### RECENT TRANSACTIONS

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<thead>
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<th>Company</th>
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<tr>
<td>HERON THERAPEUTICS</td>
<td>28,200</td>
<td>Tenant</td>
</tr>
</tbody>
</table>

### CLIENT TESTIMONIALS

- "They helped Takeda to understand the market, carefully consider all viable alternatives, and arrive at a custom solution with exceptional economic and other lease terms."
  
  **David Weitz**
  Head of Takeda California and Global Research Externalization

- "We’ve relied on C&W Life Sciences as our advisor for over a decade, both at Inception and Amira. They have helped us on several transactions and have always delivered great terms and flexibility."
  
  **Donna Tran**
  VP, Finance and Operations
  Inception Sciences

- "They are the “go to” real estate team for the life science industry. I trust them and highly recommend them."
  
  **Magda Marquet**
  Ph.D., Co-Chairman & Founder
  Althea Technologies

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**LEADING TENANT ADVISORS FOR THE LIFE SCIENCES INDUSTRY**

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(858) 452-6500
Greetings and welcome to our spring 2018 issue of LifeLines! The theme of this issue is investment. Investment in our programs and services, and exciting investments in the growth of our association, our members, and in our network of companies, academic and research institutes and service providers across the globe. I can proudly declare that we have now exceeded 1,000 members. In keeping with this growth, our staff has expanded to nearly 50 employees and our budget is approaching $10 million annually. Our footprint now includes members from California, Japan, and across the EU. This success and our deep bench of talent provide us the power to continue to expand successfully into markets in the greater Los Angeles area, where we now have 125 members, and to the north in the San Francisco Bay Area, where we have more than 200 members. Our presence within these markets enables us to provide what no other organization can—more than 25 years of continuous experience and knowledge in building successful life science clusters.

Our growth comes with increased responsibility to serve our members. We remain committed to our roots: to effectively advocate on behalf of our California life science community at the regional level, in Sacramento and in Washington, DC where we face continuing challenges and seek opportunities to work with government. We remain committed to fostering opportunities for our members to collaborate and to raise capital across the globe with our partners in Japan, Australia, the UK, France and China. Furthermore, we remain committed to encouraging students and veterans to seek careers in the life sciences here in California. Additionally, we remain committed to creating a network of member-to-member interactions through our slate of conferences and numerous and highly-active committees that engage employees at every level of a company. Finally, we remain forever committed to providing robust and strategic business solutions programs, customized ONLY for Biocom members, that leverage group buying power.

As the world’s 6th largest economy, California is not only a global powerhouse, it is also the birthplace of biotechnology and the top-ranked state in the nation in this field. It generates $317 billion in economic activity, according to Biocom’s most recent statewide economic impact report. With our team on the ground in all three of our state’s life science clusters, we are focused on delivering the same high-quality value to our members that we delivered for so many years in the San Diego region. The power created by engaging with the members of our state legislature and Congress will strengthen our voice as an industry. The opportunity now exists to bring together large biotech, pharma and med device companies along with venture capital investors throughout California, bridging each of the clusters. Our conferences and committees will grow in recruiting both participants and high-quality speakers in San Diego, Los Angeles, and the Bay Area. In the business services arena we are experiencing
tremendous growth, as exemplified by the scale of participation in our new ThermoFisher lab supply program: it has increased by almost 500 percent since its inception! I assure you that we will continue to grow and thrive within our new locations this year and in the future.

Early this year I had the great pleasure of working with our senior management team and members of our Executive Committee to bring together key advisors in Los Angeles and San Francisco. We discussed how we can most effectively deepen and leverage the Biocom 2020 Strategic Plan. The good news: we are on course and definitely staying ahead of our evolution as the statewide life science association. These “Big Think” sessions brought together industry CEOs, members of academia and the research community, government representatives and service providers to provide us with a detailed and cluster-specific understanding of each region’s dynamics, demographics, strengths and needs. In the Bay Area, our experts shared the region’s long history as a life science cluster—and that now it must compete with the ever-growing high tech industry for capital and talent. Meanwhile, in the greater Los Angeles Area, key opinion leaders noted a need for greater visibility nationally and globally as a legitimate life science cluster in order to more effectively recruit talent and to raise capital for its more than 500 companies. Our Biocom team throughout California will incorporate what we heard into an expanded strategy to grow and bridge our clusters in the coming years.

Please enjoy the interesting and provocative articles in this edition of LifeLines. I believe that today, more than ever before, our industry will take advantage of the tools that we are developing in precision medicine and many other fields to create dramatic breakthroughs in commercializing treatments and therapies that will benefit patients world-wide.

Joe Panetta
President and CEO, Biocom
The lab supply agreement between the Fisher Scientific™ channel and Biocom PG sets a new standard for partnership and member benefits.

Together, we bring you an industry-leading collection of 900,000 items, an exclusive life sciences portfolio from the Applied Biosystems™ and Invitrogen™ brands, plus guaranteed savings, attractive participation incentives and a scalable on-site service model.

We’re proud to be your exclusive partner for:

- Lab consumables, supplies and equipment
- Scientific instruments
- Life sciences tools
- Supply chain optimization
- R&D collaboration
- Clinical trial support
- Production efficiencies
- And more!

Visit fishersci.com/biocom to learn more.
Life science startups generally don’t have products to sell—not yet, anyways. What they do have is a big idea, and the desire to bring that big idea to fruition so it can ultimately benefit patients or improve quality of life in a critical way.

However, as we all know, there’s a lot that can happen on the winding (and sometimes rocky) road that leads from ideation to patient success. Reaching the finish line requires experienced staff, rigorous science and a well-developed business plan, not to mention some good luck. With the exception of luck, each of these essential elements comes with a substantial price tag.

Whether founders intend to raise money through traditional venture capital or seek out other sources of financing, they must quickly develop a compelling investment case around their business idea. Their success depends on it. Just as important, they must connect with financiers who share in their vision and are willing to devote resources to it. And as we all know, that part is never easy, even in today’s more optimistic financing climate.

Because capital development is such a major influencing factor in the vitality of the life sciences ecosystem in California, Biocom has long committed itself to helping foster vital connections between startups and proven sources of capital, including venture firms, angel investors, industry partners and even family foundations. In the last several years, the scope of these efforts has grown dramatically—much in line with Biocom’s membership—resulting in what is now a series of valuable events that span the entire state of California over the full year.
Biocom’s expanded range of venture and partnering activities in San Diego, Los Angeles and the Bay Area are doing their job, and the numbers prove it. In 2017, Biocom facilitated 200 direct connections between entrepreneurs and potential sources of funding or partnering. That’s more than double the total in 2016, and quadruple the number of connections that Biocom made happen in 2015. Recent participants in our partnering events include Eli Lilly, GSK, Vertex, Illumina and Bristol-Myers Squibb.

At the center of these productive events is Jennifer Landress, senior vice president and chief operating officer of Biocom, who turns the Capital Development Committee’s ideas and recommendations into polished, state-wide programming.

Thanks to Jen’s efforts, as well as the devoted work of Biocom’s Capital Development Specialist Oscar Rodarte, dynamic new events have sprouted up in all of the markets we serve—San Diego, Los Angeles and the San Francisco Bay Area—with each event customized to the financing challenges and opportunities of the region. As Jen recently observed: “Each market has its very own financing ecosystem and unique funding needs. While deal value is increasing statewide for life sciences, it’s absolutely imperative for life science companies to be networked in with the key funding sources to make sure they’re getting the attention they deserve.”

One of the year’s most highly anticipated events, the annual Global Life Science Partnering Conference, will be held February 28–March 1 at the Lodge at Torrey Pines in San Diego. Now in its eighth year, this conference brings together senior executives, bankers, venture capitalists and business development professionals from leading pharmaceutical and biotech companies all over the world. These companies come to La Jolla to meet with you, Biocom’s members, and scout out innovative new programs that are prime for partnering.

To complement this premier partnering event, we’ve pulled together useful insights and advice from a handful of venture capitalists who are active in California. As the co-chairs of Biocom’s Capital Development committee, we also provided some of our own industry observations, which come not only...

*Biocom brings its highly successful Capital Development programming to Los Angeles and holds first ever Partner Day with GSK’s Discovery Partnerships with Academia (DPAc) team.*
It all comes down to cells.

