NEWS FROM THE DEPARTME **MARCH 2020**

MODE IN THE MEDICINE DEPARTMENT OF MEDICINE

MISSION

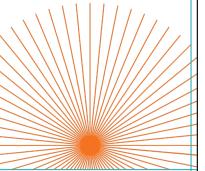
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

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.



QUICK LINKS

DoM WEBSITE

GRAND ROUNDS

HIGHLIGHTED DIVISION

HOOS WELL

MINDFULLNESS MATTERS



MESSAGE FROM THE CHAIR



March Madness indeed! One look inside this edition of Medicine Matters will convince you that you need not watch basketball this March and instead concentrate on all of the activity in the Department of Medicine. Last month, the Department hosted students from Buford Middle School for a day of learning about careers in health professions. My deepest thanks to Brandon Kemp, Terri Washington, and our many staff members who served as leads for this critical event. Our future centers on exciting young people from diverse backgrounds to

seek careers in medicine. In addition, we have our own version of March Madness led by Dr. Drew Harris in the Division of Pulmonary and Critical Care Medicine. The first 6 Minute Walk Race will no doubt garner huge ratings on local media and I am sure that there will be some fierce competition. I encourage all of you to participate and also to give generously to the Charlottesville Free Clinic. Lastly, this month we highlight the people and achievements of the Division of Pulmonary and Critical Care Medicine under the leadership of Dr. Imre Noth. Dr. Noth has accomplished a tremendous amount in his short time leading the Division as you will see in the newsletter. Happy March to all and spring is near!

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

SUBSCRIBE

GIVE TO DOM

DOM FINANCIAL UPDATE

Department of Medicine Summary of Consolidated Financials FY20 as of January 31, 2020

	Budget	Actual	\$ Variance
	YTD	YTD	YTD
Work RVUs	538,397	533,272	(5,125)
Clinical Receipts (NPSR)	36,231,143	35,390,387	(840,756)
Total Revenues	107,521,077	109,351,887	1,830,810
Total Expenditures	109,329,503	108,273,200	1,056,303
Net Income	(1,808,426)	1,078,687	2,887,113

Summary Explanation of Variance:

For the fiscal year ending January 31, 2020 DOM posted a consolidated net surplus of \$1.1M and a favorable variance to net budget surplus of \$2.9M. The unfavorable variance in Net Patient Service Revenue is due to lower net collections, medicaid conversion rate and pending payor crdentialing. Non-Grants consolidated revenues outperformed budget while non-personnel expenditures remained steady.

DOM UPDATES & NOTES



Firas El Chaer, MD



Karen Ballen, MD



Mike Salerno, MD, PhD, MS



Todd Villines, MD



Andrew Wolf, MD



Julia den Hartog, MD



John Macknight, MD



Eve Bargmann, MD



Matt Goodman, MD



Ken Ballew, MD



Kim Dowdell, MD



Christina Tieu, MD

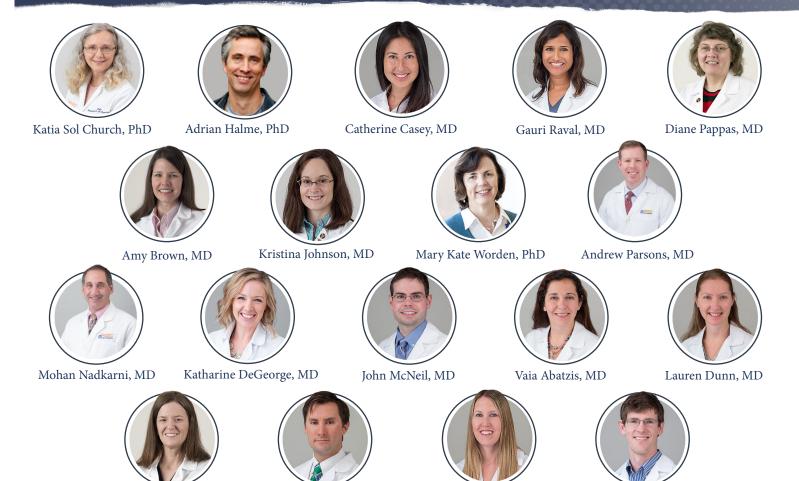
Congratulations to Firas El Chaer, MD and Karen Ballen, MD on a new publication in the British Journal of Hematology titled: "Treatment of acute leukemia in adult Jehovah's Witnesses".

Congratulations to Mike Salerno MD, PhD, MS for being named a *Vivien Pinn Scholar* at UVA for the next three years. With this comes three years of support for a new research direction.

Congratulations to Todd Villines, MD who was just named to a 5-year term as Editor-in-Chief of the Journal of Cardiovascular CT.

Congratulations to Andrew Wolf, MD, Julia den Hartog, MD, John Macknight, MD, Eve Bargmann, MD, Matt Goodman, MD, Ken Ballew, MD, Kim Dowdell, MD, and Christina Tieu, MD. Who each received recognition for top tier performance in patient satisfaction scores from the Medical Center. This is a real tribute to the extraordinary efforts and care that are recognized by their patients.

 $\overline{2}$



Congratulations to the faculty below who have been awarded the 2020 School of Medicine Medical Education Fellowships (total of \$100,000) for their innovative proposals! We had a strong pool of proposals from which to draw.

Jessica Sheeran MD

Thaddee Valdelievre, MD

Edward Nemergut, MD

- Katia Sol-Church, PhD and Adrian Halme, PhD for their <u>proposal</u> to promote rigor and reproducibility in experimental research among early second-year BIMS students.
- Catherine Casey, MD for her proposal to strengthen the LGBT+ curriculum.

Lynn Kohan MD

- Gauri Raval, MD, Diane Pappas, MD, JD, Amy Brown, MD, Kristina Johnson, MD, Mary Kate Worden, PhD, Andrew Parsons, MD, Mohan Nadkarni, MD, for their proposal to develop a curriculum around health equity focusing on the impact of racism on health and the historical context of racism in Charlottesville.
- Katharine DeGeorge, MD and Andrew Parsons, MD, for their proposal to develop an Evidently MD smartphone app.
- John McNeil, MD, Vaia Abatzis, MD, Lauren Dunn, MD, Lynn Kohan, MD, Edward Nemergut, MD, Jessica Sheeran, MD, and Thaddee Valdelievre, MD, for their proposal to develop an interactive, web-based tool for the Anesthesia clerkship.

