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Israeli Arrow ABM System is Operational as War Clouds Darken

Military analysts generally agree that when the US attacks Iraq, Saddam Husein's first response will be to order a missile attack against Israel. Unlike 1991 when 39 Iraqi Al Husein Scuds landed in Israel, mostly in the Tel-Aviv area, this time it is expected that the missiles will carry warheads armed with lethal chemical and biological agents, with a mass destruction potential.

Israel's main deterrence against the dangers from a "dirty" missile attack is its $2.0 billion Arrow Anti Ballistic Missile. Its development began in the early 1990s and in 1998 it had its first successful deployment. The Arrow is the world's only first ABM system, which is specifically developed to destroy incoming missiles. The Arrow Missile is a defense system against medium-range ballistic missiles. It can intercept missiles within a wide spectrum of ranges and altitudes, and can provide protection over large areas. Specifically it is designed to intercept medium- and short-range missiles, not intercontinental missiles, in keeping with Israel's perception of its exposure to Iraqi and possibly Iranian missiles. The latter on the verge of fielding the Shahab-3, which will have the range to strike Israel.

Simultaneously the system handles dozens of threats through multi-target racking and interception capabilities. In 1998 Israel successfully conducted the first comprehensive test launch of the Arrow system designed to shoot down incoming missiles at speeds up to two miles per second traveling 10 or 25 miles above the earth's surface. A test launch in 1998, lasted for 97 seconds, and was deemed as most successful. US officials observing the test were most pleased and said everything went smoothly.
The Arrow's main contractor is one of Israel Aircraft Industries factories. The "green pine" firing system is produced by Elta, and the "golden citron" control module is made by Tadiran.

Israel's worst nightmare: Iraqi Al Husein missiles armed with chemical warheads
Picture Credit: CIA

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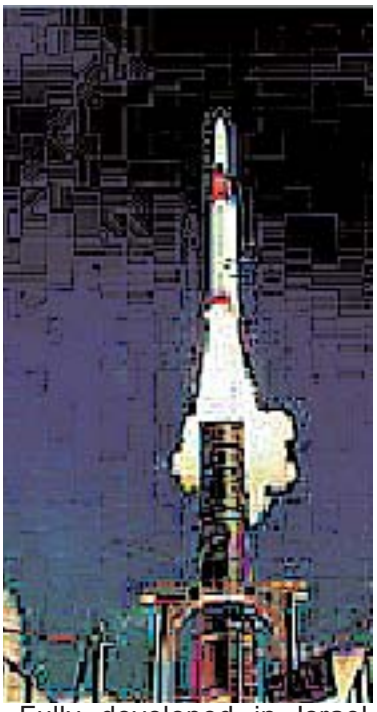

Arrow: the Israeli developed Anti- Ballistic Missile.Two operational batteries are deployed. Israel Air Force and Israel Aircraft Industries personnel believe they can provide a safety net for most of Israel

Fully developed in Israel, with American assistance, the Arrow is expected to provide the country with a security net that will extend over most of its major cities, including its most populous centers, between Haifa and Ashdod and including Tel-Aviv.

The Arrow Missile Project has acquired several dimensions, among them are its deterrence aspect while its political implications are high on the list. Over the past decade, localized skirmishes including the bombing of Libya and the "Scudding" of Israel by Iraq during Desert Sand, as well as Iran's acknowledged missile capability, have created a pressing need for a security net.

Range of Iraqi missiles

Reporters were recently invited to visit the highly guarded Palmahim Air Force Base, nestled on Israel's Mediterranean shoreline. Knowledgeable Israelis are aware that the Palmahim Air Force Base first earned a reputation as the proving grounds for the development of Israeli RPVs. The remotely piloted vehicles are small pilotless planes that can fly over designated targets and transmit a real time pictures of the area they scan. They detected the exact position of SAM-9 Syrian missile bases in Lebanon's Bekaa Valley more than a decade ago. These bases were rendered inoperative by the Israel Air Force, removing a major threat to the security of this country.

At Palmahim the IAF has deployed its operational missile defense, ready to use to protect Tel Aviv and other major population centers if they come under fire from Iraq's arsenal of Scud missiles. One Arrow battery has been operational at the Palmachim base for two years. The deployment of the second battery in central Israel was delayed when the citizens who lived nearby complained that the radar might endanger their health. The Israelis are trying to make the second battery operational before any U.S. attack on Iraq. As a stopgap, the Arrow missile launchers from the second battery can be linked to the Palmachim battery to upgrade its capability, an Israeli military official said.

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The Arrow, system is designed to avoid the shortcomings of the American Patriot system, which Israelis know was unsuccessful in stopping Scud missile attacks by Iraq during the 1991 Gulf War.
At Palmahim crews were engaged in intensive training in operating the Arrow ABMs in chemically contaminated areas. Wearing the ABC, Israeli slang for Atomic, Biological and Chemical gas masks and protective suits, they repeated the operation over and over again, including tracking, aiming and firing. Past experience indicates that the time it takes for a Scud, launched from southern Iraq to reach Israel, is about 8-9 minutes. In practice Israel depends on notification from American satellites that a Scud has been launched. The Arrow's tracking system identifies and locks onto the missile and at the optimal point the ABM missile is released.
Unlike the Patriot system used in the Gulf War, whose fire control system is essentially automated, the Israeli system leaves it to officers to decide when to fire the Arrow interceptor. At a firing site, massive launchers, each loaded with six Arrow interceptors, stand at the ready while Israeli radar scans the skies.

