

2021 Annual Report



HBR mission statement

To provide world-class breast reconstruction outcomes, service, and educational resources to our patients, our clinical partners, and the greater global community



**Peter Henderson,
MD MBA FACS**

*CEO and Director of
Surgical Services*

The past year has been one of tremendous challenges, as the global pandemic that we had hoped would be nearing its end has instead not only persisted but has rapidly escalated right at the very end. And while we approach the coming year with trepidation, we also do so with optimism, as the science and the societal understanding of how to first live with, and then overcome, this virus will inevitably lead us to better times.

However, 2021 was also a year of happiness and success, as we had the opportunity to help so many patients. **So first and foremost, we would like to say thank you to our patients** – we continue to be in awe of the strength and confidence with which you approach your treatment. In addition, we would like to thank our partners and collaborators, as we could not do anything that we do without you.

This group includes nurses, technicians, administrative staff, residents, research fellows, janitorial services, and so many others.

The coming year holds so much potential and also presents many potential challenges and pitfalls. Our focus will be even more intensely on the treatment of women with breast cancer and related conditions, and everything we do – team growth, program development, research, outreach – will be with that goal in mind.

It has been an honor to work with and work for all of our partners over the past year, and we cannot wait to do even more, and to do even better, in 2022.

We look forward to collaborating with anyone who will help us provide the best possible care, whether clinical care, administrative care, or research. We may be reaching out to you, but don't hesitate to reach out to us

Sincerely,
Peter

BY THE NUMBERS

After measuring our volume and evaluating our outcomes, we are pleased to have found that every indicator showed that we have helped more people than ever before, and that our complication rate is far lower than the national average.

Outpatient visits: 1991
Operations performed: 534

	DIEP flap	Breast reduction	Mastopexy	Lymphedema
n	63	126	26	6
Complication rate	6.7%	4.8%	3.8%	0%
Return to OR	4.4%	2.4%	3.8%	0%
Flap survival rate	98.4%	----	----	100%
Nipple necrosis	----	0%	0%	----
Conversion to free nipple graft	----	0.8%	0%	----

ACCOMPLISHMENTS

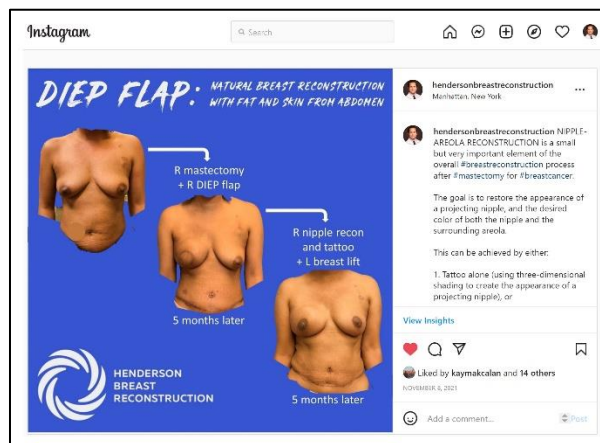
Refined the FlapMap DIEP flap surgical planning system: We are proud to have made further improvements to the FlapMap surgical planning system for DIEP flap breast reconstruction. This improvement has allowed us to perform the procedure faster and more safely, and we are sharing this technique with others both within and outside of the Mount Sinai system.

Implemented advanced pain management methods: In conjunction with the excellent anesthesiologists at Mount Sinai, we have implemented advanced pain management methods for breast surgery. These include regional nerve block modalities such as the erector spinae plane (ESP) block and the transversus abdominis plane (TAP) block, as well as opiate-minimizing outpatient medication regimens.

Created “DIEP Dive” database: As students of the field of breast reconstruction, we have created a complete database of every paper ever published about DIEP flap breast reconstruction. Having read each of these papers has allowed us to learn more than ever before about the collective knowledge that has been gathered about this powerful breast reconstruction technique (www.diepdive.org)

Created first before-and-after photo gallery: After receiving consent from each included patient, we have created our team’s first before-and-after photo gallery. This is available both in-office as well as online.

