December 6, 2013

Announcements

Jennifer Moliterno Gunel
Appointed in Neurosurgery
I am pleased to announce that Jennifer Moliterno Gunel, MD has joined the department of Neurosurgery and the Brain Tumor Program at Smilow Cancer Hospital. Dr. Moliterno joins us from the department of Neurosurgery at Memorial Sloan-Kettering Cancer Center where she completed a neurosurgery oncology fellowship. She received her undergraduate and medical degree from The University of Florida. She completed her internship and residency at Yale-New Haven Hospital and served as Chief Resident from 2011-2012. Dr. Moliterno's primary focus is on the surgical management of all types of brain tumors.

Smilow Cancer Hospital Network Research Summit
In an effort to continue to expand our clinical research efforts at the Smilow Cancer Care Centers, we held our third Smilow Cancer Hospital Network Research Summit yesterday at West Campus. I was very happy to see over 60 people, including great representation from the Care Centers, Greenwich and Bridgeport physicians and research staff, as well as our clinical program leaders, CTO staff, and special guests Skip Burris and Deanna Smith from Sarah Cannon Research Institute (SCRI).

The focus of the summit this year was on the relationship between Yale and SCRI, and opportunities for collaboration and excellence in clinical research in the community. Clinical program leaders, as well as new faculty members Steve Gore, Brian Shuch, and Joseph Kim were present to discuss their
clinical trial portfolios and brainstorm about clinical trial ideas over dinner. Care Center Research leads Kert Sabbath, Jeremy Kortmansky, Debbie Brandt, Wajih Zaheer, and Kevin Jain also met separately with YCC/SCRI leadership to discuss how to improve clinical research efforts.

**American Society of Hematology Annual Meeting**

Yale Cancer Center and Smilow Cancer Hospital will have a strong presence at the annual meeting beginning tomorrow in New Orleans, with several oral presentations by our clinicians and scientific leaders from the program. If you are attending, please support your colleagues at their presentations. Several posters will be presented as well.

- **Protecting the Genome: Mechanisms Targeting Somatic Hypermutation**
  - **Result Type:** Paper
  - **Number:** SCI-13
  - **Presenter:** David Schatz
  - **Program:** Scientific Program
  - **Session:** Genomic Instability and Plasma Cells
  - **Time and Location:**
    - *Saturday, December 7, 2013:* 2:00 PM-3:30 PM
    - 293-296 (Ernest N. Morial Convention Center)
    - *Sunday, December 8, 2013:* 7:30 AM-9:00 AM
    - 293-296 (Ernest N. Morial Convention Center)

- **Srf Is Required For Neutrophil Migration In Response To Inflammation**
  - **Result Type:** Paper
  - **Number:** 319
  - **Presenter:** Ashley Taylor
  - **Program:** Oral and Poster Abstracts
  - **Session:** 201. Granulocytes, Monocytes, Macrophages: Neutrophil Responses to Inflammation and Vascular Injury
  - **Time and Location:**
    - *Monday, December 9, 2013:* 10:30 AM-12:00 PM
    - 295-296 (Ernest N. Morial Convention Center)

- **The Bcl6 RD2 Domain Is Essential For Pre-Germinatal Center B Cell Development**
  - **Result Type:** Paper
  - **Number:** 783
  - **Presenter:** Chuanxin Huang
  - **Program:** Oral and Poster Abstracts
  - **Session:** 203. Lymphocytes, Lymphocyte Activation and Immunodeficiency, including HIV and Other Infections: B Cells and Innate Immune Cells
  - **Time and Location:**
    - *Tuesday, December 10, 2013:* 7:30 AM-9:00 AM
    - 395-396 (Ernest N. Morial Convention Center)

- **Blast Crisis CML Cells Require IFN-γ Conditioning For Effective GVL Whereas Chronic Phase CML Cells Do Not:**

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available to our members, with CVs of post-docs and others looking for positions at Yale. Please browse the listings if you have openings, and send the CVs you receive to share.

**In the News**

Read recent articles featuring experts from Yale Cancer Center.