"We did a lot of testing and most were successful," said Danny Peretz, the program manager for the Arrow at Israel Aircraft Industries, the prime contractor of the system. "But we know in our hearts, and put it into the design, that this weapon will be tested fully only in war."

Fifth Israeli to Win a Nobel Prize

Professor Daniel Kahneman, a dual American-Israeli citizen based at Princeton University in New Jersey, won the 2002 Nobel Prize for Economic Sciences for pioneering the use of psychological and experimental economics in decision-making to make markets safer. Kahneman shares the $1.1 million award with Vernon L. Smith of George Mason University.

Kahneman has integrated insights from psychology into economics, "especially concerning human judgment and decision-making under uncertainty," the Royal Swedish Academy of Sciences said in its citation.

A modest individual, Kahneman was quoted that he wants the excitement over the Nobel recognition to pass quickly, so that he can get back quietly to his work.

Kahneman received his Nobel Prize in recognition for work that he did many years ago with a colleague,

Amos Tversky, who died in 1996. "The thought of his missing this day saddens me," Kahneman said.
Kahneman still defines himself as "Israeli and American" in his publications.
The Royal Swedish Academy of Sciences noted Kahneman's contributions of psychological insight to the field of economics. In particular, he showed that human decision making in times of uncertainty often departs from what is expected under standard economic theory.
An example of the Kahneman, psychological observation in economic settings is a conclusion that even if a consumer prefers three pears to two apples, he may choose one apple to three pears.
Kahneman, who has been at Princeton since 1993, says he has a strong connection to Israel. His children and grandchildren live in Israel, and he frequently visits and lectures in the country. Kahneman's wife, Anne Treisman, also lectures at Princeton.
Kahneman was born in Tel Aviv in 1934. He served as an officer in the Givati Brigade. He received his bachelor's degree in psychology and mathematics from the Hebrew University of Jerusalem and his Ph.D. from the University of California at Berkeley in 1961. He taught at Hebrew University from 1961 to 1978 and at the University of British Columbia from 1978 to 1986. From 1986 to 1994 he was a professor at Berkeley.
Kahneman is the fifth Israeli to win a Nobel Prize.

Bank of America Invests in Power Paper

Power Paper Ltd. a leading provider of thin and flexible micro-power source technology and devices, announced that Bank of America Capital Partners and existing shareholders, have invested $3 million in the company's fourth round of financing. The company's current shareholders include Japanese, European, Singaporean and Israeli investors.
Power Paper intends to use the new funding to accelerate sales, marketing and customer support efforts, according to Shalom Daskal, CEO of Power Paper, who joined the company in April 2002. The

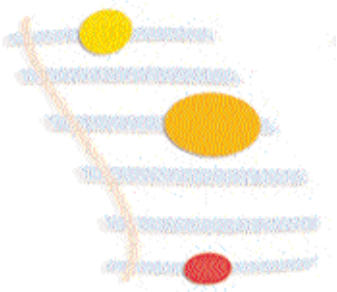
current round brings the total funding raised by Power Paper to date to nearly $17 million.

Power Paper combines all the prerequisites for a strong investment including exceptional management, a strong investor group, and a universal technology platform with many potential applications," stated Edward McCaffrey, Bank of America Capital Partners' Chief Investment Officer. "We are very pleased to be a part of what could become a top-tier technology company."

"We are very pleased that Power Paper has now established the financial backing that it needs to accomplish our goal of becoming the premier provider of micro-power energy sources and devices", stated Daskal. "This level of financial support during difficult market conditions is a strong endorsement of our technical and market position as a leading supplier with the best-in-class thin, flexible, safe, environment-friendly batteries and microelectronic devices"

About Power Paper

Founded in 1997, Power Paper is a provider of micro-power source technology, which addresses a growing trend across a wide range of industries towards ultra-thin and flexible micro-powered devices. Power Paper's patented, thin and flexible energy cells can be adapted to fit the size, thickness and form factors required for the design of any product. These environment-friendly, safe batteries require no metal casing, and can be printed cost-effectively directly onto paper, plastics or other surfaces by standard printing equipment. Licensing and know how agreements allow Power Paper's partners and customers in the United States, Europe and Asia to utilize the company's wining technology to produce millions of cells every year. Based on this technology, the company has developed innovative applications spanning the fields of cosmetics, novelties and logistics.



BIOTECH & PHARMA UPDATE

IEI and Ohio Israel Chamber of Commerce Organizing Mission

The Israel Export Institute and the Ohio-Israel Chamber of Commerce have joined forces and are organizing a biosciences mission to Cleveland, Ohio in January 27-30, 2003. The event will be an opportunity for Israeli companies to meet one-on-one with relevant companies, medical organizations and VC`s. "The US companies who have committed excellence to the event are aware of Israel`s preeminence, technical expertise and reputation for innovation in the life sciences area and are looking to meet with potential strategic partners," said Osnat Karp, Executive of the Healthcare and Biotechnology section at the Israel Export Institute.

Many of the VC`s who will be participating in the event are located outside the Boston and Silicon Valley areas and are not yet familiar with Israel`s biotechnology sector. this represents an excellent opportunity for Israeli companies to present themselves to new investors, eager to learn about Israel`s specific capabilities, stated Karp.

