

ISRAEL HIGH-TECH & INVESTMENT REPORT

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“Unleashing an Immune Response Against CNS Disorders”

A unique story. An outstanding person. A story behind the story. They rarely get the exposure that human interest stories deserve. We wish to share just such a story with you.

A number of years ago Gershon, a former editor of a science magazine in Canada, immigrated to Israel and helped us edit stories for our newsletter. He understood science and technology and was also a good rewrite man. But his body, more correctly his spine was nearly completely shattered in a car accident. He walked with the help of a cane and with a swaying movement. He assured us that he had accepted his fate and did not hope, in his lifetime for medical solutions.

In June 2002 we published a story captioned: Proneuron: Profile of a Highly Promising Biotech Company. The lead paragraph read as follows:

"Proneuron, Biotechnologies Inc. a Delaware registered company, is the first biotechnology company to apply the power of the body's own immune system for the treatment of permanent debilitating central nervous system (CNS) disorders. The six year old company bases its activities on the groundbreaking research of Professor Michal Schwartz of the Weizmann Institute of Science, which demonstrated the role of immune response in normal and pathological conditions in the central nervous system. Currently, Proneuron is focusing its expertise in cell therapy and neuro-immunology on the development and commercialization of a treatment for spinal cord injuries (SCI) as well as other neurological disorders, which until now were considered incurable."

We were reminded of Gershon. Could his spinal injury be alleviated?

Before we published our September 2003 IHTIR newsletter we received an e-mail: "My friend recently (August 9) injured his spine resulting in paralysis below his chest. He injured his 7th vertebrae but the cord was not completely severed. I am VERY interested to know if there are any macrophage trials that he could quali-

fy for in the US, Brussels, or Israel. Please contact me by e-mail or phone". (It was obvious that the writer had used Google, found our web site and had read about the ProNeuron spinal injury treatment.)

We supplied the contact data and were rewarded by another e-mail on August 20 "I felt that I should let you know my friend was accepted for the surgery in Israel. Thanks to the help of people like you everywhere, he was able to contact the right people. He and his mother will be flying into Tel-Aviv early Thursday morning. My parents, who are members of the Bahai faith, as well as

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A Historic Visit
AGIS, IHTIR's #1 Choice for 2003 Poised for further Growth

With the arrival of the Jewish New Year. We extend our best wishes for Peace with the knowledge that all other problems lend themselves to a simpler solution.

myself, have visited Haifa and say Israel is beautiful. Thanks again! I will always remember the kindness I have received in such a tough time.

Yet another message reached us, this time on Friday August 29:

"His surgery was completed on Saturday evening (Israel time) and it went very well. He will be starting rehabilitation today and will return home in about a month. There is no word on the success of the surgery yet, but hopefully time and prayer will bring good news! I hope this message finds you well".

Professional ethics do not allow Proneuron to discuss the procedure or supply any personal details but we did have a chance to meet with Professor Michal Schwartz of the Weizmann Institute of Science, whose scientific research forms the basis of Neuron's treatments for spinal injuries.

The science, the development of incredible technology, making it available to the world at large with Internet Technology are the elements of this big story.

While the political cartographers may not succeed in drawing the right Road Map Israel's role "as a light unto the nations" will continue through its science and medicine.

IHTIR Visits with Weizmann Institute Neuroscientist



Prof. Michal Schwartz, in the course of five years has become an internationally recognized neuroscientist. Based in Weizmann Institute's Neurobiology Department, several years ago she successfully challenged the commonly accepted wisdom, that immune cells were damaging to the central nervous system, and

specifically to the brain and spinal cord. Her research led to the conclusion that following neuronal injury, immune cells known as macrophages may be enlisted to encourage repair and renewed growth of damaged nerve fibers.

Severing the spinal cord or even a partial injury of the spinal cord, may cause complete paralysis of the organs innervated by the central nervous system, from the point of injury downwards.

The main reason is that damaged fibers create a 'hostile environment' which harms other, undamaged fibers. As a result, even in cases of partial spinal cord injury, the damage continues to spread, intensifying the paralysis.

Blocking the spread of damage may therefore save the nerve cells undamaged by the initial trauma. The research led to the founding of ProNeuron a start-up that is currently in the midst of human clinical trials. The procedure involves the adding of immune cells, known as T-cells, to block the spread of spinal cord damage.

This treatment is based on extracting immune cells from the patient's blood, increasing their amount, and then re-introducing them into the damaged neuronal area.

