

**Faculty Council Meeting
Meeting Minutes
April 28, 2025**

Timing	Agenda Item	Presenter	Summary of discussion	Action items/Motions/ Votes
4:02-4:08PM	Chair's Remarks and Announcements	Alan Levine Chair of Faculty Council	<p>The chair called the meeting to order at 4:02PM. Dr. Levine explained that the previous climate survey had a poor response from the affiliate hospital faculty and that many of the survey questions were not appropriate for clinical faculty. Over the next few weeks, a new survey will be going out and he is soliciting comments to assist in developing that survey.</p> <p>Dr. Levine noted that that NEC is working hard to fill all of the empty slots (Chair-Elect, Faculty Council Steering Committee, and the standing committees). He asked the council members to encourage their constituents about getting involved in Faculty Council at many levels.</p> <p>When asked to elaborate on the Chair-Elect requirements in terms of how long someone has left Faculty Council or restrictions on who can run for that position, Dr. Levine explained that you must be a current Faculty Council member. If your appointment ends on July 1, you are still eligible for Chair-Elect. For the openings on the Faculty Council Steering Committee, you must be a current Faculty Council member and your appointment cannot end on July 1 2025; you must be a voting member of Faculty Council.</p>	
4:08-4:10PM	Approval of March 24 Faculty Council Meeting Minutes	Alan Levine	Edits were suggested to the March 24 meeting minutes; it was revised and posted to BOX.	With no objections, the revised March Faculty Council Meeting Minutes were approved by general consensus.
4:10-4:25PM	Faculty Council Steering Committee Report	Anastasia Rowland-Seymour	Dr. Rowland-Seymour provided a summary of topics covered at the April 7 Faculty Council Steering Committee Meeting. The committee had the opportunity to hear from Paul Bristow about the compensation plan (to be shared by the Dean at a later date) and spent the majority of the meeting discussing the plan and the incentive portion and what that would mean in terms of	

	Faculty Council Steering Committee Report (continued)		<p>percentages of faculty that would be affected by this and the amount that would be saved over the course of the year. They discussed two proposals (one sabbatical and one emeritus appointment). The committee discussed what the faculty response should be to the threat to the university and academic freedom, and whether it might be beneficial for the university to partner with other universities to protect themselves. No clear resolution was brought forth. The Dean has stated that he will obey the law and we will not give up our principles following that law.</p> <p>Alan Levine briefly reiterated the three questions addressed by the Dean in the Dean's Third Meeting of Faculty on April 22. Paul Bristow added that he and Dean Gerson are moving forward with a draft model and do plan to get communication out this week to the chairs. He noted that the Dean emphasized last Tuesday that we have 3,500 faculty and 200-300 basic science faculty paid by CWRU. When we talk about salary both involved in new programs in SOM, it is a very small percentage.</p>	
4:25- 4:32PM	Senate/ExCom Report	Matthias Buck	<p>Dr. Buck reported that the Senate ExCom discussed the merging and splitting of departments. The topic of post-doctoral healthcare came back from the senate committee on graduate studies, which Dr. Buck had presented to a week or two earlier. They decided not to revisit the current policies, so it stays in place. Post docs and faculty development merged with the Post Doc Office. It has not yet been determined which committee of the faculty senate will look after the post docs.</p> <p>The hospital-based faculty committee on tenure looked at practices at UH and MHS concerning tenured faculty members. This committee closed the loop looking at the VA and came up with the same recommendation that tenured faculty members should have an appointment in a basic science department in the medical school or General Medical Sciences and benefits maintained when faculty moves from a hospital to a SOM center. The Faculty Committee on Women presented some changes to the faculty handbook on parental leave. Nineteen weeks of paid parental leave can be shared between two parties and across two semesters.</p>	

4:32-4:38PM	Annual Report for the Program Review Committee	Nick Ziats	<p>Dr. Ziats explained that the Program Review Committee is a standing committee of faculty that serves as a college curriculum committee, in the CWRU approval matrix, overseeing/reviewing major changes to existing programs, and presenting their recommendations to Faculty Council. The Program Review Committee is distinct from the Curriculum Review Committee which is tasked with reviewing new courses.</p> <p>Dr. Ziats listed the committee members and noted that the Program Action Form is accessible on-line. The workflow follows the new on-line Program Action Form. He showed the sequence for the flow approval process for new programs and presented a brief overview of the programs reviewed by the committee in 2024-2025.</p>	
4:38-4:47PM	Remarks by Dean Gerson	Stan Gerson	<p>Dean Gerson noted a conversation in the last half hour with the country's deans of schools of medicine talking about accreditation of medical schools, both executive orders, and the effort that is beginning for LCME to reconsider its approach to the accreditation process.</p> <p>The Dean held a town hall with medical students to discuss what has happened since January and to get feedback from any Faculty Council members who attended. A brief update of the schools was provided and they went over the impact of the executive orders, the restructure of DEI, and education programs impact on perceived and real education in NIH funding, interview processes, and compensation and transparency of communication for the Dean's Office to the entire faculty. He noted that while the school and the university continue with ongoing contingency planning, this cannot be made public.</p> <p>Each of our component institutions has a threatened source of funding for its research and education mission. While all are affected differently, logically, the SOM is the most affected of the five campuses, and even more so than the university, because of the nature of its funding -- external funding being exclusively NIH support. Given the anxiety generated for foreign-based students, the composition of our incoming classes, at every level from outside the U.S, has dwindled rapidly, which obviously affects the competitiveness of the programs, the number of</p>	

	Remarks by Dean Gerson (continued)		matriculating students, and therefore our budgets and resources. While the LCME gave us 6-7 items of concern; it is an improvement since, typically, it has been 15-16.	
4:47-5:11PM	Research Updates at MHS	John Chae	<p>The Center for Cancer Research has experienced tremendous growth in the last 7 years. They have 10 investigators; all members of the Case Comprehensive Cancer Center covering areas of research. MHS is heavily invested in cancer research. The Vector and Cellular GMP Lab (opened in March 2023) for under-resourced populations.</p> <p>The Center for Cancer Research is the smaller of the three groups and is well funded. They launched 7 core facilities in February 2024. Dr. Chae provided a brief overview of the current NIH grants. He noted that two grants were recently terminated due to current executive orders.</p> <p>The 2024 Annual Report Summary indicated that there are 37 active grants where MHS ~17 core faculty serve as PI, co-PI or site PI totaling over \$50 million dollars to MetroHealth, with 8 new grants in 2024. Twenty-nine additional grants are co-I (an additional \$26 million dollars). The summary indicated there were 164 peer-reviewed publications and 85 national presentations with 17 as invited national presentations. Fifty of these publications had Dr. Kaelber as a co-author.</p> <p>The Institute for Rehabilitation Research is led by a Steering Committee of 7 investigators (from translation from basic sciences to implementation science). They are funded primarily by NIH but also from other federal and state agencies, as well as foundations. The Blue Ridge Institute for Medical Research acknowledged Case Western Reserve University & Cleveland Clinic Lerner College of Medicine as number one in the nation.</p> <p>The Institute for Rehabilitation Research has developed a non-opioid treatment approach to chronic pain. They developed a technique where high frequency blocks nerve signals and pain providing relief, which has received FDA clearance.</p> <p>Dr. Levine noted that the SOM does not have the resources within the SOM to bail out the labs, especially if the research being conducted is not likely to be refundable in the current</p>	

	Research Updates at MHS (continued)		environment. It is in everyone's best interest to find other funding. He clarified that at the time of appointment to the lab of the SOM grad students, the principal investigator and the chair obligate themselves to a stable financial support for that grad student until graduation. If the lab finds itself having to make the difficult decision of technical vs. grad student, the last to go is the grad student. It is then incumbent upon the department chair to find funding if resources have been exhausted. We support the grad student to graduation.	
5:11-5:31PM	Committee on Women and Minority Faculty New Charge and Name Change	Amy Hise Thomas Collins	<p>The Committee on Women and Minority Faculty is petitioning Faculty Council to change the committee's name to the Committee on Faculty and Community Representation. There would be a similar adjustment to some of the language in the charge to be in alignment university wide.</p> <p>Dr. Hise clarified that part of the changes were from a mandated 5-year review of the charge. Those changes reflected more accurately what they do as a committee. They wanted to change the charge in title to be in closer alignment with the rebranding of offices at the university level as well. They also wanted to reflect that their committee has discussed being inclusive of many different faculty groups, not limited to the narrow focus on our faculty. Dr. Collins noted that the Bylaws Committee has reviewed this, with some minor editing, but did not have any conflicts with the SOM bylaws or the faculty handbook, and therefore approved the changes.</p> <p>Dean Gerson commented that especially in this era, the role and value of this committee should be remarkably important to all within the SOM. His concerns were that it falls short. He wanted the committee to consider (formally or informally), and Faculty Council, and Bylaws to note, that nowhere in the document is it stated that the charge aligns with the SOM strategic plan, which includes a section containing very important specifics on academic community enhancement. It would seem, from the Dean's perspective, that the committee would be separated from the priorities, and support commitments and financial investments that are outlined in the strategic plan section on Academic Community Engagement & Advancement. He suggested a better alignment be indicated or the intention for that alignment be part of the charge for the committee.</p>	

	Committee on Women and Minority Faculty New Charge and Name Change (continued)		<p>Taking the Dean's request into account, Dr. Hise felt that it warranted further discussion with the committee and the Dean. Given we are at the tail end of this academic year, she proposed a vote on the revisions as presented to Faculty Council today with a plan to discuss this further with the committee and the Dean and possibly come back early in the fall with additional changes of the charge that would incorporate the Dean's recommendations. The membership of the committee is changing with new members, and her term as chair will be ending. At the next committee meeting they will plan to move forward on this topic.</p> <p>The name change and the charge (as written by the committee and modified by bylaws in BOX) is being asked for approval from Faculty Council today.</p> <p>After the motions were voted on, it was realized that Faculty Council no longer had quorum. A ballot will be sent out by email for a vote on the motions to approve the name change, charge update, and to revisit the charge.</p>	<p>A motion was made by a FC member and seconded by a FC member to change the name of the Committee on Women and Minority Faculty to the Committee on Faculty and Community Representation.</p> <p>Vote: 28 were in favor, 1 was against, and 0 abstained. No quorum – vote invalid</p> <p>A motion was made by a FC member and seconded by a FC member to approve the charge changes to the Committee on Faculty and Community Representation (formerly the Committee on Women and Minority Faculty)</p> <p>Vote: 23 were in favor, 4 was against, and 0 abstained. No quorum - vote invalid</p> <p>A motion was made by a FC member and seconded by a FC member to revisit the charge.</p> <p>Vote: 23 were in favor, 0 was against, and 2 abstained. No quorum - vote invalid</p>
5:31-5:35PM	New Business		The Council offered no new business to address.	
5:35-5:38PM	Good and Welfare		The goal of Faculty Council is to make sure that the strategic plan of the SOM is in line with what we think and make sure that Faculty Council is in line with the strategic plan.	
5:38PM	Adjourn		There being no further agenda items to address, the chair adjourned the meeting at 5:38PM.	

