Connect The Weekly Newsletter of UCSD CONNECT

TUESDAY JANUARY 26, 1999 ISSUE 8-52 HTTP://WWW.CONNECT.ORG AMOSER1@COMPUSERVE.COM

EPICYTE RAISES \$4.5 MILLION IN VENTURE CAPITAL; ADDS NEW INVESTORS

By Andrea Moser

Defying current trends, EPIcyte Pharmaceutical Inc. has announced the company has raised \$4.5 million in venture capital financing. "To close this round of financing with such a stellar group of investors is very heartening given the tough venture capital climate that currently exists for biotechnology companies," said Robert Leach, chief executive officer of EPIcyte (and former Chief Operating Officer of UCSD CON-NECT). "We believe part of our

ccess is due to the unique dual agbiotech/biopharmaceutical play we offer investors. The participation of Dow, and its venture fund, CMEA Life Sciences, provides particular validation of our core technologies."

The financing included four investor groups: TD Javelin Capital Fund II, LP; CMEA Life Sciences, LP; Viridian Capital, LP; and Dow Chemical Co. EPIcyte, which develops medical therapies for diseases affecting mucous membranes using its proprietary technology for manufacturing antibodies in plants, has raised close to \$6 million since it was founded in 1996, according to Leach. EPIcyte is at the forefront of manufacturing antibodies with two closely related technologies. Its proprietary Plantibodies(TM) technology can be used to produce unlimited quantities of pharmaceutical-grade antibodies and related molecules in plants. The

ficiency of this antibody production system results in manufacturing costs

that are 25 to 100 times less expensive than those of animal cell culture-based systems. The company's Epithelial Transport technology uses EPIcyte's antibody-based Transport Molecules (economically produced using its Plantibodies production system) to target drugs specifically to epithelial tissues. EPIcyte's founders, Drs. Mich Hein and Andrew Hiatt invented the Plantibodies technology while at The Scripps Research Institute, and subsequently, EPIcyte's drug delivery technology.

EPIcyte has extensive intellectual property with three issued patents, two of which are exclusively licensed from The Scripps Research Institute. Eight additional patent applications are in process. The company has entered into strategic partnerships with ProdiGene, leveraging their expertise in the production of transgenic proteins in plants, and ReProtect LLC, to develop antibodies for reproductive health. It plans to license or partner its technology in areas outside its human therapeutic and over-the-counter market focus. "With this round of financing, we will be able to further our strategy to become the low-cost producer of antibodies for human therapeutic and over-the-counter markets, initiate Phase II clinical trials of our novel drug delivery platform in treating lung infections in Cystic Fibrosis patients, and continue the development of our own proprietary antibodies to prevent

and treat neonatal herpes," said Leach.

Letter to the Editor

Dear Director Otterson,

In your recent column you said: "Reopen Sorrento Valley Road!"

You have mis-represented the extent of the opposition to the road re-opening. You say that 'a small band of Sierra Club members' opposes the re-opening. In fact, the road re-opening is opposed by a large coalition of organizations, not just the Sierra Club. They include:

San Diego Audubon Torrey Pines Community Planning Group Torrey Pines State Reserve San Diego County Bicycle Coalition to name a few

plus hundreds of individuals.

Carmel Mtn. Road and Vista Sorrento Parkway, combined with other existing connectors, will provide sufficient traffic flow. No additional road through the lagoon will alleviate traffic congestion in this severely impacted area; it would merely serve as an additional parking lot during commute time, at great injury to the quality of life and habitat in the area.

FROM THE DIRECTOR

By William W. Otterson (botterson@ucsd.edu)

THE FOLLOWING COMMENTARY IS THE OPINION OF THE WRITER, AND DOES NOT NECESSARILY REFLECT THE OPINION OF UCSD CONNECT AND/OR OUR SPONSORS AND MEMBERS.

The MDA Cancer Center

full name is the University of Texas MD Anderson Cancer nter (MDA). A real mouthful! But its size and proficiency live up to its name.

Located in Houston, it is part of one of the world's largest medical care and research centers. Alongside MDA are Rice, UT Medical School, and others. MDA itself has a faculty of 750, of which 500 are MDs. Total employment is a gargantuan 8000. They have 350,000 patient visits per year, treating 65,000 separate patients. Some 18,000 new patients are seen each year.

Seven thousand patients are treated in clinical trials, and there are 500 different trials underway at any given time. Six hundred patients receive bone marrow (stem cell) transplants per year, and, as just one example of one disease, 900 new cases of leukemia are seen each year.

MDA's total annual budget is \$800 million, and its NCI research budget, at \$50 million, is second only to the University of Washington.