The results will be reported at the end of the clinical trials. In five years from now, the scientist believes that the natural activity of the immune system will serve as an important protector of nerve cells against degeneration and help in recovery following CNS trauma. Consequently, the immune system may be harnessed to attenuate neuronal loss in diseases such as Amyotrophic Lateral Sclerosis (ALS), Parkinson's disease and glaucoma.

Teva Pharmaceuticals recently, entered into a collaboration with Proneuron, for the development of Copaxone™ for various neurodegenerative diseases. This program is based on the concept of "protective auto-immunity", discovered and developed by Prof. Michal Schwartz.

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Is \$10 billion for Protection worth it?

The cost of equipping commercial jets with antimissile systems is estimated at \$10 billion. Yet aviation experts warn that the fall out costs associated with the downing of a jet, far outweigh the cost of the protection.

"The cost is so insignificant compared to what it will cost if we lose one or two aircraft to such an attack," according to Yuval Aviv, chief executive of Interfor Inc., an antiterrorism consultant to the U.S. government. He points out that people will avoid using planes and the effect on the economy could be substantial. Aviv, who was director of security for Israel's El Al airline in the 1970s, says that El Al jets are equipped with flare technology designed to deflect missiles, and its pilots are trained to respond to an attack.

Still, there are major questions about how effective such antimissile systems are, and who would bear the cost. In May 2003, the American Department of Homeland Security asked for proposals from makers of antimissile systems. The department is expected to hire two companies to develop prototype systems.

The American Raytheon Company is among the defense firms working on that technology. Raytheon's SafeFlight system combines missile-detection radar technology made by an Israeli company, Elta, with a Raytheon system. Originally developed for the U.S. Air Force - it is designed to defeat an attacking heat-seeking missile. Raytheon says its system is less expensive than competing laser-based solutions. The cost is estimated to be between \$500,000 and \$1 million per aircraft.

Legislation introduced in Washington calls for outfitting all of the roughly 6,800 planes in the U.S. commercial fleet,

with antimissile defenses. The cost is estimated at \$10 billion. Experts say the nation's struggling airlines could not afford the cost. Some suggest that money could be better spent securing airports and tracking down terrorists.

The foiled plot to smuggle a shoulder-fired missile into the United States for use against civilian airliners, is likely to boost stalled federal legislation to install countermeasures on commercial aircraft.

Focus on Technology to Protect Against Missiles

Technology to thwart shoulder-fired missile attacks already exists and is in use on some military and commercial aircraft.

Existing antimissile technology falls into four categories:

An infrared detection system using lasers to jam the missile's guidance system.

A "lamp-based" system that uses heat transmitters to confuse heat-seeking missile sensors.

Phosphorous flares that are deployed to divert a heat-seeking missile.

Thin, metallic "chaff" strips that are deployed to confuse radar-guidance systems

Two companies owned by the Israeli government, Israeli Aircraft Industries (IAI) and Rafael, are offering to develop civilian versions of their military systems.

IAI's Elta Systems division offers "Flight Guard" technology using phosphorous flares. The system is in use on 150 aircraft, including military airplanes and commercial aircraft used by heads of state and corporate executives. IAI spokesman Marvin Klemow declined to identify the commercial customers except to say that none is based in the United States.

Flight Guard uses six sensors that provide 360-degree coverage. The sensors automatically detect a missile, confirm a threat, and deploy some or all of the phosphorous flares on both sides of the fuselage.

Klemow cited an attack in November 1997 when four troop-carrying Sri Lankan helicopters were targeted by rebels with shoulder-fired missiles. Three helicop-



ters with the Flight Guard system avoided damage, but an unequipped helicopter was downed.

Concerns about the Flight Guard system have focused on the possibility of ground fires ignited by the flares. "This is nonsense," Klemow said. "The flares burn hot and quickly - really like a hot gas - without any residual flame."

Klemow said the Flight Guard system would cost about \$850,000 per plane for 200 planes.

He also said the flares would not fire if the plane was too low, reducing the risk of them hitting the ground. The infrared system using lasers was developed by the American Northrop Grumman Corp. The company is seeking to adapt for civilian use its LargeAircraft InfraRed CounterMeasures system, which it developed for C-17 Globemasters and other large transport aircraft and helicopters.

Missile-warning sensors automatically detect an incoming infrared missile either at launch or in flight. The sensors signal a processor that confirms a missile attack, as opposed to some other heat source. A confirmed threat causes a turret to swivel and emit a modulated laser beam that hits the missile's "seeker" and turns it off course.