Present

Joshua Arbesman
Stephanie Barnes
Elvera L. Baron
Kavita Bhatt
Matthias Buck
Adrienne Callahan
Wayne Cohen-Levy
Patrick Collier
Thomas Collins

Marta Couce
Jeremiah Escajeda
Jessica Fesler
Calen Frolkis
Lisa Gelles
Stan Gerson
Andrew Harris
Amy Hise
Jason Ho

Sheronica James
Sadashiva Karnik
Venkatesh Kambhampati
Gaby Khoury
Alan Levine
Jennifer Li
Janice Lyons
Tani Malhotra
Claudio Milstein

Monica Montano
Nona Nichols
Rebecca Obeng
Sarah Ondrejka
Elizabeth Painter
Cyrus Rabbani
Rania Rayes-Danan
Deven Reddy

Ann Rivera
Anastasia Rowland-Seymour
Ben Schwan
Hemalatha Senthilkumar
Demitre Serletis
Simran Singh
Phoebe Stewart
Scott Williams

Not Present

Robert Abouassaly
Mohammad Ansari
Blaine (Todd) Bafus
Corinne Bazella
Maura Berkelhamer
Melissa Bonner
Hulya Bukulmez
Francis Caputo
Andy Chen
Meelie DebRoy
Mackenzie Deighen

Nadim El Chakhtoura
Keshava Gowda
Ramy Ghayda
Rachael Gowen
Bahar Bassiri Gharb
Emily Hamburg-Shields
Vanessa Ho
Susan Linder
Lia Logio
David Ludlow
Maeve Hopkins

Eric W. Kaler
Hung-Ying Kao
Sandeep Khanna
Camilla Kilbane
Qingzhong Kong
Christina Krudy
Bret Lashner
Stephen Leb
Ang Li
Shawn Li
Dan Ma

James Martin
Raman Marwaha
Amy McDonald
Christopher McFarland
Gillian Michaelson
Michael Moffitt
Ruben Olivares
Neal Peachey
Abigaill Raffner (Basson)
Elizabeth Rainbolt
Tamer Said

Paul Shaniuk
Matthew Sikora
Bryan Singelyn
Simran Singh
Michael Staudt
James (Jim) Strainic
Nami Tajima
Patricia Taylor
Saba Valadkhkan
Gregory Videtic
Raed Zuhour

Others Present

Shane Angus
Hope Barkoukis
John Chae

Nicole Deming
Mirela Dobre
Joyce Helton

Joey Kass (BGSO)
Vijaya Kosaraju

William Merrick
Lila Robinson

Ming Wan
Nick Ziats

**Faculty Council Meeting
Draft Meeting Minutes
Marh 24, 2025**

Timing	Agenda Item	Presenter	Summary of discussion	Action items/Motions/ Votes
4:02-4:12PM	Chair's Remarks and Announcements	Alan Levine Chair of Faculty Council	<p>The chair called the meeting to order at 4:02PM. Last fall Faculty Council voted to take Faculty Council to the affiliates. To date, Faculty Council meetings have been held at the CCLCM, MHS, and the VA with UH scheduled for April 28. Dr. Levine hoped that they continue this practice in the 2025-2026 Faculty Council schedule.</p> <p>The modified strategic plan has been drafted and is now available in BOX. Dr. Levine has been taking recommendations directly so he can receive, collate and then share them with the dean as one document. He encouraged everyone to review the strategic plan. It may be again modified once we have a clearer idea of forthcoming changes. The AAMC is contacting our faculty colleagues across the country asking them to provide stories of how the new NIH policies (in flux or happening right now) are impacting you, as a scientist, professor, clinician. Please share your stories with Dr. Levine.</p> <p>Dr. Levine learned in an email today that the Co-Director of the Center for Aids Research, joining alliance with the University of Pittsburgh, just found out that colleagues (leadership) he knows well had their R01 cancelled. Non-compete with the University renewal, competing renewal and funding are not happening – it was canceled midstream. He stressed that faculty need to stand together and be strong in their stance. He stressed again the importance of Faculty Council reps bringing what we do in Faculty Council to their constituents, and constituents input back to Faculty Council.</p>	
4:12-4:13PM	Approval of February 17 Faculty Council Meeting Minutes	Alan Levine	When polled, there were no edits to the February 17 Faculty Council Meeting minutes as posted in BOX.	With no objections, the February Faculty Council Meeting Minutes were approved by general consensus.

4:13-4:21PM	Faculty Council Steering Committee Report	Anastasia Rowland-Seymour	<p>Dr. Rowland-Seymour provided a summary of topics covered at the March 10 Faculty Council Steering Committee Meeting. When reviewing the emeritus applications, the committee was specifically looking for definition or designation that the faculty member had meritorious service to CWRU, and should be included in future applications. Discussion on whether or not faculty should compose a statement on the White House decisions and how we might improve that engagement and level of discussion. Would a task force be appropriate, moving forward, to consider specific actions, or should the proposal come first. The committee considered reaching out to department chairs to encourage more engagement with Faculty Council and faculty engagement and promotion criteria and the need for clarification of areas of excellence.</p> <p>The APT document should be introduced into bylaws by April 2025 at the latest. Dr. Levine suggested meeting with research leadership of the four affiliate hospitals to determine their criteria for promotion making sure the APT document reflects all of us.</p> <p>The survey coming out of the ad hoc FACE committee has been postponed for two weeks.</p>	
4:21-4:24PM	Senate/ExCom Report	Matthias Buck	<p>There has been progress at the Faculty Senate ad hoc committee on merging and splitting departments. They have formulated a policy document, based on policies that exist in the SOM, which will be coming shortly before the Senate. A special meeting of the ExCom (privileged and confidential) on recent government actions and talking points will be put in BOX. Post doc healthcare coverage has been turned over to the Graduate Education Committee</p>	
4:24-4:48PM	Presentation of Research at Cleveland Clinic	Donna Driscoll	<p>Dr. Driscoll (representing Dr. Erzurum) provided an overview of current research at the Cleveland Clinic; most is done on heart and vascular disease. They have added new positions (four new research associate chief positions) to enhance system sustainability as they move into new markets.</p> <p>CCLCM has a long history of partnership with CWRU. They recently celebrated the 20-year anniversary of CCLCM.</p> <p>The Ohio Discovery Corridor was launched last year facilitated</p>	

	Presentation of Research at Cleveland Clinic (continued)		<p>by a large number of investments from state and partner institutions as well as Jobs Ohio, allowing them to make connections that drive their shared goals of cutting-edge research, educating the next scientists and providing jobs in the communities. Two new buildings will open in January of 2026.</p> <p>The discovery accelerator accelerates the pace of science. Last year they started a program in Denmark as a fellowship exchange program for quantum and AI in biomedical and clinical applications.</p> <p>Ten years ago, they started the young investigator mentoring/coaching program where assistant staff assisted setting up labs and networking. They will have a coach for 6 years and many continue beyond that time. Career development workshops have been implemented and now have 4 faculty that assist.</p>	
4:48-4:56PM	<p>Remarks by Dean Gerson</p> <p>Government actions, the Dean notedwill be forthcoming, referring councilors to statements of the University president"</p>	Stan Gerson	<p>The Dean was on his way to a symposium in Taipei, and has recently visited the Florida site and Abu Dhabi where they are beginning their first class of fellows and clinical investigation. He stated that our faculty extend worldwide and Cleveland Clinic has major activity in that regard.</p> <p>These are tumultuous times and he is spending a considerable amount of time in focusing on how to manage it all. He is concerned at the NIH level that study sections slow down, council slowed down, and competitive renewals slowed down which could have a major impact resourcing our science. We all need to pay attention to that. When looking at the grant portfolio where can our internal funding come from. The Dean chatted with the chairs, John Chae, and Faculty Council requesting them to please bring this information back to their departments enabling a unified approach and help us to appreciate the individual issues all of us must pursue in this complex terrain. We know how to educate, publish, write grants and conduct research which needs to continue. The classic R01 could become the mainstay for our existence. Please continue to write that R01 and keep ourselves funded at the individual faculty level in business. Regarding recent government actions, the Dean noted that no statement has come from him and none will be forthcoming, referring councilors to statements of the University President.</p>	The Dean noted that while a town hall was held a couple of weeks ago, another one could be beneficial.

4:56-5:06PM	Agenda Items for the Dean's Third Meeting of Faculty		Faculty Council considered seven topics suggested as agenda items for the Dean's Third Meeting of Faculty. Faculty Council voted on all seven and the top three were forwarded to the Dean. They were: SOM strategic planning regarding the potential impact of DEI and FA reimbursement; compensation policy regarding base, merit, and incentive. Strategy and philosophy; and overall evaluation of leadership accountability and transparency with faculty in these rapidly changing times.	<p>A motion was made by a Faculty Council member and seconded by a Faculty Council member to vote on the seven suggested topics for the Dean's Third Meeting of Faculty.</p> <p>The top three votes were:</p> <ol style="list-style-type: none"> 1) Strategic Planning – DEI & F&A – 25/45 2) Compensation Policy – 19/45 3) Leadership Accountability and Transparency – 23/45
5:06-5:15PM	Bioethics CET-CT: Clinical Ethics, Graduate Certificate Program	Eileen Anderson Mark Aulisio	The proposal for the creation of a Bioethics CET-CT: Clinical Ethics, Graduate Certificate Program was presented to Faculty Council for review and approval. There being no further discussion, the motion was put to a vote.	<p>A motion was made by a Faculty Council representative and seconded by a Faculty Council member to approve the Bioethics CET-CT: Clinical Ethics, Graduate Certificate Program.</p> <p>Vote: 33 were in favor, 0 was against, and 2 abstained.</p> <p>The motion is approved.</p>
5:15-5:33PM	Annual Report for the Committee on Biomedical Research	Susann Brady-Kalnay	<p>Dr. Brady-Kalnay presented the annual report of the Committee on Biomedical Research. She noted that the Dean had asked them to assess what is being done with artificial intelligence in the SOM, and what can be done to improve the CWRU and affiliates IRB. She then presented an overview of the CBR meetings held in 2024.</p> <p>AI will be a large part of medicine in the future and needs to be approached correctly at the educational level. She explained how they plan to build generative AI-powered applications that will create tools that enhance teaching, learning, and clinical training. This approach would eliminate the need for individual student accounts and instead incur costs based on token usage.</p> <p>Resources were requested for a dedicated AI programmer at 50% FTE initially, to develop, refine, and maintain these applications.</p>	

	Annual Report for the Committee on Biomedical Research (continued)		<p>A course was developed, IBMS450 Data Science and AI in Biomedicine: Introduction and Applications which will prepare students for the evolving landscape of computational biology and its applications in molecular and biomedical research.</p> <p>Challenges include dealing with the large part of money that came from the NIH which is not flowing very quickly and how this will be handled. It is vital, and in everyone's interest, to coordinate quickly and not give back to the federal government funds they worked so hard to accrue. It is imperative to spend down their grants.</p> <p>Grace McComsey is tackling the issue of the IRB which she feels is vital to continue that research. They are working on models which will help them navigate this in a way that would explain why we think something is exempt, to be expedited or requires a full review, and then offer appropriate people to review.</p>	
5:33-5:51PM	Annual Report for the Committee on Women and Minority Faculty	Amy Hise	<p>Dr. Hise provided an overview of the composition of the committee and their activities and topics of discussion over the past year. Recently the committee had met with Dean Gerson and Cynthia Kubu, the Vice Dean for Faculty.</p> <p>Anti-DEI legislative efforts and plans of the SOM were meeting topics along with the DEI activities of the Faculty Senate committees CWRU ODEIE, SOM offices, the visibility of the LGBTQIA and their activities/resources. Salary equity, the Professional Conduct Committee, the climate survey, faculty development activities and opportunities, and services and resources for students with disabilities were discussed. The committee is currently revising their charge and are considering a proposed new name for their committee – the Committee on Faculty Community and Representation.</p> <p>Their ongoing meetings with chairs have been informative. Recurring themes included the importance of mentoring in one's personal leadership journey and having support of SOM leadership to support faculty from varied backgrounds. The upcoming report on salary equity will be discussed at their May meeting. The ad hoc FACE Committee is looking at similar questions and Dr. Hise will reach out to coordinate efforts with Matthias Buck.</p>	<p>Dr. Levine suggested that a 1–2-hour open forum, organized by her committee, could be beneficial for those who could be affected due to diversity or gender in their title. How do we bring an accounting, with that level of risk, together to come up with an approach so that everyone is hearing the same story and whatever available ideas you come up with disseminate across campus.</p>

5:51-5:52PM	New Business		None.	
5:52PM	Good and Welfare		Postponed in favor of time.	
5:52PM	Adjourn		There being no further agenda items to address, the chair adjourned the meeting at 5:52PM.	

