



Anna Luan, MD, MS

Clinical Assistant Professor, Surgery - Plastic & Reconstructive Surgery

CLINICAL OFFICE (PRIMARY)

- **Stanford Plastic Surgery Clinic**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

Jasmine Murray - Administrative Associate

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Bio

BIO

Dr. Luan is a fellowship-trained plastic and reconstructive surgeon and hand and upper extremity surgeon with Stanford Health Care. She is a clinical assistant professor in the Department of Surgery, Division of Plastic & Reconstructive Surgery at Stanford University School of Medicine.

Dr. Luan specializes in diagnosing and treating hand and peripheral nerve disorders. She treats issues such as fractures, instability, soft tissue injuries, degenerative conditions, spasticity, nerve compression, and peripheral nerve injuries. She also treats many other conditions that cause pain or other problems with the hands.

In addition, Dr. Luan has expertise in treating patients with upper and lower extremity amputations. Amputations can result from trauma, tumors, vascular disease, or infection. Dr. Luan specializes in surgeries to help prevent or treat pain and to maximize function in upper and lower extremity amputations. She takes a personalized approach to patient care, considering each individual's condition, concerns, and goals.

Dr. Luan's research interests include innovation and translational research, which applies the results of scientific research to treating patients or preventing illness. She also researches clinical outcomes and global surgery. Additionally, Dr. Luan's research explores how technologies such as artificial intelligence (AI), machine learning, and deep learning can be used to improve patient care.

Dr. Luan has published in many peer-reviewed journals, including the Journal of Hand Surgery and Plastic and Reconstructive Surgery. She also serves as a reviewer for multiple journals. She has authored textbook chapters and delivered presentations at symposiums and conferences nationally and worldwide.

Dr. Luan is an affiliated faculty member of the Stanford Center for Artificial Intelligence in Medicine and Imaging. The center focuses on responsible innovation and research in medical AI applications. She is also a member of the American Society of Plastic Surgeons, American Association for Hand Surgery, American Society for Surgery of the Hand, and California Society of Plastic Surgeons.

CLINICAL FOCUS

- Peripheral Nerve Injuries
- Amputation Stumps
- Hand Injuries
- Spasticity
- Hand Deformities
- Peripheral Nerve Diseases
- Nerve Pain
- Prosthesis, Arm
- Myoelectric Prostheses
- Post Stroke Rehabilitation
- Spastic Tetraplegias
- Paraplegia
- Spastic Paraplegias
- Plastic and Reconstructive Surgery

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Surgery - Plastic & Reconstructive Surgery

HONORS AND AWARDS

- Donald R. Laub Fellowship, ReSurge International
- J.K. Hardesty Best Resident Paper Award, California Society of Plastic Surgeons 67th Annual Meeting
- Jesse B. Jupiter Prize, 32nd Annual Richard Smith Research Day, Harvard Medical School and Massachusetts General Hospital
- Magna Cum Laude, University of California San Diego
- Honor Society, Phi Beta Kappa Academic Honor Society
- Regents Scholarship, University of California San Diego
- Ron Milliken Resident Teacher of the Year, Stanford University School of Medicine Division of Plastic and Reconstructive Surgery
- Scholarship, Orthopaedic Research Society Clinician Scholar Career Development Program
- Stanford Medical Scholar Research Fellowship, Stanford University School of Medicine (2014, 2015)
- Stanford Zedplast Traveling Resident Scholarship, Stanford University School of Medicine Division of Plastic & Reconstructive Surgery

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Candidate Member, American Association for Hand Surgery (AAHS) (2022 - present)
- Candidate Member, American Society for Surgery of the Hand (ASSH) (2020 - present)
- Candidate Member, American Society of Plastic Surgeons (ASPS) (2024 - present)
- Resident Member, ASPS (2016 - 2023)
- Member, California Society of Plastic Surgeons (CSPS) (2017 - present)
- Candidate Member, Plastic Surgery Research Council (PSRC) (2016 - 2018)
- Affiliated Faculty, Stanford Center for Artificial Intelligence in Medicine and Imaging (AIMI) (2024 - present)

PROFESSIONAL EDUCATION

- Board Certification: Plastic and Reconstructive Surgery, American Board of Plastic Surgery (2025)
- Fellowship: Harvard Hand and Upper Extremity Fellowship (2024) MA
- Residency: Stanford University Dept of Plastic Surgery (2023) CA
- Medical Education: Stanford University School of Medicine (2016) CA
- MS, University of California, San Diego , Bioengineering (2011)
- BS, University of California, San Diego , Bioengineering (2010)

