August 30, 2019

Announcements

YCC Appoints Five New Leaders
I am pleased to announce several leadership appointments for Yale Cancer Center, including two new leadership positions to help bolster Yale Cancer Center’s research mission in the coming years.

Please join me in welcoming the following faculty to their new appointments:

- Megan King, PhD, Co-Research Program Leader for Radiobiology & Radiotherapy
- Carla Rothlin, PhD, Co-Research Program Leader for Cancer Immunology
- Katerina Politi, PhD, Co-Research Program Leader for Signal Transduction
- Don Nguyen, PhD, Assistant Cancer Center Director for Research Development
- Mark Lemmon, PhD, FRS, Associate Cancer Center Director for Basic Science
Megan King, PhD, Associate Professor of Cell Biology, joins Joseph Contessa, MD, PhD, as Co-Leader of the Radiobiology & Radiotherapy Research Program. Megan's research is generating unique insights into chromatin organization and dynamics, with a particular focus on DNA repair and the biology of BRCA cancer susceptibility genes. Together with Joe, Megan will lead the next wave of scientific discovery with our Radiobiology & Radiotherapy program members.

Carla Rothlin, PhD, Dorys McConnell Duberg Professor of Immunobiology and Pharmacology and Howard Hughes Medical Institute Scholar, joins Lieping Chen, MD, PhD, and Mario Sznol, MD, as Co-Leaders of the Cancer Immunology Research Program. Carla’s elucidation of the TAM (Tyro3, Axl, Mer) signaling pathway has launched an exciting new avenue of research in immunology, which also avails exciting new therapeutic strategies for inhibition or enhancement of the inflammatory response. The joint leadership between Carla, Mario, and Lieping is a dynamic team and will undoubtedly accelerate discovery, innovation, and high-impact translation in Cancer Immunology and Immuno-Oncology at our Center.
Katerina Politi, PhD, Associate Professor of Pathology, joins David Stern, PhD, and Daniel Petrlyak, MD, to lead our Signal Transduction Research Program. Katie's innovative research has characterized pivotal mechanisms that underlie sensitivity and resistance to targeted therapies and immune checkpoint inhibition and her ongoing work is defining novel approaches to overcome therapeutic resistance. Katie's accomplishments and commitment to innovation, combined with David and Dan's continued leadership, will ensure the enduring success of our Signal Transduction Program as they unveil the Program's next chapter.

Don Nguyen, PhD, Associate Professor of Pathology and of Medicine (Medical Oncology), and a member of Yale Cancer Center's Signal Transduction Research Program, has been appointed as the inaugural Assistant Cancer Center Director for Research Development. Don's laboratory has developed unique approaches and model systems to understand the biology of cancer metastases, thereby unleashing the potential for novel cancer therapies. In his new role for the Cancer Center, Don will lead intramural funding programs, identify new funding opportunities to broaden the funding support of our membership, and craft strategies to promote new collaborations and areas of investigations within our Center. These are vitally important priorities for our Cancer Center,
and I am confident that Don's leadership will further propel scientific progress at Yale.

Finally, Mark Lemmon, PhD, FRS, Co-Director of the Cancer Biology Institute (CBI), has been appointed Associate Cancer Center Director for Basic Science, to oversee basic science priorities and maximize interaction between basic, translational, population, and clinical investigators across the YCC community. Mark's great success in leading the CBI, in conjunction with CBI co-Director Joseph (Yossi) Schlessinger, PhD, positions Mark as an ideal leader of our exceptional talented and accomplished basic research community in our Cancer Center. In assuming this new role, Mark will transition his leadership of the Signal Transduction Research Program to David Stern, PhD, Daniel Petrylak, MD, and Katerina Politi, PhD.