It is huge, but friendly. The first thing the newcomer's eye captures is a sign reading, "New Patient Desk", manned by a smiling face. As a small demonstration of friendliness, when you are asked to fill out your new patient record, the receiving clerk comes out from behind her desk and sits with you, while

bing you fill out your form. What a pleasurable event that mukes your first encounter with MDA!

In fact, all we saw anywhere were smiling faces- of both employees and patients! (We were in the Cancer Center two days, taking various tests, like X-rays, MRI scans, etc. We started to recognize a few patients. By the second day, we were greeted by fellow patients as, "Hi, San Diego!"

Dr. John Mendelsohn, the Scientist and President, MDA

The enthusiasm Dr. John Mendelsohn conveys as president of M. D. Anderson is contagious for colleagues and community supporters, who appreciate the way he combines personal scientific expertise with preparing the institution for the new year and the new century.

Since assuming the presidency in mid-1996, Dr. Mendelsohn has maintained some of the cutting-edge translational research he began more than 15 years ago at UCSD.

A superlative medical research administrator, he is also a talented researcher. From 1970 to 1985, Dr. Mendelsohn balanced patient care and research with administrative challenges at UCSD. He and a UCSD colleague, Dr. Gordon Sato, first demonstrated in 1983 that monoclonal antibodies could block the binding of epidermal growth factor (EGF) to its

eptor, thereby preventing a crucial molecular step involved in cancer cell proliferation. This research was reported in 1983 in Proceedings of the National Academy of Sciences USA.

He continued his research on the antibody 225 when he went to Memorial Sloan-Kettering as chair of its Department of Medicine. Recent clinical studies utilize a variant of the antibody, known as C225.

ImClone Systems, Inc., of New York, has licensed C225 from the University of California and is now taking it into multicenter Phase III clinical trials for head and neck cancer. The company plans to recruit 250 patients at about two dozen centers. The trial will be a double blind study with one leg getting C225 in conjunction with radiotherapy and the other leg getting radiotherapy and a placebo. The end point will be response and time to progression of the disease.

Of course we are biased, but in our travels around MDA we heard his praises sung by more than a few Ph.D.s and M.D.s – his faculty. From our viewpoint, we are glad first that MDA has some of the finest clinicians in the country and second, that Dr Mendelsohn knows that. MDA is awe inspiring, and so is its President!

Beginning to Understand the Internet?

Found hard under an article in the Daily Transcript describing the proposed purchase of Excite by At Home for \$6.7 billion was an article about On Sale, Inc. of Menlo Park and its sale of computers over the Internet at cost. On Sale says it is gambling that revenue from advertising on its Web site, fees for service contracts and leases, plus a nominal handling fee per order will generate sufficient margin to make the company profitable.

What's the connection? Excite is an Internet portal, one of the sites where Internet users stop first on their way to other services on the Web. Excite gives advertisers an opportunity to reach the 14 million users who click on it each month. The connection is that Excite offers big advertisers, like On Sale, Inc., an opportunity to capture some of these millions for their low priced products.

And what will this do for retailing in general? It would seem to us that when Net users see pricing for H-P, IBM and other brand name computers offered at prices below anything they can find in a store, computer retailing will quickly convert to the Web. It's just too easy to compare computer speeds, hard drive capacities, CD-ROM speeds, etc. and to give the buyer more information than they can get from a retailer. Add to that the convenience of shopping from home with a credit card, and you can see the attractiveness of Web retailing.

If this works for computers, why not automobiles? And then air fares, hotel bookings, CD-ROMs, movies, books, records and so on..

But you've got to have traffic – to use a retailing term – and that gets you back to Excite's 14 million users. Full circle.

BILL'S BITS

Please see Director Page 3

HEALTHCARE NEWS ...

Women First Healthcare has launched IntegraVie(TM), an innovative new skin care treatment for created specifically for midlife women. IntegraVie delivers more intensive strength hydroxy compounds to help quicken the skin's ability to

new itself. IntegraVie contains element 38(TM), a patented chnology that works beneath the skin's surface to neutralize the potential irritating effects of active ingredients, such as alpha hydroxy acids, allowing stronger levels of these ingredients to be used to help renew the skin.

DAOU Systems Inc. has announced that it has been accepted as a client of Healthcare Research and Development Institute (HRDI). The membership of HRDI comprises a think tank of thirty-five CEOs of leading healthcare systems who serve as advisers to some fifty client companies in the healthcare industry. As a client of HRDI, DAOU will have an opportunity to fine tune its strategic plans with key member executives who will assist DAOU in understanding its customers' needs throughout major healthcare systems. "B2K" (beyond year 2000) issues such as next generation Internet applications and outsourcing complete information technology departments are of particular interest.