Publications

PUBLICATIONS

- **Return to play and outcomes of surgically treated upper limb nerve entrapment in athletes: a systematic review.** *International orthopaedics*
Lawand, J. J., Saab, D., Luan, A., Curtin, C., Hagert, E.
2025
- **The Mangled Digit Severity Score: Determining Salvageability of Severe Digital Injuries.** *The Journal of hand surgery*
Luan, A., Friedrich, J., Giladi, A., Mithani, S. K., Rhee, P., Safa, B., Strohl, A., Eberlin, K. R.
2025
- **Machine Learning-Aided Diagnosis Enhances Human Detection of Perilunate Dislocations.** *Hand (New York, N.Y.)*
Luan, A., von Rabenau, L., Serebrakian, A. T., Crowe, C. S., Do, B. H., Eberlin, K. R., Chang, J., Pridgen, B. C.
2025: 15589447241308603
- **Discussion: Polyethylene Glycol-Mediated Axonal Fusion Promotes Early Sensory Recovery after Digital Nerve Injury: A Randomized Clinical Trial.** *Plastic and reconstructive surgery*
Luan, A., Eberlin, K. R.
2024; 154 (6): 1257-1258
- **Application of Machine Learning to Osteoporosis and Osteopenia Screening Using Hand Radiographs.** *The Journal of hand surgery*
Luan, A., Maan, Z., Lin, K., Yao, J.
2024
- **Intramedullary Nailing for Extra-articular Ulnar Head Fractures Concomitant with Distal Radial Fractures**
Den Hengst , S., Luan , A., Hanel , D., Bhashyam , A.
Journal of Hand Surgery: European Volume.
2024
- **Osteoporosis Screening Techniques Continue to Evolve AAOS Now**
Luan , A., Fox , P.
2024
- **Automatic Detection of Perilunate and Lunate Dislocations on Wrist Radiographs Using Deep Learning.** *Plastic and reconstructive surgery*
Pridgen, B., von Rabenau, L., Luan, A., Gu, A. J., Wang, D. S., Langlotz, C., Chang, J., Do, B.
2023
- **Impact of Adding Carpal Tunnel Release or Trigger Finger Release to Carpometacarpal Arthroplasty on Postoperative Complications".** *Plastic and reconstructive surgery*
Trinh, P., Luan, A., Tawfik, V. L., Sheckter, C., Rochlin, D., Fox, P., Curtin, C.
2023
- **Economic Evaluation of a Global Reconstructive Surgery Visiting Educator Program.** *Annals of surgery open : perspectives of surgical history, education, and clinical approaches*
Luan, A., Meyers, N., Le Thua, T. H., Dang, H. T., Phu, Q. V., Auten, B., Chang, J.
2022; 3 (3): e181

