# CURRICULUM VITAE – CASSIDI GOLL (she/her)

San Francisco Bay Area, CA | 608.658.2277 | cassidigoll8@gmail.com | LinkedIn

## **EDUCATION**

**BA**, Journalism, Public Relations & Strategic Communications (Entrepreneurship Minor), University of Wisconsin – Madison, Madison, WI, Spring 2017

Visiting Scholar, International Marketing and Strategic Communications, Danish Institute for Study Abroad (DIS), Copenhagen, Denmark, Spring 2016

## **Additional Training:**

- Design Research: Creating New Products and Market Success, Stanford University Continuing Studies, Spring 2020
- Unconscious Bias Training, Stanford University Department of Surgery, Summer 2020
- The Exceptional Leader: A Framework for Successful, Fulfilling, and Impactful Leadership, Stanford University Continuing Studies, Winter 2021

## **WORK HISTORY**

Aug 2021 – Present	Research Operations and Program Manager, Technology Enabled Clinical Improvement (T.E.C.I.) Center, Department of Surgery, Stanford University, Palo Alto, CA
Sept 2020 – April 2021	Independent Consultant, Global Surgical Training Challenge, Intuitive Surgical Foundation, Sunnyvale, CA / Remote
Jan 2018 – Aug 2021	Marketing Coordinator and Researcher, Technology Enabled Clinical Improvement (T.E.C.I.) Center, Department of Surgery, Stanford University, Palo Alto, CA
Oct 2019 – Present	Program Manager, 10 Newtons, Inc., Madison, WI / Remote
May 2017 – Oct 2019	$VP\ of\ Marketing,\ 10\ Newtons,\ Inc.,\ Madison,\ WI\ /\ Remote\ (recused\ title\ in\ accordance\ with\ Stanford\ University\ guidelines)$
Feb 2017 – Dec 2017	Marketing Specialist, Simulation and Engineering for Surgical Education (SEnSE) Lab, University of Wisconsin School of Medicine and Public Health, Madison, WI
Mar 2015 – May 2017	Volunteer Coordinator, University of Wisconsin Organ and Tissue Donation, Madison, WI

# **COMMITTEE SERVICE**

2021 – Present Presence Racial Justice Lab, Stanford Medicine

2020 - Present Justice, Equity, Diversity & Inclusion (JEDI) Council, Stanford University Department of Surgery

- Staff Lead, JEDI CouncilMentorship Committee
- Fundraising and Strategic Planning Committee
- LGBTO+ Committee
- Invited educator on the topic of imposter syndrome for 80+ Bay Area students from Cupertino High School, Fremont High School, and the VA Initiative in job Training and Learning Program

2020 – Present Wellness Committee, Stanford University Department of Surgery

#### **HONORS AND AWARDS**

# Diversity, Equity, and Inclusion (DEI) Award, Stanford Department of Surgery, March 2021

Nominations for this honor are made by faculty and staff. The Department of Surgery DEI Award is to annually recognize both an individual staff and faculty/resident/fellow/post doc member who has consistently created opportunities for the Department of Surgery to improve DEI in the domains of recruitment, retention, inclusion, and advancement. These individuals actively work to promote, value, and increase diversity in the Department of Surgery.

# Academic Excellence Award, Danish Institute for Study Abroad (DIS), May 2016

DIS faculty members select one student from each major on an annual basis who demonstrates motivation and intelligence in their courses, fosters collaborative learning environments, and brings class discussions to high academic levels.

# Carol Scaife Memorial Scholarship, Wisconsin Healthcare Public Relations & Marketing Society (WHPRMS), September 2016

The Carol Scaife Memorial Scholarship award gives one student or recent graduate the opportunity to spend three days learning

and networking with healthcare marketing and public relations professionals from across Wisconsin at the WHPRMS annual conference.

## CONFERENCE PRESENTATIONS

May 2021	"Promoting Breast Health Awareness: Can a sensor-enabled training system help?" – Stanford University Department of Surgery Holman Research Day
March 2021	"Utilizing an Intersectional Framework to Develop a Technological Intervention for Black/African American Women's Breast Health Education" – International Healthcare Humanities Consortium
February 2020	"The Surgical Metrics Project" – Wearable Tech + Digital Health + Neurotech Silicon Valley Conference
November 2019	"The Use of Sensors to Enhance Physical Exam Assessment" – Stanford 25 Skills Symposium, Stanford Medicine
October 2019	"Promoting Breast Health Awareness: Can a sensor-enabled training system help?" – Breast Cancer and African Americans Community Ambassador Event, Stanford Cancer Institute
October 2019	"Promoting Breast Health Awareness: Can a sensor-enabled training system help?" – Bay Area Cancer Connections Annual Conference Resource Fair
June 2019	"Promoting Breast Health Awareness and Community Based Conversations: Can Haptic-AI Technology Help?" – Presence Summit, Stanford Medicine

