

**Faculty Council Meeting
Meeting Minutes
October 16, 2023**

Timing	Agenda Item	Presenter	Summary of discussion	Action items/Motions/ Votes
4:02-4:07PM	Welcome and Chair Announcements	Matthias Buck	The Chair called the meeting to order at 4:02PM. Dr. Buck reminded the members that there is only one day left to complete the Engagement Survey (des.surveystar.com/case) and that the LCME Survey visit dates have been confirmed for March 2 -5, 2025 (https://case.edu/medicine/education/medical-education/liaison-committee-medical-education-lcme/lcme-overview) . The overarching theme of this meeting is the strategic plan, of which the CAPT Report is part. Dr. Buck hopes to reduce the amount of presentation time in order to allow more discussion and ideas from the group. He provided a brief overview of the topics that would be addressed in today's meeting.	
4:07-4:08PM	Approval of September Faculty Council Minutes	Matthias Buck	When polled there were no edits or corrections to the September 18 Faculty Council Meeting minutes. No one objected to accepting the minutes as posted in BOX.	The September 18 Faculty Council Meeting Minutes were approved by general consensus.
4:08-4:10PM	Dean's Announcements	Dean Gerson	<p>The Dean announced that they had a very successful alumni weekend with the Class of '73 raising almost \$8M dollars, most of it going towards scholarship. An announcement will soon be made of a major gift providing UH and Case resources to build a facility in Uganda/ Malawi for research and education programs.</p> <p>The Dean, Lia Logio, and a small group of experts, will be discussing ways to go forward regarding UH Family Medicine. The SOM does not control nor supervise their Family Medicine residency program on main campus.</p> <p>We all appreciate that the Israeli Hamas conflict, war, terrorism and ongoing violence is hurting all of us. It has been a struggle across universities to provide leadership. We have not had the opportunity</p>	

	Dean's Announcements (continued)		for the SOM to issue a response, although we have done so with our students in various ways to make sure that we can provide support. We have had faculty on site in Israel and trauma and insecurities exist. We are supportive of our faculty, students and staff during the conflict, and the Dean will soon be making a formal statement about it.	
4:10-4:16PM	Report from University Faculty Senate/Senate Executive Committee	Elvera Baron	<p>Dr. Baron presented an overview of the Faculty Senate meetings already held and the topics discussed. She went over the commitment to shared governance, Faculty Senate structure, process, shared expectations, and the rules for reporting back to the Senate and reporting back to Faculty Council as is being done today.</p> <p>A task force (of about 20 people) was designed to address issues regarding tenure track faculty. A list of recommendations was generated and approved by unanimous consent in a final committee review to be presented at the next ExCom meeting (November 13) and then presented at the November Faculty Council meeting. She explained the composition of the ExCom and their terms, and the different topics that were addressed.</p> <p>The ad hoc Committee on Shared Governance gave their initial report to the ExCom and will give a final review and their recommendations. At the last meeting the DEI statement for Promotions and Tenure was discussed; where that particular statement is a requirement, and how many currently write it. It is still being discussed and is a work in progress.</p>	
4:16-4:19PM	Faculty Council Steering Committee Report	Alan Levine	Dr. Levine provided an overview of topics and discussion from the October 2 Faculty Council Steering Committee Meeting. The qualifications for emeritus status were reviewed. Dr. Levine asked that faculty go back to their committees and respective constituents and share that the criterion for emeritus status is meritorious service (meritorious contributions to the school and to the university). As emeritus status is conferred through the SOM, the SOM should be referred to in their CV when included with the application.	

4:19-4:37PM	Vote on Membership of the Clinical Scientist/ Department Representatives to Faculty Council ad hoc Committee on Faculty-Administration Interactions, Co-Governance and Engagement (FACE) (Statements of Interest are in BOX)	Matthias Buck	<p>FACE Nominations</p> <p>There were three applications for the three seats for basic science faculty. They assumed those seats and were approved. There were six candidates for the three clinical faculty seats. Statements of interest are in the Faculty Council BOX folder.</p> <p>Anantha Harajith, Janice Lyons, and Hemalantha Senthilkumar received the most votes and will assume the three clinical faculty seats.</p>	<p>A motion was made by a Faculty Council member and seconded by a Faculty Council member to choose three faculty members, for the clinical faculty seats, from the slate of six below.</p> <p>Votes in favor:</p> <p>Ricardo Correa – 18</p> <p>Anantha Harajith -- 20</p> <p>Janice Lyons-- 44</p> <p>Raj Rajesh -- 9</p> <p>Lisa Rauh-- 13</p> <p>Hemalantha Senthilkumar--31</p>
4:37-5:00PM	Presentation and Discussion of Strategic Plan with Focus on Faculty/Faculty Hires	Matthias Buck	<p>The strategic plan is a living document updated several times since 2021. Some numbers have changed, pages for DEI have been augmented and faculty pages added. On the research side there are eight areas of focus. Objectives vs measurable results are calculated to suggest success in these areas. Several goals for research are to increase national reputation and support top faculty.</p> <p>It was suggested that a section on departments be added (how departments maintain excellence in their areas, and faculty interact with their department chairs). We can help departments be excellent by giving them a roadmap to make their own strategic plans which would feed into this. Dean Gerson concurred and suggested it could be run through the chairs and ask them to address that. The approach taken in the strategic plan is succinct, balanced and limited in its objectives and key results, which departments can consider individually or collectively. The department chairs provided a significant input in the original and revised plan.</p>	

	Presentation and Discussion of Strategic Plan with Focus on Faculty/Faculty Hires (continued)		<p>Our various law offices in the university train our committees on how to recruit, not using race as a criterion and not tracking race in our application pool. We can register outcomes post facto. For this first read, please offer suggestions and let us, or the Dean, know those issues with which you concur. Individual members should go back to their departments, have departmental discussions, and then bring the feedback to the Dean or Vice Deans. It is important that it is seen as a living document in public space, on the website, shared with the Provost and University President. We are not aware if other schools have similar investments in their strategic plans. We need to determine how we can take advantage of the FIS (Faculty Information System) and other data systems to better understand who we are.</p> <p>The Dean stated that until March or so of this year (between 2019 and now) the university was not enthusiastic about the SOM developing an annual report outside of State-of-the-School or issuing the annual report. The last annual report for the School of Engineering, which has them all collected in one place from 2009, was also from 2019.</p> <p>The Chair again posted the link to the diversity survey; the Dean encouraged everyone to participate.</p>	
5:00-5:08PM	<p>New Graduate Course Proposals:</p> <p>ANS-MIN: Anatomical Sciences, Minor</p>	Darin Croft	<p>Several new graduate course proposals have been brought to Faculty Council for consideration.</p> <p>Dr. Croft explained that Anatomy is the only department in the university that offers cadaver-based courses, especially for those interested in hands on surgical practices. This course will take 3-5 students per year. It doesn't require developing any new course or resources. It is put together in a sequence that makes sense and adds up to 15 hours (minor).</p>	<p>A motion was made by a Faculty Council member and seconded by a Faculty Council member approve the ANS-MIN: Anatomical Sciences, Minor</p> <p>Vote: 52 were in favor, 0 were against, and 2 abstained. The motion is approved</p>

5:08-5:15PM	--APH-MS: Aerospace Physiology MS --APHV-MS: Aerospace Physiology MS (on line)	Lisa Damato Michael Decker	<p>Dr. Decker and Lisa Damato provided an overview of the two new graduate courses which will help build a master's degree in aerospace physiology.</p> <p>They explained what they expect the students to accomplish and where they would go after the program. There is a burgeoning need for aerospace physiologists. Aerospace physiology is a dynamic study of several biological sciences (effect of environment on human organisms, extreme environment and impact on an individual, etc. There is no training in the country for a master's program like this. Case is uniquely poised. We have operational experience and have experienced hyper gravity.</p>	<p>A motion was made by a Faculty Council member and seconded by a Faculty Council member to approve the APH-MS: Aerospace Physiology MS program.</p> <p>Vote: 45 were in favor, 0 were against, and 2 abstained. The motion is approved.</p> <p>A motion was made by a Faculty Council member and seconded by a Faculty Council member to approve the APHV-MS: Aerospace Physiology MS (on line) program</p> <p>Vote: 39 were in favor, 0 were against, and 6 abstained. The motion is approved.</p>
5:15-5:25PM	Annual Report from the Committee on Appointments, Promotions and Tenure (2022-2023)	Michael Dell	<p>Michael Dell co-chaired the Committee on Appointments, Promotion and Tenure (CAPT) last year with Siran Koroukian. He provided an overview of the committee's activities over the 2022-2023 academic year.</p> <p>Last year the committee reviewed 150 applications; in comparison, only 87 packets were reviewed in 2014, nearly half of this year's total. In the packets reviewed, there appeared to be a 1/3-2/3 female to male ratio. The CAPT received the applicant's materials mainly from the departments, whose quantity and quality have a high correlation with the ability of the committee to provide guidance, but not be the gatekeepers. The CAPT's mission is to maintain the high standards of our school while seeing our candidates promoted and recognized for the best work that they do.</p>	

			<p>Dr. Dell noted that most appeals are hugely successful. Packets should be well organized and complete and should not make the committee do the work for the candidate. He observed in his three years on the committee, that packets were coming to the committee much better organized allowing the committee to spend their mental energy on content</p> <p>Changes continue to be made to the process. Most recently is the use of Interfolio to upload packet documents and track the packet for completion. Hopefully, in the near future, it will be used for every single packet. The candidate uploads documents and the packet doesn't advance until everything is there.</p>	
5:25PM	Annual Report on Medical Student Admissions Committee	Christian Essman	Due to time constraints, the annual report on Medical Students Admissions will be postponed to the next Faculty Council Meeting.	Approved by general consensus.
5:25-5:42PM	New Business	Patricia Moore Richard Weinberger Kent Smith	<p>Patricia Moore, Richard Weinberger and Kent Smith have asked to bring forward to Faculty Council their concerns for the Department of Family Medicine and Community Health in a Resolution on the Importance of Family Medicine. For nearly 50 years the CWRU University Hospital Family Health residency provided the bulk of full-time faculty for Faculty Medicine. Working as part of a team is likely to be a norm for primary care. Teams need strong, well-trained leaders, and the residency trained family physician is an ideal team leader.</p> <p>They appreciate Dean Gerson's concern and they are looking forward to working with medical school leadership to determine a way forward to reinvigorate Family Medicine through the department.</p> <p>Kent Smith stated this issue is so critical because most people came here for the School of Medicine wanting the leading health services in the country. Patty Kellner noted that students follow a pregnant woman (these are patients who mostly lived in the inner city) through delivery and the first year of the baby's life. The broad training and building of relationships within the training residency serves them well throughout their career.</p>	

			Proximity to Case made Dr. Moore's practice a teaching site. She was able to model, in her practice, what students were learning in class and provide clinical correlations. Consequently, Case students were far better prepared for residency. Dr. Moore, Dr. Smith, and Dr. Weinberger hope that CWRU will consider supporting Family Medicine in training potential family physicians and providing a training site for medical students in the community. This matter will be reviewed by FCSC and may appear on the November 20 th . agenda.	
5:42PM	Adjourn		There being no outstanding agenda items to address, a motion was made and seconded, with no objections, to adjourn the meeting. The chair adjourned the meeting at 5:42PM.	

Present

Robert Abouassaly
Joshua Arbesman
Moises Auron
Blaine (Todd) Bafus
Elvera L. Baron
Abigail Basson
Maura Berkelhamer
Matthias Buck
Adrienne Callahan
Aleece Caron
Mohamad Chaaban
Patrick Collier
Marta Couce
Darin Croft
Andrew Crofton
Margot Damaser
Mackenzie Deighen
David DiLorenzo
Jonathan Emery
Jessica Fesler
Stephen Fink

Lisa Gelles
Stan Gerson
Ramy Ghayda
Matthew Grabowski
Alia Hdeib
Amy Hise
Jessie Jean-Claude
Hung -Ying Kao
Gaby Khoury
Erin Lamb
Alan Levine
Jennifer Li
Shawn Li
David Ludlow
Janice Lyons
Dan Ma
Tani Malhotra
James Martin
Raman Marwaha
Christopher McFarland

William Merrick
Gillian Michaelson
David Mihal
Dean Nakamoto
Attila Nemeth
Rebecca Obeng
Anastasia Rowland-Seymour
Tamer Said
Hemalatha Senthilkumar
Paul Shaniuk
Bryan Singelyn
Courtney Smalley
Phoebe Stewart
Usha Stiefel
James (Jim) Strainic
Ben Strowbridge
Johannes von Lintig
Mark Walker
Scott Williams
Wei Xiong

Absent

Corinne Bazella
Dan Cai
Piet de Boer
Neil Bruce
Meelie DebRoy
Corinne Falck-Ytter
Bahar Bassiri Gharb
Rachael Gowen
Peter K. Kaiser
Eric W. Kaler
Sadashiva Karnik
Vijaya Kosaraju

Sangeeta Krishna
Christina Krudy
Mallika Lavakumar
Kelly Lebak
Lia Logio
Dan Ma
Mariel Manlapaz
Daniela Mehech
Nathan Mesko
Rocio Moran
Neal Peachey
Cyrus Rabbani

Deven Reddy
Alicia Santin
Jacek Skowronski
Joseph Tagliaferro
Nami Tajima
Patricia Taylor
Johannes von Lintig
Ari Wachsmann
Robert Wetzel
Leon R. White
Samina Yunus

Others Present

Melissa Bonner
Lisa D'Amato
Michael Decker
Michael Dell
Nicole Deming

Tyffani Dent
Christian Essman
Joyce Helton
Nelson Scott Howard

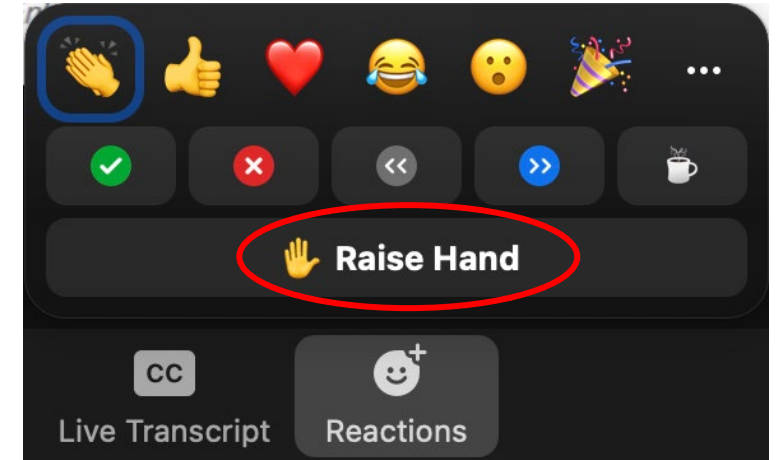
Siran Koroukian
Patricia Moore
Kent Smith
Richard Weinberger

Today's agenda

- 1. Chair Announcements (Matthias Buck)
- 2. Approval of September Meeting Minutes (Matthias Buck)
- 3. Dean's Announcements (Dean Gerson)
- 4. University Faculty Senate/Senate Executive Committee Report (Elvera Baron)
- 5. Report from Faculty Council Steering Committee Meeting (Alan Levine)
- 6. Vote on Membership of the Clinical Scientist/Department Representatives to FC ad hoc Committee on **F**aculty-**A**dministration Interactions, **C**o-Governance and **E**ngagement (FACE) (Statements of Interest in BOX)
- 7. Discussion of Strategic Plan with Focus on Faculty/Faculty Hires (Matthias Buck)
- 8. Three New Graduate Courses: ANS-MIN: Anatomical Sciences, Minor (Darin Croft); APH-MS: Aerospace Physiology MS (Lisa Damato); Aerospace Physiology MS (on line) (Lisa Damato)
- 9. Ann. Report from CAPT (2022-2023) (Michael Dell)
- 10. Annual Report on Medical Student Admissions Committee (Christian Essman)
- 11. New Business

Using Zoom at Faculty Council meetings

- Raise your hand (Reactions menu)
- Wait to be acknowledged
- Lower your hand when done
- Chat function
 - Enter your name for purposes of attendance
 - Do not use for side conversations or to ask questions
 - Can be used to post hyperlinks and other information
- Votes will be conducted using the polling function
 - If you call in, you should register a voice vote



Robert's Rules Review:

How to make and act on a motion

1. Motion is stated ("I move that....")

➤ Motion must be seconded for debate to proceed!