Jack Pledger, Northrop's director of infrared countermeasures, said that for commercial use, an external pod or "canoe" containing the sensors, processor and laser turret would be installed on the exterior of the aircraft.

Pledger said it would cost about \$2 million per airplane to buy canoes for 300 aircraft, a cost that could be halved if it were installed on 1,000 aircraft.

The window of greatest threat from a shoulder-fired missile is described by experts as the 30 minutes after take-off and the 30 minutes before landing. Most such missiles, including the Russian-made SA-18 Igla involved in the New Jersey sting operation disclosed recently, are effective up to about 15,000 feet, Pledger said.

By comparison, to effectively control the launch area from which a missile could effectively be targeted against a plane, about 300 square miles surrounding each runway would have to be patrolled, the experts said.

The second Israeli government firm, Rafael, has a technology called "Britening" that employs sensors that detect a missile. It then emits a hot beam of photons (light) to disrupt the missile's heat-seeking guidance system.

BAE Systems, a British firm, has developed the Matador, a "lamp-based" system that employs a matrix of heat transmitters to fool the heat-seeking sensors in the missile. The Matador is deployed on some military aircraft, government airplanes and business jets.

Concerns about shoulder-fired missiles being used by terrorists increased in November 2002 after an unsuccessful attack by two missiles on a chartered Israeli jet in Mombasa, Kenya.

In February 2003, Senators Barbara Boxer, D-Calif., and Charles E. Schumer, D-N.Y., introduced legislation requiring that countermeasures against shoulder-fired missiles be placed on all of the about 6,800 commercial airplanes in the United States beginning at the end of this year. Last month, the Senate approved a \$60 million appropriation for the research and development of such countermeasures.

In a letter to Homeland Security Secretary Tom Ridge, Boxer said the New Jersey sting operation was another warning of the threat from shoulder-fired missiles. Failing to act means "we will be culpable for not moving fast enough to protect the American people from this threat," she said.

Israeli Firm has Chilling Plan for London Subway

Reuters has published a report about an Israeli company that has proposed cooling down sweltering London Underground platforms by placing snow-making machines above ground.

I D E
Technologies



Ltd, a desalination plant developer confirms it had submitted the plan as part of a contest announced by London Mayor Ken Livingstone last month inviting proposals to help commuters beat the heat.

The Reuters report quoted Avshalom Felber, IDE Technologies' president and chief executive officer, who said snow made by machines at street-level would be delivered through pipes into containers placed in train tunnels or at platform entrances.

Trains whizzing through the tunnels would create air currents causing cold air from the containers to circulate and cool passengers in stations.

"We use this snow machine technology to cool gold mines in South Africa," Felber added.

An extraordinarily hot summer this year prompted Livingstone to offer a 100,000 pound (\$159,000) prize for the best solution for cooling the Tube, as London's underground is called.

Felber gave no estimate for cooling all of London's 12 Underground lines. But he said it would take six snow-making systems, each costing about \$6 million, to cool the 22.5 km (14 mile) Circle Line, which passes through 27 stations.

Schwarzenegger is Invested in Israeli High-Tech

Arnold Schwarzenegger one of the current candidates to replace Gary David as governor of California is an investor in Israeli CellGuide, according to his financial disclosures. made ahead of his first political competition.

CellGuide is a fabless communications semiconductors firm that has developed a unique satellite-based global positioning technology. Its product enables the rapid, and accurate, location of mobile devices such as cellphones, beepers, and computerized PDAs. In the future its technology could serve to supply advanced location-based services, such as finding lost children or missing cars.

The startup was launched by a former Israeli army officers, is headed by Joseph Nir. Other investors include the Samson venture capital fund and Cap Ventures. Customers include the European space agency and the Red Cross. Strategic investors include Texas Instruments and Motorola.

Watchdog's Novel Technology Can Detect Terrorist Threat

Israeli security technologists are developing replies to terrorist threats on the home front while looking toward the massive American security market.

An Israeli start-up has developed a technology that uses biosensors and digital signal processing analysis to determine whether a watchdog is responding to routine events or to someone penetrating its territory.

Eyal Zahavi, chief executive of DBS Watchdog Alarm Systems. says that the idea was hatched during his military service.

The new technology called Watchdog is an integrated biometric alert sensor. It can turn almost any alert canine house pet into a sophisticated warning system that can detect an intruder and take action even when no human being is at home.

Watchdog's computer-based security system, which can be integrated into existing security systems such as central control systems, home alarms, and CCTV monitoring systems, monitors the barking of dogs to provide information about security breaches. When a dog senses an intruder in the vicinity of his territory he starts to bark or growl, and the Watchdog system goes into operation.