# **PUBLICATIONS**

- 1. Mohamadipanah H, Perumalla C, Yang S, Wise B, **Goll C**, , Kearse L, Witt A, Korndorffer J, Pugh C. Do Individual Surgeon Preferences Effect Procedural Outcomes? Annals of Surgery. February 2022. (In Press).
- 2. Perumalla C, Goodman E, Peven M, Mohamadipanah H, Kearse L, Wise B, Yang S, **Goll C**, Pugh C. AI-Based Video Segmentation: Procedural Steps or Basic Maneuvers? Journal of Surgical Research. February 2022. (In Press).
- 3. Applewhite M, Kearse L, Mohamadipanah H, Witt A, **Goll C**, Wise B, Korndorffer J, Pugh C. Developing a longitudinal database of surgical skills performance for practicing surgeons: A formal feasibility and acceptance inquiry. The American Journal of Surgery. 2022 January 1; doi: 10.1016/j.amjsurg.2021.12.035.
- 4. Kearse L, Goll C, Jensen R, Wise B, Witt A, Huemer K, Korndorffer J, Pugh C. Diversity, Equity, and Inclusion in Presidential Leadership of Academic Medical and Surgical Societies. American Journal of Surgery. March 2022; doi: 10.1016/j.amjsurg.2022.03.028.
- 5. Perumalla C, **Goll C**, Yang S, Wise B, Kearse L, Bowler A, Pugh C. Digitizing Clinical Procedural Skills Using Sensors: New Opportunities for Data Driven Performance Metrics. Cutting Edge of Surgical Education. 2021. (In Press).
- 6. Mohamadipanah H, Kearse L, Witt A, Wise B, Yang S, Goll C, Pugh C. Can Deep Learning Algorithms Help Identify Surgical Workflow and Techniques? The Journal of Surgical Research. December 2021; 268:318-325. doi: 10.1016/j.jss.2021.07.003.
- 7. Mohamadipanah H, Wise B, Witt A, **Goll C**, Yang S, Perumalla C, Huemer K, Kearse L, Pugh C. Performance Assessment in Surgery Using Sensor Technology. Journal of Surgical Oncology. 2021 (In Press).
- 8. Mohamadipanah H, Perumalla C, Yang S, Wise B, Kearse L, Goll C, Witt A, Korndorffer J, Pugh C. Artificial Intelligence in Surgery: A Research Team Perspective. Current Problems in Surgery. February 2022; doi: 10.1016/j.cpsurg.2022.101125.
- **9.** Perrone K, Yang S, Wise B, Mohamadipanah H, Witt A, **Goll C**, Pugh C. Translating Motion Tracking Data into Resident Feedback: An Opportunity for Streamlined Video Coaching. American Journal of Surgery. 2020: 552-56.
- 10. Perrone K, Yang S, Wise B, Witt A, **Goll C**, Dawn S, Eichhorn W, Mohamadipanah H, Pugh C. Use of Sensors to Quantify Procedural Idle Time: Validity Evidence for a New Mastery Metric. Surgery. 2019 Nov 7. pii: S0039-6060(19)30672-5.

# JOURNAL REVIEWS

"Use of semi-automated digital image analysis and line drawings to quantify breast assessment findings in a simulation-based exercise in clinical lactation"

Authors: Samantha Chuisano, Olivia Anderson, Anne Eglash, Kate Stanley, Ruth Zielinski, Anna Sadovnikova, August 2021

"Whole Consultation Simulation in Undergraduate Surgical Education: A Breast Clinic Case Study"

Authors: Alice Lee, Dalia Abdulhussein, Mohammad Fallaha, Olivia Buckeldee, Rory Morrice, Kathleen Leedham-Green –

BioMed Central Medical Education, January 2021

"Evaluation of Efficiency of Breast Self-Examination Method"

Authors: Jiri Prokop, Pavel Marsalek, Vladimir Janout, Petr Horyl, Jan Roman – Journal of Clinical Biomechanics, November 2020

#### **GRANT SUPPORT**

Title: Individualized performance optimization for surgeons: Utilizing biometric analytics to

understand the impact of stressors and recovery on surgeon performance and skill acquisition

Sponsor: Intuitive Foundation

Years: 2021-2022 Role: Project Manager

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

Reliably achieving peak performance requires balancing the strain of the prior day with sufficient recovery to be ready for the next day. Surgery has a long-standing tradition involving long hours of hard work often at the expense of adequate sleep. Decreased sleep and recovery has physiologic consequences which can be measured using biometric data. The goal of this study is to quantify surgeon performance and biometric data to understand how modifiable behaviors including mindfulness training and diet can maximize recovery and performance.