The Medical Education Fellowship Awards provide release time of up to 100% for a limited time for faculty to develop teaching and learning innovations in our NxGen, BIMS, and public health educational programs. Funding awarded will support a specific percentage of effort (depending on request and availability of funds) for a specifically determined timeline that is sufficient to develop the innovation.



iPad Diabetes Education Pilot Program - VCDPE

The Virginia Center for Diabetes Prevention and Education will be offering a 4-series iPad diabetes education program to patients at Stone Mountain Health Services in Southwest Virgina. The telehealth pilot program will begin March 2020. The purpose of the progam is to increase diabetes self-care knowledge and skills of PWD so that they can better manage their disease. Particular focus of this program is lifestyle modification delivered via telehealth, iPad to home intervention.

Four live 1-hour Zoom sessions will be delivered weekly in March. These sessions will be based on the AADE self-care behavior system. Additionally, items loaded on the iPads will support self-care engagement between sessions. Included will be pre-loaded videos on stress reduction activities, a grocery store tour, meal preparation, goal setting, and physical activity. A number of mHealth apps will also be pre-loaded on the iPads. These include Zoom, Fat Secret, Mysugr, and Diabetes:M. The iPads will be set with calendar reminders to help patients with organization and time management for attendance of live sessions, being physically active, tracking meals, and working on goals.

If you have questions about the program, please contact <u>Viola Holmes</u>, <u>RD</u>, <u>CDE</u>: vjf7j@virginia.edu





Middle School Students Tour Nursing School to Encourage Future Careers in Nursing

On February 3rd and 5th, 7th grade students from Buford Middle School visited the University of Virginia Health System in order to experience different aspects of medicine. They had the unique opportunity to tour the medical simulation labs in either the School of Medicine or School of Nursing, spend time in the ultrasound and CT/MRI imaging departments, and learn about the Pegasus flight crew. The highlight for most students was the ability to walk out onto the helipad and take in the gorgeous views of Charlottesville.

In looking through the various photos, one can see that everyone involved had an amazing time and experience. If even one student walks away with a greater appreciation or enthusiasm for science and medicine then all of the effort put forth into making this event happen was a worthwhile investment.

This experience could not have been possible without the time, effort, and support from the amazing volunteers from the Department of Medicine. Thank You!



A Buford Middle School student listens to the "heartbeat" of one of the UVA Medical Simulation Center's manikin-based patient simulators.



Middle school students ask questions about the Pegasus helicopter on the helipad, which affords the highest view of Charlottesville in the city.

Buford Middle School Visit UVA Nursing School



Middle school students get an explanation as to how a CT scan is performed.



A Buford Middle School teacher and student try using equipment while exploring future career possibilities at the UVA School of Nursing.



James Nisley demonstrates how blood pressure is taken to middle school students at UVA School of Nursing.



Employees from UVA Department of Medicine. Pictured from left: Amanda Powell, Ruth Aldridge, Jessica Proffitt, Sonja Spradlin, Debra Burleigh



Employees from UVA Department of Medicine. Pictured from left: Leslie Stewart, Javanov Barksdale, Monte Parsons, Lisa Mackey, Cheryl Etelvari



Employees from UVA Department of Medicine who toured middle school students through UVA Nursing School, radiology, and the helipad. Pictured from left front: Javanov Barksdale, Debra Burleigh, Jessica Proffitt, Terri Washington, Lisa Mackey, From left back: Patty Dabney, Janet Tillage, Stacey White, Leslie Stewart, Monte Parsons, Cheryl Etelvari, Brandon Kemp, Ruth Aldridge, Glenn Glover, Sonja Spradlin, Martha Burner, Kristine Olson



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

DOM's Own March Madness to Support Cville Free Clinic - You Still Have 24 Hours!

With March Madness on the way, please click on the below link to find out more about the 1st annual UVA Department of Medicine March Madness Fundraiser to support the Charlottesville Free Clinic. It is a NCAA Basketball March Madness style tournament, with 16 "ELITE" athletes competing from the DOM.

https://med.virginia.edu/dom/6-minute-walk-march-madness

The website has:

- 1) A link to download a bracket (bracket is also attached)
- 2) Instructions for how to submit your bracket (email to <u>Drew.Harris@virginia.edu</u>) or <u>6minutefreeclinic@virginia.edu</u>)
- 3) Instructions for how to donate (donation required to enter the bracket pool) using Paypal or Venmo

For those technologically challenged: you can also drop off printed out/filled out brackets and donate using cash or a check: West complex, D elevators, 5th floor, pulmonary offices behind ID clinic, Drew Harris office 2nd set of offices on left.

Prizes: the winning bracket will win an autographed Tony Bennett basketball (the coach of the 2019 NCAA Men's Basketball Championship team) as well as free running shoes courtesy of Ragged Mountain Running Shop.

Check out the website to see bio's of these intense competitors and submit your brackets TODAY to support your colleagues and the Charlottesville Free Clinic!!!

Questions? Email <u>Drew.Harris@virginia.edu</u>



Filled out by anyone affiliated with UVA Health \$20 suggested donation to enter the bracket pool Venmo: @sixminutefreeclinic OR PayPal: @drewharris1

-- include name and email in venmo comments Email brackets to: 6MinuteFreeClinic@Virginia.edu

GET BRACKET: med.virginia.edu/dom/6-minute-walk-march-madness/

DIVISION SPOTLIGHT - PULMONARY & CRITICAL CARE

Division Chief Message - Dr Imre Noth



Imre Noth, MD

As I complete my second year as chief of the Division of Pulmonary and Critical Care Medicine at the University of Virginia, I continue to feel inspired by our faculty.

I feel excited and privileged to be working with so many intelligent, talented, aspiring, and young physicians, nurse practitioners, caretakers, scientists, and staff.

