Business Tips
Investment in Mexico’s Pharmaceutical and Biotech Industries

The Lifestyle
Mexican Refuges of Yesteryear

Negocios para exportadores

HEALTHY BUSINESSES
Medical Devices, Pharmaceutical and Biotechnology Industries in Mexico
The government of Mexico has set out to transform our country based on five major national goals: to have a peaceful, inclusive, well-educated, prosperous and globally-responsible Mexico.

In order to build the prosperous Mexico we long for, we must generate sustained high economic growth that results in more and better jobs that will improve the quality of life of our population.

Mexico has a solid foundation on which to attain these goals: healthy public finances; a manageable debt level; a budget with no fiscal deficit; a responsible and autonomous monetary policy, as well as adequate international reserves. Our macroeconomic stability and institutional strength are enriched by a wide sociopolitical consensus that favors important transformations required to boost the development of our country. Through the Pact for Mexico, two constitutional reforms have been approved: one in education that will enhance the quality of teaching, and another in telecommunications, radio broadcasting and economic competition that will open up the sector and ensure competition throughout our economy. Furthermore, the Congress is analyzing a financial overhaul to increase the level of credit and make it more affordable.

Mexico offers certainty and confidence to investments, a business climate favoring productivity and competitiveness, and an ambitious plan to further develop infrastructure. Moreover, the country’s strategic geographic location and optimal legal framework for international trade, through a network of trade agreements with 45 countries, give us access to a potential market of over one billion people.

Mexico’s exceptional economic and geographic conditions, as well as the talent and quality of its human capital, make it the ideal destination for new productive capital to flourish.

This is the time to invest in Mexico. Investors will find the government of Mexico and ProMéxico to be allies committed to the success of projects that create quality jobs and prosperity for the country.

Enrique Peña Nieto
President of Mexico
# Table of Contents  September 2014

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>Business Tips</strong></td>
</tr>
<tr>
<td></td>
<td>Investment in Mexico’s Pharmaceutical and Biotech Industries</td>
</tr>
<tr>
<td>29</td>
<td><strong>Guest Opinion</strong></td>
</tr>
<tr>
<td></td>
<td>The Pharmaceutical Industry in Mexico</td>
</tr>
<tr>
<td>32</td>
<td><strong>Mexico in the World</strong></td>
</tr>
<tr>
<td></td>
<td>Mexican Medical Services for the World</td>
</tr>
<tr>
<td>33</td>
<td><strong>Healthy Businesses</strong></td>
</tr>
<tr>
<td></td>
<td>Medical Devices, Pharmaceutical and Biotechnology Industries in Mexico</td>
</tr>
<tr>
<td>10</td>
<td><strong>Special Report</strong></td>
</tr>
<tr>
<td></td>
<td>Querétaro Believes in Innovation</td>
</tr>
<tr>
<td>22</td>
<td>Check In and Get Checked Up</td>
</tr>
<tr>
<td>24</td>
<td>Beach and Stethoscope: Medical Tourism in Western Mexico</td>
</tr>
<tr>
<td>26</td>
<td><strong>Briefs</strong></td>
</tr>
<tr>
<td>32</td>
<td><strong>Figures</strong></td>
</tr>
<tr>
<td>32</td>
<td>Mexico’s Partner</td>
</tr>
<tr>
<td>34</td>
<td>Neolpharma</td>
</tr>
<tr>
<td>36</td>
<td>Industrias Vepinsa</td>
</tr>
<tr>
<td>38</td>
<td>Laboratorios Tornel</td>
</tr>
<tr>
<td>40</td>
<td>Liomont</td>
</tr>
<tr>
<td>42</td>
<td>Biografi</td>
</tr>
<tr>
<td>44</td>
<td>Eumex</td>
</tr>
<tr>
<td>46</td>
<td>Össur</td>
</tr>
<tr>
<td>48</td>
<td>Tecnología y Diseño Industrial</td>
</tr>
<tr>
<td>50</td>
<td>Atramat</td>
</tr>
<tr>
<td>52</td>
<td>Industrias Plásticas Médicas</td>
</tr>
<tr>
<td>54</td>
<td>Becton, Dickinson and Company</td>
</tr>
<tr>
<td>56</td>
<td>Dentalia</td>
</tr>
<tr>
<td>58</td>
<td>Neoteck</td>
</tr>
</tbody>
</table>

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De ProMéxico

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Servicios médicos de México para el mundo

Logística y transporte: hacia una América del Norte más competitiva

México: promesa mundial para el turismo médico

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03 Distribution centers, showrooms and business centers in Mexico and abroad
04 Consultancy for international brand registration
05 Technical advice in production processes or new product development
06 Design of image campaigns for exported products
07 Design of packaging and labelling for exported products
08 Design of promotional material for exported products
09 Foreign delivery of samples
10 Studies to identify and select new suppliers

