

MEDICINE

NEWS FROM THE DEPARTMENT OF MEDICINE

MATTERS

APRIL 2020

 UVA Health | DEPARTMENT OF MEDICINE

MISSION

We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

VALUES

We strive for a sense of community, connection, and synergy among all faculty, staff, and trainees.

PLEDGE

We will conform to the highest ethical standards, uphold the values of our partner organizations, and give back to our community through public service.



MESSAGE FROM THE CHAIR



It is hard to believe that spring is here and we are facing challenges that none of us probably ever imagined. As I have communicated, I am confident in our abilities to stand up to this challenge and our response thus far has been nothing short of amazing. I am sure that our excellence, resolve and determination will continue to shine.

It is easy to become consumed with all things COVID-19 and I hope you will take some time and read through this month's Medicine Matters. You will see that our lives are continuing, our community is thriving and our excellence in all our missions is evident. The Division of Hematology and Oncology has seen tremendous growth over the past ten years and is now leading the region in cancer care and will continue to gain national and international prominence. My thanks to Dr. Michael E. Williams for his leadership over this time. As you may have heard, Dr. Williams will be turning leadership of the Division over to Dr. Karen Ballen this summer. Dr. Ballen will continue our plans for attaining Comprehensive Cancer Center status and growing the Division to ensure we are at the cutting edge of cancer care.

Enjoy a break and see what your colleagues are doing!

Mitchell H. Rosner, MD, MACP
Henry B. Mulholland Professor of Medicine
Chair, Department of Medicine

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DOM FINANCIAL UPDATE

Department of Medicine Summary of Consolidated Financials FY20 as of February 29, 2020

	Budget YTD	Actual YTD	\$ Variance YTD
Work RVUs	613,880	609,376	(4,503)
Clinical Receipts (NPSR)	41,319,221	40,209,788	(1,109,433)
Total Revenues	121,564,527	123,072,488	1,507,961
Total Expenditures	124,320,783	122,411,761	1,909,022
Net Income	(2,756,257)	660,727	3,416,984

Summary Explanation of Variance:

For the fiscal year ending February 29, 2020 DOM posted a consolidated net surplus of \$660K and a favorable variance to net budget surplus of \$3.4M. The unfavorable variance in Net Patient Service Revenue is due to lower net collections, medicaid conversion rate and pending payor credentialing. Non-Grants consolidated revenues outperformed budget while non-personnel expenditures remained steady.

DOM UPDATES & NOTES

ID & Global Biothreats Research Day 2020



Dr Liise-anne Pirofski

On Monday, February 24th the Division of Infectious Diseases & International Health held its 2020 ID and Global Biothreats Research Day. The keynote speaker was Liise-anne Pirofski, MD who spoke on “A New Paradigm for Studying and Treating Infectious Diseases: Damage Control”. Dr Liise-anne Pirofski is Professor of Microbiology and Immunology, Selma and Dr Jacques Mitrani Chair in Biomedical Research, Chief, Infectious Diseases at the Department of Medicine, Albert Einstein College of Medicine, Bronx, NY.

At the end of the day, awards were given by ID division chief Bill Petri, MD for oral and poster presentations. The winners were:

Oral presentation Awards:

Sean Cuddy “*Reactivation of Herpes Simplex Virus (HSV) from latency in response to neuronal hyperexcitability*”

Brooke Sauder “*A small RNA promotes metabolism and virulence of enterohemorrhagic Escherichia coli*”

Daniel Van Aartsen, MD “*Enteropathogens negatively impact anti-mycobacterial drug pharmacokinetics in children from rural Tanzania*”

Erin Weddle “*Investigating the role(s) of the Shigella GEFs during invasion and dissemination*”

Lacie Werner “*Human serum suppression of neutrophil anti-gonococcal activity*”

Poster presentation Awards:

Clayton Bishop “*Determining the function of the Chlamydia inclusion membrane protein CTL0390*”

Greg Madden, MD “*Measuring the cost of overtesting and overdiagnosis of Clostridioides difficile infection*”

Aimee Potter, PhD “*Multi-Modal interrogation of Neisseria gonorrhoeae metabolism and virulence*”

Jon Suzich “*Type I Interferon-induced PML-NBs promote a repressive form of HSV-1 latency*”

DOM UPDATES & NOTES



Andrew Mihalek, MD



Laura Farr



Will Eschenbacher, MD



Sana Khan, MD



Leonid Volodin, MBBS



Brian Uthlaut, MD



Russ Manley



Jeff Sturek, MD, PhD



Sumner Abraham, MD



Mohan Nadkarni, MD



Ross Buerlein, MD



Adam Carlson, MD



Timothy Scialla, MD



Zhen Yan, MD



Bennett Milner, MD



Austin Robinson, MD



Joe Leeds, MD



Rajkumar Venkatardi, PhD



Jessica Dreicer, MD

Congratulations and a big thank you to all those who participated in the first annual *6 Minute March Madness Walk* to benefit the **Charlottesville Free Clinic**, both walkers and wagers!

Congratulations to **Austin Robinson, MD** for his Best Overall Moderated E-Poster at *SCMR 2020*, February 15, 2020 on “*Diagnostic Accuracy of High Resolution Stress Myocardial Perfusion Imaging with Whole Heart Coverage at 3T*”

Congratulations to **Joe Leeds, MD** (Swaminathan lab) who won 3rd place and **Rajkumar Venkatardi, PhD** (Sharma lab) who won 4th place at the *MidAtlantic Young Investigator Forum*.

Congratulations to **Jess Dreicer, MD**, from Hospital Medicine for the publication in *Society of General and Internal Medicine (SGIM)* Vol 43, No. 3, March 20 of her case report entitled, “*The Patient Who Keeps Calling: Perspectives on Approaches From Clinicians Who Care for High-Risk Populations*”



Did you know that DOM has a Twitter account? Follow us here.

Not all of March Madness was canceled in the DOM!

6 MINUTE
WALK
MARCH
MADNESS



In the first week of March, back when our social interactions occurred in person, the UVA's Department of Medicine held the first annual March Madness 6-minute Free Clinic Tournament. This tournament is a fundraiser to support the Charlottesville Free Clinic: a non-profit which provides free medical and dental care and free prescriptions for working uninsured and under-insured adults in the greater Charlottesville community.

16 athletes competed in head to head 6 minute walking tests, with the longest 6-minute walk distances advancing to the final round. Highlights included Dr Volodin walking the longest distance (961m) in an Elvis costume, Dr Sturek walking in rainbow tights and an original Michael Jordan basketball Jersey, Dr Scialla wearing 3 inch long (short) shorts, and Dr Nadkarni carrying a rolling walker.

Over 50 faculty, admin and staff completed March Madness-Style brackets (and donated!) raising \$1,500 to support the clinic. Thank you to all who donated/participated/walked/refereed! Stay tuned for the finals, hopefully in early summer, once the 'Rona is just a terrible memory. Winning bracket receives an autographed Tony Bennett Basketball, the coach of the UVA Men's Basketball team: the REIGNING NCAA MEN'S BASKETBALL CHAMPIONS (which being reigning champs for another year really is the only good thing the coronavirus brought to our town).

Charlottesville Free Clinic

March 23, 2020

Drew Harris
UVA School of Medicine
P.O. Box 800793
Charlottesville, VA 22908

Dear Elite DOM Athletes,

The Free Clinic thanks you for participating in one of the most creative fundraisers we've ever seen, the 6 Minute Walk March Madness. We are in awe of your speed, willpower, and costumes! Even if you didn't end up taking home the signed Tony Bennett basketball, you are all winners in our eyes.

Thank you for helping us provide primary care to the working uninsured and under-insured adults in the greater Charlottesville community. We are proud to recognize your gift in our publications in the following manner:

UVA School of Medicine 6 Minute Walk March Madness

If you have a different preference or any questions, please contact Willa at 434-295-8966 or development@cvillefreeclinic.org. Thanks again and we can't wait for next year!

With warmest regards,

Colleen Keller
Executive Director

This letter will serve as your tax receipt for your recent donation. The Charlottesville Free Clinic is a 501(c)(3) nonprofit organization (ID# 54-1610405). No Goods or services were provided in return for this gift.