Present

Joshua Arbesman	Lisa Gelles	Bret Lashner	Rebecca Obeng	Hemalatha Senthilkumar
Stephanie Barnes	Stan Gerson	Alan Levine	Ruben Olivares	Simran Singh
Elvera L. Baron	Keshava Gowda	Jennifer Li	Monica Montano	Paul Shaniuk
Maura Berkelhamer	Andrew Harris	Susan Linder	Nona Nichols	Matthew Sikora
Kavita Bhatt	Amy Hise	Lia Logio	Elizabeth Painter	Bryan Singelyn
Matthias Buck	Hung-Ying Kao	David Ludlow	Abigaill Raffner (Basson)	Michael Staudt
Adrienne Callahan	Sadashiva Karnik	Janice Lyons	Elizabeth Rainbolt	Phoebe Stewart
Andy Chen	Gaby Khoury	Tani Malhotra	Rania Rayes-Danan	Saba Valadkhkan
Thomas Collins	Camilla Kilbane	Claudio Milstein	Anastasia Rowland-Seymour	Scott Williams
Marta Couce	Qingzhong Kong	Nona Nichols	Ben Schwan	Raed Zuhour
Nadim El Chakhtoura				

Not Present

Robert Abouassaly	Mackenzie Deighen	Maeve Hopkins	James Martin	Deven Reddy
Mohammad Ansari	Jeremiah Escajeda	Sheronica James	Raman Marwaha	Ann Rivera
Blaine (Todd) Bafus	Jessica Fesler	Eric W. Kaler	Amy McDonald	Tamer Said
Corinne Bazella	Calen Frolkis	Venkatesh Kambhampati	Christopher McFarland	Demitre Serletis
Melissa Bonner	Ramy Ghayda	Sandeep Khanna	Gillian Michaelson	Simran Singh
Hulya Bukulmez	Rachael Gowen	Christina Krudy	Michael Moffitt	James (Jim) Strainic
Francis Caputo	Bahar Bassiri Gharb	Stephen Leb	Sarah Ondrejka	Nami Tajima
Wayne Cohen-Levy	Emily Hamburg-Shields	Ang Li	Neal Peachey	Patricia Taylor
Patrick Collier	Jason Ho	Shawn Li	Cyrus Rabbani	Gregory Videtic
Meelie DebRoy	Vanessa Ho	Dan Ma		

Others Present

Eileen Anderson	Susann Brady-Kalnay	Jimmy Efird	Cynthia Kubu	Lila Robinson
Shane Angus	Nicole Deming	Joyce Helton	William Merrick	Jiri Safar
Mark Aulisio	Donna Driscoll	Joey Kass (BGSO)	Karen Mulloy	Xiaomei Song

From: **Faculty Affairs** <facaffrs@case.edu>

Date: April 20, 2025

Subject: Call for Nominations: Faculty Council Chair-Elect, Steering Committee, and Nomination and Elections Committee

To: Faculty Council

Call for Nominations: Faculty Council Chair-Elect, Steering Committee, and Nomination and Elections Committee

Dear Faculty Council,

At the Faculty Council meeting on May 19, 2025, we will begin the process to elect the new 2025-2026 Faculty Council Chair-elect, members of the Faculty Council Steering Committee, and members of the Nomination and Elections Committee who also serve on the Faculty Council.

Faculty Council Chair-Elect - 1 seat available

Each year the Faculty Council shall elect a chair-elect from among current members of the Faculty Council. The chair-elect shall serve as vice-chair of the Faculty Council during the first year following election and succeed to the chair the following year. The chair of the Faculty Council (or the vice-chair of the Faculty Council in the absence of the chair) shall preside over the Faculty Council and shall be vice-chair of the Faculty of Medicine. Following completion of this term of office, the immediate past chair of the Faculty Council shall serve one additional year as a member of the Faculty Council and as a member of its Steering Committee. Candidates for chair-elect will also be candidates for the Steering Committee and will be so listed on ballots.

Faculty Council Steering Committee - 5 Seats available

Steering Committee meets once a month to set the agenda for the upcoming Faculty Council meeting.

Membership: Chair, Chair-elect, past-Chair, 5 members elected from Faculty Council roster
Meets the first Monday of each month from 3:30p-5:00p (additional meetings as needed), acts for the FC between regularly scheduled meetings, and sets the agenda for FC meetings. The Steering Committee also reviews all matters to be brought forward to the Faculty Council such as new programs of study, department mergers, department name change, changes to Standing Committees, and requests from the Dean's office, etc. It reviews CAPT recommendations "to ensure equity, adherence to published guidelines, and proper procedure." It also advises the Dean regarding: Sabbatical Requests, Emeritus appointments, Interim chair appointments, and other matters and/or items to be brought to the attention of the FC. The term is for one year ending June 30, 2026.

Nomination and Elections Committee - 3 Seats available

Nomination and Elections Committee. This committee shall consist of eleven members: the dean, the chair of the Faculty Council, the vice-chair of the Faculty Council, three other Faculty Council members, and five full-time faculty members who are not members of the Faculty

Council, one each from CWRU Basic Sciences, CCLCM, MHMC, UHCMC, and VAMC. The three Faculty Council members of the Nomination and Elections Committee shall be elected at large by the Faculty Council and shall serve for the duration of their terms as Faculty Council members. The five non-members of the Faculty Council shall be elected by ballot by the Faculty of the respective institution (CWRU Basic Sciences, CCLCM, MHS, UHCMC, and VAMC) and shall serve three-year terms. The chair will be elected from the members of the committee annually.

If you wish to be considered for a place on the ballot for Chair-Elect, Steering Committee, or the Nomination and Elections Committee, please submit your statement of interest by Friday, May 5, to Himika Dalia (hdalia@metrohealth.org) and Lila Robinson (ler6@case.edu). In addition, the FC Chair will also ask for nominations from the floor (consent of the FC member is required) at the meeting on May 19, 2025.

Sincerely,
Himika Dalia, Chair
Nominations and Elections Committee

Lila Robinson
Assistant Director for Faculty Affairs

Nicole M. Deming, JD, MA
Assistant Dean for Faculty Affairs

Program Review Committee

Report to Faculty Council

April 28, 2025

Nicholas P. Ziats, Ph.D., Chair
Professor of Pathology,
Biomedical Engineering and Anatomy



CASE WESTERN RESERVE
UNIVERSITY
School of Medicine

Program Review Committee- Charge

“The Program Review Committee shall consist of eight full-time members of the School of Medicine faculty, elected at-large by the full-time faculty, with no more than two members from a single department, and three ex officio members. The elected members shall serve staggered three-year terms, two or three new members being elected each year. Elected members may stand for re-election and serve at most two consecutive terms. All elected and ex officio members shall be voting members on the committee.”

- Standing Committee of the Faculty of Medicine
- Serves as the “college curriculum committee” in the CWRU approval matrix
- Reviews major changes to existing programs (>50%)
- Presents recommendations to the Faculty Council
- Review other non-MD programs at the Dean’s request
- Distinct from the Curriculum Review Committee that reviews new courses



Program Review Committee- Members, 2024-25

Updated 11/12/2024

2024-2025 Program Review Committee Members

Three elected members of the Faculty involved in graduate or undergraduate education in the School of Medicine

Krupa Parikh (2026)
Department of Medicine (MHS)
kparikh@metrohealth.org
kxp533@case.edu

Gurkan Bebek (2027)
Department of Nutrition (SOM)
gurkan@case.edu

Colin Drummond (2025)
Department of Biomedical Engineering CSE
colin.drummond2@case.edu

One School of Medicine faculty member serving on the University Faculty Senate Committee on Graduate Studies (ex officio)

Hope Barkoukis (2025)
Department of Nutrition
hope.barkoukis@case.edu

One School of Medicine faculty member serving on the University Faculty Senate Committee on Undergraduate Education (ex officio)

Vivien Yee (2025)
Department of Biochemistry
vcy2@case.edu

Five elected faculty members currently in charge of on-going graduate or undergraduate programs involving departments of the School of Medicine, elected by the Faculty of Medicine

CHAIR Nicholas Ziats (2027)
Department of Pathology
npz@case.edu

James Spilsbury (2025)
Department of Population and Quantitative Health Sciences
jcs5@case.edu

Aaron Goldenberg (2025)
Department of Bioethics
ajg10@case.edu

Christina Vargas (2026)
Department of Surgery
cvargas@metrohealth.org

Nicholas Zaorsky (2026)
Department of Radiation Oncology
nicholas.zaorsky@uhhospitals.org

The Vice Dean for Graduate Education (ex officio)

Mark Jackson, PhD
Department of Pathology
mwj7@case.edu

2025:
Three members leaving:
Drs. Spilsbury, Goldenberg
and Drummond, ex officio
members need reappointment



CASE WESTERN RESERVE
UNIVERSITY
School of Medicine

Program Review Committee- Process

- **The workflow follows the new online Program Action Form**
 - ▶ <https://case.edu/registrar/>
 - ▶ Faculty and Staff - Curriculum and Program Management
- **Office of the Provost**
 - ▶ <https://case.edu/provost/faculty-academics/approvals-and-governance-academic-programs-and-processes>
- **School of Graduate Studies**
 - ▶ <https://case.edu/gradstudies/faculty/faculty-guidelines/new-program-development-guidelines>



Program Review Committee- Approval Matrix

[illegible]

Program Review Committee- Flow Approval Process for New Programs

- Department Review
- Library Resources Review
- UTech - IT review
- **Program Committee Review**
- Faculty Council
- Dean's Review
- Faculty Senate - Graduate Studies Committee
- Faculty Senate
- President or Provost
- Board of Trustees
- Ohio Department of Higher Education

Program Review Committee- Reviews in 2024-25

- MS in Regenerative Medicine and Entrepreneurship
- MS in Molecular & Cellular Biology of Disease
- PhD in Bioethics
- Clinical Ethics Graduate Certificate
- MS in Clinical Research
- Public Health Minor
- PhD in Pharmacology
- MS in Biotechnology
- Health Informatics Graduate Certificate
- MS in Aerospace Physiology
- Bioethics and Medical Humanities Minor
- Nutrition and Metabolism Minor
- Nutrition for Women and Children Minor
- Nutrition Minor
- Nutrition and Lifestyle Medicine Minor
- Environmental Nutrition, Food Systems Sustainability and Health Minor



Program Review Committee

Questions?



CASE WESTERN RESERVE
UNIVERSITY
School of Medicine

Updated charge for the SOM Committee on Faculty Community and Representation Submitted to the Bylaws Committee 03/06/25, Discussed on 04/01/25

Purpose and Responsibilities:

The purpose of the Committee on Faculty Community and Representation is to act in an oversight and advisory capacity to identify factors that have impeded progress towards improving the status and well-being of all faculty in the School of Medicine and recommend ameliorative policies and actions to the School of Medicine (SOM) Faculty Council and Administration.

Specific charges:

1. To consult and advise on SOM and university efforts to assess the quality of the environment for the faculty community, which may include climate surveys and other institutional research projects.
2. To review and utilize existing data from university-wide, regional, and national surveys, national organizations and other research to identify goals for advancing faculty interests and enhanced engagement at the university.
3. To consult and facilitate dialogue on policies and programming in collaboration with relevant institutional offices, committees, and faculty groups.
4. The chair of this committee will be appointed by the Chair of the Faculty Council. This individual shall be expected to attend each Faculty Council meeting for the purpose of identifying issues related to the committee. If the chair cannot attend a meeting of the Faculty Council, another representative of the committee will attend as an ex-officio non-voting member.
5. To submit to the Faculty Council a comprehensive end-of-year report on the committee's activities and recommendations for the future.
6. At least once every five years, review the committee's charge and recommend changes, which will be shared with the SOM Bylaws Committee and then with the Faculty Council for review and approval.

Membership:

The Committee on Faculty Community and Representation shall be composed of nine full-time members of the Faculty of Medicine, two who hold primary appointments in basic science departments, two who hold primary appointments in clinical departments and five elected at-large. Membership should be diverse with regards to tenure and non-tenure track status. Committee members shall be elected by a vote of the full-time faculty, with no more than two members from a single department. The Dean may designate an appropriate administrative official to serve as an ex officio non-voting member. Additional ex officio members and guests may be invited by the committee chair. To ensure continuity, members shall serve staggered three-year terms. Members may stand for re-election and serve at most two consecutive terms. After a period of three years off the committee, former members may run for reelection to new term(s). The Chair of the Faculty Council shall appoint one of the elected members to serve on an annual basis as chair of the Committee after soliciting recommendations from its members.