Sixty-five US companies and VC`s have committed to the event including Abbott Laboratories, Baxter, IBM Life Sciences, Hitachi Medical Systems, Kent State University Technology Transfer Office, NASA (Space Flight Systems and Medicine Div.), Trek Diagnostics, Timken Technology Office, BioEnterprise, Inc., National City Investments, McDonald Investments, Walden Israel Venture Fund and Primus Ventures. Another 15 companies are expected to participate.

BSecure Fights Drug Counterfeiting

Security Companies Move Into Life Sciences

"Based on a chemical antibody lock and key authentication system, we use highly specific bioengineered recognition molecules to detect simple chemical codes implanted into a tablet, gel coating or liquid form of a drug," said Ron Peer, CEO, BSecure.

The first Global Forum on Pharmaceutical Counterfeiting that took place in Geneva, Switzerland earlier this fall, heard evidence that counterfeit medicines are a threat to public health worldwide.

Counterfeit drugs may contain too much, too little or no active ingredient, the wrong ingredients or high levels of impurities, contaminants and even toxic substances.

The role of security products and technologies is crucial to drug piracy enforcement, said Ian Lancaster at the Global Forum.

He pointed out that some of the most innovative solutions are being developed by Israeli security and authentication product companies, using sophisticated

coded and covert authentication solutions.
"Israel offers a unique combination of hi-tech savoir faire from the army and the hi-tech and medical knowledge from both Israeli and Russian scientists," said Lancaster.
One company which has developed an arsenal of overt and covert tactics to combat the distribution of counterfeit drugs is Caesarea-based BSecure Technologies.
Prior to entering the pharmaceutical sector Bsecure developed security products for clients that include Intel, New Balance and the Israeli Driver`s Bureau.
Using technological and chemical tools to stay one step ahead of counterfeit crimes, CEO Ron Peer said: "In conjunction with a UK company, we have devised systems for determining both the quality and quantity of drugs."
"Based on a chemical antibody lock and key authentication system, we use highly specific bioengineered recognition molecules to detect simple chemical codes implanted into a tablet, gel coating or liquid form of a drug," he continued, emphasizing that the FDA approved assay in no way changes the efficacy of the drug.
Immuno-assay techniques are tuned by BSecure`s bioengineers to detect specific chemicals at parts per billion allowing drug importers and distributors to access the quality and quantity of the active ingredients to be revealed, within minutes.
The same technology is being used for gasoline and alcohol industries.
"BSecure is dealing with highly classified products and information," commented Chairman Gideon Fishman who described the machine-readable ink in use. Indistinguishable with the naked eye from other ink, it can be printed virtually anywhere to protect brand owners.

The extent of counterfeiting varies from country to country; global estimates start at two percent according to the International Federation of Pharmaceutical Manufacturers (IFPMA), rising to 80 percent in some countries, usually developing nations, where economies are unstable; patients tend to turn towards the cheapest available medications, not knowing that some may be lethal.

"It is very hard for pharmaceutical companies to admit that the counterfeiting problem exists because they don`t want customers to be afraid of the risk. The magnitude of the problem is about 10 percent of the massive global pharmaceutical market," commented Peer.
BSecure, formerly PitKit Technologies is a holding and marketing company formed by its mother company, PitKit Printing Enterprises Ltd. BSecure employs about 30 Israeli electronic engineers, physicists, programmers and metallurgists.
Arie Levine, Chief Scientist is a physicist, chemical and laser specialist from Colombia and Yale Universities. Ten percent of BSecure is owned by U.S. security company Genuone, 3 percent employee-owned. PitKit Printing Enterprises was founded by Gideon Fishman, and Zeev Blajwajs.

Israeli Arab and Jewish Incubator Funds Life Science

An Arab-Jewish high-tech incubator has opened in Nazareth. The site is opening with an initial investment of $1.4 million, funded by six Israeli Arab businessmen from the Galilee and an Israeli entrepreneur Davidi Gilo, who are in a partnership with the Center for Jewish-Arab Economic Development (CJAED). A substantial amount of the fund will be allocated to finding life science projects effectively bridging the gap between the Israeli Arab and the Israeli scientific communities.

The incubator operates under an Office of the Chief Scientist experimental model as a private company. Some 30 projects have been examined to date, of which 35 percent are Arab ventures. One project belonging to an Arab entrepreneur has already been approved. The incubator`s long-term objective is to reach 12 projects.

The first project will focus on dietary supplements, which may turn into a medical product in the future; said Sharon Devir, director of the incubator project. "We expect about half of the projects to be from the life sciences area," he continued.
The companies will be housed by the incubator in an 800 square meter site for the first two years in Nazareth.

CJAED was founded in 1988 by Israeli Arab and Jewish business people on the premise that Israel`s diverse population provides the country with an invaluable resource. CJAED aims to provide Israeli Arabs with the necessary skills and advantages to capitalize on opportunities for development.