**Subscribe to Yale Cancer Center Answers on iTunes**

Yale Cancer Center's weekly radio program on CT Public Radio is ranked number 2 in the world for cancer programs on iTunes. Subscribe to the show.

**Yale Cancer Center Grand Rounds**

Video presentations from Yale Cancer Center members are now available online.

**ASCO Connection Blog**

Where do we go from here? Thoughts on Improving the Healthcare System

**Events**

- **December 6; 7:00 AM**
  - **Yale CME/New England Otolaryngological Society**
  - **TAC N-107**
  - **New Technologies in Otolaryngology**
  - Ken Yanagisawa MD, FACS
  - Learn More >> (PDF)

- **December 6; 2:00 PM**
  - **YCC Special Seminar**
  - **WWW 208**
  - **Antitumor T-Cell Immunity Delays the Emergence of Melanoma Resistance to Vemurafenib:** Defining the Principles of Combination Therapy from Mice to...
**Explanation For Chronic Phase CML GVL-Sensitivity**

**Result Type:** Paper  
**Number:** 2013  
**Presenter:** Warren Shlomchik  
**Program:** Oral and Poster Abstracts  
**Session:** 702. Experimental Transplantation: Immune Function, GVHD and Graft-versus-Tumor Effects: Poster I  
**Time and Location:**  
*Saturday, December 7, 2013: 5:30 PM-7:30 PM*  
Hall G (Ernest N. Morial Convention Center)  

**Both Intermittent and Continuous Dosing Regimens Of Pomalidomide Mediate Broad Activation Of Innate and Adaptive Immunity In Relapsed/Refractory Myeloma: Results Of A Phase II Randomized Trial**

**Result Type:** Paper  
**Number:** 1949  
**Presenter:** Kavita Dhodapkar  
**Program:** Oral and Poster Abstracts  
**Session:** 653. Myeloma: Therapy, excluding Transplantation: Poster I  
**Time and Location:**  
*Saturday, December 7, 2013: 5:30 PM-7:30 PM*  
Hall G (Ernest N. Morial Convention Center)  

**Graft-Versus-Host-Disease Recruits Both Monocyte and Pre-Conventional Dendritic Cell-Derived Tissue Antigen Presenting Cells Independent Of CCR2 and CCR6**

**Result Type:** Paper  
**Number:** 4463  
**Presenter:** Sarah Morin-Zorman  
**Program:** Oral and Poster Abstracts  
**Session:** 702. Experimental Transplantation: Immune Function, GVHD and Graft-versus-Tumor Effects: Poster III  
**Time and Location:**  
*Monday, December 9, 2013: 6:00 PM-8:00 PM*  
Hall G (Ernest N. Morial Convention Center)  

**Host Tissue PD-1 Pathway Contribute To Murine Chronic Graft-Versus-Host Disease Via Th1+Th17+ Cells**

**Result Type:** Paper  
**Number:** 3244  
**Presenter:** Hideaki Fujiwara  
**Program:** Oral and Poster Abstracts  
**Session:** 702. Experimental Transplantation: Immune Function, GVHD and Graft-versus-Tumor Effects: Poster II  
**Time and Location:**  
*Sunday, December 8, 2013: 6:30 PM-8:30 PM*  
Hall G (Ernest N. Morial Convention Center)  

**Comparison Of Intermittent and Continuous Dosing Regimens Of Pomalidomide In Relapsed/Refractory Myeloma: Results Of A Phase II Randomized Trial**

**Result Type:** Paper  
**Number:** 3205  
**Presenter:** Nicolas Acquavella, MD  
**Program:** Oral and Poster Abstracts  
**Session:** 653. Myeloma: Therapy, excluding Transplantation: Poster I  
**Time and Location:**  
*Saturday, December 7, 2013: 5:30 PM-7:30 PM*  
Hall G (Ernest N. Morial Convention Center)
Two Photon Intravital Microscopy Reveals CD4+ T Cells Making Cognate Interactions With Tissue Dendritic Cells In Skin Graft-Versus-Host-Disease