Not that kind.

THIS kind.

What do they do?

How can we influence them?

How do they interact?

Can I put something inside?

ATS has the answers!

**Custom Conjugations**
- ADC
- Fluorescent
- Biotinylation
- Aptamer
- Antibody

**DIY Kits**
- Binding /Internalization
- Cell Targeting

**Contract Services**
- Antibody screening
- Binding Assays
- Internalization Assays
- Flow Cytometry
- Cell Culture

[ADVANCED TARGETING SYSTEMS](www.ATSbio.com)
from the work we do every
day with life science
companies, but also from
having a unique vantage
point at the center of the
committee action.
In speaking with
members of the capital
development community, we
found one thing that most
everyone could agree on:
2018 is going to be another
strong year for life science
financing, with money
available for the companies
that can clearly differentiate
themselves from competitors
and demonstrate the unmet
need they are solving.
Excitement is percolating,
especially following a year
that included first-ever FDA
approvals of gene and cell
therapies.
Are you ready for a
successful year? We want to make sure of it. To get the most out of your
Biocom membership, we encourage you to get involved in one of this
year’s events or contact us for information on the next
Capital Development committee meeting. We welcome new faces.
Email us at capdev@biocom.org.

Show Me The Money: Expert Advice for Success with VCs

Think like your audience.
“Because financing rounds are getting much bigger, we’re
seeing the rich-get-richer phenomenon happening to some
extent. Once you have one success, you’ll have more
people looking to give you money for your next product.
It’s more difficult for a new entrepreneur meeting with a
VC. You have to think about the target audience you’re
pitching to, which is a new concept for many scientists
in academia. Before you meet with a VC, take a look at
the portfolio on the website and understand the profiles of
the deals they’ve done. Find where they’ve had successes.
Every VC has its own preferences, often based on past
successes. If you’re meeting with Big Pharma, be prepared
to talk about the whole pathway you envision through FDA
approval and reaching patients. Appreciate the complexity
of the process and all the work that needs to be done along
the way.”
—Nancy Hong, Ph.D., Managing Director, RiverVest

Seek out mentors who’ve been there before.
“This is the most exciting time for early-stage biotech
company formation and venture funding that I’ve seen
in San Diego in at least five years. Not only do we have
a healthy venture capital community in San Diego, but
we’re also increasingly grabbing the attention of Bay Area
VCs, who are seeing the value of San Diego’s scientific
and entrepreneurial talent, especially in genomics. I’ve
seen a lot of first-time CEOs at the financing table,
surrounded by great mentors, and I expect that to
continue. My advice for startups is to seek out mentors in
the life science community and consult with the absolute
experts in drug development and capital development.
That matters to VCs.”
—Jonathan Kabakoff, Senior Principal, Science & Technology,
Alexandria Venture Investments
More money but fewer deals means newbies must work hard.

“There is no shortage of VC money in the system, but deal size is growing. Thus, fewer people are making the investment decisions. It’s a real conflict for the new kid on the block. If you’re a Nobel Laureate at a major research university, then your deal is probably going to be seen. But it’s more difficult for the lesser-known labs and first-time entrepreneurs. To gain the attention you need, reach out to a repeat entrepreneur who’s been in your shoes and can provide advice and connections. Biocom’s many events are also an excellent backdrop for making these valuable connections. Science is moving faster than it ever has, and money is out there.”

—Carin Canale-Theakston, CEO, Canale Communications Inc.

Don’t ever lose sight of the unique problem you’re solving.

“Startups tend to get enamored with their technology and may lose focus on the problem that needs to be solved. Investors are being bombarded with opportunities, particularly in the oncology space. When we meet with companies, many of them will spend the majority of the time on their technical solution. The reality is that many different modalities or molecules may work. As an investor, what I really need to know is how this technology fits into the whole therapeutic paradigm and competitive landscape. Does it solve an unmet medical need? If you do all this work and come up with a product that’s just a little bit better than something that’s already available, you’re not going to create commensurate value.”

—David Kabakoff, Ph.D., Executive Partner, Private Equity, Sofinnova Ventures

Show Me The Money: Expert Advice for Success with VCs (cont.)
Genomic data is on the rise—doubling every seven months as DNA sequencing becomes increasingly prevalent. When you consider that the 2.9 billion base pairs of a single human genome equate to about 100 gigabytes of data, you can begin to understand why genomics isn’t just about health; it’s also about computing. And the more data we have, the more computing power we need to make sense of it all.

At the fascinating intersection of DNA and computing is the San Diego company Edico Genome, which has developed a bio-IT platform designed specifically for analyzing large quantities of DNA data in a short timeframe, all while ensuring extremely high accuracy. Its platform, DRAGEN, can process an entire human genome in about 20 minutes, as compared to more than 20 hours using a traditional CPU-based system.

Here, we talk with founder and CEO Pieter van Rooyen, Ph.D., about his vision for the future of genomics and what’s next for Edico Genome.

Q. How do you see genomics reshaping healthcare?

A. As DNA-sequencing technology becomes more affordable and widespread, there is no question that genomics will play a more central role in how we manage our health. Since 2009, the cost of whole-genome sequencing has decreased dramatically, from $200,000 to around $700. And now, Illumina is working on the $100 genome.

In tandem with decreased sequencing costs, Edico has reduced the cost to analyze a genome by a factor of 80-100 times. With this newfound accessibility, the scientific community will discover important connections between disease and genetic variations. Eventually, I predict every person will have his or her genome sequenced at birth and routinely throughout their lives, with the objective of preventing disease before it becomes symptomatic.
Q. Why is San Diego poised for growth in the genomics industry?

A. San Diego already is the place to be for genomics because we have all the makings for innovation in this sector. First, we’re surrounded by top talent from our universities, biotech companies and DNA sequencing giants including Illumina and Thermo Fisher Scientific. We also have world-class talent in computing and technology, which is needed to process and make sense of all of this data. Combine these with a strong culture of collaboration and supportive incubators, and you can understand why San Diego is at the forefront of personalized medicine. This is exactly why I launched Edico Genome in San Diego.

Q. What is one of your proudest moments with your company, Edico Genome?

A. The most satisfying part of my job is seeing the impact that our technology is having on patients. Our DRAGEN Bio-IT Platform is already at work in clinical settings—notably, in the NICU at Rady Children’s Institute for Genomic Medicine. DRAGEN has enabled quick, accurate diagnoses of critically ill newborns, enabling doctors to make treatment decisions in a matter of hours instead of weeks. When doctors are able to act on genomic information so quickly, they can quickly pivot between treatments, ensuring that the most effective course of action is in play. Leading labs and genomic centers across the globe, including Genomics England, NHGRI, NCI and Perkin Elmer, rely on DRAGEN to accelerate their secondary analysis and enhance accuracy across the board.

Q. What’s in store over the next few years at Edico Genome?

A. Currently, DRAGEN is empowering labs of all sizes and disciplines to tap into next-generation sequencing by drastically reducing costs and speeds associated with secondary analysis, while increasing accuracy. Our current focus is on serving the research market, but looking forward, we will be focusing more on the clinical market. In addition to that, we are growing our team with the best and brightest talent in the industry to keep pace with our burgeoning global presence and market share. This will enable us to continue expanding our product offerings while forming new partnerships with key industry organizations.

Q. What is the biggest lesson learned from your career?

A. I’ve learned that it is impossible to incite change and progress if you don’t take risks. I defer to the famous words of Theodore Roosevelt: “It is not the critic that counts, nor the person who points out how the strong man stumbles … The credit belongs to the person who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly, who errs, who comes short again and again, because there is no effort without error and shortcoming.”

Edico Genome reminds us not only of the power of genomics and the increasingly important role that bioinformatics plays in medicine, but about the abundance of groundbreaking ideas that take root right here within the ranks of Biocom’s membership.

Sumitra Gupta is an Account Associate for CanaleComm, where she collaborates with a vast array of clients who are thinking outside the box to build a better future for people and patients around the world.
Navigating a New Policy Year

Congress faces a packed agenda in 2018, including reauthorizing the Pandemic and All-Hazards Preparedness Act (PAHPA), essential to the industry’s ability to research and develop medical countermeasures, and the Farm bill, facilitating the development of biobased products through funding for the Energy Title. Another critical issue for Biocom will be to have the medical device tax fully repealed beyond the two-year extension provided for in the temporary funding deal of January 2018.

