



MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN

PM&R

Cancer Rehabilitation Update

December 2022



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ISSUE 5

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CANCER REHABILITATION REMAINS FOCUSED ON LEADING, GROWTH, AND IMPROVEMENT

Once again the Cancer Rehabilitation program – which includes specialists and researchers in multiple disciplines – had a banner year of continued innovation and expansion. This included **leading many regional and national initiatives** to expand patient care and educational opportunities.

Clinically, the numbers are clear: the physicians saw over 2000 patients, over 500 of which were new. The lymphedema program expanded at both Ann Arbor and Brighton centers despite hospital-wide restrictions on new hiring – the need was so profound and the program that strong. Other outpatient therapies hired as well, including physical therapy.

On the inpatient side, the MCORE team saw a high volume of acute care patients again this year, improving discharge disposition and function. The inpatient rehabilitation program also grew, with nearly 30% of inpatient volume on the University Hospital Inpatient Rehabilitation Unit being cancer or medically complex patients.

Providers continue to be involved in institutional and extramural **education** as well – including training for Michigan Medicine therapists, house officers, and non-rehabilitation trainees. Providers have also given patient-facing educational talks and presented at national and regional meetings.

Research was again successful, with interdisciplinary AND multi-center prospective studies being completed. The goal is to continue to raise the bar nationally in cancer rehabilitation research so that patients receive better care and providers have easier decision-making.

Please take a look around to see what we've been up to this year. And if you're inclined, [donations](#) are used for research or education to advance our patient care.

*Note: special thanks to **Ashley Mallion** and **Melanie Devine** for supporting the program administratively – it would not be possible without them!*

CLINICAL INNOVATION

THE CANCER REHABILITATION PROGRAM CONTINUES TO BE NATIONALLY RECOGNIZED FOR ITS LEADING CLINICAL CARE. WE REMAIN PASSIONATE ABOUT GROWING AND INNOVATING. HERE ARE SOME HIGHLIGHTS FROM 2022:

To improve **interdisciplinary care and education**, a larger team has been formed, with meetings beginning early January. This will help providers of different specialties share knowledge, manage patients, and triage care.

Lymphedema care continues to expand, including new team members who have joined at the Burlington site, and plans to hire an additional person at Brighton. The Brighton site also now has bioimpedance spectroscopy (SOZO machine) to quickly evaluate patients for subclinical lymphedema, and changes in their lymphedema status, to prospectively manage these patients.

The **MCORE** team continues to treat patients with a history of cancer admitted to the hospital. This team, consisting of PT, OT, PM&R now includes members of the **Inpatient Rehabilitation** unit in weekly rounds, to improve continuity of care, and expand options for continuing education.

In bittersweet news, **Geeta Peethambaran, PT** retired after a long and distinguished career. She was one of the first cancer rehabilitation providers at Michigan Medicine.

The **Kathy Konosky Fund**, which finances cancer rehabilitation education for therapy team members, welcomes donations. Kathy was one of the first cancer rehabilitation providers at the University of Michigan, and this December marks the fifth anniversary of her passing. Click [here to donate](#).

NEW FACES!



Stacy Weber, PT, joined the Burlington team after completing her PT Oncology residency at Beaumont. She will sit for the APTA Oncology board certification this spring. Welcome!

Rachelle Partee, OT, joined the Burlington Lymphedema program! She expands the program with her much-needed skills



Sophia Santiago, OT joins the Brighton Lymphedema team - this will enhance care and provide much needed patient access to this popular location and program.

Maricella Walterhouse, OTRL joins the inpatient Mott team to see oncology patients, especially hematologic, BMT, and GynOnc!

Sadly, her dog is not on the team (yet)



EDUCATION

The Cancer Rehabilitation Medicine program welcomed its fifth fellow, **Dr. Maaheen Ahmed, DO**, in July. Let's get to know her!

Why Cancer Rehabilitation?

