CURRICULUM VITAE

Name: CHARLES THOMPSON (TY) TUGGLE, III

Education:

08/2006–05/2011 MD, MHS - Yale University School of Medicine

08/2001–12/2005 BS in Biochemistry & Molecular Biology - University of Georgia

Career/Training:

08/2017–present: Hand Surgery Fellow, Curtis National Hand Center at Medstar

Union Memorial Hospital, Baltimore, MD

07/2016–06/2017: Educational Chief Resident, Plastic & Reconstructive Surgery,

Yale-New Haven Hospital, New Haven, CT

07/2012-06/2017: Resident, Plastic & Reconstructive Surgery, Yale-New Haven

Hospital, New Haven, CT

07/2011-06/2012: Intern, Surgery, Yale-New Haven Hospital, New Haven, CT

Licensure and Board Certification:

03/16/2017-present: Pennsylvania Medical Physician and Surgeon license

(MD460323)

Pending: Louisiana Physician license

Pending: Plastic & Reconstructive Surgery Board Certification

Honors/Awards:

- Yale Plastic Surgery Scholastic Award [Top In-Service Exam Score] (2017)
- Quarterly Excellent Teaching Resident Recognition 09/13, 12/13, 03/14
- YNHH Medical Staff, Patient Experience Recognition 06/13, 07/13
- Cum laude, Yale University School of Medicine (2011)
- Association for Academic Surgery–Novartis Research Award (2011)
- Yale Farr Scholar (2011)
- Doris Duke Clinical Research Fellowship (2009-2010)
- Summa cum laude, University of Georgia (2005)
- First Honors Graduate [Valedictorian], Department of Biochemistry and Molecular Biology (2005)
- Honors Program: Highest Honors Capstone (2005)
- Phi Beta Kappa (2004)
- Blue Key Honor Society (2004)
- University of Georgia Foundation Fellowship (2003)
- University of Georgia Charter Scholarship (2001)

Research Grants/Stipends:

1. Title: The Effect of Scaphoid Overstuffing on Radiocarpal Kinetics

Role: Principle Investigator

Source: Curtis National Hand Center

Funding: \$7,575

Interval: August 2017-September 2018

Mentor: Dr. James Higgins, MD

2. Title: Thyroid Cancer in the Elderly: Predictors of Quality of Care and Outcomes

Role: Principle Investigator

Source: Doris Duke Clinical Research Fellowship

Funding: \$32,000

Interval: July 2009-July 2010

Mentor: Dr. Julie Ann Sosa, MA, MD, FACS

3. Title: Outcomes Analysis of Thyroid and Parathyroid Surgery in Children

Role: Investigator

Source: NIH - Ruth L. Kirschstein National Research Service Award (NRSA) Short-Term Research Grant (T35); and Graduate and Professional Student Senate

of Yale University - Professional Development Travel Fund

Funding: \$5,000

Interval: July 2007-September 2007

Mentor: Dr. Julie Ann Sosa, MA, MD, FACS

Courses Taught:

- Teaching Assistant, Histology Course for YSM-MS1, 2007-2008
- Instructor, Students-Helping-Students Anatomy Course for YSM-MS1, 2007-2008

Professional Organizations:

- · American Society for Surgery of the Hand
 - Candidate member, 2016-present
- Association for Academic Surgery
 - Resident member, 2011-present
 - Medical student member, 2010-2011
- ASPS Legislative Advocacy Committee
 - Fellow member, 2016-2017
- Plastic Surgery Research Council
 - Resident member, 2012-present

Publications:

Peer-reviewed Manuscripts

- 1. Mirza FN, **Tuggle CT**, Zogg CK, Mirza HN, Narayan D.
 - Epidemiology of malignant cutaneous granular cell tumors: A United States population-based cohort analysis using the Surveillance, Epidemiology, and End Results (SEER) database.
 - Journal of the American Academy of Dermatology. 2017; 9622(17):32467-72.
- 2. Berlin NL, Tuggle CT, Steinbacher DM.