Teva Gets FDA Approval For Two Drugs

Teva Pharmaceutical Industries Ltd. (Nasdaq: TEVA) has obtained FDA approval of two drugs, Nizatidine, and Fenofibrate. Nizatidine Capsules USP are the AB-rated generic equivalent of Eli Lilly`s Axid® Pulvules. This product is indicated for treatment of active duodenal ulcer, maintenance therapy of healed duodenal ulcer, GERD and benign gastric ulcer. Sales of the brand product for the last year were approximately $225 million.
Fenofibrate Capsules are the AB-rated generic equivalent of Abbott`s Tricor Capsules for the treatment of patients with high levels of serum triglyceride levels. Annual sales of the 67 mg dosage form product are approximately $14 million. The 134 mg and 200 mg strengths were approved April 9, 2002 following a favorable ruling on a motion for summary judgment. Teva has been awarded 180 days marketing exclusivity for this product.

Teva Pharmaceutical Industries Ltd., headquartered in Petach Tiqva,Israel is among the top 35 pharmaceutical companies and among the largest generic pharmaceutical companies in the world. Over 80 percent of Teva`s sales are in North America and Europe. It develops, manufactures and markets generic and branded human pharmaceuticals and active pharmaceutical ingredients.

Taro Announces Record Profits

Taro Pharmaceutical Industries Ltd. reported record sales and earnings for Q2 and six months ending June 30, 2002 and announced the purchasing of a building in New York to house its US research and development operations.
Sales for the second quarter of 2002 increased 36 percent to $49.6 million, compared with $36.4 million in the second quarter of 2001. Net income for the quarter increased 68 percent to $10.2 million, or $0.35 per diluted share, compared with $6.1 million, or $0.24 per diluted share, for the year-ago quarter.
Taro`s gross profit for the quarter increased 30 percent to $30.8 million, or 62 percent of sales, compared with $23.8 million, or 65 percent of sales, for the second quarter of 2001.
In May, Taro purchased the assets and liabilities of Thames, a privately-held pharmaceutical manufacturer located in Ronkonkoma, New York. Thames had sales of approximately $9 million in 2001, primarily consisting of topical generic products. Pharmaceuticals, Inc., a wholly owned subsidiary.
The new US facilities are located in Hawthorne, New York.

Identa Detection Kits to Fight Illicit Drug Trade in Chile

Identa Corp. will start field tests of its narcotic drug detection kits with three national authorities in Chile. The company produces four kits containing patented reagents, each testing for the drugs marijuana/hashish, cocaine/crack, heroin, or ecstasy (MDMA). It is estimated that the potential market size for the kits to the law enforcement agencies in Chile alone is approximately 75,000-90,000 kits per year. The Identa kits introduce fast and highly accurate field drug identification results, for private use in the home and office as well as in the field by professionals.

The company`s kits provide many advantages to the kits currently on the market, which are being used by the national authorities in Chile. Identa`s kits do not give "false positive" results, are easier and simpler to use than existing kits and are more time efficient for getting definite results within seconds. In addition, the kits can be used to detect minute amounts of drugs.
The company`s CEO, Mr. Yaacov Shoam, stated: "This testing will lead to sales of our drug detection kits in Chile and other national organizations replacing the mistral-spray and nik-ampoules drug detector kits which are currently being used."

Operating since 1997 in Jerusalem, Identa develops, manufactures and distributes innovative on-site drug-of-abuse substance testing products to the professional and civilian markets. In 2000, the kits were successfully used in DOA field tests conducted by the North Miami Beach Police Department in Florida, the Israeli Police and the Hebrew University of Jerusalem.

Hapto Biotech and Ortec Collaborate on Wound Healing

Jerusalem-based Hapto Biotech has announced a collaboration with Ortec International, Inc. focusing on developing new wound healing and tissue regeneration products from the combination of Ortec`s bilayered cellular matrix technology, with Hapto`s Haptide(TM) technology, a proprietary family

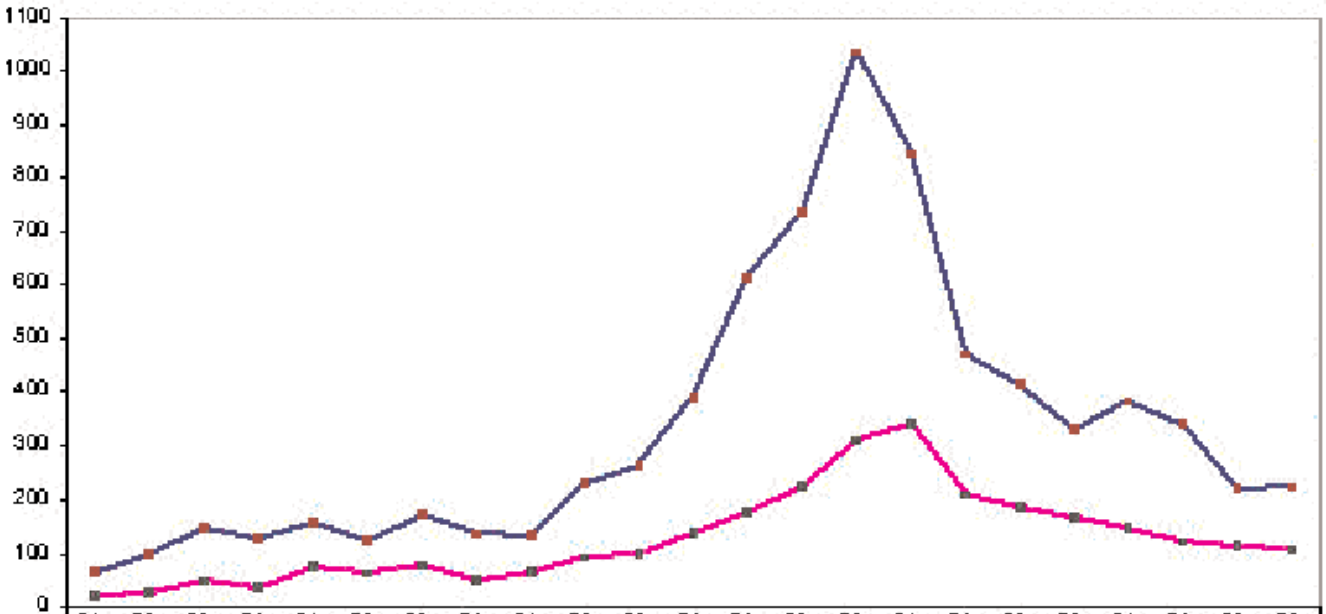
of synthetic peptides that enhance cell attachment and facilitate growth.