The Division has a rich history and tradition of excellence in patient care, education and research. We currently have 23 faculty members (3 full professors, 3 associate professors, 15 assistant professors, 1 instructor, 1 full research professor, 1 associate research professor, 10 NPs) and 11 clinical pulmonary and critical care fellows. Our faculty members strive to provide the best possible care to patients with a variety of disorders, ranging from obstructive lung diseases in asthma and COPD to pulmonary arterial hypertension, cystic fibrosis, and interstitial lung disease. We also provide the best possible care to the most critically ill patients in the medical intensive care unit. The lung transplant group has been increasing activity while maintaining some of the best outcomes in the nation. These activities allow the division to provide the best training environment for the next generation of physicians and scientists for discoveries in bench, translational and outcomes medicine.

Several of our clinical and research programs have enjoyed continued success. The Cystic Fibrosis foundation continues to recognize our center for excellence under the directorship of Dr. Dana Albon. After many years, of growth under Dr. Eric Davis' guidance, our Sleep medicine program is now under the steady hand of Dr. Daniel O'Hearn, who joined us from the University of Washington, Seattle, WA. Dr. Mihalek continues his role jointly with Cardiology to run the PAH program. Our COPD center of excellence continues to provide outstanding care under the guidance of Dr. Mike Shim. The ILD program houses expertise in genetics, genomics and clinical trials with participation in numerous industry and NIH sponsored trials. We also engage in cutting-edge bronchoscopic techniques for lung cancer screening and diagnosis. ~ Imre Noth, MD

Cystic Fibrosis Foundation Team Program

The UVA Cystic Fibrosis team is a Cystic Fibrosis Foundation (CFF) accredited program and is participating in multiple charitable activities, QI activities and clinical trials.

In 2018 the CF adult team received the Cystic Fibrosis Foundation Quality of Care Award and in 2019 the Cystic Fibrosis Foundation Outstanding Partnership Award.

Some of the clinical trials that we participate in through the Cystic Fibrosis therapeutic development network are:

- Part of phase two and phase three triple combination studies
- STOP2 study looking at CF exacerbation therapy length.

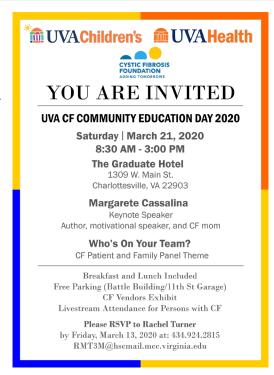
We serve patients from all over Virginia as well as outside of the state. Our patient population has been increasing and is currently over 140 patients.

We closely collaborate with our pediatric partners and we participate in the Cystic Fibrosis Learning Network, a network of CFF centers that collaborates to develop innovative QI work.

Upcoming events:

Virginia CFF Chapter Great Strides Walks Riverview Park May 23rd at10:00 am

Charlottesville Brewer's Ball IX Art Park June 18th at 7:00 pm



Live stream UVA CF Community **Education Day at:** https://livestream.com/ blueridgeeventproduction/CFF2020 (7)

PULMONARY & CRITICAL CARE - UPDATES

Clinical Update

The division continues to grow both in the ambulatory setting and in the critical care arena. The ambulatory practice operates in the primary care clinic, Fishersville, and Zion Crossroads. We successfully launched a joint attending/nurse practitioner operated ICU at Culpeper using a telemedicine model. Last year we added several new faculty: Dr. Dan O'Hearn as noted above is our new Director for Sleep medicine. Dr. John Kim comes to us from Columbia where he completed his fellowship. He has an active interest in ILD, and lipid metabolism. While Dr. Timothy Scialla joined the Division from Duke University as an Associate Professor, his clinical focus is asthma and COPD. He will also be assuming the role as Program Director for the fellowship. Jeff Sturek also joined the faculty this past year as a clinical investigator on an iTHRIV award. The future looks very bright and I am very excited to see the division grow and expand.

Culpeper elCU

Academic medical centers have an important role in regional critical care by supporting community hospitals in the area. This support typically comes through accepting transfers to a "higher level of care", however these transfers are associated with higher mortality rates. Our MICU at UVAHealth (UVA) has a long standing interest in improving these outcomes, publishing the first interhospital ICU transfer checklist in 2012. In 2018, we evaluated our referral pattern and found that our largest referring hospital was Culpeper Medical Center, averaging 2 transfers per week with a 35% mortality rate.

In July of 2018, we approached the leadership of UVAHealth (UVA) and Culpeper to form a collaborative relationship in which we would staff the Culpeper ICU with acute care nurse practitioners hired by UVA in a collaborative relationship with a UVA intensivist using telemedicine. This built on work already done at UVA in tele-stroke and differs from an e-ICU, which provides continuous monitoring of patients through an electronic platform without augmenting existing staffing.

On July 17, 2019, we began staffing the Culpeper ICU and by early August we were providing daytime coverage



Pulmonary Fibrosis Patient Education Day 2020

Saturday | September 19, 2020 8:00 AM - 2:30 PM

Omni Charlottesville Hotel

212 Ridge McIntire Road Charlottesville, VA 22903

Who's It For?

Patients, caregivers, and family members

Breakfast and Lunch Included Vendors Exhibit

Please RSVP to Rachel Turner

by Friday, August 14, 2020 at: ild@virginia.edu OR 434.924.2815 of the ICU 7-days per week. Initially the service volume was on average less than 1 patient per day. This grew over the following months with an average of 4.2 patients per day in the month of January. In February, 2020 we moved to a 24/7 model, with the tele-ICU consult attending at UVA during the day and the MICU attending on call via tele-consult, as needed based on triage guidelines, patients at night. The nurse practitioners staff the unit providing all aspects of critical care without an on-site attending, making this program the first of its kind that we have found documented.

While early in the data collection process, we have reduced the transfer rate from Culpeper to 1 transfer per week and reduced the mortality to 21% of transferred patients. The majority of patients who are transferred now come because the service they need, for example GI, is not available at Culpeper. In this new model, once they receive those service they can return to Culpeper to complete their hospital course. In the past 5 months, 21% of patients who come to UVA from Culpeper return to Culpeper.

The real win has been for the patients – we have demonstrated multiple times that what we have built an ICU system that works to optimize patient care delivery and focuses on providing care at its highest level regardless of the location.