The heart of the technology is a series of proprietary data processing algorithms, which digitally sample the signals, identify, filter and analyze the data profile according to predetermined parameters. The system can determine the alert state of a specific dog in a given area and location, including whether it is in a state of suspecting or engaging intruder/escaper. The system is comprised of 3 principal units:

- a sensor input unit
- a processing and analyzing unit
- a user security terminal

The patent pending system can be installed in the dog's collar or stationary sensors, and is operational in all weather conditions. Tests so far have proven the system to be nearly completely accurate, according to the company.

The company plans to launch a commercial version of its product in the last quarter of the year in Israel. Zehavi admits that the company views the Israeli governmental market as an operational "seal of approval," and a launching pad to the US, European, and Far East markets.

Biometrics Applied to Protect Against Unauthorized Entry at Israeli Airport and at Palestinian Border Crossing

Nearly twenty years ago, El-De, a small Jerusalem based company was among the global pioneers working on developing a fully digitized fingerprint system, in which a "live" fingerprint would be electronically compared with the fingerprint image recorded digitally in the system's memory unit. In 1984 the world had not experienced the September 11 attack and security issues were not the agenda of the investment community. A German company had provided seed money but El-De failed when an American initial public offering was cancelled.

Today, El-De would have a relatively easy time in raising capital as technologies that scan faces and fingerprints are on the drawing board to become a standard part of travel for foreign visitors to the United States.

The rush to develop and to bring to the market the underlying technology, known as biometrics, following security concerns after the attacks on Sept. 11, has greatly accelerated.

By October 26, 2004, the State Department and Immigration Bureau will begin issuing visas and other documents to foreign visitors, with the body-identifying technologies. The change is mandated by border security legislation passed by the American Congress in May 2003.

Officials from the American State Department said that mandatory use of the biometric identifiers is scheduled to begin in three years.

Biometric systems take digital measurements of a person's fingerprints, face, retinas or other characteristics and store the information on a computer chip or a machine-readable strip, which can be retrieved at border check points.

Upon arrival, travelers will be asked to put their fingers on scanners and to stand in front of facial recognition cameras to see if their measurements match the ones stored on the visa or passport. Biometric systems



tested by the United States at the Mexican border have been sensitive enough to distinguish between identical twins.

Israel is very sensitive to the issues of personal security and more than two years ago have adopted a fingerprint recognition system.

This system is deployed at Ben Gurion Airport in Tel Aviv, and processes tens of thousands passengers each month through immigration with RSI HandReader kiosks. The new 'Dual-Biometric Recognition System, produced by the American IR Recognition Systems company combines hand geometry and face recognition technology to create a redundant, convenient and highly accurate system for identifying and verifying the identity of individuals, according to unique physical traits parameters.

The airport reduced processing times to less than 20 seconds, and has become very popular with the traveling public. Israeli citizens and frequent international travelers at Ben Gurion now go through the airport's automatic inspection kiosks. During enrollment, the system captures biographic information and biometric hand-geometry data.

During arrival or departure, travelers use a credit card for initial identification, and the system verifies their identity with the HandReader. The system then prints a receipt to allow travelers to proceed. Ben Gurion's biometric identification system has reduced or in some cases eliminated waiting times for travelers. Nearly 80,000 Israeli citizens have enrolled in the system, which completed more than 1 million inspections the first year of use.

Israel Ben Haim, managing director of Ben Gurion International Airport, is extremely pleased with the system. "Tighter security expedites air travel, and more efficient operations help make our airport one of the world's best," he said.

Another dual hand-face biometric system is about to be deployed at the Israeli-Palestinian land border for improved border control and faster processing.

Yona Flink, CEO, OptiSec Ltd. a biometric company founded in 1994, founded the company that provid-

ed the software solutions for the Ben Gurion Airport Project.

"The rationale for a biometric solution at border crossings is related to Israel's need to allow open borders that would allow for the Palestinian population to enter and exit Israel, while at the same time being able to verify very quickly the identity of the individuals entering or exiting Israel."

Since 2001, the security requirements have become far more stringent than in 1997. However, even with increased security requirements, Israel required that the method used for identifying individuals remain as user friendly as possible, secure, and with little or no interference on the part of Israeli personnel.