Expression Of Mutant Spliceosomal Protein SF3B1 Results In Dysregulated Hematopoietic Maturation

Increased Local Disorder of DNA Methylation Forms the Basis of High Intra-Leukemic Epigenetic Heterogeneity and Enhances CLL Evolution

Enrichment Of Embryonal Stem Cell Signature and Persistent Genomic Complexity In Residual Disease Following Pomalidomide Therapy In Myeloma
PD-L1 and PD-L2 Protect The Heart In a T-Cell Receptor Transgenic Model Of Graft-Versus Host Disease

Result Type: Paper
Number: 4479
Presenter: Warren Shlomchik
Program: Oral and Poster Abstracts
Time and Location: Monday, December 9, 2013: 6:00 PM-8:00 PM
Hall G (Ernest N. Morial Convention Center)

A Pilot Study Of Sorafenib In Refractory Or Relapsed T-Cell Lymphoma Patients

Result Type: Paper
Number: 4356
Presenter: Juliet Fraser
Program: Oral and Poster Abstracts
Session: 623. Lymphoma: Chemotherapy, excluding Pre-Clinical Models: Poster III
Time and Location: Monday, December 9, 2013: 6:00 PM-8:00 PM
Hall G (Ernest N. Morial Convention Center)

RP6530, a Dual PI3Kδ/γ Inhibitor, Attenuates AKT Phosphorylation and Induces Apoptosis In Primary Cutaneous T Cell Lymphoma (CTCL) Cells

Result Type: Paper
Number: 4418
Presenter: Julia Lewis
Program: Oral and Poster Abstracts
Session: 625. Lymphoma: Pre-Clinical - Chemotherapy and Biologic Agents: Poster III
Time and Location: Monday, December 9, 2013: 6:00 PM-8:00 PM
Hall G (Ernest N. Morial Convention Center)

Glucose Phosphate Isomerase Deficiency In 2 Patients With Novel Mutations Presenting As Severe Neurologic Abnormalities and Transfusion Dependent Hemolytic Anemia

Result Type: Paper
Number: 947
Presenter: Mammen Puliyel
Program: Oral and Poster Abstracts
Time and Location: Saturday, December 7, 2013: 5:30 PM-7:30 PM
Hall E (Ernest N. Morial Convention Center)

Activation Induced Cytidine Deaminase-Associated DNA Repair Pathways Influence Germinal Center B Cell
Enhancers and Super Enhancers Are Associated With Genes That Control Phenotypic Traits In Primary Human Erythroid Cells

The Patient With Transfusion-Dependent Anemia: Diagnosis and Directed Management With Targeted Next Generation Sequencing and Copy Number Analysis

Histones To The Cytosol: Role Of Nuclear Protein Export In Erythroid Nuclear Condensation

Blast Crisis CML Cells Require IFN-γ Conditioning For Effective GVL Whereas Chronic Phase CML Cells Do Not: An Explanation For Chronic Phase CML GVL-Sensitivity
Program: Oral and Poster Abstracts
Time and Location:
Saturday, December 7, 2013: 5:30 PM-7:30 PM
Hall G (Ernest N. Morial Convention Center)

**FANCD2 and RAD51 Regulate PCNA Monoubiquitination and Translesion Synthesis**

**Result Type:** Paper  
**Number:** 3712  
**Presenter:** Gary Kupfer  
**Program:** Oral and Poster Abstracts  
**Session:** 508. Bone Marrow Failure: Poster III  
**Time and Location:**  
Monday, December 9, 2013: 6:00 PM-8:00 PM  
Hall E (Ernest N. Morial Convention Center)

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**Yale Participation at San Antonio Breast Cancer Symposium**

Next week will also mark an exciting week for members of our Breast Center as they present research findings at the annual San Antonio Breast Cancer Symposium. Our presence at this meeting is growing each year, and I’m pleased that we will have such a broad array of presentations from our faculty this year.