2. Motion is debated

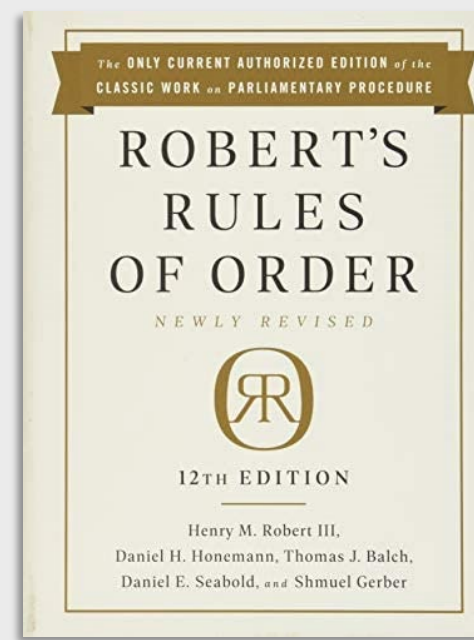
** Please speak only once if others have not spoken**

3. Debate proceeds until someone moves to end it

➤ This must also be seconded!

4. Motion to end debate must be approved (by vote or consent)

5. After debate ends, a vote is taken on the motion



SOM calendar

- Did you know the SOM has an events calendar?
- <https://case.edu/medicine/events/>
- Check it out to see what's going on in the School of Medicine
- To request that an event be added, use the “See How We Can Help” link on the same page

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SOM EVENTS

Nov 21	Molecular Medicine PhD Program Webinar
Nov 21	Post-baccalaureate Readiness Instruction for bioMedical Education (PRIME): Ask me anything
Nov 25	The Global Health & Infectious Disease (GHID) Research Conference

[View Full Calendar](#)

Agenda items for Nov FC meeting

- Must be submitted by Oct.20th (*this Friday*)
 - Send to Matthias Buck (mxb150@case.edu) and Nicole Deming (nmd11@case.edu)
- Will be considered by the Steering Committee on Monday, Nov 6th (3:30-5:00 pm)
 - Set this day/time aside for possible presentation (Zoom)
- Feel free to plan ahead and send requests for November!

Hybrid Faculty Council Meeting
Draft Meeting Minutes
September 18, 2023

Timing	Agenda Item	Presenter	Summary of discussion	Action items/Motions/ Votes
4:02-4:09PM	Welcome and Chair Announcements	Matthias Buck	<p>The Chair called the meeting to order at 4:02PM and introduced himself as Chair and Professor, welcoming everyone to the first meeting of Faculty Council for 2023-2024. He noted that as a hybrid meeting there were 58 people on line and approximately 10 people in the room. (later the online total reached 82)</p> <p>All pertinent documents for the meeting can be found in the Faculty Council folder in BOX. The Chat function should only be used for attendance, or to post hyperlink and other information. Attendance is being kept for the Faculty Council Meetings.</p> <p>Members of the Faculty Council Steering Committee were introduced to Faculty Council. Any proposals or motions should be submitted a week before the Faculty Council Steering Committee meets and sent to Matthias Buck or Nicole Deming. The next meeting is October 2.</p>	
4:09-4:10PM	Approval of June Faculty Council Minutes	Matthias Buck	When polled there were no edits to the June 12 Faculty Council Meeting minutes. No one objected to accepting the minutes as posted in BOX.	The June 12 Faculty Council Meeting Minutes were approved by general consensus.
4:10-4:19PM	Summary of FY23 FC Business	Darin Croft	<p>Darin Croft, past Chair of Faculty Council, presented the Faculty Council Annual Report of Activities for 22-23. He stated that one of the most important things Faculty Council does is to review amendments to the bylaws and approve these changes. Faculty Council approved amendments to Article 3.5: Officers of the Faculty Council, and various relatively minor text changes in Articles 1-3.</p> <p>Changes to the committee charges for the Budget, Finance and Compensation Committee and the Medical Student Admissions Committee were approved. The new Aerospace Physiology Certificate was approved as was the closure of the UH Plastic Surgery Department</p>	

	Summary of FY23 FC Business (continued)		<p>.Faculty Council also approved the following motions: Statement on Dobbs v. Jackson Women’s Health Center SCOTUS Ruling, Support for SOM Faculty Development, and Recognition for Extraordinary Service. Topics were chosen for the Third Meeting of Faculty with Dean Gerson.</p> <p>The standing committees presented their annual reports. Miscellaneous pertinent presentations and updates were received.</p>	.
4:19-4:22PM	Faculty Council Steering Committee Report	Alan Levine	Dr. Levine provided an overview of topics and discussion from the September 11 Faculty Council Steering Committee Meeting.	
4:22-4:41PM	Discussion of all Zoom vs Hybrid Faculty Council Meetings	Anastasia Rowland-Seymour	<p>Dr. Rowland-Seymour noted that while currently Faculty Council meeting attendance is fair, the hybrid meetings held for the first meeting in September and last June proved to be more engaging with better attendance. If we meet hybrid, the location should rotate between CWRU/SOM and affiliates to average out the burden of travel and give different delegations a chance to be “in the room”.</p> <p>When discussion was opened to the floor it was noted that the hybrid is logistically more challenging although nice to meet colleagues from the affiliates. It was suggested that the first and last meeting could remain hybrid. It takes time to travel to other locations. It was felt that the fact that 68 people were on line and 10 physically present in BRB105 indicated what faculty were most comfortable with Zoom. In the interest of productivity, Zoom allows more people to participate</p>	<p>A motion was made and seconded to choose one from the following:</p> <p>A) All hybrid with every third meeting hosted at an affiliate (on average)</p> <p>B) Alternating Hybrid only every ~2nd time, i.e. Sept, Nov, Feb, Apr, June and rotate? (CWRU, Metro, UH/VA, CCF)</p> <p>C) Zoom only</p> <p>Vote: 19 in favor of A 11 in favor of B 24 in favor of C</p> <p>Since A and C did not have a majority, another vote will be taken to choose either A or C.</p>

	Discussion of all Zoom vs Hybrid Faculty Council Meetings (continued)			<p>A motion was made by a FC member and seconded by a FC member to vote for either A or C.</p> <p>Vote: 20 in favor of A 31 in favor of C</p> <p>Option C passes. All Faculty Council Meetings will be held via Zoom.</p>
4:41-4:59	Presentation on Research and Renovation Projects	Bill Schiemann	<p>Dr. Schiemann provided updates on the renovations for the Robbins Building (project, square feet, budget and cost) giving the timeline for Gross Anatomy, Robbins 4, and Prior Center Freezer Relocation. Additional space requirements are still being discussed.</p> <p>He summarized the Research Portfolio from 2019 to 2023, showing the breakdown between CWRU/UH/MetroHealth and CCLCM. Combined totals for NIH were \$1.7B over these years. Dr. Schiemann explained the Bridge Funding Program's recent activity (2022-present) and Historical Activity (2008-present). The SOM Recruitment plan is to increase net basic science faculty by 10% in five years (target – 23 recruitments/ year) with 15% of new basic science faculty coming from URiM groups (Target: 4-5 URiM Recruitments/year (Amounts to 100+ recruitments to grow by 10%). Thirty-one retention packages were ongoing and/or completed. Five declined the retention package and left the university; two accepted and eventually left for new academic institutions.</p> <p>Dean Gerson expressed an interest in learning if the faculty who left and went to another institution provided a reason for leaving (i.e. are there patterns for longevity and retention?). Faculty Affairs does an exit interview but the data is confidential</p>	<p>Cindy Kubu stated that while she does have the data she needs to get sufficient samples of good qualitative coding. She will address this in the coming year.</p>

4:59-5:14PM	Presentation on BSTP/Graduate Recruitment	Marvin Nieman	<p>Dr. Nieman presented the Graduate Education Office Annual Update report. Of the 1,263 graduate students in the 18 different master's programs and the 17 PhD programs, fall enrollment was 835 for the master's programs, and 428 for the PhD programs. He then broke the programs down into categories. For the 2023 BSTP Recruitment, the committee reviewed 420 applications after triage with 188 virtual interviews, and offers of admissions made 103 (domestic (21 matriculating), 21 international (8 matriculating). Both in-person campus visits and virtual were used.</p> <p>The Dean supported 47 PhD students. The stipend for PhD students will increase by \$2,000 for the next academic year to keep us competitive with peer institutions.</p> <p>The CWRU – SACNAS Chapter (Society for Advancement of Chicanos/Hispanics & Native Americans in Science) was initiated by Jason Buitrago. It is open to all STEM fields, undergraduate and graduate students, postdoctoral fellows. Over 100 have signed up. Dr. Nieman provided an overview of events, and identified the scholars and mentors for the Dean's Scholars Pathway to Faculty, and mentor training.</p>	
5:14-5:28PM	Proposal to form a Faculty Council Ad Hoc Committee on SOM Faculty Engagement and Co-Governance	Matthias Buck	<p>Dr. Buck provided an overview for his proposal to form a Faculty Council ad hoc Committee on SOM Faculty Engagement and Co-Governance. He stated that one of the reasons this committee is needed is that within the last 15 years the SOM came in <u>last</u> in two surveys of faculty morale, when compared to the other seven schools at CWRU and other universities. A recent (2022) Gallop engagement poll had CWRU falling behind other universities in terms of faculty morale and engagement. The Faculty Senate Well-being committee has been formed, and the Faculty Senate Co-Governance committee will go out to schools to report, refine recommendations. Recommendations of these committees will not, however, address the unique needs of SOM faculty or consider how faculty interactions with our affiliates can be improved.</p> <p>The committee will consist of up to three basic science faculty, up to three clinical science faculty, from CCF, Metro, UH or VA, plus three Faculty in close contact with administration: FC Chair or Chair-elect. Nicole Deming, Assistant Dean for Faculty Affairs, Craig Hodges, Member of University Engagement Committee.</p>	

			Dr. Buck outlined the goals of the committee and stated that its duration would be two years. Those interested in membership can self-nominate (Faculty Council members and faculty-at-large) by sending a statement of interest to Matthias Buck and Nicole Deming by October 1.	<p>A motion was made by a FC member and seconded by a FC member to end discussion. No one objected.</p> <p>A motion was made by a FC member and seconded by a FC member to establish an ad hoc committee on Faculty-Administration Interactions, Co-governance and Engagement with the composition, charge and deliverables, as presented in the charge.</p> <p>Vote: 45 were in favor, 3 were against, and 0 abstained. The motion is approved.</p> <p>The motion passes.</p>
5:28-5:29PM	New Business		When Faculty Council was polled, there was no new business to be discussed.	
5:30PM	Adjourn		There being no other agenda items to address, the Chair adjourned the meeting at 5:30PM.	

Present

Robert Abouassaly
Joshua Arbesman
Moises Auron
Blaine (Todd) Bafus
Elvera L. Baron
Abigail Basson
Maura Berkelhamer
Neil Bruce
Matthias Buck
Adrienne Callahan
Aleece Caron
Mohamad Chaaban
Marta Couce
Darin Croft
Andrew Crofton
Margot Damaser
Mackenzie Deighen
David DiLorenzo
Jessica Fesler
Stephen Fink

Lisa Gelles
Bahar Bassiri Gharb
Ramy Ghayda
Matthew Grabowski
Alia Hdeib
Jessie Jean-Claude
Hung -Ying Kao
Gaby Khoury
Vijaya Kosaraju
Christina Krudy
Erin Lamb
Alan Levine
Lia Logio
Dan Ma
Tani Malhotra
Daniela Mehech
William Merrick
Gillian Michaelson
David Mihal

Rebecca Obeng
Anastasia Rowland-Seymour
Alicia Santin
Hemalatha Senthilkumar
Paul Shaniuk
Bryan Singelyn
Courtney Smalley
Phoebe Stewart
Usha Stiefel
James (Jim) Strainic
Ben Strowbridge
Joseph Tagliaferro
Nami Tajima
Patricia Taylor
Johannes von Lintig
Mark Walker
Robert Wetzel
Scott Williams
Wei Xiong

Absent

Moises Auron
Elvera Baron
Corinne Bazella
Dan Cai
Patrick Collier
Piet de Boer
Meelie DebRoy
Jonathan Emery
Corinne Falck-Ytter
Stan Gerson
Amy Hise

Sadashiva Karnik
Sangeeta Krishna
Mallika Lavakumar
Kelly Lebak
Jennifer Li
Shawn Li
David Ludlow
Janice Lyons
Dan Ma
Mariel Manlapaz
James Martin

Nathan Mesko
Rocio Moran
Dean Nakamoto
Attila Nemeth
Neal Peachey
Cyrus Rabbani
Deven Reddy
Tamer Said
Jacek Skowronski
Johannes von Lintig
Ari Wachsmann

Absent (continued)

Peter K. Kaiser

Eric W. Kaler

Raman Marwaha

Christopher McFarland

Leon R. White

Samina Yunus

Raed Zuhour

Others Present

Melissa Bonner

Nicole Deming

Jonathan Haines

Peter Harte

Joyce Helton

Siran Koroukian

Cynthia Kubu

Hua Lou

Danny Manor

Marvin Nieman

Bill Scheimann



SCHOOL OF MEDICINE
CASE WESTERN RESERVE
UNIVERSITY



STRATEGIC PLAN

2021–2026

Updated April 2023



Case Western Reserve University School of Medicine



It all starts with a plan—and I’m pleased to present an update of the Case Western Reserve University School of Medicine’s strategic plan encompassing 2021–2026.

While first posted in mid 2021, our update now adds elements focused on diversity, equity and inclusive excellence. This pervades all that we do in recruitment, education research and community engagement and impact. Inclusive of the interests of our faculty across our five campuses at Case Western Reserve University School of Medicine, Cleveland Clinic, Louis Stokes Cleveland VA Medical Center, MetroHealth System and University Hospitals, our plan encourages interdisciplinarity and a focus on health benefits. In January 2023, I noted our initiation of three broad interdisciplinary efforts that bring together our faculty of medicine and other CWRU Schools:

- Population and Community Health
- Artificial Intelligence and Machine Learning in Medicine
- Therapeutic Discovery and Development of CWRU

Each aligns with our research and education programs, mindful of our healthcare environment and attentive to impact on our communities and our emphasis on diversity.

Our strategic plan links together our academic community priorities in advancing our trainees, staff and faculty through a culture that emphasizes our diversity and cultivates inclusive excellence towards our mission to improve global health by linking research to populations in a superb educational environment.

This outline of our goals and aspirations is instructive to a far deeper conversation through planning and evaluation for each element of our research, education and academic community priorities. These guide our programs, investments and scholarly discourse.

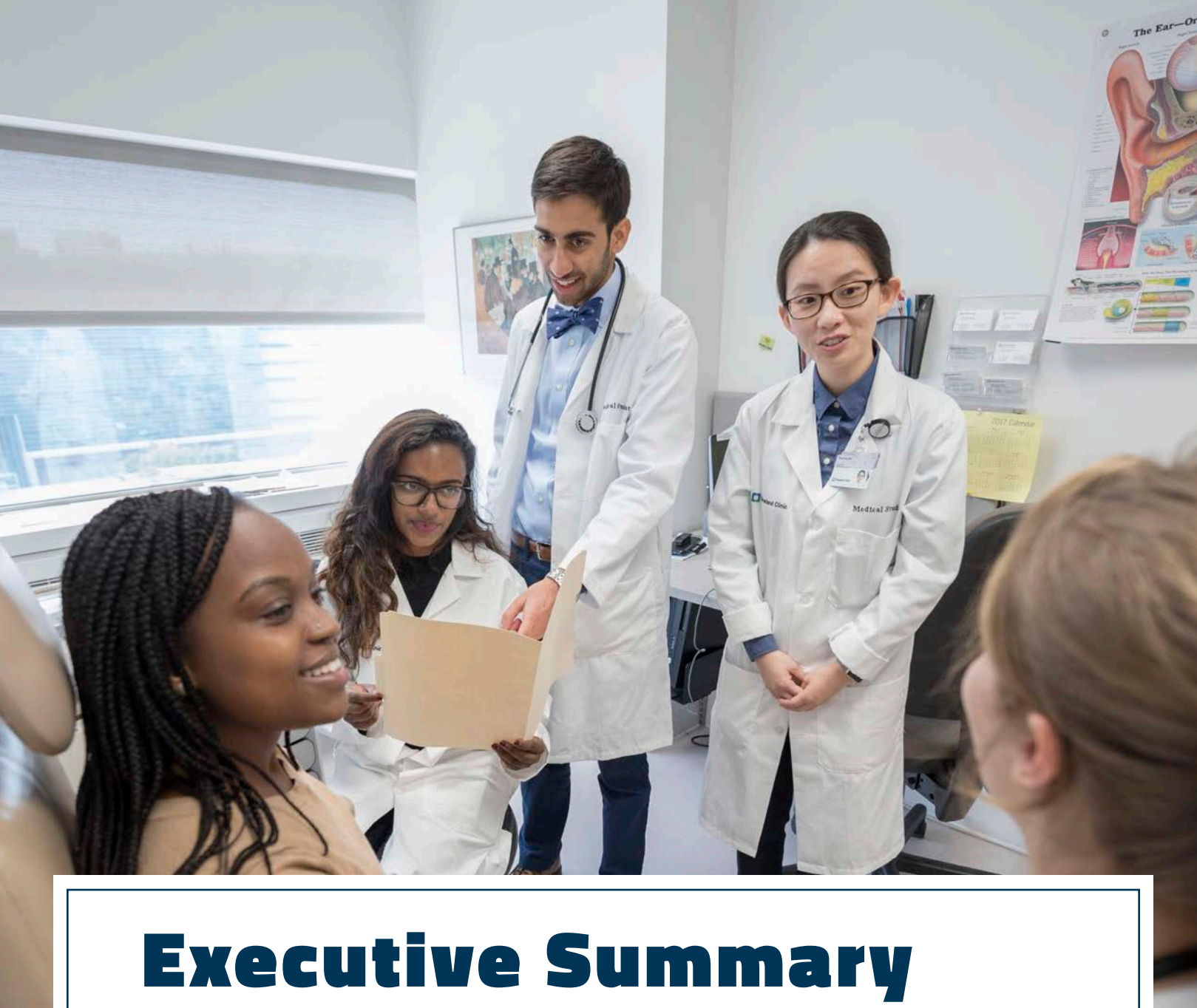
Welcome to the School of Medicine’s roadmap!