Congress may also pass legislation to address some aspects of the new tax law, which was enacted in December 2017. Specifically, Biocom is urging changes to ensure that the orphan drug tax credit (reduced to 25 percent of eligible expenses from 50 percent) remains an incentive for companies doing research in the rare disease space, and to help Californians who will be disproportionately hit by the limits on state and local tax (SALT) deductions.

After passing a FY2018 spending package, Congress will have to quickly turn to FY2019 and work to pass the twelve appropriation bills that fund all federal agencies. Biocom is advocating for increasing the operating budgets of the National Institutes of Health (NIH) and Food and Drug Administration (FDA) in both FY2018 and FY2019.

Lastly, Biocom will continue to provide our members with regulatory expertise. In 2017, Biocom created a regenerative medicine working group, dedicated to improving the framework for regulating such products. Additionally, Biocom will also continue to submit comments on the regulatory policies that matter to our industry.

At the state level, it is expected that the industry will still be a focus of the California Legislature, albeit in very different ways than last year. The continuing issue of opioid addiction has already been brought forward, with several new bills already introduced seeking to address this issue. A proposal to tax opioid manufacturers may reappear as well.

State lawmakers may also try to address disproportionate impacts to California residents and businesses caused by the recently adopted federal tax reform. Conversely, legislation has also been introduced to increase taxes on business. We will monitor these developments closely.

With the passage of SB 17, which requires drug manufacturers to provide notification of price increases, last year and subsequent wait for data to assess its effectiveness, it is unclear how much further action legislators may seek in pricing disclosure or other proprietary business practices. It is also left to be seen whether further action will be taken on “spot bills” introduced last year regarding home generated medical waste (including sharps and unused medications).

At the regional level, Biocom will continue to advocate on behalf of our members in legacy issues: reliable access to water, transportation and a sufficient supply of housing. These issues are pervasive in all regions where our members are concentrated throughout the state: San Diego, Los Angeles, and the Bay Area.

San Diego County Supervisor Kristin Gaspar, who represents the areas of the county where most Biocom members are located, will serve as the board’s 2018 chair. Biocom will be engaged in discussion of the City of San Diego’s business plan this year for implementation of Community Choice Energy, which will be released this year. In anticipation of the upcoming elections, we are monitoring the future of San Diego’s Convention Center, and other local races. In Oceanside, another county life science hub, Peter Weiss was sworn in as mayor in late January after Jim Wood stepped down for health reasons.

In Los Angeles, Biocom is supportive of a workforce housing exemption from the city’s new linkage fee, which will charge $1 to $15 per square foot on new development, in hopes that this exemption leads to construction of more moderate-income housing. Two additional issues we are engaged on in Los Angeles include gross receipts tax and prescription drug/sharps takeback.

Meanwhile, San Francisco’s Board of Supervisors (which also serves as its city council) is currently debating 29 potential revenue measures for the 2018 ballot, including several that will affect business taxes. We will consider whether to weigh in on those that have significant impacts to Biocom members.

Finally, Biocom’s Facilities/EH&S Committees continue to meet regularly in each region and to hold workshops on best practices for issues such as emergency response and regulatory updates and provide networking opportunities for these professionals.

Biocom members can keep current on our policy activities by subscribing to our Public Policy Newsletter or by contacting us directly.

Jimmy Jackson is the Senior Vice President and Chief Policy Officer for Biocom. He oversees government affairs and public policy for the organization.
Join us, Monday, April 30th, 2018 at the exclusive Santaluz Club for a day of golf, games and networking, all while supporting Biocom Institute’s Veterans Initiative.

Enjoy an unparalleled experience at San Diego’s most exquisite and exclusive member-only course! All proceeds from this event go to support the Biocom Institute Veterans Initiative—helping veterans transition into careers in the life science industry.

THANK YOU TO OUR LEAD SPONSOR FOR THEIR CONTINUED SUPPORT

www.biocom.org
Future-Focused and Well Positioned for Continued Success

Looking back on 2017, I am amazed at the growth Biocom has experienced in the Bay Area in the past 12 months—our first full year here. Our Bay Area membership has more than doubled, comprising well over 200 companies and accounting for more than 1/5 of Biocom’s total membership base. Throughout 2017, we hosted 30 different events, bringing life science professionals together to network, share best practices and build valuable relationships. Our Monthly Meet Ups, seminars and conferences kept members informed on topics as varied as sustainability, regulatory strategies for compound products and human resources trends specific to the bay area life science community. Bringing Biocom’s capital development programming to the Bay Area, we hosted a two-day partnering event with Eli Lilly and facilitated over 80 one-on-one meetings between the pharma giant and small California companies looking to collaborate with them. We also met with government...
Michelle Nemits is the Senior Director of Business Development in the Bay Area. It was a whirlwind year to be sure, and personally it was incredible to feel the excitement and energy we have experienced with local Bay Area stakeholders. I have the privilege of connecting with large companies, small startups, incubators, accelerators, CROs, services providers, government officials and investors in my role here at Biocom. I hear repeatedly that nothing compares to Biocom’s ability to build strong networks, create valuable programming and facilitate industry connections. With Biocom’s 23 years of cluster building expertise, fifty knowledgeable and committed staff members, and the backing of over 1,000 member companies, this fire power is unmatched anywhere in the world and the Bay Area is finally benefitting from the strength and support Biocom can deliver.

So what’s in store for 2018? We look forward to enhancing the Bay Area life science ecosystem just as we have done in San Diego, Orange County and Los Angeles. We’re committed to delivering the programming that will keep this region current, informed and competitive with other markets. We’ll offer Biocom’s world-class partnering events so startups and mid-size companies can connect to the capital they need to grow their businesses, and so that investors and larger companies can efficiently scan the technology landscape they rely on to fill their pipelines. Lastly, you can count on us to deliver on Biocom’s overarching promise to build and strengthen clusters, while creating a collaborative global life science community throughout California.

To better serve the needs of our members, Biocom has expanded our Bay Area team, adding two talented individuals. Vik Nichani, our Business Development Manager, brings industry experience from his years at Genomic Health and Ascend Genomics and has already proven to be a great addition. He is focused on building our Bay Area membership and ensuring our members fully optimize their Biocom membership. Emily Abraham is our Projects and Events Associate and she will play a critical role in supporting our members through event planning and execution.

We kicked this year off with a Life Science Executive Breakfast in Newark to bring together the life science companies along the Highway 84 corridor. Working collectively with the economic development staff at the City of Newark and the City of Fremont, we assembled 30 companies for insightful presentations on the micro-clusters of the Bay Area life science ecosystem and the state of the financial markets. In February, we continued our Monthly Meet Up networking series and plan to expand them to more regions, including Santa Cruz, Sacramento and the North Bay. Biocom will launch a Bay Area Life Science HR Roundtable this year, creating an opportunity for Human Resources professionals to meet on a quarterly basis to network, share best practices and stay up to date on changes within the HR industry. In March, we start our new Procurement Roundtable with similar goals in mind, and we’ll also bring together Facilities and EH&S managers at a reception on March 6. April will kick-off our first Partnering event and two local CRO events. With so many events and new programs coming this year, we encourage you to stay tuned by visiting our website frequently and signing up for Biocom’s BCQ Newsletter.

Our members are working on the most cutting-edge technologies and the Biocom Bay Area team is here to support, connect and promote these amazing companies and professionals every step of the way. 2018 is off to a great start and I couldn’t be more thrilled for what’s to come.
Why is Biocom Investing in LA?

We get asked this question all the time. People are surprised when I share facts about the strength of the existing industry cluster in Los Angeles. More than 590 life science companies. $1B in NIH funding—the highest figure of any county in California. And, more life science workers than any other county in the state—over 70,000.

However, what drives these numbers is a newly-unleashed passion and energy that has blossomed around this industry in LA county. Biocom is delighted to see the overwhelmingly positive response to our presence in this market. We want to take that momentum and harness it for our members and the region as a whole, launching this life science cluster into the prominence it deserves.

Spring will mark the two year anniversary of Biocom opening our office in LA. Consequently, we are taking the opportunity to seek input from our local stakeholders and partners about what is most critically needed in moving the needle for the success of this up-and-coming life science region.