An open door to health care

1138 Rose Hill Dr #200, Charlottesville, VA 22903
434.295.0008 • info@cvillefreeclinic.org
cvillefreeclinic.org

Ist Round Results:

Zhen Yan (874m)	v.	Andrew Mihalek (725m)
Sumner Abraham (808m)	v.	Russ Manley (717m)
Leonid Volodin (961m)	v.	Jeff Hetmanski (702m)
Bennett Milner (897m)	v.	Will Eschenbacher (814m)
Adam Carlson (934m)	v.	Laura Farr (736m)
Ross Buerlein (947m)	v.	Brian Uthlaut (934m)
Mo Nadkarni (900m)	v.	Jeff Sturek (815)
Sana Khan (876m)	v.	Tim Scialla (813m)

DOM UPDATES & NOTES

6 Minute March Madness Walk to Benefit The Charlottesville Free Clinic



Dr. Leonid Volodin sports his Elvis suit



A very Norman Rockwell-esque tableau



Brian Uthlaut and Ross Buerlein go a few rounds of rock, paper, scissors to see who will walk first



Dr. Harris had two young referees to help make sure all played fair



Will Eschenbacher, Zhen Yan, Drew Harris



[VIEW MORE PHOTOS HERE](#)

DOM UPDATES & NOTES

Introducing the Intern Class for 2020-2021 - Welcome!

2020 - 2021 Medicine PGY 1 (Interns)

CATEGORICAL



Anne Shipe, Cardiology Fellowship Coordinator Retiring



Anne Shipe

Anne Shipe, Cardiology Fellowship Coordinator, will be retiring effective Sunday March 29th.

Anne has worked tirelessly for the University for over 42 years. Her entire tenure has been with the Division of Cardiology. Anne has worked as the Education Coordinator for the Cardiology fellowships for the past 10 years.

This is an amazing tenure and she has demonstrated a loyalty that's truly hard to come by these days. I know that she will be greatly missed and we are so appreciative to Anne for the service she has provided to the educational programs in the Division and for her contributions to the health system and UVA. Anne has been a tireless advocate for her fellows and also for patients and their families.

Anne and her husband will remain in Charlottesville and hopefully look forward to spending quality time with their two grandchildren!

Studies Opened Since January 1, 2020

Genitourinary Oncology

20-21771 PHAR M18MDP

A Multicentre Phase IIb Trial to Evaluate the Efficacy and Tolerability of ModraDoc006/r in Subjects With Metastatic Castration Resistant Prostate Cancer (mCRPC), Suitable for Treatment With a Taxane

Stages: IV CT.GOV ID: NCT04028388

Primary: Dreicer, Robert, CRC: TBD

Hematologic Malignancies

20-21781 PHAR Vedolizumab-3035

A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of Vedolizumab in the Prophylaxis of Intestinal Acute Graft Versus-Host Disease in Subjects Undergoing Allogeneic Hematopoietic Stem Cell Transplantation

Stages: Any/all stages CT.GOV ID: NCT03657160

Primary: Volodin, Leonid, CRC: Gianna R Strand, MS

20-21795 PHAR 54767414MMY3021

A Randomized Study of Daratumumab Plus Lenalidomide Versus Lenalidomide Alone as Maintenance Treatment in Patients with Newly Diagnosed Multiple Myeloma Who Are Minimal Residual Disease Positive After Frontline Autologous Stem Cell Transplant

Stages: Any/all stages CT.GOV ID: NCT03901963

Primary: Foster, Laahn, CRC: Johnson, Sharon, Lisa

Division Chief Message - Dr Michael E. Williams



Michael E. Williams, MD

The Hematology/Oncology Faculty continues to provide a high level of academic productivity and national presence, a growing research portfolio and an outstanding environment for training. Our work has been supported by new clinical space, including the December 2019 opening of a 54 bed infusion center on the Couric Center 4th floor, with expanding exam and work room space on the 2nd floor later this year. The UVA Breast Care Center will open Fall 2020 on Pantops, and we anticipate an expansion of inpatient bed capacity later this year.

The NCI-designated UVA Cancer Center remains in the Top 50 U.S. News & World Report rankings, with clinical research staff supported by new office space on the 3rd floor of the Education Resource Building that opened in January 2020. This places about 60 members of clinical research teams immediately adjacent to the Couric clinics and infusion center, greatly facilitating interaction with patients and disease-specific teams.

Our multidisciplinary teams provide integrated, state of the art diagnostic and therapeutic management for all cancers and blood disorders, and our community-based offices and infusion centers at Augusta (Drs Paphitis and Abdelmalek), Culpeper (Drs Patel and Mahjoub) and Pantops (Dr Johann Hsu) are a

terrific resource for patients in those areas, extending the reach of UVA services and optimizing patient convenience. We're proud of the fact that 18 faculty members were recognized for achieving Press-Ganey scores above the 97th percentile in FY19 – Dr Michael Douvas achieved a 100% score for the second year in a row!

Our Fellowship Program's national visibility and reputation have grown under the leadership of Dr Richard Hall, with a record number of applications this year. We're pleased that many of our graduates now hold academic faculty appointments, and that our fellows have numerous active research projects, many presented at national and international conferences. The Program recently received two very generous endowments, the Weiss Family Bicentennial Fellowship Fund from Emeritus Professor and former Division Chief, Dr Geoff Weiss and Martha Weiss, and the Wells Sargeant Family Bicentennial Fellowship in Oncology from Ms Susan Wells Sargeant. These Funds will support research training and catalyze academic careers, and are gratefully acknowledged for the impact they'll have in the coming years.

Please see the many additional highlights below regarding the Division's extramural funding, publications, faculty achievements, and educational programs. It's gratifying to see the progress of recent years, and I'm indebted to each member of our faculty, advance practice providers and care coordinators, investigators and staff who demonstrate excellence every day to improve patient outcomes and to contribute importantly to the rapid advances in our field. Enjoy the features and photos – they remind us that, while our missions are serious and essential, we also enjoy the collegiality and day-to-day interactions with such a dedicated and wonderful group!! ~ Michael E. Williams, MD



Recent Hematology/Oncology Division Faculty on National & International Committees & Boards

Dr. Kelly Davidson –	Member, American Board of Internal Medicine Hematology Exam Committee
Dr. Laahn Foster –	Member, ASH Governmental Affairs Committee
Dr. Varinder Kaur –	Member, ASCO Educational Book Expert Panel ASCO/ABIM- Test Material Development sub-committee ASCO Systemic Therapy for Melanoma Guidelines Development Panel
Dr. Michael Keng –	Chair, ASCO Quality Training Program Committee Member, ASH Committee on Quality
Dr. Tamila Kindwall-Keller –	Medical Monitor, BMT CTN CIBMTR Plasma Cell Working Group
Dr. Daniel (Trey) Lee –	Member, Immune Effector Cell-related Adverse Events Subcommittee, Society for Immunotherapy of Cancer
Dr. Matthew Reilley –	Committee Member, North American Neuroendocrine Tumor society (NANETs)
Dr. Michael E. Williams –	Editorial Board member, Journal of Clinical Oncology and Annals of Lymphoma; Member, Executive Committee, Lymphoma Research Foundation Scientific Advisory Board

Message from Medical Oncology Section Head, Dr Robert Dreicer



Robert Dreicer, MD

On November 14, 2019 many members of the section participated in the inaugural UVA Cancer Center Inova Schar Cancer Institute Oncology Update held at the Boars Head Inn. This full day CME meeting was a mixture of didactic and case based discussions covering major topics in Oncology. Dr Brady Patterson of our Cardiology Division presented a key note discussion on the evolving field of cardio-oncology. The meeting was well attended and received and our 2nd conference is scheduled for November 19, 2020.

Ryan Gentzler was awarded a NIH UM1 grant. He will serve as a PI along with 4 other co-PIs on this multi-PI grant to fund the NIH-sponsored Experimental Therapeutics Clinical Trials Network (ETCTN). This is a collaborative effort with investigators from Johns Hopkins University with a budget of \$10 million over 6 years that will fund a cooperative network of investigators from Johns Hopkins, Emory, Georgetown, Thomas Jefferson,

Wisconsin, and UVA to conduct multi-institutional phase I and phase II cancer trials in collaboration with the NCI. As a member of the PI leadership team, Dr. Gentzler will oversee grant activities across all sites. He will also serve as the site PI for UVA. Matthew Reilley, Michael Devitt, and Michael Hanley (Dept of Radiology) will also receive support from this grant as representatives from UVA serving as disease-focused clinical investigators in GI oncology, GU oncology, and interventional radiology procedures, respectively.

