



NORTHWESTERN  
UNIVERSITY

# Hematology/Oncology News



ROBERT H. LURIE  
COMPREHENSIVE CANCER CENTER  
OF NORTHWESTERN UNIVERSITY

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## New Fellows



Dr. Joy Feliciano is coming to Chicago from Washington D.C. She completed her undergraduate education at Georgetown with a major in psychology and minor in physics, and attended Georgetown University for medical school. She then continued at Georgetown for her internal medicine residency training and is completing her chief residency year prior to her fellowship training at Northwestern.



Dr. Marisa Hill received her BA in Zoology at Miami University in Ohio. She then went on to receive her MD at the University Of Cincinnati College Of Medicine. Marisa then continued to complete her residency at Ohio State University.



Dr. Max Vergo received his BS in biochemistry and his MD at Tufts University School of Medicine. After completing his residency at Massachusetts General Hospital in Boston, he trained at Dana Farber Cancer Institute and Massachusetts General Hospital through the one year Palliative Medicine fellowship program. Max is excited to be joining Northwestern to train in our hematology and oncology fellowship.



Dr. Nushmia Khokhar received her MBBS at Aga Khan University and her undergraduate degree at Kinnard College, both in Pakistan. She completed her residency at Washington Hospital Center/Georgetown University and also worked as a Post-Doc fellow at Memorial Sloan Kettering Cancer Center in a Pharmacology and Molecular Therapeutics Lab before leaving to pursue her clinical training.



Dr. Polina Khrizman completed a combined BA/MD 6-year medical degree program at the University of Missouri, Kansas City. She will complete her internship and residency at McGaw Medical Center of Northwestern University at Evanston Northwestern Healthcare.



Dr. Richard Lee attended medical school at George Washington University, completed his internal medicine residency at Stanford University, and recently finished his hematology-oncology fellowship at the University of Chicago. He looks forward to meeting everyone in the Hem/Onc Division during his fellowship in palliative medicine.

### *Hematology/Oncology News*

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## Recent Publications

Ibrahim SM, Lewandowski RJ, Ryu RK, Sato KT, Gates VL, Mulcahy MF, Kulik L, Larson AC, Omary RA, Salem R. Radiographic Response to Yttrium-90 Radioembolization in Anterior Versus Posterior Liver Segments. *Cardiovasc Intervent Radiol*. 2008 May 29;. [Epub ahead of print] PMID: 18509704 [PubMed - as supplied by publisher]

Mehta J. Cytomegalovirus: time for a requiem? *Blood*. 2008 Jun 1; 111(11):5265-6. PMID: 18502838 [PubMed - in process]

Rhee TK, Lewandowski RJ, Liu DM, Mulcahy MF, Takahashi G, Hansen PD, Benson AB 3rd, Kennedy AS, Omary RA, Salem R90Y Radioembolization for metastatic neuroendocrine liver tumors: preliminary results from a multi-institutional experience *Ann Surg*. 2008 Jun;247(6):1029-35 PMID: 18520231 [PubMed - in process]

Gerami P, Rosen S, Kuzel T, Boone SL, Guitart J. Folliculotropic mycosis fungoides: an aggressive variant of cutaneous T-cell lymphoma. *Arch Dermatol*. 2008 Jun; 144(6):738-46 PMID: 18559762 [PubMed - in process]

Diamond ME, Sun L, Ottaviano AJ, Joseph MJ, Munshi HG. Differential growth factor regulation of N-cadherin expression and motility in normal and malignant oral epithelium. *J Cell Sci*. 2008 Jul 1;121(Pt 13):2197-207. PMID: 18544635 [PubMed - in process]

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Paunesku T, Ke T, Dharmakumar R, Mascheri N, Wu A, Lai B, Vogt S, Maser J, Thurn K, Szolc-Kowalska B, Larson A, Bergan RC, Omary R, Li D, Lu ZR, Woloschak GE. Gadolinium-conjugated TiO<sub>2</sub>-DNA oligonucleotide nanoconjugates show prolonged intracellular retention period and T1-weighted contrast enhancement in magnetic resonance images. *Nanomedicine*. 2008 Jun 20;. [Epub ahead of print] PMID: 18567541 [PubMed - as supplied by publisher]

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Redig AJ, Plataniias LC. Protein kinase C signaling in leukemia. *Leuk Lymphoma*. 2008 Jul;49(7):1255-62. PMID: 18604714 [PubMed - in process]