Last month, we convened a superb group to take part in a strategic brainstorming session. We invited the Biocom LA Advisory Board, Biocom’s senior staff from our headquarters in San Diego, other members who have been active in our LA efforts and initiatives, the full Biocom LA team and several Biocom Board members. Starting with the Biocom...
five year strategic plan as context, we spent two and a half hours together and identified very concrete initiatives we can launch in 2018 and beyond to support the region.

**LIFE SCIENCES IN LOS ANGELES:**

More than 590 life science companies

$1B in NIH funding

70k life science professionals

Biocom is investing in LA not only because of the scale, size and scope of the industry, but also because of the energy, enthusiasm, opportunity and value. And you should, too.

If you’d like to know more or get involved, please contact me at dlozofsky@biocom.org

Dina Lozofsky is the Executive Director of the Biocom Los Angeles office.
Turning Scientific Discoveries into Successful Companies

LABioStart is Fostering the Growth of 60 Bioscience Startups in Greater Los Angeles

There are a lot of things you don't learn about running a business in graduate school, especially if your graduate degree is a PhD in Biochemistry. That's why Robert Gellibolian, founder and CEO of CellectGen, and his partner and cofounder, Adam Markaryan, were ecstatic to apply for the LABioStart boot camp program. LABioStart's Bioscience Entrepreneurs Boot Camp is a training program jointly developed by by Biocom Institute, California State University, Los Angeles (Cal State LA), and Los Angeles Cleantech Incubator (LACI) in support of our region’s life science startups, providing entrepreneurs with the skills needed to bring innovative ideas and products to market.

In 2013, Robert and Adam knew they wanted to do something with saliva research after developing and patenting a technology that within 10 seconds after collection, readies the saliva sample for immediate testing. They invested countless hours in determining how their technology could be fully utilized. Yet after several conversations around which diseases they could screen for using their saliva test, the responses remained the same—"that's a nice idea, but…"

Robert and Adam finally had their light bulb moment when they considered dentists' interest in helping their patients avoid periodontal disease. By 2016, they knew the idea was sound, but wondered how they could turn their idea into something real. While Robert had worked within R&D in larger industry companies in the past, neither he nor Adam had any entrepreneurial experience or knew anything about launching a product. As soon as they heard about LABioStart, they knew they had to sign up for the first cohort in June of 2017.

Adam entered LABioStart with no formal business background and called the program ‘an eye opening experience’ in every aspect. He finally grasped why Robert constantly stressed the importance of understanding their market, and why it was key to their future success.

Robert’s goal in the LABioStart program was to glean everything he could from the journey of other entrepreneurs. He wanted to understand their emotional challenges so he would be better prepared for the road ahead. Some of the most valuable components of the program for Robert were breaking into groups to work through the business fundamentals of taking products to market and completing financial projection exercises. Another impactful component of the program was building skills in storytelling and effectively capturing an audience. Robert explained that, “as a scientist, we usually don’t think about this. We tend to go deep into the data.”

Robert and Adam are now fully focused on raising seed capital for CellectGen. They have created an advisory board of stakeholders and hope to turn their prototype into a tangible product within the next twelve months. They credit their
Be sure to mark your calendar for the following Biocom events:

**Inaugural Biocom and IFMA Bay Area Facilities Reception**
March 6th, 2018
Bay Area

**Biocom’s Life Science Young Leaders & Think, Drink, Science Networking Event**
March 7th, 2018
San Diego

**Venture Day with MPM Capital**
March 15th, 2018
San Diego

**Biocom 2018 Regenerative Medicine Advocacy Fly-In**
March 19th – 21st, 2018
Washington, DC

**Bay Area Procurement Professionals Roundtable**
March 22nd, 2018
Bay Area

**Bay Area Monthly Meet-Up / San Mateo**
March 22nd, 2018
Bay Area

**Otsuka Partner Day**
April 3rd – 4th, 2018
San Francisco Bay Area

**Think, Drink, Science Los Angeles**
April 12th, 2018
Los Angeles

**Demo Day with Tech Coast Angels**
April 13th, 2018
San Diego

**Biocom CRO Breakfast**
April 18th, 2018
San Diego

**Breakfast with Biocom**
April 19th, 2018
San Diego

**Earth Day Sustainability Panel + Networking**
April 19th, 2018
San Diego

**Biocom CFO Breakfast**
April 25th, 2018
San Diego

**Biocom HR Workshop with Fisher & Phillips**
April 26th, 2018
San Diego

**Veolia & OSI DOT & Hazardous Waste Awareness Training**
April 26th, 2018
Bay Area

**Veolia & OSI: Complimentary DOT & Hazardous Waste Awareness Training**
April 26th, 2018
Bay Area

**Biocom Charity Golf Tournament**
April 30th, 2018
San Diego

**Biocom Your Move**
May 24th, 2018
San Diego
Liisa Bozinovic is the Executive Director of the Biocom Institute.

experience at LABioStart with significantly shortening their learning curve within this entrepreneurial process.

Another participant, Gayle Boxx commented “LA BioStart highlighted the diverse and sometimes underappreciated biotech ecosystem in the LA basin. Learning about the established industry, the growing infrastructure and the opportunities for business development made LA more attractive as a long-term home for our company.” Gayle co-founded Aukera in March 2016 with two scientists from UCLA to manufacture protein based nanoparticles used to improve the delivery of life-saving and life-enhancing products.

LABioStart is a county-wide collaborative effort with many partners in industry, local government, economic development, incubators and higher education institutions to address the shortage of bioscience executives and managers and designed to elevate the capabilities of bioscience entrepreneurs.

LABioStart will train five cohorts of boot camp participants during five intensive weeks of deep dives into areas such as: business formation, human resources, financing, intellectual property, visioning and strategic planning, interpersonal and communication skills, research and development process, clinical trials, regulatory affairs, and manufacturing.

The third cohort will begin mid-2018 and the final two cohorts (through the grant-funded program) are scheduled for 2019. Early-stage entrepreneurs, emerging entrepreneurs (scientists, university faculty, postdoctoral fellows, and graduate students) interested in taking bioscience ideas to market are encouraged to apply.

To learn more, visit the LABioStart website: www.calstatela.edu/LABioStart.
MiraCosta College in Oceanside welcomed a cohort of junior year students this past fall 2017 for the college’s first four-year bachelor’s program in biomanufacturing. The program prepares students for careers in the biotechnology industry. The first program of its kind, not only in California but in the nation, emphasizes biological production where science is partnered with quality and compliance. Existing biotechnology degree programs in California focus solely on product understanding during the research and early development stages. MiraCosta College’s biomanufacturing degree program will emphasize the process understanding required of later stages of biotech development and production. Created to serve a need in the North County San Diego region, the biomanufacturing degree program was designed with the industry in mind. The new four-year degree program at MiraCosta College is an outstanding, timely, and welcome addition to the life science community," said Joe Panetta, president and CEO of Biocom, the Life Science Association of California. "Biomanufacturing is a critical need in our industry, so congratulations to the MiraCosta College leadership team for their foresight in introducing a tremendously affordable program for students. The life science industry employs nearly 50,000 people and generates $34 billion in annual economic activity in San Diego County alone. Having a homegrown workforce is essential to the future growth of this high-wage sector, so we look forward to providing our support to the faculty and students in the program."

In 2015, MiraCosta College was selected as one of only 15 community colleges in California authorized by Senate Bill 850 to pilot a bachelor’s degree program. The college has been approved to offer this program through its accreditor, the Accrediting Commission for Community and Junior Colleges (ACCJC).

The program eases the burden of expensive tuition costs with courses being offered at $46 a unit for lower division classes and an additional $84 a unit for upper division classes. The four-year program is extremely affordable compared to other four-year degree programs, and is expected to cost about $10,000, not including books, materials and minor fees.

The 23 students in the inaugural class bring with them a diverse set of backgrounds and experiences. Roberto Ruiz earned a 12-unit certificate at MiraCosta while working part-time washing glassware for a biotech company. Through his dedication and hard work, he is now performing technical lab work while finishing his bachelor’s degree in science with five years of practical experience under his belt.