**Oncology Nursing Symposium**
Join your nursing colleagues for a symposium highlighting the latest advances in cancer care and treatment on Saturday, September 21 at Lawrence + Memorial Hospital in New London. Hosted by the Smilow Cancer Hospital Care Center in Waterford, the program will feature presentations on a variety of topics.
Learn More and Register >>

**Notables**

**Jason Cai, PhD**, Assistant Professor of Radiology and Biomedical Imaging and a member of Yale Cancer Center's Radiobiology and Radiotherapy Research Program, has been awarded an Exploratory/Development R21 grant from the National Institutes of Health (NIH). Dr. Cai's research project titled, "Development of BBB Permeable PD-L1 PET Imaging Agents," will involve synthesis and radiolabeling a library of small molecule

Dr. Nita Ahuja, Chief of Surgery at Yale New Haven Hospital, joined us for a discussion on surgical advances on Yale Cancer Answers on Connecticut Public Radio. Tune in to hear her insights and more on her research focus on pancreatic cancer.

Our radiation oncology team provides the most advanced technology to our patients, while putting quality and safety
PD-L1 ligands as potential PET imaging probes, aiming to find one probe that could penetrate the blood-brain barrier and allow for the quantification of PD-L1 in brain tumor or metastasis.

**Leah Ferrucci, PhD, MPH**, Assistant Professor of Epidemiology and a member of Yale Cancer Center's Cancer Prevention and Control Research Program, has been selected to participate in **SWOG’s Young Investigator Training Course** in Seattle next month.

**Carla Vanina Rothlin, PhD**, has been named the **Dorys McConnell Duberg Professor of Immunobiology**. Dr. Rothlin is also a Professor of Pharmacology, Co-Leader of the Yale Cancer Center Cancer Immunology Research Program, and a Howard Hughes Faculty Scholar. She co-directs a laboratory with Sourav Ghosh, Associate Professor of Neurology and Pharmacology. Their lab has identified the function of the TAM receptor tyrosine kinases in the negative regulation of the magnitude of the immune response.

The **Genetics, Genomics and Epigentics Research Program** is proud to welcome **James Clune, MD**, to its program. Dr. Clune is an Assistant Professor in the Department of Surgery and cares for patients in our Melanoma Program at Smilow Cancer Hospital. Dr. Clune has a background in translational research and a high-volume clinical practice focused on the treatment of melanoma patients. His goal at Yale Cancer Center is to harness his translational research and clinical care skillset to help translate the institution’s strong research in the genetics of metastatic disease and prognostic and diagnostic markers into additional clinical trials in melanoma.

**Research Highlights**

Riley Norwood, a senior at Cheshire Academy, stopped by Smilow Cancer Hospital to deliver a check to the Breast Center. Riley crafted and sold over 250 pink ribbon key chains to help in the Smilow support breast cancer research. We are so grateful to Riley for her creativity and generosity of time this summer!

The American Association of Physicists in Medicine sponsored a 10-week summer Diversity Recruitment through Education and Mentoring "DREAM" Program nationally for 7 fellows and Yale was proud to host 3 of the 7 fellows this summer!
As many as 55% of patients with non-small cell lung cancer (NSCLC) present with stage IV disease at diagnosis. Systemic therapy is the cornerstone for treatment for the patients with stage IV disease.

A Yale Cancer Center study led by Kevin Kim, MD, Professor of Radiology and Biomedical Imaging and Medicine (Medical Oncology) and Section Chief of Interventional Oncology, published in JAMA Network Open found that in patients with oligometastases, a combination of local treatments (surgery, radiation and/or thermal ablation) in addition to systemic therapy, vs. systemic therapy alone, showed survival benefits.

Learn More >>

Super special thank you to the Connecticut Sunfor their generous donation to Smilow Cancer Hospital during #RockThePink earlier this month!

Read More >>

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Follow us on twitter

Dr. Sangini Sheth reviews important information for parents to understand about vaccinating their kids against #HPV.

New research led by .@Aneeschagpar called "practice
Immunotherapy has revolutionized the treatment of cancer in the last decade, yet many tumors do not respond to these new therapies. A new genome-wide screen of 20,000 human genes in T cells have turned up several new candidates to unleash the immune system's ability to attack a variety of tumor types, Yale Cancer Center researchers reported Aug. 22 in the journal Cell.