The Novartis Agricultural Discovery Institute Inc. (NADII) and Novartis Institute for Functional Genomics (NIFGI) have signed a lease for 80,000 square feet of space, occupying 100% of 3115 Merryfield Row in the La Jolla Spectrum Technology Park. Construction is scheduled to be completed in February, 1999. Both NADII and NIFGI are indirect subsidiaries of the Novartis Research Foundation, an independent research foundation that was established by Novartis AG-a global leader in life sciences.

GH-TECH NEWS ...

Peregrine Systems, Inc. has announced a new Remote Management(TM) graphical remote control and network management application. Remote Management(TM) is designed to help large organizations cut enterprise service desk cost by reducing the time needed to identify and solve problems and eliminating travel to manage remote and mobile systems. Designed to work effectively across a variety of operating environments, technologies, and communications protocols, Remote Management's remote control and file transfer capabilities are ideal for large enterprises currently using or considering Peregrine Systems AssetCenter(TM) and ServiceCenter(R) applications.

Ensemble Communications Inc. has raised \$3 million in its second round of venture financing. The adaptive broadband access company added three new investors-Crescendo Ventures, ADC Telecommunications, and Trinity Ventures-along with the company's existing investors, Enterprise Partners and Institutional Venture Partners. Ensemble is developing an adaptive IP point-to-multipoint system for the rapidly expanding Broadband Wireless Access (BWA) markets worldwide including Local Multipoint Distribution Services (LMDS) in the United States.

QUALCOMM Incorporated has introduced the new OUALCOMM Thin Phone, its fourth generation of Code vision Multiple Access (CDMA) technology digital phones. The Thin Phone features an ultra-thin design with an internal battery and hot-swappable external battery options. The new phone incorporates QUALCOMM's latest integrated CDMA Mobile Station Modem (MSM-TM) chipset that provides talk times of up to 10 hours in digital mode and supports standby times of up to 8 days with external battery options.

Syzygy Network Solutions, a communications integration company providing solutions for local and wide area networks, telephony and cabling infrastructure for corporations across the United States, has announced the opening of a regional office in San Diego. Based in Orange, California, the company's sales have tripled over the previous year causing a need for regional offices in key cities and the addition of new staff.

DIRECTOR ... (Continued)

Harry Gruber's InterVu Inc. announced a contract to deliver commercials, product information and other content to Saatchi & Saatchi PLC, one of the world's leading advertising agencies.

According to the Transcript, San Diego is the single hottest city for Time Warner's Road Runner, the cable modem service. Who says San Diego is not a high-tech community?

Last week, we told you about the first flight of Ryan Aeronautical's new unmanned decoy and how useful it could be in a country like Iraq that fire missiles at our aircraft. This week we learn that Ryan's parent is searching for a buyer for the company. Honestly, we didn't know. But how many of our readers didn't know that Charles Lindbergh's airplane, "The Spirit of St. Louis" was manufactured by Ryan Aircraft, right here in San Diego?

The international defense industry gets more competitive with the announcement of the acquisition of GEC Marconi by British Aerospace PLC. The combined company is market cap of \$25.7 billion will put it just behind Boeing and Lockheed Martin. The AP quoted Terry Straeter, president of Marconi Integrated Systems, Inc. (formerly GDE Systems, Inc.) with 2000 employees in San Diego, as upbeat on the announcement because "it gives us more international distribution channels."

Congrats to Qualcomm for increased sales and earnings for its first quarter of \$941 million and \$48.5 million. That annualizes to almost \$4 billion in our book.

Special thanks to Proxima, six years ago they gave us a new projector which they replaced this month with a spiffy new one – Springboard and Financial Forum companies thank you!

Speaking of Springboard, Temecula CONNECT held its first Springboard and received press coverage in both the Press Enterprise and The Californian! Congratulations to all involved and may this be the first of many programs to promote and strengthen high-tech companies in the Temecula region.

We look forward to seeing everyone with money to invest in early stage companies at the Financial Forum, February 9-11.

UPCOMING EVENTS...

The San Diego Venture Group presents "Venture Capital Success Story of 1998" on Wednesday, January 27 at the Sheraton Grande Torrey Pines, from

5:30 - 8:30 pm. No cost to members, \$60 for non-members.

Erin Hall at 619-272-1985.

The La Jolla Interfaces in Science Lunchtime Speaker Series presents the first seminar in the interdisciplinary series for junior researchers on **Thursday**, **January 28**, from noon-1 p.m. in 7130 Urey Hall at UCSD. Topic is "Nuclear Magnetic Resonance: The Link Between Physics and Biology." Vicki Tsui (TSRI Department of Molecular Biology) is the speaker. For information see http://chemcca10.ucsd.edu/~wriggers/ljis/ seminar.html.