Samantha Rhodes, a student in the inaugural cohort, is a single mother who started the MiraCosta biotechnology program eight years ago. She finished much of the certificate-level coursework before switching to a related health career. Her experience has led her back to working in a scientific laboratory setting. She now hopes to make an impact by helping develop next generation biopharmaceuticals.

Fellow student and veteran, Andy Relopez, is a self-driven professional and a true asset to the classroom environment. He is using his GI Bill to fund his final two years to pursue a bachelor’s in science.

For more information on the biomanufacturing bachelor’s degree at MiraCosta College, visit MiraCosta.edu/bioman.

Dr. Sunita Cooke is the Superintendent / President of the MiraCosta Community College District.
Investing in Your Success

There are many ways to measure success as a group purchasing organization. It could be by the number of contracts negotiated on behalf of members, sales and savings figures throughout the year, the number of members using contracts or the number of contracts they use. By all of these measures, it has been a record year for the Biocom Purchasing Group.

While those successes inspire confidence within our team, the measure we hold in the highest regard is the conversation we have with a supply chain and procurement expert about Biocom Purchasing Group’s value. Real life, actual value. It is this conversation that justifies the hundreds of hours we pour into each RFP. It’s why the Biocom Purchasing Group, unlike any other life science group purchasing organization, continues to invest in resources around technology, data, and contract negotiators. While anyone can save a few bucks on shipping, paper, or beakers, we are able to effectively lean on the industry’s best and brightest and deliver some outstanding results.

“We’re invested heavily in the people, processes, and technology required to earn the trust of our members.”

- Rick Fultz, Chief Business Development Officer, Biocom & Managing Director, Biocom Purchasing Group

Lastly, the resurgence of our member advisory committees has provided invaluable insight into the issues that matter most to our 1,000+ members. With this guidance, we are learning more about the contract areas that will directly impact members’ bottom lines, building trust in the system every step of the way.

Enhancing Quality

The goal of our contract negotiations has always been more than just securing the lowest price possible. When we’re searching for the perfect partner, we are analyzing a variety of value-added services. We want to know that an inquiry from a Biocom member will be met with unmatched customer service and tracked until resolution. We demand Biocom member-only benefits, terms, conditions, and services, and thanks to your increased participation these last few years, these demands are being met!

Increasing Savings

“Less is more” is not a phrase often used here at the Biocom Purchasing Group. More members have meant more buying power which has translated into more savings and more solutions for our Biocom community. We are making it our mission to roll this momentum into even more contracts and more choices for our members this year.

We’re excited to introduce two new additions to the Biocom Purchasing Group Savings Portfolio: YourEncore (strategic life science staffing solutions) and centrexIT (managed IT services). YourEncore has been a leading provider of proven expertise to the life science industry for over 14 years. This new partnership provides unparalleled access for Biocom members to highly experienced talent.
centrexIT joins our portfolio after a long search for the perfect technology partner. As a trusted IT strategic partner, they empower life science companies to achieve their goals while providing proactive support and friendly, responsive customer service.

Building Trust
Our ever-expanding team is meeting daily with Biocom members up and down the coast, fostering personal relationships that translate into increased committee participation and invaluable roundtable discussions around what Biocom Purchasing Group can be doing to accelerate life science success throughout California.

We place the utmost value on the conversations with our procurement and supply chain industry experts, asking for feedback on contracts and how we can constantly improve.

Conversations like the one we had with Jason Schnieder, Senior Manager, Purchasing & Facilities from aTyr Pharma around our Fisher Scientific contract are what we aspire to have with each of our 1,000+ members: “When it comes to lab supplies, I have done my due diligence with the competition. Nothing even comes close to the value and savings we get from the Biocom Fisher Scientific program.”

Rick Fultz is Chief Business Development Officer of Biocom and Managing Director of the Biocom Purchasing Group.
“STEM” (science, technology, engineering and math) is becoming a common buzzword here in San Diego and around the world, and the appetite for programs and events that encompass these concentrations continues to grow on a daily basis.

Programs have been created ranging from in-classroom support, to outside-the-box field trips, to incorporating STEM in genres such as dance, soccer, and music. Every week, you hear about a new program or sponsor hoping to join in on the movement and effect change. All positive—yes, absolutely. However, the more partners operating in silos, the less powerful and unified the message becomes.

How is it then that we work together as a community to build and deliver programs that will support these growing needs? How can we collaborate to deliver enriched programs without recreating the wheel and duplicating efforts?

Enter the STEM Ecosystem; a national initiative providing the architecture for cross-sector learning, offering young people access to STEM-rich learning environments set to develop critical skills and engage in science, technology, engineering and math throughout preK-16.

San Diego, specifically, has stepped forward as one of 55 regionally-recognized STEM Ecosystem communities throughout the United States. Our local chapter operates out of the Fleet Science Center and is a multi-functioning hub of ideas, resources, and talent.

The San Diego STEM Ecosystem initiative brings together local stakeholders across education, science and business sectors to ensure all students have opportunities to develop the knowledge and skills they need to thrive. The initiative is reimagining how community partners can coordinate efforts and align resources to provide quality STEM education for more students.

With six working groups in the San Diego STEM Ecosystem to join (Corporate Partnerships, Early Childhood STEM, Environmental Education, Expanding Access, Innovation in K-12, Women In STEM), there is a way for every organization to engage and make a difference within the purpose of this larger group.

The Biocom Institute is a proud member of the San Diego STEM Ecosystem. Our biggest K-12 STEM program, the San Diego Festival of Science & Engineering, acts as a conduit for local organizations, businesses, schools, educators and outreach groups to showcase their programming.

This year, we are excited to be celebrating our tenth year of the Festival, which will take place March 3–11, 2018, and offers a week-long educational experience all across San Diego. The kick-off-event, EXPO Day at Petco Park, takes place on March 3rd and will boast over 130 different hands-on activities along with stage performances, free and open to the public.

The Festival has also teamed up with the Science Ambassador Scholarship as part of the San Diego STEM Ecosystem’s ‘Women In STEM’ working group to produce a special event for middle and high schools girls on March 8, celebrating International Women’s Day.

A recent update from the U.S. Department of Commerce Economics and Statistics shows that women filled 47 percent of all U.S. jobs in 2015, but held only 24 percent of STEM-related jobs. Encouraging to note, the women in STEM-related jobs earned 35 percent more than comparable women in non-STEM jobs. We want to do our part in celebrating the successful women of our industry and inspiring the next generation to pursue careers in creative STEM fields. We believe new ideas are shaped every day, so early engagement is key to growing the jobs of the future.

Our event will be held at the Serra Mesa Public Library and will feature mini “STEM Sessions” from inspirational women at high-level positions within the industry, followed by round-table discussions allowing for more conversations between students and speakers and will conclude with a networking reception.

So if you are new to the neighborhood, or even if you have been here for years, and you are not yet involved with the San Diego Festival of Science & Engineering or the San Diego STEM Ecosystem, come knock on our door. We want to get to know you, and we want you to learn about us, so that we can work together and continue to thrive and foster community engagement inside this amazing city full of innovation and growth.

When we surround residents with STEM-rich learning environments, our region, individuals, and businesses can reach their full potential. For more details on our Women in STEM event, and all that surrounds Festival Week 2018, please visit www.lovestemsd.org to view a full listing of offerings.
Biocom and AusBiotech signed a Memorandum of Understanding in June of 2017 to explore greater opportunities of cross promotion and collaboration between the Australia and California life science sectors. Both organizations look forward to keeping our members informed on innovations and partnerships coming from our vibrant clusters, leading to new ways of thinking and fostering new connections.

Australia’s biotech industry finished 2017 strong with confidence at an all-time high and funds flowing into the sector from the Medical Research Future Fund and its $500 million Biomedical Translation Fund (BTF), as well as MTP Connect grants underpinning a flurry of quality activity.

IPO activity picked up last year with four medtech companies and four biotechs joining the ASX, including AusBiotech members Imagion Biosystems, Telix Pharmaceuticals, Sienna Cancer Diagnostics and the Cann Group, which shaped an active and successful year for the Australian biotechnology industry. According to BioShares, ASX-listed life science companies raised a very healthy $840 million in the last calendar year.

Last May, the IP Group, a leader in the commercialization of scientific innovation, developed in research universities and launched a landmark agreement with Australasia’s leading universities, which will see at least AU$200 million over a 10-year period invested in disruptive innovation spin-out companies based on the IP developed by academics.

