Genomics, Genetics & Epigenetics
RESEARCH PROGRAM

Tuesday, March 27, 2018
1:00 PM
SHM I-304

“A Feature of Leukemia cell-of-origin”

Shangqin Guo, Ph.D.
Assistant Professor of Cell Biology

A light lunch will be provided.
Yale Cancer Center offers biostatistics and bioinformatics support to all members/projects through the Biostatistics Shared Resource (BSR), which is led by Dr. Shuangge (Steven) Ma. Dr. Ma has over ten years of experience conducting cancer biostatistical research, including serving as co-director of the Biostatistics and Bioinformatics Core of the Yale SPORE in Skin Cancer, and is also the senior genetic statistician for the VA CT Healthcare System. YCC members are eligible to receive up to 16 hours per year of service at no cost. As funding agencies and journals continue to place increasing emphasis on proper analytics, it is critical to involve statisticians early on and in all stages of your study. Whenever you have a new project or idea, Dr. Ma urges you to contact him (shuangge.ma@yale.edu) and he will introduce you to the appropriate faculty or staff at the BSR so that you can take advantage of their expertise and your YCC member benefit.

The BSR is happy to re-announce its drop-in consultation service. Dr. Wei Wei, an experienced statistician with special expertise in clinical trial design and analysis and general analytics, provides on-site biostatistics support. Drs. Yong Kong and Ying Zhu, both with extensive experience in the analysis of genetic, genomic, proteomic, and epigenetic data, provide bioinformatics support.

**Biostatistics Shared Resource (BSR) Drop-In Office Hours - WWW213**

**Biostatistics**
Dr. Wei Wei  
Thursdays - 9am-1pm  
Fridays - 9am-5pm

**Bioinformatics**
Drs. Yong Kong and Ying Zhu  
Fridays - 1pm-5pm
STAT News March Madness

STAT News is running a bracket-style tournament to find the best innovations in science and medicine. The bracket began with 64 research innovations and is now down to the final 4; one Yale Cancer Center publication is competing to move on to the finals needs your support! It takes a minute to vote, and no registration or email is required. Please support Skyler Johnson, James Yu (RR), Cary Gross (CPC), and Henry Park's (RR) publication in the Journal of the National Cancer Institute on the Use of Alternative Medicine and its Impact on Survival, which is in competition against East Carolina University.

Vote Now!
Recently, Smilow Cancer Hospital received $500,000 from a family foundation to support Stephanie Halene, MD, PhD, Associate Professor of Medicine (Hematology), in the study of clonal hematopoiesis. Understanding clonal hematopoiesis may offer new opportunities to prevent blood cancers. Dr. Halene will collaborate with her colleagues in Hematology, Medical Oncology, and Internal Medicine on the research.

YCC investigators have demonstrated in a new study that more sophisticated models to assess patient risk for cancer can result in better clinical trials with more definitive results...”Historically, clinical trials select patients using mostly tumor size and lymph node status,” said Lajos Pusztai, MD, senior corresponding author of a study published in JAMA Oncology.... https://www.ncbi.nlm.nih.gov/pubmed/29372234 http://yalecancercenter.org/news/article.aspx?id=16647 Corresponding authors Christos Hatzis, PhD, and Tara Sanft, MD (CPC).
Member Notables

Muzumdar Lab @MuzumdarLab · Mar 20
Check out our recent work deciphering how size and shape properties of nanoparticles can impact drug delivery in models of PancreaticCancer.
@kochinstitute @YaleMed @YaleCancer
pubs.acs.org/doi/10.1021/ac...

