



# SAN DIEGO'S MEDICAL DEVICE INDUSTRY

The medical device industry is an important component of San Diego's burgeoning life sciences cluster. More than 30 years ago, scientists out of UC San Diego founded Hybritech, a company that produced one of the first diagnostic tests for prostate cancer. The company's acquisition by Eli Lilly in 1986 for \$400 million made it one of the region's early success stories, and catalyst for a subsequent influx of startup investors.

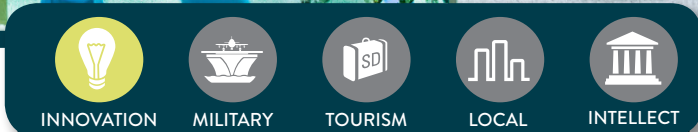
Since that time, San Diego's medical device ecosystem has rapidly expanded, with products and technologies spanning a wide range of applications including diagnostics, sleep aids, glucose monitors and spinal implants, to name a few. Noteworthy tradeshows in the industry have started to call San Diego home, including the 2016 MeDevice Forum, 2017 10X Medical Device Conference and the 2017 BIO International Convention.

## HIGHLIGHTS

- » **Economic impact:** Carlsbad has a robust medical device industry, accounting for 6 percent of all employment in the area and around 4,000 jobs.<sup>1</sup>
- » **Life saver:** Local company Aethlon Medical produces a device known as the Hemopurifier. Featuring a single-use, disposable cartridge that filters blood, the technology treats Ebola and is credited for having saved the life of a Ugandan physician infected with the disease in 2014.<sup>2</sup>
- » **Shedding pounds:** Medical device applications run the gamut in San Diego. Local company Obalon produces the Obalon 3-Balloon System that helps facilitate weight loss by taking up space in your stomach. Obalon became a publicly traded company in October 2016.<sup>3</sup>
- » **Unique degree:** In response to local demand, UC San Diego's Jacobs School of Engineering launched the Masters in Medical Device Engineering in 2011. The program is one of the few of its kind in the country.

## KEY COMPANIES

- |                     |                              |
|---------------------|------------------------------|
| » ACON Laboratories | » ResMed                     |
| » Calbiotech        | » Tandem Diabetes Care, Inc. |
| » Dexcom            | » Volcano Corporation        |
| » NuVasive          | » Zimmer Dental              |



## SPOTLIGHT

### ResMed

San Diego-based device manufacturer ResMed has spent more than 25 years helping people with sleep apnea and other respiratory conditions. Its comprehensive portfolio of ventilation devices aligns with the company's motto: "changing lives with every breath."



## RESOURCES

### Biocom

Biocom is the largest regional life sciences association in the world and represents more than 825 member companies. [biocom.org](http://biocom.org)

### San Diego Entrepreneurs Exchange

San Diego Entrepreneurs Exchange supports new companies in the life sciences and technology fields, and sponsors networking and educational events. [sdentrepreneurs.org](http://sdentrepreneurs.org)

### San Diego Biotechnology Network

San Diego Biotechnology Network was founded in 2008 with the goal of providing high quality, face to face networking among professionals working directly in the biotech space. [sdbn.org](http://sdbn.org)

### Health Technology Forum: San Diego

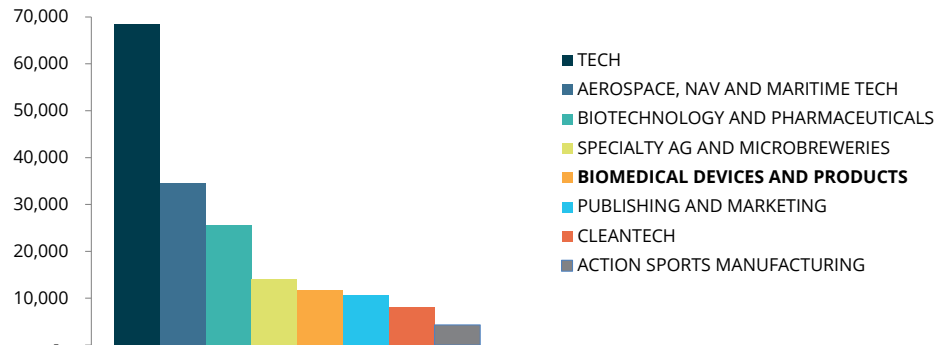
HTF promotes the intersection of health care and technology by connecting people worldwide who have a common interest in making health care better, more accessible and affordable for everyone. [healthtechnologyforum.com/htf-san-diego/](http://healthtechnologyforum.com/htf-san-diego/)

## BY THE NUMBERS

### Employment Numbers

Medical device falls under San Diego's biomedical devices and products segment of the life sciences cluster. In 2014, biomedical devices and products accounted for **11,700** jobs and **305** establishments in the San Diego region.

**Employment Comparisons  
within San Diego Region's Innovation Economy**

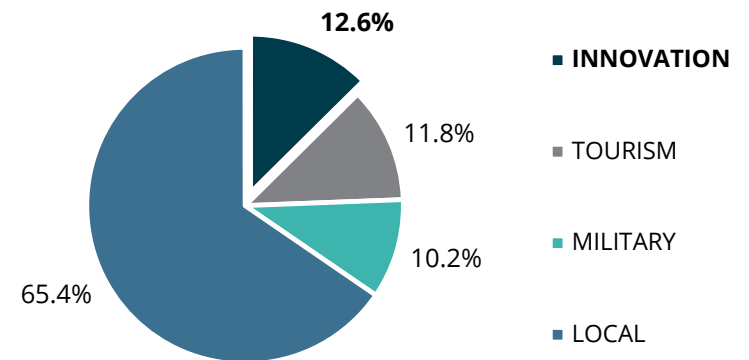


### Our Economies

The vitality of San Diego's economy is reliant upon the strength of the region's four economic drivers – innovation, military, tourism and local.

The medical device industry is an intrinsic part of San Diego's innovation economy. As of 2014, innovation was responsible for almost 13 percent of the region's total jobs.

**Employment Comparisons  
Across the San Diego Region's Economies**



### Employment Allocations by Key Industries in Biomedical Devices and Products

Industry	Employment	Avg Annual Pay	LQ*
Industrial Gas Manufacturing	355	\$81,200	1.93
Optical Instrument and Lens Manufacturing	432	\$71,800	1.97
Surgical and Medical Instrument Manufacturing	2390	\$92,000	2.15
Surgical Appliance and Supplies Manufacturing	1764	\$89,100	1.76
Dental Equipment and Supplies Manufacturing	762	\$76,300	5.00
Ophthalmic Goods Manufacturing	962	\$46,300	2.93
Dental Laboratories	347	\$33,300	0.78
Testing Laboratories	402	\$85,300	4.95
Res/Dev Phys, Eng, Life Sciences (ex Biotech)	4106	\$179,500	4.80
Other Electronic Equipment Repair	198	\$67,300	0.61
<b>BIOMEDICAL DEVICES AND PRODUCTS</b>	<b>11,700</b>	<b>\$115,000</b>	<b>2.50</b>

For more information on San Diego's medical device industry, please contact:

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\*LQ=Location Quotient

Sources: Highlights: 1. BW Research Partnership, "The Medical Devices Industry in Carlsbad", 2013 2. Mass Device, "Aethlon's blood filtration device as broad countermeasure for infectious diseases", 2015 3. FierceBiotech, "Obalon Therapeutics launches \$75M IPO for ingestible weight loss balloon", 2016