# JENNIFER LYNN BAKER, MD

## **CURRICULUM VITAE**

**PERSONAL HISTORY:** 

**Assistant Professor** 

Department of Surgery; General Surgery Division David Geffen School of Medicine at UCLA

**EDUCATION:** 

BS, Marquette University, 2006

Milwaukee, WI

MD, University of Iowa, 2010

Iowa City, IA

Intern, General Surgery, 2010-2011

**UCSD Health System** 

San Diego, CA

Residency, General Surgery, 2011-2012; 2014-2016

UCSD Health System

San Diego, CA

Postdoctoral Research Fellow, 2012-2014

UCSD Health System

San Diego, CA

Chief Resident, General Surgery, 2016-2017

**UCSD Health System** 

San Diego, CA

Fellow, Breast Surgical Oncology, 2017-2018

Memorial Sloan Kettering Cancer Center

New York, NY

LICENSURE:

State of California Medical License, Iss: Feb 2012 Exp: Jan 2020

Lic # A120237

State of New York Medical License, Iss: Feb 2017 Exp: Jan 2019

Lic # 287926-1

**BOARD CERTIFICATION:** 

American Board of Surgery Certificate No. 063332

Issued: Nov 2017 Exp: Dec 2028

# PROFESSIONAL EXPERIENCE: (CURRENT)

Assistant Professor, Department of Surgery UCLA Medical Center

# PROFESSIONAL EXPERIENCE: (PREVIOUS)

Clinical Instructor, Department of Surgery Memorial Sloan Kettering Cancer Center 2017-2018

Contract Physician, Department of Surgery Veteran Affairs, UCSD Healthcare System 2012-2014

#### **PROFESSIONAL ACTIVITIES:**

Member, Women in Surgery UCSD San Diego Healthcare System 2014-2017

Member, Quality and Patient Safety Project Committee UCSD San Diego Healthcare System 2016-2017

Member, Sub-Committee, "Surgical Training" Resident and Associate Society of the American College of Surgeons 2013-2014

Volunteer Physician, Peruvian American Medical Society Mission Trip, General and Pediatric Surgery, Ayachucho, Peru 2014

Invited Reviewer
International Journal of Surgical Oncology
2013

Vice President, Product Education Lead Credible Cravings, LLC 2012-2015

Volunteer, Iowa Miles of Smiles Mission Trip, Craniofacial Surgery, Huehuetenango, Guatemala 2010 Volunteer, Global Medical Relief Mission Trip, urgent medical care, Honduras 2006

#### SOCIETY MEMBERSHIPS

Member, American College of Surgeons

Member, Society of Surgical Oncology

Member, American Society of Breast Surgeons

Member, UCLA Jonsson Comprehensive Cancer Center

#### **HONORS AND SPECIAL AWARDS:**

National Armed Forces Medal for Athletic and Academic Excellence 2002

Ignatius Academic Merit Scholarship, Marquette University 2002-2006

Conference-USA Division I Commissioner's Academic Medal of Honor 2002-2004

Graduated Summa Cum Laude from Marquette University 2006

Inducted into Alpha Sigma Nu Honor Society, Marquette University 2006

Robin Curtis Award for Service, Marquette University 2006

Recognition for Excellence in Neuroscience Research, Marquette University 2006

Graduated *Alpha Omega Alpha* from University of Iowa Medical School 2010

"Best Scientific Paper", 2<sup>nd</sup> place, Southern California ACS 2013

"Best Oral Presentation: Clinical Outcomes" UCSD Surgery Research 2013

"Dr. Tapan K Chaudhuri Award; Best Paper Breast Cancer Research" Society of Nuclear Medicine and Molecular Imaging Annual Meeting 2013

#### RESEARCH GRANTS AND FELLOWSHIPS RECEIVED:

Baker, JB (Co-Investigator)

Integrative Profiling of Primary Breast Cancer on the Basis of Divergent Exercise Exposure (18-058)

To characterize the tumor molecular landscapes of patients with untreated, operable breast cancer. Specific aims to examine differences in the DNA somatic mutational profile by whole-exome sequencing, evaluate differences in transcriptome by transcriptional analysis, and differences in tumor metabolic profile by mass spectrometry

Iyengar, N (PI)

2018

Baker, JB (Collaborator)

Exercise projects in CANTO

Clinical Study of treatment related Chronic Toxicity in Women with Localized Breast Cancer (CANTO) is a prospective trial involving 20 institutions in France. This project objective is to evaluate whether physical activity during neo-adjuvant chemotherapy affects pathologic complete response at surgery Pr Fabrice Andre (PI)