- **Expansion of Reconstructive Surgical Capacity in Vietnam: Experience from the ReSurge Global Training Program.** *Plastic and reconstructive surgery*
Luan, A., Hau, L. T., Thom, D. H., Viet, P. Q., Auten, B., Chang, J.
1800
- **“The ‘Swan Neck’ Deformity.”**
Luan, A., Fox, P.
.” In Boyce DE, Giddins G, Shewring DJ (eds.), *Tendon Disorders of the Hand and Wrist: IFSSH/FESSH Instructional Course Book*.
2022
- **Are We Curing by Cutting? A Call for Long-Term Follow Up and Outcomes Research in Global Surgery Interventions - Perspective.** *International journal of surgery (London, England)*
Luan, A., Mghase, A. E., Meyers, N., Chang, J.
2021
- **Lymphatic Microsurgical Preventive Healing Approach (LYMPHA) for Lymphedema Prevention after Axillary Lymph Node Dissection-A Single Institution Experience and Feasibility of Technique.** *Journal of clinical medicine*
Lipman, K., Luan, A., Stone, K., Wapnir, I., Karin, M., Nguyen, D.
2021; 11 (1)
- **Educator Workshops: Visiting Educators, Curricula, and Digital Education**
Luan, A., Chang, J.
In Swanson JW, Low DW (eds.), *Global Cleft Care in Low-Resource Settings*. Springer.
2021
- **Single-Unit technique for the use of acellular dermal matrix in immediate expander-based breast reconstruction.** *Journal of plastic, reconstructive & aesthetic surgery : JPRAS*
Luan, A., Patel, A. A., Martin, S. A., Nazerali, R. S.
2020
- **Assessing the Accuracy of a 3-Dimensional Surface Imaging System in Breast Volume Estimation.** *Annals of plastic surgery*
Kwong, J. W., Tijerina, J. D., Choi, S. n., Luan, A. n., Feng, C. L., Nguyen, D. H., Lee, G. K., Nazerali, R. S.
2020
- **Pathway Analysis of Gene Expression in Murine Fetal and Adult Wounds.** *Advances in wound care*
Hu, M. S., Hong, W. X., Januszyk, M., Walmsley, G. G., Luan, A., Maan, Z. N., Moshrefi, S., Tevlin, R., Wan, D. C., Gurtner, G. C., Longaker, M. T., Lorenz, H. P.
2018; 7 (8): 262-275
- **Comparison of Outcomes of Total Esophageal Reconstruction With Supercharged Jejunal Flap, Colonic Interposition, and Gastric Pull-up** *ANNALS OF PLASTIC SURGERY*
Luan, A., Hunter, C. L., Crowe, C. S., Lee, G. K.
2018; 80: S274-S278
- **Pathway Analysis of Gene Expression in Murine Fetal and Adult Wounds** *ADVANCES IN WOUND CARE*
Hu, M. S., Hong, W., Januszyk, M., Walmsley, G. G., Luan, A., Maan, Z. N., Moshrefi, S., Tevlin, R., Wan, D. C., Gurtner, G. C., Longaker, M. T., Lorenz, H.
2018
- **Pathway Analysis of Gene Expression of E14 Versus E18 Fetal Fibroblasts** *ADVANCES IN WOUND CARE*
Hu, M. S., Borrelli, M. R., Januszyk, M., Luan, A., Malhotra, S., Walmsley, G. G., Hong, W., Tevlin, R., Gurtner, G. C., Longaker, M. T., Lorenz, H. P.
2018; 7 (1): 1–10
- **Noncoding RNAs in Wound Healing: A New and Vast Frontier** *ADVANCES IN WOUND CARE*
Luan, A., Hu, M. S., Leavitt, T., Brett, E. A., Wang, K. C., Longaker, M. T., Wan, D. C.
2018; 7 (1): 19–27
- **Ultrasound-assisted liposuction provides a source for functional adipose-derived stromal cells** *CYTOTHERAPY*
Duscher, D., Maan, Z. N., Luan, A., Aitzetmueller, M. M., Brett, E. A., Atashroo, D., Whittam, A. J., Hu, M. S., Walmsley, G. G., Houschyar, K. S., Schilling, A. F., Machens, H., Gurtner, et al

