UC San Diego School of Medicine

Department of Surgery

NEWSLETTER JANUARY 2023

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LETTER FROM THE CHAIR



Dear Colleagues and Friends,

It is hard to believe that another calendar year has passed (except when I look in the mirror). We once again find ourselves reflecting on the year that was and on the opportunities in the year ahead. Indeed, 2022 was a year of continued growth in the reach of our unique clinical capabilities throughout the region, as well as impactful discoveries, new research funding, and the launch of another class of graduates who will extend the spirit of UC San Diego far and wide. It was a year of extraordinary generosity by our philanthropic supporters and a year in which we continued to come

together in the aftermath of the COVID pandemic. The upcoming year will feature new leadership at the top of UC San Diego Health Sciences (Welcome Vice Chancellor John Carethers!) and many more opportunities for us to positively impact our diverse communities as well as the world beyond our region. I can't wait...

One of the most rewarding aspects of working in an academic setting is reflecting on the accomplishments and successes of our graduates, in whom we have invested our time and resources. In this month's Q&A, we have the opportunity to hear from general surgery residency alumnus, Dr. Waddah Al-Refaie. Dr. Al-Refaie is an accomplished surgical oncologist and surgeon scientist who was just named as the new Chair of Surgery at Creighton University School of Medicine. He represents all that is good in the world of American Surgery, not the least of which is the ability to attract the best and the brightest from around the globe.

A Kuwaiti native, Dr. Al-Refaie obtained his medical degree from the Royal College of Surgeons in Ireland and following a one-year internship in Kuwait. He then completed residency training at UC San Diego working under luminaries such as Drs. A.R. Moossa, David Hoyt, Michael Bouvet and others. His accomplishments as a resident earned him a competitive fellowship slot at MD Anderson and facilitated a successful career as an academic surgeon at the University of Minnesota and then Georgetown-MedStar, including roles as the Chief of Surgical Oncology and the Physician-in-Chief of the Lombardi Comprehensive Cancer Center. We are proud of Dr. Al-Refaie and all of our graduates. His is a shining example of what is possible with a UC San Diego education and with the support of all of our benefactors.

I hope this new year finds you in good health and in good spirit. We remain grateful for your interest and support of this incredible department.

Gratefully,

Bryan Clary, MD, MBA

SUPPORT THE WORK OF UC SAN DIEGO'S DEPARTMENT OF SURGERY

With your help, the Department of Surgery at UC San Diego School of Medicine is changing lives. Financial support from our community is critical to providing leading-edge surgical care to thousands of people every year. Your partnership enables UC San Diego's Department of Surgery to continue to serve our region's patients with the most expert care available.

DONATE

Q&A: WADDAH AL-REFAIE, MD, FACS



Creighton University School of Medicine and CHI Health have announced a new Chair for the School's Department of Surgery: UC San Diego Department of Surgery alumnus Waddah B. Al-Refaie, MD, FACS.

As chair, Dr. Al-Refaie will oversee and direct the clinical, research, education, academic and innovative missions of general surgery, colorectal, trauma/acute care surgery, cardiovascular, and thoracic surgery at Creighton and CHI Health. Image

Dr. Al-Refaie comes to Creighton from MedStar Health and Georgetown University, where he served as regional chief of Surgical Oncology, the John S. Dillon Chair in Surgical Oncology and Surgeon in Chief of the Lombardi Comprehensive Cancer Center.

He is a fellowship-trained surgical oncologist with more than 15 years of expertise in gastric cancer, skin cancer and soft tissue sarcomas. He obtained his medical degree from the Royal College of Surgeons in Ireland. After finishing an internship at Al-Amiri Hospital in Kuwait, he completed his residency at UC San Diego. He then completed a surgical oncology fellowship at the University of Texas M.D. Anderson Cancer Center. Prior to Georgetown, Al-Refaie served as the co-director of the University of Minnesota Surgical Outcomes Research Center.

He has over 130 peer-reviewed publications, books, and book chapters covering various aspects of surgical oncology including variations and disparities in surgical care and has earned numerous honors and awards for his work. He is an invited speaker on gastric cancer, soft tissue sarcomas and advanced cutaneous cancers. Al-Refaie has helped establish cancer surgery standards for gastric cancer, GI cancer, and soft tissue sarcomas as part of the American College of Surgery Cancer initiatives.