PULMONARY & CRITICAL CARE - PUBLICATIONS

Use of mepolizumab in adult patients with cystic fibrosis and an eosinophilic phenotype: case series.

Zhang L, Borish L, Smith A, Somerville L, Albon D.

Allergy Asthma Clin Immunol. 2020 Jan 6;16:3. doi: 10.1186/s13223-019-0397-3. eCollection 2020.

Single-Cell Transcriptomic Analysis of Human Lung Provides Insights into the Pathobiology of Pulmonary Fibrosis.

Reyfman PA, Walter JM, Joshi N, Anekalla KR, McQuattie-Pimentel AC, Chiu S, Fernandez R, Akbarpour M, Chen CI, Ren Z, Verma R, Abdala-Valencia H, Nam K, Chi M, Han S, Gonzalez-Gonzalez FJ, Soberanes S, Watanabe S, Williams KJN, Flozak AS, Nicholson TT, Morgan VK, Winter DR, Hinchcliff M, Hrusch CL, Guzy RD, Bonham CA, Sperling AI, Bag R, Hamanaka RB, Mutlu GM, Yeldandi AV, Marshall SA, Shilatifard A, Amaral LAN, Perlman H, Sznajder JI, Argento AC, Gillespie CT, Dematte J, Jain M, Singer BD, Ridge KM, Lam AP, Bharat A, Bhorade SM, Gottardi CJ, Budinger GRS, Misharin AV. Am J Respir Crit Care Med. 2019 Jun 15;199(12):1517-1536. doi: 10.1164/rccm.201712-2410OC.

Palliative Care and Moral Distress: An Institutional Survey of Critical Care Nurses.

Wolf AT, White KR, Epstein EG, Enfield KB.

Crit Care Nurse. 2019 Oct;39(5):38-49. doi: 10.4037/ccn2019645.

The Impact of Heat Waves on Emergency Department Visits in Roanoke, Virginia.

Davis RE, Houck M, Markle E, Windoloski S, Enfield KB, Kang H, Balling RC Jr, Kuehl DR, Burton JH, Farthing W, Rubio ER, Novicoff WM.

Acad Emerg Med. 2020 Jan 17. doi: 10.1111/acem.13919. [Epub ahead of print]

A Randomized Controlled Trial Comparing Two Lung Expansion Therapies After Upper Abdominal Surgery.

Rowley DD, Malinowski TP, Di Peppe JL, Sharkey RM, Gochenour DU, Enfield KB.

Respir Care. 2019 Oct;64(10):1181-1192. doi: 10.4187/respcare.06812. Epub 2019 May 21.

Depressive Symptoms Are Associated with Self-Reported Physical Limitations That Are Activity Dependent in a Cross-Sectional Analysis of Subjects with Chronic Obstructive Pulmonary Disease.

Odackal J, Lyons G, Harris D.

COPD. 2019 Aug;16(3-4):254-260. doi: 10.1080/15412555.2019.1634684. Epub 2019 Jul 12.

Lung Lavage Granulocyte Patterns and Clinical Phenotypes in Children with Severe, Therapy-Resistant Asthma. Teague WG, Lawrence MG, Shirley DT, Garrod AS, Early SV, Payne JB, Wisniewski JA, Heymann PW, Daniero JJ, Steinke JW, Froh DK, Braciale TJ, Ellwood M, Harris D, Borish L.

J Allergy Clin Immunol Pract. 2019 Jul - Aug;7(6):1803-1812.e10. doi: 10.1016/j.jaip.2018.12.027. Epub 2019 Jan 14.

Not One More Life: A Health and Faith Partnership Engaging At-Risk African Americans with Asthma in Atlanta. Harris D, Graham L, Teague WG.

Ann Am Thorac Soc. 2019 Apr;16(4):421-425. doi: 10.1513/AnnalsATS.201803-166IP. No abstract available.

Association of novel measures of sleep disturbances with blood pressure: the Multi-Ethnic Study of Atherosclerosis. Kim JS, Azarbarzin A, Wang R, Djonlagic IE, Punjabi NM, Zee PC, Koo BB, Soliman EZ, Younes M, Redline S. Thorax. 2020 Jan;75(1):57-63. doi: 10.1136/thoraxjnl-2019-213533. Epub 2019 Aug 22.

A Young Adult from the Middle East with Septic Shock, Pancytopenia, and Systolic Dysfunction.

Vavolizza RD, Alkabab YM, Scheld WM, Mihalek AD.

Ann Am Thorac Soc. 2019 Aug;16(8):1052-1056. doi: 10.1513/AnnalsATS.201809-624CC. No abstract available.

Genome-Wide Association Study of Susceptibility to Idiopathic Pulmonary Fibrosis.

Allen RJ, Guillen-Guio B, Oldham JM, Ma SF, Dressen A, Paynton ML, Kraven LM, Obeidat M, Li X, Ng M, Braybrooke R, Molina-Molina M, Hobbs BD, Putman RK, Sakornsakolpat P, Booth HL, Fahy WA, Hart SP, Hill MR, Hirani N, Hubbard RB, McAnulty RJ, Millar AB, Navaratnam V, Oballa E, Parfrey H, Saini G, Whyte MKB, Zhang Y, Kaminski N, Adegunsoye A, Strek ME, Neighbors M, Sheng XR, Gudmundsson G, Gudnason V, Hatabu H, Lederer DJ, Manichaikul A, Newell JD Jr, O'Connor GT, Ortega VE, Xu H, Fingerlin TE, Bossé Y, Hao K, Joubert P, Nickle DC, Sin DD, Timens W, Furniss D, Morris AP, Zondervan K, Hall IP, Sayers I, Tobin MD, Maher TM, Cho MH, Hunninghake GM, Schwartz DA, Yaspan BL, Molyneaux PL, Flores C, Noth I, Jenkins RG, Wain LV.

Am J Respir Crit Care Med. 2019 Nov 11. doi: 10.1164/rccm.201905-1017OC. [Epub ahead of print]

Peripheral blood proteomic profiling of idiopathic pulmonary fibrosis biomarkers in the multicentre IPF-PRO Registry.