During residency I found that I enjoyed many aspects of the field of PM&R. What I have found is that cancer rehabilitation is a great amalgamation of all the subspecialties of PM&R. As rehab physicians, I believe we are in a unique position to treat oncology patients. The road to regaining function and quality of life can be challenging, which is where we come in not only as someone with the knowledge to manage complex clinical needs, but also as an advocate and coach during patients' time of need.

Why UofM?

I chose U of M due to its reputation as one of the leading centers for cancer rehabilitation. It is really a privilege to be able to work in a system that works well and where there are plentiful opportunities for collaboration when it comes to patient care.

What do you envision for your career?

My dream would be starting my own cancer rehabilitation program in Houston, TX. Building new programs is never an easy feat, but Rome wasn't built in a day!

Best concert?

Green Day's American Idiot Tour

Favorite Ann Arbor restaurant?

Tomukun Noodle Bar—Spicy Seafood Ramen was Spot On!

Pets?

Four rambunctious cats rule my life outside of work: Lola (a fluffy princess with true fortitude), Figgy (a glamorous tuxie whose vanity knows no bounds), Poppy (a stripped tabby calico with 1 and a half ears rescued off the mean streets of Sugarland, TX) and Kenny Lofton (a sweet boy with cerebellar hypoplasia who has the most persistent spirit and never lets his deficits rule his life!)

Favorite vacation?

Hawaii, in another life I was destined to be a beach bum



Cancer Rehabilitation Medicine Fellow, Dr. Maaheen Ahmed

HIGHLIGHTS

Dr. Sean Smith co-chairs the AAPM&R Cancer Rehabilitation BOLD initiative, which held town hall meetings throughout the year exploring subspecialty certification for Cancer Rehabilitation Medicine. As a result, the AAPM&R formally notified the American Board of Physical Medicine and Rehabilitation that it supports this certification, urging the Board to do the same. This is an important step in the process of becoming an ACGME-recognized specialty.

Dr. Lauren Brothers, completed her Cancer Rehabilitation Medicine fellowship and joined the Strength and Relief clinic in Farmington Hills, MI

Krysten Salla, PT and **Amelia Louis-Ferdinand, PT** attended the PORi course on Chemotoxicity and Cencer Exercises

A patient-facing article in ASCO's *Cancer.net* featured **Dr. Sean Smith** explaining the role of exercise following mastectomy

Jennifer Pak, PT will be taking the Norton lymphedema course this month

VISIONING
PM&R BOLD
www.aapmr.org/pmrbold



The University of Michigan Cancer Rehabilitation program was part of the development of core service delineation and specialized curriculum development for cancer rehabilitation programs. This was spearheaded by the AAPM&R BOLD Cancer Rehabilitation Medicine initiative.

Click [here](#) to visit the Cancer Rehabilitation Medicine fellowship program webpage!
Special shout-out to **Melanie Devine** for keeping things running.



ALUMNI UPDATE

CANCER REHABILITATION MEDICINE FELLOWSHIP PROGRAM



Cody Andrews, MD, Fellowship Program Director



CATCHING UP WITH DR. CHANG

Fellowship Program Director **Cody Andrews, MD** recently caught up with Philip Chang, DO (above, far right), who is making his mark at the Cedars-Sinai Cancer Center:

Looking back, how did fellowship training help prepare you?

There is absolutely no way I would be able to do what I am doing now without the incredible training I received at the University of Michigan. I would break it down as the following:

-Clinical Care

-A significant part of my patient care includes ultrasound guided procedures. The training I received with Dr. Andrews, Dr. Smith and Dr. Gharib not only sharpened my ultrasound training from residency but expanded it to include interventions for cancer specific impairments such as oromandibular dystonia and scapulothoracic bursitis.