Short-term outcomes following orthognathic surgery are associated with high-volume centers.

- Plastic and Reconstructive Surgery. 2016; 138(2):273e-81e.
- 3. Dimitrievska S, Gui L, Weyers A, Lin T, Cai C, Wu W, **Tuggle CT**, Sundaram S, Balestrini JL, Slattery D, Tchouta L, Kyriakides TR, Tarbell JM, Linhardt RJ, Niklason LE.

New Functional Tools for Antithrombogenic Activity Assessment of Live Surface Glycocalyx.

- Arteriosclerosis, Thrombosis, and Vascular Biology. 2016; 36(9):1847-53.
- 4. Zhu VZ, **Tuggle CT**, Au AF.

Promise and Limitations of Big Data Research in Plastic Surgery.

- Annals of Plastic Surgery. 2016; 76(4):453-8.
- 5. Forte AJ, **Tuggle CT**, Berlin NL, Fischer JP, Persing J. Hysterectomy with concurrent panniculectomy: A propensity-matched analysis of 30-day outcomes.
 - Plastic and Reconstructive Surgery. 2015; 136(3):582-90.
- 6. Fischer JP, Wink JD, **Tuggle CT**, Nelson JA, Kovach SJ.

Wound risk assessment in ventral hernia repair: Generation and internal validation of a risk stratification system using the ACS-NSQIP.

- Hernia. 2015; 19(1):103-11.
- 7. Fischer JP, Wes AM, **Tuggle CT**, Nelson JA, Tchou JC, Serletti JM, Kovach SJ, Wu I C

Mastectomy with or without immediate implant reconstruction has similar 30-day perioperative outcomes.

- Journal of Plastic Reconstructive and Aesthetic Surgery. 2014; 67(11):1515-22.
- 8. Fischer JP, Wink JD, **Tuggle CT**, Nelson JA, Serletti JM, Kovach SJ. Predictive risk model of 30-day mortality in plastic and reconstructive surgery patients.
 - Plastic and Reconstructive Surgery. 2014; 134(1):156-64.
- 9. Berlin NL, **Tuggle CT**, Thomson JG, Au A.

Digit replantation in children: A nationwide analysis of outcomes and trends of 455 pediatric patients.

- Hand. 2014; 9(2):244-52.
- 10. **Tuggle CT**, Patel A, Broer N, Persing JA, Sosa JA, Au A.

Increased hospital volume is associated with improved outcomes following abdominal-based breast reconstruction.

- Journal of Plastic Surgery and Hand Surgery. 2014; 48(6):382-8.
- 11. Fischer JP, Wes AM, Tuggle CT, Wu LC.

Venous thromboembolism risk in mastectomy and immediate breast reconstruction: Analysis of the 2005 to 2011 American College of Surgeons National Surgical Quality Improvement Program data sets.

- Plastic and Reconstructive Surgery. 2014; 133(3):263e-73e.

12. Fischer JP, **Tuggle CT**, Wes AM, Kovach SJ.

Concurrent panniculectomy with open ventral hernia repair has added risk versus ventral hernia repair: An analysis of the ACS-NSQIP database.

- Journal of Plastic, Reconstructive & Aesthetic Surgery. 2014; 67(5):693-701.
- 13. Nelson JA, Fischer JP, Chung CU, West A, **Tuggle CT**, Serletti JM, Kovach SJ. Obesity and early complications following reduction mammaplasty: An analysis of 4545 patients from the 2005-2011 NSQIP datasets.
 - Journal of Plastic Surgery and Hand Surgery. 2014; 48(5):334-9.

14. Fischer JP, **Tuggle CT**, Au A, Kovach SJ.

A 30-day risk assessment of mastectomy alone compared to immediate breast reconstruction.

- Journal of Plastic Surgery and Hand Surgery. 2014; 48(3):209-15.

15. Fischer JP, Wes AM, **Tuggle CT**, Serletti JM, Wu LC.

Risk analysis and stratification of surgical morbidity after immediate breast reconstruction.