2017; 19 (12): 1491–1500

- **Delayed prosthetic breast reconstruction without the use of acellular dermal matrix** *EUROPEAN JOURNAL OF PLASTIC SURGERY*
Mittermiller, P. A., Nazerali, R. S., Glaus, S. W., Perez, M. G., Luan, A., Kahn, D. M., Lee, G. K.
2017; 40 (6): 533–40
- **Dynamic Rheology for the Prediction of Surgical Outcomes in Autologous Fat Grafting.** *Plastic and reconstructive surgery*
Luan, A., Zielins, E. R., Wearda, T., Atashroo, D. A., Blackshear, C. P., Raphael, J., Brett, E. A., Flacco, J., Alyono, M. C., Momeni, A., Heilshorn, S., Longaker, M. T., Wan, et al
2017
- **Validation of a Cognitive Task Simulation and Rehearsal Tool for Open Carpal Tunnel Release.** *Archives of plastic surgery*
Paro, J. A., Luan, A., Lee, G. K.
2017; 44 (3): 223-227
- **Transversus Abdominis Plane Block and Free Flap Abdominal Tissue Breast Reconstruction: Is There a True Reduction in Postoperative Narcotic Use?** *Annals of plastic surgery*
Hunter, C., Shakir, A., Momeni, A., Luan, A., Steffel, L., Horn, J., Nguyen, D., Lee, G. K.
2017; 78 (3): 254-259
- **Transversus Abdominis Plane Block and Free Flap Abdominal Tissue Breast Reconstruction Is There a True Reduction in Postoperative Narcotic Use?** *ANNALS OF PLASTIC SURGERY*
Hunter, C., Shakir, A., Momeni, A., Luan, A., Steffel, L., Horn, J., Dung Nguyen, D., Lee, G. K.
2017; 78 (3): 254-259
- **Hospital Transfer of Open Tibial Fractures Requiring Microsurgical Reconstruction Negatively Impacts Clinical Outcomes.** *Annals of plastic surgery*
Crowe, C. S., Luan, A., Lee, G. K.
2017
- **Magnetic Nanoparticle-Based Upregulation of B-Cell Lymphoma 2 Enhances Bone Regeneration.** *Stem cells translational medicine*
Brett, E., Zielins, E. R., Luan, A., Ooi, C. C., Shailendra, S., Atashroo, D., Menon, S., Blackshear, C., Flacco, J., Quarto, N., Wang, S. X., Longaker, M. T., Wan, et al
2017; 6 (1): 151-160
- **Cleft Lip Standardized Patient Examinations: The Role in Plastic Surgery Resident Education** *CLEFT PALATE-CRANIOFACIAL JOURNAL*
Wright, E. J., Khosla, R. K., Howell, L., Luan, A., Lee, G. K.
2016; 53 (6): 634-639
- **Suction assisted liposuction does not impair the regenerative potential of adipose derived stem cells** *JOURNAL OF TRANSLATIONAL MEDICINE*
Duscher, D., Luan, A., Rennert, R. C., Atashroo, D., Maan, Z. N., Brett, E. A., Whittam, A. J., Ho, N., Lin, M., Hu, M. S., Walmsley, G. G., Wenny, R., Schmidt, et al
2016; 14
- **Effects of A Novel Decision Aid for Breast Reconstruction: A Randomized Prospective Trial.** *Annals of plastic surgery*
Luan, A., Hui, K. J., Remington, A. C., Liu, X., Lee, G. K.
2016; 76: S249-54
- **Superior Gluteal Artery Perforator Flap: The Beauty of the Buttock.** *Annals of plastic surgery*
Hunter, C., Moody, L., Luan, A., Nazerali, R., Lee, G. K.
2016; 76: S191-5
- **Cell-Assisted Lipotransfer Improves Volume Retention in Irradiated Recipient Sites and Rescues Radiation-Induced Skin Changes.** *Stem cells*
Luan, A., Duscher, D., Whittam, A. J., Paik, K. J., Zielins, E. R., Brett, E. A., Atashroo, D. A., Hu, M. S., Lee, G. K., Gurtner, G. C., Longaker, M. T., Wan, D. C.
2016; 34 (3): 668-673
- **Enrichment of Adipose-Derived Stromal Cells for BMP1A Facilitates Enhanced Adipogenesis** *TISSUE ENGINEERING PART A*
Zielins, E. R., Paik, K., Ransom, R. C., Brett, E. A., Blackshear, C. P., Luan, A., Walmsley, G. G., Atashroo, D. A., Senarath-Yapa, K., Momeni, A., Rennert, R., Sorkin, M., Seo, et al