-Program Development

-A key part of my training at Michigan included both formal and informal education on how to build a practice. Near the end of my fellowship, Dr. Smith gave lectures on making a slide deck, preparing an elevator speech and effectively communicating a skillset. Dr. Andrews showed me this in practice as he allowed me to observe him discussing cancer rehabilitation medicine services at oncology meetings. This training has allowed me to expand the cancer rehabilitation medicine services at Cedars-Sinai outside of our central location to affiliate sites including Torrance Memorial and The Angeles Clinic and Research Institute.

-Research

-Prior to my fellowship at Michigan, my publication experience was limited and I had never submitted a research proposal to an IRB before. At Michigan, I was able to complete my first research project from start to finish under the guidance of Dr. Smith and Dr. Andrews. This led to my current most cited publication, "Patient and Provider-Reported Satisfaction of Cancer Rehabilitation Telemedicine Visits During the COVID-19 Pandemic" which led to numerous other opportunities including writing multiple telemedicine review articles



chairing the Telehealth and Technology subgroup of the Cancer Rehabilitation Physician Consortium, and continued research projects in the area of telemedicine.

What program(s) are you working on developing?

-We have recently started a Prehabilitation in Breast Cancer program consisting of a single educational class discussing exercise and nutrition recommendations prior to starting treatment. We've had a few classes so far and the feedback received has been uniformly positive.

-We are in the final processes of developing a supervised prehabilitation program in pancreatic cancer that will be conducted as a research study.

-I am working with a team at Cedars-Sinai to retrospectively study the efficacy of telemedicine encounters in skilled therapies. We presented a poster on our preliminary results at the recent ACRM conference and hope to publish further results in the next year.

-I am engaged in a qualitative study exploring opinions and attitudes on the use of skilled therapies for patients on hospice.

-We have recently started a multidisciplinary brain tumor clinic (the Complete Neuro-Oncology Support Clinic) focused on meeting individual patient needs.

What do you miss most about Michigan?

The seasons, Franklin Cider Mill, rain, green trees and grass...a lot.

Any life updates?

I recently picked up surfing. I am not good at it.

Monica Hubbert, OT, Katie Rogers, OT, and others continue their efforts with **LE&RN (Lymphedema Education and Research Network)**. Hear from Monica what the group has been up to:

LE&RN- Michigan chapter celebrated a huge success with our first World Lymphedema Day Event. This event consisted of various members; patients, activists, clinicians, and physicians coming together to increase the awareness of lymphedema and lymphatic disease. Our primary goal was to be seen, and as a group we felt that this was best accomplished through use of statewide media. **Our group organized a rally on the steps of the Michigan capitol** in Lansing (see picture). Both patients and clinicians from across the state met, spoke, and united for our common goals: to be seen as rare disease that needs better treatment, research, and coverage from 3rd party payors. We received several mentions on various public news channels throughout the state!

LE&RN MI is now focusing our efforts on the education of our medical community with primary focus on students. We are currently collecting names of medical, therapy, nursing, and advanced provider schools. After collecting this information, we will reach out to them and offer educational opportunities. We are hoping to offer these in the month of March and expand our impact from World Lymphedema Day to World Lymphedema Month! We are always looking for new members and volunteers. **Interested in helping? Contact Monica at mojordanemed.umich.edu**

ADVOCACY AND INVOLVEMENT



Cancer Rehabilitation team members participated in this year's *Pink Challenge* to raise money for Breast Cancer Awareness Month. Who wore it best?



OT Lymphedema and hand, Burlington 3rd floor



Brighton team



Inpatient rehabilitation (6A)



MCORE, PM&R, RPN



PT, 2nd floor Burlington



<- Lower level, Burlington

Research Spotlight

INTERESTED IN SUPPORTING OUR RESEARCH? [CLICK HERE TO DONATE](#)

Patient and Provider-Reported Satisfaction of Cancer Rehabilitation Telemedicine Visits During the COVID-19 Pandemic

Philip J Chang DO ✉, Gina M. Jay PhD, Claire Kalpakjian PhD, Cody Andrews MD, Sean Smith MD

Dr. Philip Chang and co-authors received an honorable mention for Best Paper of the Year in *PM&R: The Journal of Injury, Function, and Rehabilitation*. [This paper](#) helped create an AAPM&R workgroup on cancer telerehabilitation that Dr. Chang now leads, and began at Michigan Medicine in the early days of the COVID-19 pandemic.