Grew our social media presence: In order to both share our experiences and high-level educational content with as many people as possible, we have increased our activity on Instagram (@HendersonBreastReconstruction), Facebook (Henderson Breast Reconstruction), and Twitter (@NYCplastics).



NEW PROCEDURES DEVELOPED

DIEP skin paddle reduction + simultaneous NAC reconstruction: Creating the nipple after DIEP flap breast reconstruction is a subtle, but very important, part of the overall reconstruction process. We have developed, and are refining, a new technique for shaping the nipple, neo-areola, and overall flap shape in a single, simple procedure.

Modified-superomedial pedicle breast reduction pattern: Women who are seeking breast lift and reshaping after having achieved significant weight loss can often pose a difficult challenge due to extremely medial displacement of the nipple-areola complex. We have developed a novel modification to the standard superomedial pedicle mastopexy or breast reduction technique that allows us to safely and successfully perform the procedure.

CHALLENGES AND OPPORTUNITIES

Textured implants/BIA-ALCL: As more and more becomes known about the effects of textured implants, we will be faced with difficult questions about how to manage patients who have asymptomatic textured implants.

Expanding MSHS footprint: Mount Sinai continues to expand, both geographically and in scope. This presents a great opportunity to be able to offer our services to an even larger community of women.

Consolidation in industry: There is an unprecedented consolidation of reconstructive surgery practices nationwide, and this consolidation will have an impact on how these sorts of services are offered, performed, and marketed.

RESEARCH

The Leonidas Surgical Research Society (LSRS) is the research arm of HBR. Our focus is on conducting research on all aspects of breast reconstruction, including surgical outcomes, new techniques, and better understanding of underlying physiology. We collaborate with researchers and clinicians within Mount Sinai, as well as throughout the country and the world.

Team members and key contributors

Taylor Ibelli
Annet Kuruvilla
Uchechukwu Amakiri
Jared Gopman
Frankie Graziano
Pierce Janssen
Jake Sharaf
Max Mandelbaum
Dani Inglesby

Brianne Sullivan
Alex Sarosi
Abigail Katz
Ava Adler
Elena Baldwin
Nikita Roy
Isabel Ryan
Eric Bao

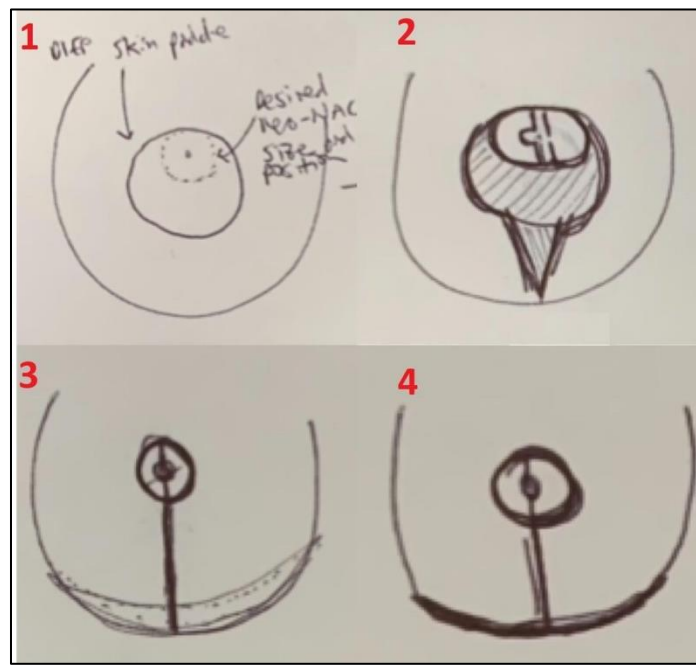
Collaborators

Alex Kagen
Minas Chrysopoulo
Hani Sbitany
Jordan Jacobs
Alice Yao
Sergio Canavero
Florence Doo
Samantha Chem

PROJECTS

Breast reconstruction database: We have designed and initiated the first comprehensive database of patients who have undergone breast reconstruction at Mount Sinai. This data aggregation will allow us to understand our outcomes, improve our patient care, and contribute these findings to the global research community.

Mastectomy dimensions: We are evaluating the use of mastectomy specimen dimensions (in addition to weight) to guide flap design and shaping during DIEP flap breast reconstruction.