Message from Hematologic Malignancies/Hematology/SCT Section Head, Dr Karen Ballen



Karen Ballen, MD

In 2019, we welcomed Dr Firas El Chaer to our UVa family. Firas brings expertise in leukemia and infectious disease, and has already started working on investigator initiated trials to improve care in this complex population. Craig Portell and Hillary Maitland were promoted to Associate Professor. Seven members of our team were acknowledged as extraordinary patient providers. We had another banner year at the American Society of Hematology with over 30 presentations. We also saw the opening of our beautiful new infusion unit in December, 2019.

In malignant hematology, we saw over 900 new patients. Dr Craig Portell (PI), Dr Michael E. Williams and colleagues have completed an important multicenter study of ibrutinib plus venetoclax for relapsed mantle cell lymphoma. Dr Laahn Foster is leading several trials, designed to prevent relapse of myeloma. A new trial is opening to incorporate cellular based therapy to treat patients with relapsed disease. Dr Michael Keng leads our quality initiatives and his enthusiasm has helped to engage our trainees in the American

Society of Clinical Oncology quality training program. Dr Keng, with colleagues from Sloan Kettering and Penn State, is also a co-investigator on a newly funded PO1 grant. Dr Michael Douvas is starting a multicenter trial for young adults with acute lymphoid leukemia. Dr John Densmore continues to lead our undergraduate education efforts as Associate Dean, with expansion of the medical school class to Northern Virginia this coming year. Dr Fran Garrett-Bakelman was the first author on a seminal paper in Science, on the effects of gravity on cellular function following prolonged space flight.

In stem cell transplant, we performed 122 stem cell transplants and 4 CAR T in 2019. We opened our commercial CAR T program and moved cell therapy to a state of the art, GMP facility in Pinn Hall. We had a successful inspection from the FDA. Dr Leonid Volodin is studying ways to prevent and treat graft vs host disease, which remains one of the toughest problems after transplant. Dr. Tammy Kindwall-Keller is working with national teams on ways to prevent myeloma recurrence after stem cell transplant. Dr Indu Varadarajan is investigating the influence of diet on the microbiome, to decrease GVHD and infections, and has helped to expand cell therapy. Dr Karen Ballen is working on improving access to care for patients in Virginia, in partnership with the Be The Match program of donors.

In Hematology, Dr Hillary Maitland is developing an anticoagulation stewardship program, and studying the application of new oral blood thinners to prevent and treat blood clots. Dr Kelly Davidson has expanded our program in Sickle Cell Anemia. Kelly is collaborating on a state wide initiative to improve care and obtain more funding for these complex patients. And we are delighted to announce the opening of our Adult Comprehensive Hemophilia and Bleeding Disorders Center, under the direction of Dr Louise Man.

Message from UVA Community Oncology Section Head, Dr Elizabeth Gaughan



Elizabeth Gaughan, MD

The UVA Community Oncology team serves patients in Fishersville (UVA Cancer Center Augusta), Charlottesville (UVA Cancer Center Pantops) and Culpeper (UVA Cancer Center Culpeper). This eight- provider team cares for patients with the spectrum of hematologic and solid tumor diagnoses as well as manages the multidisciplinary infusion centers. Due to our convenient office locations, we are able to see patients quickly and facilitate referrals to sub-specialists at the Emily Couric Clinical Cancer Center, when appropriate. While clinical care is the central focus of these teams, we welcome resident and fellow trainees on ambulatory elective rotations and are members of Health System administrative committees.

In the last year, we have expanded oncology clinical trial capabilities to UVA Cancer Center Pantops and are now actively treating patients on investigational protocols. Led by Community Oncology leadership, Clinical Trial Nursing, and the UVA Cancer Center Office of Clinical Research, with support from Cancer Service Line, this success was a coordinated effort between physician, nursing, pharmacy, lab and research teams. The inaugural effort focused on the Breast Medical Oncology trial portfolio, with work now underway on the Genitourinary and Gastrointestinal Oncology offerings. The continued enrollment and management of patients on clinical trials at UVA Cancer Center Pantops will serve as the foundation for these capabilities at other current and future satellite locations.

HEMATOLOGY/ONCOLOGY CLINICAL

Clinical Volumes

Clinical volumes remain at levels similar to FY2019. On grounds (Emily Couric Clinical Cancer Center - EC4) facility (room availability) and other resource constraints (nurse coordinators, other core staff shortages) have slowed the rate of growth seen over previous years. Regional clinics and infusion centers are located at Pantops, Culpeper and Augusta. Subspecialty clinic sessions are also provided at the Pantops location. A new expanded Infusion center on the 4th floor of EC4, and inauguration of an Urgent Symptom Clinic in March will allow for further growth.

Recruitment of new faculty has slowed, with only one new clinician joining the Division in FY2020.

	FY2018	FY2019	FY2020 (projected)
Inpatient Attending	11,345	13,622	13,755
Inpatient Consults	2,754	2,928	2,774
Inpatient TOTALS	14,099	16,550	16,530
Outpatient NEW and CONSULTS	4,223	4,380	4,355
Established Patient Visits	37,579	42,072	42,367
Outpatient TOTALS	41,802	46,452	46,722

Clinical volumes -- Does not include "other specialty procedures"

INOVA Hematologic Malignancies Clinic – UVA leukemia and bone-marrow transplant physician are on-site at INOVA every three weeks to attend in an ambulatory clinic, providing development of treatment plans for hematologic malignancies which may include eligibility for SCT, patient/family education, and for post-transplant evaluation, care and follow-up.

Selected New Extramural Funding

V Foundation Award

Dr. Francine Garrett-Bakelman was awarded a V-plus Scholar grant from the V foundation for cancer research. These scholar grants are awarded to early stage tenure track junior faculty leading laboratories focused on cancer research. Dr. Garrett-Bakelman was awarded a V scholar grant in 2017 which supported the study of gene expression and epigenetic data in high risk Acute Myeloid Leukemia patients. The V-plus award will support work derived from this initial award. Specifically, the functional studies of potential disease drivers that contribute to Acute Myeloid

R01 Grant

Dr Udai Singh (PI):

Over the past 20 years, the prevalence of obesity in the United States and worldwide has reached epidemic proportions. Obesity is a very powerful health determinant that facilitates the development and progression of several metabolic diseases, insulin resistance, and chronic inflammation. High-fat diet (HFD) consumption positively correlates with the development of obesity. Further, during the progression of obesity differential expression of microRNAs (miRs) by naive and activated T cells suggests their importance in T cell effector (Teff) functions. Drs. Singh's and Lum research team will examine how T cells infiltrate in adipose tissue during the early development of obesity. The project is focused on a novel and innovative area of research known as epigenetics changes and crosstalk with cellular immune cells during the development of obesity. In this proposal, we will determine how T cell miRs-are regulating crosstalk between adipocytes, T cells, and macrophages during diet-induced obesity. For the first time, we will explore how resident adipose tissue-derived T cell miRs alter metabolic function and obesity. The overall goal of the team's research is to an enhanced understanding of interactions between T cell miRs, T cell expansion, and macrophage and adipocyte function in the adipose tissue microenvironment that may allow for effective prevention and treatment options for obesity and metabolic dysfunction.