Operation:

The committee shall hold virtual hybrid or in-person meetings at least six times per academic year and communicate regularly between meetings as needed. One member acting as a volunteer will record minutes of each meeting, which will be distributed and approved, with any agreed-upon modifications, before the next committee meeting.

Research Initiatives The MetroHealth System

John Chae, MD

EVP-Chief Academic Officer

The MetroHealth System

Senior Associate Dean for Medical Affairs

Professor of PM&R and BME

Case Western Reserve University



Vision

To be the national leader in translating innovations and discoveries to improve the health and quality of life of the community, especially for our most vulnerable populations

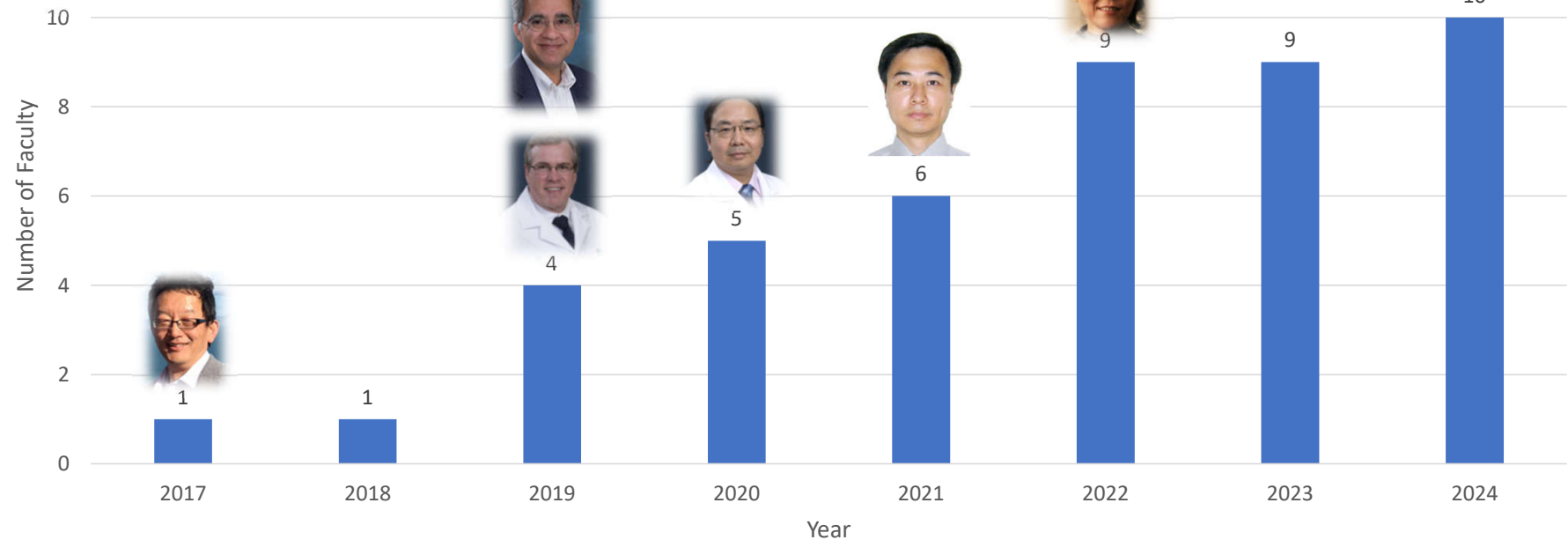
MetroHealth Research Institutes

Population Health Research Institute (PHRI)	Institute for Rehabilitation Research (IRR)	Center for Cancer Research (CCR)	Department Based Research	
Center for Healthcare Policy & Research (CHRP)	Center for SCI Rehabilitation Research	Program for Solid Tumor Malignancy Research	Anesthesiology	OBGYN
Center for Health Equity, Engagement, Education & Research (CHEER)	Center for Stroke and Brain Injury Rehabilitation Research	Program for Hematological Malignancy Research	Dentistry	Orthopedics
Center for Clinical Informatics Research & Education (CCIRE)	Center for Innovative Rehabilitation and Technology	Program for Cancer Clinical Research	Dermatology	Otolaryngology
			Emergency Med	Pathology
			Family Medicine	Pediatrics
			Geriatrics	PM&R
			Medicine	Psychiatry
			Neurology	Radiology
			Neurosurgery	Surgery/Trauma
			Nursing	

Center for Cancer Research



**CASE WESTERN RESERVE
UNIVERSITY**
Case Comprehensive
Cancer Center



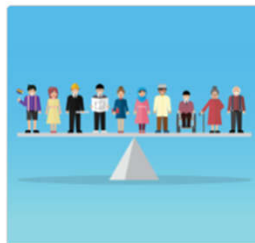
**CASE WESTERN RESERVE
UNIVERSITY**
School of Medicine

Center for Cancer Research

Areas of Research

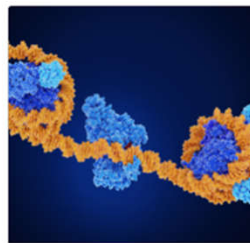


**CASE WESTERN RESERVE
UNIVERSITY**
Case Comprehensive
Cancer Center



Cancer Disparity

[LEARN MORE](#)



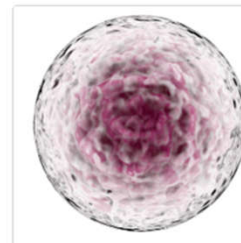
Cancer Epigenetics

[LEARN MORE](#)



Cancer Microbiome

[LEARN MORE](#)



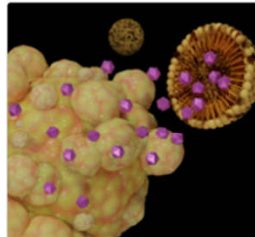
Cancer Stem Cells

[LEARN MORE](#)



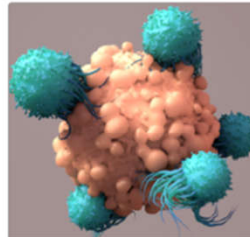
Tumor Metabolism

[LEARN MORE](#)



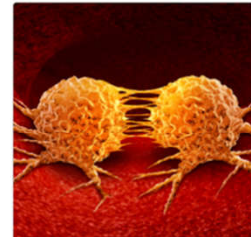
Cancer Therapeutics

[LEARN MORE](#)



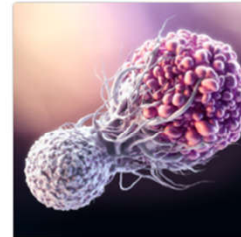
Cell Therapy

[LEARN MORE](#)



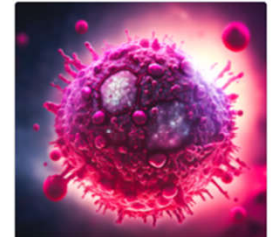
Tumor Etiology and
Metastasis

[LEARN MORE](#)



Tumor Immunology

[LEARN MORE](#)



Tumor Virology

[LEARN MORE](#)



**CASE WESTERN RESERVE
UNIVERSITY**
School of Medicine

Xiaojun (Roger) Shi, PhD

Science

SIGNAL TRANSDUCTION

Time-resolved live-cell spectroscopy reveals EphA2 multimeric assembly

Xiaojun Shi^{1,2}, Ryan Lingerak^{1,3}, Cameron J. Herting⁴, Yifan Ge^{5†}, Soyeon Kim^{1,2}, Paul Toth^{6†}, Wei Wang¹, Benjamin P. Brown⁷, Jens Meiler⁷, Khalid Sossey-Alaoui¹, Matthias Buck^{3,8}, Juha Himanen⁹, Dolores Hambardzumyan¹⁰, Dimitar B. Nikolov^{9*}, Adam W. Smith^{6§*}, Bingcheng Wang^{1,2,8,11*}

Ephrin type-A receptor 2 (EphA2) is a receptor tyrosine kinase that initiates both ligand-dependent tumor-suppressive and ligand-independent oncogenic signaling. We used time-resolved, live-cell fluorescence spectroscopy to show that the ligand-free EphA2 assembles into multimers driven by two types of intermolecular interactions in the ectodomain. The first type entails extended symmetric interactions required for ligand-induced receptor clustering and tumor-suppressive signaling that inhibits activity of the oncogenic extracellular signal-regulated kinase (ERK) and protein kinase B (AKT) protein kinases and suppresses cell migration. The second type is an asymmetric interaction between the amino terminus and the membrane proximal domain of the neighboring receptors, which supports oncogenic signaling and promotes migration in vitro and tumor invasiveness in vivo. Our results identify the molecular interactions that drive the formation of the EphA2 multimeric signaling clusters and reveal the pivotal role of EphA2 assembly in dictating its opposing functions in oncogenesis.



Vector and Cellular GMP Lab

News

MetroHealth opens new facility for cell-based cancer therapies

Plain Dealer, 3/30/23

Published: Mar. 30, 2023, 9:00 a.m.



Brian Kovach, MBA

7




**CASE WESTERN RESERVE
UNIVERSITY**
School of Medicine


Center for Cancer Research

Core Facilities Launched: February 12, 2024

- Flowcytometry Core
- Imaging Core
- Organoid Core
- Exosome Core
- Cell Biology Core
- Molecular Biology and Biochemistry Core
- Small Animal Imaging Core




1. High-dimension Flow Analysis




SONY ID7000 Spectral Cell Analyzer

5 lasers, 50 channels

Spectral unmixing (easier panel design & setup)
Identifying autofluorescence from complex cell populations
Immunophenotyping for tissue digests & whole blood
(developing) Phospho-flow cytometry




2. Fluorescence-activated Cell Sorting




SONY MA500 Multi-Application Cell Sorter

4 lasers, 14 channels

Cell line engineering (Overexpression, Knockout)
Enrich subpopulation from complex samples (blood PBMC, tissue digests)
Monoclonal selection for 96 and 384 well plate




3. Basic Flow Analysis




Beckman CytoFLEX Flow Cytometer

3 lasers, 15 channels

Evaluation of cell or tissue samples;
Lower-plex panel analysis (<8 markers);
Bead-based ELISA assays, etc.



3. Basic Flow Analysis



Cyteck Guava Muse Cell Analyzer

Easy-to-use, flexible Flow analysis

Accurate & fast cell counting for complex samples (tissue digest, whole blood)
Comprehensive cell health measurements
Cell signaling pathway measurements (EGFR, PI3K, MAPK etc.)