2017-2018

Weill Cornell Medical Center Multi-Institutional Consortium Clinical Research Methodology Curriculum Aug 2017-Jun 2018 Certificate received Jun 2018

#### Baker, JB (Co-investigator)

A randomized, double-blinded controlled clinical trial comparing postinjection site pain of [99mTc]Tilmanocept vs [99mTc]sulfur colloid in breast cancer patients undergoing SLN mapping

Primary objective: randomized control trial investigating differences in pain experiences by breast cancer patients undergoing lymphoscintigraphy by two different radiolabeled mapping agents

Funding source: Navidea Pharmaceuticals

Wallace, AM (PI)

2013

Baker, JB (Co-investigator)

Evaluating the relationship between stem cells and fat graft survival Primary Objective clinical trial investigating the role of stem cells and fat graft survival

Funding Source: Plastic Surgery Research Foundation

#### **INVITED LECTURES AND PRESENTATIONS:**

- 1. **Baker J**. Are we over-treating DCIS? Resident Debate. UCSD Department of Surgery Grand Rounds, San Diego, CA. November 4, 2015
- 2. Baker J. "Benign Breast Disease". UCSD Resident Teaching Series, San Diego, CA. Nov 2016
- 3. **Baker J**. A Work-out a Day...Keeps Cancer Away? Exploring the link between exercise and cancer protection. UCSD Department of Surgery Grand Rounds, San Diego, CA. April 2017
- 4. **Baker J**. Impact of Delay to Adjuvant Therapy on Breast Cancer Outcomes. Memorial Sloan Kettering Cancer Center Semi-Annual Joint Plastic Surgery and Breast Surgery Conference, New York, NY. Dec 18, 2017
- 5. **Baker J**. Case Conference Series Presenter. Memorial Sloan Kettering Cancer Center Multi-Disciplinary Breast Tumor Board, New York, NY. Aug 2017-Aug 2018
- 6. **Baker J.** "Breast Surgery for primary care". CME Event: Women's Health: Imaging and Treatment Guidelines for Primary Care Providers. UCLA Health. Santa Monica, CA. Nov 3, 2018

#### **CME LECTURES**

- 1. "Update in surgical management of breast cancer". Women's Health: Imaging and Treatment Guidelines for Primary Care Providers. UCLA Health CME program. Nov 2, 2018
- 2. "Atypical Breast Lesions: Update in Surgical Mangement of high risk lesions". <u>Womens Health Case Conference meeting.</u> Iris Canter UCLA Womens Health Center

#### TEACHING/MENTORING

#### **Teaching appointments:**

- 1. Chair. Elective medical student rotation in breast surgery. UCLA Health. Dec 2018-current
- 1. Prepared Case Presentation: oral boards

#### **PUBLICATIONS/BIBLIOGRAPHY:**

### **RESEARCH PAPERS**

RESEARCH PAPERS (PEER REVIEWED)