Selected New Extramural Funding (continued)

PO1 Grant

Through three inter-related and inter-dependent Projects and four essential Cores, our team will continue to define the biological basis of dysfunctional sphingolipid metabolism in AML, and in that process, validate new therapeutic targets for pharmacological treatment approaches. The **premise** of the renewal P01 application is that targeting enzymes responsible for dysfunctional sphingolipid metabolism will lead to new clinical options in AML. The **overall hypothesis** to be tested by all projects is that increasing endogenous pro-apoptotic ceramide species, while diminishing pro-survival phosphorylated or glycosylated ceramide metabolites, will yield efficacious treatments for AML. The **overall premise** of this renewal application are the exciting results from the first-in-man clinical trial of ceramide nanoliposomes for solid tumors (NCT02834611), demonstrating the lack of dose-limiting toxicities at doses where stable disease is observed. Exciting preliminary and published *in vivo* data provide the **rationale** for nanoscale delivery vehicles for exogenous ceramide as an adjuvant therapy to support standard of care therapy (low-dose AraC and venetoclax) in a phase 1b/2a clinical trial for relapsed/refractory AML (Project 1, CAV trial, UVA PRC approval #5414, pre-IND 142902). In addition, preliminary and published data are provided demonstrating that selective inhibitors of ceramide metabolism (Projects 2-3) increase the clinical utility of agents that raise levels of pro-apoptotic ceramides. A **common scientific theme** of all Projects is the mechanistic investigation of drug resistance and programmed cell death, which can be directly altered with sphingolipid-based therapeutics. The major **innovation** of our P01 is to utilize a bio-informatic and systems biology approach to integrate genomics, sphingolipidomics, and proteomics data from molecularly defined patient samples to reveal susceptible populations for testing innovative sphingolipid-targeted therapeutics in state-of-the-art patient-derived xenografts, genetically engineered murine models, and most importantly, a clinical trial. The major **goal** of this proposal is to develop new sphingolipid-targeted therapeutics for AML. The interdisciplinary team includes leaders in the fields of leukemia (specifically AML), nanoscale delivery systems for bioactive lipids, programmed cell death, and the biochemistry and biophysics of sphingolipids. This major goal will be accomplished through the following overarching five **Specific Aims** that are shared by all Projects and Cores: **1)** Evaluate the efficacy of therapeutics that elevate exogenous or endogenous levels of pro-apoptotic ceramide species in animal and clinical trials; **2)** Obtain preclinical and clinical PK, bio-distribution, and toxicology data to support and/or expand our FDA-IND for sphingolipid-based AML therapeutics; **3)** Define the biochemical, biophysical, and molecular mechanisms underlying the synergies obtained with agents that target dysfunctional sphingolipid metabolism; **4)** Understand the molecular basis defining variable dysfunctional sphingolipid metabolism for heterogeneous AML; **5)** Define and validate lipid-based biomarkers as diagnostic or prognostic indicators.

We are looking forward to continue the momentum of the first five years of NIH NCI support with this competitive grant renewal, which will feature the phase 1b/2a CAV clinical trial for ceramide Nanoliposomes administered with standard of care ARaC and Venetoclax for relapsed /refractory AML patients.

Our synergistic team of clinicians, basic scientists, and engineers include:

PI's:

Dr Thomas Loughran Jr
Dr Mark Kester

Co-Investigators:

David Feith, Medicine
Todd Fox, Pharmacology
Jason Pappin, BME
Kevin Janes, BME
Mark Conaway, Public Health Sciences
Dr Francine Garrett-Bakelman, Medicine
Dr Mike Keng, Medicine

Collaborating Universities:

Memorial Sloan Kettering
Eastern Carolina University
Penn State University
University of New Hampshire

Press Ganey 90% Recognition

Press Ganey Results for Patient Experience (90% or greater)

Douvas, Michael G.
Hall, Richard D.
Patel, Pranav D.
Grosh, William
Ballen, Karen K.
Keng, Michael K.
Densmore, John J.
Gaughan, Elizabeth M.
Davidson, Kelly M
Gentzler, Ryan D.
Portell, Craig A.
Williams, Michael E.
Kaur, Varinder
Man, Louise M.
Kindwall-Keller, Tamila L.
Brenin, Christiana M.
Dreicer, Robert
Reilly, Matthew J.

Press Ganey Results for Special Recognition who received a Perfect Score for Patient Experience

Douvas, Michael G.—2nd year in a row
Hall, Richard D.
Patel, Pranav D.

LETTER FROM THE PROGRAM DIRECTOR: DR RICHARD HALL



Richard Hall, MD

Hematology/Oncology continues to be a rapidly evolving field of internal medicine. This evolution is seen by our fellows throughout their clinical training – in many cases, therapies that we provide today did not exist, or were only in early studies, when our current 3rd year fellows began their fellowship training in 2017. It is certainly an exciting time to become a hematology/oncology physician, and our UVA team is engaged in many projects that are helping drive improved outcomes for our patients.

Our fellows are an integral part of the quickly changing therapeutic landscape in hematology/oncology. Along with multiple faculty mentors, our fellows were a part of 7 poster or oral presentations at the American Society of Hematology national meeting in December 2019. The UVA Cancer Center continues to generously support our fellows with research funding through the Farrow Endowed Research Fund, and we also will soon have a new opportunity to fund fellow investigation through the Weiss Endowed Fund, given by our former division chief Geoff Weiss MD and his family.

In addition to academic endeavors, our fellows continue to drive change within our program. Pooja Mehra led an effort through the American Society of Clinical Oncology (ASCO) Quality Training Program to adjust our call structure as a way to reduce burnout among fellows. With Trish Millard MD as the champion, we continued to grow our resiliency curriculum to hopefully teach fellows healthy strategies to managing the inherent stress in our discipline. Lastly, we modified and re-developed a clinical research program with the help of Amy Bouton, PhD, the UVA Cancer Center Associate Director for Education and Michael Devitt MD.

Lastly, we graduated four fellows in 2019 – Aber Alfaraj MD, Puja Arora MD, Carolyn Carrera MD, and Lindsey Hathaway MD; a few days later we welcomed three new fellows – Christian Barlow MD, David Riley MD, and Lindsey Shantzer MD. We continue to have a highly sought after fellowship – over 350 applicants applied for our 3 positions during the 2019 – 2020 application cycle, and we look forward to welcoming 3 new fellows into our program in July 2020.

2019–2020 FELLOWSHIP HIGHLIGHTS



Left to Right: Daniel Reed, Hillary Maitland, Pooja Mehra, Surabhi Palkimas, Louise Man, Anem Waheed, Erin McLoughlin

2019 American Society of Hematology Annual Meeting Fellow Poster Presentations:

Our fellowship was well represented at the Annual Meeting of the American Society of Hematology (ASH) conference held in December 2019 in Orlando, FL. A list of oral and poster presentations presented during the where our fellows served as primary author or co-author include:

1. Pooja Mehra MD: “Multidisciplinary Implementation of an Iron Deficiency Anemia in Pregnancy Treatment Protocol”
2. Victor Orellana-Noia MD: “Evaluation and Treatment of Burkitt Lymphoma in Modern Era: Real world Outcomes and Prognostication Across 26 US Cancer Centers”
3. Victor Orellana-Noia MD: “Outcomes of Patients with Newly Diagnosed Burkitt Lymphoma and CNS Involvement Treated in the Modern Era: a Multi-institution Real World Analysis”
4. Krista Isaac DO: “Efficacy of Therapies Following Venetoclax Discontinuation in CLL: Focus on B-cell Receptor Transduction Inhibitors and Cellular Therapies.”
5. Victor Orellana-Noia MD: “Current Selection Patterns, Toxicities, and Outcomes of Pre-Transplant Salvage Rx Regimens in Pts with R/R HL: Results of a Multicenter Retrospective Study.”
6. Krista Issac DO and Victor Orellana-Noia MD: “Fitness and Anthracycline Use in Front-Line Therapy for Older Patients with cHL: a Multi-Center Retrospective Analysis.”
7. Krista Issac DO: “Distance Does not Matter: Excellent Survival Outcomes for Leukemia Patients in Rural Appalachia.”

HEMATOLOGY/ONCOLOGY EDUCATION

2019–2020 FELLOWSHIP HIGHLIGHTS (continued)



Left to Right: Lindsey Hathaway, Krista Isaac, Pooja Mehra, Daniel Reed, Erin McLoughlin, Carolyn Carrera, Abeer Alfaraj, Puja Arora, Victor Orellana, Joseph Mock

Abeer Alfaraj, MD

Bayhealth Hematology/Oncology Associates, Milford, DE

Puja Arora, MD

University Hospitals – UH Seidman Cancer Center, Cleveland, OH

Carolyn Carrera, MD

IHA Hematology Oncology at St. Joe's, Ann Arbor, MI

Lindsey Hathaway, MD

Maine General Health, Portland, ME
Our Graduating Fellows in June 2020

Erin McLoughlin, MD

“UVA has provided a superb environment to train, both for residency and fellowship. The mentorship and support from faculty has been one of the highlights of my training at UVA. I had numerous opportunities to participate in exciting research projects and was fortunate enough to travel to three international conferences during fellowship to present projects. I

could not have asked for better co-fellows; their support and camaraderie made my experience here very special. I feel very prepared (yet appropriately terrified!) to start the next chapter in my career.”