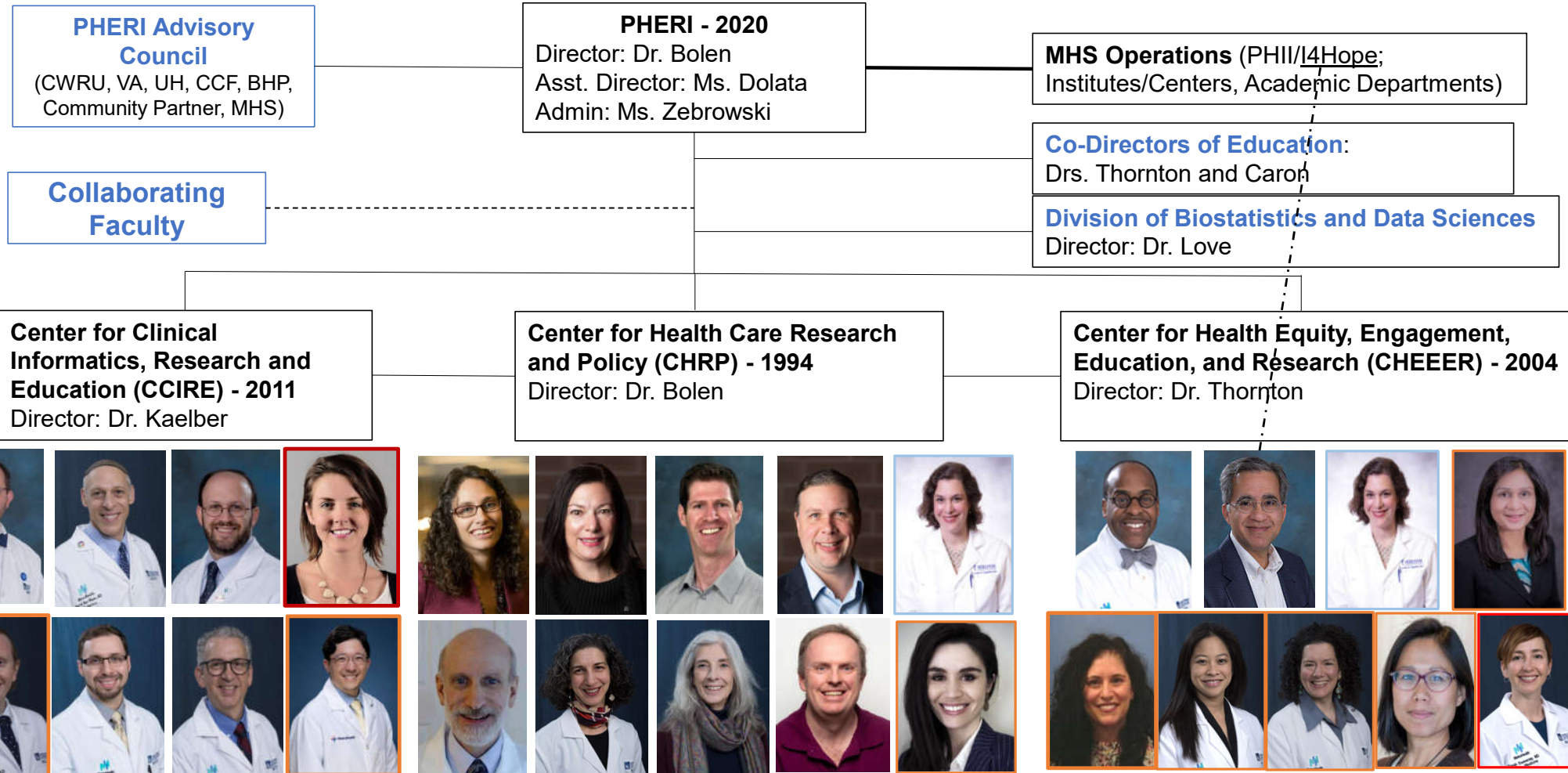
Center for Cancer Research

NIH Funding

Contact PI (MPIs)	NIH ID	Institute	Title	Start	End	2024 Direct	2024 Indirect	Total
Furuta, Saori	5R01CA248304-05	NCI	Normalizing arginine metabolism with sepiaptein for immunostimulatory-shift of HER2+ breast cancer	3/4/2020	2/28/2025	\$228,750	\$124,669	\$353,419
Wang, Bing (Pasquale E.)	1R01CA297778-01A1	NCI	EphA1 homotypic and EphA1-EphA2 heterotypic interactions in cell regulation	12/5/2024	11/30/2029	\$512,953	\$180,181	\$693,134
Jin, Ge	5R01CA264910-04	NCI	Role of HIV in KSHV oral transmission	9/20/2021	8/31/2026	\$379,150	\$231,282	\$610,432
Jin, Ge (Wang, B)	5R01CA250067-05	NCI	HIV-infected T-cell exosomes in lung cancer progression	7/1/2020	6/30/2025	\$480,807	\$293,292	\$774,099
Liu, Shujun (Huang, G.)	5R01CA248019-05	NCI	The role of HIF1A-DNMT3A axis in AML1/ETO-driven acute myelogenous leukemia	12/7/2020	11/30/2025	\$490,114	\$156,537	\$646,651
Liu, Shujun (Huang, G; Tse, W)	1R01CA266256-03	NCI	Role of an aberrant N6-Methyladenosine-LncRNA Axis in the development and maintenace of drug resistance through regulating the leukemia stem cell	9/12/2022	8/31/2027	\$444,141	\$174,270	\$618,411
Han, Xiaonan	5R01DK123299-05	NIDDK	REGULATION OF NICHE CELL DIFFERENTIATION TO SUSTAIN INTESTINAL STEM CELL REGENERATION AGAINST GUT INFLAMMATION	1/1/2020	12/31/2024	\$225,000	\$124,898	\$349,898
Furuta, Saori	1R21CA288449-01	NCI	Roles of gut-breast axis in breast pathophysiology	4/5/2024	3/31/2026	\$140,250	\$85,553	\$225,803
Sossey-Alaoui, Khalid	5R01CA272621-02	NCI	Role of YB1 in health disparities in triple negative breast cancer	5/12/2023	4/30/2028	\$250,858	\$156,147	\$443,058
Total/Yr						\$3,152,023	\$1,526,829	\$4,714,905
Grand Total						\$15,760,115	\$7,634,145	\$23,574,525



PHERI Organizational Diagram



Collaborating Faculty (59)



- Dave Aron (SOM)
- Jennifer Bailit (SOM)
- Alfred Connors (SOM)
- Jennifer Cullen (CCCC)
- Neal Dawson (SOM)
- Derek Falk (CCCC)
- Darcy Freedman (Environmental Health)
- Ronald Hickman (SON)
- Peter Hovmand (SOM)
- Gunnur Karakurt (SOM)
- Michael Konstan (SOM)
- Siran Koroukian (PQHS)
- Suchitra Nelson (Dentistry)
- Kurt Stange (CHI)
- Erika Trapl (CCCC and PRCHN)



- Molly McVoy
- Mahboob Rahman
- Sarah Ronis
- Martha Sajatovic



- Jarrod Dalton
- Juan P. del Rincon Jarero
- Logan Harper
- Maeve MacMurdo
- Anita Misra-Hebert
- Elizabeth Pfoh
- Glen Taksler



- Mimi Singh
- Mary Dolansky

Other External Partners

- Don Allensworth-Davies (CSU)
- Swagata Banik
- Nazleen Bharmal (UCLA)
- Sarah Hendrickson
- Rita Horwitz
- Eamon Johnson
- Saima Karim
- Yael Klionsky
- Gabriel Labbad
- Dave Margolius (CLE DOH)
- Dick McCormick
- Edward McEachern
- Anup Salgia
- Joan Thoman (CSU)
- Brook Watts



- Ifeolorunbode Adebambo (Family Medicine)
- Kathleen Alto (Pride Network)
- Agnieszka Ardelt (Neurology)
- Ann Avery (ID)
- Robert Bruce (Int. Med)
- Johnbuck Creamer (Hospital Medicine)
- Katie Davis Bellamy (I4HOPE)
- Mark Dunlap (Cardiology)
- Michael Kelly (Neurosurgery)
- Vanessa Maier (School Health/Family Medicine)
- Jim Misak (I4HOPE)
- Kate Fox Nagel (Community Health Centers)
- Britt Nielsen (Psychiatry)
- Joan Papp (Opioid)
- Joseph Piktel (Emergency Medicine)
- William Tse (Cancer)





Community Partners (78)

2024 Selected New PI, Co-PI, or Site PI Grants

Funding Source	Grant Title (PI)	Total MH \$ (all years)	Years
EPA	Asthma, Indoor Air Pollution and Greenhouse Gas Emissions (Sehgal – PI)	\$17,810,277	10/01/2024-09/30/2027
NHLBI	Engaging African American Couples in the Management of Obstructive Sleep Apnea (Thornton – PI)	\$3,549,277	08/15/2024 – 06/30/2029
HHS	Restoring Health Equity and Resilience to Cleveland Through Vacant Land Improvements (Western Reserve Land Conservancy – PI; Berg and Perzynski – Site Co-PIs)	\$558,420	09/01/2024 – 08/31/2028
NIMH and OMHAS	The Roles of Parental Mental Health and Helpseeking (De Luca , Bosnich – MPI's) AND ZerOH and Caring Contacts Mobile Intervention for Suicide Prevention (Chapman, PI / De Luca – Site PI)	\$111,638	08/20/2024-02/28/2026
CDC	CDC IPA to explore use of Epic's Cosmos for vaccine and viral assay health services research (Kaelber, Tarabichi – PIs)	\$60,000	09/01/2024 – 08/31/2025

Continued Leading Key Grants in 2024

- **Social Drivers of Health and Health Equity**

- Working with communities to eliminate health disparities (Sehgal, Thornton)
- Teen suicide in minority populations (De Luca)
- Gun violence CTSC pilot (Ho and Sweeney)
- Digital Twin Neighborhoods (Perzynski and Dalton)

- **Implementation Science, Quality Improvement Science and Workforce Development**

- Primary Care and CHW Workforce Development (Caron and Davis)
- Heart Healthy Ohio Initiative (Caron/Bolen), Northeast Ohio QI Hub & Cardi-OH (Bolen/Konstan)

- **Health Behaviors**

- Smoking cessation (Seeholzer)
- Wearable hydration device (Roach/Perzynski)

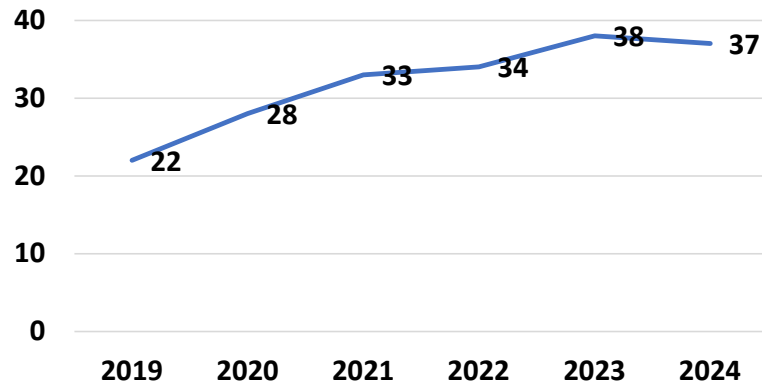
- **Clinical informatics** (Kaelber/Tarabichi/Hughes)

- Big Data and Implementation Science

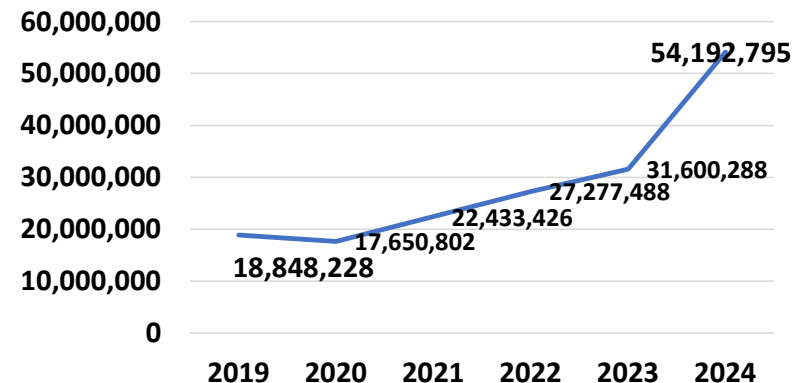
2024 Annual Report Summary - Grants

- **37 active grants** where our ~17 core faculty serve as PI, co-PI or site PI totaling over **50 million dollars to MetroHealth**, with **8 new grants** in 2024
- 29 additional grants as co-I (**an additional 26 million dollars**)

Number of Grants as PI, co-PI or site PI

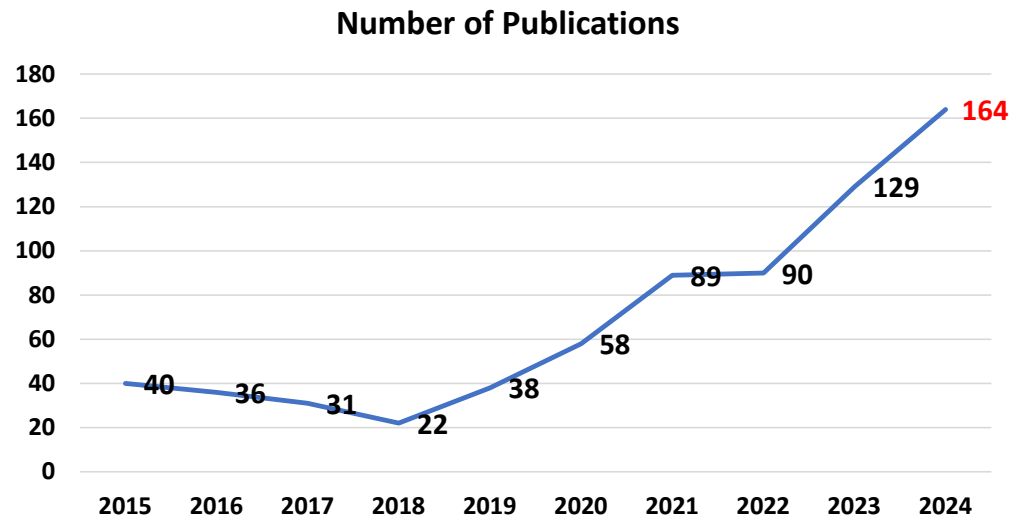


Total Costs as PI, site PI, co-PI



2024 Annual Report Summary - Publications and Presentations

- 164 peer-reviewed publications
- 85 national presentations with **17 as invited national presentations**