- Journal of The American College of Surgeons. 2013; 217(5):780-7.
- 16. Fischer JP, Wes AM, **Tuggle CT**, Serletti JM, Wu LC.

Risk analysis of early implant loss after immediate breast reconstruction: a review of 14,585 patients.

- Journal of The American College of Surgeons. 2013; 217(6):983-90.
- 17. Fischer JP, Nelson JA, Au A, **Tuggle CT**, Serletti JM, Wu LC.

Complications and morbidity following breast reconstruction - a review of 16,063 cases from the 2005-2010 NSQIP datasets.

- Journal of Plastic Surgery and Hand Surgery. 2014; 48(2):104-14.

18. Patel A, Chang CC, Terner JS, Tuggle CT, Persing JA.

Improved correction of supraorbital rim deformity in craniosynostosis by the "tilt" procedure.

- Journal of Craniofacial Surgery. 2012; 23(2):370-3.

19. **Tuggle CT**, Roman S, Udelsman R, Sosa JA.

Same-day thyroidectomy: A review of practice patterns and outcomes for 1,168 procedures in New York State.

- Annals of Surgical Oncology. 2011; 18(4):1035-40.

20. Indes JE, Tuggle CT, Mandawat A, Muhs BE, Sosa, JA.

Effect of physician and hospital experience on patient outcomes for endovascular treatment of aortoiliac occlusive disease (AIOD).

- Archives of Surgery. 2011; 146(8):966-71.

21. Tuggle CT, Park LS, Roman S, Udelsman R, Sosa JA.

Rehospitalizations among elderly patients with thyroid cancer following thyroidectomy are prevalent and costly.

- Annals of Surgical Oncology. 2010; 17(11):2816-23.
- 22. Indes JE, Mandawat A, Tuggle CT, Muhs B, Sosa JA.

Endovascular procedures for aortoiliac occlusive disease are associated with superior short-term clinical and economic outcomes compared to open surgery in the inpatient population.

- Journal of Vascular Surgery. 2010; 52(5):1173-9.
- 23. Indes JE, **Tuggle CT**, Mandawat A, Sosa JA.

Age-stratified outcomes in elderly patients undergoing open and endovascular procedures for aortoiliac occlusive disease.

- Surgery. 2010; 148(2):420-8.
- 24. Sosa JA, **Tuggle CT**, Wang TS, Boudourakis L, Thomas DC, Rivkees S, Roman SA. Clinical and economic outcomes of thyroid and parathyroid surgery in children.
 - Journal of Clinical Endocrinology and Metabolism. 2008; 93(8):3058-65.
- 25. **Tuggle CT**, Roman SA, Wang TS, Boudourakis L, Thomas DC, Udelsman R, Sosa JA.

Pediatric endocrine surgery: Who is operating on our children?

- Surgery. 2008; 144(6):869-77.

Review Articles and Editorials

1. Berlin NL, Steinbacher DM, Tuggle CT.

Procedure volume in orthognathic surgery: The surgeon or the hospital.

- Journal of Oral and Maxillofacial Surgery. 2017;75(10):2037.
- 2. Zhu V, **Tuggle CT**, Au A.

Promise and limitations of big data research in plastic surgery.

- Annals of Plastic Surgery. 2016;76(4):453-8.
- 3. Patel A, Pfaff M, Tuggle CT.

The plastic and reconstructive surgery facebook page: newfound treasure.

- Plastic and Reconstructive Surgery. 2013;132(1):189e.
- 4. Shah A, **Tuggle CT**, Clune JE, Steinbacher D, Patel A.

FaceTime with Apple and Information Technology.

- Plastic and Reconstructive Surgery. 2012;129(3):562e-3e.
- 5. Breuer C, Tuggle CT, Solomon D, Sosa JA.

Pediatric thyroid disease: When is surgery necessary and who should be operating on our children?

- Journal of Clinical Research in Pediatric Endocrinology. 2013;5 Suppl 1:79-85.