Victor Orellana-Noia, MD

“During fellowship I have worked closely with Drs Craig Portell and Michael Williams, seeing patients with lymphoma and CLL and becoming increasingly involved in lymphoma clinical research. I have developed two prospective clinical trials using immune-based targeted therapies in non-Hodgkin and Hodgkin lymphoma, participated in a number of large-scale retrospective analyses, and recently presented data from our own multi-center retrospective study on older patients with classical Hodgkin lymphoma at the ASH Annual Meeting. After completing fellowship, I will be joining the lymphoma faculty at Emory University where I aim to continue my work as a clinical investigator.”



Left to Right: Daniel Reed, Erin McLoughlin, Victor Orellana

Danny Reed, MD

“At the outset of fellowship, I knew I wanted to pursue academic medicine and specialize in hematologic malignancies. I found success at UVA with several mentors who challenged me to grow as a person and physician. Opportunities like designing and implementing my own clinical trial from its earliest stages to publishing several retrospective studies, case reports, review articles and chapters have molded my early career as a leukemia physician. Not only have I been surrounded by supportive faculty, but my co-fellows are phenomenal. While I am sad to be leaving my UVA family, I know that they have prepared me for my next adventure.”



Left to Right: Lindsey Hathaway, Carolyn Carrera, Puja Arora, Abeer Alfaraj

Our new fellows entering joining us in July 2020:

Samantha DiBenedetto, MD

Medical School: St. Georges University
Internal Medicine Residency: University of Florida, Gainesville

Eric Pierce, MD

Medical School: East Carolina University (Brody)
Internal Medicine Residency: University of Virginia

Nicholas Schmidt, MD

Medical School: University of South Carolina
Internal Medicine Residency: University of Virginia

PUBLICATIONS

Total number of publications within last three years: 339 total

Khaki AR, Li A, Diamantopoulos LN, Bilen MA, Santos V, Esther J, Morales-Barrera R, **Devitt M**, Nelson A, Hoimes CJ, Shreck E, Assi H, Gartrell BA, Sankin A, Rodriguez-Vida A, Lythgoe M, Pinato DJ, Drakaki A, Joshi M, Isaacsson Velho P, Hahn N, Liu S, Alonso Buznego L, Duran I, Moses M, Jain J, Murgic J, Baratam P, Barata P, Tripathi A, Zakharia Y, Galsky MD, Sonpavde G, Yu EY, Shankaran V, Lyman GH, Grivas P. *Impact of performance status on treatment outcomes: A real-world study of advanced urothelial cancer treated with immune checkpoint inhibitors*. *Cancer*. 2020 Mar 15;126(6):1208-1216.

Thomas, M. H., Higgs, L. K., Modesitt, S. C., Schroen, A. T., Ring, K. L., & **Dillon, P. M.** (2019). Cases and evidence for panel testing in cancer genetics: Is site-specific testing dead?. *Journal of genetic counseling*. doi:10.1002/jgc4.1044

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Garrett-Bakelman, F. E., Darshi, M., Green, S. J., Gur, R. C., Lin, L., Macias, B. R., . . . Turek, F. W. (2019). The NASA Twins Study: A multidimensional analysis of a year-long human spaceflight. *SCIENCE*, 364(6436), 144-+. doi:10.1126/science.aau8650

Kunimoto, H., Meydan, C., Nazir, A., Whitfield, J., Shank, K., Rapaport, F., . . . Shih, A. H. (2018). Cooperative Epigenetic Remodeling by TET2 Loss and NRAS Mutation Drives Myeloid Transformation and MEK Inhibitor Sensitivity. *CANCER CELL*, 33(1), 44-+. doi:10.1016/j.ccell.2017.11.012

Kimpel, D. L., Lewis, J. E., **Gaughan, E., Grosh, W. W., & Brenin, C.** (2018). Collaboration Between Rheumatology and Oncology in Immune Checkpoint Inhibitor Therapy. *JOURNAL OF CLINICAL ONCOLOGY*, 36(26), 2743-+. doi: 10.1200/JCO.2018.79.0428

Johnson, D. B., Bordeaux, J., Kim, J. Y., Vaupel, C., Rimm, D. L., Ho, T. H., . . . Dakappagari, N. (2018). Quantitative Spatial Profiling of PD-1/PD-L1 Interaction and HLA-DR/IDO-1 Predicts Improved Outcomes of Anti-PD-1 Therapies in Metastatic Melanoma. *CLINICAL CANCER RESEARCH*, 24(21), 5250-5260. doi:10.1158/1078-0432.CCR-18-0309

Paudel, N., Schulze, D., **Gentzler, R. D., Evens, A. M., Helenowski, I., Dillehay, G., . . . Mittal, B. B.** (2019). Patterns of Failure and Survival Outcomes after Total Lymphoid Irradiation and High-Dose Chemotherapy with Autologous Stem Cell Transplantation for Relapsed or Refractory Classical Hodgkin Lymphoma.. *International journal of radiation oncology, biology, physics*. doi:10.1016/j.ijrobp.2019.02.007

Borghaei, H., Langer, C. J., Gadgeel, S., Papadimitrakopoulou, V. A., Patnaik, A., Powell, S. F., . . . Gandhi, L. (2019). 24-Month Overall Survival from KEYNOTE-021 Cohort G: Pemetrexed and Carboplatin with or without Pembrolizumab as First-Line Therapy for Advanced Nonsquamous Non-Small Cell Lung Cancer. *JOURNAL OF THORACIC ONCOLOGY*, 14(1), 124-129. doi:10.1016/j.jtho.2018.08.004

Recio-Boiles, A., Galeas, J. N., Goldwasser, B., Sanchez, K., **Man, L. M. W., Gentzler, R. D., . . . Gralla, R. J.** (2018). Enhancing evaluation of sarcopenia in patients with non-small cell lung cancer (NSCLC) by assessing skeletal muscle index (SMI) at the first lumbar (L1) level on routine chest computed tomography (CT). *SUPPORTIVE CARE IN CANCER*, 26(7), 2353-2359. doi:10.1007/s00520-018-4051-2

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Reed, D. R., Hall, R. D., Gentzler, R. D., Volodin, L., Douvas, M. G., & Portell, C. A. (2019). Treatment of Refractory ALK Rearranged Anaplastic Large Cell Lymphoma With Alectinib.. *Clinical lymphoma, myeloma & leukemia*. doi:10.1016/j.clml.2019.03.001

Morris, A. L., Naeem, M., Murray, T., Sen, J., Thomas, T., Daniels, E., . . . Keng, M. (2018). Establishing an Antifungal Program to Reduce Invasive Fungal Infections in Patients With Acute Myeloid Leukemia Receiving Induction and Reinduction Chemotherapy. *JOURNAL OF ONCOLOGY PRACTICE*, 14(12), E770-E774. doi:10.1200/JOP.18.00307

Gopalakrishnan, S., D'Souza, A., Scott, E., Fraser, R., Davila, O., Shah, N., . . . Hari, P. (2019). Revised International Staging System Is Predictive and Prognostic for Early Relapse (<24 months) after Autologous Transplantation for Newly Diagnosed Multiple Myeloma.. *Biology of blood and marrow transplantation : journal of the American Society for Blood and Marrow Transplantation*, 25(4), 683-688. doi:10.1016/j.bbmt.2018.12.141