Todd JL, Neely ML, Overton R, Durham K, Gulati M, Huang H, Roman J, Newby LK, Flaherty KR, Vinisko R, Liu Y, Roy J, Schmid R, Strobel B, Hesslinger C, Leonard TB, Noth I, Belperio JA, Palmer SM; IPF-PRO Registry investigators. Respir Res. 2019 Oct 22;20(1):227. doi: 10.1186/s12931-019-1190-z.

(9)

PULMONARY & CRITICAL CARE - PUBLICATIONS

Low Dose Carbon Monoxide Exposure in Idiopathic Pulmonary Fibrosis Produces a CO Signature Comprised of Oxidative Phosphorylation Genes.

Casanova N, Zhou T, Gonzalez-Garay ML, Rosas IO, Goldberg HJ, Ryter SW, Collard HR, El-Chemaly S, Flaherty KR, Hunninghake GM, Lasky JA, Lederer DJ, Machado RF, Martinez FJ, Noth I, Raghu G, Choi AMK, Garcia JGN. Sci Rep. 2019 Oct 15;9(1):14802. doi: 10.1038/s41598-019-50585-3.

Circulating Plasma Biomarkers of Progressive Interstitial Lung Disease.

Alqalyoobi S, Adegunsoye A, Linderholm A, Hrusch C, Cutting C, Ma SF, Sperling A, Noth I, Strek ME, Oldham JM. Am J Respir Crit Care Med. 2020 Jan 15;201(2):250-253. doi: 10.1164/rccm.201907-1343LE. No abstract available.

Overlap of Genetic Risk between Interstitial Lung Abnormalities and Idiopathic Pulmonary Fibrosis.

Hobbs BD, Putman RK, Araki T, Nishino M, Gudmundsson G, Gudnason V, Eiriksdottir G, Zilhao Nogueira NR, Dupuis J, Xu H, O'Connor GT, Manichaikul A, Nguyen J, Podolanczuk AJ, Madahar P, Rotter JI, Lederer DJ, Barr RG, Rich SS, Ampleford EJ, Ortega VE, Peters SP, O'Neal WK, Newell JD Jr, Bleecker ER, Meyers DA, Allen RJ, Oldham JM, Ma SF, Noth I, Jenkins RG, Maher TM, Hubbard RB, Wain LV, Fingerlin TE, Schwartz DA, Washko GR, Rosas IO, Silverman EK, Hatabu H, Cho MH, Hunninghake GM.

Am J Respir Crit Care Med. 2019 Dec 1;200(11):1402-1413. doi: 10.1164/rccm.201903-0511OC.

Biomarkers of extracellular matrix turnover in patients with idiopathic pulmonary fibrosis given nintedanib (INMARK study): a randomised, placebo-controlled study.

Maher TM, Stowasser S, Nishioka Y, White ES, Cottin V, Noth I, Selman M, Rohr KB, Michael A, Ittrich C, Diefenbach C, Jenkins RG; INMARK trial investigators.

Lancet Respir Med. 2019 Sep;7(9):771-779. doi: 10.1016/S2213-2600(19)30255-3. Epub 2019 Jul 17.

Cardiovascular safety of nintedanib in subgroups by cardiovascular risk at baseline in the TOMORROW and INPULSIS trials.

Noth I, Wijsenbeek M, Kolb M, Bonella F, Moros L, Wachtlin D, Corte TJ.

Eur Respir J. 2019 Sep 30;54(3). pii: 1801797. doi: 10.1183/13993003.01797-2018. Print 2019 Sep.

Rare Protein-Altering Telomere-related Gene Variants in Patients with Chronic Hypersensitivity Pneumonitis. Ley B, Torgerson DG, Oldham JM, Adegunsoye A, Liu S, Li J, Elicker BM, Henry TS, Golden JA, Jones KD, Dressen A, Yaspan BL, Arron JR, Noth I, Hoffmann TJ, Wolters PJ.

Am J Respir Crit Care Med. 2019 Nov 1;200(9):1154-1163. doi: 10.1164/rccm.201902-0360OC.

Novel idiopathic pulmonary fibrosis susceptibility variants revealed by deep sequencing.

Lorenzo-Salazar JM, Ma SF, Jou J, Hou PC, Guillen-Guio B, Allen RJ, Jenkins RG, Wain LV, Oldham JM, Noth I, Flores C. ERJ Open Res. 2019 Jun 10;5(2). pii: 00071-2019. doi: 10.1183/23120541.00071-2019. eCollection 2019 Apr.

Association of Angiotensin Modulators With the Course of Idiopathic Pulmonary Fibrosis.

Kreuter M, Lederer DJ, Molina-Molina M, Noth I, Valenzuela C, Frankenstein L, Weycker D, Atwood M, Kirchgaessler KU, Cottin V.

Chest. 2019 Oct;156(4):706-714. doi: 10.1016/j.chest.2019.04.015. Epub 2019 Apr 29.

Resequencing Study Confirms That Host Defense and Cell Senescence Gene Variants Contribute to the Risk of Idiopathic Pulmonary Fibrosis.

Moore C, Blumhagen RZ, Yang IV, Walts A, Powers J, Walker T, Bishop M, Russell P, Vestal B, Cardwell J, Markin CR, Mathai SK, Schwarz MI, Steele MP, Lee J, Brown KK, Loyd JE, Crapo JD, Silverman EK, Cho MH, James JA, Guthridge JM, Cogan JD, Kropski JA, Swigris JJ, Bair C, Kim DS, Ji W, Kim H, Song JW, Maier LA, Pacheco KA, Hirani N, Poon AS, Li F, Jenkins RG, Braybrooke R, Saini G, Maher TM, Molyneaux PL, Saunders P, Zhang Y, Gibson KF, Kass DJ, Rojas M, Sembrat J, Wolters PJ, Collard HR, Sundy JS, O'Riordan T, Strek ME, Noth I, Ma SF, Porteous MK, Kreider ME, Patel NB, Inoue Y, Hirose M, Arai T, Akagawa S, Eickelberg O, Fernandez IE, Behr J, Mogulkoc N, Corte TJ, Glaspole I, Tomassetti S, Ravaglia C, Poletti V, Crestani B, Borie R, Kannengiesser C, Parfrey H, Fiddler C, Rassl D, Molina-Molina M, Machahua C, Worboys AM, Gudmundsson G, Isaksson HJ, Lederer DJ, Podolanczuk AJ, Montesi SB, Bendstrup E, Danchel V, Selman M, Pardo A, Henry MT, Keane MP, Doran P, Vašáková M, Sterclova M, Ryerson CJ, Wilcox PG, Okamoto T, Furusawa H, Miyazaki Y, Laurent G, Baltic S, Prele C, Moodley Y, Shea BS, Ohta K, Suzukawa M, Narumoto O, Nathan SD, Venuto DC, Woldehanna ML, Kokturk N, de Andrade JA, Luckhardt T, Kulkarni T, Bonella F, Donnelly SC, McElroy A, Armstong ME, Aranda A, Carbone RG, Puppo F, Beckman KB, Nickerson DA, Fingerlin TE, Schwartz DA.