Stan Gerson, MD
Dean, Case Western Reserve University School of Medicine



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Planning Process

Key to building a successful plan was ensuring faculty and staff felt engagement with and ownership of the plan. Once the school's leadership team built the draft, we shared it with the basic science chairs, presented it to the clinical chairs in each department and held town halls with our hospital affiliate partners, as well as the school's faculty and staff.

We reviewed the plan with each group, asking them to evaluate the contents and share their comments with the dean's leadership team. After gathering and analyzing the data received from the town halls, we developed objectives and measurable results for each of these areas and finalized the strategic plan.

Executive Summary

In July 2020, Case Western Reserve University (CWRU) School of Medicine embarked on a journey to develop a five-year strategic plan encompassing 2021 through 2026. We categorized six fundamental elements/areas that affect the school's overall performance and outcomes with leaders from each area:

- Research
- Medical Education
- Graduate Education
- Academic Community
- Diversity and Inclusive Excellence
- Regional and National Community
- Philanthropy



About the School of Medicine

Founded in 1843, Case Western Reserve University School of Medicine has been at the forefront of medical education and world-class biomedical research, combining its faculty across Cleveland's preeminent healthcare network to educate students, develop breakthrough discoveries and treatments for diseases, and work toward eliminating health disparities around the world. **Ranked as one of the top-25 medical schools in the country, and both the No. 1 medical school and largest biomedical research institution in Ohio**, the school boasts over two dozen program and degree options and consistently ranks in the top tier of medical schools for National Institutes of Health (NIH) research funding.

Focused on interdisciplinarity, the School of Medicine nurtures and promotes collaborative education and research efforts through its faculty at five campuses: Case Western Reserve University School of Medicine, Cleveland Clinic, Louis Stokes Cleveland VA Medical Center, MetroHealth System and University Hospitals. Our 477,000-square-foot Health Education Campus with Cleveland Clinic opened in 2019, bringing together medicine, nursing, dental, physician assistant and social work students from across the university under one roof to promote interprofessional education (IPE) and synergistic practice.

School and Faculty Innovations

- **2nd woman in the U.S. to earn a Doctor of Medicine (MD) degree**, Emily Blackwell, graduated from Western Reserve in 1852.
- Initiated the most **advanced medical curriculum in the country** in 1952, pioneering integrated education, a focus on organ systems and team teaching in the preclinical curriculum—an approach that transformed into the Western Reserve2 curriculum, based on small group, student-based learning that's now in use.
- At least **11 Nobel Prize holders** with ties to the School of Medicine.
- **1st MD/PhD dual-degree program in the country**, upon which the NIH and others modeled their programs, with one of the longest-standing MD/PhD NIH-supported programs in the country.
- **1st successful defibrillation of the human heart.**
- **1st stool DNA tests for early detection of colon cancer** and another for esophageal cancer.
- Developed **Magnetic Resonance Fingerprinting.**

▶ Learn more about the School of Medicine's notable people, scientific advancements and institutional events at: case.edu/medicine/about/history.



Strategic Vision

Case Western Reserve University School of Medicine is the intellectual glue for health education and research faculty across Cleveland's academic medical centers—Cleveland Clinic, Louis Stokes Cleveland VA Medical Center, MetroHealth System and University Hospitals—coordinating a network of transdisciplinary effort that touches myriad diseases and empowers diversity and inclusive excellence.

Our Mission

To improve global health by linking research to populations in a superb educational environment.

Approach

We utilize an extraordinary consortium of medical school faculty across all Cleveland medical institutions to create integrated teams of diverse experts to educate our trainees, link disciplines to discover the mysteries and treatment of serious diseases, and understand and eliminate health inequities in Cleveland and across the world.

Alignment with CWRU'S Think Big Strategic Plan

The School of Medicine embraces inclusive excellence, encompassing humanity and technology through interdisciplinarity in discovery, scholarship, education and career enhancement, engaging the entire university in the process.

THINK BIG PATHWAYS

- Ignite Interdisciplinarity
- Integrate Humanity and Technology
- Achieve Social Impact
- Shape the Agora

Strategic Principles

We seek a high degree of impact in all endeavors of research, training, and cross-institutional, transdisciplinary efforts by moving our discoveries to implementation, policy changes and societal benefit.

Our departments maintain excellence in their specialty area while promoting cross-discipline education, discovery and impact.

Our efforts will be focused through critical choices and selective investments.

Our policies and actions will increase diversity and equity in research, education, and implementation, and we will excel in recruitment, career development and retention, while remaining attentive to the social, cultural, and financial needs of our community of learners.

We recognize that health benefits of biomedical discoveries are tied to their impact on the social determinants of health and to our ability to engage our diverse community in their health needs.





Programmatic Research and Education Priorities



Research

- Cancer
- Immunity, Immunotherapy, Infectious Diseases, Emerging Infection and Global Health
- Therapeutic Discovery and Development—Small Molecules, Gene Therapies, Vaccines, Cell Therapies
- Neurological and Psychiatric Disorders
- Genomics, Human Genetics
- Physiologic Basis of Disease—Molecular Structure, Metabolic
- Public and Community Health—Social Determinants of Health, Health Policy and Implementation
- Artificial Intelligence and Machine Learning in Medicine

Education

- Cultivate a diverse and inclusive environment for our students, faculty and staff.
- Engage our community in partnerships that train and retain highly talented individuals in Northeast Ohio.
- Foster innovation in curricular design for educational programs and joint degrees by encouraging experiential learning and competency-based education.
- Establish a continuum of training—from high school to post-doctoral education—that emphasizes mentoring and broad career advancement.
- Increase regional and national recognition of medical and graduate education through faculty involvement in national groups and scholarship.
- Provide a supportive environment to train leaders in education.

New Education Programmatic Priorities

- Master of Science in Regulatory Science and Entrepreneurship
- Master of Science in Biotechnology
- Master of Science in Aerospace Physiology



Key Results / Metrics

Research



Objectives

Measurable Results

1. Increase national reputation as a research-intensive school of medicine while supporting top faculty to promote innovation	<ul style="list-style-type: none">▪ Increase publications in high-impact journals (IF>10) from 13% to 17%▪ Increase research expenditures per faculty member by 15% over 3 years▪ Increase large multi-investigator and transdisciplinary grants by 20% (P, U other)▪ Increase faculty participation on national study sections, in leading medical societies, and national guideline committees and in the receipt of national and societal awards▪ Increase number and involvement of faculty members on health, community and patient organization boards
2. Increase net basic science faculty member count by 10% over five years, with a goal of 15% hires from groups who are Underrepresented in Medicine (URiM)	<ul style="list-style-type: none">▪ Current count: 277 FT, with turnover approximately 4-5%▪ 10% increase in each category: tenure track and non-tenure track▪ Target: 20 per year; 16 tenure-track and 4 non-tenure-track; 3-4 URiM per year
3. Increase discovery-based patent applications, licenses, startups and commercialization income	<ul style="list-style-type: none">▪ Target 10% increase per year▪ Return on Investment (ROI) as licenses, venture funding
4. Develop and build interdisciplinary and programmatically focused research space promoting cross-department and institution coordination, between basic and clinical/translational researchers	<ul style="list-style-type: none">▪ Establish program-clustered research space for interdisciplinary teams▪ Add 50,000 square feet in additional research space over five years to accommodate cluster programs and new faculty
5. Increase investments in existing faculty through bridge grants, program expansion and pilot funding initiatives	<ul style="list-style-type: none">▪ Focus investments on new initiatives and grant opportunities, link to department priorities and strategic plan, with ROI assessed by grants, publications and IP
6. Invest in enabling and emerging technologies that support the school's research priorities with cost-effective shared resources	<ul style="list-style-type: none">▪ Match investments to grants and impact, increase \$10 grant applications, and increase philanthropy for technology acquisition



Key Results / Metrics

Medical Education

Objectives

Measurable Results

1. Cultivate and foster a diverse and inclusive environment	<ul style="list-style-type: none">▪ Increase pipeline training program for MD admits to 10 students per year▪ Sustain URiM enrollment to above 20% in MD program▪ Mitigate bias in admissions, curriculum, clerkships with real time assessments▪ Train residents and faculty in micro-aggressions
2. Curricular innovation in competency-based medical education	<ul style="list-style-type: none">▪ Establish and map core competencies in curriculum▪ Customize curriculum to student career exploration▪ Enhance ways to report high performance of students in clinical space▪ Pivot to early scientific inquiry in MD curriculum to promote scholarship in graduates
3. Provide exceptional well-mentored research experiences for students	<ul style="list-style-type: none">▪ Provide mentoring skill training to at least 50% of MD thesis mentors▪ Build database of research opportunities (accomplished)
4. Expand our simulation programs and educational technologies	<ul style="list-style-type: none">▪ Include interprofessional education training in Simulation Center (accomplished)▪ Add Master of Science in Anesthesia and Physician Assistant programs to the Simulation Center (accomplished)▪ Augment education with AR/VR/MR technologies
5. Manage the cost of medical education	<ul style="list-style-type: none">▪ Reduce relative tuition in AAMC private medical school rankings▪ Create revenue stream for medical education (Continuing Medical Education, Simulation Center, HoloLens)▪ Increase donor scholarship support by greater than 10% a year, target \$10M in annual support
6. Engage with the local community for partnerships	<ul style="list-style-type: none">▪ Link Pathways, interprofessional education, and community outreach to MD, PA, MSA students▪ Create opportunities for students in Midtown Population Health initiative▪ Expand geriatric education program across Cleveland▪ Increase capacity for students in Student Run Health Clinics
7. Elevate national recognition of education excellence	<ul style="list-style-type: none">▪ Increase faculty education-focused publications to 10 per year▪ Create brand awareness for Continuing Medical Education and innovative education (Simulation Center, HoloLens)▪ Recognition for education in recognizing and avoiding racism in medicine▪ Train and support medical educators across the five campuses



Key Results / Metrics

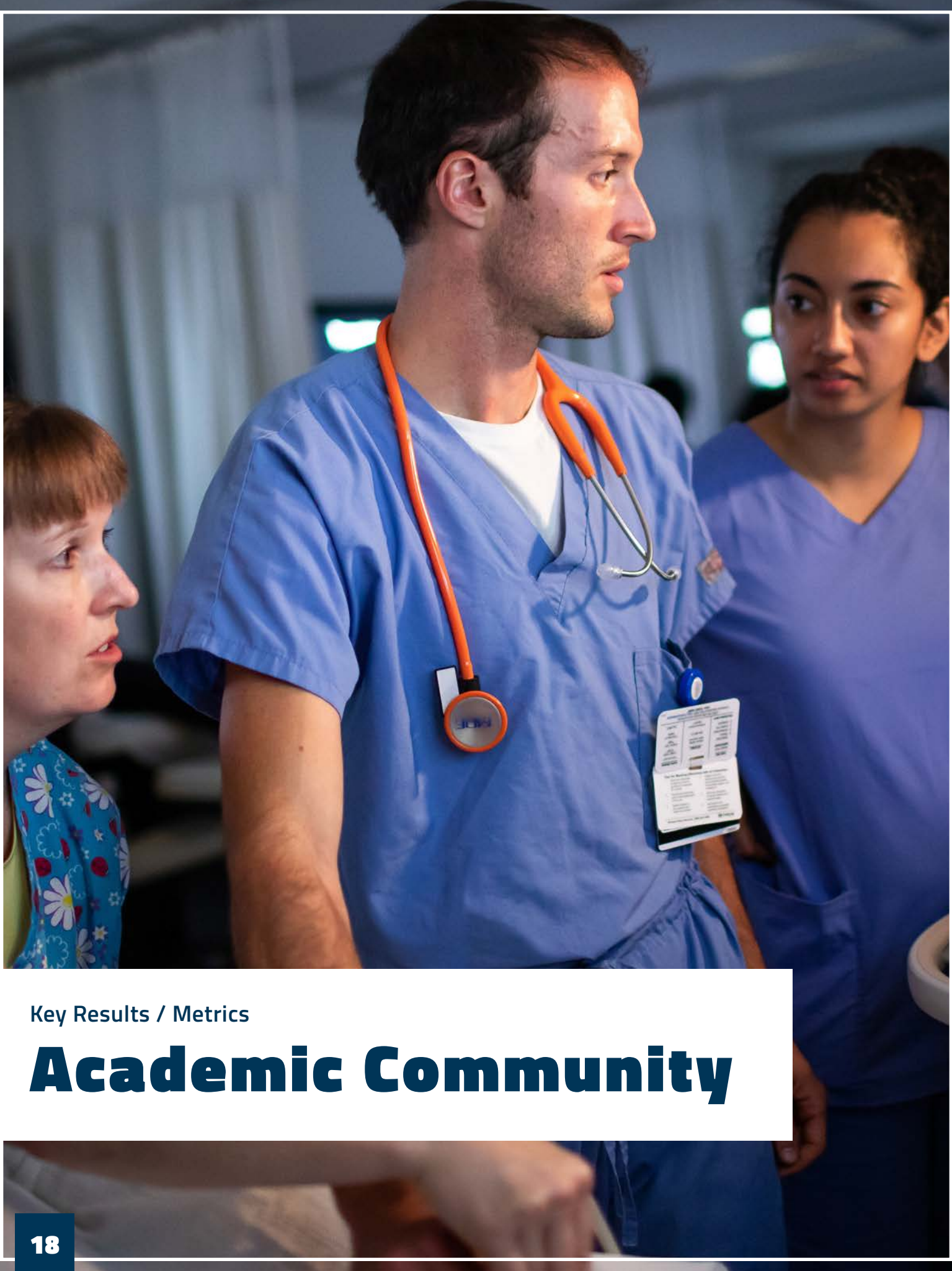
Graduate Education



Objectives

Measurable Results

1. Improve student experience (post-baccalaureate, master's and doctoral) in career development	<ul style="list-style-type: none">▪ Implement mentor training for thesis advisors in career development, mental health support, diversity and inclusion and microaggressions▪ Promote and expand participation of trainers on training grant and fellowship study sections and national committees▪ Metric: Student satisfaction with graduate education to at least 80%
2. Support non-academic biomedical science careers for PhD and Master's students	<ul style="list-style-type: none">▪ Embed career exploration opportunities into programs▪ Implement PhD alumni seminars on their career paths▪ Use "Alumni Connect" to link students to alumni coaches▪ Expand translational fellows program and track placement▪ Metric: Achieve 50% trainee participation in career development activities
3. Career guidance for PhD students and postdoctoral fellows interested in academic career	<ul style="list-style-type: none">▪ Develop a career development program focused on Add teaching, mentoring and leadership▪ Implement structured grant writing courses in the PhD program in year 2 to encourage fellowship submission▪ Develop support for postdoctoral fellow career development awards that lead toward independence▪ Metric: Increase of 50% submission
4. Offer URiM postdoctoral fellows path to faculty	<ul style="list-style-type: none">▪ Implement Dean's Scholars Program Pathway to Faculty Program (DSP)▪ Train faculty mentors and establish career mentoring▪ Admit two to three post-doctoral students each year to DSP▪ Evaluate continuity toward independence at year four
5. Increase master's programs matriculation and add offerings	<ul style="list-style-type: none">▪ Establish regulatory science and entrepreneurship, aerospace and physiology programs▪ Monitor placement and career progression for graduates
6. Increase graduate student diversity	<ul style="list-style-type: none">▪ Recruit from historically Black colleges and universities (HBCUs) and develop a pathway from Cleveland Metropolitan School District, Cleveland State University and CWRU students▪ Participate in CWRU's North Star program to draw in candidates from HCBUs and other minority-serving institutions▪ Recruit PhD students from CWRU's North Star initiative and Postbaccalaureate Research Education Program



The Case Western Reserve University School of Medicine culture is based on the norms of integrity, respect, inclusive excellence and kindness. These values are mirrored in the university’s North Star strategic vision. Adherence to these normative values helps support a community of diverse scientists and physicians committed to transdisciplinary (or interdisciplinary) research which will reduce health care disparities and lead to healthier communities for all.