Title: Utilizing Digital Technology to Foster Community Engagement and Increase Breast Health

**Awareness Among Diverse Populations** 

Sponsor: Spectrum Community Engagement Pilot Grant – Stanford University

Years: 2021-2022

Role: Researcher/Educational Liaison/ Project Manager

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

The causes of breast cancer disparities arise from a complex interplay of multiple factors that impede awareness and limit access and engagement in preventative and follow-up care. The goal of the proposed research is to build on our prior success at women's wellness events and use this information to take a deeper dive into the multiple factors that contribute to underuse of preventive breast health services among subgroups in our catchment area.

Title: Quantifying the Metrics of Surgical Mastery: An Exploration in Data Science

Sponsor: NIH 1R01DK123445

Years: 2020-2025

Role: Project Manager/Researcher

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

The significance of this study is the opportunity to make a major contribution to the emerging field of Surgical Data Science by:

1) Generating a large multimodal dataset that can be de-identified and shared and 2) Providing a roadmap for predicting and supporting operative mastery with an artificial intelligence powered decision tool. To generate this database, sensor-based performance data will be collected from participants at the May 2022 American Urologic Association who will perform a simulated nerve sparing prostatectomy using the da Vinci Surgical System. A subsequent data collection will take place at the October 2022 American College of Surgeons Clinical Congress where participants will perform a simulated bowel repair.

Title: The Sensor Enabled Smart Ultrasound

Sponsor: Flexible Electronics Collaboratory – Beijing Institute of Collaborative Innovation (BICI)

Years: 2020-2022

Role: Project Manager/Researcher

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

With the increased use of ultrasound technology for diagnostics (especially at the bedside) a wide variety of physicians who historically were not operating these devices now use them daily. Ultrasounds are only as useful as the quality of the image derived, and that quality is highly dependent on the ultrasonographer. There is an increasing need to provide proper training on the use of ultrasound across many medical specialties. Problematically, this increasing need is met with a lack of effective training programs for physicians and sonographers, which has led to low quality ultrasounds and ultimately misdiagnoses.

Title: Leveraging Embedded Haptic Sensor Technology for Force Vector Mapping in Orthoses for

**Adolescent Idiopathic Scoliosis** 

Sponsor: Scoliosis Research Society (SRS)

Years: 2020-2022

Role: Project Manager/Researcher

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

The purpose of this research is to explore the use of flexible force sensor technology to augment the efficacy of scoliosis bracing by measuring the force profile of the orthotic across the torso, mapped to individual patient anatomy. Objectives of the research are (1) to refine technology designs for clinical introduction, (2) pilot clinical introduction of the technology, and (3) conduct longitudinal clinical monitoring and determine the usefulness of this technology in the treatment of AIS. The proposed work aims to improve orthotic interventions, potentially resulting in better outcomes and fewer surgeries among AIS patients.

Title: The Surgical Metrics Project

Sponsor: American College of Surgeons (National Society Contract)

Years: 2019-2021

Role: Project Manager/Researcher

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

Surgeon preferences such as instrument and suture selection and idiosyncratic approaches to individual procedure steps have been largely viewed as minor differences in the surgical workflow. Results of this <u>research</u> show that individual preferences affect technical decisions and play a significant role in procedural outcomes.

Title: Tourniquet Master Training Sponsor: DOD SBIR Phase IIb – Continuation Award

#W81XWH-13-C-0021

Years: 2017-2021

Role: Project Manager/Researcher - University Subcontract PI

Percentage of effort: 5%

PI: Carla Pugh, MD, PhD

The goal of this research is to develop a sensorized system that can measure tourniquet placement, force, application time, and correct technique/steps to train, evaluate, and refresh tourniquet-related application skills.

# **COMMUNITY SERVICE**

## Middleton Cross Plains Area School District Alumni Network

Member - Class of 2013, October 2020 - Present

## Braven - San Jose State University

Leadership Coach/Invited Guest Lecturer, September 2020 – Present

## City of Dreams San Francisco

Board President, Executive Planning Committee Member & Youth Mentor, June 2020 - Present

# **Boys & Girls Club of Dane County**

Fundraising Volunteer, September 2013 - May 2015

#### Girls on the Run South Central Wisconsin

Fundraising Volunteer, September 2013 – May 2015

# Relay for Life - The American Cancer Society

Fundraising Volunteer, September 2013 – May 2015

## **Juvenile Diabetes Research Foundation**

Volunteer Educator & Fundraising Volunteer, February 2011 – September 2017

# Horizon High School - Dane County's Only Recovery High School

Volunteer Event Coordinator, June 2011 - May 2017

# **INTERESTS**

Environmental Stewardship and Sustainability, Neurobiophilia, Crafting, Hiking, Gardening, Community Outreach, Biking, Traveling, Beach Walks, Interior Design, Cooking, Watercolor Painting