For Immediate Release
June 19, 2017

Media Contact
Bree Burris: (909)518-1083
bb@sandiegobusiness.org

Study: San Diego ranks #1 in the US for genomics patents

First-ever study quantifies regional genomics industry; how region stacks up compared to peer US metros

San Diego— Today, San Diego Regional EDC released the first-ever economic impact report on San Diego's genomics industry. "Cracking the Code: the Economic Impact of San Diego's Genomics Industry" explores the economic factors that have led to the proliferation of San Diego's genomics industry, analyzes the region's genomics standing relative to other U.S. regions, and quantifies San Diego's genomics-related firms, talent pool, venture capital and more.

As a way to understand San Diego's proliferation in the genomics industry, the study also includes a web timeline that charts significant milestones at GenomicsSD.org.

As the **#1 most patent intensive genomics market in the U.S.,** San Diego is leading the charge in a new era of healthcare. Personalized medicine and technology are taking precedence, with local genomics companies, research institutions and universities at the forefront.

"Twenty years ago, healthcare meant treating an ailment as it arose. Today, thanks to research and scientific discovery, personalized medicine has enabled us to predict and potentially combat disease and illness. And San Diego is leading this charge," said **Mark Cafferty, president & CEO, San Diego Regional EDC**. "With collaboration at our core, San Diego genomics companies, research institutes and universities are actively changing lives, curing disease and revolutionizing healthcare as we know it."

KEY FINDINGS

Leadership: San Diego is poised to continue its leadership in the field of precision medicine. With more than **115 genomics-related firms**, San Diego has companies that handle every aspect of the genomics value-chain – from sampling and sequencing (e.g. Illumina, Thermo Fisher Scientific) to analysis and interpretation (e.g. AltheaDX, Human Longevity, Inc.) to clinical applications (e.g. Celgene, Arcturus Therapeutics), creating a complete ecosystem. Additionally, San Diego conducts the fundamental scientific research, due in part to the concentration of research institutes that form the basis for many global genomics therapies and interventions.

Capital: While San Diego is home to just one percent of the U.S. population, it received **22 percent – $292 million – of the venture capital funding** in genomics in 2016. Continually, San Diego's numerous nonprofit research institutes command a large share of federal funding (e.g. NIH). In fact, San Diego received $38 million in federal funding in 2016, including $3.2 million in federal contract dollars which is more than any other U.S. region.

Talent: San Diego produces more genomics-ready graduates, relative to the size of its workforce, than any other U.S. region. With nearly **2,000 average genomics-related degrees** (biochemistry, cognitive science and bioinformatics) conferred per year, San Diego's genomics companies benefit from the preparatory work of the region's top academic institutions. In that vein, it is projected that the local talent pool for **key genomics occupations will grow by an additional 10 percent by 2021**.

"This report highlights how three key ingredients come together to create a unique industry opportunity, and the secret ingredient that makes it all work is collaboration," said **Ashley Van Zeeland, CTO of Human Longevity, Inc**.

"Human Longevity, Inc., has benefited from working closely with our regional research and technology leadership as the San Diego genomics community truly propels the mission of precision medicine forward."

"This report confirms what we've known for years: there isn't a city in America better positioned to be a leader in the life sciences cluster than San Diego," said **Rep. Scott Peters, 52nd district of California.** "We are the center for groundbreaking discoveries in genomics that are saving lives and creating jobs along the way. Our innovation economy is driven by robust federal research funding through the National Institutes of Health. The discoveries of tomorrow and economic opportunities for the next generation depend on preserving this funding to keep San Diego at the forefront of innovation and discovery."

ADDITIONAL KEY FACTS

- San Diego's genomics industry has a $5.6 billion annual economic impact, impacting 35,000 jobs in 2016.
- Among top life sciences U.S. metros, San Diego's genomics industry ranks #2 overall, #3 in innovation, #2 in talent, and #4 in growth.*
- From 2014 to 2016, San Diego generated 371 genomics-related patents. Collectively, 28 local firms generated 120 genomics-related patents in 2016.
- San Diego is 3.1x more concentrated than the U.S. in key genomics occupations.
- From 2011 to 2016, San Diego's genomics talent pool grew by 11 percent, far outpacing the national growth rate of 5.1 percent.

*The genomics scorecard was calculated using a weighted ranking system divided into three categories approximating the genomics ecosystem: innovation, talent, and growth.

EDC's study was underwritten by **Illumina**, and sponsored by **Alexandria Real Estate, Barney & Barney, Biocom, Eastridge Workforce Solutions, Human Longevity, Inc., Latham & Watkins**, **Thermo Fisher Scientific** and **UC San Diego**. Additional research support was provided by **CBRE**.

For a complete copy of the executive summary, click here. For a copy of the full study, click here. To view the web timeline, visit GenomicsSD.org.

About San Diego Regional Economic Development Corporation

San Diego Regional Economic Development Corporation's (EDC's) mission is to maximize the region's economic prosperity and global competitiveness. As an independently funded non-profit fueled by more than 160 companies and organizations, EDC takes a data-driven approach to attracting, retaining and expanding companies and the talent pool across the region's three traded economies: military, tourism and innovation. sandiegobusiness.org

###