Kelemen K, Peterson LC, Helenowski I, Goolsby CL, Jovanovic B, Miyata S, Aranha O, Rosen ST, Winter JN, Nelson BP, Gordon LI, Evens AM. CD23+ Mantle Cell Lymphoma: A Clinical Pathologic Entity Associated With Superior Outcome Compared With CD23- Disease. *Am J Clin Pathol*. 2008 Aug;130(2):166-77. PMID: 18628084 [PubMed - in process]

McDermott MM, Liu K, Ferrucci L, Tian L, Guralnik JM, Green D, Tan J, Liao Y, Pearce WH, Schneider JR, McCue K, Ridker P, Rifai N, Criqui MH. Circulating Blood Markers and Functional Impairment in Peripheral Arterial Disease. *J Am Geriatr Soc*. 2008 Jul 24;. [Epub ahead of print] PMID: 18662216 [PubMed-as supplied by publisher]

Kaur S, Katsoulidis E, Platanias LC. Akt and mRNA translation by interferons. *Cell Cycle*. 2008 May 8;7(14). [Epub ahead of print] PMID: 18635959 [PubMed - as supplied by publisher]

Woodard J, Sassano A, Hay N, Platanias LC. Statin-Dependent Suppression of the Akt/Mammalian Target of Rapamycin Signaling Cascade and Programmed Cell Death 4 Up-Regulation in Renal Cell Carcinoma. *Clin Cancer Res*. 2008 Jul 15;14(14):4640-4649 PMID: 18628479 [PubMed - as supplied by publisher]

Morrison DJ, Kim MK, Berkofsky-Fessler W, Licht JD. WT1 Induction of Mitogen-Activated Protein Kinase Phosphatase 3 Represents a Novel Mechanism of Growth Suppression. *Mol Cancer Res*. 2008 Jul;6(7):1225-31. PMID: 18644985 [PubMed - in process]

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Nonzee NJ, Dandade NA, Markossian T, Agulnik M, Argiris A, Patel JD, Kern RC, Munshi HG, Calhoun EA, Bennett CL. Evaluating the supportive care costs of severe radiochemotherapy-induced mucositis and pharyngitis : results from a Northwestern University Costs of Cancer Program pilot study with head and neck and nonsmall cell lung cancer patients who received care at a county hospital, a Veterans Administration hospital, or a comprehensive cancer care center. *Cancer*. 2008 Aug 6;. [Epub ahead of print] PMID: 18683883 [PubMed - as supplied by publisher]

Evens AM, Hutchings M, Diehl V. Treatment of Hodgkin lymphoma: the past, present, and future *Nat Clin Pract Oncol*. 2008 Aug 5;. [Epub ahead of print]. PMID: 18679394 [PubMed - as supplied by publisher]

Wang LX, Agulnik M. Promising newer molecular-targeted therapies in head and neck cancer. *Drugs*. 2008;68(12):1609-19. PMID: 18681486 [PubMed - in process]

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## Featured Research

### Corey Lab

The Division of Hematology/Oncology would like to welcome Dr. Seth Corey and his lab to Lurie, 5<sup>th</sup> floor. Dr. Corey is a professor of Pediatrics, specializing in Pediatric Oncology. He is working closely with the Leukemia program, along with members of the adult Hematology Oncology division. The Corey Lab is currently studying the chemical messages that instruct a cell to grow, divide, differentiate or move. More specifically, how a normal white blood cell becomes a leukemia cell. By studying the signaling pathways for G-CSF Receptor, they are trying to uncover the circuitry by which stem cells become granulocytes.

In another project, they are looking at how a cancer cell acquires the ability to invade neighboring tissues. Using yeast two hybrid screening with Src as bait, they discovered CIP4, a new cytoskeletal protein. By silencing its expression by RNAi, they found that breast cancer cells no longer were invasive. One way may be through affecting endocytosis of cell surface proteins, as they discovered in their knockout mouse strain. The third project is to figure out how all the different pieces of the cellular puzzle come together - how these components form a system, and how this system goes haywire in cancer. Their goal is to identify the most effective combination of drugs to fight cancer, how to use smart drugs more smartly.

In terms of direct impact on patient care, the Corey lab first identified Lyn as a constitutively active Src kinase and potential drug target in myeloid leukemia cells. Because the oral Abl-Src kinase inhibitor dasatinib has been approved for use in chronic myeloid leukemia, their work suggests that it may be useful in acute leukemia. Blockade of Src kinases may be invaluable in treating solid tumors as well. They have recently reported that dasatinib blocks invasion of breast cancer cells. To use targeted agents, they need to better evaluate their pharmacodynamics. They have developed a flow cytometric assay for successful blockade of Src kinases. This will help clinicians to monitor and optimize drug dosage.