**Wednesday, December 11 Poster Discussion Session**

<table>
<thead>
<tr>
<th>5:00 pm - 7:00 pm</th>
<th>POSTER DISCUSSION 2: Body Mass, Exercise, and Breast Cancer - Ballroom B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pamela J. Goodwin, MD, MSC, FRCP and Melinda Liggett Irwin, PhD, MPH</td>
</tr>
</tbody>
</table>

**Wednesday, December 11 Poster Session (5-7 pm)**

| P1-08-16 | Deep sequencing of breast tumor biopsies reveals an association between pathologic complete response and reduction of TP53 clonal abundance upon brief exposure to therapy  
|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| P1-08-42  | High HER2 expression correlates with response to trastuzumab and the combination of trastuzumab and lapatinib in the NeoALTTO phase III trial  
| P1-08-09  | EGFR expression is associated with decreased response from HER2 targeted therapeutics in the neoadjuvant setting in the NeoALTTO trial  
           | Rimm DL, Holmes F, Schalper K, Bradbury I, Zamora F. |
### Thursday, December 12 Poster Session (7:30 - 9:00 am)

**P2-11-04**  
Expression of immune checkpoint related genes are prognostic in untreated breast cancer  
Bianchini G, Rossi CM, Iwamoto T, Karn T, Callari M, Kelly CM, Pusztai L, Gianni L.

**P2-11-22**  
The use and influence of a 21 gene rearrangement assay in breast cancer: Clinical and pathologic predictors of recurrence score and chemotherapy receipt  

**P2-10-02**  
PD-L1 protein expression is a prognostic biomarker in breast cancer  
Wimberly H, Schalper K, Chen L, Velchetti V, Pusztai L, Rimm D.

### Thursday, December 12 General Session

**10:00 am**  
S3-03. Randomized trial of exercise vs. usual care on aromatase inhibitor-associated arthralgias in women with breast cancer: The hormones and physical exercise (HOPE) study  

**10:45 am**  
S3-06. Emergence of constitutively active estrogen receptor mutations in advanced estrogen receptor positive breast cancer  

### Thursday, December 12 Poster Discussion Session (5-7 pm)

**PD4-6**  
Combined analysis of gene expression, DNA copy number and mutation profiling data to display biological process anomalies in individual cancers  

**P3-05-05**  
Classification using dynamic re-discovery of the strongest prognostic features in each analysis outperforms static gene expression signatures for prognostic prediction in breast cancer  
Győrffy B, Karn T, Sztupinszki Z, Weltz B, Müller V, Pusztai L.
Patterns of the use of primary systemic therapy in the United States

Friday, December 13 Poster Session (7:30 - 9:00 am)

RNA-seq reveals functional IncRNAs associated with estrogen-receptor status in breast cancer
Banerjee N, Chothani S, Kamalakaran S, Varadan V, Miskimen K, Vadodkar A, Abu-khalaf M, Sikov W, Harris LN, Dimitrova N.

Systematic analysis of molecular subgroups and age in patients with breast cancer
Liedtke C, Karn T, Gluz O, Becker S, Pusztai L, Holtrich U, Rody A.

Heterogeneous gene fusions detected by RNASeq show enrichment of insulin signaling pathway genes in breast cancer
Varadan V, Agrawal V, Kamalakaran S, Banerjee N, Miskimen K, Vadodkar A, Abu-Khalaf M, Sikov W, Harris LN, Dimitrova N.

Estrogen receptor (ER) mRNA expression and molecular subtype distribution in breast cancers that are ER-negative but progesterone receptor-positive by immunohistochemistry
Iwamoto T, Matsuoka J, Nogami T, Motoki T, Shien T, Taira N, Niikura N, Hayashi N, Doihara H, Symmans W, Pusztai L.

Transcriptional heterogeneity correlates with chemotherapy sensitivity in triple negative breast cancer and varies by molecular subtype
Jiang T, Shi W, Ononye S, Han G, Wali V, Pusztai L, Hatzis C.

