Sarah E. Hagarty, MD, FRCSC Plastic Surgeon, Clin. Ass. Prof. of Surgery, University of Illinois College of Medicine at

Plastic Surgeon, Clin. Ass. Prof. of Surgery, University of Illinois College of Medicine at Rockford, President of Medical Staff OSF St. Anthony Medical Center. <u>shagarty@uic.edu</u>

Education

Doctor of Medicine, McGill University, Montreal, Quebec, Canada

Bachelor of Science in Physiology, cum laude McGill University, Montreal, Quebec, Canada, '*Canadian Scholar' & McGill University* Scholarship for Studies in Science

Post-Graduate Training

University of Illinois at Chicago: Residency Training Program in Plastic Reconstructive & Cosmetic Surgery

McGill University, Montreal, Canada: General Surgery Residency Fellow of The Royal College of Physicians and Surgeons of Canada, General Surgery

Licensing Examinations, Board Certifications, Memberships

BCLS, ACLS, ATLS

The American Society of Plastic Surgeons, The American College of Surgeons The Royal College of Physicians and Surgeons of Canada, General Surgery, 2002 The Royal College of Physicians and Surgeons of Canada, Plastic & Reconstructive Surgery, 2007 The American Board of Plastic Surgeons, Plastic and Reconstructive Surgery, 2008 The American Board of Plastic Surgeons, Plastic and Reconstructive Surgery, Recertification 2018

Work Experience

- 2006 2020. Featherstone Clinic Multispecialty Group, Covering OSF St Anthony, Swedish American Hospital and Rockford Memorial Hospital. Employed at OSF St Anthony Medical Center, Plastic Surgeon. Clin. Ass. Prof. of Surg. at University of Illinois College of Medicine Rockford
- 2018 2020 Vice President Medical Staff OSF St Anthony. Chaired Quality & Peer Review Committee, Credentials Committee, 'at large' member of Medical Executive

Committee several years, OR committee since 2015. As Vice President, instituted standardization of Peer Review, oversight and tracking process for all three subcommittees of QPC, including Trauma, Cardiovascular and Neurosciences. Helped prepare and organize a rewriting and update of OSF Hospital Bylaws to state levels. In Quality Peer Review Committee, streamlined process, workflow and feedback loop for The Novel Midas Professionalism Complaint Platform to help improve the process for communication and constructive feedback between physicians and nursing management.

2020present President Medical Staff Chair Medical Executive Committee, oversight all subcommittees and medical staff departments

Research & Publications

Alejandro Magana, B.Sc¹, Divya Rani Bijukumar, PhD¹, Mathew T. Mathew, PhD¹, Sarah E. Hagarty, MD² **Enhancement of adipose cell viability and functionality using amniotic membrane derived growth factors**. (A masters thesis project - Alejandro Magana). Accepted for presentation at June 2020 Meeting Midwestern Society of Plastic Surgeons, Abstract accepted for publication in The Annals of Plastic Surgery

Sarah Hagarty, MD, FRCSC, Jessica Luo, BS. E-cigarette "Vape" Device Explosion Causing C Spine Fracture. Plast Reconstr Surg Glob Open 2020;8:e2752;

Hagarty, Sarah E. M.D.; Yen, Lawrence L. M.D.; Luo, Jessica B.Sc.; Fosco, Christopher R. M.D.; Gomez, Kayeromi Ph.D.; Khare, Manorama PhD .Decreased Length of Postoperative Drain Use, Parenteral Opioids, Length of Stay, and Complication Rates in Patients Receiving Meshed versus Unmeshed Acellular Dermal Matrix in 194 Submuscular Tissue Expander–Based Breast Reconstructions: A Single-Surgeon Cohort Study. Plast Reconst Surg: <u>April 2020 - Volume 145 - Issue 4 - p 889-897</u>. doi: 10.1097/PRS.00000000006635

Hagarty, Sarah E. MD^{*,†}; Santos, Edward F. MD[†]; Luo, Jessica BS^{*} Large Viable Fat Nodules, Months Post-Transfer, inside Radiated Breast Implant Pocket. A Case Report. Plastic and Reconstructive Surgery - Global Open: <u>March 24, 2020 - Volume Latest Articles - Issue -</u> doi:10.1097/GOX.00000000002722

Hagarty, Sarah E. BS, MD; Yen, Lawrence BS; Fosco, Christopher MD; Khare, Manorama PhD. **Positive Impact of Meshing Autogenous Dermal Matrix (ADM) on Pain, Length of Stay and Length of Time Required for Post-Operative Drains in Tissue Expander Based Breast Reconstruction. Plastic and Reconstructive Surgery: <u>October 2015 - Volume 136 - Issue 4S - p 113-114</u>. doi: 10.1097/01.prs.0000472420.12175.46**

Luo J, Tsai C, Alharthi S, Bijukumar D, Khare MM, Hagarty SE. Adipocyte Viability After Standard Method Liposuction Harvest, Collection, and Variable Treatment for Fat Transfer: Manual Syringe Plunger Versus Pulsatile Pump. The Annals of Plastic Surgery May 2019 – Volume Issue - p S - S.