Alan Vest is glad to be back in Chicago after spending a year in Iannis Aifantis' lab in New York City. Alan co-authored a paper on hematopoietic stem cell quiescence that appeared in June's issue of J Exp Med. Alan is the Corey lab manager and their animal technician.

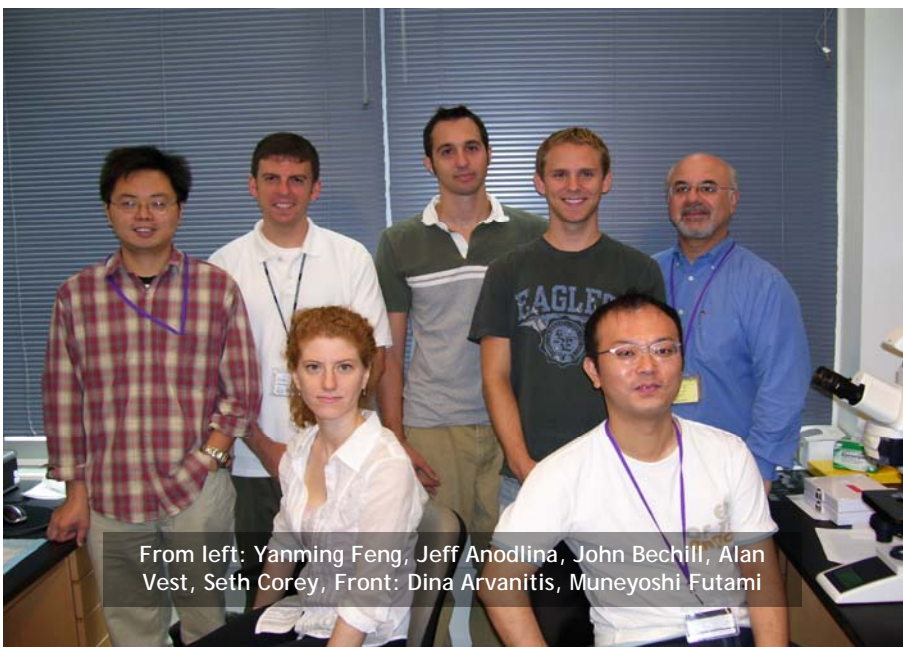
John Bechill just received his PhD in molecular biology and virology from Loyola University. He's a native of Michigan. John worked on SARS (the respiratory virus) and murine hepatitis virus and recently published part of his thesis in Journal of Virology. Shifting from viral trafficking, John will be studying the role of CIP4 in host defense.

Muneyoshi Futami came to Chicago after finishing his PhD from the Institute of Medical Sciences at the University of Tokyo. Also a physician, Muneyoshi recently published a paper in June's issue of Leukemia on using shRNA to silence Bcr-Abl. He will be studying how G-CSF Receptor signals from the cell membrane to the nucleus to regulate genes that drive maturation. A newlywed, Muneyoshi's wife is a classical pianist, and she will be joining her husband shortly.

Yanming Feng received his PhD from the Institute of Biophysics Chinese Academy of Sciences in Beijing, which is just a stone's throw from the main stadium of the Beijing 2008 Olympics. He was the one person smart enough to make the move from Houston to Chicago, and so far, he likes it a lot. He is also the proud father of a 7 month old boy named Liyan. Yanming will continue to analyze the CIP4 knockout mice as well as the structural features of the G-CSF Receptor.

Jeff Anodlina is a second-year fellow in pediatric hematology-oncology. Coming from upstate New York, he did his residency at Children's Memorial Hospital and liked Chicago so much he stayed for fellowship. He is a proud father of a 2 month old boy named Nathan. He will be studying how a mutant G-CSF Receptor leads to leukemia. He has already learned how to submit a protocol...and survive.

Dina Arvanitis is the newest member of the lab, joining in October after her wedding. She received her PhD in Chemical and Systems Biology from Stanford under the supervision of Dean Felsher. Reporting in Science, she developed and analyzed a transgenic myc mouse model for osteosarcoma. Here, she will be studying how CIP4 affects cancer cell invasion and metastases.