Among Israel's security issues is its need to seal its borders against terrorism while allowing Palestinians to enter and exit Israel in order to conduct their business, visit families, and work in Israel. The 40,000 workers arriving daily from Gaza need to enter Israel within three hours and exit at the end of the working day. This means that 200 Palestinians have to be 'security checked' every day in the morning and then again in the evening. A manual check manually would require hundreds of persons to man the security check points without guarantee of reliability. By using HandGeometry, people entering or exiting Israel can be verified or rejected within two seconds. The HandGeometry readers operates non-stop 24 hours a day.

Palestinians, wishing to enter Israel, will be issued a highly secure smart card after first enrolling into the system, receiving clearance that they have no previous security or criminal records, and that they are not previously enrolled in the system under an alias. The smart card will hold substantial amounts of information including biometric templates and personal and security data.

A Palestinian wishing to enter or exit Israel at a border crossing checkpoint, will present his smart card to a biometric kiosk, the gate will open, he will place his hand on the reader, be biometrically verified as claimed, and after being cleared for entrance into Israel, the gate will open and allow him to enter or exit Israel.

The borders themselves will be protected with the most

advanced technology available in fencing, CCTV, intrusion detection and electronic surveillance.

Security and the war on terrorism is an on going battle, that requires the use of the most advanced electronic and biometric technology, but at the same time it must not inconvenience the law abiding citizens that need to enter and exit Israel on a daily basis.

Biometrics will allow Israel to automatically verifying a person's identity in the shortest possible time, the most user friendly way, and maintain its high level of security.

Recently, Smart card On Track Innovations, Ltd., (OTI) (Nasdaq: OTIV; Prime Standard [Frankfurt]: announced that it has completed another stage in the delivery of the infrastructure toward the installation of the Basel Project, a cross-border contactless access control system.

The first border center at the Erez checkpoint between Gaza Strip and Israel, is scheduled to open later this year. When fully operational, the system will monitor the entrance and exit of approximately 120,000 daily workers while assuring a secure, and what is claimed as an exceptionally fast border crossing.

The project, awarded by the Israel Ministry of Defense (MoD) and the Israeli National Police, is the first border control system in the world to use both hand and facial biometrics with contactless chip technology as the primary methods of identification.

Those wishing to cross into Israel will be required to obtain a contactless smart card that will be programmed with hand and facial biometrics and include recent photos and personal information programmed on a contactless chip embedded in the card.

The border crossing, which is expected to take no more than four to nine seconds, will be required to wave the card in front of a reader and place their hand on a biometric sensor for identification. Once the identity has been confirmed, an automatic gate will open allowing the person to cross into Israel.

Cracking the Encoding System for Cell Phones

Researchers at the Israeli Technion Institute of Technology state that they have found an effective way to crack the encoding system for cellular telephone conversations conducted over GSM (Global System for Mobile) networks, allowing eavesdroppers to listen in on conversations and even take on a caller's identity.

The research has aroused great interest among cellular companies and equipment manufacturers, but none of the companies are ready to comment on this potential threat to the security of cellular networks.

The GSM Association, representing companies which depend on the world's largest mobile system, confirmed the security hole but said it would be expensive and complicated to exploit. GSM is one of the two standards widely used for cellular service. There are now some 540 cellular companies providing GSM services to approximately 870 million subscribers throughout the world.

In order to solve the encoding problem identified by the Technion researchers, cellular companies would, among other measures, need to replace all of the cellular phones used by their subscribers.

GSM systems are considered relatively secure. The only case of widespread eavesdropping on cellular telephone conversations in Israel involved tapping into the phone conversations of senior news reporters at two of the country's daily newspapers. This eavesdropping was conducted with a system developed by ECI Telecom for use by intelligence agencies. The system was only capable of intercepting conversations on analog network, and is not effective in tapping into the digital networks now deployed in Israel.

Cellular conversations are conducted via digital signals. During the cellular conversation, there is also a filtering process of signals passing between the cellular phone and the nearby antenna.

The Technion team explained at the conference that their system of cracking the GSM encoding mechanism would enable hackers to "hunt" codes used by cellular phones by collecting the digital signals sent to

and from the cellular antennas. They could then eavesdrop on conversations by entering the cellular network "disguised" as one of the cell phones whose codes were cracked.

This does not mean that it is impossible to listen in on cellular conversations. Each of the cellular providers are equipped with systems that enable locating and tapping into each conversation in its network. The license these companies received required them to allow authorized agencies to listen to any conversation after presenting an appropriate court order.

Intelligence agencies operating in foreign countries, private investigators and criminal elements would all be happy to get their hands on a device that enables them to eavesdrop on cellular conversations. The findings of the Technion team, which has already applied for a patent, is likely to enable a relatively inexpensive device to be built that will increase the risk of eavesdropping on the cellular conversations of GSM users.