Here we speak with Dr. Al-Refaie about his experience as a resident at UC San Diego, his motivation for becoming chair and his goals for surgery at Creighton University.

Q: What was your experience like as a General Surgery resident at UC San Diego?

A: It was a fantastic educational experience second to none. The operative experience is vast, the team spirit is high, and the commitment to proudly represent UC San Diego is unwavering.

Q: What have been some of your accomplishments since leaving UC San Diego?

A: The opportunity to work with and learn from outstanding clinicians, scientists, and learners to advance the field of surgery overall and especially surgical oncology (namely gastric cancer, soft tissue sarcomas, and melanoma) is impeccable.

Also, collaborating with expert colleagues to promote equity and reduce disparities in surgery at the institute and national levels has been an important part of my career journey.

As a native of Kuwait, having received the inaugural Gulf Cooperation Council Award of Merit is one of highest honors bestowed upon on me.

Q: What drove you to want to become Chair of a department of surgery?

A: The reason behind my decision is largely inspired by the foundational tenants of surgical training at UC San Diego (the late Dr. Moossa, Dr. Hoyt, the late Dr. Orloff) and MD Anderson (Drs. Pollock, Curley, Pisters). That is to train surgeons who aspire to make a positive difference and influence our field with large scale and impact.

Q: What are some of your goals as Chair of Surgery for Creighton?

A: Creighton Surgery is the home of many outstanding leaders in the United States, including Drs. Claude Organ, Danny Jacobs, Tom DeMeester, and Robert Fitzgibbons. I fully recognize that I am honored to follow and live up to an amazing legacy of excellence in surgery, academia, resident education, and diversity.

Building on this legacy and in collaboration with colleagues at Creighton and CHI Health, the vision is to grow the surgical subspecialties, enhance our academic brand and rigor thorough extra-mural scientific inquiries, grow Creighton's Crown Jewel (The residency), push the surgical innovation arm, and strongly advance the agendas of diversity, equity, and inclusion among faculty, learners, and team members.

DISCOVERIES MAGAZINE



Like life itself, a university is in constant evolution: growing and changing to meet new challenges and needs. Nowhere is that more evident than in the past and future of UC San Diego Health Sciences and its missions of education, research and clinical care.

The cover and foldout centerpiece of 2023 issue of *Discoveries* magazine capture the ongoing transformation of the La Jolla and Hillcrest health campuses, visualizing through past, current and planned development what we were, are and will be.

The issue also recollects the significant contributions of David A. Brenner, MD, who stepped down as vice chancellor of Health Sciences in 2021 after an unprecedented 14-year tenure, and reintroduces his successor, John M. Carethers, MD, who began his distinguished career as a professor in the UC San Diego School of Medicine.

And, of course, the latest issue includes a variety of articles highlighting

UC San Diego Surgery, including feature stories on UC San Diego Health's Center for Transplantation and

Read Discoveries

CLINICAL NEWS



Patient Full of Gratitude After Facing Cancer Three Times

Phyllis Schwartz, a former news executive, knows firsthand what a cancer diagnosis is like. She has been through treatment for three different types of cancers – Hodgkins's lymphoma, breast cancer and pancreatic cancer.

Her most recent diagnosis was pancreatic

neuroendocrine cancer. She did her research and decided to receive her cancer care with Andrew Lowy, MD, FACS, surgical oncologist and chief of the Division of Surgical Oncology at Moores Cancer Center at UC San Diego Health.

Schwartz underwent the Whipple procedure, a complex surgery that takes several hours and involves removal of the pancreas head and then the duodenum, the first portion of the small bowel.

Now, nearly five years post surgery, Schwartz is living a full life and full of gratitude to the entire medical team who treated her. She is a book author and is using her journey to help others through her writing. <u>Watch Phyllis' story on YouTube</u>

RESEARCH NEWS



Stress-Tolerant Cells Drive Tumor Initiation in Pancreatic Cancer

Researchers at University of California San Diego School of Medicine have discovered a molecular pathway critical to the initiation of pancreatic tumors. The mechanism could also contribute to the disease's high resistance to chemotherapy and its propensity for metastasis.

The study, published on January 16, 2022 in <u>Nature Cell Biology</u>, found that pancreatic tumor-initiating cells must first overcome local 'isolation stress' by creating their own tumor-promoting microenvironment, and then recruit surrounding cells into this network. By targeting this tumor-initiating pathway, new therapeutics could limit the progression, relapse and spread of pancreatic cancer.