"Immunotherapy is not effective in all patients and 70% to 80% don't respond to treatment," said Sidi Chen, PhD, Assistant Professor of Genetics and senior author of the study. "We asked: Why don't we take one gene at a time and see which ones are responsible for tumor growth and might be targets for new therapies?"

Learn More >>
A team of investigators at Yale Cancer Center have found a major chink in the armor of an incurable childhood Brain Cancer called Diffuse Intrinsic Pontine Gliomas (DIPG). In a new study, published online in the journal *Nature Communications*, researchers identified an enzyme responsible for producing NAD, a metabolite that is necessary for nearly all of cell life.

"DIPG is such a devastating disease. Children with this cancer, which affects the brain stem when they are between three and five years old, rarely live beyond a year after diagnosis and we have been so stymied in our progress for new therapies," said Ranjit S. Bindra, MD, PhD, co-director of the Brain Tumor Center and Associate Professor of Therapeutic Radiology and senior author of the study. "Many drugs have been tested with no success at all. These findings now offer new hope for children with this truly terrible cancer." Learn More >>

Training the next generation of physician-scientists is part of our mission! Led by @DrRoyHerbstYale and Dr. Lieping Chen, our new Advanced Training Program T32 will support our #Hematology and #MedicalOncology fellows during years 3 & 4 for #CancerResearch.

Join us on Saturday for a day of networking and education as we look at Paradigm Shifts in Early Stage #BreastCancer Treatment with our colleagues at @MoffittNews and @Rush

Watch why "Team Be Happy" is biking the distance @CTFride next month for #Smilow Cancer Hospital.

Congratulations to our #StemCellTransplant and @Yale_LabMedicine teams on their @FACTunmc re-accreditation! Our program continues its long history of transplant care to patients in Connecticut, around the country and world.

New findings in #breastcancer research journal led by .@SMougalian and Dr. Bridget Killela finds women receiving neoadjuvant #endocrinotherapy had similar rates of breast conservation surgery compared to neoadjuvant #chemotherapy.

**Calendar**

Yale Cancer Answers
September 1; 7:30 PM
WNPR
Breast Cancer Care
Danielle Bertoni, MD, MPH
Learn More >>

Schwartz Center Rounds
September 3; 12:00 PM
55 Park Street, Park Street Auditorium
Words Matter: Building our Culture of Respect and Support
New research led by Anees Chagpar, MD, MPB, MPH, FACS, FRCS(C), Professor of Surgery, has been called "practice changing" by the New England Journal of Medicine for significant reduction in re-excision rates in women undergoing partial mastectomies.

The ground-breaking study, recently published in *Annals of Surgery*, demonstrated that by resecting slightly more tissue around a cancer (cavity shave margins), it reduced positive margin rates and re-excisions by more than half (60-70%) and is effective regardless of surgeon experience, oncoplastic procedures, and other factors.

**Employee Profile: David Menard**

Marlon Pastor-Staten | Yolanda Sydnor | Andrea Murrell, RN | Maura Shea, RN | Katherine Tucker | Ena Williams

Smilow Screening & Prevention Informational Table
September 5; 10:00 AM
100 Leibert Rd, Hartford
CT Transit Hartford Division 2019 Employee Health Fair

Pharmacology Seminar Series
September 5; 12:30 PM
Brady Memorial Library, B-131
Cracking the Code of Rare Diseases: Understanding Mechanisms and Developing New Therapies
Aris N. Economides, PhD

Cancer Genetics and Prevention Program Seminar
September 5; 2:30 PM
Orchard Medical Center, 107-109

Advances in Pain Management
September 5; 6:00 PM
Filomena's, Waterford
Sudhir Kadian, MD and Honghui Feng, MD

Hematology Research Seminar Series
September 6; 11:45 AM
Brady Auditorium
Lessons on Sex, Leukemia, and Therapy Resistance from an Unusual Malignancy
Andrew Lane, MD

Closer to Free Ride 2019
September 7; All Day
As the lead PET Tech in the Department of Radiology and Biomedical Imaging, David Menard has both a managerial and hands-on role. He oversees the day to day tasks of his team, and works in conjunction with the Yale Diagnostic Radiology Clinical Trials team to provide imaging to patients according to various protocols. Previously a computer technician, David came to Yale twelve years ago and enjoys the marriage of technology and patient care his current role provides.

