Research in Medicine

Li Li, MD, PhD
Laboratory of Translational Cancer Research
Ochsner Clinic Foundation, New Orleans, LA
Ochsner Clinical School, University of Queensland, AU
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Ochsner Health System

Ochsner Health System DOCTORS LOCATIONS SERVICES Patients & Visitors Health Resources Medical Professionals

Research > Institute of Translational Research > Research Programs > Cancer

TRANSLATIONAL CANCER RESEARCH PROGRAM

Our Goals/Vision

- Our mission is to gain an insight into the mechanisms driving tumorigenesis, drug resistance, metastasis, and to develop personalized targeted therapies and precision medicine to treat both drug resistance and metastatic cancer.

Projects

Tumor microenvironment

- Regulates cancer cell survival, metastasis, inflammation, and immune surveillance: colon, renal, bladder, pancreatic, esophageal, melanoma, prostate etc
- Lymph node (LN) microenvironment, especially lymph node stromal cells (LNSCs), play a significant role in solid tumor growth, drug resistance, and subsequent extra-nodal metastasis of many types of cancer

Cancer stem cell (CSC)

- A small population of cancer cells, grow slow
- Self renewal, dependent on tumor microenvironment

Patient-derived orthotopic xenograft models

- Human cancer-in-mouse orthotopic xenograft models using patient tumor specimens, tagged with optical reporter genes
- Recapitulate human cancer features, a platform for investigating CSC/LN microenvironment-specific mechanisms

Prognostic and predictive biomarkers

- Recurrence-CRC; long or short lived-FL; therapeutic targets-PC

Translate preclinical discoveries into effective cure for cancer patients

- Individualized therapy-an Avatar style approach

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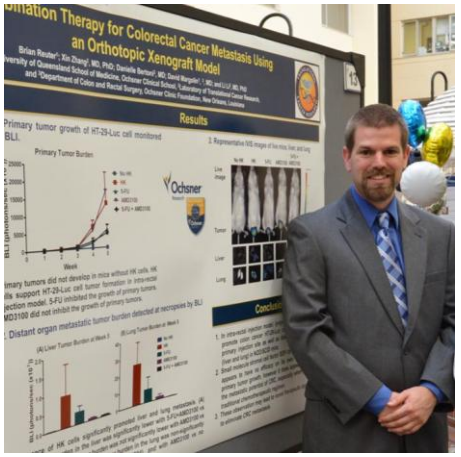
UQ students

2013

Theo*-Follicular lymphoma cancer stem cell and prognostic marker -Dr. Cole, SRM podium 2013, multiple awards at ACP 2014

2014

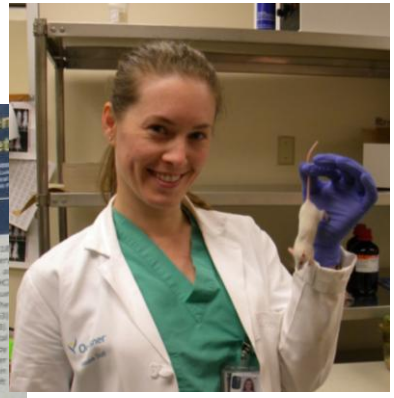
Brian*-Colon cancer combination therapy-Dr. Margolin, the second place in Ochsner Research Day poster 2014, ASCRS annual meeting podium 2015



2015

Megan*-Colon cancer stem cell biomarker-Drs. Margolin and Hooper (UQ), SRM podium 2016

Ashley*-Renal cell carcinoma-Drs. Bardot and Gobe (UQ), the first place Ochsner Research Day poster 2015



*Scholarship
SRM: Southern Regional Meeting

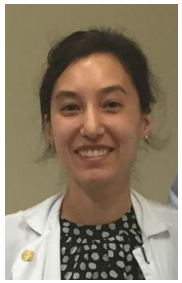
UQ students (continue)

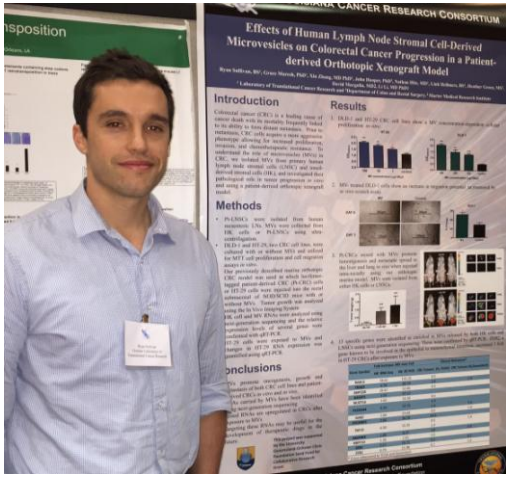
2016

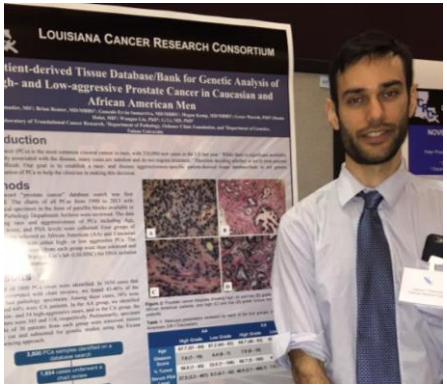
Laurent—Prostate cancer data mining-Dr. Liu (LSU)

Hilary**—Melanoma-Dr. Wells (UQ), SRM podium 16, 17

Ryan**—Colon cancer-Drs. Margolin and Flemington (Tulane), SRM podium 16, 17





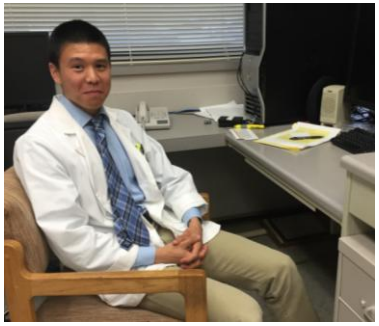


2017

Sonny-Colon cancer-Margolin, follicular lymphoma immune scores-Dr. Gandhi (UQ), SRM podium 17

Darren-Prostate cancer-Drs. Tang and You (Tulane), co-authored a quick paper

Mae-Pancreatic cancer-Dr. Conway



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**Mphil and scholarship

What do you need to be involved

- Interested in translational CANCER research
- Do well in your MD program, such as STEPs
- Dedicating — 10 hours per week (average, volunteer basis)
- A team player — works well with other people in different levels including scientists, research associates, physicians, research coordinators, residents and fellows, and some times also patients
- Seeking for the post-doc scholarship
- It is rewarding

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Questions? lli@ochsner.org