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- Norkin, M., Shaw, B. E., Brazauskas, R., Tecca, H. R., Leather, H. L., Gea-Banacloche, J., . . . Wingard, J. R. (2019). Characteristics of Late Fatal Infections after Allogeneic Hematopoietic Cell Transplantation. *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*, 25(2), 362-368. doi:[10.1016/j.bbmt.2018.09.031](https://doi.org/10.1016/j.bbmt.2018.09.031)
- Mock, J., Kunk, P. R., Palkimas, S., Sen, J. M., Devitt, M., Horton, B., . . . Maitland, H. (2018). Risk of Major Bleeding with Ibrutinib. *CLINICAL LYMPHOMA MYELOMA & LEUKEMIA*, 18(11), 755-761. doi:[10.1016/j.clml.2018.07.287](https://doi.org/10.1016/j.clml.2018.07.287)
- Reed, D., Palkimas, S., Hockman, R., Abraham, S., Le, T., & Maitland, H. (2018). Safety and effectiveness of apixaban compared to warfarin in dialysis patients. *RESEARCH AND PRACTICE IN THROMBOSIS AND HAEMOSTASIS*, 2(2), 291-298. doi:[10.1002/rth2.12083](https://doi.org/10.1002/rth2.12083)
- Tan, S. -F., Dunton, W., Liu, X., Fox, T. E., Morad, S. A. F., Desai, D., . . . Loughran, T. P. (2019). Acid ceramidase promotes drug resistance in acute myeloid leukemia through NF-kB-dependent P-glycoprotein upregulation.. *Journal of lipid research*. doi: [10.1194/jlr.m091876](https://doi.org/10.1194/jlr.m091876)
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- Wang, T. T., Yang, J., Zhang, Y., Zhang, M., Dubois, S., Conlon, K. C., . . . Jr, L. T. P. (2019). IL-2 and IL-15 blockade by BNZ-1, an inhibitor of selective gamma-chain cytokines, decreases leukemic T-cell viability. *LEUKEMIA*, 33(5), 1243-1255. doi:[10.1038/s41375-018-0290-y](https://doi.org/10.1038/s41375-018-0290-y)
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- Kulling, P. M., Olson, K. C., Hamele, C. E., Toro, M. F., Tan, S. -F., Feith, D. J., & Jr, L. T. P. (2018). Dysregulation of the IFN-gamma-STAT1 signaling pathway in a cell line model of large granular lymphocyte leukemia. *PLOS ONE*, 13(2). doi:[10.1371/journal.pone.0193429](https://doi.org/10.1371/journal.pone.0193429)
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HEMATOLOGY/ONCOLOGY RESEARCH

TRIALS

Hematology/Oncology faculty serve as PIs on 97 active protocols, and have accrued 1,270 patients onto clinical trials over the past 12 months. Interventional Treatment (159); Interventional Non-treatment (19); Non-interventional (1,092).

Selected examples across disease teams are as follows:

Active Protocol Category	Date Open	IRB No.	Title	PI Name	Elig. Stages	NCI ID
Breast Oncology	2017	19406	A Phase I/II Study of Anti-CD3xAnti-HER2/neu (HER2Bi) Armed Activated T Cells (ATC) and Pembrolizumab Combination Therapy in Women with Metastatic Breast Cancer	Dillon, Patrick	IV	NCT03272334
Breast Oncology	2017	19900	Focused Ultrasound Therapy to Augment Antigen Presentation and Immune-Specificity of Checkpoint Inhibitor Therapy with Pembrolizumab in Metastatic Breast Cancer	Dillon, Patrick	IV	NCT03237572
Gastrointestinal Oncology	2017	19236	Phase Ib/II Treatment of Advanced Pancreatic Cancer with anti-CD3 x anti-EGFR-Bispecific Antibody Armed Activated T-Cells (BATs)	Le, Tri	IV	NCT03269526
Gastrointestinal Oncology	2019	20984	A Randomized Controlled, Open label, Adaptive Phase-3 Trial to Evaluate Safety and Efficacy of EndoTAG-1 Plus Gemcitabine versus Gemcitabine alone in Patients with Measurable Locally Advanced and/or Metastatic Adenocarcinoma of the Pancreas Failed on FOLFIRINOX Treatment	Kunk, Paul	Any/all stages	NCT03126435
Gastrointestinal Oncology	2019	21923	A Phase 1b/2, Open-label, Multicenter Study of Novel Oncology Therapies in Combination with Chemotherapy and Bevacizumab as First-line Therapy in Metastatic Microsatellite-stable Colorectal Cancer	Reilley, Matthew	IV	NCT04068610
Genitourinary Oncology	2019	21599	A Phase 3 RandOmized Study Comparing PERioperative Nivolumab vs. Observation in Patients with Renal Cell Carcinoma Undergoing Nephrectomy (PROSPER RCC)	Dreicer, Robert	II; III	NCT03055013
Genitourinary Oncology	2019	21680	A Phase II trial of sEphB4-HSA in combination with ANti PD1 Antibody Pembrolizumab (MK-3475) for metastatic urothelial cancer refractory to platinum	Devitt, Michael	IV	NCT02717156
Head & Neck Oncology	2017	19735	A randomized phase III study of pembrolizumab given concomitantly with chemoradiation and as maintenance therapy versus chemoradiation alone in subjects with locally advanced head and neck squamous cell carcinoma (KEYNOTE-412)	Kaur, Varinder	Any/all stages	NCT03040999

HEMATOLOGY/ONCOLOGY RESEARCH

TRIALS (continued)

Hematologic Malignancies	2020	21781	A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Efficacy and Safety of Vedolizumab in the Prophylaxis of Intestinal Acute Graft Versus-Host Disease in Subjects Undergoing Allogeneic Hematopoietic Stem Cell Transplantation	Volodin, Leonid	Any/all stages	NCT03657160
Hematologic Malignancies	2020	21795	A Randomized Lenalidomide Alone as Maintenance Treatment in Patients with Newly Diagnosed Multiple Myeloma Who Are Minimal Residual Disease Positive After Frontline Autologous Stem Cell Transplant	Foster, Laahn	Any/all stages	NCT03901963
Hematologic Malignancies	2019	21668	A RANDOMIZED PHASE III STUDY OF IBRUTINIB PLUS OBINUTUZUMAB VERSUS IBRUTINIB PLUS VENETOCLAX AND OBINUTUZUMAB IN UNTREATED OLDER PATIENTS (≥ 70 YEARS OF AGE) WITH CHRONIC LYMPHOCYTIC LEUKEMIA (CLL)	Portell, Craig	Not specified	NCT03737981
Hematologic Malignancies	2019	21391	Phase III Multicenter Open-Label Randomized Trial to Evaluate Efficacy and Safety of CPI-613 in Combination with High Dose Cytarabine and Mitoxantrone (CHAM) Compared to High Dose Cytarabine and Mitoxantrone (HAM) in Older Patients (≥60 years) with elapsed/Refractory Acute Myeloid Leukemia (AML)	Keng, Michael	Any/all stages	NCT03504410
Hematologic Malignancies	2018	20533	Assessment of Allogeneic Hematopoietic Cell Transplantation in Medicare Beneficiaries with Multiple Myeloma: A Study to Develop Evidence of Effectiveness for the Centers for Medicare and Medicaid Services (CMS)	Kindwall-Keller, Tamila	II; III	NCT03127761
Melanoma	2019	20968	A Randomized Phase III trial of Dabrafenib + Trametinib followed by Ipilimumab + Nivolumab at Progression vs. Ipilimumab + Nivolumab followed by Dabrafenib + ametinib at Progression in Patients With Advanced BRAFV600 Mutant Melanoma	Gaughan, Elizabeth	III; IV	NCT02224781
Thoracic Oncology	2019	21913	A Phase II Randomized Study of Ramucirumab Plus MK3475 (Pembrolizumab) Versus Standard of Care for Patients Previously Treated with Immunotherapy for Stage IV or Recurrent Non-Small Cell Lung Cancer (Lung-MAP Non-Matched Sub-Study)	Hall, Richard	IV	NCT03971474
Thoracic Oncology	2019	21757	A phase II study of Carboplatin plus Pemetrexed plus Atezolizumab plus Bevacizumab in chemotherapy and immunotherapy-naïve patients with stage IV non-squamous nonsmall cell lung cancer: Big Ten Cancer Research Consortium BTCRC-LUN17-139	Gentzler, Ryan	IV	NCT03713944