Mandar Muzumdar is a new member in GGE.
Member Notables

Erin Hofstatter discusses latest breast cancer research on CT’s WFSB that was made possible by the Terri Brodeur Breast Cancer Foundation with money raised by the Southern Connecticut Breast Cancer Walk.

http://www.wfsb.com/story/37514506/breast-cancer-breakthrough-may-have-been-found-in-connecticut
Jeffrey Townsend was last author a recent Oncogene paper that described development of a new method to predict likely resistance paths to cancer therapeutics, and a methodology to apply it to one of the most frequent cancer-causing genes, KRAS. Other Yale authors included Stephen Gaffney and Vincent Cannataro.


https://www.nature.com/articles/s41388-017-0105-z
Funding Opportunities – Comprehensive List check here:
http://yalecancercenter.org/research/foa.aspx

**SPORE in Lung Cancer Program Awards: Career Development Program**
The Career Development Program will provide support of up to $50,000 to promising junior investigators and/or establish investigators who have not previously conducted lung cancer focused research.

**Application Timeline:** Letters of intent (LOI) are due no later than 5:00 PM, April 27, 2018

Learn More >>

**SPORE in Lung Cancer Program Awards: Developmental Research Program** To provide seed money to investigators to support studies with a strong translational component that have the potential to evolve into, or be incorporated into, a full Yale SPORE in Lung Cancer project.

**Application Timeline:** Letters of intent are due no later than 5:00 PM, April 27, 2018

Learn More >>
Funding Opportunities – Comprehensive List check here:  
http://yalecancercenter.org/research/foa.aspx

2018 YCC Internal Pilot Grants

These grants will support innovative basic, clinical, population, computational, prevention/control, and translational cancer research. The primary review criteria will be scientific excellence, innovation, cancer relevance, and the likelihood of the project evolving into federally funded cancer research. Members of Yale Cancer Center or faculty who have applied for membership are eligible to apply. The anticipated start date is May 1, 2018.

Projects headed by a member of Yale Cancer Center will be awarded up to $50,000. YCC Program Leaders may not apply for pilot funding. We welcome all potential areas of cancer research, recognizing the following funding priorities:

• Microbiome, including its role in carcinogenesis and modulation of cancer therapy
• Single cell analysis to understand tumor heterogeneity, microenvironment, tumor immune response
• Undruggable targets, including immunotherapeutic, novel delivery approaches, or synthetic lethal approaches
• DNA repair and therapeutics
• Metabolic dysregulation in cancer

In addition, applications that incorporate studies of underserved populations or novel data science and computational approaches will receive greater funding priority.  
Submission deadline is 11:59pm on April 2nd, 2018.

Grant guidelines and electronic application instructions can be obtained on Submittable (https://yalecancercenter.submittable.com/submit)

For scientific questions, please contact joann.sweasy@yale.edu. All other inquiries should be sent to christine.holmberg@yale.edu.
Upcoming Events - https://medicine.yale.edu/cancer/patient/calendar/

• YCC Member Lunch – April 12th
  • Lunch with YCC Leadership and meet our newest members
  • Thursday, April 12, noon-1pm
  • Smilow North Pavilion, NP4-101A/B

• YCC Annual Retreat – May 16th – West Campus Conference Center – Agenda TBD

• YCC Grand Rounds – Most Tuesdays – 12-1pm – 55 Park Street Auditorium – Now viewable on Skype! – Find out how on the calendar posting at the link above.
  • Next week – Richard Flavell and Bernadette Marquez-Nostra: “Humanized Mice for the Study of Human Cancer” and “PET Imaging of Breast Cancer Using 89Zr-labeled Antibodies"

• Next GGE Seminar is April 24th - Speaker TBD
Upcoming Events - [https://medicine.yale.edu/cancer/patient/calendar/](https://medicine.yale.edu/cancer/patient/calendar/)


- Dermatology Grand Rounds: Visiting Professor Lecture: "From Melanocytes to Melanoma: The Molecular Evolution of Melanocytic Neoplasms” - March 28 – 10-11am – Fitkin Memorial Pavilion Auditorium

- Cancer Prevention and Control (CPC) Research Program Seminar – April 5 – 12-1pm – 60 College St, Rm 216 – **Scott Huntington**: “Physician-volume and Cancer Outcomes: Moving Beyond the Surgical Setting”
February Publications

