

ALBERT HUANG

101 Crawford St. #202
Houston, TX 77002
+1 (832) 799 8546
albert.y.huang@gmail.com
www.alberthuangmd.com
linkedin.com/in/albertyhuang

AREAS OF EXPERTISE

- Field of Surgery
 - Field of Medicine
 - Clinical Study Design
 - Translational Science Research
 - Hospital Organization & Workflow
-

RELEVANT SKILLS

- In-Vivo & In-Vitro Study Design
 - CAD: Rhino 3D
 - Adobe Photoshop
 - Rapid 2D Ideation & Communication
 - 3D Prototype/Model Fabrication
-

INTERESTS

- Wearable Technology
 - Creative Design
 - Vintage Car & Motorcycle Restoration
 - Modernist Cuisine
 - Wine Collecting
 - Vintage Audio Equipment
 - History
 - Textiles Research
 - Furniture Design
-

LANGUAGES

- Fluent Mandarin Chinese
- Elementary Spanish
- Elementary German

TRAINING & EDUCATION

HOUSTON METHODIST | WEILL CORNELL MEDICAL COLLEGE..... 2011-CURRENT
SURGERY RESEARCH FELLOW
GENERAL SURGERY RESIDENT

- Coordinated and led multidisciplinary team in clinical testing (pilot studies) of systems and devices in the operating room and patient care setting
- Performed extensive market research, regulatory review, business model projections, and wrote patent documents on device-based intellectual property
- Identified clinical issues, designed, built, validated devices and initiated clinical studies

UT HEALTH SCIENCE CENTER SAN ANTONIO..... 2007-2011
DOCTORATE OF MEDICINE

HARVARD MEDICAL SCHOOL | MASSACHUSETTS GENERAL HOSPITAL..... 2004-2007
TISSUE ENGINEER & ORGAN FABRICATION DESIGN

UNIVERSITY OF ROCHESTER..... 2000-2004
B.S. IN CELL & DEVELOPMENTAL BIOLOGY

BUSINESS & INDUSTRY EXPERIENCE

INTEGRATED BIONICS..... 2013-CURRENT
PRODUCT DESIGN DIRECTOR

- Designed headbands and enclosure for wearable activity and impact monitor used in contact sports
- Developed manufacturing patterns and materials research for functionality and reliability
- Coordinated scaled production and quality control of product for market
- Conducted usability testing with athletes in on-field device trials

COLLATERAL CONCEPTS..... 2007-CURRENT
FOUNDER & DESIGNER

- Developed and constructed medically inspired industrial products and garments
- Advanced knowledge of metal/leatherwork, tailoring methods, and patternmaking
- Performed extensive R&D, materials and historical research for each product
- Designed and constructed 4 complete garment collections
- Experience in international marketing and distribution for retail sales

ACADEMIC RESEARCH

HOUSTON METHODIST HOSPITAL & UNIVERSITY OF HOUSTON..... 2013-CURRENT

- Developed operative applications for OR awareness and image-guided technology including GPS and video enabled laparoscopic trocar system
- Designed and developed multiple minimally invasive surgical devices.

HARVARD MEDICAL SCHOOL | MASSACHUSETTS GENERAL HOSPITAL 2004- 2007
DEPT. OF TISSUE ENGINEERING & ORGAN FABRICATION

- Developed nerve conduits, bone scaffolds and implantable liver replacement devices using polymers, hydrogels and stem cells with in-vivo testing

HARVARD MEDICAL SCHOOL | MASSACHUSETTS GENERAL HOSPITAL..... 2003
CUTANEOUS BIOLOGY RESEARCH CENTER

- Designed genetic crosses and assays on cell death regulation/gene expression

UNIVERSITY OF PENNSYLVANIA..... 2002
CENTER FOR EXPERIMENTAL THERAPEUTICS

- Studied COX-2 related receptor behavior and the effects of agonists

UNIVERSITY OF FLORIDA..... 2001
DIVISION OF RHEUMATOLOGY & CLINICAL IMMUNOLOGY

- Evaluated Lupus gene & antibody behavior in patients involved in a clinical study