Patients are typically ordered a PET scan for diagnostic, staging, or follow-up purposes. David facilitates communication across multiple modalities to ensure every patient receives high quality care. "Our goal is to provide patients with the newest options available, and to make sure everything about their particular treatment plan is verified before they arrive," said David. "We want to do everything within our power to make this experience as easy and as safe as possible for them."

David was instrumental in performing imaging and collecting data for the National Oncologic PET Registry (NOPR), which was a key factor in the Centers for Medicare and Medicaid Services (CMS) expanding coverage for PET imaging for many cancer types. He was also a crucial part of the reason that Yale was the first in the nation to perform trial imaging for prostate cancer.
of Radiology and Biomedical Imaging, commented, "Not only has David developed strong relationships with the clinical trial staff resulting in successful data collection for all clinical trials requiring PET imaging, but he also excels in patient and family satisfaction. He goes above and beyond and is a role model for our service."

**Recent Publications**

**Can I Keep My Nipple? Factors Influencing the Surgical Decision between Skin-Sparing and Nipple-Sparing Mastectomy.**

Wang M, Huang J, Chagpar AB.


[Read More >>]

**Exposure to Polybrominated Diphenyl Ethers and a Polybrominated Biphenyl and Risk of Thyroid Cancer in Women: Single and Multi-Pollutant Approaches.**


[Read More >>]

**Combinatorial drug screening of mammary cells with induced mesenchymal transformation to identify drug combinations for triple-negative breast cancer.**


[Read More >>]

**PRPF4 is a novel therapeutic target for the treatment of breast cancer by influencing growth, migration, invasion, and apoptosis of breast cancer cells via p38 MAPK signaling pathway.**


[Read More >>]

**Minimum Data Elements for Radiation Oncology: An ASTRO.**

Harnessing Neuronal Trafficking for Therapeutics in Neurodegeneration

Subhojit Roy, MD, PhD

[Learn More >>]

Cancer Genetics and Prevention Program Seminar

September 12; 2:30 PM

Orchard Medical Center, 107-109

[Learn More >>]

Free Prostate Cancer Screening - PSA Blood Tests

September 12; 5:00 PM

Greenwich Hospital

[Learn More >>]

Smilow Cancer Hospital, Yale Cancer Center and AIM at Melanoma Host

September 12; 5:00 PM

55 Park Street, Park Street Auditorium

Melanoma Symposium

Jonathan Leventhal, MD | Sarah Weiss, MD | James Clune, MD | Kelly Olino, MD, FACS | Harriet Kluger, MD | Laura Donnelly, LCSW | Dwain Fehon, PsyD | Mario Sznol, MD

[Learn More >>]

**Submissions**

Please submit your recent publication and grant announcements to:

Renee Gaudette

Director, Public Affairs and Communications
Epidemiological analysis of croup in the emergency department using two national datasets.
Hanna J, Brauer PR, Morse E, Berson E, Mehra S.
Read More >>

Effector TH17 Cells Give Rise to Long-Lived TRM Cells that Are Essential for an Immediate Response against Bacterial Infection.
Read More >>

PPM1D mutations silence NAPRT gene expression and confer NAMPT inhibitor sensitivity in glioma.
Fons NR, Sundaram RK, Breuer GA, Peng S, McLean RL, Kalathil AN, Schmidt MS, Carvalho DM, Mackay A, Jones C, Carcaboso ÁM, Nazarian J, Berens ME, Brenner C, Bindra RS.
Read More >>

Immune cell infiltrate-associated dysregulation of DNA repair machinery may predispose to papillary thyroid carcinogenesis.
Nicolson NG, Brown TC, Korah R, Carling T.
Read More >>

The impact of socioeconomic status on outcomes in hepatocellular carcinoma: Inferences from primary insurance.
Sellers CM, Uhlig J, Ludwig JM, Taddei T, Stein SM, Lim JK, Kim HS.
PARP-1 activity (PAR) determines the sensitivity of cervical cancer to olaparib.
Gynecol Oncol. 2019 Aug 18.