(It is generally assumed that the U.S. National Security Agency (NSA) - which has received larger budgets in the wake of the September 11 terrorist attacks - has cracked the GSM code and is capable of tapping into any telephone in the world.)

Even if the cellular companies choose not to fix the breach discovered in the GSM security system, this problem will disappear when the cellular operators move to the third generation of cellular technology. The problem does not exist in this next-generation standard.

Snooping on mobile calls was fairly simple with analog networks, but since the advent of digital technology like GSM in the early 1990s this has become much harder. The researchers said they would help the GSM Association to fix the hole. The method will be patented and usage will be restricted to law enforcement agencies.

The GSM Association said the problem would not affect third-generation (3G) phones since engineers had replaced the encryption, security mechanisms and protocols with 3G.



Pitango is Reported to be Raising Capital for New Fund

Pitango, Israel's largest group of venture capital funds, has begun raising capital for a fourth \$400-500 million fund, say sources close to the fund.

Existing investors have been contacted in recent months, to gauge interest in a follow-on fund. whose first stage, of \$100 million, is planned for closing in a few months.

The Private Equity Analyst journal recently published a list of international funds that will start raising financing in the second half of 2003, including Pitango. The magazine noted that the report was based on conversations with partners, interviews and tips it had received.

Pitango's fundraising is expected to be the largest capital-raising exercise of an Israeli venture capital fund in the coming year.

The Israeli venture capital industry is stirring after more than two years of relative inactivity. At the September Journey '03 Life Science Conference held in Tel-Aviv there was a definite air of optimism. Several speakers suggested that the Israeli venture capital industry would expand its investments in the coming year.

A Deloitte Touche Israel survey of 50 venture capital managers found that 35% of funds have plans to raise funds next year. Sector sources name the largest funds, mostly those who financed their last funds in 2000, as those likely to raise capital in 2003 and 2004 with their sights on \$1-1.2 billion dollars. These include Genesis, Giza, Gemini and Jerusalem Global, all planning efforts to raise \$100-200 million.

The local industry is watching Pitango's fourth fund effort closely, as Pitango is considered one of the most prominent funds in Israel in terms of capital under management and exits. Pitango was partner to one of the two largest exits in the Israeli technology sector in 2003 - the \$150 million sale of RAD-

Bynet venture Radlan to U.S. broadband communications and storage giant Marvell. Pitango had a 9% stake in the company and pocketed \$10 million on the deal.

Some of the prominent investors in Pitango's last fund include investment bank JP Morgan which has a \$100 million capital commitment to Pitango III, the Koor concern with its \$35 million and real estate tycoon Alfred Akirov's AI Rov.

Is the outlook for Israel's high tech industry improving? According to Deloitte and Touche - Brightman Almagor's third quarter Venture Capital (VC) Indicator survey, 54% of Israeli VC managers expect the economic situation to improve, compared with 46% three months ago.

The survey also noted an improvement in expectations that funds would raise money sooner rather than later, with 35% of VC managers saying they expected to raise their next fund in 2004. Three months ago, only 17% of managers said they could reach such a target.

QuantomiX Raises \$3.5 m. in Second Financing Round

QuantomiX Ltd, an Israeli life science company which develops and markets capsules that enable on-line accurate analysis of wet cells and tissue biopsies in an electron microscope, has raised \$3.5 million in a second financing round.

Vitalife, the Israeli life sciences venture capital fund, led the round and was joined by Pitango Venture Capital, which led the previous round for QuantomiX, and SFKT.

QuantomiX, founded in 2001 by CEO Dr. Ory Zik and Chairman of the Board Dr. Michael Brunstein, has solved a 50-year-old problem of direct imaging of hydrated samples in an electron microscope. QuantomiX's proprietary capsule technology enables direct high resolution imaging of cells and tissue biopsies in research, patient care and drug discovery. The platform, now at the Beta development stage in leading research institutes in the US and Israel, is set to be marketed first in the US and then in Europe and Japan.

Dr.Zik said: "Our strategy is to build a profitable business in a relatively short time by capitalizing on the research market, while gradually expanding our

presence in the medical and drug discovery markets. We have identified a number of applications, each with large market potential, which we are investigating with global market leaders. These include neural diseases, cancer and metabolic diseases".

Discretix raises \$12m.