Hayssen, Hilary BA; Khare, Manorama PhD; Hagarty, Sarah E. MD. Abstract: **A Retrospective Comparison** of Two Techniques of Fat Grafting in Breast Reconstruction: Outcomes over 5 Years. Plastic and Reconstructive Surgery – Global Open: <u>September 2018 - Volume 6 - Issue 9S - p 23-24</u> doi: 10.1097/01.GOX.0000546742.82720.fa

Hayssen H, Khare M, Hagarty SE. A Retrospective Comparison of Two Techniques of Fat Grafting in Breast Reconstruction Outcomes over 5 Years. Plast Recons Surgery – Global Open: <u>August 2018 -</u> <u>Volume 6 - Issue 88 - p 23–24</u>. PSTM 2018 Abs Supp. doi: 10.1097/01.GOX.0000546742.82720.fa

Hayssen H, Khare M, Hagarty SE. Preliminary Outcomes in Autologous Fat Grafting for Breast Reconstruction: Closed-Loop Versus Syringe Technique. 57th Annual MAPS Meeting Innovations, Challenges, & Artistry in Plastic Surgery. Annals of Plastic Surgery: <u>April 2018 - Volume 80 - Issue 4 - p S119–</u> <u>S138</u>. doi: 10.1097/SAP.00000000001416

Hayssen H, Khare MM, Hagarty SE. A Novel Closed-Loop Autologous Fat Grafting Technique for Breast Reconstruction. 56th Annual MAPS Meeting Restoration of Function and Aesthetics in Plastic Surgery." Annals of Plastic Surgery. 78 (Supplement 3):S166, April 2017.

Hagarty, SE, Yen, L, Fosco C, Khare M. **Positive Impact of Meshing Autogenous Dermal Matrix** (ADM) on Pain, Length of Stay and Length of Time Required for Post-Operative Drains in Tissue **Expander Based Breast Reconstruction.** Plast Recon Surgery: <u>October 2015 - Volume 136 - Issue 48 - p</u> 113–114. doi:10.1097/01.prs.0000472420.12175.46

Yen L, Fosco C, Khare M, Hagarty SE . **Post-operative Drain Time Analysis, Outcomes and Complication Rates in Patients Receiving "Meshed" Versus "Un-Meshed" Acellular Dermal Matrix** (adm) in Partial Sub-Muscular Breast Reconstruction. Midwestern Association of Plastic Surgeons 2015: Abstracts. Annals of Plastic Surgery: June 2015 - Volume 74 - Issue - p S173–S188 . doi: 10.1097/SAP.00000000000554

SE Hagarty and JL Henry PhD, **The Cardiovascular Effects of Substance P in the Rat**. Department of Physiology, McGill University. This project required the use of microsurgical techniques to introduce catheters into the carotid artery and intrathecal space in the rat. Various peptide antagonists of the substance P receptor (subtypes NK-1 and NK-2) were introduced to the intrathecal space, and their cardiovascular effects were monitored. A Physiology Honours Research Thesis, August 1992, McGill University.

SE Hagarty MD, I Huttner MD PhD, H Shibata MD, S Katz MD **Gastric Carcinoid Tumours and Pernicious Anemia: A Case Report and Review of the Literature**. The Canadian Journal of Gastroenterology, 2000 Mar; 14(3) 241-5

SE Hagarty MD, AM Derossis MD, LS Feldman MD, GM Fried MD, DS Stanbridge RN. Validation of Inanimate Laparoscopic Skills Testing Model using Residency In-Training Evaluations. The Department of Minimally Invasive Surgery McGill University, Montreal Canada. Presented at The Society of American Gastrointestinal Endoscopic Surgeons (SAGES) April 2001, at St. Louis, Missouri, USA (Awarded Poster of Distinction)

Liane S Feldman MD, FACS : Sarah E Hagarty MD^{*}, Gabriela Ghitulescu MD^{*}, Donna Stanbridge RN^{*} and Gerald M Fried MD, FACS^{*} Relationship between objective assessment of technical skills and subjective in-training evaluations in surgical residents^{*} Steinberg-Bernstein Centre for Minimally Invasive Surgery, McGill University, Montreal, Quebec, Canada Journal of the American College of Surgeons, Volume 198, Issue 1, January 2004, Pages 105-110

SE Hagarty MD, L Feldman MD, G Fried MD, J Garzon MD. **The Evolution of Elective Splenectomy at McGill: Twenty-Five Years from Open to Laparoscopic Splenectomy in 325 patients.** Department of Minimally Invasive Surgery at McGill University, Montreal, Canada. Data presented at Surgical Grand Rounds, Montreal General Hospital December 2000. Accepted for presentation at The Annual Meeting of The Society of The American Gastrointestinal Endoscopic Surgeons (SAGES) in April 2002, New York, NY, USA. Accepted for publication in the Journal of SAGES.

SE Hagarty, G Ghitulescu, D Stanbridge, G Fried. A Rabbit Model of Adhesion Formation in Incisional Hernia Repair: A comparison study of Gortex®, Duomesh® and Seprafilm. Department of General Surgery, Montreal General Hospital, McGill University. Accepted for presentation and The Annual the Meeting of The Society of American Gastrointestinal Endoscopic Surgeons (SAGES) in April 2002, New York, NY, USA. Accepted for publication in the Journal of SAGES.