	Karnofsky change			Pearson <i>R</i>
	<-5	Between 5 and -5	>5	
Physical function				0.68
N	44	93	46	
Mean	-0.20	0.23	1.80	
SD	3.21	3.26	3.40	
Fatigue				-0.32
N	40	99	48	
Mean	0.80	-0.12	-1.14	
SD	2.57	2.68	2.87	
Social participation				0.49
N	40	94	43	
Mean	-0.10	0.45	1.56	
SD	2.38	2.26	2.41	

Validation of the PROMIS Cancer Function Brief 3D Profile, led by Dr. Sean Smith, found that patients' scores changed as their function changed, and this was in line with patient/provider perception of change, changes in performance status, and changes in pain levels. This tool has been adopted nationwide at several NCI-designated cancer centers.

Multi-center, and interdisciplinary collaboration with Rogel Cancer Center colleagues, highlights the year

Single institution retrospective studies do not generate evidence of sufficient quality to change practice. The University of Michigan Cancer Rehabilitation program continues to lead with prospective studies, including multi-site and interdepartmental within the institution.

The Rogel Cancer Center's IMPACT the Brain project, providing multidisciplinary care to breast cancer patients with brain metastases, published several abstracts and articles. Highlights include that a **third of enrolled patients saw a PM&R provider**, and **13% of all patients saw PM&R before any other specialty**. Patients who were treated by a PM&R physician saw them an average of 3.6 visits. This underscores the importance of rehabilitation on a multidisciplinary oncology team.

Lymphedema research was also conducted, with **Christelle David, OT** joining colleagues in Radiation Oncology and Medical Oncology to evaluate head and neck lymphedema following radiation.

Featured articles

[IMPACT the Brain: A Team-Based Approach to Management of Metastatic Breast Cancer With CNS Metastases](#)

The interdisciplinary effort, IMPACT the Brain, developed and evaluated a new system to triage people with breast cancer and brain metastases into appropriate clinics, including PM&R and Rehabilitation Psychology.

[Responsiveness and interpretation of the PROMIS Cancer Function Brief 3D Profile](#)

This is a culmination of a multi-site study to develop a better way to evaluate function in people with a history of cancer. Led by **PI Sean Smith**, this manuscript reports the findings of the new tool's validation and featured an [accompanying invited editorial](#) in the journal *Cancer*.

RESEARCH AND SCHOLARLY ACTIVITY

The Cancer Rehabilitation program continued its excellent scholarly track record, with original research published and numerous presentations given in the past year. With many projects ongoing, we anticipate next year will be as productive as ever.

PEER-REVIEWED MANUSCRIPTS

Fleege NM, Pierce-Gjeldum D, Swartz LK, Verbal K, Merajver S, Friese CR, Kiyota A, Heth J, Leung D, **Smith SR, Gabel N**, Kim, M, Morikawa, A. IMPACT the Brain: A Team-Based Approach to Management of Metastatic Breast Cancer With CNS Metastases. JCO Oncology Practice. 2022 Oct:OP-22.

Smith SR, Vargo M, Zucker DS, Shahpar S, Gerber LH, Henderson M, Jay G, Chevill AL. Responsiveness and interpretation of the PROMIS Cancer Function Brief 3D Profile. Cancer. 2022 Sep 1;128(17):3217-23.

Jaworski E, Sun Y, Vineberg KA, Mierzwa ML, **David C**, Rivera KM, Schonewolf CA, Casper K, Rosko A, Swiecicki PL, Worden F. Dosimetric Analysis for Predicting Secondary Lymphedema After Radiation for Head and Neck Cancer. International Journal of Radiation Oncology, Biology, Physics. 2021 Nov 1;111(3):e371.