Pancreatic cancer is one of the most lethal cancers, notoriously resistant to treatment. Almost all patients experience cancer recurrence or metastasis.

Read more

FACULTY & STAFF NEWS



Dr. Lowy Appointed Levine Family Endowed Chair

Andrew Lowy, MD, FACS has been appointed the inaugural holder of the Levine Family Chancellor's Endowed Chair in Surgical Oncology for the UC San Diego School of Medicine, Department of Surgery. This five-year appointment is based on the recommendation of campus reviewers and the enthusiastic endorsement of university leadership.

Dr. Lowy has spent his career developing an outstanding research program in surgical oncology, and specifically in studies of the pathogenesis of pancreatic cancer. Among other contributions, his laboratory created the first Cre driver strains used to develop the KC and KPC models of pancreatic cancer, and most recently has made important contributions in the areas of tyrosine kinase signaling and made important contributions in the areas of tyrosine kinase signaling and stem cell biology.

He is a renowned investigator, who has written more than 226 publications and book chapters. Dr. Lowy's research has been continuously funded since 1999, including multiple, concurrent NIH, Stand up to Cancer, Lustgarten Foundation, Pancreatic Cancer Action Network awards. He has held multiple leadership positions, including serving as vice-chair of the NCI Pancreatic Cancer Task Force from 2007-2016, and chair from 2016-2021. He has served as co-leader of the SWOG pancreas cancer subcommittee since 2007 and served as interim Chair of the SWOG GI committee in 2019. In addition, he serves on the Pancreatic Cancer Working Group of the Clinical Trials and Translational Research Committee (CTAC) for NCI, which advised on development of priorities for the Recalcitrant Cancers Act of 2013 and continues to serve to report on the progress of NCI initiatives around PC.

Dr. Lowy's outstanding contributions to science, research and the improvement of clinical care make him an outstanding candidate to receive the Levine Family Chancellor's Endowed Chair in Surgical Oncology.

Dr. White Receives American Cancer Society Grant

Rebekah White, MD, FACS, has received an American Cancer Society grant and supplement to her existing Discovery Boost Grant entitled, "Digestive Proteases Contribute to Immune Escape in Pancreatic Cancer."





Dr. Friend Elected to Royal Society of Chemistry

James Friend, PhD, has been elected as a Fellow of the Royal Society of Chemistry. Dr. Friend leads the Medically Advanced Devices Laboratory in the Center for Medical Devices at the University of California, San Diego, a professor in both the Department of Mechanical and Aerospace Engineering, Jacobs School of Engineering and the Department of Surgery, School of Medicine.

AS SEEN ON TWITTER



Our Senior ACS Fellow Dr Aaron Marshall provides the impact of the 30' border wall in #SanDiego on @UCSDHealth and @ScrippsHealth - since 2019: 1400% increase in border fall admits, \$83 million in estimated costs on overloaded health systems @go_WAM #EAST2023 #title42





Dr. Kristin Mekeel @DrKMekeel

Proud of UC San Diego Surgery residents Dr. Raeda Taj, Dr. Victoria Berendsky, and Dr. Nicole Goldhaber presenting their transplant research at the ASTS Winter Meeting @nhgoldhaber @ASTSChimera @UCSDsurgery



THIS MONTH'S PUBLICATIONS

A Young Man Presenting With Tongue Lesions.

Victor M, Vavinskaya V, Guo T. JAMA Otolaryngol Head Neck Surg. 2022 Nov 23. doi: 10.1001/jamaoto.2022.3799. Online ahead of print. PMID: 36416858

Anti-KIT DNA aptamer-conjugated porous silicon nanoparticles for the targeted detection of



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UC San Diego Health 🤣 @UCSDHealth

January is National Blood Donor Month, a time to recognize the importance of giving blood. #UCSDHealth partners with @RedCross and @sdbloodbank to coordinate and host multiple blood drives across the county. Here is a recap at our contributions with the Red Cross in 2022:





Waddah Al-Refaie

Deeply honored and throughly excited to join @Creighton @CreightonSOM @CreightonSurg @CHI Health as Chair of Surgery following an amazing lineage: Drs. Organ, Jacobs, DeMeester, and Robert Fitzgibbons.