The nine universities include the University of Adelaide, Australian National University, the University of Melbourne, Monash University, UNSW Sydney, the University of Queensland, the University of Sydney and the University of Western Australia in Australia, and the University of Auckland in New Zealand.

According to BioInformant, 2017 marks the first year that regenerative medicine has disrupted healthcare. The article published on January 1, says the “regenerative medicine industry has been rapidly expanding over the past few years, making it a high-value, fast-growth market.”

In 2018, AusBiotech notes key industry milestones and activities:

- In September of 2017, Australian surgeons performed a world-first surgery and transplanted a 3-D printed shinbone, modelled at the Queensland University of Technology, into a patient.
- In a collaboration between CSIRO, St Vincent’s Hospital and Victorian-based biotechnology company Anatomics, Australian surgeons performed the world-first surgery to implant a titanium-printed heel bone, printed using CSIRO’s Arcam 3-D printer, into a patient.
- A research group based in the Translational Research Institute Australia is currently researching 3-D scanning and bio-printing techniques with the aim to regenerate breast tissue using adipose stem cells and biodegradable breast scaffolds.
- PolyNovo Biomaterial produced and sold NovoSorb, a US FDA-approved temporary lattice inserted ahead of eventual skin grafts for patients with skin burns. Originally developed by CSIRO, the lattice works to encourage the regrowth of normal skin cells.
- Global medical engineering company Invetech, had its Melbourne office work closely with Organovo, a US-based company in designing, developing, and manufacturing the world’s first commercial 3D bio-printer.

In the US, indicators are also positive with the FDA providing record approvals for novel medicines in 2017 and investor sentiment is very confident the biotech sector will outperform the broader market and see an up-tick in M&A activity, according to STAT News.

In significant investments for the year came a US$18 million (AU$23.5 million) investment in Bionic Vision Technologies (BVT) from Hong Kong investors China Huarong International Holdings and State Path Capital. BVT, a company working to create a ‘bionic eye’, will put the funds toward helping the company transition to commercialization.

The New Year ushered in a year of positivity for the sector with the numerous technology advances and partnerships and bodes well for Australian biotech’s outlook for 2018.

**Save the Date for 2018 Events:**
AusMedtech 2018 | May 1-2 in Adelaide, Australia
AusBiotech 2018 | November 2 in Brisbane, Australia

Glenn Cross is the CEO of AusBiotech, one of Biocom’s global partners.
MEMBERS IN ACTION

BIOCOM ANNUAL CELEBRATION OF LIFE DINNER

On November 16th, Biocom held its Annual Celebration of Life Dinner with a record crowd of 700 attendees. We recognized Los Angeles County Supervisor Mark Ridley-Thomas and San Diego County Supervisor Ron Roberts for championing the life sciences industry. Additionally, the audience heard remarkable stories of perseverance from honored speakers Scott Hamilton, the 1984 men’s Olympic figure skating gold medal winner who successfully survived cancer, and Karolyn Smith, U.S. Army veteran whose awe-inspiring courage allowed her to overcome unimaginable odds.

By
Glenn Cross
CEO, AusBiotech

Biocom LifeLines Spring 2018 25
On October 19th, Biocom Purchasing Group hosted over 200 members for the first Life Science Oktoberfest celebrating biotech to brewing and an unforgettable evening on the Torrey Pines mesa. Members gathered for an expert panel of scientists and local brewers, followed by craft beer tastings, a custom menu of German-style cuisine curated by Celebrity Chef Brian Malarkey and classic German sounds from the Linda Herman Quartet. Thanks to the attendees, speakers, sponsors and local craft breweries who spent the evening with us celebrating San Diego’s two largest industries, life science and brewing.
Combining world-class academic resources with best-in-class development & facilities
If people think differently, they can unlock their full potential.

“Sozosei” (creativity), pervades everything we do and also reflects our Japanese heritage. It’s fueled by a broad range of viewpoints, backgrounds and experiences. We encourage this diversity of thought for Otsuka-people to push themselves to achieve remarkable breakthroughs. Otsuka healthcare companies share one corporate philosophy: “Otsuka—people creating new products for better health worldwide.”
MEMBERS IN ACTION

BIOCOM BIG DATA EXECUTIVE SUMMIT:
Biocom held a one-day summit featuring illuminating discussions focused specifically on the intersection of big data, precision medicine and oncology on November 29th. Our audience heard dynamic keynote presentations, panel discussions, and interactive use-case sessions with local industry leaders, while they explored innovative ways to utilize big data. Biocom would like to thank the speakers, best-in-class technology partners, and attendees who came out and spent the day with us.
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COMMITTEE CORNER

Biocom’s 15 committees plus advisory boards provide valuable networking, the chance to plan future Biocom events, and a forum to discuss critical issues within the industry. We are excited to announce the launch of committees in Los Angeles and the Bay Area for even more opportunities for our members to get involved with Biocom and the life science community. In this LifeLines, we are featuring the Facilities Committee and we hope to spark your interest in joining a committee where you can share your skills, knowledge, and expertise.

**Biocom Institute’s San Diego Festival of Science & Engineering Advisory Board**
Biocom Institute’s Festival Advisory Board provides oversight and strategic direction for the San Diego Festival of Science & Engineering. Led by representatives from leading Science, Technology, Engineering, and Math (STEM) companies, the group offers guidance for the continuous innovation, improvement, and expansion of Southern California’s largest STEM Festival. Members champion STEM education and help ensure that the annual nine-day Festival continues to inspire the curious young minds of today’s tinkerers, explorers, star gazers, and adventurers to become tomorrow’s STEM leaders.

Interested in joining? Contact Sara Pagano at spagano@biocom.org
Name: Kara Bortone  
Job title: Head of JLABS San Diego  

Your favorite movie: Inception  
Favorite book: One Thousand Splendid Suns  
Your favorite city is: Barcelona  
What music can we find you listening to? Pixies & Ramones, 80’s punk rock  
Favorite technology, program, or app: J&J 7-minute workout app  
Favorite hobbies you enjoy: Running ½ marathons, rock climbing, and mountain biking  
What’s your most favorite spot in California? Joshua Tree  
What was your first job? Worked on fishing boats  
What would you say is the best part of your current job? Every week I meet companies on the edge of innovation and health care—new consumer products, pharmaceutical or biotech developments, as well as medical devices.  
What should Biocom members know about your company? Over 100 cutting-edge companies have called JLABS San Diego home over the past five years, and over 330 companies across all JLABS locations around the world. Collectively, these companies have secured over $9.4B in capital. Our goal is to enable, empower and inspire innovators so they can deliver healthcare solutions to people all over the world.  
Why did you start working the industry you’re in? My father is a scientist and I developed a passion for science early on. In my role today, I’m able to use both my scientific and corporate communications background to mentor early stage entrepreneurs, helping them make connections, communicate their science and grow their companies.  
Best tip for someone working in your industry: Networking, networking, and more networking. I got this job because of someone else, and in San Diego, because it’s such a close-knit community, you never know who you can help and who can help you in the future.