Tolchin DW, Kaplan NM, **Smith SR**, Barker KD, Chevill AL. Integrating Palliative Care Into Physiatric Care: Perspective of the Association of Academic Physiatrists Physiatry Palliative Care Task Force. American Journal of Physical Medicine & Rehabilitation. 2022 Sep 1;101(9):888-96.

Wisotzky E, **Smith S**, Ruppert L, Mayer RS, Shahpar S, McMichael B, Clark M, Brunner M, Thompson B, Vargo M. PM&R BOLD: Cancer rehabilitation medicine core services. PM & R: the journal of injury, function, and rehabilitation. 2022 Oct 10.

Wisotzky E, **Smith S**, Ruppert L, Mayer RS, Shahpar S, McMichael B, Clark M, Brunner M, Thompson B, Vargo M. Specialized curriculum for cancer rehabilitation medicine in physical medicine and rehabilitation residency training and beyond. PM & R: the journal of injury, function, and rehabilitation. 2022 Oct;14(10):1297-8.

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TEXTBOOK CHAPTERS

Kim, M. M., **Gabel, N.**, Noll, K. R., Compter, A., Schagen, S. B., & Wefel, J. S.: Neurocognitive Effects. *Cancer: Principles & Practice of Oncology*, DeVita, V. T., Lawrence, T. S., & Rosenberg, S. A. Wolters Kluwer Health, 2022. 12

Allegra Adams: Adverse Effects of Cancer Treatment by System: Genitourinary and Gynecological Systems. *Oncology Rehabilitation: a Comprehensive Guidebook for Clinicians*. 2022.

Allegra Adams: Oncology Rehabilitation Treatment Interventions by Cancer Type: Genitourinary and Gynecological Cancers. *Oncology Rehabilitation: a Comprehensive Guidebook for Clinicians*. 2022.

Taire Thie: Sarcomas and Soft Tissue Cancers. *Oncology Rehabilitation: a Comprehensive Guidebook for Clinicians*. 2022.

Raj, MacDonell, Sacomori, Lorca, **Smith S**, Moran de Brito: Quality standards and outcomes in cancer rehabilitation. In Moran de Brito, Almeida, Cecatto, Frontera, Battistella Eds. *Cancer Rehabilitation Manual*, 1, Editora Manole Ltda., Santana de Parnaíba, Brasil, (2022)

PRESENTATIONS

A Systematic Approach to Systems-Based Oncology Rehabilitation: An Expert Panel Discussion, APTA Michigan Fall Conference (featuring **Allegra Adams, PT**)

Essential Knowledge and Skills in Cancer Rehabilitation: Results of a Working Group Analysis and Recommendations for Medical Education, American Academy of Physical Medicine and Rehabilitation, 10/2022, Baltimore, MD (**Sean Smith MD**)

You CAN Do It: Tips for Incorporating Cancer Rehabilitation into Your Existing PM&R Practice, American Academy of Physical Medicine and Rehabilitation, 10/2022, Baltimore, MD

From molecule to motion: Cutting edge brain tumor rehabilitation based on genetic factors and emerging international treatments, International Society of Physical and Rehabilitation Medicine, 07/2022, Lisbon, Portugal

How Bad is the Bone? A Focused Back Pain Exam for a Busy Oncology Clinic, ASCO, 06/2022, Chicago, IL

Highlights of the Day: Symptoms and Survivorship, ASCO, 06/2022, Chicago, IL

Discussing Bad News: Skills and Strategies to Utilize in the Rehab Setting, Association of Academic Physiatrists Annual Meeting, 05/2022, New Orleans, LA

Chest and Shoulder Pain in Breast Cancer Patients, Michigan Breast Cancer Coalition, 04/2022, Virtual

Upper Quadrant Pain in Breast Cancer Patients, Rutgers University Department of Physical Medicine and Rehabilitation Grand Rounds, 12/2021, Newark, NJ