Am J Respir Crit Care Med. 2019 Jul 15;200(2):199-208. doi: 10.1164/rccm.201810-1891OC.

Genetics of Idiopathic Pulmonary Fibrosis.

Barros A, Oldham J, Noth I.

Am J Med Sci. 2019 May;357(5):379-383. doi: 10.1016/j.amjms.2019.02.009. Epub 2019 Feb 13. Review.

FELLOW PROFILE - Talal Kaiser



Tell us a little bit about yourself.

I've been at UVA for six months now after completing my Internal Medicine Residency and Chief Residency year at the University of Connecticut. I'm originally from California and started out working retail (and other odd jobs) throughout high school and college and eventually worked my way into a fellowship in Pulmonary and Critical Care. I currently live on the south side of Charlottesville with my wife and our 2-year-old boy/girl twins.

Why Healthcare?

There are no physicians in my immediate or extended family so being a doctor was not even on my radar when I was growing up. I remember always being interested in helping others and really enjoyed science but I assumed I would end up in a vocational career working with my hands. It wasn't until I went to college at UC Davis that I realized how much I enjoyed science and how much easier it came to me than other

subjects. I took a few years off between college and medical school, but once I went back it became clear pretty quickly that I had made the right choice.

I was drawn to Internal Medicine and Pulmonary/Critical Care because it combines all of my favorite things: complex problem solving, being able to work with my hands, working closely with a team, and being able to make a difference in someone's life. Today, I can't imagine doing anything else.

What brought you to Charlottesville?

Fellowship! When I was interviewing, I was really drawn to the "small town" feel, the lack of traffic, the family-friendly environment, and the weather. C'Ville just felt like a place where we could grow as a family.

What excites you about your work?

I love coming to work every day. I really enjoy how dynamic and variable my schedule can be. In any given week I can go from quickly stabilizing and managing a critically ill patient in the MICU, performing biopsies in the operating room, and/or seeing patients in my clinic. The variety makes the days fly by. I really enjoy teaching and I think my role as a fellow really allows me to hone my skills. It's tremendously satisfying to see someone understand a complex concept because of something I've said. Lastly, medicine is very team-oriented and I love working closely with my team members to ensure that we deliver the best possible care.

Proudest / greatest achievement outside the professional realm?

I think there's a saying that goes something like, "if you find someone you're dating is too good for you, then you should probably marry them." I followed that advice and I think marrying my wife and having our kids is probably the best thing I've ever done.

Next life?

In another life, I'd be a mechanic with my own shop in California on the coast. I'd work on Toyota Camrys to pay the bills and modify performance cars for fun.

What are you usually doing on the weekend?

Our weekends typically revolve around our kids. One of the really cool things about Charlottesville is how many family-friendly activities and places there are. Typically we try to be as active as possible and spend as much time outdoors as the weather allows.

Favorite vacation/activity spot

My favorite spot to go to in the world is a place called "Indian Rock" in Albany, California. It's an old meteorite that crashed into earth thousands of years ago and people have since carved out steps into it so it's easy to climb. Sitting on top of that rock gives you phenomenal views of the Bay Area. I used to go there regularly when I was still on the west coast.

FELLOW PROFILE - Talal Kaiser (continued)



If you could go back in time, what year would you travel to? 1999. My parents paid the bills, I didn't have to pay taxes, and the biggest existential threat to society was Y2K.

Most admired person, and why?

One of my favorite athletes of all time is Muhammad Ali. He was certainly tremendous in the boxing ring but I think what made him truly great was his ability to transcend sports at a very tumultuous time in our country. He stuck to his principles even when it cost him everything and his redemption later in life makes his life story one of the most compelling I've ever heard.

How did you meet your partner?

I met my wife on the first day of orientation week in medical school. She was there for another program and we happened to meet by happenstance. There was a large group of people walking to a restaurant for dinner and we ended up pairing off because the sidewalks were narrow. As luck would have, I ended up walking next to her and the rest is history.

What's one thing you always have in your fridge? Milk. Lots and lots of milk.

What's the most unusual thing you have ever eaten?

I once ate chocolate-covered insects. Unsurprisingly, chocolate makes everything taste better, even bugs.

Best advice anyone ever gave you?

I've been very fortunate in my life to have strong role models who have had an impact on my life. In the medical realm, the best motto/advice I've ever received is to never forget that the patient is the one in the bed. We regularly meet people on the worst day of their lives and we should never forget that any day on this side of a breathing tube is a good day.

What about you would surprise us?

In college I wanted to be a professional bodybuilder and was quite strong. Eventually, I got to a point where the time, effort, and money I was investing simply wasn't sustainable.

What is a talent or skill that you don't have that you wish you did?

I wish I had a talent for the arts. I'm always amazed when I see people who are good at drawing, sculpting, playing an instrument, or at performance art.

Favorite fictional characters?

I've always been a huge fan of superheroes and it's pretty amazing to live in a time where they're so mainstream. I think my favorite superhero is the Hulk. Mostly because I think there's a Hulk in all of us, the only difference is that in the comic books Bruce Banner lets his come out.

What is the last book you read for pleasure?

I'm a pretty avid reader and really try to read for pleasure whenever I get a chance. The most recent one I can remember is 11/22/63 by Stephen King. It's one of my favorite books and one of his best works in my opinion.

What was your first job, how old were you?