Israeli start-up Discretix Technologies completed a \$12 million financing round a few weeks ago. Discretix develops silicon-based information security solutions. Poalim Capital Markets - Investment Bank, Jerusalem Global Ventures, Pitango Venture Capital, Genesis Partners, and Accel Partners of the US participated in the round. Discretix has secured commitments for \$9.5 million, with the remaining \$2.5 million due to be received shortly.

Simultaneously with completing the financing round, Discretix is rebuilding its marketing network. Under the changes, its sales and marketing will be handled from an office set up in Europe. Meanwhile, Discretix continues to enjoy revenue from its deal signed last December with cellular equipment giant Ericsson (Nasdaq:ERICY), under which Ericsson is installing Discretix's CryptoCell product in its next-generation cellular devices.

Discretix develops full information security systems for the enterprise, entertainment, and financial services markets. In the financial services market, Discretix operates through partnerships. The company's technology will be installed in tens of millions of cellular telephones worldwide, beginning in late 2003.

Discretix's solution defends against damage from viruses and break-ins to end devices (cellular telephones, handheld computers, personal computers.) Its product is based on technology installed on the silicon chips that are integrated in the chips in the cellular telephones. The technology enables cellular telephones to serve as electronic wallets, as a link to enterprise networks,

Netanya-based Discretix was founded in 2000 by CEO Gal Salomon, VP research Limor Elbaz, and VP engineering David Deitcher. All previously worked for DSPC, a developer of chips for cellular telephones, which Intel (Nasdaq:INTC) acquired for \$1.6 billion. In its first financing round, Discretix raised several million dollars from Shrem Fudim Kelner Technologies and Eurocom Communications, which still own shares in the company. **Quigo Launches AdSonar Contextual Advertising Platform**

Quigo Captures Valuable Client

Quigo Technologies Inc., a young developer of proprietary search solutions for online contextual advertising, search engine marketing and business intelligence, recently announced the launch of the AdSonar™ contextual advertising solution. AdSonar enables online publishers and licensees to serve contextually targeted advertising that achieves greater relevancy, reach and revenue for publishers, licensees and advertisers alike. Overture, has licensed Quigo's AdSonar, and will combine their solution with AdSonar's powerful, dynamic capabilities. Overture is a subsidiary of Yahoo and the license will provide Quigo with its first substantial flow of revenues.

AdSonar achieves superior relevancy by integrating automated semantic technology with human intelligence. AdSonar uses proprietary semantic algorithms to automatically identify, match and deliver the most relevant ads to each particular content page.

AdSonar's contextual advertising technology can be set up to support foreign languages within a matter of days. Using patent-pending semantic algorithms, AdSonar creates ontologies - networks of concepts and relationships between them - in most languages automatically.

AdSonar offers advertisers the opportunity to present their products or services in an environment more conducive to purchasing, while more effectively reaching their desired target audience.

Online contextual advertising is part of the fast growing search engine marketing industry, which experienced growth of 275% in 2001 and 325% in 2002 to \$927.4 million in the US, according to the Interactive Advertising Bureau. "We believe online search engine marketing will continue its impressive growth, possibly exceeding an estimated \$7 billion in 2007 worldwide revenues, and contextual advertising, although in very early stage, it is one of the fastest growing new segments within this industry," says U.S. Bancorp Piper Jaffray senior research analyst Safa Rashtchy. "Through its technology and now this relationship with Overture, Quigo has established a solid presence in this industry."

Quigo was founded by Yaron Galai who serves as its COO and Oded Itzhak who is its CTO.



Medical Compression Signs Contract with Hill-Rom

Israeli startup Medical Compression Systems has secured an exclusive distribution contract with U.S. medical equipment giant Hill-Rom. The American company markets MCS orthopedics, vascular care and wound care products in the U.S., Canada, Great Britain and Australia.

Industry sources estimate that MCS revenues from the contract's first year could amount to \$5-10 million, with a longer-term potential of 20% of the U.S. market for MCS's ActivCare.

MCS, founded in 1997, is involved in the development, manufacture and sale of mechanical equipment that prevents blood clots, which cause potentially fatal pulmonary embolisms.

Hill-Rom, which markets healthcare products to professional caregivers with sales of \$1.2 billion last year, will launch the anti-clotting product to 4,500 medical centers in the U.S. in the fourth quarter of this year.

OpenTV Acquires BettingCorp for \$10m.

OpenTV (Nasdaq: OPTV) announced the acquisition of Israeli company BettingCorp for \$10 million. OpenTV estimates that it will invest another \$3-5 million in BettingCorp's business development and products. BettingCorp has developed technologies and services for interactive games and gambling.