SUPPORT

11 Logistics studies
12 Market studies to identify missing or weak links in supply chains
13 Market studies and business plans for export or internationalization
14 Studies to form export consortia or other business association projects
15 Implementation and certification of international export standards and supply management systems for exporters
16 Organization and carrying out of business meetings
17 Individual participation in international events
18 Planning and promotional activities abroad
19 Training projects in international business

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www.economia.gob.mx
www.promexico.gob.mx

MINISTRY OF ECONOMY

Trade and Investment
Health industries in Mexico have a double deck of opportunities. On one side, the country has several export advantages compared to other countries; and on the other, Mexico has become fertile ground for further productive investment. Mexico is earning international standing as a center for health care, as reflected by its pharmaceutical, medical device and biotechnology sectors. Mexico is the second largest pharmaceutical market in Latin America and a major producer of high-technology medicines. In addition to Mexican owned companies, 20 of the world’s top 25 multinational pharmaceutical companies have operations in Mexico. Their presence has increased in recent years, placing our country as one of the leading pharmaceutical manufacturing centers in the world.

Mexico is also a major player on the international medical device market. It is currently Latin America’s leading exporter and the main supplier to the United States, as well as a major exporter of syringes, needles, catheters and cannulas, among others. Mexico’s talent and human capital are a crucial competitive advantage. Every year more than 100,000 engineers graduate in Mexico, a higher percentage of engineering graduates than in Brazil, Germany, Spain, the United States, and the United Kingdom. The country’s constant infrastructure development, positive business climate, legal certainty, and macroeconomic environment are competitive advantages which, along with the recent structural reforms, will continue to drive more productive investment.

Our country is one of the most attractive countries for investment in the world not only for its stability, talent, and other advantages; it is increasingly well-known for medium- and high-technology manufacturing exports and competitive manufacturing costs, among others. For the Mexican government, innovation is the cornerstone of our country’s economic prosperity. There are around 7,500 researchers in Mexico in areas related directly to biotechnology, who participate in the development of projects and activities in the country. Companies established in Mexico are ever more involved in the design of sophisticated products, as well as in research and development processes. Health-related business opportunities in Mexico are on the rise. Mexico is positioned amongst the most advanced and profitable countries in the world, beating at the heart rate of success.

Welcome to Negocios!

Francisco N. González Díaz
CEO
ProMéxico

Japanese automaker Toyota will invest 100 million USD to launch production of a new model in Mexico in 2015. Toyota currently manufactures cars at a Mazda plant in the central state of Guanajuato.

Japanese auto parts manufacturer Denso will expand its manufacturing plant in the northeastern state of Nuevo León at a cost of 53.8 million USD. Denso also has plans to construct an additional 35 million USD production facility in that state to produce solenoids for engine and airflow units.
BRIEFS

MANUFACTURING

BUSINESS AS CLEAR AS CRYSTAL

Spanish glass maker Vicrila will invest 37 million USD to establish a glass factory in the central state of Hidalgo. The plant is planned to produce glass and tableware for the North American market.

www.vicrila.com

AUTOMOTIVE

SMOOTHLY-RUNNING ALLIANCE

Daimler and Nissan have finalized a joint venture deal to build future Mercedes and Infiniti compact cars in Mexico. The companies will make a substantial investment to develop the vehicles on Daimler’s front wheel-drive architecture and assemble them at Nissan’s Aguascalientes site.

The new manufacturing deal will be the largest project in the global collaboration of Daimler and the Renault-Nissan Alliance.

Mercedes, Nissan and alliance partner Renault have shared engines, plants and vehicle architectures for small cars and vans since 2010.

www.daimler.com / www.nissan.global.com

UNSTOPPABLE GROWTH

Japanese-owned auto parts manufacturer Nissan Brake de México inaugurated a new manufacturing plant in the central state of Guanajuato. The 43 million USD site will produce brake parts and aluminum pieces for automobiles and motorcycles.

www.nissanbrake.com

AUTOMOTIVE

BMW CHOOSES SAN LUIS POTOSI

The BMW Group will build a new plant in Mexico in close proximity to the city of San Luis Potosí in the state of the same name. The company will invest one billion USD in the new production site over the next few years. The plant will have an annual capacity of 150,000 and production is planned to start in 2019. During that year, the workforce will reach around 1,500 people. The company will announce which BMW models will be built at the San Luis Potosí location at a later date.