Name: Mark R. Wicker  
Job title: Partner  

Your favorite movie: Butch Cassidy and the Sundance Kid  
Favorite book: The Spy Who Came in from the Cold by John le Carré  
Favorite TV show: Cheers  
Favorite restaurant or meal: Mexican food  
A quote I live by would be: “The biggest risk is not taking any risk.” - Mark Zuckerberg  
What music can we find you listening to? Rock or country  
Your favorite city is: Paris, France  
Favorite technology, program, or app: Fitness devices and apps  
If you could meet one famous person, who would it be? Leonardo da Vinci  
Favorite hobbies you enjoy: Triathlons and rock climbing  
What’s your most favorite spot in California? Laguna Beach  
What was your first job? Construction worker  
What would you say is the best part of your current job? Helping companies improve the lives of people by developing important new therapies and diagnostics.  
What should Biocom members know about your company? Perkins Coie represents the greatest companies with the most innovative technologies.  
If you could have another career, what would you choose? Teacher  
Why did you start working the industry you’re in? I wanted to do deals, be challenged and make a difference.  
Best tip for someone working in your industry: The best advice you can give your clients must achieve their objectives and be practical.
Name: Dr. Joe Lamendola  
Job title: Senior Vice President, Biopharmaceutical Practice  
Favorite book: Anything written by Mary Higgins Clark  
A quote I live by would be: Find something you love to do and you’ll never work a day in your life.  
Favorite restaurant or meal: I love Italian food (so many great places)  
Favorite TV show: Bull or Modern Family  
Your favorite city is: I loved Paris and closer to home I love New York City.  
Favorite technology, program, or app: Apple CarPlay. Easy access to everything—music, phone, messaging, etc.  
If you could meet one famous person, who would it be? The Pope  
Favorite hobbies you enjoy: Sailing  
What was your first job? Bench Scientist in the Veterinary Division of Schering Plough  
What would you say is the best part of your current job? The variety of projects, meeting new people and reconnecting with many former colleagues.  
What should Biocom members know about your company? We have experts in every area of the drug development process and can help a company develop their assets with flexible resourcing.  
If you could have another career, what would you choose? I love what I do and wouldn’t change a thing.  
Why did you start working in the industry you’re in? I really have a passion for doing what’s right for patients and our industry. Being able to contribute to new advances to help patients is a strong motivation each day for me.  
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- Ampron
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- Assembly Biosciences
- Aspyran Therapeutics
- Astellas Pharma
- Atara Biotherapeutics
- Atia BioSystems
- atYr Pharma
- Audenzes Therapeutics
- Augmenta Biowork
- August Therapeutics
- Aukera
- AutolImmune Therapeutics
- Avanir Pharmaceuticals
- Avantgent
- Avelas
- Aventxor Pharmaceuticals
- Avexenx Therapeutics
- AveKis
- Avity Biosciences
- Bachem Americas
- Balance Therapeutics
- BASF
- Bellatrix Pharmaceuticals
- Belotecta
- BioAtla
- BioCerx
- BioLegend
- Biomatrix
- Biomx
- BioNano Genomics
- Bioniz Therapeutics
- Blade Therapeutics
- Bluestar Genomics, Inc.
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- Bolt Therapeutics
- BP Biosciences Center
- BridgeBio Pharm
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- Catalaise
- Cayuga Biotech
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- Cellnex Therapeutics
- Cell Therapeutics
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- Celecta
- Cerebellar Therapeutics
- Celsion
- Channel Medsystems
- Checkerspot, Inc.
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- Circle Pharma
- Circuit Therapeutics
- Cirrus Therapeutics
- Coherus Biosciences
- Contract Biotechs
- Coyote Bioscience USA
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- CureMatch
- CURE Pharmaceuticals
- Curtana Pharmaceuticals
- CytoVale
- CV Sciences
- CytomX Therapeutics
- Dare Bioscience
- Decoy Biosystems
- DEL Biopharma
- Demetrix
- Denovo Biopharma
- Dermata Therapeutics
- Diagnostics for the Real World
- DICE Molecules SV, LLC
- DiscoverX Corporation
- DNA Link USA
- DNATrix
- DoDo OmniData
- Dovetail Genomics
- EA Pharma Co., Ltd
- Edico Genome
- eFECTOR Therapeutics
- Elcelyx Therapeutics
- Elixys
- Emerald Cloud Lab
- Emerald Health Biocatalysts
- Emerald Health Pharmaceuticals
- eMolecules
- EndoCyclic Therapeutics
- EndoRx Pharmaceuticals
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- Epigenx
- Esper Therapeutics
- Eton Bioscience
- Evoxem Biosciences
- EvoRx Technologies
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- Expression Systems
- EZ Labs
- F1 Genomics
- F1 Oncology
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- Fate Therapeutics
- FibroGen
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- Fluoropore Sciences
- Forge Therapeutics
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- GWR Instruments
- Halozyme Therapeutics
- Harpoon Therapeutics
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- Hexagon Bio
- Histogen
- Horizon Pharma USA
- Human Longevity
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- Ignite Immunotherapeutics
- Immix Biopharma
- Immunity and Me
- ImaginAb
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- Indee Labs
- IndieBio
- Indi Molecular
- Inhibitx
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- Innoviva
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- Innovo Pharmaceuticals
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- Integrated DNA Technologies
- Isogen Biosciences
- ItexBio
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- Invetech
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- InvivoGen
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- IRBCo.
- Isimmune
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- KIotho Therapeutics
- Koniku
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Leading Biosciences
Levent Bio
Lin Bioscience
Linkage Bioscience
Locana, Inc.*
Lumena Pharmaceuticals
MabVax Therapeutics
Mapp Biopharmaceutical
Maraviol Life Sciences*
Maverick Therapeutics
MAX BioPharma
MatrixSys Bioscience
Maverick Therapeutic
MedGenome
Meditope Bioscience
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Meiji Seika Pharma
Memphis Meats
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Mercaptor Discoveries
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MindWerks Bio
Minotaur Bio*
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Mirati Therapeutics
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Molecular Response
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Monsanto
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Nagano Science USA
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NeuroGenetic Pharmaceuticals
Neurona Therapeutics
Ohr Pharmaceutical
Omniox
Oncentrals Therapeutics
Optimum Therapeutics
Orca Biosystems
Orexigen Therapeutics
Originami Therapeutics
OrPro Therapeutics
Otonomy
Oxford Biotherapeutics
Pacira Pharmaceuticals
Pact Pharma
Parallume
Patara Pharma
Pathway Genomics
Pelium
Peptide Logic
Perfect Day
Persephone Biome
Persimmune
Pfexen
PharmAkea
Phenvogen
Phenymo*
Phoenix Molecular Designs
Pimera
Pipeline Therapeutics
Pivot Bio
Flex Pharmaceuticals
Plant Therapeutics
Polycoma
Polypeptide Laboratories
Poseida Therapeutics
Precision Nanosystems
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PrimeGen Biotech
Privity Bio
Primvine Therapeutics*
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Principia Biopharma
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Prognosx Biosciences
Prosetta Biosciences
Protelica
Provix
ProZyme
PrvP Biologics
QED Bioscience
QLSF Biotherapeutics
Quay Pharmaceuticals Limited
Reflxion Pharmaceuticals
Refuge Biotech
Regude Biotechnologies
Regulus Therapeutics
REHA Health
REMID Biotherapeutics
Remex Pharmaceuticals
Renew Biolindustries
Renova Therapeutics
Repertoire Genesis
Reset Therapeutics
Retrophin
RetroVirx
REVOLUTION Medicines
Ribosilicone
RidgeLine Engineering
RIFT Biotherapeutics
Ritter Pharmaceuticals
Roho Pharmaceutical
Rumi Scientific
RQGisite
Sapphire Energy
Samumed
Samsara Sciences
Sangyum Biosciences
Sanofi
Scripps Laboratories
Second Genome
Senomyx
Senté
Sentmel Therapeutic
SesqOne Biosciences
Seragon Pharmaceuticals
Seventh Wave*
Simple Healthkit, Inc.*
Single Cell Technology
Singlera Genomics
SingleBio
SingleGenomics*
Sillalene Biotherapeutics
SMS Biotech*
Solstice Biologics
Sophris Bio
Sorrento Therapeutics
Sporgnex*
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StemImmune
StemonX
Sunesis Pharmaceuticals
Sun Genomics
Sunovion Pharmaceuticals
Sunzero
Switch Bio
Syndex
Synova Life Sciences
Synthetic Genomics
Takeda Pharmaceuticals U.S.A.
Tanabe Research Laboratories
Tarere Therapeutics
Target Discovery
TCR Cure Biopharma
T-Cure Bioscience
TEGA Therapeutics
Tempo Therapeutics
Tenova Therapeutics
Theravance
Thesan Pharmaceuticals
Tizana Therapeutics
T3L Biolabs
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Tombo Biosciences
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Tragara Pharmaceuticals
Trefoil Therapeutics
Tri anni
Triphase Accelerator
Triont Algae Innovations
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Twist Bioscience Corporation
UCB
Ultima Genomics
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Vital Therapies
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Wildcat Discovery Technologies
World Fusion Co., Ltd
Xcell Biosciences
Xcell Unity
Xencor
Yokogawa Electric
Zavante Therapeutics
ZebraSci
Zosano Pharma Corporation