Key Results / Metrics

Academic Community

Objectives	Measurable Results
1. Expand collaborative efforts across the faculty members of medicine at our five institutions (Case Western Reserve, Cleveland Clinic, Louis Stokes Cleveland VA Medical Center, MetroHealth System, University Hospitals)	<ul style="list-style-type: none">▪ Develop Strategic Leadership groups with each site▪ Pursue Multi-PI grants in priority areas▪ Leverage institutional competencies: genomics, tissue, EHR data, populations▪ Balance financial support
2. Increase interdisciplinarity initiatives between faculty members in the SOM and other faculty throughout the University to benefit our communities	<ul style="list-style-type: none">▪ Provide opportunities for diverse faculty to engage in public discussions that benefit from interdisciplinary perspectives▪ Broaden cross-school links: patents, social justice-School of Law; populations-the Jack, Joseph and Morton Mandel School of Applied Social Sciences; technology-Case School of Engineering; discovery-the College of Arts and Sciences
3. Increase diversity, equity and inclusion (DEI) of our trainees, faculty, chairs and leadership	<ul style="list-style-type: none">▪ Target >15% from URiM▪ Promote DEI through school seminars, education and dialogue▪ Train all in DEI with assistance from the CWRU Office of Inclusion, Diversity and Equal Opportunity
4. Develop ongoing programs for inclusive excellence	<ul style="list-style-type: none">▪ Unconscious bias training▪ Mentor and thesis student committees training in DEI▪ Review curriculum for bias
5. Provide comprehensive mentoring, career advancement and leadership training for all, from trainees through senior professors	<ul style="list-style-type: none">▪ Faculty leadership training: pre-tenure, post-tenure, professor▪ Mentoring of URiM groups: women, trainees in pipeline program▪ Grant writing, career mentoring for junior faculty▪ Provide skills based training to leadership and other faculty in best practices for inclusive excellence
6. Establish a responsive, cultivating learning and work-place environment	<ul style="list-style-type: none">▪ Provide outlets for trainees and faculty to seek advice mentoring and problem solving through offices of faculty and students▪ Advocate a Speak-up culture where trainees and junior faculty feel safe



Key Results / Metrics

Diversity, Equity and Inclusive Excellence

Objectives

Measurable Results

1. Enhance the overall climate to reflect, promote, and welcome diversity principles—the School of Medicine embraces a climate of inclusive excellence at every level.

- Improve climate through a regularly scheduled climate/culture/engagement survey
- Create/sustain the Inclusive Excellence Advocate program
- Implement and support employee education and engagement activities
- Implement incident portal system to facilitate responsive, transparent and easy reporting of bias-based behavior
- Create opportunities for faculty identity-based groups and student identity-based groups to collaborate

2. Improve and expand content and format of Diversity, Equity and Inclusion training for faculty, staff and students in the context of professionalism.

- Enhance and expand best/next practice professional development and training for search, promotion, tenure and student-facing committees
- Expand and enhance current career development and academic pathway programs

3. Expand efforts to recruit Under Represented in Medicine faculty, staff and students to School of Medicine—retain, develop and promote strategies to diversify faculty, staff, student and trainees.

- Enhance and expand current mentoring and leadership training programs, tools and networks
- Modify tenure and promotion standards to consider and give credit for diversity-related service and scholarship
- Enhance and expand Diversity, Equity and Inclusion-oriented networking events, lectures and training
- Establish a working group for minority faculty tasked with increasing (and securing) philanthropic, institutional, foundation-based and public funding for research
- Coordinate research and education scholarship about Diversity, Equity and Inclusion, and under-resourced communities conducted by diverse faculty and students

4. Increase the diversity of the School of Medicine to reflect the changing health-equity needs of an increasingly diverse population and support all students for success in academic medicine and our new national/ cultural milieu.

- Increase the number of minority students entering School of Medicine programs
- Revise School of Medicine curriculum content over time to best reflect the changing demographics and to better integrate cultural humility
- Prepare students for success in and needs of a diversifying patient population and caregiver population
- Support increased participation in student identity-based groups

Objectives

1. Increase faculty engagement in the SOM across all five campuses (Metrics: # of events and participants, #applications, #faculty running/ appointed/serving across all five campuses)
2. Support the professional and personal development of all faculty across their career span with specific attention to individual differences (Metrics: customer reviews/surveys, course evaluations; long-term metrics: retention of diverse faculty, climate survey data, #DEI-related complaints logged into portal, increased diversity in leadership)
3. Establish a culture that reflects the highest ideals of professionalism (Metrics: #clicks on professionalism page/inquiries directed to professionalism resources, % completion of professionalism reflections in annual reviews, # and outcome of requests to the PCC, customer surveys, recruitment and retention of faculty)

Measurable Results

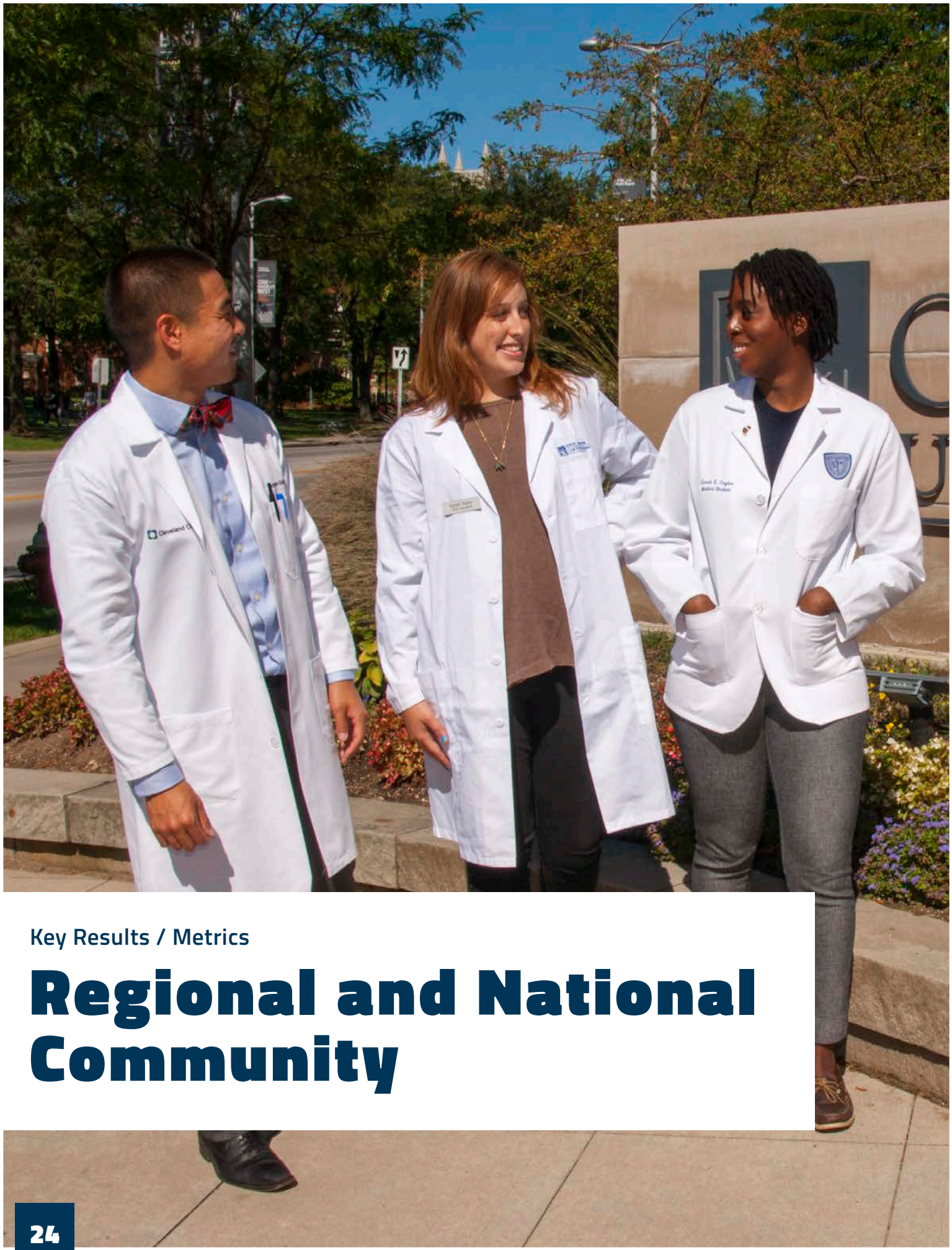
- Regularly meet with and recognize faculty contributions across all five campuses
- Increase number of faculty appointment and promotion applications across all five sites
- Increase faculty involvement in faculty governance and professional service across all five sites
- Increase faculty participation in faculty development initiatives across all five sites
- Provide efficient and customer-centered support for faculty to ensure compliance with SOM and University guidelines
- Incorporate best practices for diversity, equity, and inclusive excellence in all faculty development curricula
- Continue to refine existing and develop new curricula to address the professional development needs of faculty in different demographic groups and at different stages of their careers
- Facilitate the development of safe, cohort communities for faculty who have been traditionally under-represented in academic medicine with input from the Committee on Women and Minorities and the Dean’s ad hoc Committee on DEI
- Provide training opportunities to all faculty on best practices for establishing and maintaining a culture of inclusive excellence
- Develop and disseminate a SOM Professional Code of Conduct
- Explicitly establish expectations and accountability for professionalism
- Establish resources to promote professionalism in the SOM



Key Results / Metrics

FACULTY





Key Results / Metrics

Regional and National Community



Objectives

Measurable Results

1. Develop Population and Community Health initiative with programs in education, research and policy change with national impact

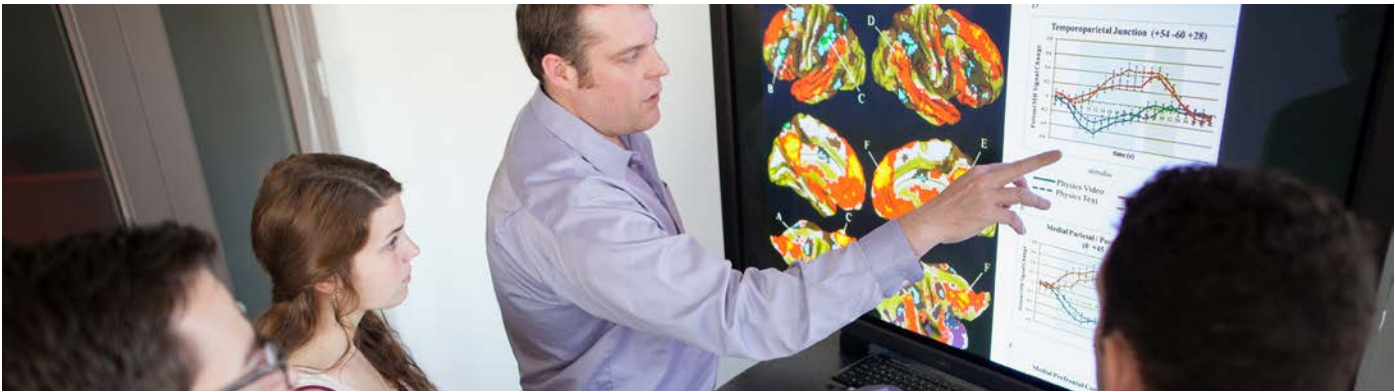
- Link Population Health and Health Policy initiative (with MetroHealth, VA) to Urban Health Center of Cleveland State University and Cleveland Clinic
- Expand Tech Transfer through JobsOhio to commercialization of Innovation District
- Expand visibility of the nationally recognized Case Comprehensive Cancer Center, National Center for Regenerative Medicine, and Clinical and Translational Science Collaborative

2. Expand school-linked community outreach engagements to Boards of Health, schools, and nonprofit groups focused on improving health of our region

- Increase direct faculty participation in community programs and policy and guideline committees
- Engaged the advice and input of the local community in large research projects
- Develop community health initiatives and implementation programs
- Create community education efforts for public health

3. Develop partnered programs in education, research and policy change for community benefit

- Establish school-wide Community Advisory Board to develop awareness of community health needs and potential interventions





Key Results / Metrics

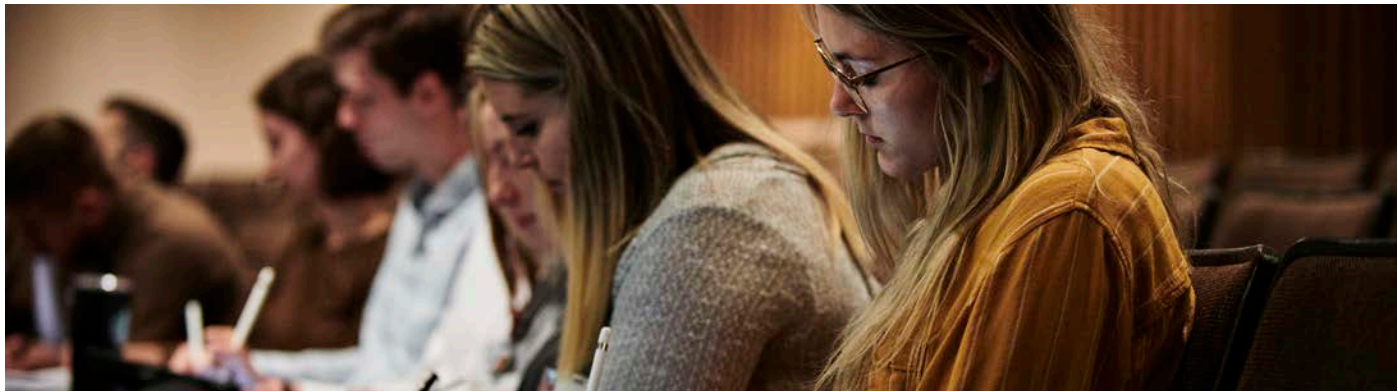
Philanthropy



Objectives

Measurable Results

- | | |
|---|--|
| 1. Align philanthropy to each research strategic priority | <ul style="list-style-type: none">▪ Expand faculty and URiM faculty through endowed professorships; including Dean's Scholars Program▪ Support growing research activities into funded centers▪ Provide philanthropic support for new research initiatives |
| 2. Raise scholarships for the school's MD and graduate student programs | <ul style="list-style-type: none">▪ Increase scholarship support per year to medical and graduate students through philanthropy▪ Increase support for Pathway programs including stipend and student project support |
| 3. Raise unrestricted dollars for the Dean's Catalytic Fund | <ul style="list-style-type: none">▪ Support emerging needs at the direction of the the Dean of the Medical School▪ Raise more than \$3 million per year in unrestricted funding |





SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

Faculty Senate and Executive Committee Update

Elvera L. Baron, MD, PhD

October 2023



Faculty Senate Meetings (08/2023—Present)

August 21-22, 2023: Faculty Senate Retreat

- Purpose and value of the Faculty Senate and shared governance
- Senate structure, Senate process (parliamentary procedure), and shared expectations
- Roles of ExCom representatives and Charis of Committees (standing and *ad hoc*)
- Tenure track faculty in clinical departments at MetroHealth

September 27, 2023

- Update on the Hospital Based Faculty Committee
- Child-care working group – additional Senate vacancy – resumed Oct 4, 2023

Next Meeting: November 2, 2023



U.S. Department
of Veterans Affairs



CASE WESTERN RESERVE
UNIVERSITY
SCHOOL OF MEDICINE

Executive Committee Reps

Committee member representation:

- *Ex officio*: School of Medicine, School of Engineering, College of Arts and Sciences, Secretary of the University Faculty, President, Provost and Executive Vice President
- Weatherhead School of Management, School of Law, School of Dental Medicine, Mandel School of Applied Social Sciences, School of Nursing, School of Engineering, College of Arts and Sciences, **School of Medicine**
- Faculty Senate Standing Committee Chairs

Elected Senators: 3-year terms; ExCom Members: 1-year term.