#### A. RESEARCH PAPERS – PEER REVIEWED

- 1. Segal NA, Anderson DD, Iyer K, **Baker J**, Torner JC, Lewis CE, Felson DT, Lynch J, Brown TD. Baseline Articular Contact Stress Levels Predict Incident Symptomatic Knee Osteoarthritis Development in the MOST Cohort. J Orthopedic Research; 2009; 27(12):1562-8. PMID 19533741
- Segal NA, Glass NA, Baker JL, Torner J. Correcting for Fat Mass improves DXA Quantification of Quadriceps Specific Strength in Obese Adults Aged 50-59. J Clin Densitom, 2009; 12(3):299-305. PMID 19121597
- 3. *Mailey B, Saba S, Baker J, Tokin C, Hickey S, Wong R, Wallace A, Cohen S.* A Comparison of Cell Enriched Fat Transfer to Conventional Fat Grafting after Aesthetic Procedures using a Patient Satisfaction Survey. Ann Plast Surg. 2013; 70(4): 410-5. PMID 23486128
- 4. *Baker J*, *Misra S*, *Manimala N*, *Kuy S*, *Gant G*. The Role of Politics in Shaping Surgical Training. Bull Am Coll Surg. 2013; 98(8):17-25. PMID 24205571
- 5. *Baker JL*, *Mailey BA*, *Tokin CA*, *Blair SL*, *Wallace AM*. Post-Mastectomy Reconstruction is Associated with Improved Survival in Invasive Breast Cancer Patients: A Single Institution Study. Am Surg. 2013; 79(10):977-81. PMID 24160782
- 6. Hosseini A, **Baker JL**, Tokin CA, Qin Z, Hall DJ, Stupak DG, Hayashi T, Wallace AM, Vera DR. Flourescent-tilmanocept for tumor margin analysis in the mouse model. J Surg Res. 2014; 190(2):528-34. PMID 25069859
- 7. Weiss A, Tran V, **Baker J**, Farnaz H, Wallace AM, Chang D, Ojeda-Fournier H, Blair SL. Increased Likelihood of Mastectomy in Human Epidermal Growth Factor Receptor 2-positive Ductal Carcinoma In Situ. Am Surg. 2014 Oct; 80(10):936-9. PMID 25264633
- 8. *Mailey B, Hosseini A, Baker J, Young A, Hicok K, Alfonso Z, Wallace AM, Cohen SR.* Adipose Derived Stem Cells: Methods for Isolation and Applications for Clinical Use. Methods Mol Biol. 2014; 2010:161-81. PMID 25173168
- 9. **Baker JL**, Minya P, Messer K, Tokin CA, Hoh CK, Vera DR, Wallace AM. Comparison of [99mTc]Tilmanocept and Filtered-[99mTc]sulfur colloid for identification of SLNs in Breast Cancer Patients. Ann Surg Oncol. 2015; 22(1):40-5. PMID 25069859
- 10. *Baker JL*, *Schwab RB*, *Wallace AM*, *Madlensky L*. Breast Cancer in a RAD51D Mutation Carrier: Case Report and Review of the Literature. Clinical Breast Cancer. 2015; 15 (1):71-5. PMID 25445424
- 11. Unkart JT, **Baker JL**, Hosseini A, Hoh CK, Wallace MS, Vera DR, Wallace AM. Comparison of Post-injection Site Pain Between Technetium Sulfur Colloid and Technetium Tilmanocept in Breast Cancer Patients Undergoing Sentinel Lymph Node Biopsy. Ann Surg Oncol. 2015; 22 Suppl 3: 559-65. PMID 26275779
- 12. Mailey B, **Baker J**, Hosseini A, Collins J, Suliman A, Hicok K, Wallace AM, Cohen SR. Evaluation of Facial Volume Changes after Rejuvenation Surgery Using a 3-D Camera. Aesthet Surg J. 2016 Apr; 36(4):379-87. PMID 26628536
- 13. Baker JL, Muhsen S, Zabor E, Stempel M, Gemignani M. Does Lymph Node Status Prior to

Neoadjuvant Chemotherapy Influence the Number of Sentinel Nodes Removed? Ann Surg Oncol. 2019; 26:336-342

#### B. RESEARCH PAPERS- PEER REVIEWED (IN PRESS)

1. *Toesca A, Invento A, Massari G, Baker JL, et al.* Update on the Feasibility and Progress on Robotic Breast Surgery. Ann Surg Oncol. Accepted June 21 2019. In press

#### **CHAPTERS**

- 1. Hosseini A, **Baker J,** Young A, Hicok K, Alfonso Z, Wallace AM, Cohen S Adipose Derived Stem Cells: Methods for Isolation and Applications for Clinical Use. Stem Cell and Tissue Repair: Methods and Protocols. Kioussi (ed). Humana Press. New York. 2014
- 2. Young A, Mailey B, **Baker J**, Wallace AM. Stem Cells and Adipose Tissue Engineering. <u>Stem Cell and Tissue Engineering 2<sup>nd</sup> Edition</u>. Song Li (ed). World Scientific Publishing Co. Singapore 2012

#### REVIEWS

1. *Baker JL*, *Hasteh F*, *Blair SL*. Atypical Ductal Hyperplasia at the Margin of Lumpectomy Performed for Early Stage Breast Cancer: Is there Enough Evidence to Formulate Guidelines? Int J Surg Oncol. 2012; 2012:297832. PMID 23304477