The San Diego Chapter of Anderson Alumni presents the 1999 UCLA Anderson School Forecast of global economic trends featuring Dr. Tom Lieser, Ph.D., **Tuesday, February 2**, at the La Jolla Marriott from 7 a.m. - 9 a.m. The UCLA Anderson Forecast is internationally recognized as a reliable authority on global economic trends. Cost is \$25. For information call 619-744-8071.

The Economic Development Corporation of Southwest Riverside County presents its quarterly luncheon on "Regional High-Tech Growth 1999" on Tuesday, February 2, at the Temecula Creek Inn from 11:30 a.m. - 1 p.m. Cost is \$25. For information call 909-695-5130.

The World Trade Center San Diego and the British American Chamber of Commerce invite high-technology companies in San Diego to meet James Gray, Chief Executive of the East of England development agency, Tuesday February 2, from 5:00 - 7:00 p.m. at the Museum of

ntemporary Art, La Jolla. Mr. Gray is based in Cambridge, gland, the leading high-tech region of Europe. He will present a brief overview of the opportunities for cooperation in high-technology research, development, manufacturing, trade and investment, between academic, non-profit and commercial organizations in the San Diego and Cambridge areas. Enjoy British refreshments at this private viewing, on the first day of

the exhibition of Francis Bacon (British) paintings at the Museum of Contemporary Art, La Jolla.

\$10 for members of WTCSD, British American Chamber, BIOCOM, UCSD CONNECT,

Team San Diego, Software Industry Council and Telecommunications Technology

Council and \$15 for non-members. For information, directions and reservations, please call 619- 615-0868 x110.

The Internet Society, an international organization, will hold its "Network and Distributed System Security Symposium" in San Diego February 3-5. Topics will include network security principles and protocol standards, optical networks security and survivability, electronic payment systems and other topics. Conference details are available at http://www.isoc.org/ndss99/

HRG's Learning Center will offer two seminars in February. On **Thursday, February 4,** from 8:30-10:30 the topic will be "Taking Change to the Bank," a case

study in the physiology of change. Tom Dannemiller and Stan Sewitch will be the presenters. On Wednesday, February 17,

n 8:30-10:30 the topic will be "Successful Investigations in 1999." To register or for more information call 619-673-3390.

Swenson Advisors LLP, Cooley Godward LLP, Merrill Lynch and Wolf/Petravicius Associates, Ltd. are sponsoring an M&A conference, "Selling Your Company in the New Millennium" on **Friday, February 5**, at the Fairbanks Ranch Country Club in Rancho Santa Fe. The seminar gives owners of middle market companies a detailed understanding of the process for selling their company. For information call 909-676-6148.

Representatives of the **Swedish Contract Research Organization, Clinical Data Care**, will visit San Diego **February 8-9** to meet with biotech/drug and device companies interested in speeding up their FDA approval process by doing some of their clinical trials in Europe. For more information call 619-388-4021.

DIRECTOR ... (Continued)

For more details, call CONNECT, 619-534-6114.

Please see the Letter to the Editor regarding the reopening of Sorrento Valley Road at the end of the newsletter. We appreciate all thoughtful communications such as this and realize that not everyone will see things our way. In fact, the more open discussion of issues the better. Please keep those comments coming.

"The emergence of a truly entrepreneurial economy in the United States during the last 15-20 years has been perhaps the most significant and hopeful event to have occurred in recent business and social history."

"Its philosophical foundation is to promote and preserve the American free enterprise system based upon private ownership, individual responsibility, fair competition, minimum involvement by government, and the opportunity to become an entrepreneur."

Quotations: from Rom Markin, Director, Washington State University's Center for Entrepreneurial Studies, in Hill Topics, the WSU Alumni Newspaper, August 1998.

CAPITAL MARKETS SEMINAR: OUTLOOK 1999

UCSD CONNECT presents "Capital Markets Seminar: Outlook for 1999" on Thursday, January 28, 7:30 a.m. - 10:00 a.m. at the Hilton La Jolla Torrey Pines. This seminar will present leading investment bankers and corporate executives who will share their insights into lessons learned in raising capital as well as their outlook for 1999.

The Life Sciences panel includes: Doug Obenshain of Ernst & Young LLP, Stan Crooke from ISIS Pharmaceuticals, Jack Reich of Collateral Therapeutics, Peter Ginsberg with Piper Jaffray, and Fredick T. Muto of Cooley Godward LLP.

The High-Tech panel includes: John Otterson of Silicon Valley Bank, Nancy Baker of CYMER, Norm Farquar from DataWorks Corp., Thomas Gay from Vista Information Solutions, Lisa Walters-Hoffert from Cruttenden Roth, and Wainwright Fishburn of Cooley Godward LLP.

For more information contact CONNECT at 619-534-6114.