Book Chapters / Educational Material

- 1. American Society of Craniofacial Surgery Fellows Curriculum, 2014.
 - **Tuggle CT**, Grabowski G, Steinbacher DS. Module on Dental Anatomy and Principles of Occlusion.
- Sippel RS, Chen H. *Handbook of Endocrine Surgery*. World Scientific, 2012.
 Tuggle CT, Sosa JA, Udelsman R. Chapter II.B.5: Hyperparathyroidism in Familial Disease.
- 3. Le T, Bhushan V, Grimm L. *First Aid for the USMLE Step 1*. McGraw-Hill Medical Publishing, 2009.
 - Contributing Author: Behavioral science, Immunology, and Respiratory sections.

Presentations at Professional Meetings:

award.

- American Association for Hand Surgery Annual Meeting Phoenix, AZ January, 2018. A population-based assessment of potential patients for targeted muscle reinnervation.
- 2. American Society of Plastic Surgeons Annual Meeting Chicago, IL October, 2014. Hysterectomy with concurrent panniculectomy: A propensity-matched multi-center analysis of 30-day outcomes. Resident abstract presentation.
- 3. American Society for Reconstructive Microsurgery Annual Meeting Naples, FL January, 2012. Increased hospital volume is associated with improved outcomes following abdominal-based breast reconstruction. Microsurgical practice paper session.
- 4. Plastic Surgery Research Council Annual Meeting Ann Arbor, MI June, 2012. The influence of hospital volume on outcomes following autologous abdominal-based breast reconstruction. Scientific podium session presentation.
- 5. Yale School of Medicine Student Research Day New Haven, CT May, 2011. Rehospitalizations among elderly patients with thyroid cancer following thyroidectomy are prevalent and costly. Poster presentation.
- 6. Doris Duke Clinical Research Fellow Meeting Dallas, TX June, 2010. Thyroidectomy in the elderly: Characterizing and predicting rehospitalization. Plenary session presentation.
- 7. Vascular Annual Meeting Boston, MA June, 2010. Effect of physician and hospital experience on patient outcomes for endovascular treatment of aortoiliac occlusive disease. Rapid-paced paper session.
- 8. American Association of Endocrine Surgeons 31st Annual Meeting Pittsburgh, PA April, 2010.

 Same-day thyroidectomy: A review of practice patterns and outcomes for 1,168 procedures in New York State. Poster competition presentation, poster of distinction

9. American Association of Endocrine Surgeons 29th Annual Meeting – Monterey, CA – April, 2008.

Pediatric endocrine surgery: Who is operating on our children? Plenary session presentation.

Abstracts:

1. Tuggle CT, Aziz KT, Giladi AM, Higgins JP.

The effect of scaphoid overstuffing on radiocarpal contact pressures. - MedStar Health Research Symposium, April 2018.

2. Tuggle CT, Zogg CK, Mirza F, Clune JE.

A population-based assessment of potential patients for targeted muscle reinnervation. - American Association for Hand Surgery Annual Meeting, January 2018.

3. Rafailov L, **Tuggle CT**, Levin F.

Primary epithelial malignancies of the lacrimal gland: Trends in survival. - American Academy of Ophthalmology Annual Meeting, November 2015.

4. Tuggle CT, Berlin NL, Steinbacher DS.

Improved outcomes following orthognathic surgery are associated with high-volume centers. - The 16th Congress of International Society of Craniofacial Surgery, September 2015.

5. Berlin NL, **Tuggle CT**, Thompson JG, Au A.

Digit replantation in children: A nationwide analysis of outcomes and trends of 455 pediatric patients. - Northeastern Society of Plastic Surgeons 31st Annual Meeting, September 2014.

6. Wes AM, Fischer JP, **Tuggle CT**, Nelson JA, Tchou JC, Serletti JM, Kovach SJ, Wu LC.

Risk assessment of immediate breast reconstruction relative to mastectomy alone: Analysis of 30-day complications using the ACS-NSQIP. - *Plastic and Reconstructive Surgery*. 2014; 133(4 Suppl):36S.