U.S. Department
of Veterans Affairs



CASE WESTERN RESERVE
UNIVERSITY
SCHOOL OF MEDICINE

ExCom Meetings (08/2023—Present)

August 8, 2023: Emergency Meeting

- Requested input regarding desired experiences and qualities for our next provost and executive vice president to the Provost Search Committee.

September 8, 2023: Emergency Meeting

- Reports on the University's response to the recent Supreme Court decision (STUDENTS FOR FAIR ADMISSIONS, INC. v. PRESIDENT AND FELLOWS OF HARVARD COLLEGE) by Office of General Counsel, COSs to the President and to the Provost.
- Discussion of qualities and attributes that faculty value in our students and, by extension, in our community, with the goal of creating guidance for faculty in reviewing applications while maintaining the university's commitment to diversity. Led by Chair-elect Janet McGrath.



U.S. Department
of Veterans Affairs



CASE WESTERN RESERVE
UNIVERSITY
SCHOOL OF MEDICINE

ExCom Meetings (08/2023—Present)

September 13, 2023: Scheduled Meeting

- Follow up Faculty Senate Retreat
- *Ad hoc* Committee on to Implement Complaint Process Review Task Force Decisions adopted by the Faculty Senate
- Recommendations from Members of Hospital Based Faculty Committee
- Tenure track faculty in clinical departments at MetroHealth

October 09, 2023: Scheduled Meeting

- DOJ-CWRU Agreement and Implementation
- Update on the DEI Statement for Promotion and Tenure
- Report from *ad hoc* Committee on Shared Governance

Next Scheduled Meeting: November 13, 2023



U.S. Department
of Veterans Affairs



CASE WESTERN RESERVE
UNIVERSITY
SCHOOL OF MEDICINE

Academic Approval Matrix

Department	School/College Curriculum Committee	School/College Faculty	School/College Dean	International Affairs Office	Library Resources Review	UTech Information Technology Review	Faculty Senate Committee on Undergraduate Education (FSCUE)	Faculty Senate Graduate Studies Committee	Faculty Senate	President or Provost	Board of Trustees	Ohio Dept of Higher Education	Ohio Dept of Higher Education	Higher Learning Commission (HLC)	Higher Learning Commission (HLC)
Action Required	Action Required	Action Required	Action Required	Action Required	Action Required	Action Required	Action Required	Action Required	Action Required	Acknowledgment only	Action Required	Action Required	Information Only	Action Required	Information Only

Administrative Structures

School/College (new)						X			X	X	X				
School /College (name change)			X	X					X	X	X				
Department (new)			X	X			X		X	X	X				
Department (name change)	X		X	X					X	X	X				
Off-campus location (new)	X	X	X	X	I		X	U	GP	X	X	X	X		X

Academic Programs

Degrees (new)	X	X	X	X	I	X	X	U	GP	X	X	X	X		X	
Degrees (name change)	X	X	X	X				U	GP	X	X	X	X			X
Degrees (change in delivery mode)	X	X	X	X	I	X	X	U	GP	X	X	X	X		X	
Degrees (changes in credit hours)	X	X	X	X				U	GP							
Programs/Majors (new)	X	X	X	X		X	X	U	GP	X	X	X	X		X	X
Programs/ Majors (name change)	X	X	X	X				U	GP	X	X	X		X		X
Programs/ Majors/Tracks/Concentrations (change in delivery mode)	X	X	X	X	I	X	X	U	GP	X	X	X		X	X	
Programs/Majors (termination)	X	X	X	X						X	X					
Minors (new)	X	X	X	X		X	X	X		U		X		X		
Minors (name change)	X	X	X	X				X		U		X				
Minors (termination)	X	X	X	X				X		X		X				
Certificates (new)	X	X	X	X		X	X	U	X	X	X	X	P		P	P
Concentration/Sequence/Track (new)	X	X						U	GP							
Concentration/Sequence/Track (change)	X	X						U	GP							
Course Subject Codes (new, desc changes)	X	X	X	X						P						

Academic Processes

Grades or grading system (new)	X	X	X	X				U	GP	X						
Diploma format Univ-wide (new/change)				X				U	GP	X	X	X				
Diploma wording change, school				X							X	X				
Transcript format (new/change)				X				U	GP	X	X					
Five Year Academic Calendar (new/change)										X		X				
Five Year Academic Calendar (deviations)											P					

Notes X = all levels

U = undergraduate level

GP = graduate or professional level

I = if international students are to be enrolled

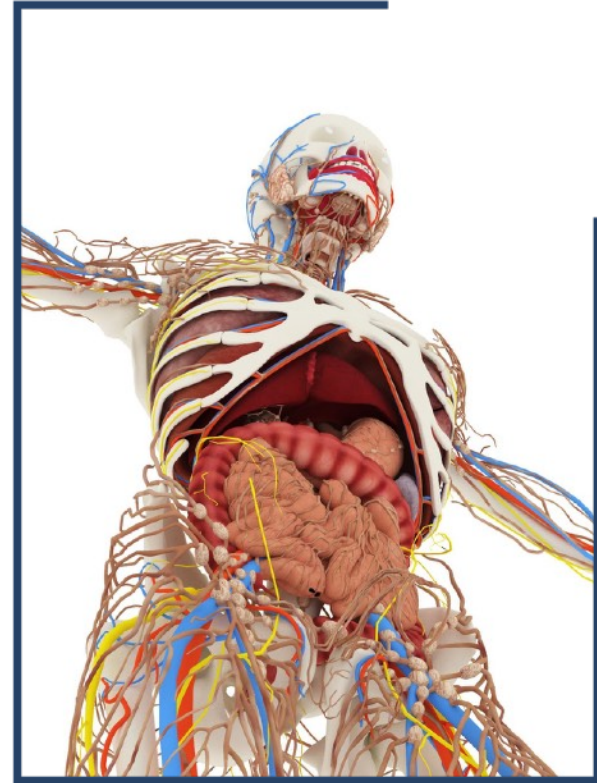
P = possibly, depending on the program. University Registrar to check with the Provost's Office

Minor in Anatomical Sciences

Department of Anatomy

Goal: Attract undergraduates to Anatomy courses

- Many Anatomy courses are available to undergraduates, but most undergraduates don't know they can take ANAT courses
- New Neuroscience major has brought many undergraduates to the SOM and increased interest in Neuroanatomy
- Biology is largest undergraduate major, and most students are interested in medicine or other health profession
- Anatomy offers the only cadaver-based courses at CWRU (the Biology human anatomy course is lecture only)
- We anticipate that ≤ 5 students will pursue the minor each year but that many more will take one or two courses
- Proposed minor requires no new courses or resources



ANS-MIN: ANATOMICAL SCIENCES, MINOR

In Workflow

- a. University Registrar Review (jpn30@case.edu; kjg23@case.edu)
- b. ANAT Chair (cvh3@case.edu)
- c. MED Library Review (jed115@case.edu; twh7@case.edu)
- d. MED UTech/International Affairs Review Vote (mxr854@case.edu; tmo13@case.edu; exa313@case.edu)
- e. MED Graduate Education Office Review (mxn83@case.edu; mcb19@case.edu)
- f. MED Graduate Education Committee (npz@case.edu)
- g. MED Faculty Committee (nmd11@case.edu)
- h. MED Dean (slg5@case.edu; sxr406@case.edu)
- i. Provost Office - UGRD Curriculum (Review) (pas125@case.edu)
- j. FSCUE Curriculum subcommittee (jxw215@case.edu; pas125@case.edu)
- k. Faculty Senate Committee on Undergraduate Education (FSCUE) (jxw215@case.edu; pas125@case.edu)
- l. Faculty Senate Executive Committee (krm78@case.edu)
- m. Faculty Senate (krm78@case.edu)
- n. Board of Trustees (krm78@case.edu)
- o. Provost Office - ODHE (Undergraduate) (dlf4@case.edu)
- p. University Registrar - SIS Updates (hle@case.edu; ysd1@case.edu; jpn30@case.edu)
- q. UGRD Updates (hxxg11@case.edu)
- r. Bulletin Updates - Univ Registrar (jpn30@case.edu; kjg23@case.edu)

Approval Path

- a. Mon, 06 Feb 2023 16:57:00 GMT
Jeremy Naab (jpn30): Approved for University Registrar Review
- b. Wed, 08 Feb 2023 15:13:01 GMT
Clifford Harding (cvh3): Approved for ANAT Chair
- c. Tue, 14 Feb 2023 18:18:51 GMT
Thomas Hayes (twh7): Approved for MED Library Review
- d. Thu, 16 Mar 2023 08:43:00 GMT
2/2 votes cast.
Yes: 100% No: 0%
Approved for MED UTech/International Affairs Review Vote
- e. Sun, 23 Jul 2023 16:48:33 GMT
Marvin Nieman (mxn83): Approved for MED Graduate Education Office Review
- f. Mon, 24 Jul 2023 12:54:24 GMT
Nicholas Ziats (npz): Approved for MED Graduate Education Committee

New Program Proposal

Date Submitted: Sun, 05 Feb 2023 11:51:12 GMT

Viewing: ANS-MIN : Anatomical Sciences, Minor

Last edit: Tue, 14 Feb 2023 18:18:46 GMT

Changes proposed by: Darin Croft (dac34)

Requestor Information

Name

Darin Croft

E-mail

dac34@case.edu

Network ID

dac34

Department

Anatomy

School

School of Medicine

Are you completing this form on behalf of someone?

No

Effective Date Information

Effective Term

Fall

Effective Year

2023

Program Information

Program Type

Minor (Undergraduate Only)

Program School

School of Medicine

Program Department

Anatomy

Does the proposal involve instruction, coursework or any resources from other departments or schools?

No

Academic Level

Undergraduate

I have consulted with the CWRU representative to the Ohio Department of Higher Education (ODHE) prior to submitting this form

Yes

Program Title

Anatomical Sciences, Minor

Minimum credit hours required for completion

15

Academic Technology

Which academic and/or research technology resources will be used in this program (both online and in the classroom)?

Canvas, Microsoft Office, HoloAnatomy

Will any course in this program be offered online?

No

Will there be computing resources or data storage resources needed in this program beyond faculty and students' personal computers?

No

Will this program require applications not currently available through the university or the Software Center?

No

Do you anticipate needing additional technologies beyond what is already available in our Technology Enhanced Classrooms (TECs) and online (e.g., Canvas, Zoom, Echo360)?

No

Will this program require technical support beyond what is available through the Help Desk?

No

Program Rationale

Program Description

The Minor in Anatomical Sciences helps students develop expertise in the macrostructure and microstructure of the human body. It is excellent preparation for students pursuing a career in health care (e.g., physician, dentist) or as a researcher/educator in a

morphology-based field such as vertebrate paleontology or biological anthropology. Students learn foundational knowledge via traditional methods such as cadaveric dissection as well as new technologies such as HoloAnatomy and virtual microscopy.

Justification

More students pursue a Biology major in the College of Arts and Sciences than any other major, and many of these students are interested in attending medical school or pursuing other advanced biomedical training after graduation. This new minor will increase awareness of Anatomy courses that provide foundational knowledge for students in biomedicine or morphology. We expect that this minor will also help make student applications to professional schools more competitive.

ANAT 345 is currently seeking approval on a CAF.

Program Requirements (will appear in General Bulletin)

Program Requirements

The Minor in Anatomical Sciences requires 15 credits of Anatomy (ANAT) courses, including:

Code	Title	Hours
Our foundational lab-based human anatomy course:		
ANAT 401	Multimodal Human Anatomy	4
ONE of the following dissection courses:		
ANAT 399	Independent Study (minimum of 2 credits; project will be independent dissections)	1 - 4
ANAT 402	Human Musculoskeletal Anatomy	4
ANAT 410	Cadaver Dissection-based Human Anatomy with Histology and Physiologic Correlations (summer course for physician assistant students)	6
ANAT 411	Gross Anatomy	6
ONE of the following lab courses in another anatomical subject:		
ANAT 312	Medical Histology	3
ANAT 414	Neurological Anatomy	4
Electives include any course listed above that is not used to fulfill basic requirements, plus the following:		
ANAT 303	Methods Neuroscience Research	4
ANAT 391	Embryology	3
ANAT 345	Mammal Diversity and Evolution	4

Program Learning Outcomes

Program Learning Outcomes

	Learning Outcome
Outcome 1	The student will be able to describe in words and diagrams the gross anatomical structure and function of each anatomical system of the human body
Outcome 2	The student will be able to demonstrate the most clinically important organs, fascia, vessels, nerves, muscles, skeletal structures, and potential spaces in a cadaveric specimen and appreciate how these structures can vary in different individuals.
Outcome 3	The student will master basic dissection skills including changing scalpel blades with a forceps, performing sharp dissection with a scalpel or scissors, performing blunt dissection with a probe or scissors, and exposing structures by spreading tissue with a scissors or forceps.
Outcome 4	Depending on the electives chosen, the student will be able to: (1) identify histological sections of tissues and organs and describe the functions of the cells comprising them; (2) describe the organization of the central and peripheral nervous system and articulate how information travels to and from the CNS; and/or (3) describe the developmental changes that result in adult anatomical structure and how deviations from normal developmental patterns result in clinically relevant pathologies.

Attachments

Attach File (optional)

Resource_Review_Anatomy.docx
Minor_Anatomy.xlsx

End of Initiator Submission (save or submit at bottom of form)

Library Resources

Library Review

To be completed by Library staff

Report prepared by [librarian]

Thomas W. Hayes, MLS

Minimum additional resources

Current staffing is adequate

Yes

Library Technology resources

Fully Adequate

Library Content resources

Fully Adequate

Adequacy of current content resources

Books

Partially adequate

Additional resources required

3 Books

One-time Costs (\$)

\$448

Recurring Costs (\$)

\$500

Journals

Partially adequate

Additional resources required

16 Journals

One-time Costs (\$)

\$8,966

Recurring Costs (\$)

\$1,000

Databases

Partially adequate

Additional resources required

Embase

One-time Costs (\$)

\$45,000

Recurring Costs (\$)

\$4,500

Media

Fully adequate

Total One-time Costs (\$)

\$54,414

Total Annual Recurring Costs (\$)

\$6,000

Do you support this proposal?

Yes

Key: 429

APHV-MS: AEROSPACE PHYSIOLOGY MS (ONLINE)

In Workflow

- a. University Registrar Review (jpn30@case.edu; kjg23@case.edu)
- b. Graduate Studies Dean Review (lxh5@case.edu; cer2@case.edu)
- c. NTRN Chair (Other Department) (hdb@case.edu)
- d. PHOL Chair (wfb2@case.edu)
- e. MED Library Review (jed115@case.edu; twh7@case.edu)
- f. MED UTech/International Affairs Review Vote (mxr854@case.edu; tmo13@case.edu; exa313@case.edu)
- g. MED Graduate Education Office Review (mxn83@case.edu; mcb19@case.edu)
- h. MED Graduate Education Committee (npz@case.edu)
- i. MED Faculty Committee (nmd11@case.edu)
- j. MED Dean (slg5@case.edu; sxr406@case.edu)
- k. Graduate Studies Dean Review (lxh5@case.edu; cer2@case.edu)
- l. Faculty Senate Graduate Studies Committee (lxh5@case.edu; lmb3@case.edu)
- m. Faculty Senate Executive Committee (krm78@case.edu)
- n. Faculty Senate (krm78@case.edu)
- o. Board of Trustees (krm78@case.edu)
- p. Provost Office - ODHE (Graduate) (cer2@case.edu)
- q. Provost Office - HLC (dlf4@case.edu)
- r. University Registrar - SIS Updates (hle@case.edu; ysd1@case.edu; jpn30@case.edu)
- s. GRAD Updates (lxh5@case.edu; wtc22@case.edu)
- t. Bulletin Updates - Univ Registrar (jpn30@case.edu; kjg23@case.edu)

Approval Path

- a. Mon, 03 Apr 2023 15:31:51 GMT
Kelsey Jorgensen (kjg23): Approved for University Registrar Review
- b. Mon, 03 Apr 2023 15:36:05 GMT
Charles Rozek (cer2): Approved for Graduate Studies Dean Review
- c. Mon, 03 Apr 2023 17:45:18 GMT
Hope Barkoukis (hdb): Approved for NTRN Chair (Other Department)
- d. Wed, 05 Apr 2023 14:42:48 GMT
Walter Boron (wfb2): Approved for PHOL Chair
- e. Wed, 05 Apr 2023 16:42:21 GMT
Thomas Hayes (twh7): Approved for MED Library Review
- f. Wed, 19 Apr 2023 15:03:05 GMT
2/2 votes cast.
Yes: 100% No: 0%
Jeremy Naab (jpn30): Approved for MED UTech/International Affairs Review Vote
- g. Sun, 23 Jul 2023 16:48:54 GMT
Marvin Nieman (mxn83): Approved for MED Graduate Education Office Review
- h. Mon, 24 Jul 2023 12:54:38 GMT
Nicholas Ziats (npz): Approved for MED Graduate Education Committee

New Program Proposal

Date Submitted: Thu, 30 Mar 2023 22:50:11 GMT

Viewing: APHV-MS : Aerospace Physiology MS (Online)

Last edit: Thu, 22 Jun 2023 12:57:41 GMT

Changes proposed by: Thomas Nosek (tmn2)

Reviewer Comments

Kelsey Jorgensen (kjg23) (Mon, 01 May 2023 13:16:47 GMT): Updated completion time from 7 years to 5 years per email from Tom Nosek.