HEMATOLOGY/ONCOLOGY SPOTLIGHT

RECENT AND FUTURE EVENTS

Abstracts presented at the 2020 Genitourinary Cancers Symposium

Natalie J. Miller, Ali Raza Khaki, Leonidas Nikolaos Diamantopoulos, Mehmet Asim Bilen, Victor Sacristan Santos, Rafael Morales-Barrera, Michael Edward Devitt, Ariel Ann Nelson, Evan Shreck, Hussein Assi, Alejo Rodriguez-Vida, Mark Lythgoe, Alexandra Drakaki, Monika Joshi, Pedro Isaacsson Velho, Marcus W. Moses, Matt D. Galsky, Guru Sonpavde, Evan Y. Yu, Petros Grivas. Histologic subtype and response to immune checkpoint inhibitor (ICI) therapy in advanced urothelial cancer (aUC). Abstract 495. *Genitourinary Cancers Symposium, San Francisco, CA, Feb 13-15, 2020.*

Ali Raza Khaki, Leonidas Nikolaos Diamantopoulos, Natalie J. Miller, Mehmet Asim Bilen, Victor Sacristan Santos, Rafael Morales-Barrera, Michael Edward Devitt, Ariel Ann Nelson, Evan Shreck, Hussein Assi, Roubini Zakopoulou, Alejo Rodriguez-Vida, Mark Lythgoe, Alexandra Drakaki, Monika Joshi, Pedro Isaacsson Velho, Lucia Alonso, Matt D. Galsky, Guru Sonpavde, Petros Grivas. Real-world prognostic model for overall survival (OS) in patients (pts) with advanced urothelial cancer (aUC) treated with immune checkpoint inhibitors (ICI). Abstract 447. *Genitourinary Cancers Symposium, San Francisco, CA, Feb 13-15, 2020.*



YOU ARE INVITED

**2020 Updates in
Hematology and Hematologic Malignancies**

New Date Coming Soon!
Rescheduled from April 3, 2020

Boars Head Inn
200 Ednam Drive, Charlottesville

This program explores research and advances in the diagnosis and management of benign hematologic conditions and hematologic malignancies, including indications for novel therapies and use in special populations.



HEMATOLOGY/ONCOLOGY GRAND ROUNDS

1st Wednesday each month
8am – 9am

ECCCC, 3rd Floor Conf Room 3303



MARK YOUR CALENDAR

**2020 UVA Cancer Center-INOVA Schar
Cancer Institute Oncology Update**

November 19, 2020

Charlottesville Omni Hotel
212 Ridge McIntire Road, Charlottesville

Didactic review/Case based conference highlighting current state of the art in Melanoma, Breast, GI, GU neoplasms, with an emphasis on immunotherapy and toxicity management.



Kristen, Danny, Alyssa, Erin, Heather, Christian, Lindsay

HEMATOLOGY/ONCOLOGY SPOTLIGHT

PHOTO HIGHLIGHTS



1st row: Louise Man, Francine Garrett-Bakelman, Laahn Foster, Michael E. Williams, Lindsey Shantzer, David Riley, Varinder Kaur, Ryan Gentzler, Christiana Brenin **2nd Row:** John Densmore, Firas El Chaer, Craig Portell, Erin McLoughlin, Daniel Reed, Pooja Mehra, Jenna Ally, Karen Ballen, Kelly Davidson, Lawrence Lum, Kimberly Leake **3rd Row:** Michael Devitt, Patrick Dillon, Joseph Mock, Richard Hall, Christian Barlow, Joshua Humphrey, Katie Strickler, Heather Youngberg, Jessica Kassay-McAllister



Left to Right: Cherif Abelmalek, Michelle Otto, Ali Mahjoub, Pranav Patel, Michael E. Williams, Meera Kumar, Elizabeth Gaughan, Johann Hsu, Marie Thomas, Nicholas Paphitis, Christina Ide

HEMATOLOGY/ONCOLOGY SPOTLIGHT PROFILE

CLINICAL FACULTY PROFILE - Dr Louise Man



Louise Man and daughter Josephine

Tell us a little bit about yourself.

I'm from a family of Hoos. My two sisters and I all went to UVA for undergraduate education. I didn't think I'd be back in Charlottesville but I ended up returning for hematology/oncology fellowship and joined the Division of Hematology/Oncology about two and a half years ago. My clinical focus is in non-malignant hematologic disorders, specifically hemostasis and thrombosis. I've been working on expanding the Comprehensive Bleeding Disorders clinic (also known as the "Hemophilia Treatment Center") to our adult patients in Hematology. We anticipate starting late spring 2020. I live in Charlottesville with my husband and daughter.

Why UVA?

I chose to stay in academics at UVA because I felt like it was both the most interesting path as well as one where I could make a difference in patient care.

What brought you to Charlottesville?

I went to UVA for undergrad and returned to Charlottesville for Hematology/Oncology fellowship.

What excites you about your work?

It's hard to choose what excites me most about my work. Even though most of what I do is not cancer-related, I have the privilege of helping patients in many other ways, especially through surgeries or procedures. Some of the most gratifying moments include when my team helps someone with a bleeding disorder get through a major surgery or childbirth.

Proudest/greatest achievement outside the professional realm?

My proudest achievement is having my daughter Josephine. This made me feel great and humbled at the same time. Since then, I count myself successful every day that I can get her to daycare in one piece and myself to work on time OR if I can pick her up before daycare closes.

Next life?

I would have my own line of cutesy stationery and be a (boxing) ringside physician, in that order of priority.

What are you usually doing in spare time?

In my spare time I closely follow sports news and accumulate random sports knowledge (limited to football, basketball, boxing). This involves a lot of reading and perpetually bugging my husband to explain things to me. I especially love doing the latter.

How did you meet your partner?

I met Malcolm through a co-worker whose husband was Malcolm's boss. This co-worker happened to be my chief at the time. You can see where we were on the power spectrum... but it worked out.

Favorite vacation/activity spot?

I hope I can add to my list of vacation spots but I loved Paris (where my husband and I went on our babymoon). Being in Paris made me realize that if I was stranded on a desert island but had an unending supply of French baguettes, I'd be pretty content (until I got bored).

Most admired person, and why?

I can't decide between my parents; both of them taught me the value of a strong work ethic. My mom is the most patient person I know.

Best advice anyone ever gave you?

My parents told me that I should always do my best but that I can only do my best. Beyond that, it's not up to me.

What about you would surprise us?

I am a boxing fan (yes, I am mildly ashamed of this). Every couple of months, I stay up unreasonably late to watch boxing matches. Don't get me started on controversial outcomes or about when Manny Pacquiao should retire.

HEMATOLOGY/ONCOLOGY SPOTLIGHT PROFILE

RESEARCH FACULTY PROFILE - Dr Laahn Foster



Laahn Foster and son Liam

Why Research

As one travels through this life, certain truths become self-evident. It seems natural to first focus on yourself and develop the skills required to be personally successful. Then you apply your skills to achieve your personal goals. But at some point, you understand the bigger picture. You understand that we are all in this life together, intermingled and codependent. So, I have turned my professional attentions to medical research, helping to develop and provide life-giving innovative therapies to everyone who is in need.

What brought you to Charlottesville?

I came to Charlottesville to work at UVA. My husband, son and I were living in Princeton NJ when I matched here for fellowship in Hematology/Oncology. I then received the opportunity to join the faculty and jumped at the chance to become part of this regional powerhouse of research and clinical care... and the improvement in climate didn't hurt!

What excites you about your work?

Every patient is our most important patient! I go to work every day with a sense of urgency. The work that is done at our cancer center is critically important and time-sensitive to so many people. We literally don't have a moment or a dollar to waste. Every day, I appreciate the privilege and honor to work as a member of a team that makes smart and difficult calls for patients who need us to do our best work for each one of them as individuals.

Proudest/greatest achievement outside the professional realm?

There are many, many people who have had to overcome significant hurdles to reach their goals. I count myself among this stalwart group who measure their success less by the level of their achievement and more by the distance of the journey.

What are you usually doing in spare time?

My son is a national class junior golfer. So, I spend a lot of time on the golf course and traveling. When not being a "golf-mom," I am a foodie, an oenophile, a runner, and a golfer myself.

How did you meet your partner?

I met my husband at work when I was a management consultant in New York. We were on the same team, traveled the world and spent a lot of time together. Nature took its course, and we have been together for 15 wonderful years.

Favorite vacation/activity spot?

The world is replete with so many wonderful places. I have enjoyed them all, but I have never found just one favorite spot. My favorite vacation is the one that I am enjoying at the time.