***50 of these publications had Dr. Kaelber as a co-author

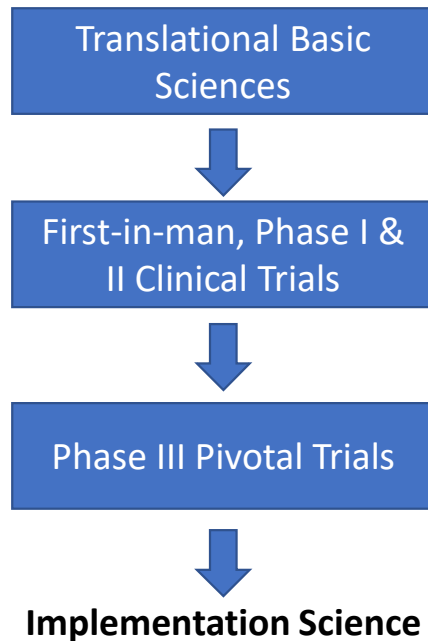
Institute for Rehabilitation Research



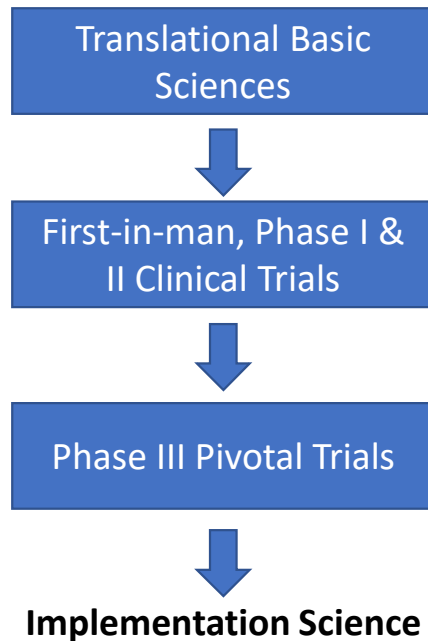
23 PhDs, 13 MD/DOs, 4 Admin Support, 9 Research coordinators, nurses, managers, assistants
6 Research Therapists, 16 Engineers, 4 Post-Docs, 11 Graduate Students = 86 people



Institute for Rehabilitation Research



Institute for Rehabilitation Research



U.S. Department of Defense



National Institutes of Health

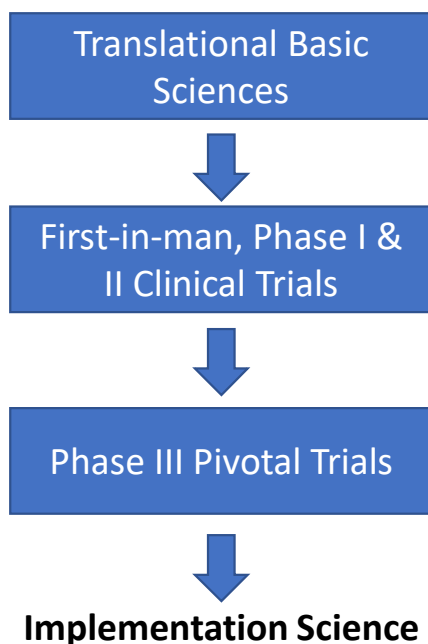


Third Frontier
Innovation Creating Opportunity

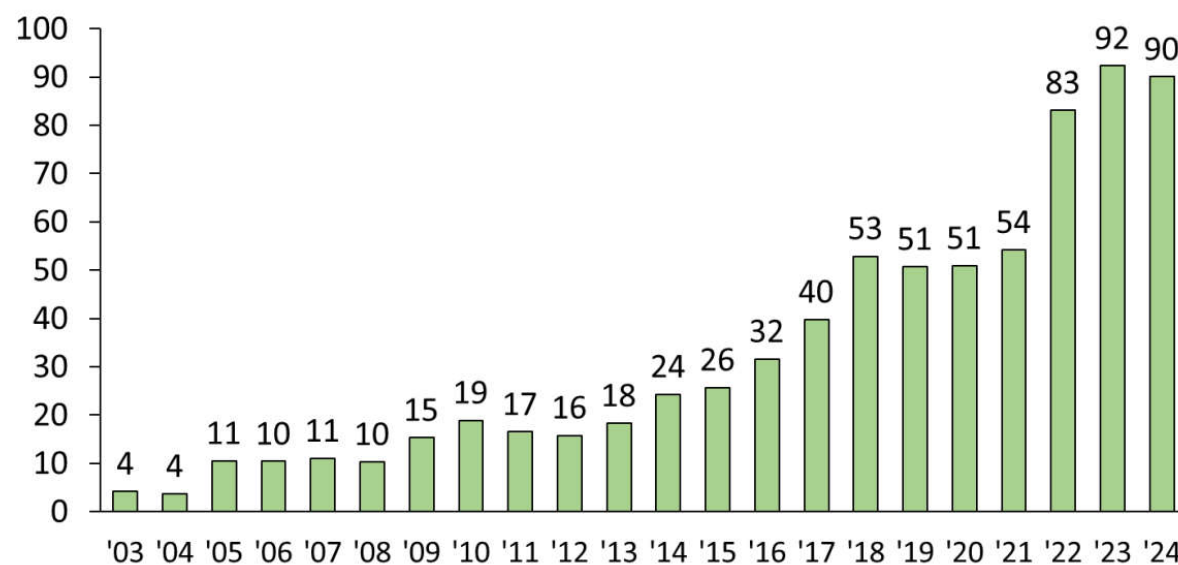


CASE WESTERN RESERVE
UNIVERSITY
School of Medicine

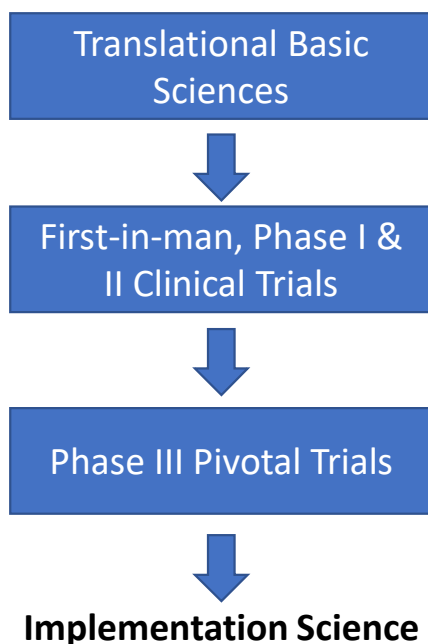
Institute for Rehabilitation Research



Grant Funding (\$ in Millions): **\$90.2 M**



Institute for Rehabilitation Research



Physical Medicine and Rehab 2024 Blue Ridge (Feb, 2025)

From the BLUE RIDGE INSTITUTE for MEDICAL RESEARCH as compiled by Robert Roskoski Jr. and Tristram G. Parslow

Rank	Name
1	CASE WESTERN RESERVE U & CLEVELAND CLINIC LERNER C
2	UNIVERSITY OF PITTSBURGH
3	NORTHWESTERN UNIVERSITY CHICAGO
4	JOHNS HOPKINS UNIVERSITY
5	UNIVERSITY OF WASHINGTON SEATTLE
6	UNIVERSITY OF MICHIGAN ANN ARBOR
7	OHIO STATE UNIVERSITY
8	UNIVERSITY OF COLORADO DENVER
9	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON
10	GEORGETOWN UNIVERSITY
11	EMORY UNIVERSITY
12	COLUMBIA UNIVERSITY HEALTH SCIENCES
13	UNIVERSITY OF PENNSYLVANIA
14	MOUNT SINAI ICAHN SCHOOL OF MEDICINE
15	UNIVERSITY OF KANSAS MEDICAL CENTER

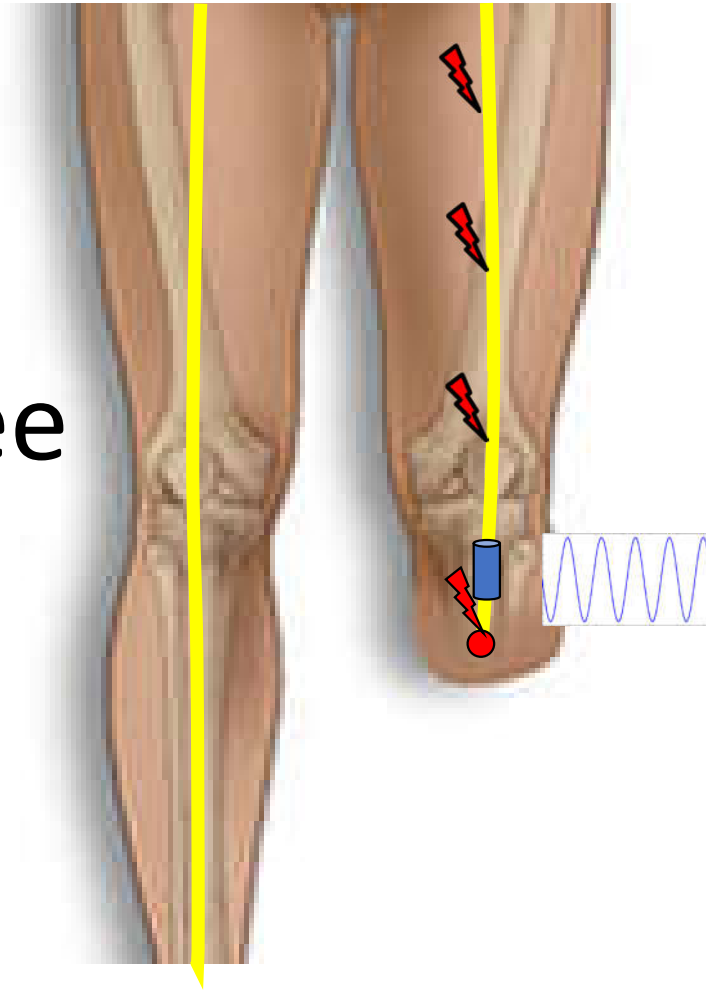
Pain and Opioid Epidemic: Non-opioid Treatment