Comparison of Survival Rates After a Combination of Local Treatment and Systemic Therapy vs Systemic Therapy Alone for Treatment of Stage IV Non-Small Cell Lung Cancer.
Uhlig J, Case MD, Blasberg JD, Boffa DJ, Chiang A, Gettlinger SN, Kim HS.

Insights into novel emerging epigenetic drugs in myeloid malignancies.
Chandhok NS, Prebet T.

Inflammatory markers in intrahepatic cholangiocarcinoma: Effects of advanced liver disease.
Sellers CM, Uhlig J, Ludwig JM, Stein SM, Kim HS.

Functional Diversity of Myeloid-Derived Suppressor Cells: The Multitasking Hydra of Cancer.
Jayakumar A, Bothwell ALM.

SBRT for Early Stage Laryngeal Cancer: Progress, But Not Quite Ready for Prime Time.
Young MR, Decker RH.
Hedgehog pathway inhibition as a therapeutic target in acute myeloid leukemia.
Read More >>

Outcomes for urologic oncology procedures: are there differences between academic and community hospitals?
Read More >>

Association between Tumor Multifocality on Multiparametric MRI and Detection of Clinically-Significant Prostate Cancer in Lesions with Prostate Imaging Reporting and Data System (PI-RADS) Score 4.
Read More >>

Precision Therapy for Aggressive Endometrial Cancer by Reactivation of Protein Phosphatase 2A.
Read More >>

Funding Opportunities

The Vera and Joseph Dresner Foundation MDS Research Fund
The fund will facilitate the advancement of innovative basic science, translational or clinical research to advance the understanding and treatment of Myelodysplastic Syndromes (MDS) and related blood disorders (such as MDS/myeloproliferative neoplasms (MPN) overlap syndromes, secondary acute myeloid leukemia following MDS, idiopathic cytopenia of undetermined significance (ICUS), or clonal
hematopoiesis of indeterminate potential (CHIP).

The foundation will consider proposals from individuals at university, college, hospital, or laboratory institutions for support of research in MDS or related disorders in two types:
- Early Career Awards
- Established Investigator Awards

**Letter of Intent (LOI) Deadline:** LOIs are accepted on a rolling basis.

[Learn More >>]

**AACR-Bayer Clinical Oncology Research (CORE) Training Fellowships Grant**

This grant is designed to encourage exceptional clinical research by bridging close collaboration between academia and industry.

**Application Deadline:** September 5, 2019

[Learn More >>]

**Gilead Sciences Research Scholars Program in Hematology/Oncology**

This program supports innovative scientific research that will advance knowledge in the field of Hematology/Oncology and provide support for research career development. The awards provide financial support to 3 junior faculty researchers in Canada or the United States a for a 2-year period.

**Application Deadline:** September 6, 2019

[Learn More >>]

**The Concern Foundation Conquer Cancer Now Award**

This Award seeks to fund research in the areas of cancer genetics, cancer cell biology, and cancer immunology.

**LOI Due:** September 12, 2019

[Learn More >>]
The Eppley Foundation for Research
The Eppley Foundation for Research was incorporated in 1947 for the purpose of "increasing knowledge in pure or applied science... in chemistry, physics, and biology through study, research, and publication." The Eppley Foundation supports advanced, novel, scientific research by PhDs or MDs with an established record of publication in their specialties. Candidates with newly awarded doctorates occasionally, but rarely, meet the Foundation's requirements for advanced research.

Letter of Intent Deadline: September 15, 2019
Learn More >>

NCI Research Specialist Award (R50)
The NCI R50 Award encourages the development of stable research career opportunities for exceptional scientists who want to pursue research within the context of an existing NCI-funded cancer research program, but not serve as independent investigators.

LOI Due: September 18, 2019
Learn More >>

Susan G. Komen Career Catalyst Research Grant
The over-arching goal of this NCI R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce.