www.bmwgroup.com

TOURISM

IHG TARGETS MEXICO

United Kingdom-based hotel operator InterContinental Hotels Group (IHG) will invest approximately 400 million USD in new locations in Mexico over the next two years. The operator of brands including Holiday Inn, Presidente Intercontinental, Crowne Plaza and others plans 30 new hotels in Mexico by 2016.

www.ihgplc.com

CONSUMER GOODS

A CARING BUSINESS

German personal care product manufacturer Beiersdorf inaugurated a new manufacturing plant in the central state of Guanajuato. The 130 million USD facility will produce lotions and other personal hygiene products. It is LEED certified and includes a research center.

www.beiersdorf.com
The pharmaceutical industry faces a challenging future but Mexico has a recipe for success. In global terms, growth has declined due to a combination of austerity policies in countries with slow economies, the expiration of patents on top-selling drugs, an increase in sales of generic medicines and the slimming of research and development (R&D) budgets. Under that scenario, emerging economies like Mexico are shaping up as the industry’s antidote, not only because they are spending more on health care but also because companies can diversify their business lines and develop innovative drugs on markets such as these.

That would appear to be the solution to Mexican owned companies, 20 of which, including the largest pharmaceutical companies in the world have operations in Mexico, positioning it as one of the world’s main manufacturing centers. In 2013, the sector’s output was valued at 13.98 billion USD and is expected to climb to 24.21 billion USD by 2020, based on average annual growth projections of 9.6% between 2014 and 2020.

Mexico’s exports of pharmaceutical products were valued at 1.70 billion USD and were shipped to the US (26.4%), Venezuela (15.3%), Panama (11.1%), Brazil (6.1%) and Colombia (3.6%), among other markets. Medicines containing alkaloids or their derivatives account for 62% of total exports, antiseptics and disinfectants 5.6% and medicines containing provitamins and vitamins, natural or synthetic derivatives 3.7%.

Over the coming years, we will most likely see a regional shift in consumption and production. While markets that have historically fueled growth—the US, Japan and certain European nations—have been forced to cut back on government spending on health, emerging economies, Mexico’s included, are investing more and more, and business opportunities are opening up, even for patented drugs.

Mexico has the second largest pharmaceutical market in Latin America. In addition to Mexican owned companies, 20 of the top 25 leading multinational pharmaceutical companies in the world have operations in Mexico, positioning it as one of the world’s main manufacturing centers.

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By the same token, investment opportunities abound. According to the report Opportunities and Changes in the Life Sciences Industry and Healthcare: Mexico’s Case (2014) published by Deloitte, “improved health coverage, an aging population and medical tourism are bolstering demand.”

In the same report, Deloitte states that spending on health care as a percentage of GDP has increased 15% since 2000 and that the government is focused on improving the system so as to “create market provisions [. . .] and offer consumers better alternatives, for example, public health protection.” To that end, the Mexican government has outlined an effective universal health coverage structure, while taking steps to improve the quality of services and reduce costs.

That strategy has resulted in a 1.5 percentage point reduction in maternal mortality since 1990 and the government has committed to further reducing it by between two and 2.5 percentage points each year.

The Deloitte report also highlights the efforts being made to prevent diseases like diabetes and obesity as an opportunity for growth in the sector.

Likewise, consumption on the domestic market is expected to grow at an average annual rate of 8.2% in the 2014-2020 period, climbing from 17.22 billion USD in 2013 to 29.34 billion USD in 2020. OTC drug sales were at 2.34 billion USD in 2012. Gold and cough accounting for 27.7% of the market’s total value.

According to COFEPRIS, during the last three years, the consumption of generic drugs has increased from 34% to 84%.

Whether it’s to meet ever greater demand on the domestic market or to export, Mexico is a major manufacturer of high-tech medicines, including antibiotics, anti-inflammatories and cancer treatments, among others. It has also become more attractive to investors following improvements to its regulatory framework and the granting of quality certifications. From 2005 through 2013, the sector received a total of 3.46 billion USD in foreign direct investment from companies in the US, Ireland, Spain, among others. Most of these funds were channeled into Mexico City, Morelos, Estado de Mexico, Baja California, Jalisco and Aguascalientes.

BIOTECHNOLOGY, AN EXPANDING SECTOR

Mexico has a well developed biotechnology sector that will no doubt come...
operate in the agriculture sector, 23% in environment-related activities, 18% in the health sector, 18% in the food industry and 10% in other areas. In recent years, Mexico has become a major receptor of foreign direct investment in biotechnology. By way of example, in 2012, the American technology company 3M invested 15 million USD in a product design, development and testing project, creating 700 highly specialized engineering jobs in San Luis Potosí (Central Mexico).