Approach 1: Block pain signals

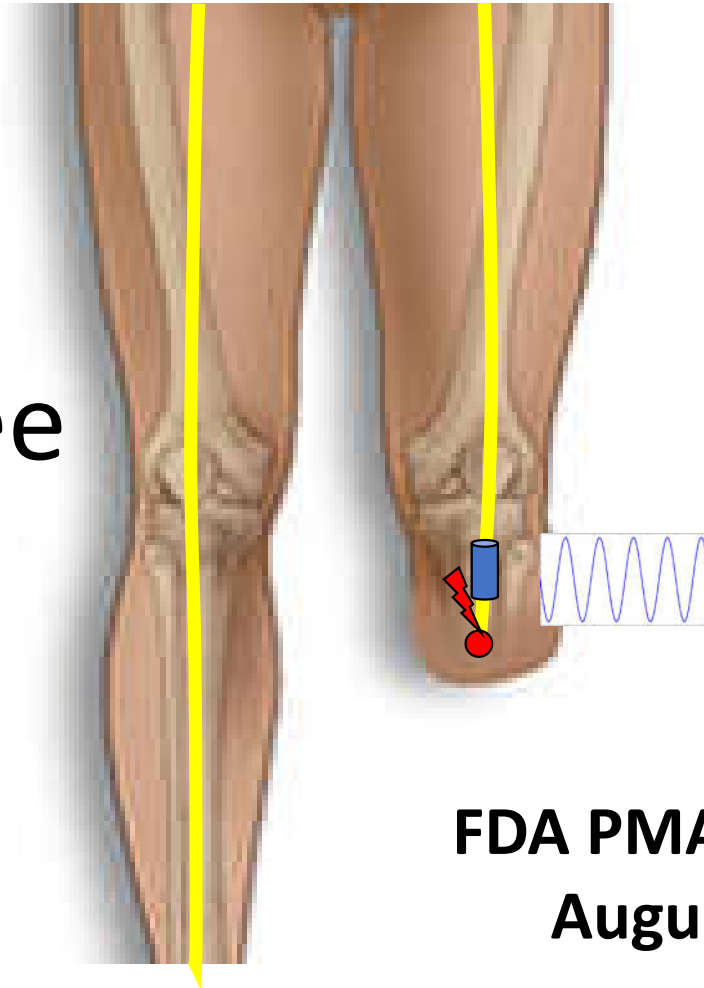
Approach 2: Exercise modulation



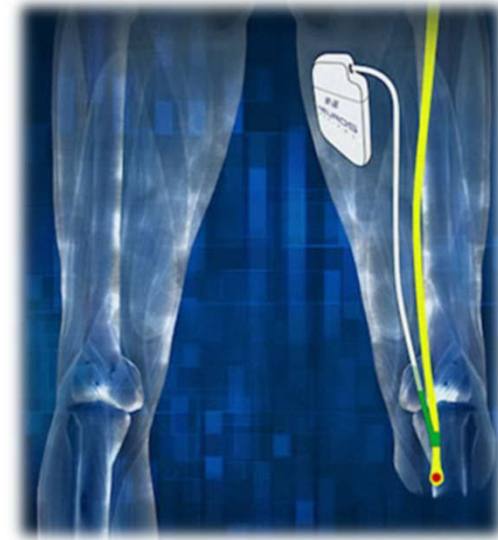
Amputee Pain



Amputee Pain



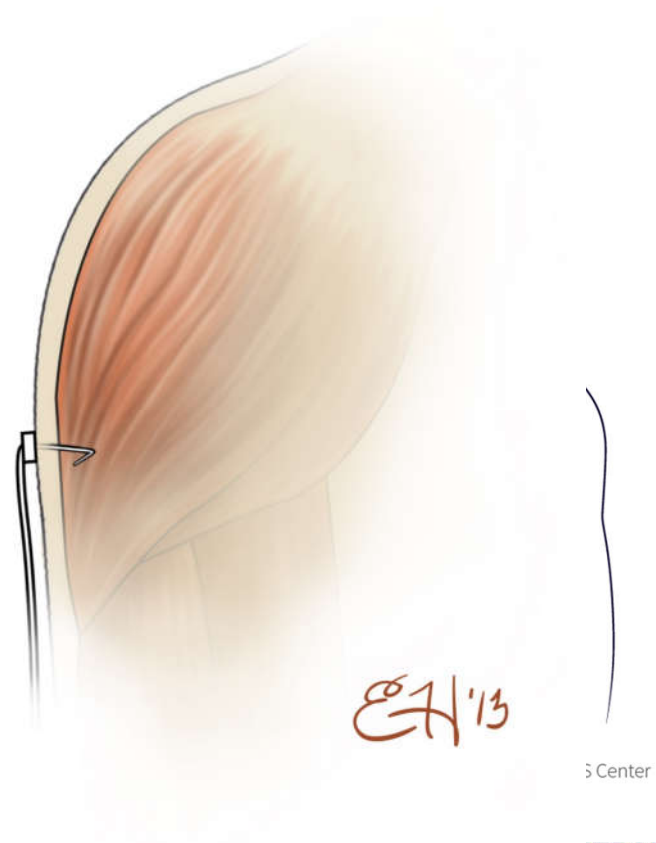

NEUROS
M E D I C A L



FDA PMA Clearance
August, 2024

Percutaneous Peripheral Motor Nerve Stimulation

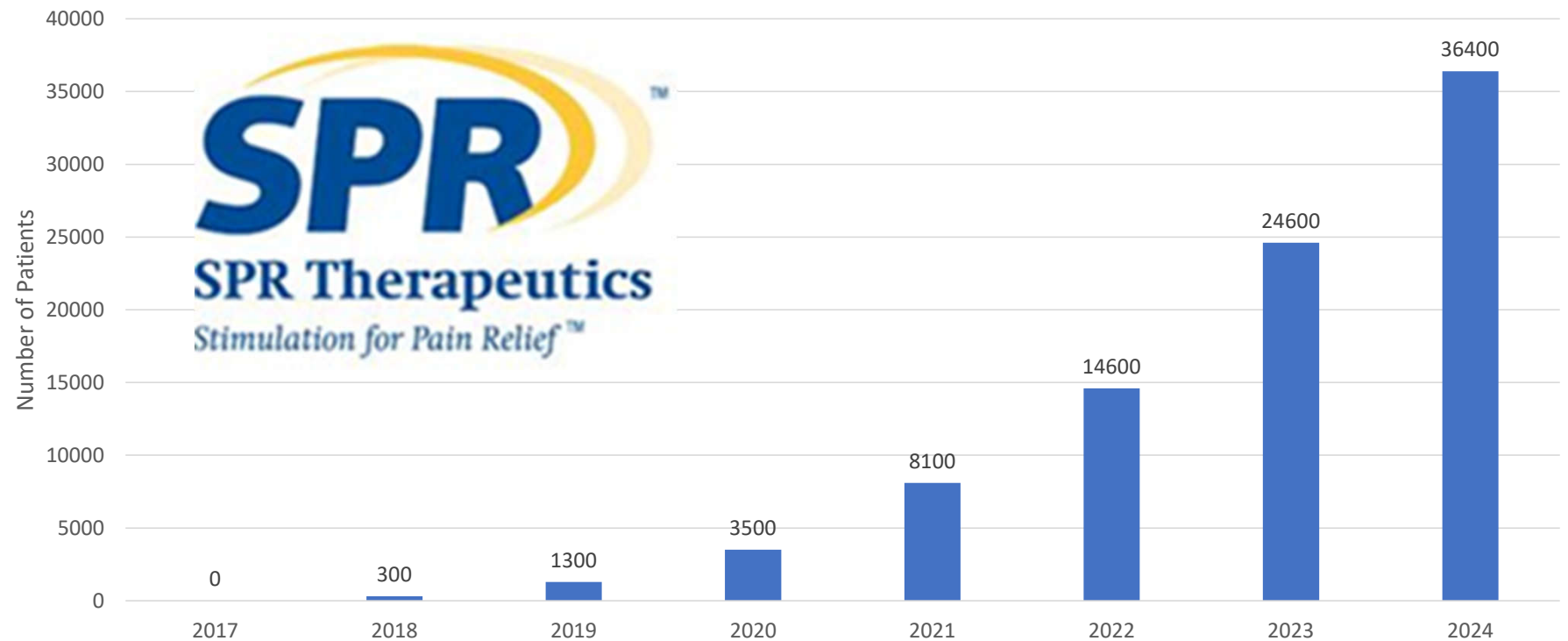
- Percutaneous electrode(s)
- Anchored in deltoid, No Migration
- External stimulator
- **Muscle contraction**



Percutaneous Peripheral Motor Nerve Stimulation: Pain in Able-bodied Persons



SPRINT: Cumulative # of Patients



Post-stroke Recovery

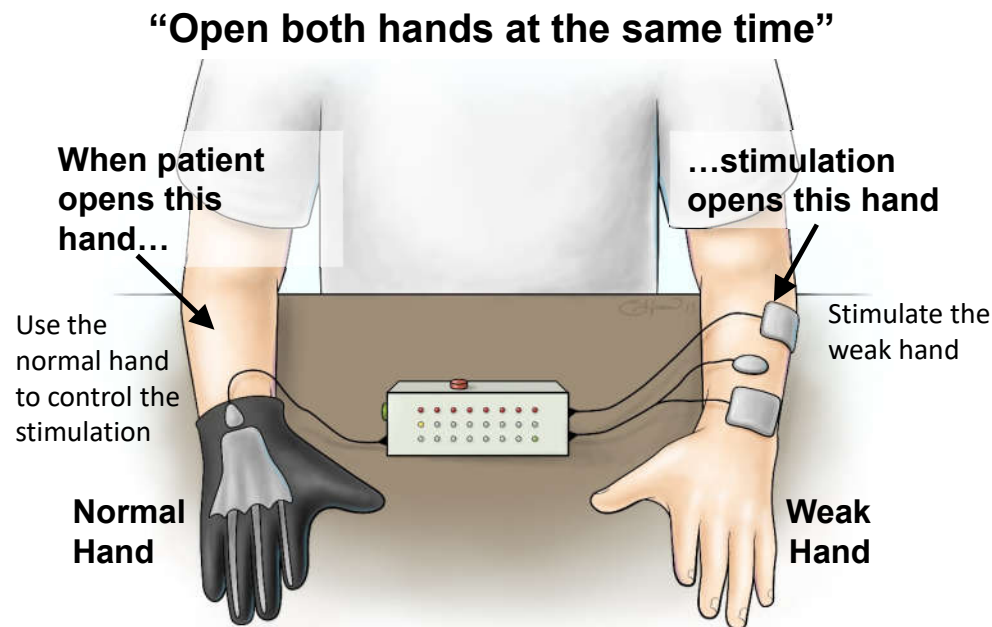
Activity Dependent Neuroplasticity

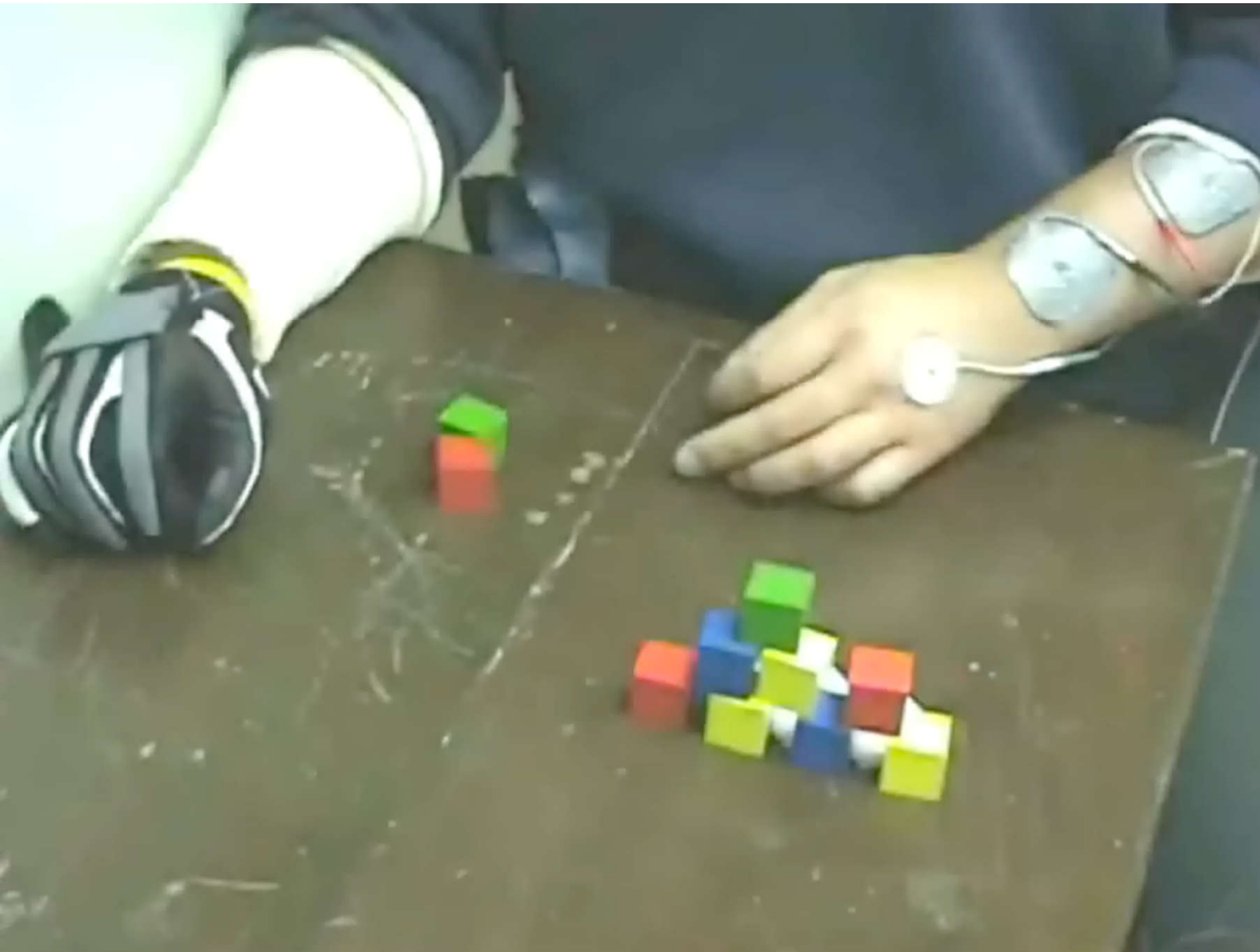


FES for Stroke Recovery

Contralaterally Controlled FES (CCFES)

By participating in CCFES mediated functional tasks, activity dependent neuroplasticity is induced to facilitate motor recovery.