## ABSTRACTS/SCIENTIFIC PRESENTATIONS

- Tokin CA, Baker JL, Mailey BA, Blair SL, Wallace AM. A novel approach to the organization and delivery of Breast Cancer Surgical Care. Poster, American College of Surgeons 98<sup>th</sup> annual clinical congress, *Chicago*, *Il*. Oct 2012.
- 2. Mailey B, Baker J, Collins J, Wallace AM, Cohen SR. Adipose-Derived Stem Cell Enriched Fat Transfer Versus Conventional Fat Grafting: Safety and Efficacy. Oral presentation, International Federation of Adipose Therapeutics and Sciences Scientific Program. *Quebec City, Canada*. October 2012.
- 3. **Baker JL**, Mailey BA, Tokin CA, Blair SL, Wallace AM. Post-Mastectomy Reconstruction is associated with improved survival in invasive breast cancer patients. Oral presentation, Southern California American College of Surgeons, *Santa Barbara*, *CA*. Jan 2013
- 4. Tokin CA, **Baker JL**, Mailey BA, Blair SL, Wallace AM. The use of shave margins results in lower reexcision rates during breast conservation therapy. Poster, Society of Surgical Oncology's 66<sup>th</sup> Annual Cancer Symposium. *National Harbor, MD*. March 2013
- 5. **Baker JL**, M Pu, K Messer, CA Tokin, CK Hoh, DR Vera, AM Wallace. Sentinel Lymph Node Elegance Ratio Predicts more efficient localization: A single institution comparison study of [99mTc]-Tilmanocept vs. [99mTc]-Sulfur Colloid. Oral presentation, UCSD Surgery Research Symposium. *San Diego, CA*. April 2013.
- 6. **Baker JL**, Tokin CA, Qin Z, Hall DJ, Stupack D, Wallace AM, Vera DR. Dendritic Cell Receptor-specific binding properties of [99mTC]-Cy7-Tilmanocept and its use as a multi-reporter probe in tumor margin analysis. Oral presentation, UCSD Surgery Research Symposium. *San Diego, CA*. April 27 2013.

- 7. **Baker JL**, Mailey BA, Collins J, Wallace AM, Cohen SR. A Method for Comparing Changes in Facial Volume after Facial Rejuvination Surgery using the 3D Camera. Oral presentation, California Society of Plastic Surgeons 63<sup>rd</sup> annual meeting. *San Francisco*, *CA*. May 2013
- 8. **Baker JL**, Mailey BA, Tokin CA, Weiss A, Blair SL, Wallace AM. Lymphovascular Invasion and Modified Bloom-Richardson Grade as Predictors of Axillary Lymph Node Metastasis and Disease Recurrence. Poster, American Society of Breast Surgeons Annual conference. *Chicago, Il.* May 2013
- 9. **Baker JL**, Mailey BA, Tokin CA, Blair SL, Wallace AM. Breast reconstruction after mastectomy: an update. Oral presentation, 58<sup>th</sup> annual meeting of Plastic Surgery Research Council. *Santa Monica, CA*. May 2013
- 10. **Baker JL**, Minya P, Messer K, Tokin CA, Hoh CK, Vera DR, Wallace AM. [99mTc] Tilmanocept identifies more positive nodes using fewer sentinel lymph nodes compared to [99mTc] sulfur colloid in early stage breast cancer patients. Oral presentation, Society of Nuclear Medicine and Molecular Imaging (SNMMI). *Vancouver*, CA. June 2013.
- 11. **Baker JL**, Minya P, Messer K, Tokin CA, Hoh CK, Vera DR, Wallace AM. Comparison of [<sup>99m</sup>Tc] tilmanocept and [<sup>99m</sup>Tc]sulfur colloid for identification of sentinel lymph nodes in clinically nodenegative breast cancer patients. Poster Presentation, American Society of Clinical Oncology (ASCO). *Chicago Il*, June 2013
- 12. Weiss A, Tran VM, **Baker J**, Wallace A, Hasteh F, Ojeda-Fournier H, Blair SL. Increased Likelihood of Mastectomy in Human Epidermal Growth Factor Receptor 2 (HER2NEU) Positive Ductal Carcinoma in Situ (DCIS). Oral presentation, Southern California Chapter of the American College of Surgeons, *Santa Barbara, CA. January* 2014
- 13. Hosseini A, **Baker J**, Tokin C, Hoh C, Vera D, Wallace. A Comparison of [99mTc]-Tilmanocept and [99mTc]-Sulfur Colloid in Rate of Sentinel Lymph Node Visualization on Lymphoscintigraphy in Breast Cancer Patients. Oral presentation, Southern California Chapter of the American College of Surgeons, *Santa Barbara, CA*. January 2014
- 14. Hosseini A, **Baker J**, Mailey B, Tokin C, Blair S, Wallace A. Predictors of Disease Recurrence in Invasive Breast Cancer Patients Differ Based on Nodal Status. Oral presentation at the Academic Surgical Congress, *San Diego*, *CA*. February 2014
- 15. **Baker JL**, Hosseini A, Tokin CA, Wallace AM, Qin Z, Vera D. Dendritic Cell Receptor-Specific Binding Properties of [99mTc]-Cy7-Tilmanocept and Its Use as a Multi-Reporter Probe in Tumor Margin Analysis. Oral presentation, Academic Surgical Congress, *San Diego*, *CA*. February 2014
- 16. Mailey B, **Baker JL**, Hosseini A, Alfonso Z, Strasser P, Hicok K, Cohen SR, Gosman AA, Dobke M, Wallace AM. Mesenchymal Stem Cell Count is influenced by Receipt of Chemotherapy. Oral presentation, Plastic Surgery Research Council, *New York, NY*. March 9, 2014
- 17. Hosseini A, Mailey B, **Baker JL**, Alfonso Z, Strasser P, Hicok K, Cohen SR, Gosman AA, Dobke M, Wallace AM. The Effect of Fat Harvest Technique on Adipocyte Viability and Adipose-Derived Stem Cell Count. Poster presentation, Plastic Surgery Research Council, *New York*, *New York*. *March* 2014
- 18. **Baker JL**, Kim J, Agrawal A, Wallace AM. Combined Efficacy Analysis from three Phase III trials of [99mtc]tilmanocept for sentinel lymph node biopsy in cNO breast cancer, melanoma, and head and neck cancer. Poster Presentation, Society of Surgical Oncology, *Phoenix*, AZ. March 2014.
- 19. **Baker JL**, Mailey B, Hosseini A, Alfonso Z, Strasser P, Hicok K, Cohen SR, Gosman AA, Dobke M, Wallace AM. Evaluating the relationship between stem cells and fat graft survival: Preliminary results from clinical trial. Oral presentation, UCSD Dept of Surgery Research Symposium, *San Diego*, *CA*. April 2014
- 20. Hosseini AM, **Baker JL**, Mailey BA, Wallace AM. Who is receiving the Oncotype Dx® breast cancer assay in current practice? Poster, American Society of Breast Surgeons. Las *Vegas*, *NV*. April 2014