I got my first job at Best Buy when I was 16 years old. It was a tremendous experience that really helped me build my confidence. It also allowed me to buy my first car with my own money: a 2000 Mitsubishi Eclipse.

FACULTY PROFILE - Cathy Bonham



Tell us a little bit about yourself.

I was born and raised in Chicago, Illinois, the oldest daughter in a blue-collar working family. I left home to go to Harvard University at eighteen, having never actually seen the University or the East Coast, since we didn't have that kind of money for travel. I was the only kid I knew who "went away" for college. After college I worked for a non-profit medical society, then went to University of Michigan medical school and internal medicine-pediatrics residency, then University of Chicago for pulmonary and critical care medicine specialty training. I started at UVA in 2018 and have been building a career as a specialist in a rare lung disease called sarcoidosis, and interstitial lung disease, also called pulmonary fibrosis.

Why research?

I'm trained as a medical doctor to take care of patients, which I love, but I still spend about 75% of my time doing patient-centered research. That is because I found early in my career that taking care of people makes me think of all the ways we can make the care better – whether it is developing new treatments, new ways to diagnose disease, new ways to understand disease. I have a restless spirit when it comes to these things, I don't like to move on until I know the answer or have at least done my best to find the answer. One of my favorite authors is Maya Angelou. She once said, "Do the best you can until you know better. Then when you know better, do better." This desire to know better and do better is why I chose a research-oriented career.

What brought you to Charlottesville?

Two things – the UVA pulmonary division, and my husband. First, my interest in pulmonary fibrosis is a huge focus for the UVA pulmonary division and I was offered great support for developing my research program and my sarcoidosis clinic here. We are a center of excellence for pulmonary fibrosis and sarcoid, and have world-class research and patient care, with a critical mass of faculty who are engaged. Second, my dear husband of 15 years just couldn't wait to get out of the polar vortex in the Midwest. He was ready to sell the snowblower the moment he heard about the opportunity.

What excites you about your work?

Innovation. I love taking an idea, perhaps a new discovery from another field, and seeing if it could apply in a meaningful way to help a patient someday. In this way scientific discovery is like a glimpse into the future.

Proudest / greatest achievement outside the professional realm? I'm a mom to four kids!

Next life?

Same but with someone who answers my email for me and does the laundry.

What are you usually doing on the weekend?

Weekends are mostly family time, which is anything from Cub Scouts to baseball to barbecue.

How did you meet your partner?

We met on a blind date, set up by my best friend's mom, at the local hot dog stand. I found out later that my husband hates hot dogs. All the makings of a fine romantic comedy there.

What's one thing you always have in your fridge?

We have a bottle of pancake syrup that we bought on vacation 9 years ago. It's still sealed and is older than my oldest child.

What's the most unusual thing you have ever eaten?

In the Amazon rainforest in Peru, where I worked with an outreach group during residency, there are all kinds of interesting foods. I didn't try the freshly fried rainforest tree grubs, they are about as big as your thumb. I did try the juice from aloe plants made into a kind of goopy shake, and Pisco, which is like a cocktail with brandy and egg in it.

Favorite vacation/activity spot

Favorite vacation spot is Hawaii with extended family.

What is a talent or skill that you don't have that you wish you did? I wish I could dance well, or skillfully. I still try.

What was your first job, how old were you?

I worked at Kiddieland, a children's amusement park where I sold three foot licorice whips, popsicles, and popcorn. I was 17.



FACULTY PROFILE - John S. Kim





Tell us a little bit about yourself.

I've been at UVA starting in September 2019 and came from New York City. I went to Johns Hopkins University for college and earned my medical degree at the University of Maryland School of Medicine. I completed my internal medicine residency and chief resident year at the University of Texas Southwestern followed by a pulmonary and critical care fellowship at Columbia University. During my fellowship, I earned a Master of Science in Patient-Oriented Research/Biostatistics at the Mailman School of Public Health and developed a research interest in pulmonary fibrosis.

Why UVA?

I was drawn to the Division of Pulmonary and Critical Care Medicine due to its remarkable growth in recent years and its commitment to expanding its research and patient care. When I interviewed at UVA, it was apparent that the Department of Medicine and Division were invested in their faculty and providing the resources and mentorship to ensure faculty development. The vision for the division outlined by Dr Imre Noth fit with what I was looking for in a large academic medical institution. UVA is part of the Pulmonary Fibrosis Foundation Care Center Network and has a robust lung transplant service which is aligned with my clinical and research interests.

Why Charlottesville?

As for Charlottesville, my wife and I enjoyed living in New York City as it's an incredible place to live as a newlywed couple. With a growing family,

however, Charlottesville and its surrounding areas make it more than ideal to plant roots and raise a family. From talking with other UVA faculty and fellows, I had a strong impression of how wonderful it is to raise a family in the area.

Why research?

By my first year of fellowship at Columbia, I became involved in research examining modifiable risk factors that may influence pulmonary fibrosis. I owe a lot to my primary mentor at Columbia, David Lederer, who encouraged and inspired me to pursue a career in research and linked me with other mentors and collaborators. During fellowship I learned to analyze and interpret data from large human population cohorts and design and implement clinical trials. Under the primary mentorship of Dr Noth, I plan to examine the role of polyunsaturated fatty acids in pulmonary fibrosis as I look forward to working with other investigators at UVA and utilizing its resources.





The best part of research has been collaborating with investigators across different disciplines and institutions with the common goal of advancing our understanding of lung disease to improve the quality of life and health of our patients. I've been fortunate to have several mentors who have provided guidance and support.

How did you meet your partner?

I supervised her first central line placement in the MICU during our internal medicine residency. She got it on the first try despite the subpar supervision.

Favorite vacation/activity spot

It's a tie between Iceland and Maui. Although two completely different climates, they are incredible places to drive around and hike. There are several hidden gems that you can find, free of the mass crowds.

FACULTY PROFILE - Timothy Scialla



Tell us a little bit about yourself.

My wife and I joined the faculty here at UVA in July of 2019. I work in the division of Pulmonary and Critical Care Medicine with a clinical focus on COPD/asthma as well as medical education. I am a coach in the Foundations of Clinical Medicine where I am privileged to work with medical students through their professional development from first to fourth year. I am also very fortunate to have a leadership role in the Pulmonary and Critical Care Fellowship program as an associate program director.