Friday, December 13 General Session
10:00 am S5-03. Discussant (S5-01 to S5-02)
Lajos Pusztai, MD, DPHIL

Friday, December 13 General Session
3:30 pm S6-02. Long-term prognostic value of residual cancer burden (RCB) classification following neoadjuvant chemotherapy

Friday, December 13 Poster Discussion Session (5-7 pm)

Sustained hyperactivated mTOR & JAK2/STAT3 pathways in inflammatory breast cancer (IBC): Evidence for mTOR plus JAK2 therapeutic targeting
## Friday, December 13 Poster Session (5-7 pm)

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5-13-04</td>
<td>What's your excuse?: Reasons women with a first degree family history of breast cancer don't get mammograms</td>
<td>Hibler L, Hofstatter EW, Chagpar AB.</td>
</tr>
</tbody>
</table>

## Saturday, December 14 Poster Session (7:30 - 9:00 am)

<table>
<thead>
<tr>
<th>Poster</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6-05-19</td>
<td>Epithelial expression of PD-L1 mRNA is associated with increased TILs and better outcome in breast carcinomas</td>
<td>Schalper KA, Velcheti V, Wimberly H, Carvajal D, Pusztai L, Rimm DL.</td>
</tr>
</tbody>
</table>

## Holiday Party

I hope you will join us for our annual Yale Cancer Center and Smilow Cancer Hospital holiday party at the Peabody Museum on Wednesday, December 18 from 5:30-7:30 PM. Everyone is invited, along with their families, to join in this festive evening and celebrate the holiday season together. I look forward to seeing you all there! [Learn More >>](#)
Notables

Santo Galatioto has been appointed as the Human Resources Generalist for Yale Cancer Center and the Department of Urology. Santo has 26 years of experience at Yale University, including 21 years in labor relations.

In addition, Yale Cancer Center continues to benefit from the continued support of Lauren Slater as the Interim HR generalist. Lauren remains the key contact point for all employee relations' matters and other HR activities.

Closer to Free

There have been numerous events dedicated to raising funds for Closer to Free this fall. Recently, the Guilford High School Boys and Girls Soccer teams presented a generous check to support breast cancer awareness, research and treatment, in honor of survivor Amy Stinton, whose wife, Regina Sullivan, works at GHS. These funds were raised by the sale of the specially designed tee-shirts worn by the senior boys pictured.

Every gift, large or small, has a positive impact on the patients and their families, researchers and care providers - all of us who make up the Closer to Free community. Information about making a donation or organizing an event is available on the Give Closer to Free website or by contacting Susan Frankenbach. Don't forget to "like" us on Facebook!

Funding and Award Opportunities

Tobacco Center of Regulatory Science 2014 Pilot Program
The Yale Tobacco Center of Regulatory Science (TCORS) is offering funding for pilot projects to initiate research relating to understanding tobacco additives and modified risk tobacco products through behavioral, molecular, laboratory, pharmacological, epidemiological, and economic sciences that
involves humans (both clinical & epidemiological research) and animals (basic research). We are particularly interested in studies of menthol, flavors, and e-cigarettes and studies using novel techniques.

Up to 5 pilot projects will be funded at the level of $25,000 to $100,000 (direct costs only), with higher levels of funding available for projects that incorporate more expensive technologies (such as neuroimaging). The project must be completed in 1 budget year.

Application Deadline: December 16, 2013
Learn More >>

Edward Mallinckrodt, Jr., Foundation Mallinckrodt Scholars
To support early-stage investigators engaged in basic biomedical research that has the potential to significantly advance the understanding, diagnosis, or treatment of disease.
- Candidates should hold an MD and/or PhD degree and must be an Assistant or Associate Professor in the fifth to eighth year of a tenure-track position.
- Candidate may have already received independent research funding (R01 or other major awards) for other projects.
- This award is designed to move the proposed Mallinckrodt project forward to the point where R01 or other independent funding can be obtained.
- $100,000 per year for 4 years. ($400,000)
  Application Deadline: December 11, 2013
Learn More >>