Jeremy Naab (jpn30) (Thu, 22 Jun 2023 12:57:41 GMT): Please contact Elizabeth Damato or Bryan Jarmusch with any questions about this PAF.

Requestor Information

Name

Thomas Nosek

E-mail

tmn2@case.edu

Network ID

tmn2

Department

Physiology and Biophysics

School

School of Medicine

Are you completing this form on behalf of someone?

Yes

Contacts

Name	E-mail	Network ID
Elizabeth Damato	egd@case.edu	egd
Bryan Jarmusch	bbj2@case.edu	bbj2

Effective Date Information

Effective Term

Fall

Effective Year

2024

Program Information

Program Type

Degree/Program/Major/Certificate

Program School

School of Medicine

Program Department

Physiology & Biophysics

Does the proposal involve instruction, coursework or any resources from other departments or schools?

Yes

Other Department(s) involved

Other Department(s)
Nutrition

Academic Level

Graduate

Degree/Credential

Master of Science

I have consulted with the CWRU representative to the Ohio Department of Higher Education (ODHE) prior to submitting this form

Yes

Program Title

Aerospace Physiology MS (Online)

Minimum credit hours required for completion

30

Completion Time (years)

5

Will the proposed program follow standard academic calendar for your school?

Yes

Program Location

Main campus/Cleveland

Does this program follow the standard academic load for your school?

Yes

Academic Technology**Which academic and/or research technology resources will be used in this program (both online and in the classroom)?**

Live streaming of all course and Journal Club lectures/discussions. Recording of all lectures/discussions so that students can view them asynchronously. We will use Canvas as the Course Management System for all courses.

Will any course in this program be offered online?

Yes

Is it possible for a student to take over half of the courses online?

Yes

Please provide additional details about online content

The MS in Aerospace Physiology program will make use of courses offered by the Department of Physiology and Biophysics and one in the Department of Nutrition, some specifically designed for this program and others traditionally taught by the two departments. As with our MS in Medical Physiology program, online and resident students will have full access to all lectures/discussions, either via live streaming of all lectures or by viewing recorded presentations asynchronously. Additional course material will be available to all students via Canvas, the Course Management System. All exams and course requirements for resident and online students will be exactly the same. Grading of online and resident students will follow the same standards.

Will there be computing resources or data storage resources needed in this program beyond faculty and students' personal computers?

No

Will this program require applications not currently available through the university or the Software Center?

No

Do you anticipate needing additional technologies beyond what is already available in our Technology Enhanced Classrooms (TECs) and online (e.g., Canvas, Zoom, Echo360)?

No

Will this program require technical support beyond what is available through the Help Desk?

No

Program Rationale**Program Description**

Aerospace Physiology (AP) is the study of the physical and cognitive impact of an extreme and/or austere environment upon an individual. Those studies provide the foundation to develop strategies conferring mental and physical resilience against extreme environmental conditions, thereby optimizing performance of the aerospace traveler. The objective of the MS in Aerospace Physiology program is to prepare students for careers in a wide range of fields (ex. Medicine - Civilian Government Physicians working in Aerospace Medicine or Aerospace Medicine Specialist Physicians working for the armed services; Research Physiologists - NASA Human Research Program or Navy Research Physiologist; Department of Transportation and Federal Aviation Administration - Medical Examiner or Aerospace and Environmental Physiologist; Commercial space companies - Virgin Galactic Research Coordinator or SpaceX medical support; USAF and USN - Aerospace Operational Physiologist) or to enhance the backgrounds of those who are already working in these fields so that they can be more effective in fulfilling their responsibilities.

Justification

No program at the MS level currently exists at CWRU in Aerospace Physiology or at any other University in the State of Ohio that is available to non-military or non-MD students. A series of focus groups conducted with future stakeholders conducted over the past 12 months has demonstrated a need and enthusiasm for an aerospace physiology-focused program at the MS level. The Department of Physiology and Biophysics is uniquely positioned to provide such a program. It is home to the Center of Aerospace Physiology (Dr. Michael Decker and Dr. Lisa Damato, Co-Director). Four of the current faculty in the Department of Physiology and Biophysics are part of this center and have been identified by NASA, NATO, the US Air Force, and US Navy as both aerospace scientists and educators who are already training graduate students, military civilian and enlisted personnel in the core concepts of aerospace physiology. Because we anticipate that the majority of the students interested in this program will be working part or full time, the program is available online on a part-time basis. Although the program can be completed in two years by a full-time student, part time students will probably take one, 3-credit hour course/semester and complete the program in 3-4 academic years (10 semesters). The Department of Physiology and Biophysics has extensive experience delivering graduate level courses and seminars online in its Master's in Medical Physiology program.

Program Requirements (will appear in General Bulletin)

Program Requirements

The MS in Aerospace Physiology is available to students who have already earned a bachelor's degree in a physical or biological science. All courses (including the Aerospace Physiology Journal Club) are offered in a synchronous, lecture/small group format with both a live broadcast and asynchronously from recordings over the Internet. The one exception to this is the 4-day residency requirement for the 3-credit hour required "Laboratory Research Rotation: Aerospace Physiology" course (PHOL 423).

The MS in Aerospace Physiology program requires 30 credit hours of course work (10, 3-credit hour courses) and active participation in the Aerospace Physiology Journal Club each Fall and Spring semester students are registered for courses. To earn the MS degree, students must have a final GPA GREATER than 3.0 in at least 30 hours of graduate course work and pass the Comprehensive Exam.

Sample Plan of Study

Full time students will follow the following Plan of Study to complete the program in 4 semesters. Part-time students can complete the program by taking as few as 1-3 credit hour course/semester over 10 semesters. All students must begin the program in a fall semester taking Introduction to Aerospace Physiology I followed by Introduction to Aerospace Physiology II spring semester.

Fall Semester Year 1 (9 credit hours)

- *Introduction to AP I (PHOL 421) – 3 credit hours (Drs. Decker and Strohl)
- *Physiology of Motion (PHOL 486) – 3 credit hours (Dr. Jessica Taylor)
- *Sleep Physiology (PHOL 614) – 3 credit hours (Dr. Decker)
- **Aerospace Journal Club – 0 Credit hours (Dr. Jessica Taylor)

Spring Semester Year 1 (9 credit hours)

- *Introduction to AP II (PHOL 422) – 3 credit hours (Drs. Decker and Strohl)
- *Laboratory Research Rotation: Aerospace Physiology (PHOL 423) - 3 credit hours (Drs. Decker, Damato and Strohl) **4-Day laboratory requirement**

Choose one, 3 credit course from the following:

- *Oxygen Physiology (PHOL 410) – 3 credit hours (Dr. Joe LaManna)
- *Comparative and Evolutionary Physiology (PHOL 485) – 3 credit hours (Dr. Joe LaManna)
- *Clinical Reasoning II (PHOL 492) – 3 credit hours (Dr. Andrea Romani)
- *Independent Study in Physiology (PHOL 451) – 3 credit hours (AP Advisor)
- *Research in Physiology (PHOL 601) – 3 credit hours (Faculty in the Center for Aerospace Physiology)
- **Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hour

Fall Semester Year 2 (6 credit hours)

- ***Man-Machine Interface – 3 credit hours (TBN)
- *Sports Nutrition (NTRN 460) – 3 credit hours (K. Tomcik)
- **Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hours

Spring Semester Year 2 (6 credit hours)

***Research Methods: Application to Mishap Investigation – 3 credit (TBN)

Choose one, 3 credit course (not taken in Year 1) from the following:

*Oxygen Physiology (PHOL 410) – 3 credit hours

(Dr. Joe LaManna)

*Comparative and Evolutionary Physiology (PHOL 485) –

3 credit hours (Dr. Joe LaManna)

*Clinical Reasoning II (PHOL 492) – 3 credit hours

(Dr. Andrea Romani)

*Independent Study in Physiology (PHOL 451) – 3 credit hours

(AP Advisor)

*Research in Physiology (PHOL 601) – 3 credit hours

(Faculty in the Center for Aerospace Physiology)

**Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hours

* An existing course currently taught in the Department of Physiology and Biophysics

** All students in the Certificate in Aerospace Physiology Program will actively participate in the Aerospace Physiology Journal Club each Fall and Spring semester that they are registered for classes. Students will present recent papers that are seminal for the understanding of Aerospace Physiology. Papers will be chosen by the Director of the Journal Club, Dr. Jessica Taylor. All students are expected to have read the papers and be prepared to discuss them at the meeting of the Journal Club. The Journal Club will meet 5 times fall semester (twice in September and October and once in November) and 5 times spring semester (twice in February and March and once in April). This Journal Club was initiated Fall Semester 2022 for interested students in the MSMP program.

*** These courses are under development

Concentration/Track/Field of Study

Does this program have any concentrations?

No

Program Learning Outcomes

Program Learning Outcomes

	Learning Outcome
Outcome 1	The learning outcome of the MS in Aerospace Physiology program is to prepare students for careers in the fields listed above or to enhance the backgrounds of those who are already working in these fields so that they can be more effective in fulfilling their responsibilities. At the end of this program, students should be ready to take and pass the Aerospace Medical Association (AsMA) Board Certification Examination in Aerospace Physiology and become a Board Certified Aerospace Physiologist. In this examination, students must demonstrate competency in the characteristics of the atmosphere, acceleration, spatial disorientation, and the physiology of decompression, thermoregulation, hypobarics, respiration, and cardiovascular function. Additional competencies in operational topics such as positive pressure breathing, noise, and LASER radiation must also be demonstrated.

Attachments

Attach File (optional)

Aerospace Physiology MS (Online).pdf

Faculty Matrix.pdf

Boron_LOS_Aerospace Physiology_MS.pdf

Attachment #3 Needs Survey.pdf

Attachment #2 Course Descriptions.pdf
Attachment #1 CVs.pdf
Gerson_LOS_Aerospace Physiology_MS.pdf
Resource_Review_MS_AeroPhysiol_Commentary.docx
MS_AeroPhysiol.xlsx
Resource_Review_MS_AerospacePhysiol.docx

End of Initiator Submission (save or submit at bottom of form)

Library Resources

Library Review

To be completed by Library staff

Report prepared by [librarian]

Thomas W. Hayes, MLS

Minimum additional resources

Current staffing is adequate

Yes

Library Technology resources

Fully Adequate

Library Content resources

1,096 books in print or electronic; 60 of 76 major journal titles; fully adequate database coverage.

Adequacy of current content resources

Books

Fully adequate

Journals

Partially adequate

Additional resources required

16 titles

One-time Costs (\$)

\$34,622

Recurring Costs (\$)

\$3,500

Databases

Fully adequate

Media

Fully adequate

Total One-time Costs (\$)

\$34,622

Total Annual Recurring Costs (\$)

\$3,500

Do you support this proposal?

Yes

Key: 439

APH-MS: AEROSPACE PHYSIOLOGY MS

In Workflow

- a. University Registrar Review (jpn30@case.edu; kjg23@case.edu)
- b. Graduate Studies Dean Review (lxh5@case.edu; cer2@case.edu)
- c. NTRN Chair (Other Department) (hdb@case.edu)
- d. PHOL Chair (wfb2@case.edu)
- e. MED Library Review (jed115@case.edu; twh7@case.edu)
- f. MED UTech/International Affairs Review Vote (mxr854@case.edu; tmo13@case.edu; exa313@case.edu)
- g. MED Graduate Education Office Review (mxn83@case.edu; mcb19@case.edu)
- h. MED Graduate Education Committee (npz@case.edu)
- i. MED Faculty Committee (nmd11@case.edu)
- j. MED Dean (slg5@case.edu; sxr406@case.edu)
- k. Graduate Studies Dean Review (lxh5@case.edu; cer2@case.edu)
- l. Faculty Senate Graduate Studies Committee (lxh5@case.edu; lmb3@case.edu)
- m. Faculty Senate Executive Committee (krm78@case.edu)
- n. Faculty Senate (krm78@case.edu)
- o. Board of Trustees (krm78@case.edu)
- p. Provost Office - ODHE (Graduate) (cer2@case.edu)
- q. Provost Office - HLC (dlf4@case.edu)
- r. University Registrar - SIS Updates (hle@case.edu; ysd1@case.edu; jpn30@case.edu)
- s. GRAD Updates (lxh5@case.edu; wtc22@case.edu)
- t. Bulletin Updates - Univ Registrar (jpn30@case.edu; kjg23@case.edu)

Approval Path

- a. Mon, 03 Apr 2023 15:31:53 GMT
Kelsey Jorgensen (kjg23): Approved for University Registrar Review
- b. Mon, 03 Apr 2023 15:35:49 GMT
Charles Rozek (cer2): Approved for Graduate Studies Dean Review
- c. Mon, 03 Apr 2023 17:45:13 GMT
Hope Barkoukis (hdb): Approved for NTRN Chair (Other Department)
- d. Wed, 05 Apr 2023 14:42:44 GMT
Walter Boron (wfb2): Approved for PHOL Chair
- e. Wed, 05 Apr 2023 16:40:04 GMT
Thomas Hayes (twh7): Approved for MED Library Review
- f. Wed, 19 Apr 2023 15:02:45 GMT
2/2 votes cast.
Yes: 100% No: 0%
Jeremy Naab (jpn30): Approved for MED UTech/International Affairs Review Vote
- g. Sun, 23 Jul 2023 16:48:45 GMT
Marvin Nieman (mxn83): Approved for MED Graduate Education Office Review
- h. Mon, 24 Jul 2023 12:54:32 GMT
Nicholas Ziats (npz): Approved for MED Graduate Education Committee

New Program Proposal

Date Submitted: Thu, 30 Mar 2023 22:48:28 GMT

Viewing: APH-MS : Aerospace Physiology MS

Last edit: Thu, 22 Jun 2023 12:56:48 GMT

Changes proposed by: Thomas Nosek (tmn2)

Reviewer Comments

Kelsey Jorgensen (kjg23) (Mon, 01 May 2023 13:17:01 GMT): Updated completion time from 7 years to 5 years per email from Tom Nosek.

Jeremy Naab (jpn30) (Thu, 22 Jun 2023 12:56:48 GMT): Please contact Elizabeth Damato or Bryan Jarmusch with any questions about this PAF.

Requestor Information**Name**

Thomas Nosek

E-mail

tmn2@case.edu

Network ID

tmn2

Department

Physiology and Biophysics

School

School of Medicine

Are you completing this form on behalf of someone?

Yes

Contacts

Name	E-mail	Network ID
Elizabeth Damato	egd@case.edu	egd
Bryan Jarmusch	bbj2@case.edu	bbj2

Effective Date Information**Effective Term**

Fall

Effective Year

2024

Program Information**Program Type**

Degree/Program/Major/Certificate

Program School

School of Medicine

Program Department

Physiology & Biophysics

Does the proposal involve instruction, coursework or any resources from other departments or schools?

Yes

Other Department(s) involved

Other Department(s)
Nutrition

Academic Level

Graduate

Degree/Credential

Master of Science

I have consulted with the CWRU representative to the Ohio Department of Higher Education (ODHE) prior to submitting this form

Yes

Program Title

Aerospace Physiology MS

Minimum credit hours required for completion

30

Completion Time (years)

5

Will the proposed program follow standard academic calendar for your school?

Yes

Program Location

Main campus/Cleveland

Does this program follow the standard academic load for your school?

Yes

Academic Technology**Which academic and/or research technology resources will be used in this program (both online and in the classroom)?**

Live streaming of all course and Journal Club lectures/discussions. Recording of all lectures/discussions so that students can view them asynchronously. We will use Canvas as the Course Management System for all courses.

Will any course in this program be offered online?

No

Will there be computing resources or data storage resources needed in this program beyond faculty and students' personal computers?