Multidisciplinary Approach to Chronic

<u>Thromboembolic Pulmonary Hypertension: Role of Radiologists.</u> Hahn LD, Papamatheakis DG, Fernandes TM, Poch DS, Yang J, Shen J, Hoh CK, Hsiao A, Kerr KM, Pretorius V, Madani MM, Kim NH, Kligerman SJ. Radiographics. 2023 Feb;43(2):e220078. doi: 10.1148/rg.220078.

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gastrointestinal stromal tumors. Vijayakumar S, Nasr SH, Davis JE, Wang E, Zuidema JM, Lu YS, Lo YH, Sicklick JK, Sailor MJ, Ray P. Nanoscale. 2022 Nov 23. doi: 10.1039/d2nr03905b. Online ahead of print. PMID: 36416809

ASO Visual Abstract: Conditional Survival After Cytoreductive Surgery with Hyperthermic Intraperitoneal Chemotherapy for Peritoneal Surface Malignancies: An Analysis from the US <u>HIPEC Collaborative.</u> Beal EW, Srinivas S, Shen C, Kim A, Johnston FM, Greer J, Abbott DE, Pokrzywa C, Raoof M, Grotz TE, Leiting JL, Fournier K, Dineen S, Powers B, Veerapong J, Kothari A, Maduekew U, Maithel S, Wilson GC, Patel SH, Lambert L, Abdel-Misih S, Cloyd JM. Ann Surg Oncol. 2022 Nov 23. doi: 10.1245/s10434-022-12852-y. Online ahead of print. PMID: 36418799 No abstract available.

Quantitative prediction of aspiration risk in head and neck cancer patients treated with radiation therapy. Liu HC, Williamson CW, Zou J, Todd JR, Nelson TJ, Hill LM, Linnemeyer KE, Henderson G, Madgula P, Faung B, Sacco AG, Vitzthum LK, Weissbrod PA, Blumenfeld LS, Mell LK. Oral Oncol. 2022 Nov 19;136:106247. doi: 10.1016/j.oraloncology.2022.106247. Online ahead of print. PMID: 36410204

Reversion of methionine addiction of osteosarcoma cells to methionine independence results in loss of malignancy, modulation of the epithelial-mesenchymal phenotype and alteration of histone-H3 lysine-methylation. Aoki Y, Han Q, Tome Y, Yamamoto J, Kubota Y, Masaki N, Obara K, Hamada K, Wang JD, Inubushi S, Bouvet M, Clarke SG, Nishida K, Hoffman RM. Front Oncol. 2022 Nov 3;12:1009548. doi:

10.3389/fonc.2022.1009548. eCollection 2022. PMID: 36408173 Free PMC article.

SARS-CoV-2 infected children form early immune memory responses dominated by nucleocapsidspecific CD8+ T cells and antibodies. Lima K, Fontoura JC, de Souza PO, Fazolo T, Hilario G, Zorzetto R, Rodrigues Junior LC, Coimbra LD, Borin A, Bispo-Dos-Santos K, Granja F, Marques RE, Zavaglia GO, Fernandes IR, Varela FH, Polese-Bonatto M, Tonini ML, Ikeda do Carmo GM, de Almeida WAF, Borges TJ, Nakaya HI,

PMID: 36525366

Newly diagnosed multiple myeloma: making sense of the menu. Costello CL. Hematology Am Soc Hematol Educ Program. 2022 Dec 9;2022(1):539-550. doi: 10.1182/hematology.2022000404. PMID: 36485145

Accurate genome-wide genotyping from archival tissue to explore the contribution of common genetic variants to pre-cancer outcomes. Nachmanson D, Pagadala M, Steward J, Cheung C, Bruce LK, Lee NQ, O'Keefe TJ, Lin GY, Hasteh F, Morris GP, Carter H, Harismendy O. J Transl Med. 2022 Dec 27;20(1):623. doi: 10.1186/s12967-022-03810-z. PMID: 36575447 Free PMC article.

Assessing Efficacy Using Variations of Olfactory Training for COVID-19-Related Smell Loss-Would a Rose by Any Other Scent Smell as Strong? Yan CH. JAMA Otolaryngol Head Neck Surg. 2022 Dec 29. doi: 10.1001/jamaoto.2022.4113. Online ahead of print. PMID: 36580290 No abstract available.

Persistent post-COVID-19 smell loss is associated with immune cell infiltration and altered gene expression in olfactory epithelium.