7. Fischer JP, **Tuggle CT**, Wes AM, Kovach SJ.

Risk assessment of concurrent panniculectomy with open ventral hernia repair: A propensity score-matched analysis using the 2005-2011 ACS-NSQIP. - *Plastic and Reconstructive Surgery*. 2014; 133(3 Suppl):42S.

8. Fischer JP, Wes AM, **Tuggle CT**, Serletti JM, Wu LC. Risk analysis and stratification of surgical morbidity following immediate breast reconstruction (IBR). - Northeastern Society of Plastic Surgeons 30th Annual Meeting, September 2013.

9. **Tuggle CT**, Patel A, Persing JA, Sosa JA, Au A.

The influence of hospital volume on outcomes following autologous abdominal-based breast reconstruction. - *Plastic and Reconstructive Surgery*. 2012; 130(1 Suppl):38S.

- 10. **Tuggle CT**, Patel A, Broer N, Clune JE, Sosa JA, Persing J.
 - Craniosynostosis: Population-level predictors of surgical technique in 1,680 patients.
 - International Society of Craniofacial Surgery XIV Biennial Meeting, August 2011.
- 11. Tuggle CT, Park LS, Roman S, Udelsman R, Sosa JA.

Thyroidectomy in the elderly: Characterizing and predicting rehospitalization.

- Doris Duke Clinical Research Fellow Meeting, June 2010.
- 12. **Tuggle CT**, Sosa JA, Mandawat A, Indes J.

Effect of physician and hospital experience on patient outcomes for endovascular treatment of aortoiliac occlusive disease. - Vascular Annual Meeting, June 2010.

13. Tuggle CT, Roman S, Udelsman R, Sosa JA.

Same-day thyroidectomy: A review of practice patterns and outcomes for 1,168 procedures in New York State. - American Association of Endocrine Surgeons 31st Annual Meeting, April 2010.

- 14. Mandawat A, Indes J, Tuggle CT, Sosa JA.
 - Open versus endovascular approaches for aortoiliac occlusive disease (AIOD) in the elderly. Society of University Surgeons, Fifth Annual Academic Surgical Congress, February 2010.
- 15. Panigrahi B, Tuggle CT, Roman S, Sosa JA.

Medullary Thyroid Cancer: Are practice patterns in the U.S. discordant from ATA guidelines? - Association for Academic Surgery, Fifth Annual Academic Surgical Congress, February 2010.

16. **Tuggle CT**, Roman S, Boudourakis L, Thomas D, Udelsman R, Sosa JA. Pediatric endocrine surgery: Who is operating on our children? - American Association of Endocrine Surgeons 29th Annual Meeting, April 2008.

International Experience:

- 1. Vietnam Spring 2011 (10 days) Cleft lip/palate surgical mission trip, 75 procedures on 65 children; Khanh Hoa General Hospital, Khanh Hoa Province.
- 2. Japan Fall 2005 Spring 2006 (1-year exchange program) Kyoto University of Foreign Studies.
- 3. South Korea Spring 2005 (1 week) Course on Buddhism involving staying in two monasteries.
- 4. Hungary/Romania Summer 2004 (2 months) Abbreviated rotation at Hungarian Institute of Enzymology, courses on Roma people.

- 5. Ecuador Spring 2004 (1 week) Study of the effects of "Fair Trade" coffee production on local farmers.
- 6. Japan Summer 2003 (2.5 months) Hokkaido International Foundation, Japanese language and culture program.

Skills:

- Programming SAS, SPSS
- Administrative and clinical database experience HCUP products, ACS-NSQIP, SEER, SEER-Medicare, NCDB
- Image software Prism, Adobe Photoshop, Adobe Lightroom

Hobbies and Interests:

- Japanese language and culture
- Running (5K / 10K)
- Lacrosse (UGA club lacrosse starting defensemen 2002, 2003 seasons; Tennessee All-State 1999)