Avon Foundation Research Grant Program
Supports research projects aimed at understanding the causes of breast cancer, prevention or developing new tests to assess risk. Funds can also be requested to develop new treatments for unmet needs in breast cancer. Up to $150,000 per year for 2 years. ($300,000 maximum) An optional 3rd year can be sought during Year 2.
  Letter of Intent Deadline: January 31, 2014
Learn More >>
Laura Radulski, RN for the outpatient infusion clinic on the first floor of Smilow, was inspired to start a career as a nurse after her husband was diagnosed with cancer, and she saw the impact nurses can have on a patient's care, and the family unit as a whole. Her husband is now doing well, but her passion for helping others remained strong. Laura spent six years as an inpatient nurse on Smilow 14, but recently moved to the outpatient setting in order to be a part of the other side of a patient's journey.

In the outpatient setting Laura administers chemotherapy, blood products, and anything else a patient may require, such as electrolytes for dehydration. She works closely with the Practice Nurses, PA's, and the other infusion nurses administering care to patients with breast and gynecologic cancers. Educating patients about what to expect, and possible side effects, is another part of the outpatient setting.

Laura commented, "Seeing the grace and dignity with which these women carry themselves when they come in for treatment is inspiring. Sometimes they have small children with them and it is hard not to let it affect you, but my job is to be there for my patients and support them during a very scary and vulnerable time."

Reaching out to patients while they are outside of the clinic is another large component of working in the outpatient infusion clinic. Laura explained that keeping in touch with patients once they are home is so important in order to prevent admission into the hospital. Addressing issues at home before they become a problem is the goal, and providing resources, such as coordinating home care, so that they can stay out of the hospital.

While working on Smilow 14, Laura was awarded the Virginia Henderson Award, which honors individuals that have made outstanding contributions to nursing in the areas of practice, education, administration, political action, and service. She commented, "It was such an honor to receive this award, knowing how amazing all the nurses are that I work with. I was touched to know that they feel comfortable coming to me for advice or with questions, as I do with them."

**Recent Publications**

**Taxanes: their impact on gynecologic malignancy.**
Schwab CL, English DP, Roque DM, Santin AD.
New possibilities and potential benefits for local control in locally recurrent pancreatic cancer.
Lloyd S, Chang BW.
Read More >>

Healthy eating for life: rationale and development of an English as a second language (ESL) curriculum for promoting healthy nutrition.
Martinez JL, Rivers SE, Duncan LR, Bertoli M, Domingo S, Latimer-Cheung AE, Salovey P.
Read More >>

Cardiovascular Effects of Neuregulin-1/ErbB Signaling: Role in Vascular Signaling and Angiogenesis.
Hedhli N, Kalinowski A, S Russell K.
Read More >>

Identification of PLX4032-Resistance Mechanisms and Implications for Novel RAF Inhibitors.
Pigment Cell Melanoma Res. 2013 Nov 27.
Read More >>

Comparison of HER2 and Phospho-HER2 Expression between Biopsy and Resected Breast Cancer Specimens Using a Quantitative Assessment Method.
Read More >>

Nurse Navigators in Early Cancer Care: A Randomized, Controlled Trial.
Wagner EH, Ludman EJ, Aiello Bowles EJ, Penfold R, Reid RJ, Rutter CM, Chubak J, McCorkle R.
Read More >>

Thyroid Cancer.
Carling T, Udelsman R.
Read More >>

Hypoxia and regulation of cancer cell stemness.
Yun Z, Lin Q.
Read More >>
SomatiCA: Identifying, Characterizing and Quantifying Somatic Copy Number Aberrations from Cancer Genome Sequencing Data.
Chen M, Gunel M, Zhao H.
Read More >>

‘Race’ and Prostate Cancer Mortality in Equal-access Healthcare Systems.
Graham-Steed T, Uchio E, Wells CK, Aslan M, Ko J, Concato J.
Read More >>

PPM1D Mutations in Circulating White Blood Cells and the Risk for Ovarian Cancer.
Read More >>

Construction and analysis of multiparameter prognostic models for melanoma outcome.
Rothberg BE, Rimm DL.
Read More >>