SE Hagarty, M Grevious, MN Cohen . Current Review of Wound Healing. University of Illinois at Chicago. Presented at Midwestern Association of Plastic Surgeons, March 2003, in Chicago, Illinois.

SE Hagarty, MD, R Crepeau⁺, MD, MN Cohen, MD . **Patient Satisfaction and Incidence of Capsular Contracture with the New Generation of Silicone Breast Implants: A Single Surgeon's Experience.** McGill University and University of Illinois at Chicago. Presented at Midwestern Association of Plastic Surgeons, March, 2004, in Chicago, Illinois, and at the American Society of Plastic Surgeons October 2004, Philadelphia, Pennsylvania, USA.

SE Hagarty, MD, R Crepeau⁺, MD, MN Cohen, MD. **Patient Satisfaction and Incidence of Capsular Contracture with the New Generation of Silicone Breast Implants: The Two Year Experience.** McGill University and University of Illinois at Chicago. Presented at The Senior Residents Meeting, March 2005, Baylor University, Houston, TX, and The Midwestern Association of Plastic Surgeons Meeting, April 2005, Northwestern University, Chicago, Il

Patent Applications

A system for the harvest and transfer for high volume fat grafting using a centrifugal pump . Abstract A closed loop system and methods for pumping harvested fat from a patient donor site to a patient grafting site using a centrifugal pump. Inventor : Sarah Elizabeth Hagarty. WO2018204929A1 WIPO (PCT). 2018-05-07. Application filed by Hagarty Sarah Elizabeth 2018-11-08. Publication of WO2018204929A1

A Closed Loop System For Direct Harvest and Transfer for High Volume Fat Grafting. Publication number: 20190105433. Abstract: A closed loop system and methods for pumping harvested fat from a patient donor site to a patient grafting site. Type: Application. Filed: April 27, 2017. Publication date: April 11, 2019. Inventor: Sarah Elizabeth Hagarty.

Simple Closed Loop System for Direct Harvest and Transfer for High Volume Fat Grafting. Publication number: 20170312403. Abstract: This invention proposes the construction of a simple closed loop system for continuous flow harvesting, collection, syphoning, and grafting of large volumes of fat. This invention uniquely bypasses the standard cumbersome and time-consuming process, that mainly being the need to first transfer fat into individual syringes prior to grafting into the patient. This is traditionally done with unmeasured, manual pressures as generated by a simple plunger syringe. This innovative concept presented here simplifies the whole process into a closed loop, from the donor harvest site, and then back to the patient. The concept is modular, drawing on commonly used, interchangeable parts and pumps present and available in most basic community hospital operating rooms. The major benefit is a significant reduction in time to transfer. Type: Application. Filed: April 27, 2016. Publication date: November 2, 2017. Inventor: Sarah Elizabeth Hagarty

Presentations & Lectures:

Midwestern Association of Plastic Surgery Meeting, Lake Geneva, WI, May 2019. Adipocyte Viability After Standard Method Liposuction Harvest, Collection, and Variable Treatment for Fat Transfer: Manual Syringe Plunger Versus Pulsatile Pump.

16th Annual International Society of Adipocyte and Stem Cell Therapy, Las Vegas NV Dec 2018: Hagarty S, Glenn B, Brooks S, Wilson T, Katz A, and Perry R. Co-Moderator, Speaker and Organizer: **'Innovation and Technology Expert Panel: Taking an Idea all the way to the Finish Line.'** Navigating Patents, IP, Device Development and FDA Regulation.

Midwestern Association of Plastic Surgery Meeting, Chicago, IL, 2017: A Novel Technique for Fat Grafting – A closed Loop Pump Method.

ASPS Plastic Annual International Surgery Meeting, 2016 Boston, MA: Positive Impact of Meshed ADM in Partial Submuscular Tissue Expander Breast Reconstruction.

Midwestern Association of Plastic Surgery, Chicago, IL, 2015: Meshed ADM Shortens Drain Times

Midwestern Association of Plastic Surgery Meeting, Chicago, IL, 2003 Current Review of Wound Healing

Midwestern Association of Plastic Surgery Meeting, Chicago, IL, 2004 Patient Satisfaction and Incidence of Capsular Contracture with the New Generation of Silicone Breast Implants: A Single Surgeon's Experience at One Year.

Midwestern Association of Plastic Surgery Meeting, Chicago, IL, 2005 Outcomes and Patient Satisfaction with the New Generation of Silicone Breast Implants: A Single Surgeon's Experience at 2 Years

ASPS Plastic Annual International Surgery Meeting 2004 Philadelphia, PA Patient Satisfaction and Incidence of Capsular Contracture with the New Generation of Silicone Breast Implants: A Single Surgeon's Experience at One Year

Chicago Society of Plastic Surgeons 2005 Graduating Residents Paper Competition: Outcomes and Patient Satisfaction with the New Generation of Silicone Breast Implants