From left: Yanming Feng, Jeff Anodlina, John Bechill, Alan Vest, Seth Corey, Front: Dina Arvanitis, Muneyoshi Futami

*"As fellows, Jon Licht and I played videogames in the pediatric waiting room at the Dana-Farber Cancer Institute... but only after hours." -Dr. Seth Corey*

## News and Events

Thursday September 25<sup>th</sup>  
5:00-6:00 pm  
Lurie 5 Conference Room

### Faculty Meetings

Wednesday November 19<sup>th</sup>  
5:00-6:00 pm  
Lurie 5 Conference Room

Tuesday October 21<sup>st</sup>  
5:00-6:00 pm  
Lurie 5 Conference Room

Thursday December 18<sup>th</sup>  
5:00-6:00 pm  
Lurie 5 Conference Room

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## Congratulations

Congratulations and best of luck to Boris Pasche for his new position as chief of the Hem/Onc Division at the University of Alabama, Birmingham.

John Crispino received a grant from the Samuel Waxman Cancer Research Foundation to study novel therapeutics for AML.

John Crispino received a grant from the NIH to study gene regulatory networks that control hematopoietic cell fates.

Kevin David was awarded the Amgen Medical Education Fellowship Grant

Veena Shankaran was awarded the Health Services Research Fellowship at the VA Center for Management of Complex Chronic Care

Sairah Ahmed had been appointed to the Robert H. Lurie Comprehensive Cancer Center's NCI-funded Training Program in Clinical Oncology Research

Charles Bennett was awarded a large Navigator grant NCI-funded R24 project titled *Extending Cancer Navigation to Underserved Suburban Women*.

Following budgetary review, Charles Bennett will be receiving funding for his submission to the Priority Program Collaborative Development Initiative (CDI) entitled *"Development of the Northwestern Center for Cancer Quality"*

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## Welcome

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## Newly Opened Clinical Studies

\*DRUG H6Q-MC-S034A: Randomized, Double-Blind, Phase 2 Study of Pemetrexed + Carboplatin + Bevacizumab + Enzastaurin versus Pemetrexed + Carboplatin + Bevacizumab + Placebo in Chemo-naïve Patients with Stage IIIB or IV Non-Small Cell Lung Cancer  
(P.I. Patel)

\*DRUG ALS-357-001: Dose-escalating, Pilot Study to Assess the Safety, Tolerability, and Preliminary Efficacy of ALS-357 Topically Administered to Patients with Cutaneous Metastatic Melanoma  
(P.I. Kuzel)

\*NU 07U1: Correlation of Pathologic Findings after Neo-adjuvant Sorafenib with Results of Diffusion-Weighted Magnetic Resonance Imaging in Patients with Locally Advanced or Metastatic Clear Cell Renal Cell Carcinoma  
(P.I. Kuzel)

\*DRUG INNO-507-P2-A1: A Phase II Study of Oral Tamibarotene in Acute Promyelocytic Leukemia Patients Who Have Received Prior Therapy with ATRA and Arsenic Trioxide (STAR-1)  
(P.I. Tallman)

\*DRUG D2782C00007: A Phase I/II, Open-label, Multi-Center, Two-Part Study to Assess the Safety, Tolerability, Pharmacokinetics and Efficacy of AZD4877 Administered on Days 1, 2 and 3 in Adult Patients with Recurrent or Refractory Acute Myelogenous Leukemia (AML) Excluding Promyelocytic Leukemia  
(P.I. Tallman)

\*DRUG GS-US-193-0101: Multi-center, Open-label, Dose-escalating Phase I/II Trial of GS 9219 Administered Once Every Three Weeks Intravenously to Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia or Non-Hodgkin's Lymphoma  
(P.I. Frankfurt)

\*DRUG TM601-007: A Phase I Dose Escalation Study Evaluating the Safety and Biologically Active Dose of TM601 Based on Perfusion MR Imaging Criteria in Patients with Progressive and/or Recurrent Malignant Glioma  
(P.I. Grimm)

\*DRUG IMCL CP18-0601: A Phase 2, Multicenter, Randomized Study of IMC-A12 or IMC-1121B Plus Mitoxantrone and Prednisone in Metastatic Androgen-Independent Prostate Cancer (AIPC) Following Disease Progression on Docetaxel-Based Chemotherapy  
(P.I. MacVicar)

\*ECOG 2804: The BeST Trial: A Randomized Phase II Study of VEGF, RAF kinase, and mTOR Combination Targeted Therapy (CTT) with Bevacizumab, Sorafenib and Temsirolimus in Advanced Renal Cell Carcinoma  
(P.I. Kuzel)