The collaboration will aim to develop a proof of concept of new non-cellular and cellular advanced wound healing products built on Ortec`s patented and propriety OrCel and collagen sponge technologies. HAPTO will conduct the collaborative research by its subsidiary HAPTO Biotech (Israel) Ltd. The initial results of the research collaboration are expected to become available in the first quarter, 2003.

quarter of 2002 . 72 high-tech companies raised $ 221 million in the third quarter of 2002 which was nearly identical to the $ 217 million invested in 70 companies in the preceding quarter.

Over the past seven quarters , beginning with Q1 2001 three out of 10 venrtures capital funds made no investments. In the past quarter the figure was above the average as 27 of the 73 funds surveyed did not make a single investment. Nearly half of the companies that raised venture capital investments obtained some funding from the Office of the Chief Scientist of the Ministry of Industry and Trade.

Israeli VC's Investments level



		Q1-97	Q2-97	Q3-97	Q4-97	Q1-98	Q2-98	Q3-98	Q4-98	Q1-99	Q2-99	Q3-99	Q4-99	Q1-00	Q2-00	Q3-00	Q4-00	Q1-01	Q2-01	Q3-01	Q4-01	Q1-02	Q2-02	Q3-02
1.	Investments	67	98	147	127	158	129	172	134	130	228	263	389	617	795	1039	845	471	415	330	384	344	217	221
2.	VCs	22	27	47	35	72	62	77	51	67	90	99	140	176	226	308	349	208	184	167	144	122	112	106
3.	VCs (%)	33%	28%	32%	24%	46%	51%	45%	38%	52%	39%	38%	37%	29%	31%	30%	41%	44%	44%	51%	38%	35%	52%	48%

1. total investments 2.Israeli VCs 3.Israeli VCs total

Stagnation in Venture Capital Investments in Q3

The Kesselman & Kesselman Pricewaterhouse Coopers Money TreeSurvey, for the third quarter of 2002 inicates that venture capital backed investments in high-tech companies were stagnant in the third

In the Israel High-Tech & Investment Report June 2002 issue we noted in anrticle that *The Time for Mining Gold Nuggets is at Hand.* Sources in America and in Israel, stating that “some of the best venture capital deals may be currently in the early germination stage. In the last decade we have noted, in times of prosperity or recession, during "bull or bear" markets,

that there are gold nuggets strewn across the Israeli technology landscape, and that savvy investors will identify them even while Israeli entrepreneurs scramble extra hard for investment funds.

Similar sentiments are voiced by veteran venture capitalist Yadin Kaufman, and founding partner of Veritas Venture Capital of Israel. "To summarize the spirit of the late 90s, Israel's VC community paid too much to invest in too many companies that spent too much cash. These so-called "best of times" were, I would argue, a terrible period to be putting money to work. Flash forward to 2002, to what looks like the worst of all possible times to be a venture capitalist. The VC party is over: Only $18 million has been invested in seed-stage companies in the past three quarters combined - compared with $126 million in the last quarter of 2000 alone. IPOs and profitable merger and acquisition transactions are virtually non-existent and the only exits these days are by managers leaving VC firms.

The gloomy diagnosis is, however, unwarranted. The reality is that today is arguably the best time in the last decade to be a venture capitalist in Israel. Valuations of companies have shrunk back to realistic levels. Cash burn rates have shrunk, too, with the decline in salaries and with the awareness of how difficult it will be to raise the next round. For the investor, this means much-improved odds of reaping significant returns. Slower cash burn means less dilution, and low entry price means that even an exit at a valuation of $100 million-rather than $1 billion can provide a 10-fold return.

And, while there are fewer startups today, they tend to be better startups. In today's environment, only "true" entrepreneurs, with great ideas and often with one or more exits under their belts, dare to pursue high-tech dreams and start a company - and these are the kind of people VCs dream about investing in. Now is the time to support startups with exceptional, seasoned teams of entrepreneurs, with low burn-rates and cash requirements to break even, accompanied with modest valuation expectations. Today's climate is likely to prevail for at least the next 12 months. The easy money is gone. Yet the good news is that this is the environment in which great companies are created. Venture capital is a cyclical business, and investments made during the dry seasons - when it's hardest to raise funds and start companies - tend to produce the best returns. In many respects, we are back to the early 90s - with the critical difference that today we have many more experienced entrepreneurs and VCs, and we've had a full decade of mistakes (and some successes) from which to learn.