Finlay JB, Brann DH, Abi Hachem R, Jang DW, Oliva AD, Ko T, Gupta R, Wellford SA, Moseman EA, Jang SS, Yan CH, Matsunami H, Tsukahara T, Datta SR, Goldstein BJ. Sci Transl Med. 2022 Dec 21;14(676):eadd0484. doi:

10.1126/scitranslmed.add0484. Epub 2022 Dec 21. PMID: 36542694

The Use of Surgical Augmented Intelligence Maps Can Reduce Radiation and Improve Safety in the Endovascular Treatment of Complex Aortic Aneurysms. Patel RJ, Lee AM, Hallsten J, Lane JS, Barleben AR, Malas MB. J Vasc Surg. 2022 Dec 26:S0741-5214(22)02712-4. doi: 10.1016/j.jvs.2022.12.033. Online ahead of print. PMID: 36581011

Archaea Microbiome Dysregulated Genes and Pathways as Molecular Targets for Lung Adenocarcinoma and Squamous Cell Carcinoma. Uzelac M, Li Y, Chakladar J, Li WT, Ongkeko WM. Int J Mol Sci. 2022 Sep 30;23(19):11566. Proenca-Modena JL, Callegari-Jacques SM, Scotta MC, Stein RT, Bonorino C. Front Immunol. 2022 Nov 2;13:1033364. doi: 10.3389/fimmu.2022.1033364. eCollection 2022. PMID: 36405692 Free PMC article.

The Society of Thoracic Surgeons General Thoracic Surgery Database: 2022 Update on Outcomes and Research. Servais EL, Blasberg JD, Brown LM, Towe CW, Seder CW, Onaitis MW, Block MI, David EA. Ann Thorac Surg. 2022 Oct 29:S0003-4975(22)01388-1. doi: 10.1016/j.athoracsur.2022.10.025. Online ahead of print. PMID: 36404445

Image analysis reveals differences in tumor multinucleations in Black and White patients with human papillomavirus-associated oropharyngeal squamous cell carcinoma. Koyuncu CF, Nag R, Lu C, Corredor G, Viswanathan VS, Sandulache VC, Fu P, Yang K, Pan Q, Zhang Z, Xu J, Chute DJ, Thorstad WL, Faraji F, Bishop JA, Mehrad M, Castro PD, Sikora AG, Thompson LDR, Chernock RD, Lang Kuhs KA, Wasman JK, Luo JR, Adelstein DJ, Koyfman SA, Lewis JS Jr, Madabhushi A. Cancer. 2022 Nov 1;128(21):3831-3842. doi: 10.1002/cncr.34446. Epub 2022 Sep 6. PMID: 36066461

Decreasing use of pancreatic necrosectomy and NSQIP predictors of complications and mortality. Liepert AE, Ventro G, Weaver JL, Berndtson AE, Godat LN, Adams LM, Santorelli J, Costantini TW, Doucet JJ. World J Emerg Surg. 2022 Dec 12;17(1):60. doi: 10.1186/s13017-022-00462-8. PMID: 36503680 Free PMC article. doi: 10.3390/ijms231911566. PMID: 36232866 Free PMC article.

Effects of Human Papilloma Virus E6/E7 Oncoproteins on Genomic Structure in Head and Neck Squamous Cell Carcinoma. Uzelac M, Barakchi A, Beldona V, John D, Chakladar J, Li WT, Ongkeko WM. Cancers (Basel). 2022 Dec 15;14(24):6190. doi: 10.3390/cancers14246190. PMID: 36551675 Free PMC article.

Treatment of pancreatic cancer with irreversible electroporation and intratumoral CD40 antibody stimulates systemic immune responses that inhibit liver metastasis in an orthotopic model. Shankara Narayanan JS, Hayashi T, Erdem S, McArdle S, Tiriac H, Ray P, Pu M, Mikulski Z, Miller A, Messer K, Carson D, Schoenberger S, White RR. J Immunother Cancer. 2023 Jan;11(1):e006133. doi: 10.1136/jitc-2022-006133. PMID: 36634919

Pancreatic cancer cells upregulate LPAR4 in response to isolation stress to promote an ECMenriched niche and support tumour initiation. Wu C, Rakhshandehroo T, Wettersten HI, Campos A, von Schalscha T, Jain S, Yu Z, Tan J, Mose E, Childers BG, Lowy AM, Weis SM, Cheresh DA. Nat Cell Biol. 2023 Jan 16. doi: 10.1038/s41556-022-01055-y. Online ahead of print. PMID: 36646789