Associated characteristics and impact on recurrence and survival of free-floating tumor fragments in the lumen of fallopian tubes in Type I and Type II endometrial cancer.
Gynecol Oncol Rep 23: 28-33 (02/2018)
PM ID: 29387776 PMC5771964

In vitro and in vivo activity of IMGN853, an Antibody-Drug Conjugate targeting Folate Receptor Alpha linked to DM4, in biologically aggressive endometrial cancers.
Mol Cancer Ther : (02/2018)
PM ID: 29440294
February Publications

Heterogeneity and mutation in KRAS and associated oncogenes: evaluating the potential for the evolution of resistance to targeting of KRAS G12C.
Cannataro VL, Gaffney SG, Stender C, Zhao ZM, Philips M, Greenstein AE, Townsend JP
Oncogene E publication ahead of print: (02/2018)
PM ID: 29453361

Adaptive and Reversible Resistance to Kras Inhibition in Pancreatic Cancer Cells.
Cancer Res 78: 985-1002 (02/2018)
PM ID: 29279356

Streptomyces sp metabolite(s) promotes Bax mediated intrinsic apoptosis and autophagy involving inhibition of mTOR pathway in cervical cancer cell lines.
Sci Rep 8: 2810 (02/2018)
PM ID: 29434241 PMC5809390
February Publications

Diverse Regulators of Human Ribosome Biogenesis Discovered by Changes in Nucleolar Number.
Farley-Barnes KI, McCann KL, Ogawa LM, Merkel J, Surovtseva YV, Baserga SJ
Cell Rep 22: 1923-1934 (02/2018)
PM ID: 29444442 PMCID:PMC5828527 NIHMS943895

Single-arm, neoadjuvant, phase II trial of pertuzumab and trastuzumab administered concomitantly with weekly paclitaxel followed by 5-fluorouracil, epirubicin, and cyclophosphamide (FEC) for stage I-III HER2-positive breast cancer.
Breast Cancer Res Treat E publication ahead of print: (02/2018)
PM ID: 29396664

ZEB1, ZEB2, and the miR-200 family form a counterregulatory network to regulate CD8+ T cell fates.
J Exp Med E publication ahead of print: (02/2018)
PM ID: 29449309
February Publications

**Lymphedema in ovarian cancer survivors: Assessing diagnostic methods and the effects of physical activity.**
Cancer E E publication ahead of print: (02/2018)
PM ID: 29437202

**DeepSurv: personalized treatment recommender system using a Cox proportional hazards deep neural network.**
PM ID: 29482517

**Improving SNP Prioritization and Pleiotropic Architecture Estimation by Incorporating Prior Knowledge Using graph-GPA.**
Kim HJ, Yu Z, Lawson A, Zhao H, Chung D, Stegle O
Bioinformatics : (02/2018)
PM ID: 29432514
February Publications

**POSH regulates Hippo signaling through ubiquitin-mediated expanded degradation.**
Ma X, Guo X, Richardson HE, Xu T, Xue L
Proc Natl Acad Sci U S A 115: 2150-2155 (02/2018)
PM ID: 29440430

**Myeloid-targeted immunotherapies act in synergy to induce inflammation and antitumor immunity.**
J Exp Med E publication ahead of print: (02/2018)
PM ID: 29436395

**Distance-correlation based gene set analysis in longitudinal studies.**
Sun J, Herazo-May JD, Huang X, Kaminski N, Zhao H
Stat Appl Genet Mol Biol 17: (02/2018)
PM ID: 29397393

**DKK2 imparts tumor immunity evasion through β-catenin-independent suppression of cytotoxic immune-cell activation.**
Nat Med : (02/2018)
PM ID: 29431745
Did I miss your good news??

Email: 
christina.dreyfus@yale.edu
by April 17\textsuperscript{th} for April’s seminar