Investors who took the plunge back then, despite the Gulf War, poor exit environment, and geopolitical instability, were rewarded very handsomely indeed. So, too, will the investors of the early 2000s - these best of all possible times for early-stage investors". Yadin Kaufman and his partner Gideon Tolkowsky identified ESC Medical, now called Lumenis, and their fund became an early stage investor. The "cashing out "was one of the more bountiful results in the history of Israeli venture capital industry.

Israeli Sand Rats Genes in Fight Against Diabetes

An Australian biotech company Autogen has signed a deal with European pharmaceuticals giant Merck-Sante to commercialize a rat's gene that could help combat diabetes.

Autogen has been researching the behavior of a large colony of Israeli sand rats at its Geelong laboratory for the past 14 years. It said it had discovered as many as 40 genes from the rat that could lead to drugs to treat human ailments such as obesity, depression and diabetes.

According to Autogen chief executive Professor Greg Collier the tanis gene, is an indicator of diabetes in rats and humans.

Professor Collier said the deal confirmed "the importance of the tanis gene as a development target for a new generation of diabetes drugs". Autogen was once partially -owned by the recently fallen from grace Australian mining magnate Joseph Gutnick. He reportedly sold his 19 per cent share to Brisbane investment group Charter Pacific in June 2002.

Robots for Harvesting Melons

Harvesting melon is a labor intensive activity. A team of Israeli and U.S. researchers has designed a vision-endowed, melon-picking robot to do the job. The machine consists of a mobile platform on which are mounted an image-processing system, air blowers and a mechanical arm with a gripper attached. As a tractor slowly pulls the platform through the field, cameras take pictures that the system analyzes. (The air blowers ruffle the foliage to expose the fruit.) When the harvester sights a melon bigger than a certain size and therefore presumed to be ripe it extends the gripper to grab the fruit and lift it off the ground. Knives

connected to the gripper slash the stalk, and the gripper places the melon on a conveyor belt. The robot is the fruit of a collaboration among three Israeli Institutes of higher learning including Ben-Gurion University, the Weizmann Institute of Science and the Agricultural Research Organization and the American Purdue University. Its commercialization is expected in less than two years.

Intel's Israeli Development Center has designed the 'Banias' processor

During the recently held Microprocessor Forum, Intel Corp. described some details of its next-generation mobile microprocessor, including plans to push the chip down to the 90-nm (0.09-micron) node in the second half of 2003.

For months, Intel has been promoting the new mobile processor, code-named Banias. Slated for introduction in the first quarter of 2003, the initial Banias chip is a 0.13-micron device that is expected to operate at 1.4-, 1.5-, and 1.6-GHz, according to analysts.

The company is also developing 90-nm versions of the processor, said Mooly Eden, director of Intel's Israel Design Center, the R&D center for the Banias project. "Banias will also be manufactured at 90-nm," Eden said during a presentation at the Microprocessor Forum.

The 90-nm Banias chip is reportedly due out in the second half of 2003, according to Intel's roadmap. Meanwhile, for some time, Intel has stated it will sell Banias as part of a systems solution. In doing so, the company will sell the Banias processor, chip set, and a wireless LAN solution on the same board.

During the Intel Developer Forum (IDF) last month, the company also disclosed the Banias would also include "advanced branch predication" and radio-frequency (RF) "scan" technologies.

The systems solution is geared for notebook PCs, sub-notebooks, and tablet systems, Eden said. "Banias is not a point solution," he explained. "It's a family of products."

Given Imaging Sales up nearly Five-fold

Israeli medical device maker Given Imaging (GIVN:NASDAQ) stated that third-quarter sales for its diagnostic miniature camera pill reached $7.4 million, a near 500 percent rise over the same period last year. It further reported that sales for the first three quarters topped $19.8 million.

VersaMed Chosen as Fastest Growing Hi-Tech Company

Israeli med-tech startup VersaMed has been accorded first place in the Israel Technology Fast 50 list for 2002.

The accounting firm of Deloitte-Touche Brightman-Almagor annually compiles a list of the 50 fastest-growing technology companies, based on revenue growth the critteria based. The 2002 list is based on revenue growth from 1999 to 2001.

The winners automatically are included in the Fast 500 Europe list, compiled by the Financial Times World Telecommunications Conference of companies in twelve European nations. Declaration of the Fast 500 will be made in London on December 2 and 3, in the presence of hi-tech and venture capital leaders.

The winning companies will also be invited to participate in the prestigious forum of the Fast 500 CEOs, cohosted by Forbes magazine.

VersaMed's revenues grew by 3,420% from 1999 to 2001. The company markets a range of intelligent ventilation systems for medical uses.

It was followed by Schema, a provider of optimization and planning solutions for wireless networks, with 3,039% revenues growth. Third place was awarded to data connectivity company Expand Networks, with growth of 2,061%.

VersaMed Inc. is privately owned.

Established in 1994, is developing an innovative range of computer-controlled portable ventilators, called "iVent", to be used in hospitals, sub-acute and alternate-site care centers, at home or in transport for emergency resuscitation, post-operative intensive care units, respiratory assistance and a wide range of respiratory diseases. The iVent's innovative technology enables the iVent 201 to be lightweight, portable, self-contained, easy to use and revolutionary in its cost/performance ratio.