Smarcd3 is an epigenetic modulator of the metabolic landscape in pancreatic ductal adenocarcinoma. Ferguson LP, Gatchalian J, McDermott ML, Nakamura M, Chambers K, Rajbhandari N, Lytle NK, Rosenthal SB, Hamilton M, Albini S, Wartenberg M, Zlobec I, Galván JA, Karamitopoulou E, Vavinskaya V, Wascher A, Lowy AM, Schürch CM, Puri PL, Bruneau BG, Hargreaves DC, Reya T. Nat Commun. 2023 Jan 18;14(1):292. doi: 10.1038/s41467-023-35796-7. PMID: 36653361

See full list of publications

IN THE NEWS

"<u>Scientists find key reason for ongoing loss of smell in long-COVID</u>," *News Medical*, features UC San Diego Health

"Loss of Smell During Long COVID Sniffed Out," Genetic Engineering & Biotechnology News, features UC San Diego Health

"Key Reason Why Loss of Smell Occurs in Long COVID-19 Identified," *Technology Networks*, features UC San Diego Health

"Immune Assault May Explain Loss of Smell in Long COVID," Futurity, featuring UC San Diego Health

JOB LISTINGS

Assistant, Associate or Full Professor (HS Clinical, Clinical X, In-Residence, Adjunct) Cardiothoracic Surgery

<u>Assistant, Associate or Full Professor (HS Clin,</u> <u>Clin X, Adj, In-Residence) - Pediatric</u> <u>Cardiothoracic Surgery</u>

<u>Assistant, Associate or Full Professor (HS</u> <u>Clinical, Clinical X, Adjunct, In-Residence)</u> <u>Surgical Sciences</u>

Assistant, Associate or Full Professor (HS Clinical, Clinical X, In-Residence, Adjunct) Otolaryngology Research

Miscellaneous Lecturer: Audiology

<u>Assistant, Associate or Full Professor (HS Clin,</u> <u>Clin X, In Residence, Adjunct) - Plastic Surgery</u>

Assistant, Associate or Full Professor (HS Clin, Clin X, Adjunct, In-Residence) Vascular and Endovascular Surgery

<u>Assistant, Associate of Full Professor (HS Clin,</u> <u>Clin X, In Residence, Adjunct) - Pediatric</u> <u>Surgery</u>

<u>Assistant, Associate or Full Professor (HS Clin,</u> <u>Clin X, In-Res, Adj) Otolaryngology - Head and</u> <u>Neck Surgical Oncology</u>

ALUMNI SPOTLIGHT: DR. JOSEPH EISNER, MD, FACS



"I am grateful for my exceptional general surgery training at UC San Diego and how it molded me into the person and surgeon I am today. Learning from subspecialist surgeons and researchers provided me a more profound depth of knowledge and insight and connected me to mentors who to this day, still advise me on rare case presentations. The graded autonomy provided in the program allowed me to grow as a doctor, surgeon and leader while ensuring exceptional patient care. From the trauma and indigent care at Hillcrest, to tertiary level oncology care in La Jolla, to multidisciplinary care at the VA, I was granted a diverse and comprehensive view of medical care and technique. I always appreciated how the attendings would allow us to take over their home for journal club and take time out of their busy day to give lectures. I forged

indestructible bonds with my co-residents through long days and even longer nights and they have become some of my closest friends."

Dr. Joseph Eisner is in a large group general surgery private practice in Ventura, California where he is Core Faculty for the Community Memorial Health System general surgery residency program and Clinical Assistant Professor of Surgery at Western University of Health Sciences.



UPCOMING EVENTS

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LATEST NEWS

ABOUT THE DEPARTMENT

The Department of Surgery at UC San Diego prides itself on maintaining a thriving clinical enterprise in 13 surgical divisions and providing exceptional care to patients; while educating future generations of surgeons and conducting ground-breaking research. Since 1968, our team of internationally recognized surgeons have performed cutting edge surgeries, which today include including awake brain surgery; heart-lung transplants; scarless appendectomies; and incisionless weight-loss surgery. We're proud of the research breakthroughs we make in surgical medicine and the quality rankings we achieve year after year. surgery.ucsd.edu