- 21. **Baker JL**, Hosseini AM, Mailey BA, Tokin CA, Blair SL, Wallace AM. Survival in early stage invasive breast cancer. Poster, American Society of Breast Surgeons. *Las Vegas*, *NV*. April 2014
- 22. **Baker JL**, Hosseini AM, Blue MS, Vera DR, Wallace AM. Sensitivity and Specificity of tilmanocept, a CD206-targeted molecular sentinel lymph node mapping agent in breast cancer. Poster, American Society of Breast Surgeons. *Las Vegas*, *NV*. April 2014
- 23. D'Souza G, **Baker J**, Mailey B, Hosseini A, Wallace A. Acellular Dermal Matrix Increases Complications in Breast Cancer Patients. Oral presentation, California Society of Plastic Surgery, *Irvine*, *CA*. May 2014
- 24. **Baker J**, Mailey B, Hosseini A, Alfonso Z, Strasser P, Hicok K, Cohen SR, Gosman AA, Dobke M, Wallace AM. Adipocyte-Derived Stem Cells are Influenced by Receipt of Hormone therapy in Breast Cancer Patients. Oral presentation at California Society of Plastic Surgery, *Irvine*, *CA*. May 2014
- 25. **Baker J**, Unkart J, Wallace A. Sentinel Lymph Node Mapping with [<sup>99m</sup>Tc] Tilmanocept: Clinical Trial Results and Follow-up Data: Consistent Performance Across Tumor Types. Oral presentation, 16<sup>th</sup> Annual American Society of Breast Surgeons. Orlando, Fl. May 2015
- 26. **Baker J,** Muhsen S, Zabor E, Stempel M, Gemignani M. Does Lymph Node Status Prior to Neoadjuvant Chemotherapy Influence the Number of Sentinel Nodes Removed? Poster Presentation at Society of Surgical Oncology. Chicago. March 2018.
- 27. **Baker J**, CANTO research working group. Association between exercise, pathological complete response, and treatment tolerability in patients receiving neoadjuvant chemotherapy for operable breast cancer: Results from the CANTO Study. Poster Presentation. San Antonio Breast Cancer Symposium 2018. San Antonio. Dec 2018