Financial toxicity of breast reconstruction: We are quantifying the financial implications of different breast reconstruction modalities in order to provide the most thorough and candid preoperative counseling for women who are considering different options.

DIEP vascular re-routing: We are developing the first comprehensive classification system for the vascular manipulations that can be performed during DIEP flap breast reconstruction

2021 PUBLICATIONS

AS Kuruvilla, JM Gopman, S Cham, PW Henderson. **Nipple-areolar tattoo: comprehensive review of history, theory, technique, and outcomes.** *Journal of Plastic, Reconstructive, and Aesthetic Surgery* 2021;S1748(21):462-9.

B Sullivan, I Ryan, PW Henderson. **Objective comparison of breast implant products and services – 5-year update.** *Journal of Plastic, Reconstructive, and Aesthetic Surgery* 2021;45(6):2568-77.

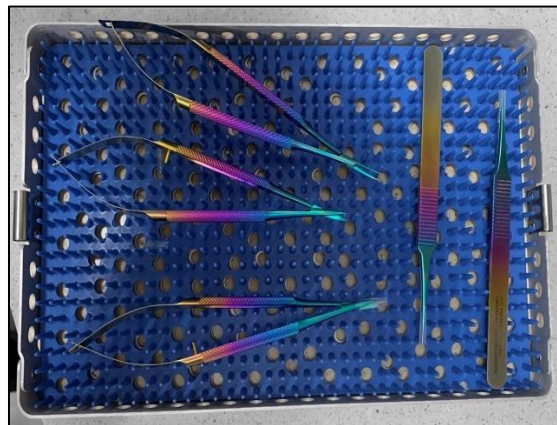
AS Kuruvilla, PW Henderson. **25th anniversary of the death of nerve surgery pioneer Luis de Medinaceli.** *Journal of Reconstructive Microsurgery*; epub ahead of print.

J Sharaf, PW Henderson. **Comments on “Application of intraoperative indocyanine green angiography for detecting flap congestion in the use of free deep inferior epigastric perforators flaps for breast reconstruction.** *Microsurgery*; epub ahead of print.

CLINICAL CARE

“Surgery Success Program”: The HBR team will be implementing a first-in-class comprehensive recovery system in the first quarter of 2022. Referred to as “Surgery Success Programs” for autologous breast reconstruction and breast reduction/mastopexy, they represent a new type of multidisciplinary, “high-touch” recovery system that formalizes the approach that we have been taking to date, and we believe will facilitate a much smoother, more effective, and more empowered postoperative recovery.

Advanced lymphedema treatments: Lymphedema has been a vexing clinical scenario, but with advanced microsurgical and supermicrosurgical techniques combined with cutting-edge technology and a multidisciplinary approach, we will be adding to our list of offerings for patients both with lymphedema, as well as those who are at high risk of developing lymphedema.



Breast implant checklist/forms: The US FDA has mandated advanced patient education checklists prior to breast implant placement, and this checklist will be provided to all patients prior to any such procedure.

Patient-reported outcomes via Breast-Q[®]: Patient-reported outcomes are a key element of both clinical care and research, and are going to be collected from all breast surgical patients beginning in 2022.

TEAM DEVELOPMENT

Aljenica Apostol: Ms. Aljenica Apóstol RN C-NP will be joining our team as the Director of Outpatient Services, which will significantly enhance our overall patient care capabilities. Welcome, Aljenica!

Creation of advisory panels: In order to better understand and address our patients' needs, we are creating the first HBR Advisory Panel, HBR Patient Council, and HBR Peer Support Networks.

RESEARCH

Outcomes research: The MSHS Breast Reconstruction Database will be queried to answer a number of relevant clinical outcomes questions that could not have been answered before its creation.

FlapMap - medial row analysis: The library of FlapMaps that have been created for the clinical care of our patients are being studied to develop a better understanding of the branching patterns of the deep inferior epigastric artery and vein. This will allow for DIEP flap dissection to be faster, safer, and ultimately more successful.

MicroAnywhere surgical skills training system: We will be releasing the first public version of our MicroAnywhere skills training workbooks, which represent a new class of training system that is highly portable, low-cost, and effective self-training tools to develop and refine microsurgical skills.