OpenTV provides technologies, content, games, tools, applications, and services to cable and satellite TV companies with a total of 47 million subscribers in 70 countries, including 20 million subscribers in the US. OpenTV employs 440. In 2002 it lost \$9.2 million on revenues of \$15.7 million.

BettingCorp has developed technology that makes it

possible to provide interactive games and gambling over the Internet, interactive TV, and wireless platforms through one back



end set-up and one user account. The company serves 6.8 million customers of British Sky Broadcasting, and works with the three Israeli cable companies. BettingCorp has also begun to market its systems to hotels for games on their internal networks. The company also operates two Internet gambling sites.

Founded by Michael Lobel, BettingCorp has its headquarters in London, and a development center in Israel. No information was disclosed about the future of the Israeli branch.

Lobel previously founded Cellular Magic, which developed a platform for online games and gambling. He also founded Take Aim, which developed two gambling websites: ibetcha.com, created by Israelis Omer Shvili and Tali Cohen.

A Historic Visit

The recent visit by Israel's Prime Minister Ariel Sharon to India is expected to advance defense deals, including the sale of more than \$1 billion Israeli airborne early warning radar system. The three Phalcon radars would put large parts of Pakistan under Indian surveillance.

Israeli officials accompanying Sharon said they did not expect the Phalcon deal to be signed during the four-day visit, but hoped it would be finalized in the next two weeks.

India also wants to buy the \$2.5 billion Arrow anti-ballistic missile system from Israel, but has yet to win U.S. approval.

Washington sources cited concern that an Arrow-armed India could prod Pakistan into expanding its ballistic arsenal and create a repeat of last summer's nuclear standoff in the subcontinent, when the two nations came close to a fourth war.

AGIS, IHTIR's #1 Choice for 2003 Poised for further Growth

At the outset of 2003 IHTIR featured a report on Agis Pharmaceutical with a caption "AGIS: IHTIR's #1 Choice for 2003 (<http://ishitech.co.il/specnews.htm>)

We then wrote "Agis Industries (1983) Ltd. is Israel's second largest pharmaceutical company. It is strategically positioning itself to move from being a local diversified pharmaceutical and consumer products enterprise into a specialized global pharmaceutical company."

Agis shares have appreciated by more than 80% since the start of 2003. The financial reports continue to reflect strong growth and we continue to maintain a very positive stance.

Quarterly revenues were up 24% to NIS 435.8 million, and up 26.5% to NIS 863.5 million in January-June.

Net income in the reported quarter totaled NIS 41.3 million, compared with NIS 11.7 million in the same period last year. Net income totaled NIS 28.7 million, an increase of 146% over the same period last year. (NIS 4.36=\$1.00)

The percentage of sales outside of Israel, mostly in the United States are likely to reach as much as 55% of all sales.

According to an analyst report; Agis' US subsidiary Clay Park Labs (CPL) (34% of revenues) which develops, manufactures and markets generic dermatology products, has gained six FDA approvals since December 2001, most of them were first in the market, leading to a sharp improvement in results. In addition Chemagis, (20% of revenues), which develops and manufactures active pharmaceutical ingredients (APIs) for generic companies (including CPL and Teva) continues to grow at a fast rate as its product range increases. Both companies have a very strong pipeline of pending FDA approvals, which should add over US\$ 30m to 2003 revenues.

Its US subsidiary CLP has 10 applications for registering new generic products filed, with an estimated ethical market turnover of \$400m. The company believes that by the end of 2003 it will have obtained seven new products. Chemagis also has about six approvals pending for 2003. We assume that the combined effect of these new products would add about \$ 30m to revenues in 2003, an assumption which could prove to be very conservative given the agreement with Dermik.

We base our forecasts on the strong pipeline of CPL and

Chemagis. Agis is growing from a local diversified pharmaceutical and consumer products enterprise to a specialized global pharmaceutical company.

In October 2002, CPL signed an agreement with Dermik Inc., an American pharmaceuticals manufacturer, for the sale and distribution in the U. S. of a generic drug, beginning from the first quarter of 2003. The company projects that sales from this product will reach US\$ 15m in 2003

Agis is expected to announce in the near future an alliance agreement with an American drug company, which will market a patented topical treatment made by CPL for a product that recently received a FDA permission. The cream in question is protected by a patent, and treats skin infections with annual sales of around US\$ 70m. Upon signing the agreement, Agis is expected to receive a one-time payment of over NIS 50 million from the American company.



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