No

Will this program require applications not currently available through the university or the Software Center?

No

Do you anticipate needing additional technologies beyond what is already available in our Technology Enhanced Classrooms (TECs) and online (e.g., Canvas, Zoom, Echo360)?

No

Will this program require technical support beyond what is available through the Help Desk?

No

Program Rationale**Program Description**

Aerospace Physiology (AP) is the study of the physical and cognitive impact of an extreme and/or austere environment upon an individual. Those studies provide the foundation to develop strategies conferring mental and physical resilience against extreme environmental conditions, thereby optimizing performance of the aerospace traveler. The objective of the MS in Aerospace Physiology program is to prepare students for careers in a wide range of fields (ex. Medicine - Civilian Government Physicians working in Aerospace Medicine or Aerospace Medicine Specialist Physicians working for the armed services; Research Physiologists - NASA Human Research Program or Navy Research Physiologist; Department of Transportation and Federal Aviation Administration - Medical Examiner or Aerospace and Environmental Physiologist; Commercial space companies - Virgin Galactic Research Coordinator or SpaceX medical support; USAF and USN - Aerospace Operational Physiologist) or to enhance the backgrounds of those who are already working in these fields so that they can be more effective in fulfilling their responsibilities.

Justification

No program at any level currently exists at CWRU in Aerospace Physiology or at any other University in the State of Ohio that is open to non-military personnel or non-physicians. A series of focus groups conducted with future stakeholders conducted over the past 12 months has demonstrated a need and enthusiasm for an aerospace physiology-focused program at the MS level. The Department of Physiology and Biophysics is uniquely positioned to provide such a program. It is home to the Center of Aerospace Physiology (Dr. Michael Decker and Dr. Lisa Damato, Co-Directors). Four of the current faculty in the Department of Physiology and Biophysics are part of this center and have been identified by NASA, NATO, the US Air Force, and US Navy as both aerospace scientists and educators who are already training graduate students, military civilian and enlisted personnel in the core concepts of aerospace physiology. Because we anticipate that the majority of the students interested in this program will be working part or full time, we anticipate that the majority of our students will be taking this program on a part-time basis. Although the program can be completed in two years by a full-time student, part time students will probably take one, 3-credit hour course/semester and complete the program in 3-4 academic years (10 semesters).

Program Requirements (will appear in General Bulletin)

Program Requirements

The MS in Aerospace Physiology is available to students who have already earned a bachelor's degree in a physical or biological science. All courses (including the Aerospace Physiology Journal Club) are offered in a synchronous, traditional, lecture/small group format. The one exception to this is the 4-day, intense laboratory experience associated with the required the 3-credit hour "Laboratory Research Rotation: Aerospace Physiology" course (PHOL 423).

The MS in Aerospace Physiology program requires 30 credit hours of course work (10, 3-credit hour courses) and active participation in the Aerospace Physiology Journal Club each Fall and Spring semester students are registered for courses. To earn the MS degree, students must have a final GPA GREATER than 3.0 in at least 30 hours of graduate course work and pass the Comprehensive Exam.

Sample Plan of Study

Full time students will follow the following Plan of Study to complete the program in 4 semesters. Part-time students can complete the program by taking as few as 1-3 credit hour course/semester over 10 semesters. All students must begin the program in a fall semester taking Introduction to Aerospace Physiology I followed by Introduction to Aerospace Physiology II spring semester.

Fall Semester Year 1 (9 credit hours)

- *Introduction to AP I (PHOL 421) - 3 credit hours
(Drs. Decker and Strohl)
- *Physiology of Motion (PHOL 486) – 3 credit hours (Dr. Jessica Taylor)
- *Sleep Physiology (PHOL 614) – 3 credit hours (Dr. Decker)
- **Aerospace Journal Club – 0 Credit hours (Dr. Jessica Taylor)

Spring Semester Year 1 (9 credit hours)

- *Introduction to AP II (PHOL 422) – 3 credit hours (Drs. Decker and Strohl)
- *Laboratory Research Rotation: Aerospace Physiology (PHOL 423) - 3 credit hours (Drs. Decker, Damato and Strohl) **4-Day laboratory requirement**

Choose one, 3 credit course from the following:

- *Oxygen Physiology (PHOL 410) – 3 credit hours
(Dr. Joe LaManna)
- *Comparative and Evolutionary Physiology (PHOL 485) – 3 credit hours (Dr. Joe LaManna)
- *Clinical Reasoning II (PHOL 492) – 3 credit hours
(Dr. Andrea Romani)
- *Independent Study in Physiology (PHOL 451) – 3 credit hours (AP Advisor)
- *Research in Physiology (PHOL 601) – 3 credit hours (Faculty in the Center for Aerospace Physiology)
- **Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hour

Fall Semester Year 2 (6 credit hours)

- ***Man-Machine Interface – 3 credit hours (TBN)
- *Sports Nutrition (NTRN 460)– 3 credit hours (K. Tomcik)
- **Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hours

Spring Semester Year 2 (6 credit hours)

- ***Research Methods: Application to Mishap Investigation – 3 credit (TBN)

Choose one, 3 credit course (not taken in Year 1) from the following:

- *Oxygen Physiology (PHOL 410) – 3 credit hours
(Dr. Joe LaManna)
- *Comparative and Evolutionary Physiology (PHOL 485) – 3 credit hours (Dr. Joe LaManna)
- *Clinical Reasoning II (PHOL 492) – 3 credit hours.
(Dr. Andrea Romani)

*Independent Study in Physiology (PHOL 451) – 3 credit hours
(AP Advisor)

*Research in Physiology (PHOL 601) – 3 credit hours (Faculty in
the Center for Aerospace Physiology)

**Aerospace Journal Club (Dr. Jessica Taylor) – 0 credit hours

* An existing course currently taught in the Department of Physiology and
Biophysics

** All students in the Certificate in Aerospace Physiology Program will
actively participate in the Aerospace Physiology Journal Club each Fall
and Spring semester that they are registered for classes. Students will
present recent papers that are seminal for the understanding of
Aerospace Physiology. Papers will be chosen by the Director of the
Journal Club, Dr. Jessica Taylor. All students are expected to have read
the papers and be prepared to discuss them at the meeting of the
Journal Club. The Journal Club will meet 5 times fall semester (twice in
September and October and once in November) and 5 times spring
semester (twice in February and March and once in April). This Journal
Club was initiated Fall Semester 2022 for interested students in the
MSMP program.

*** These courses are under development

Concentration/Track/Field of Study

Does this program have any concentrations?

No

Program Learning Outcomes

Program Learning Outcomes

	Learning Outcome
Outcome 1	The learning outcome of the MS in Aerospace Physiology program is to prepare students for careers in the fields listed above or to enhance the backgrounds of those who are already working in these fields so that they can be more effective in fulfilling their responsibilities. At the end of this program, students should be ready to take and pass the Aerospace Medical Association (AsMA) Board Certification Examination in Aerospace Physiology and become a Board Certified Aerospace Physiologist. In this examination, students must demonstrate competency in the characteristics of the atmosphere, acceleration, spatial disorientation, and the physiology of decompression, thermos-regulation, hypobarics, respiration, and cardiovascular function. Additional competencies in operational topics such as positive pressure breathing, noise, and LASER radiation must also be demonstrated.

Attachments

Attach File (optional)

Attachment #1 CVs.pdf
Attachment #3 Needs Survey.pdf
Attachment #2 Course Descriptions.pdf
Aerospace Physiology MS.pdf
Faculty Matrix.pdf
Boron_LOS_Aerospace Physiology_MS.pdf
Gerson_LOS_Aerospace Physiology_MS.pdf
Resource_Review_MS_AeroPhysiol_Commentary.docx
MS_AeroPhysiol.xlsx
Resource_Review_MS_AerospacePhysiol.docx

End of Initiator Submission (save or submit at bottom of form)

Library Resources

Library Review

To be completed by Library staff

Report prepared by [librarian]

Thomas W. Hayes, MLS

Minimum additional resources

Current staffing is adequate

Yes

Library Technology resources

None

Library Content resources

1,094 titles in print and electronic; 60 of the top 76 journals; fully adequate database coverage.

Adequacy of current content resources

Books

Fully adequate

Journals

Partially adequate

Additional resources required

16 titles

One-time Costs (\$)

\$34,622

Recurring Costs (\$)

\$3,500

Databases

Fully adequate

Media

Fully adequate

Total One-time Costs (\$)

\$34,622

Total Annual Recurring Costs (\$)

\$3,500

Do you support this proposal?

Yes

Key: 438

Summary of Committee on Appointments, Promotions, and Tenure Activities		
		2022-2023
PROMOTIONS AND TENURE FOR FACULTY AT CWRU SOM		
	<u>For Promotion to Professor (Tenured)</u>	
	nominated	6 (1F, 5M)
	initial positive CAPT rec	6 (1F, 5M)
	appeals	0 (0F, 0M)
	successful appeals	0 (0F, 0M)
	final positive CAPT rec	6 (1F, 5M)
	Dean's rec	6 (1F, 5M)
	Provost & final rec	6 (1F, 5M)
	% successful	6 of 6 = 100%
	<u>For Promotion to Professor Non-Tenure Track</u>	
	nominated	34 (14 F, 20 M)
	initial positive CAPT rec	33 (14 F, 19 M)
	appeals	1 (0F, 1M)
	successful appeals	1 (0F, 1M)
	final positive CAPT rec	34 (14 F, 20 M)
	Dean's rec	34 (14 F, 20 M)
	Provost & final rec	34 (14 F, 20 M)
	% successful	34 of 34 = 100%
	<u>For Award of Tenure</u>	
	nominated	5 (2F, 3M)
	initial positive CAPT rec	5 (2F, 3M)
	appeals	0 (0F, 0M)
	successful appeals	0 (0F, 0M)
	final positive CAPT rec	5 (2F, 3M)
	Dean's rec	5 (2F, 3M)
	Provost & final rec	5 (2F, 3M)
	% successful	5 of 5 = 100%
	<u>For Promotion to Associate Prof in Tenure Track</u>	
	nominated	4 (2F, 2M)
	initial positive CAPT rec	4 (2F, 2M)
	appeals	0 (0F, 0M)
	successful appeals	0 (0F, 0M)
	final positive CAPT rec	4 (2F, 2M)
	Dean's rec	4 (2F, 2M)
	Provost & final rec	4 (2F, 2M)
	% successful	4 of 4 = 100%

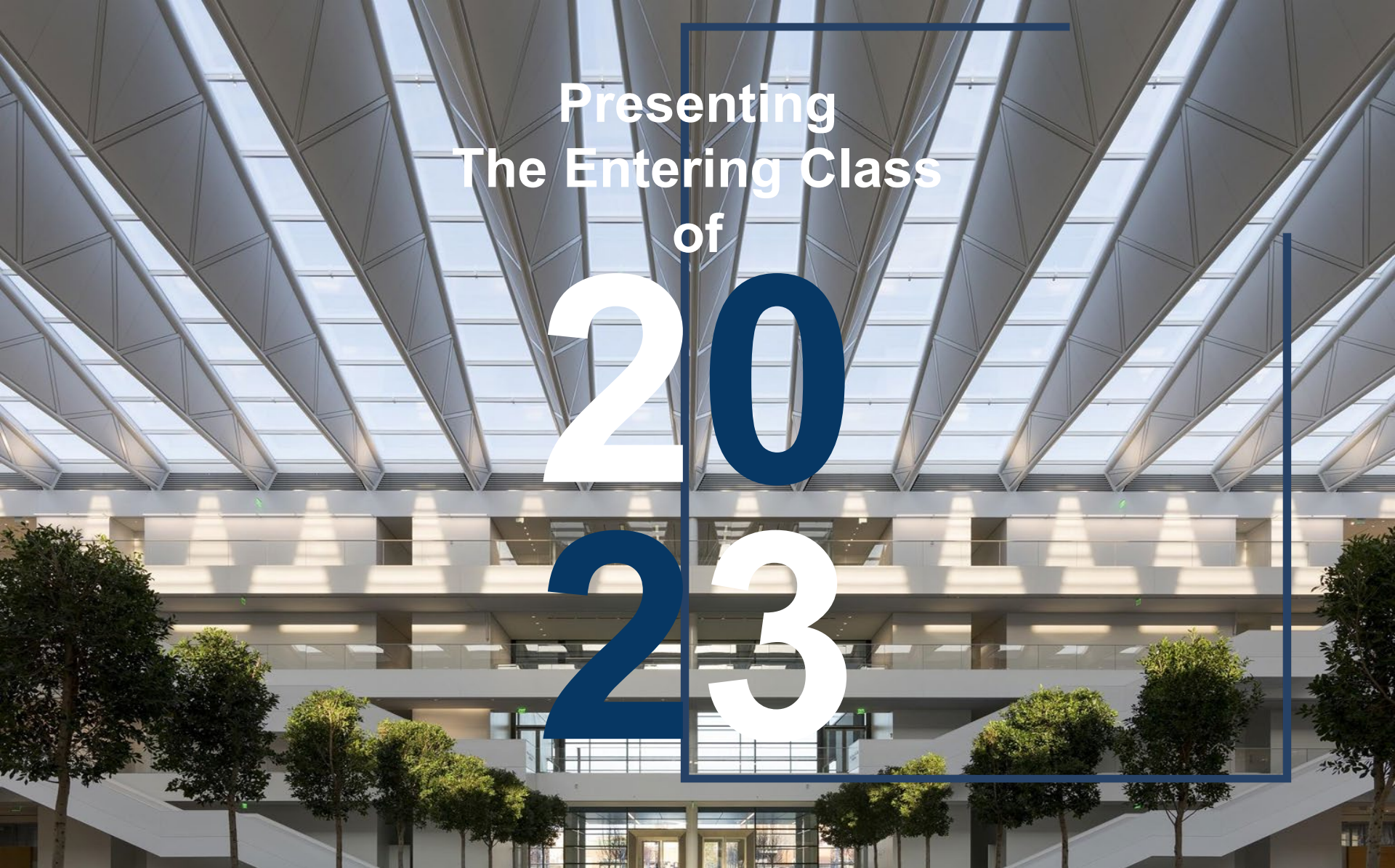
	<u>For Promotion to Associate Prof in Non-Tenure Track</u>	
	nominated	101 (34F, 67M)
	initial positive CAPT rec	92 (32F, 60M)
	appeals	7 (1F, 6M)
	successful appeals	7 (1F, 6M)
	final positive CAPT rec	99 (33F, 66M)
	Dean's rec	99 (33F, 66M)
	Provost & final rec	99 (33F, 66M)
	% successful	99 of 101 = 98%
	Overall Promotion and Tenure	148 of 150 = 99%
	<i>*applications withdrawn before submission to the Dean not included</i>	