CRO/CMO

3DT Holdings
Abbiotec
ABL
Absorption Systems
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Accenture Accelerated RD
Accepix Biosciences
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Alkahest
Alphora Research
Alliance Protein Laboratories
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American Peptide Company
AnaBios
Annotova Chem
Aptuit

Argonaut Manufacturing Services
AtheIn
Avomeen*
BaySide Pharma
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BioAulxium Research
BioBlocks
BiociNova
Bio-Edge
Biover Corporation
Cassia
Catalalyze
Catalent
Cato Research
Collecta
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Centaur Clinical CRO
Champions Oncology
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ChemPartner
Cleave Biosciences
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Crown Bioscience San Diego
Cytogenet
Davos Chemical
DDSTUDIO
Diagnostics
Drug Delivery Experts
Enplus Americas
Eurofins-Advisus Limited
eStudySite
Explora BioLabs
Frontage Laboratories, Inc.*
Genea Biosciences
GentWay Biotech
Global Blood Therapeutics
Grand River Aesptic Manufacturing
Hamamatsu Pharma Research
Harari Chemical San Diego Research Center
HD Biosciences
HTD Biosystems
HTL Biotechnology
ImmunoActive
Infinite Chemical Analysis Labs
IMS Health
InClinica, Inc.
Invicro
IriSys, LLC
JRF Global
KaloBio Pharmaceuticals
Lab Launch
LakePharma
Linear Clinical Research
Linical USA
Lovelace Biomedical
Lucidant Polymers
Mediconomics

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Adagio Medical  
Aethlon Medical  
Alpha-Tec Systems  
AltheaDx  
Ancora Heart  
Aptitude Medical Systems  
Astute Medical  
AVACEN Medical  
Balanced Medical Company  
Axitics Modulation Technologies  
Banyan Biomarkers  
Berkeley Lights  
BillionToOne  
Biocept  
BioDx  
BioFluidica  
BioInq Incorporated*  
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Biomere  
Biospecific  
biotheranotics  
Bio Trace Medical  
BlueNivo Biosystems  
Breathe Technologies  
Brain Biometrics  
Burt Concepts  
Canary Health  
CollectGen  
Cell idx  
CeloNova BioSciences  
Ceterix  
Chapter Diagnostics  
ChromaCode  
Click Diagnostics  
Cliniqa Corporation  
CombiMatrix  
Compilcon  
Confirm Bioncses  
CTK Biotech  
CVIC Systems  
DermTech International  
Decom  
Diadexus  
Dorsa Vi USA  
Drawbridge Health  
DNA Electronics  
Eliar Medical Corporation  
Emerge Diagnostics  
Endologix  
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Fallbrook Engineering  
Fresca Medical  
GenomeDX Biosciences  
GIMDx  
Giauscos Corporation  
Glytensity  
Harbor Med Tech  
HealthTell  
Heart Metabolics USA  
Hitachi Chemical Research Center  
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Ignyta  
Imagination Biosystems  
ImptMed  
ImThera Medical  
Inari Medical  
Inceptus Medical  
INOVA Diagnostics  
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Interventional Spine  
Invivoisce Technologies  
Ionian Technologies  
IRRAS*  
KFX Medical  
Kurin  
Luminex Corporation  
LuminaRx  
MARDX Diagnostics  
Mass Spec Lab  
MERRU VASimmune  
Micell Technologies  
Millennium Health  
Minerva Surgical  
Nano Imaging Services  
Nanomedical Diagnostics  
NeuroStructures  
Neuvana Medical  
NucleusHealth  
NuFACE  
Onnomine  
OncoSec Medical  
Organovo  
OrthoSign, Inc.*  
Patient Safe Solutions  
Precision Diagnostics  
Profusa  
Prometheus Laboratories  
Pulse Biosciences  
Q-Bridge Solar  
Qico  
QT Medical  
Quidel  
Quinn Medical  
Rebound Therapeutics  
ReCo Medical  
Renew Biopharma  
ReShape Medical  
REVA Medical  
ReVision Optics  
Simplify Medical  
Sirigen  
Solekaal Systems  
Sonendo  
Specific Technologies  
SpectraScience  
Spinal Elements  
Suneva Medical  
Symex America  
Tandem Diabetes  
Tewmo Cardiovascular Systems Corporation  
Transcend Medical  
Tiranise Technologies  
Trovame  
Xplatal Medical  
Xtane Medical

NON-PROFIT

American Cancer Society, Border  
Sierra Region  
Bay Area Council*  
Biomedical Manufacturing Network  
Caliber  
California NanoSystems Institute (CNSI)  
California State University, San  
Marcos  
Cal State University, Los Angeles  
Chan Zuckerberg Biohub  
Cedars-Sinai Medical Center Office of  
Tech Transfer  
Children's Hospital LA*  
CIRM  
City of Berkeley Office of Economic  
Development  
City of Hope*  
City of Yokohama  
City Of Murietta  
CONNECT  
Consulate of Canada Program  
CSU, CSUPERB Program  
Drugs & Diagnostics Tropical Diseases  
East Bay Economic Development  
GlycoAnalytics, UC San Diego  
Hayward Chamber of Commerce  
Human BioMolecular Research  
Institute  
Huntington Medical Research Center  
IDA Ireland  
Institute of Engineering in Medicine  
Institute of Quantitative Systems  
Pharmacology (IQSP)  
Institute for Biomedical Sciences*  
J. Craig Venter Institute  
Kaiser Permanente  
Keck Graduate Institute  
La Jolla Bioengineering Institute  
La Jolla Institute for Allergy &  
Immunoology  
Lawrence Family Jewish Community  
Center  
Life Science Innovation Network  
Japan  
Los Angeles Biomedical Research  
Institute  
Los Angeles EDC  
Lowy Medical Research Institute  
MiraCosta College Biotech Program  
Molecular Medicine Research  
Institute  
Mt. San Jacinto College  
Pasadena Bio Collaborative Incubator  
Pharma  
Point Loma Nazarene University  
PRISM  
Rady School of Management, UCSD  
Salk Institute for Biological Studies  
San Diego Biomedical Research  
Institute  
San Diego Blood Bank  
San Diego Clinical and Translational  
Research Institute, UCSD  
San Diego Community College District  
San Diego County Water Authority  
San Diego Employers Association  
San Diego Regional Chamber of  
Commerce  
San Diego Regional Economic  
Development Corp.  
San Diego Supercomputer Center  
(UCSD)  
San Diego Workforce Partnership  
Sanford Burnham Preys Medical  
Discovery Institute  
Scottish Development International  
Scripps Health  
Scripps Institution of Oceanography  
Scripps Research Institute  
SDSU Graduate & Research Affairs  
Society for Brain Mapping &  
Therapeutics  
SRI International  
UCLA School of Medicine  
UC San Diego Health  
UC San Diego Extension  
UC San Diego Office of Innovation &  
Commercialization  
UCI's Office of Research  
UCLA Technology Development Group  
UCSD, Department of Bioengineering  
UCSD, Office of Advancement  
UK Department for International  
Trade  
University of San Diego  
USC Stevens Center for Innovation  
Western University of Health Services  
Zhuhai Commercial Service, North  
America  
UK Department for International Trade  
University of San Diego  
USC Stevens Center for Innovation  
Western University of Health Services  
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America
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INDIVIDUAL
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Dan Burgess
Deaky Goodrich
Donna Janson
Eliott Parks
James Eppink
John Kavanagh
Peter Preuss
Richard Ledford
Stan Kim

KEY PROVIDER
Covington & Burling
Cushman & Wakefield
Innovative Advancement
Qualcomm
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2Connect
C3 Risk & Insurance Services
4G Clinical
AER Travel
AMN Healthcare
Aries
AVI Systems

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Bench International
Bionest Partners
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BioTix
Blue Sky Broadcast
Blue Sky Marketing Group
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BSM USA
Buchanan Ingersoll & Rooney
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California Manufacturing Technology Consulting
Cardinal Health Regulatory Sciences
CBRE
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Coming
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Genstar Technologies
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Grande Colonial
Ground Zero Pharmaceuticals
Gunderson Dettmer
Halbert Construction
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H.G. Fenton Company
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IMEC
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kilroy Realty
Knobbe, Martens, Olson & Bear
Layer3 Security Services
Leadership Edge
Lemon Tree Partners
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Mark Hurt Consulting
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