Laahn Foster and husband Thomas



Thomas, Liam and Laahn Foster

Most admired person, and why?

I admire many people. Some are great people of significant renown; others are people of simple strength and character. But I have to select my mother as the person that I admire most. She has achieved much in her 71 years... not by some cultivated set of skills but rather by sheer force of will. And my mother never lets common sense limit her options.

Best advice anyone ever gave you?

"Keep your options open!" This disarmingly obvious axiom has been the guiding principle of both my personal and professional life. I have taken a circuitous route from business consulting to general medicine to specializing in hematology/oncology. Without keeping my options open, I would still be in New York writing bullets on PowerPoint slides.

What about you would surprise us?

My favorite bourbon is Pappy Van Winkle 20.

HEMATOLOGY/ONCOLOGY SPOTLIGHT PROFILE

RESEARCH FACULTY PROFILE - Dr Mike Devitt



Mike and Meghan Devitt and Family

Why Research?

Cancer care is rapidly evolving, which is really exciting for both patients and physicians. I was exposed to clinical research early on in my fellowship training. I realized that performing research doesn't just improve the lives of the patients I take care of today, but improves the lives of all patients in the future.

What brought you to Charlottesville?

I came to Charlottesville in 2011 to start my internal medicine residency. At the time, I figured Charlottesville would be a nice place to spend 3 years. My wife and I were hooked shortly after we arrived. We've had all three of our children in Cville, have a wonderful group of friends and colleagues, and it feels like we have grown roots.

What excites you about your work?

I get the most satisfaction out of direct patient interaction. Patients are frequently scared, stressed, and often confused by the onslaught of information they receive when they get a cancer diagnosis. I find that helping them to better understand their cancer and the battles they face is a very rewarding experience.

Proudest/greatest achievement outside the professional realm?

Outside of marrying Meghan and our three beautiful daughters, I would have to say my first (and only) hole in one. It happened in high school at the public course I played in the summers. I usually played by myself and luckily the group ahead of me had stopped

to let me play through, so I had witnesses. Hopefully I can get another one during my golfing lifetime.

Next life?

Probably a golf pro. I don't think I'd ever be good enough to make a living playing golf, but I could probably have just as much fun working at a course and teaching the game.

What are you usually doing in spare time?

If I'm not playing with my kids, then I will probably sneak away to the golf course or driving range.

How did you meet your partner?

Meghan and I met in college. Our two groups of friends hung out a lot. In the spring of our junior year, many of our friends left to study abroad. We got to know one another a lot better with the smaller group. We started dating shortly after the start of the semester and 15 years later we are still going strong.

Favorite vacation/activity spot?

We go up to Cape Cod almost every summer. Between the trips to the beach, a couple rounds of golf, and great home-cooked meals, it is always a relaxing trip.



Nora left, Avery middle, and Mackenzie right

Most admired person, and why?

My dad. He had to work through a lot of challenges in his early life. He worked hard, developed skills any way he could, and was able to make the most of everything that came his way.

Best advice anyone ever gave you?

"Let the shot develop." My dad received this advice from a caddy during a golf trip to Scotland and passed it on to me. He had hit what he thought was a bad shot, that ended up being quite good. I think it applies well to the times in life when things don't seem to be going your way or according to plan. If you let it play out, you might be surprised how good things end up.

What about you would surprise us?

I was the lead singer for a punk/emo rock band in high school. We played several shows in community halls and friends basements. This was pre-internet, so I don't know if there is any evidence of this in existence.

HEMATOLOGY/ONCOLOGY SPOTLIGHT PROFILE

FELLOW FACULTY PROFILE - Dr Lindsey Shantzer



Tell us a little bit about yourself.

I was born and raised in Bucks County, Pennsylvania. After finishing college and medical school in Pennsylvania, I moved to North Carolina for Internal Medicine Residency training at Duke University. I was lucky to match at UVA for Hematology/Oncology fellowship last year and moved to Charlottesville about nine months ago.

What brought you to Charlottesville?

The stellar mountain views, beautiful vineyards, and of course the top notch Hematology/Oncology fellowship training program.

What excites you about your work?

On a daily basis I have the opportunity to meet such cool and resilient people and contribute to their care in

a meaningful way. It's especially rewarding to be able to help educate and support patients through new diagnoses. There are so many exciting areas of research in cancer therapeutics and it's always awesome to see patients benefit from novel therapies. I'm lucky to have the best group of co-fellows who teach me so much and have me laughing every day.

Proudest/greatest achievement outside the professional realm?

Maintaining friendships and family relationships over time and distance!

Next life?

I'm pretty happy with this life, but maybe I'd be a yogi or fitness instructor -- forcing myself to stay mindful and active while helping others do the same.

What are you usually doing in spare time?

Enjoying Charlottesville's vineyards, hanging out with my co-fellows, watching stand-up comedy, and planning our wedding.

How did you meet your partner?

About four years ago, fate and a dating app brought us together. We swiped into each other's lives and never looked back!

Favorite vacation/activity spot?

I'm not hard to please when it comes to vacation. Any beach, lake, or national park and time with people I love works for me.

Most admired person, and why?

Probably my brother - he always stays true to himself and gives really good advice.

Best advice anyone ever gave you?

You learn and grow the most when you get out of your comfort zone.

What about you would surprise us?

I love Broadway musicals.



HEMATOLOGY/ONCOLOGY SPOTLIGHT PROFILE

STAFF PROFILE - Jennifer Taylor



Tell us a little bit about yourself.

I've been at UVA for 20 years as of this year and actually remained in Hematology/Oncology the entire duration. I started as a temp in Hematology/Oncology in November 1999, was offered a full-time position as an Administrative Assistant in January 2000 and am now the Division Chief Executive Assistant. I've lived in Fluvanna County for the last 16 or so years and enjoy the peaceful setting. I have one daughter, Makayla, who is in her first year of the Nursing Program at PVCC. I'm also the proud aunt of three nephews and two nieces ranging from three and a half months to 19 years old. Life is definitely exciting, unpredictable and fun!

Why UVA?

A few of my family members have worked at UVA in different capacities at different times. The opportunity for a temp position presented itself and it seemed like a good fit. Years later, that still stands true.

What brought you to Charlottesville?

I was born and raised in Charlottesville. Fluvanna became home around 2004 and the area I live in is beautiful.

What excites you about your work?

I truly enjoy those that I work with, from physicians to other administrative staff. Each day brings variety which keeps things lively. The administrative team in Hematology/Oncology is wonderful and really offers assistance in multiple ways when needed.

Proudest/greatest achievement outside the professional realm?

I would have to say where I am in my life today. From purchasing my first home in my early 20s to raising my daughter as a single mother to being at UVA for 20 years.

What are you usually doing in spare time?

Spending time with family. From family gatherings to sporting/school events, any time together is always fun.

Favorite vacation/activity spot?

The beautiful Outer Banks, NC area. It just isn't summer unless a vacation is booked there each year.

Most admired person, and why?

My mother, Sharon. She is a kind-hearted, loving, compassionate, empathetic and overall a strong woman. A whole-heartedly genuine good person is the best

way to describe her. Everyone in our family knows her cup runs over with love for us. I am so lucky and thankful to be able to call her my mother.

Best advice anyone ever gave you?

Believe in yourself!

What about you would surprise us?

I've never be on an airplane...fear of heights. That was scheduled to change next month as I had booked my first American Airlines ticket to Florida, but thanks to COVID-19 I'll be on the ground for the foreseeable future.



HEMATOLOGY/ONCOLOGY SPOTLIGHT FUN

HEMATOLOGY WORD SEARCH

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B N R G I B G H E U T D X C A M H B N G O T C R A
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E O H M M S S N N R A L H N Y E Y E E T Y Q I A T
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MEDICINE
HEMATOLOGY
ONCOLOGY
BONE MARROW
BLOOD CELLS
HEMOGLOBIN
PLATELET
VESSEL
ONCOLOGIST

PROTEINS
RESEARCH
BIOMEDICINE
THERAPEUTIC
CELLS
TREATMENT
CLINICAL TRIALS
ANTIMETABOLITE
CLINICIAN

WELLNESS
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ANTIGEN
IMMUNE RESPONSE
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