colony Interest Group. Some of the projects that will take advantage of this resource are:

[Dr. Scott Abrams](#) - Testing a novel dual combination immunotherapy in two TNBC models, one is syngeneic to the B6 strain, and one is syngeneic to the BALB/c strain. We would like to expand this to older mice to determine efficacy in a setting more closely reflecting the age(s) of the breast cancer patient population such a therapy would likely be clinically tested.

[Dr. Mukund Seshadri](#) - Has planned: Study 1 - Modeling oral carcinogenesis in old mice, Study 2- Therapeutic response of head and neck cancer in aging hosts.

[Dr. Betsy Repasky](#) - Perform a longitudinal study that will evaluate a comparative analysis of inherent stress levels of mice at different ages.



For more information contact
[Dr. Sandra Sexton](#), COSR Facility
Director.



NEW EQUIPMENT

Flow and Image Cytometry Shared Resource (FICSR)

xCELLigence RTCA MP - Multiple Plates

The Agilent [xCELLigence Real-Time Cell Analysis \(RTCA\) MP instrument](#) uses label-free cellular impedance to continuously monitor cell health, behavior, and function with high accuracy, sensitivity, and reproducibility.



COMING SOON

- Run up to six 96-well plates simultaneously or independently, with flexible plate batch processing to maximize productivity for multiple users.
- Measure cell health, viability, or response to treatments with high sensitivity, accuracy, and reproducibility.
- Obtain continuous data at high temporal resolution (from seconds to days), with non-invasive and label-free real-time impedance technology.
- Easy workflow allows users to simply add cells to E-plates and begin kinetic measurements at physiological conditions, with minimal hands-on time.
- Intuitive RTCA Software Pro allows for analysis of real-time data to generate diverse plot types and automatically calculate parameters such as % of cytolysis, IC50 or KT50.
- RTCA Software Pro supports FDA 21 CFR Part 11 compliance to ensure electronic data integrity.

Bioanalytics, Metabolomics & Pharmacokinetics Shared Resource (BMPK)

The Agilent 6545 LC/Q-TOF MS

To support the growing demands of metabolomics research, the [BMPK](#) has recently acquired a quadrupole time of flight (QTOF) high-resolution mass spectrometer (HRMS) from Agilent Technologies. The [6545 LC/Q-TOF MS](#) delivers sensitivity, resolution, mass accuracy, isotopic fidelity, and speed in one measurement. The system couples excellent sensitivity over a wide in-spectrum dynamic range with precise quantitative accuracy, reducing the number of replicates needed or the size of a study.

ASSAYS UNDER DEVELOPMENT



NEW EQUIPMENT

Genomics Shared Resource (GSR)

AVENIO Millisect System

The [AVENIO Millisect System](#) is an automated, high-performance tissue dissection system that enables precise and consistent recovery of formalin-fixed paraffin-embedded (FFPE) tissue areas of interest for molecular pathology.



Digital annotation

- Allows definition of multiple Areas of Interest (AOIs) on a single slide, without limits on geometry
- Digitally-assisted alignment to reference slide for up to 4 serial slides

Automated milling

- Faster process with fewer steps and no pre-staining
- Precise milling displaces tissue AOIs as small as 250 μm using a rotating action

Comprehensive reporting

- Electronic report file, including images, annotations and notes, exportable as a PDF
- Pre-and post-dissection image capture



COMING SOON

Immune Analysis Facility (IAF)

The PhenoCycler™-Fusion system

The [PhenoCycler](#) instrument (formerly CODEX®) is a bench-top fluidics system that integrates with the Fusion imaging platform. Together, the PhenoCycler-Fusion system is the fastest spatial biology system, capable of mapping 1 million cells in 10 minutes, turbocharging your discoveries and allowing you to go from sample-to-data within 24 hours. The automated cycling and image acquisition is enabled by flow-cell integration placed within a slide carrier designed specifically for PhenoCycler-Fusion fluidics. The output file (.QPTIFF) can be analyzed with the Akoya software suite and third-party software solutions.

- Automated cycling and iterative imaging of 100+ biomarkers across the whole slide.
- Seamless integration of fluidics and imaging capability driven by a single software.
- Single-step staining and gentle reporter removal to preserve sample integrity for downstream analyses.
- Output file (.QPTIFF) is compatible with Akoya software solutions or third-party.
- Part of an end-to-end spatial biology solution including reagents, software, and specialized support.

COMING SOON



Scientific Editing & Research Communications Core Resource (SERCC)

SERCC provides professional-level scientific editing services to faculty with the goal of helping them succeed in their pursuit of funding and publication of high-impact research. Grant proposals and manuscripts are edited over a turn-around time of 10 business days, and requests for editing support can be submitted to editing@roswellpark.org approximately one month in advance of the projected start date for a project. Editing support is free for Assistant Professors at Roswell Park with active mentoring committees. More information about SERCC's services and fees can be found online under Roswell Park's Shared Resources [website](#).

On-site Research Supply Center (ORSC)

The [On-site Research Supply Center](#) is offering a new service for our investigators. Our new Laboratory Support Assistants, Amanda Post and Michaela Navone, are available to assist with defrosting freezers, transporting small equipment & labware, and laboratory closeouts such as cleaning lab benches and disposing of biologics and non-toxic solutions as directed by the lab.

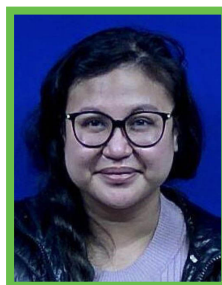
If you are interested in utilizing their services, please contact Gina.Blasko@RoswellPark.org x1740 to schedule an appointment.



NEW PERSONNEL



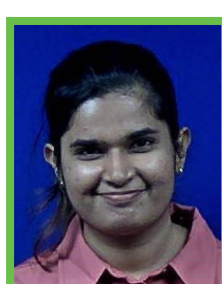
Steve Schweigert joined the [Genomics Shared Resource](#) in February as a Research Technologist.



Melissa Fos joined the [Hematologic Procurement Shared Resource](#) in January as a Clinical Data Manager.



Justin Labrie joined [Therapeutic Cell Production Facility](#) in September as a Research Associate.



Tanvi Ulkande joined [Vector Development & Production Facility](#) in September as a Research Technologist.