Nepalese Benefit from Israeli Eye Saving Surgery

For decades, Nepalese have been told that blindness is one of the major health problems of the country. What is less known, however, is that the condition can be prevented and cured. According to a study conducted by the World Health Organization and His Majesty's Government in 1979, 80 percent of blindness cases can either be prevented or cured through appropriate and timely intervention.

Seventy-eight percent of the preventable cases are due to cataract, which is the leading cause of blindness in South Asia. In the past, the treatment of cataract was quite complex. The affected eye lens had to be surgically removed and a thick eyeglasses put on, without which the patient would be almost blind. Then came along the technique of replacing the infected lens by an artificial one. This technology enabled the patient to see perfectly without an eyeglass. Still, the patient took two months to recover from the operation.

With the advent of new technology, the same operation now takes 15 minutes. The patient can go about his or her normal routine within 24 hours. Nepalese patients, too, can now avail themselves of this innovation.

A group of senior Israeli ophthalmic surgeons recently arrived in the country to teach Nepalese doctors this technology. The visit by the Israeli doctors was made possible jointly by Nepal Ophthalmic Society (NOS), Mashav Cooperation, the government of Israel and Nepal Eye Hospital (NEH).

A practical training and demonstration program on the latest surgical technique, known as Phaeco-emulsification, was held for Nepalese doctors from August 14 to 21 at the NEH. A delegation of eminent Israeli surgeons, Prof. Dr. Dov Veinberger, Dr. Moshe Lusky and Dr. Slomi, organized the camp. The new technology uses a folding lens that replaces the unhealthy one almost without hurting the eye. In earlier technology, the lens that was replaced was non-folding. Hence, it was hard to insert it into the patient's eye.

"But this technology uses a folding lens to replace the ill lens, which is cleared out after breaking it into tiny pieces," said Dr. Banshi Krishna Malla, medical director of the NEH, who is also director of the NOS.

One drawback is the high cost of the equipment and the lens. "A single folding lens costs Rs. 10,000," said Dr. Malla. "The non-folding lens used to be imported from the United States at 25 to 50 US dollars per piece. But as soon as NEH started production in Nepal, its price came down by 15 times (to less than $4)," Dr. Malla added. "The cost of folding lens, too, will eventually come down."

Forty-eight patients benefited from the technology during the training. The Israeli team provided the lenses free of cost. The Continuous Medical Education program of updating and uplifting knowledge of important diseases like glaucoma, vitreo-retinal and related problems was another significant aspect of the program.

"These kinds of programs are very useful for our ultimate goal of VISION 2002: The Right to Sight," said Dr. Malla. He said such programs would continue in days to come. "This program has opened the doors of hopes for Nepal's blind patients," said Avraham Nir, Israeli ambassador to Nepal.

Israeli Startup Finds "bug" in Microsoft Outlook

Israeli startup Beyond Security has found a bug in Outlook, the popular email program by Microsoft (Nasdaq:MSFT). The breach allows hackers to take control of a remote PC, without the user opening any email message.

Beyond Security specializes in managing, testing and monitoring data security systems for enterprises. It has contacted Microsoft about the bug and cooperated with it to plug the breach.

The startup recommends that Outlook users download the solution, which blocks access to hackers, from Microsoft's website.

"This kind of attack is particularly dangerous because there is no need to open attachments or even read an email, because the attack is carried out through the preliminary presentation screen," explains a source at Beyond Security.

Beyond Security has over 2,000 customers around the world for its data security products and services. It says its customers include IBM, Spain's Telefonica and Israeli phone company Bezeq.

Surgeons in Italy and Israel Perform Telepresence Surgery

Computer Motion, Inc. (Nasdaq: RBOT), the world's leading developer of surgical robotic systems serving over 900 customers and 3,000 surgeons in 32 countries, today announced that Dr. Moshe Rubin at Rabin Medical Center Hospital in Tel Aviv Israel used the SOCRATES™ Robotic Telecollaboration System during a procedure performed by Prof. Cristiano Huscher at S. Giovanni Hospital in Rome, Italy. The SOCRATES System enabled telepresence allowed Dr. Moshe Rubin to share control of the AESOP® Robotic Endoscope Positioner, to visually annotate the surgical image during the procedure, and to monitor the status of additional medial devices.

The procedure on a 41 year-old patient from Palermo, Italy was a complete success. It is expected that the patient will be discharged within 24 hours, and will be able to return to normal activity within 3 days. The minimally invasive robotically assisted approach,

practiced by the surgeons, will reduce the pain and trauma to the patient, and will allow him to recover much quicker than using a traditional "open" surgical approach. Dr. Moshe Rubin stated, "Although I was physically thousands of miles distant from the patient, I felt truly as if I were present in the operating room. I was able to participate in the progress of the case, and I am very grateful to Prof. Huscher for this chance to collaborate using this new technology."
Prof. Huscher stated, "The ability to include peers and mentors in these advanced robotic cases will certainly bring many more physicians the confidence they need to adopt the minimally invasive approach. Learning is a constant requirement of the life of every physician today, and the experience of telepresence is a wonderful new way for surgeons to learn."