2021-2022	2020-2021	2019-2020	2018-2019	2017-2018
8 (1F, 7M)	10 (2F, 8M)	12 (5F, 7M)	6 (2F, 4M)	6 (3F, 3M)
7 (1F, 6M)	10 (2F, 6M)	10 (3F, 7M)	5 (2F, 3M)	6 (3F, 3M)
0 (0F, 0M)	1 (0F, 1M)	2 (2F, 0M)	0	0
0 (0F, 0M)	1 (0F, 1M)	2 (2F, 0M)	0	0
7 (1F, 6M)	10 (2F, 7M)	12 (5F, 7M)	5 (2F, 3M)	6 (3F, 3M)
7 (1F, 6M)	10 (2F, 7M)	12 (5F, 7M)	5 (2F, 3M)	6 (3F, 3M)
7 (1F, 6M)	10 (2F, 7M)	12 (5F, 7M)	5 (2F, 3M)	6 (3F, 3M)
7 of 8 = 88%	9 of 10 = 90%	12 of 12 = 100%	5 of 6 = 83%	6 of 6 = 100%
37 (17 F, 20 M)	35 (13 F, 22 M)	30 (7 F, 23 M)	33 (12 F, 21 M)	33 (9 F, 24 M)
35 (15 F, 20 M)	31 (13 F, 18 M)	26 (6 F, 20 M)	27 (11 F, 16 M)	30 (8 F, 22 M)
2 (2F, 0M)	4 (0F, 4M)	3 (1F, 2M)	3 (0F, 3M)	1 (1 F, 0 M)
2 (2F, 0M)	4 (0F, 4M)	3 (1F, 2M)	3 (0F, 3M)	1 (1 F, 0 M)
37 (17 F, 20 M)	35 (13 F, 22 M)	29 (7 F, 22 M)	30 (11 F, 19 M)	31 (9 F, 22 M)
37 (17 F, 20 M)	35 (13 F, 22 M)	29 (7 F, 22 M)	30 (11 F, 19 M)	31 (9 F, 22 M)
37 (17 F, 20 M)	35 (13 F, 22 M)	29 (7 F, 22 M)	30 (11 F, 19 M)	31 (9 F, 22 M)
37 of 37 = 100%	35 of 35 = 100%	29 of 30 = 97%	30 of 33 = 91%	31 of 33 = 94%
6 (1F, 5M)	9 (3F, 6M)	7 (1F, 6M)	6 (0F, 6M)	10 (0F, 10M)
6 (1F, 5M)	8 (3F, 5M)	7 (1F, 6M)	5 (0F, 5M)	5 (0F, 5M)
0 (0F, 0M)	1 (0F, 1M)	0	1 (0F, 1M)	4 (0F, 4M)
0 (0F, 0M)	1 (0F, 1M)	0	1 (0F, 1M)	2 (0F, 2M)
6 (1F, 5M)	9 (3F, 6M)	7 (1F, 6M)	6 (0F, 6M)	7 (0 F, 7 M)
6 (1F, 5M)	9 (3F, 6M)	6 (1F, 5M)	6 (0F, 6M)	7 (0 F, 7 M)
6 (1F, 5M)	9 (3F, 6M)	6 (1F, 5M)	6 (0F, 6M)	7 (0 F, 7 M)
6 of 6 = 100%	9 of 9 = 100%	6 of 7 = 86%	6 of 6 = 100%	7 of 10 = 70%
5 (2F, 3M)	7 (2F, 5M)	4 (2F, 2M)	9 (0F, 9M)	13 (3F, 10M)
4 (2F, 2M)	6 (2F, 4M)	4 (2F, 2M)	6 (0F, 6M)	12 (3F, 9M)
1 (0F, 1M)	1 (0F, 1M)	0	1 (0F, 1M)	1 (0F, 1M)
1 (0F, 1M)	1 (0F, 1M)	0	1 (0F, 1M)	1 (0F, 1M)
5 (2F, 3M)	7 (2F, 5M)	4 (2F, 2M)	7 (0F, 7M)	13 (3F, 10M)
5 (2F, 3M)	7 (2F, 5M)	4 (2F, 2M)	7 (0F, 7M)	13 (3F, 10M)
5 (2F, 3M)	7 (2F, 5M)	4 (2F, 2M)	7 (0F, 7M)	13 (3F, 10M)
5 of 5 = 100%	7 of 7 = 100%	4 of 4 = 100%	7 of 9 = 78%	13 of 13 = 100%

96 (45F, 51M)	68 (32F, 36M)	50 (19F, 31M)	66 (28F, 38M)	52 (28F, 24M)
90 (42F, 48M)	64 (31F, 33M)	46 (18F, 28M)	59 (25F, 34M)	48 (26F, 22M)
1 (1F, 0M)	3 (1F, 2M)	1 (0F, 1M)	4 (2F, 2M)	2 (1F, 1M)
1 (1F, 0M)	3 (1F, 2M)	0 (0F, 0M)	4 (2F, 2M)	1 (0F, 1M)
91 (43F, 48M)	67 (32F, 35M)	46 (18F, 28M)	63 (27F, 36M)	49 (26F, 23M)
91 (43F, 48M)	67 (32F, 35M)	46 (18F, 28M)	63 (27F, 36M)	49 (26F, 23M)
91 (43F, 48M)	67 (32F, 35M)	46 (18F, 28M)	63 (27F, 36M)	49 (26F, 23M)
91 of 96 = 95%	67 of 68 = 96%	46 of 50 = 92%	63 of 66 = 95%	49 of 52 = 94%
146 of 152 = 96%	127 of 129 = 98%	97 of 103 = 94%	111 of 120 = 93%	106 of 114 = 93%

2016-2017	2015-2016	2014-2015
9 (2F, 7M)	2 (1F, 1M)	8 (1F, 7M)
9 (2F, 7M)	2 (1F, 1M)	8 (1F, 7M)
0	0	0
0	0	0
9 (2F, 7M)	2 (1F, 1M)	8 (1F, 7M)
9 (2F, 7M)	2 (1F, 1M)	8 (1F, 7M)
8 (1F, 7M)	2 (1F, 1M)	8 (1F, 7M)
8/9 = 88.9%	2 of 2 = 100%	8 of 8 = 100%
32 (9 F, 23 M)	22 (3 F, 19 M)	22 (3 F, 19 M)
29 (7 F, 22 M)	22 (3 F, 19 M)	21 (3F, 18M)
1 (1 F, 0 M)	0	1 (0 F, 1M)
1 (1 F, 0 M)	0	1 (0F, 1M)
30 (8 F, 22 M)	22 (3 F, 19 M)	22 (3F, 19M)
30 (8 F, 22 M)	22 (3 F, 19 M)	22 (3F, 19M)
30 (8 F, 22 M)	22 (3 F, 19 M)	22 (3F, 19M)
30/32 = 93.8%	100%	100%
20 (9F, 11M)	9 (3F, 6M)	9 (3F, 6M)
16 (6F, 10M)	8 (2F, 6M)	7 (3F, 4M)
3 (2F, 1M)	1	0
2 (1F, 1M)	1	0
18 (7 F, 11 M)	9 (3F, 6M)	7 (3F, 4M)
16 (6 F, 10 M)	9 (3F, 6M)	6 (3F, 3M)
16 (6 F, 10 M)	9 (3F, 6M)	6 (3F, 3M)
16/20 = 80%	100%	6 of 9 = 66.7%
16 (6F, 10M)	11 (4F, 7M)	10 (4F, 6M)
14 (5F, 9M)	11 (4F, 7M)	8 (4F, 4M)
2 (1F, 1M)	0	0
1(1F. 0M)	0	0
15 (6F, 9M)	11 (4F, 7M)	8 (4F, 4M)
15 (6F, 9M)	11 (4F, 7M)	8 (4F, 4M)
15 (6F, 9M)	11 (4F, 7M)	8 (4F, 4M)
15/16 = 93.8%	100%	80%

42 (21F, 21M)	58 (25F, 33M)	38 (13F, 25M)
34 (18F, 16M)	53 (23F, 30M)	35 (11F, 24M)
3 (2F, 1M)	3 (2F, 1M)	1 (1F, 0M)
2 (2F, 0M)	3 (2F, 1M)	1 (1F, 0M)
36 (20F, 16M)	56 (25F, 31M)	36 (12F, 24M)
36 (20F, 16M)	56 (25F, 31M)	36 (12F, 24M)
36 (20F, 16M)	56 (25F, 31M)	36 (12F, 24M)
36/42 = 85.7%	56/58 = 96.6%	36/38 = 94.7%
96 of 110 = 87.3%	90	87



Presenting
The Entering Class
of

20
23

Dr. Lina Mehta
Associate Dean for Admissions

Application Statistics

Total Applications Nationally: 50,061 (-5%)

Total Applications to CWRU: 8,615(+6%, 15% of US apps)

2023 Entering Class Size: 216

University Program

- Applications: 7,345
- Interviews: 797
- Matriculants: 172

CCLCM

- Applications: 1,690
- Interviews: 205
- Matriculants: 32

MSTP

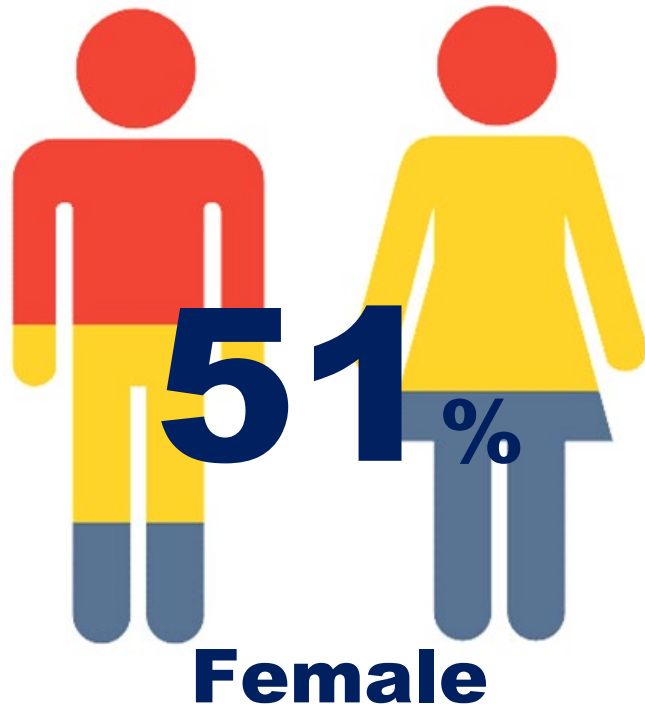
- Applications: 440
- Interviews: 103
- Matriculants: 12



SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

Demographics



Age Range: 21-44



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Asian	Alone	77	Other		Alone	6
	In Combination	10			In Combination	3
	Alone or in Combination	87				
Black or African American	Alone	11			Alone or in Combination	9
	In Combination	6				
	Alone or in Combination	17	White	Alone		73
Hispanic, Latino, or of Spanish Origin	Alone	13		In Combination		18
				Alone or in Combination		91
	In Combination	7				
	Alone or in Combination	20	Unknown			10
American Indian or Alaska Native	Alone	1	Data includes duplicate information in each category			
	In Combination	1				
	Alone or in Combination	2				

Unduplicated Total Matriculants	216
--	------------

Demographics

LGBTQ: 27

First Generation College: 19

Rural Areas of US: 11

Military Service: 1

Nontrad (> or = 25 yrs old): 43

Graduated from college more than 1 year ago: 180



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UNIVERSITY

86 Different Colleges & Universities



27



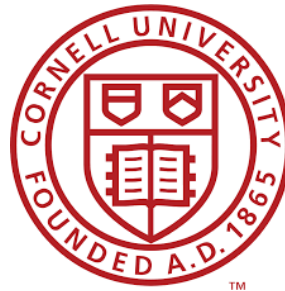
17



13



10



8



8



THE OHIO STATE
UNIVERSITY

7



6



EMORY
UNIVERSITY

5



5



5

Complete List of Schools

American University- 1
Auburn University- 1
Barnard College- 1
Brigham Young University- 2
Brown University- 1
California State University San Bernardino- 1
Carleton College- 1
Carnegie Mellon University- 1
Case Western Reserve University- 27
Central Michigan University- 1
Chapman University- 1
Clemson University- 1
Colby College- 1
Colgate University- 2
Colorado State University- 2
Columbia University- 3
Cornell University- 8
Dartmouth College- 3
Davidson College- 1
Duke University- 5
Earlham College- 1
Emory University- 5
Florida Institute of Technology Melbourne-1
George Washington University- 1
Georgetown University- 1
Georgia Institute of Technology- 2
Hamilton College- 1
John Carroll University- 1
Johns Hopkins University- 17
Loyola University Chicago- 1
Massachusetts Institute of Technology- 1
McGill University- 1

Miami University- 1
Northeastern University- 2
Northwestern University- 1
Occidental College- 1
Penn State University- 1
Pepperdine University- 1
Princeton University- 2
Rice University- 2
Rockhurst University- 1
Rutgers University- 1
Southern Methodist University- 1
St. Olaf College- 1
Stanford University- 1
Tennessee Technological University- 1
The Ohio State University- 7
The University of Alabama- 1
The University of Alberta- 1
University of California- Berkeley- 6
University of California- Irvine- 1
UCLA- 10
University of Cal., San Diego- 1
University of Charleston- 1
University of Cincinnati- 1
University of Colorado-Boulder- 1
University of Connecticut- 1
University of Florida- 5
University of Idaho- 1
University of Illinois at Chicago- 4
University of IL-Urbana Champaign- 1
University Maryland- 1
University of Miami- 1
University of Michigan- 13

University of Minnesota Twin Cities- 1
University of North Carolina Chapel Hill- 1
University of Notre Dame- 5
University of Oregon- 1
University of Pennsylvania- 4
University of Pittsburgh- 3
University of Southern California- 2
University of Toledo- 1
University of Virginia- 1
University of Washington- 1
University of Wisconsin- Madison- 4
University of Vanderbilt University- 3
Villanova University- 1
Virginia Military Institute- 1
Wake Forest University- 1
Washington and Lee University- 1
Washington University in St. Louis- 8
Wellesley College- 1
Wesleyan University- 2
West Virginia University- 1
Williams College- 2
Yale University- 1

Majors and Graduate Degrees

Undergraduate Degrees

Animal Science, Anthropology, Biochemistry, Bioengineering, Biological Engineering, Biology, Biomedical Engineering, Biomedical Science, Biomolecular Science Biophysics, Business Administration, Cell and Molecular Biology, Cellular Biology, Chemical Biology, Chemical Engineering, Chemistry, Classics, Cognitive Science, Cognitive Studies, Comparative Literature, Computational and Systems Biology, Computer Science, Dance, Economics, Engineering, English, Environmental Biology, Environmental Science, Environmental Studies, Evolutionary Anthropology, Evolutionary Biology, Film Studies; Finance, Food Science, Genetics and Genomics, Exercise Science, Health and Society; Health Sciences, Health Systems and Population Health, Healthcare Management and Policy, Hispanic Literatures and Cultures, Human Health, Human Physiology, Integrated Health Studies, Interdisciplinary Studies, Literature, Materials Science, Mathematics, Medical Sciences Medicine, Science, and the Humanities, Molecular and Cellular Biology, Molecular Environmental Biology, Molecular, Cell, and Developmental Biology, Movement Science, Music, Psychobiology, Natural Sciences, Neurobiology, Neuroscience, Neuroscience and Behavior, Petroleum Engineering, Philosophy, Psychological and Brain Sciences, Physics, Psychology, Public Health, Sociology, Spanish, Statistics, Toxicology, Science, Technology and Society, Social Policy Analysis, Sports Medicine, Behavioral Biology

Graduate Degrees - 30

Engineering
Chemical Engineering
Biomedical Engineering
Medical Physiology
Healthcare Management
Chemistry
Accounting
MBA
MPH in Epidemiology
Bioethics
MPH
Nursing (Nurse Practitioner)
Liberal Studies
Biostatistics
Physiology
Population and Family Health
Molecular Microbiology &
Immunology
Population Health Sciences
Law
Education
Anatomy
Materials Science



2

**Chemistry,
Biomedical
Engineering**

45

Double Majors

2

Triple Majors

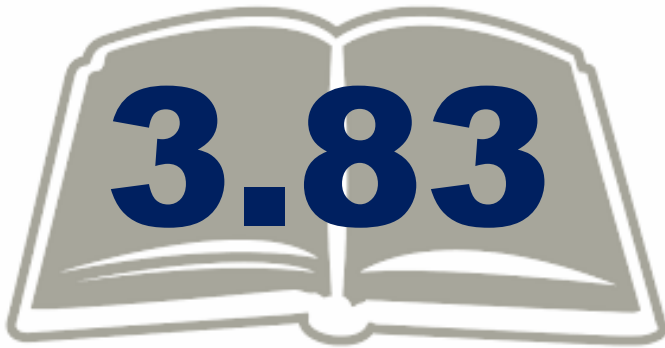
JD



1



Academic Credentials



Average Cumulative GPA

Cumulative GPA

Range: 2.87-4.0

Median: 3.88

Mode: 4.0

*National Avg. Matriculating Student Cumulative GPA (2022): 3.74
(SD = .25)*

Science GPA

Range: 2.43-4.00

Median: 3.86

Mode: 4.0

*National Avg. Matriculating Student Science GPA (2022):
3.67
(SD = .31)*



Average Science GPA



SCHOOL OF MEDICINE

CASE WESTERN RESERVE
UNIVERSITY

Academic Credentials

MCAT

n= 198

Average: 518 (95%)

Median: 518 (95%)

Mode: 517 Range: 505-527

National Matric. Student Avg. 2022 = 511.9 (80-83%)
(SD = 6.6)



SCHOOL OF MEDICINE

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UNIVERSITY

Work/Extracurricular/Academic Activities



198

Research Experiences



21

Artistic Endeavors

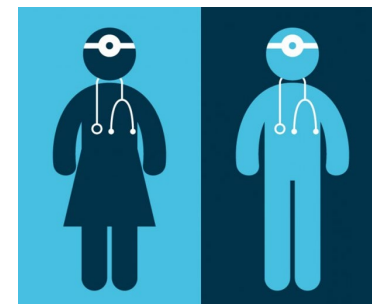


137

Volunteer Medical Experiences

120

Paid Medical Experiences



148

Physician Shadowing,
Clinical Observation



54

Publications



96

Teaching/Tutoring/T
A



11

Intercollegiate Athletics



94

Leadership Experiences

145

Other Volunteer
Experiences



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CASE WESTERN RESERVE
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