Why Healthcare?

They asked Willie Sutton why he robbed banks and his reply was simple: Because that's where the money is. I am in academic medicine because that is where the teaching is. I cannot think of a more rewarding feeling than having a positive impact on a student or house officer who then goes on to be a leader of this great profession.

What excites you about your work?

Watching good students or residents become great through their professional commitment and dedication. Eventually seeing those same trainees become academic leaders.

Proudest / greatest achievement outside the professional realm?

I still have most of my hair in my mid-forties. I completed an unassisted quadruple play in tee-ball when I was 8.

Next life?

High school history teacher; assistant coach of basketball/football team.

What are you usually doing on the weekend?

If I am not working then as little as possible.

How did you meet your partner?

I gave my future wife her medical school tour when she was interviewing at Penn Med. It remains unclear if she came to Penn because of/or despite that first encounter.

Favorite vacation/activity spot

School Spring Break = Family vacation; the goal is to not necessarily have fun but to build family memories.

Most admired person, and why?

Robert F Kennedy. His character and leadership skills continued to evolve and were shaped both by his own personal suffering and commitment to the service of others. He could have chosen to step away after his brother was assassinated and nobody would have blamed him. Instead after some introspection, he doubled down and inspired a country.



What about you would surprise us?

I do a pretty good impression of Matt Foley the motivational speaker. I can still breakdance.

Best advice anyone ever gave you?

My dad told me not to get a family dog. Unfortunately, I didn't listen to him.

What is a talent or skill that you don't have that you wish you did?

I wish just once that if something stopped working at home or needed repair that I could actually fix it.

Favorite fictional characters? Jack Reacher. John Wick.

If you could go back in time, what year would you travel to? May 1804 to join Lewis and Clarke on the Missouri River.

What is the last book you read for pleasure? Shoe Dog by Phil Knight.

Do you collect anything?

Used to collect Baseball and football cards when I was a kid. I have over 100 different Mike Schmidt baseball cards including his Topps 1973 Rookie Card.



STAFF PROFILE - Patricia "Trisha" Herndon



Trisha's Children

Tell us a little bit about yourself.

I was born and lived in Alexandria, VA on Duke Street across from what used to be the Old Alexandria Hospital. My dad was in the Air Force so we moved around a lot from Virginia to Maryland to Texas and finally to Arkansas. As a family, we stayed in the United States, but my dad toured to Turkey, deployed two times to the Vietnam War and Korea (during the Korean War, so it was still one country). I stayed in Arkansas for thirteen years and attended the University of Arkansas, in Fayetteville. During that time I began my government career as a clerk-typist with the Department of the Interior, Fish and Wildlife Service working for thirteen Fishery Biologists, typing manuscripts, giving tours of the fish farming operation, and helping out with catfish farming. I also worked with the

National Marine Fisheries Service (NMFS) as the national secretary and with Animal Damage Control providing assistance to farmers in the region who were struggling to keep their crops and animals safe from migratory birds and wildlife. I worked my way up and transferred to Department of Veterans Affairs, National Cemetery Service were I became a National Cemetery Director.

Why Charlottesville?

In 1984, I returned to Virginia to be closer to family. I have been at the University of Virginia for almost 7 years. I initially worked in Student Affairs at Newcomb Hall. My job there was varied and no two days were the same. I worked with Student Activities, Fraternity & Sorority Life, Programs and Councils, the Multicultural Students and LGBTQ Center. After 6 years I transferred to the Department of Medicine, Pulmonary and Critical Care.

What excites you about your work?

I enjoy my work there because every day is different and I work with so many nice people. What keeps me motivated in my role is my ability to help others be successful and be organized.

Proudest / greatest achievement outside the professional realm?

Outside of work, I have three grown children who all live within an hour or so from me. I also have four grandchildren – one who already graduated high school and two more who will soon graduate. The youngest grandchild is in middle school.

What are you usually doing on the weekend?

When I am not working or spending time with family, I enjoy planting and raising flowers, crafting and trips to the mountains or anything to do with animals.

What about you would surprise us?

I am a house mom at a sorority house.

If you could go back in time, what year would you travel to?

I would travel back to the 1800s. I have always felt that I should have lived during that era.

What was your first job, how old were you?

My very first job was babysitting when I was 10 years old.

PULMONARY WORD SEARCH

AMDDYLADCHRKLHEMOGLOBINNP RACRΕ WASР S EXDC L Q E S Ε J Ε R Q Α Μ G Ι ХР Α S Υ C Ν D В U Μ G Ν D Ι R Ε Ι В S Ν Q 0 Χ ΧL Ε Ε Н Т MН Q U Ι Х Т Т 0 Μ Ε S S В Υ $X \subset N$ Ι Ζ D C 0 0 0 S Κ Т Α U Х S M WS Ι Ι В R Т Κ Ε Ν U S 0 Q Q LY Q P Y G L G Ι Q S J S 0 АН F Q ΗY Е Ρ В O Х Υ G ENGA Q S 0 Ι S Ζ Ε Н C 0 U M Ν Ν E В G C W G Ι F G $X \cup V$ Μ Ρ Ζ Т Е G U Ι Ν R Ζ Ε Χ Ι G G Н G Н QAAE Α Α W Q Ν Т Ι G IHDC R O Ε Ζ Ι J C N H PC R Q W S Ε G N 0 Ζ S 7 0 G Χ L Q G ΙP Е Α Υ Т Α Ε D 0 D J 0 F 0 Ν KYVTLSSLNIYDVLP

LUNGS
PULMONARY
HEART
TRACHEA
ESOPHAGUS
BLOODSTREAM
GAS EXCHANGE
DIFFUSION
CARBON DIOXIDE

LIVER
ARTERY
AIRWAY
RESPIRATION
SPEECH
DIAPHRAGM
RESPIRATORY SYSTEM
PHARYNX
BRONCHIOLES

OXYGEN
LARYNX
AIR
RESPIRATORY BUD
HEMOGLOBIN
PHARYNGEAL MUSCLES
RESPIRATION
THORACIC CAVITY
BREATHING