John Soto, Computer Motion's Vice President and General Manager, Operations for Europe, Middle East, and Africa, stated, "The ability of SOCRATES to deliver telepresence and allow surgeons from remote locations to telementor and telecollaborate is a key differentiator of Computer Motion's system of products. Remote education and training significantly aids the rapid adoption of robotic technology by collapsing time and space, and allows surgeons to further disseminate their expertise worldwide in a telepresent fashion."

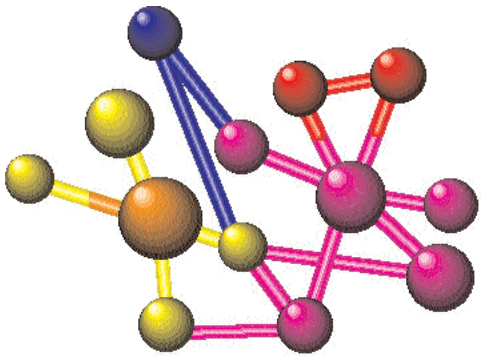
The SOCRATES Robotic Telecollaboration System is an integrated system of telecommunication equipment, networked surgical devices, and robotics that provides an efficient and economical pathway to enable remote mentoring and surgical collaboration. SOCRATES allows a surgeon located at a remote site to assist another surgeon who may be located in an operating room down the hall, across the country or on the other side of the world.

SECURITY

ECtel (Nasdaq:ECTX), which develops monitoring solutions and revenue assurance applications for incumbent and next-generation networks, recently reported record results for the third quarter and first nine months of 2002.
Third-quarter revenues were $24.3 million, compared to $20.8 million in the same quarter of 2001, an increase of 17%. Net income was $4.6 million, up 10% from the $4.1 million reported for the corresponding quarter of last year.
ECtel said its gross margins reached a new high of 60.5%, compared to 58.5% in the third quarter of 2001. Nine-month revenues increased by 23% to $71.6 million from $58.3 million in the first nine months of 2001 with net income for the nine-month period increasing by 35% to $12.9 million compared with $9.6 million.
ECtel president and chief executive Aharon Shech pointed out that telecom sales declined in the quarter as expected, but that demand for the company's government surveillance systems continued to increase, offsetting the weakness in the telecom markets.
ECtel's Intelli-View is a surveillance tool used by law enforcement agencies to trace and target suspicious entities through their use of the telecom equipment.

SCIENCE CORNER

New Research May Help to Advance Gene Therapy



Twenty thousand hits per day – that's the average dose of damage sustained by the genes within each cell of our body. How are innumerable mutations avoided? In a study published in the October issue of Molecular Cell, Weizmann Institute researchers have proved the existence of a vital repair mechanism used by cells to correct this damage and showed that it's responsible for about 85% of what are termed "last-resort" repairs.
Genes can be damaged by a variety of factors, such as ultraviolet light, cigarette smoke, or certain types of viruses. Such damage, if left unrepaired, can cause mutations, which can lead to disease. The "first resort" for genetic repair is most often a mechanism that works on an "all or nothing" basis: when unable to precisely correct the damage, it stops in its tracks, leading to what can be an even more harmful effect – the death of the cell.

Fortunately, nature has provided cells with two alternative, last-resort repair systems that can take command when the first rescue mechanism fails. One system is inaccurate – it repairs genes while permitting the formation of a relatively small number of mutations. Though this poses a certain risk, it ensures the cell's continued existence. Equally important, it increases genetic diversity, allowing natural selection, the driving force of evolution, to come into play.

The other last-resort repair system was hypothesized by scientists in the 1960s yet was never proved until the current study. This system, which relies on the help of "sister chromosomes," enables the cell to repair genetic damage without the risk of creating mutations. (During the process of cell division, each chromosome - the structure in the nucleus that contains DNA - gives rise to two identical "sister" chromosomes. These move on to the two separate cells created from the dividing cell.)

According to this theory, if one of the sister chromosomes is damaged, the other can serve as a back-up system of sorts. The damaged genetic information can be restored precisely using the corresponding DNA segment from the other, identical chromosome. That segment detaches itself from the intact "sister" chromosome and moves over to the defective chromosome, helping to repair the damage. The gap created in the donor chromosome is refilled by using the segment from its remaining intact DNA strand (DNA consists of two matching strands) as a template. Both chromosomes end up with a complete, undamaged genetic segment.

In the new study, Prof. Zvi Livneh, head of the Biological Chemistry Department at the Weizmann Institute of Science, has for the first time observed this repair mechanism in action. Furthermore, Livneh and his team of researchers also showed that the repair mechanism based on a genetic "donation" from the sister chromosome is unusually common: it is responsible for 85% of last-resort repairs – those performed by alternative repair systems when the major, "all-or-nothing" repair mechanism fails. The second last-resort system – the relatively inaccurate repair mechanism that allows the creation of mutations – is responsible only for some 15% of repairs.

The repair mechanisms, studied in E. coli bacteria, are well preserved throughout evolution, which means that variants of these mechanisms exist and operate in more developed organisms, including humans. The new findings could thus provide important clues into human disease and help advance gene therapy. In addition, these findings could help tackle bacteria's mounting resilience to antibiotic drugs, which is credited to their ability to quickly mutate into resistant forms.

In the December Report

Shortage of Labor and Water are major problems facing Israel. In our end of the year issue we report on advances in agricultural research and development