2016; 22 (3-4): 214-221

- **Ultrasound-Assisted Liposuction Does Not Compromise the Regenerative Potential of Adipose-Derived Stem Cells.** *Stem cells translational medicine*
Duscher, D., Atashroo, D., Maan, Z. N., Luan, A., Brett, E. A., Barrera, J., Khong, S. M., Zielins, E. R., Whittam, A. J., Hu, M. S., Walmsley, G. G., Pollhammer, M. S., Schmidt, et al
2016; 5 (2): 248-257
- **Flow-through omental flap to free anterolateral thigh flap for complex chest wall reconstruction: Case report and review of the literature.** *Microsurgery*
Luan, A., Galvez, M. G., Lee, G. K.
2016; 36 (1): 70-76
- **Effects of a Decision Aid in Breast Reconstruction: A Randomized Prospective Trial**
Luan, A., Hui, K., Remington, A., Liu, X., Lee, G.
Annals of Plastic Surgery 76(Suppl 3).
2016 S249-54
- **RNA Sequencing for Identification of Differentially Expressed Noncoding Transcripts during Adipogenic Differentiation of Adipose-Derived Stromal Cells.** *Plastic and reconstructive surgery*
Luan, A., Paik, K. J., Li, J., Zielins, E. R., Atashroo, D. A., Spencley, A., Momeni, A., Longaker, M. T., Wang, K. C., Wan, D. C.
2015; 136 (4): 752-763
- **Microfluidic single cell transcriptional analysis reveals subpopulations of adipose derived stromal cells with enhanced angiogenic potential**
Zielins, E. R., Januszzyk, M., Luan, A., Brett, E. A., Paik, K., Walmsley, G. G., Gurtner, G. C., Longaker, M. T., Wan, D. C.
ELSEVIER SCIENCE INC.2015: E26
- **What Makes a Plastic Surgery Residency Program Attractive? An Applicant's Perspective** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Atashroo, D. A., Luan, A., Vyas, K. S., Zielins, E. R., Maan, Z., Duscher, D., Walmsley, G. G., Lynch, M. P., Davenport, D. L., Wan, D. C., Longaker, M. T., Vasconez, H. C.
2015; 136 (1): 189-196
- **Studies in Fat Grafting: Part V. Cell-Assisted Lipotransfer to Enhance Fat Graft Retention Is Dose Dependent** *PLASTIC AND RECONSTRUCTIVE SURGERY*
Paik, K. J., Zielins, E. R., Atashroo, D. A., Maan, Z. N., Duscher, D., Luan, A., Walmsley, G. G., Momeni, A., Vistnes, S., Gurtner, G. C., Longaker, M. T., Wan, D. C.
2015; 136 (1): 67-75
- **Emerging drugs for the treatment of wound healing** *EXPERT OPINION ON EMERGING DRUGS*
Zielins, E. R., Brett, E. A., Luan, A., Hu, M. S., Walmsley, G. G., Paik, K., Senarath-Yapa, K., Atashroo, D. A., Wearda, T., Lorenz, H. P., Wan, D. C., Longaker, M. T.
2015; 20 (2): 235-246
- **Therapeutic applications of human adipose-derived stromal cells for soft tissue reconstruction.** *Discovery medicine*
Zielins, E. R., Luan, A., Brett, E. A., Longaker, M. T., Wan, D. C.
2015; 19 (105): 245-253
- **Isolation and Enrichment of Human Adipose-derived Stromal Cells for Enhanced Osteogenesis.** *Journal of visualized experiments : JoVE*
Zielins, E. R., Tevlin, R., Hu, M. S., Chung, M. T., McArdle, A., Paik, K. J., Atashroo, D., Duldulao, C. R., Luan, A., Senarath-Yapa, K., Walmsley, G. G., Wearda, T., Longaker, et al
2015
- **Cloud-Based Applications for Organizing and Reviewing Plastic Surgery Content.** *Eplasty*
Luan, A., Momeni, A., Lee, G. K., Galvez, M. G.
2015; 15
- **Design and Focus Test of a Preconsultation Decision Aid for Breast Cancer Reconstruction Patients: A Quality Improvement Initiative.** *Eplasty*
Hui, K. J., Liu, X. X., Luan, A., Lee, G. K.
2015; 15

- **Heterogeneity of Progenitor Cell Populations and their Therapeutic Implications** *Journal of Stem Cell Research and Therapy*
Zielins , E., Luan , A., Tevlin , R., Wong , V., Momeni , A., Longaker , M., Wan, D.
2014: 254
- **Cost-effectiveness of preoperative imaging for appendicitis after indeterminate ultrasonography in the second or third trimester of pregnancy.** *Obstetrics and gynecology*
Kastenberg, Z. J., Hurley, M. P., Luan, A., Vasu-Devan, V., Spain, D. A., Owens, D. K., Goldhaber-Fiebert, J. D.
2013; 122 (4): 821-829
- **Small Increases To Employer Premiums Could Shift Millions Of People To The Exchanges And Add Billions To Federal Outlays** *HEALTH AFFAIRS*
Austin, D. R., Luan, A., Wang, L. L., Bhattacharya, J.
2013; 32 (9): 1531-1537
- **An Arthroscopic Device to Assess Articular Cartilage Defects and Treatment with a Hydrogel** *ANNALS OF BIOMEDICAL ENGINEERING*
McCarty, W. J., Luan, A., Sundaramurthy, P., Urbanczyk, C., Patel, A., Hahr, J., Sotoudeh, M., Ratcliffe, A., Sah, R. L.
2011; 39 (4): 1306-1312
- **Biomechanical Properties of Mixtures of Blood and Synovial Fluid** *JOURNAL OF ORTHOPAEDIC RESEARCH*
McCarty, W. J., Luan, A., Siddiqui, M., Hansen, B. C., Masuda, K., Sah, R. L.
2011; 29 (2): 240-246