Application Deadline: September 25, 2019
Learn More >>

Susan G. Komen Career Catalyst Research Grant
The topic area for the FY20 Career Catalyst Research Award is Redefining Metastatic Breast Cancer through Liquid Biopsy. The goal of this focus area is to support outstanding research seeking to use liquid biopsy techniques to improve treatment, detection, and understanding of metastatic breast cancer which will lead to a reduction in breast cancer deaths by 2026. Komen requests Letters of Intent for research
projects that address one of the following focus areas:

- Refining treatment of metastatic breast cancer
- Early detection of metastatic breast cancer

Applications that fit the focus areas as detailed in the LOI Announcement and include studies that address metastatic breast cancer disparities, or leverage data science to better understand and treat metastatic breast cancer are highly encouraged. The award provides funding up to $450,000 (direct and indirect costs combined) over 3 years.

**Application Deadline:** September 25, 2019

Learn More »

**AACR-AstraZeneca Clinical Immuno-oncology Research Training Fellowships Grant**

This grant is designed to encourage exceptional clinical research by bridging close collaboration between academia and industry.

September 27, 2019

Learn More »

**Alex's Lemonade Stand (ALSF) Single-Cell Pediatric Cancer Atlas**

Alex's Lemonade Stand Foundation (ALSF) is now accepting applications for the ALSF Single-cell Pediatric Cancer Atlas. ALSF seeks to build a Pediatric Cancer Atlas as an open resource for discovery with an initial goal of producing data that can be harmonized. ALSF seeks researchers to create datasets that profile pediatric cancers at a single-cell resolution level. Single-cell profiling can provide insights into the heterogeneity of cells in a tumor and the surrounding tumor microenvironment, as well as variability in the states of cancer cells, all of which can influence the cancer's response to treatments.

Learn More »

**Alex's Lemonade Stand Foundation (ALSF) 2020 Crazy 8 Initiative Award**

The Crazy 8 Initiative Award will fund research into innovative and rigorous approaches that directly...
address the most intractable issues in pediatric cancer research today.

**Application Deadline:** October 1, 2019

[Learn More >>](#)

**Burroughs Wellcome Fund - Career Awards for Medical Scientists**

The Career Awards for Medical Scientists (CAMS) is a highly competitive program that provides $700,000 awards over five years for physician-scientists, who are committed to an academic career, to bridge advanced postdoctoral/fellowship training and the early years of faculty service. Proposals must be in the area of basic biomedical, disease-oriented, or translational research. Proposals in health services research or involving large-scale clinical trials are not eligible.

**Application Deadline:** October 1, 2019

[Learn More >>](#)

**Life Sciences Research Foundation - Postdoctoral Research Fellowship**

Since 1983, the Life Sciences Research Foundation (LSRF) has funded nearly 550 outstanding postdoctoral fellows in all areas of the life sciences, and raised more than $50 million from generous industries, foundations, and individuals to support this effort.

[Learn More >>](#)

**Cancer Research Institute - CRI Irvington Postdoctoral Fellowship Program Applications**

The Cancer Research Institute is currently accepting applications for its CRI Irvington Postdoctoral Fellowship Program. The CRI Irvington Fellowship furthers career development and supports laboratory research for promising young scientists working under the mentorship of leading immunologists.

Program Note: In recent years, significant advances in immunotherapy have yielded major breakthroughs in cancer treatment. CRI recognizes, however, that getting to the next great breakthrough will require continued investment in fundamental research and training. With this in mind, CRI accepts applications from qualified young scientists at leading universities.
and research centers around the world who wish to receive training in fundamental immunology or tumor immunology.

CRI is seeking hypothesis-driven, mechanistic studies in both immunology and tumor immunology that aim to directly impact our understanding of the immune system's role in cancer.

**Application Deadline:** October 1, 2019

**Learn More >>**

**Lion Heart Fund for Cancer Research**
The Lion Hearts are committed to finding a cure for cancer, and breast cancer in particular. In keeping with this mission, they understand the value of funding bright young minds - providing them with pilot funding to kick-start high potential research projects, and/or supporting innovative work requiring bridge funding.

**Deadline for Proposals:** November 4, 2019

**Learn More >>**