**Electrical
Stimulation-mediated
Activity-dependent
Neuroplasticity**



**Electrical
Stimulation-mediated
Activity-dependent
Neuroplasticity**

BASELINE



**Electrical
Stimulation-mediated
Activity-dependent
Neuroplasticity**

**AFTER
TREATMENT
(90 Days)**

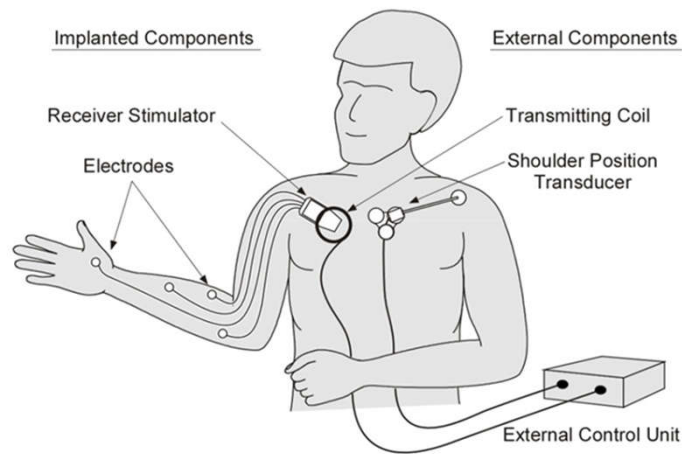


Neuroprostheses



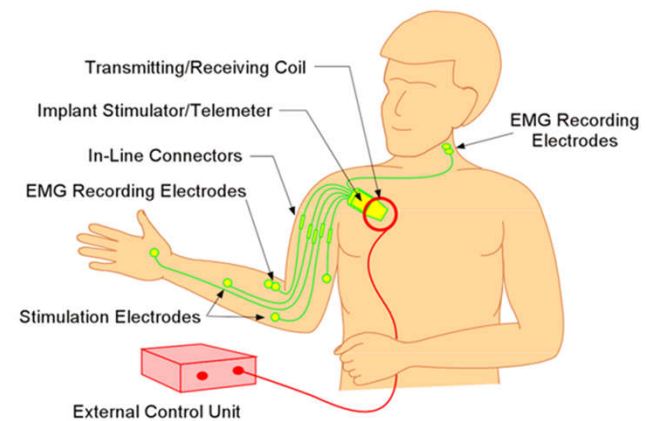
SCI: Upper Extremity Function

8 – Channel System



12 – Channel System

Implantable Stimulator and Telemetry System



SCI: Upper Extremity Function

C6 ASIA A Tetraplegia

Stimulation Off

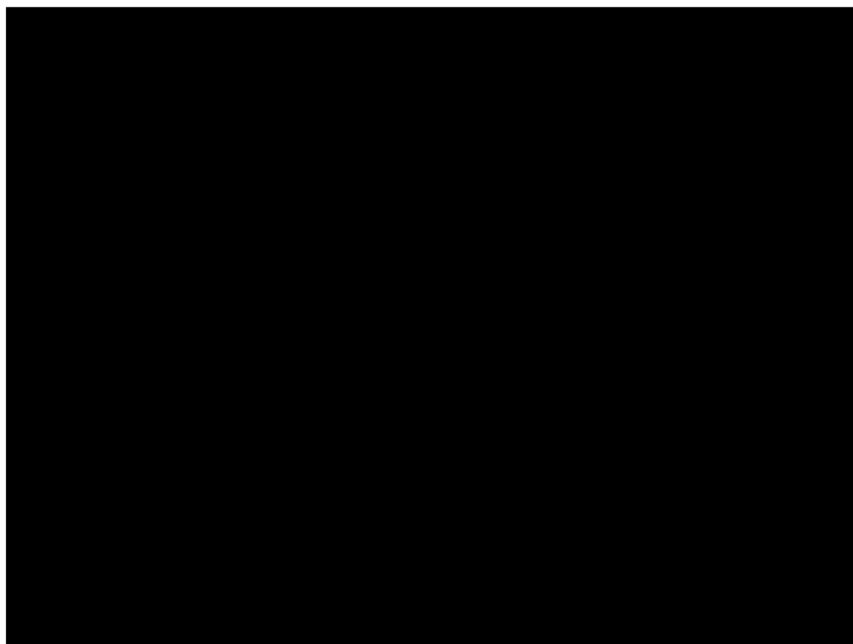


Stimulation On

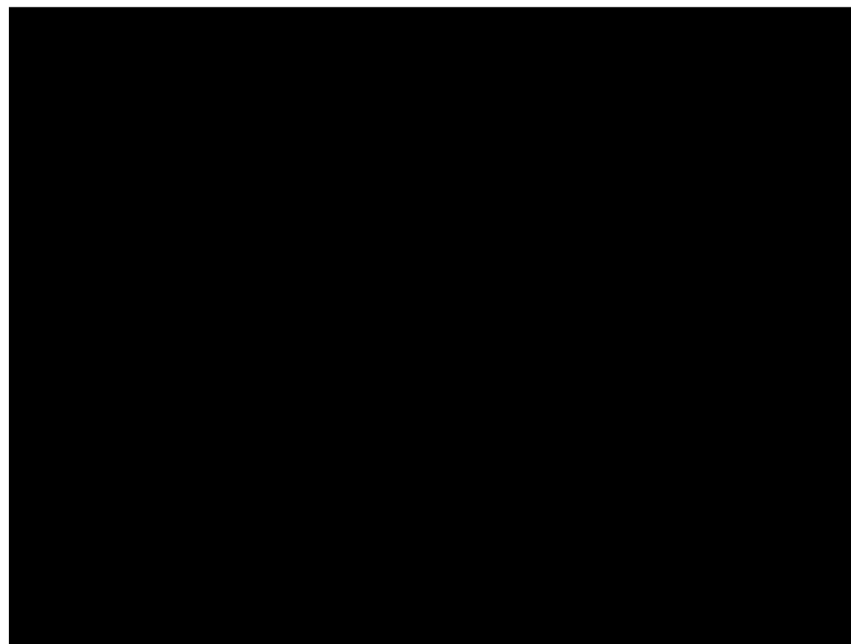


SCI: Trunk System

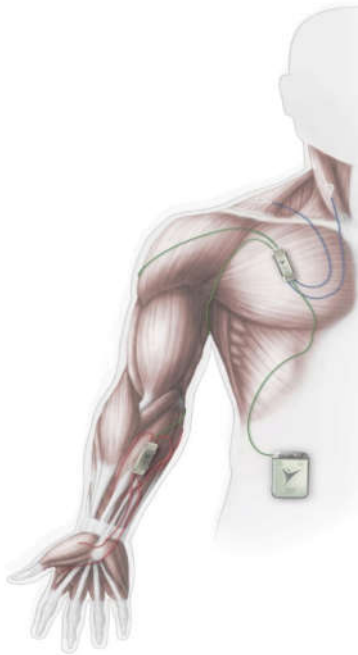
Stimulation Off



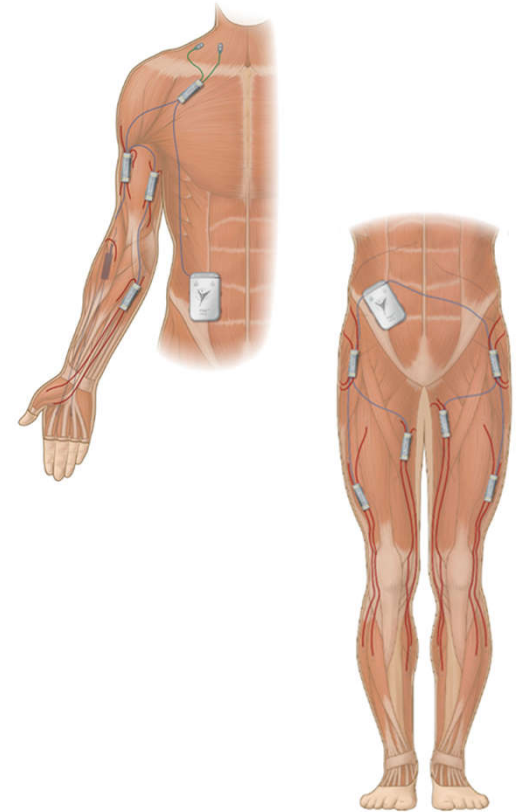
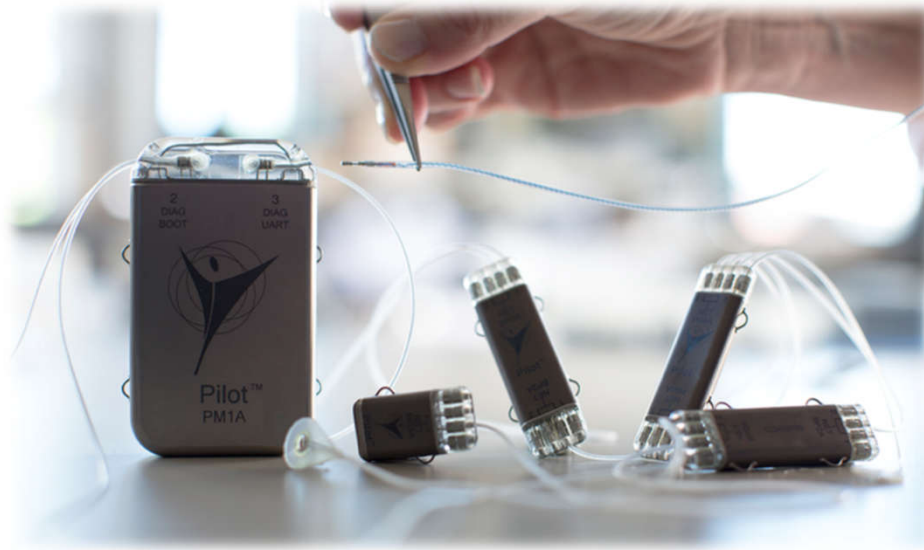
Stimulation On



Networked Neuroprosthesis (NNP)



Single Function



Multi-Function



SCI: Hand and Trunk System – NNP



SCI: Hand and Trunk System – NNP



MetroHealth Research Institutes

Population Health Research Institute (PHRI)	Institute for Rehabilitation Research (IRR)	Center for Cancer Research (CCR)	Department Based Research	
Center for Healthcare Policy & Research (CHRP)	Center for SCI Rehabilitation Research	Program for Solid Tumor Malignancy Research	Anesthesiology	OBGYN
Center for Health Equity, Engagement, Education & Research (CHEER)	Center for Stroke and Brain Injury Rehabilitation Research	Program for Hematological Malignancy Research	Dentistry	Orthopedics
Center for Clinical Informatics Research & Education (CCIRE)	Center for Innovative Rehabilitation and Technology	Program for Cancer Clinical Research	Dermatology	Otolaryngology
			Emergency Med	Pathology
			Family Medicine	Pediatrics
			Geriatrics	PM&R
			Medicine	Psychiatry
			Neurology	Radiology
			Neurosurgery	Surgery/Trauma
			Nursing	

Thank You!