WHO WE ARE

Peter Henderson, MD MBA FACS:	<i>CEO and Director of Surgical Services</i>
Janequa Bailey, MBA:	<i>COO and Director of Administrative Services</i>
Aljenica Apostol RN, C-NP:	<i>Director of Clinical Services</i>
Bridget Riley:	<i>Director of Finance and Billing</i>

Our team is passionate about caring for our patients and is growing! We are proud to welcome Ms. Aljenica Apostol, RN CNP to our team as Director of Clinical Services. She will be the leader of our outpatient clinical care and will be a key member of our team. She joins Janequa Bailey and Bridget Riley, and our clinical and administrative partners in the PACC building.

WHAT WE DO

Our clinical focus is on breast cancer reconstruction and related procedures. Therefore the conditions that we most commonly treat are:

- Breast neoplasm (pre-cancerous, as well as invasive cancer)
- Breast cancer genetic predisposition
- Macromastia
- Breast ptosis
- Congenital breast anomalies
- Lymphedema (both congenital and acquired)

We provide the full-range of procedures to treat the above conditions, including:

- Autologous total breast reconstruction (DIEP/SIEA, PAP/TUG/DUG, LD/TAP)
- Implant-based total breast reconstruction (tissue expander, direct-to-implant)
- Partial/oncoplastic breast reconstruction (volume displacement, volume replacement)
- Symmetrizing procedures (breast reduction, mastopexy, augmentation)
- Adjunct procedures (nipple reconstruction, NAC tattoo, scar management)
- Lymphedema management (LVNT, LVA, liposuction/direct excision/Charles)

PARTNERS AND COLLABORATORS

At HBR we choose to only work with the highest quality partners and collaborators.

Breast surgeons

Dr. Sylvia Reyes (<https://www.mountsinai.org/profiles/sylvia-reyes>)
Dr. Ashley Tsang (<https://www.mountsinai.org/profiles/ashley-tsang>)
Dr. Michael Zeidman (<https://www.mountsinai.org/profiles/michael-zeidman2>)
Dr. David Anderson (<https://www.mountsinai.org/profiles/david-n-anderson>)
Dr. Sarah Cate (<https://www.mountsinai.org/profiles/sarah-p-cate>)

Plastic surgery co-surgeons

Dr. Jordan Jacobs (www.mountsinai.org/profiles/jordan-ms-jacobs)
Dr. Hani Sbitany (www.mountsinai.org/profiles/hani-sbitany)
Dr. Alice Yao (www.mountsinai.org/profiles/alice-s-yao)
Dr. Steven Sultan (www.mountsinai.org/profiles/steven-m-sultan)

Medical oncologist

Dr. Theresa Shao (www.mountsinai.org/profiles/theresa-shao)
Dr. Paula Klein (www.mountsinai.org/profiles/paula-klein)
Dr. Stephen Malamud (www.mountsinai.org/profiles/stephen-c-malamud)

Radiology

MSSH Radiology: Dr. Alex Kagen (www.mountsinai.org/profiles/alexander-c-kagen)

Garment suppliers

WeFit Lingerie (<https://wefitlingerie.com>)

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How to contact us

It is our privilege and humble responsibility to care for as many people as we can, to as great a degree as possible. If there are any women who would benefit from evaluation by our team, we would be happy to meet with them.

Please contact us by whatever means is most convenient:

Website: www.hendersonbreastreconstruction.com

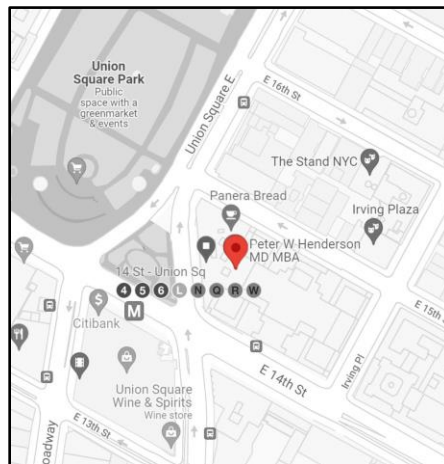
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