PATENTS

DISPOSABLE, IN-LINE ENTEROTOMY DETECTION SYSTEM

US Patent # 61/921,206 Filed 12/27/13 Conversion 12/22/14

Inventor - A. Huang

MINIMALLY INVASIVE URETER IDENTIFICATION DEVICE

US Patent # 61/938,767 Filed 2/12/14 Conversion 2/12/15

Inventor - A. Huang

SURGICAL GOWN WITH TRANSPARENT WINDOWS AND POCKETS

US Patent # 61/981,765 Filed 4/19/14 Conversion 4/9/15

Inventors - A. Huang, V. Wilcox

SYSTEMS AND METHODS FOR MEDICAL PROCEDURE MONITORING

US Patent # 62/020,778 Filed 6/11/14 Conversion 6/2/15

Inventors - B. Bass, B. Dunkin, M. Garbey, A. Huang

REMOVABLE WINE EXTRACTION DEVICE AND METHOD

US Patent # 62/119,182 Filed 2/22/15

Inventor - A. Huang

METHOD AND APPARATUS FOR DETERMINING THE ORIENTATION OF AN ENDOSCOPE RELATIVE TO GRAVITY DURING USE AND FOR RECORDING THE SAME

US Patent # 62/137,937 Filed 3/25/15

Inventors - A. Huang, B. Dunkin

ROBUST FORCE SENSITIVE SENSOR

US Patent # 62/175,374 Filed 6/14/15

Inventors - A. Huang, G. Joerger

PUBLICATIONS

Huang, A., Wilcox, V., Dunkin, B. Laparoscopic Repair of Iatrogenic Diaphragmatic Hernia After Splenectomy *Gastroenterology*, 146, 5 Supp. 1, S-1021, 2014.

Wilcox, V., Huang, A., Tariq, N., Dunkin, B. Endoscopic Suture Fixation of Self-Expanding Metallic Stents With and Without Submucosal Injection *Surgical Endoscopy* Aug.27, 2014.

Pomerantseva, I., Krebs N., Hart, A., Neville CM., Huang, AY., Sundback, CA. Degradation Behavior of Polyglycerol Sebacate *J Biomed Mater Res A*. 2009 Dec 15;91(4): 1038-47.

Neville, CM., Huang, AY., Shyu JY., Snyder, EY., Hadlock, TA., Sundback, CA. Neural Precursor Cell Lines Promote Neurite Branching *Int J Neurosci*, 2009;119(1):15-39.

Weinand, C., Gupta, R., Huang, AY., Weinberg, E., Madisch, I., Qudsi, RA., Neville, CM., Pomerantseva, I., Vacanti, JP. Comparison of Hydrogels in the In-Vivo Formation of Tissue Engineered Bone Using Mesenchymal Stem Cells and Beta-Tricalcium Phosphate *Tissue Eng*. 2007 Apr; 13(4):757-65.

Krieser, RJ., Moore, FE., Dresnek, D., Pellock, BJ., Patel, R., Huang, A., Brachmann, C., White, K. The Drosophila Homolog of the Putative Phosphatidylserine Receptor Functions to Inhibit Apoptosis *Development* 2007 Jul; 134(13):2407-14.

Wilson, SJ., McGinley, K., Huang, A., Smyth EM. Heterodimerization of the Alpha and beta Isoforms of the Human Thromboxane Receptor Enhances Isoprostane Signaling *Biochem Biophys Res Commun*. 2007 Jan 12;352(2):397-403.

AWARDS & ACHIEVEMENTS

- 2014 Courtenay & R. William Bass Surgical Research Scholarship Award
- 2014 South Texas American College of Surgeons Surgical Skills Champion
- 2012 South Texas American College of Surgeons Surgical Jeopardy Champion
- 2012 General Surgery Intern of the Year
- 2007 Texas State Academic Medical Scholarship
- 2000 University of Rochester Rush Rhees Academic Scholarship
- Eagle Scout