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Amanda Gosman Changes Face of Plastic Surgery

Dr. Amanda Gosman, an expert in complex facial reconstructions for children and adults, was recently named the new chief of the division of plastic surgery at <u>UC San Diego School of Medicine</u>.

A professor of plastic surgery, she also directs the school of medicine's plastic surgery residency and craniofacial fellowship programs.

In her new leadership role, Gosman hopes to establish the school of medicine as a world-renowned plastic surgery training center, one that captures all the biotech innovation in San Diego. She plans to grow her division's expertise in microsurgery (surgery performed under a microscope), and she is excited by the potential of stem cells and regenerative techniques to improve reconstructions. Her own research is currently focused on the use of distraction osteogenesis—a technique for stretching and reshaping bone—to correct abnormal skull development in newborns.

"I would also hope my legacy includes sharing our innovations and expertise with underserved communities, here and abroad," said Gosman, whose interest in international service dates to her undergraduate days as an architecture and urban planning major.

Gosman directs <u>the Fresh Start Clinic for Craniofacial</u> <u>Anomalies at Rady Children's Hospital-San Diego</u>, where she performs cleft lip and palate surgeries and other reconstructions for children at no cost. She is also the



founder of the non-profit <u>ConnectMed International</u>, which helps people around the world receive lifealtering surgical reconstructions and provides training of surgeons through on-site visits, teleconferencing and telemedicine. Among ConnectMed's most recent achievements was the launch of Vietnam's third plastic surgery training center, at Hue University.

"I can perform one or a few surgeries on a humanitarian mission or I can help train surgeons who will go on to perform thousands of surgeries in their lifetime," she said. "That ability to touch so many lives through training is what really motivates me."

Gosman describes the global burden of diseases that could be treated through surgery as a tremendous global public health opportunity. The <u>Lancet Commission on Global Surgery</u> estimates that 5 billion people lack access to safe and affordable surgical care and anesthesia. Because of this, many easily treatable conditions become deadly or disabling. An estimated 90 percent of maternal deaths globally could be prevented with minor interventions. The number of surgeons globally needs to roughly double in 15 years to meet the demand for care in the developing world, according to its report.

"We tend to think of HIV, infectious disease and vaccines as focal points for global public health initiatives, but in many cases, the biggest bang for your buck is safe surgical care," Gosman said.

Congenital defects like cleft palate, motor vehicle injuries, burns—these are all situations in which surgical care can be transformative to otherwise healthy individuals. Whereas chronic conditions may require ongoing monitoring and care, surgeries can be a one-time fix with huge downstream benefits to productivity and quality of life, she said.

Some of Gosman's first experiences in medicine were with a mobile surgical unit in Central and South America. "We worked out of the back of a truck," she said. "I realized that surgical care can be surprisingly low tech, and very directly impact human life. This is why outreach efforts such as ConnectMed can be so successful."

In addition to humanitarian service, teaching and research, Gosman would also like to grow UC San Diego Health's <u>plastic surgery practice</u>.



"Aesthetics are a critical part of treating the whole patient," she said. "How you feel about yourself and are able to interact socially with your peers can truly impact on your health. The neuro-chemistry component is not entirely understood but the value of surgical interventions for aesthetic purposes has been shown repeatedly and convincingly."

She noted that breast cancer patients who have breast reconstructions have been shown to have higher rates of

survival.

"It is not well known, but we offer many elective plastic surgery interventions at UC San Diego Health at a significant discount to the UC San Diego community," she said.

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