Furthermore, Mexico’s enormous diversity of ecosystems and species, its geographical location, varied weather and complex topography offer endless opportunities for the development of commercial biotechnology. Trained labor isn’t lacking either: there are some 142 universities in the country running a total of 169 degree courses in directly related areas (biology, biochemistry, biotechnology, the biomedical sciences and biochemical engineering) and some 76 institutions offering related post graduate programs. In 2011, approximately 18,500 students obtained a post graduate degree in areas related to biotechnology. And of the 7,500 researchers currently working on biotechnology projects in Mexico, half are employed in states with bio-clusters like Jalisco (West), Nuevo León (Northeast), Morelos (Central Mexico) and Guanajuato (Central Mexico). Recent years have seen the creation of an ever-expanding network of research centers specializing in different areas of biotechnology. The three foundations at the helm of the initiative are UNAM, the National Polytechnic Institute (IPN) and the National Council of Science and Technology (CONACYT).

According to the World Intellectual Property Organization (WIPO), the number of patent applications in Mexico has increased at an average annual rate of 9% in the last 14 years. In 2012, Mexico was among the ten countries that granted the most patents and of the 209,642 patent applications registered in the 1998-2012 period; approximately 14.3% were related to medical and veterinary science products, which were valued at 1.70 billion USD in 2013 and is expected to grow at an average annual rate of 7% between 2013 and 2020 to end the period at an estimated of 996 billion USD.

In Mexico, the sector has posted sustained growth over the last decade, largely due to the development of manufacturing capacities and the commercial facilities afforded by free trade agreements. According to ProMéxico estimates based on data furnished by Global Insight, domestic production was valued at 15.67 billion USD in 2013 and is expected to climb to 25.55 billion USD by 2020, while average annual growth of 7.2% is forecast, surpassing projections for the NAFTA region (5.1%) and countries like Germany (4.3%), Japan (4.4%) and Switzerland (2.5%).

There are more than 180 enterprises either developing or utilizing modern biotechnology in Mexico, 31% of which operate in the agriculture sector, 23% in environment-related activities, 18% in the health sector, 18% in the food industry and 10% in other areas. In recent years, Mexico has become a major receptor of foreign direct investment in biotechnology.

Mexico’s exports of pharmaceutical products were valued at 1.70 billion USD and were shipped to the US (26.4%), Venezuela (15.3%), Panama (11.1%), Brazil (6.1%) and Colombia (5.6%), among other markets.
A major player on the international market for medical devices, in 2013 Mexico’s exports were valued at a total of 6.89 billion MXN, positioning it as Latin America’s leading exporter, the main supplier of the US (which accounted for 92.5% of the sector’s total exports) and the world’s ninth largest exporter.

Mexico is also rated the world’s third largest exporter of syringes, needles, catheters, cannulas and similar instruments, the fifth of medical, surgical, odontology and veterinary instruments and equipment, the sixth of orthopedic equipment and articles for fractures and the seventh of electro-diagnostic equipment.

In the 2000-2013 period, the sector received 1.9 billion MXN in foreign direct investment, mainly from the US, Germany and Italy. Between 2010 and 2014, at least 14 companies announced investments in 16 projects related to medical devices.

There are some 2,511 economic units operating on Mexico’s medical devices market, 740 of which are export companies. Baja California (Northwest Mexico) is home to the largest cluster in the country. These companies account for over 33.3% of total exports in the sector and most are engaged in the manufacture and assembly of equipment and components. Smiths, Tyco Healthcare, Cardinal Health, Pall Life Sciences, Medtronic, Gambro, Medimexico, ICU Medical Inc., Hudson Axi, De Ortho, CLP, Sunrise Medical, and North Safety Products are just a handful of the 80 exporters of medical devices with operations in Baja California.

One reason multinational companies choose to invest in Mexico is because costs are substantially lower compared to countries that lead the way in the manufacture of medical equipment, electronic devices and precision components, product testing and labor related operating costs at all levels of specialization.

According to KPMG, in 2013, it was 18% cheaper to manufacture medical devices in Mexico than in the US; 7.8% cheaper to manufacture precision components and 39.3% cheaper to develop and test electronic systems.

Another area where there are opportunities to be had is in the export of medical devices such as intravenous catheters for peritoneal dialysis, anesthesia and embolocarcinoma, surgical clamps and scissors, tubes, needles, skin staplers, disposable medical material, scalpels, lancets, plastic equipment, cannulas and surgical and dissection kits to markets specialized in the manufacture of more technologically complex devices.

VACATION MAKEOVERS

One of the world’s top tourist destinations, Mexico doesn’t just draw holiday-makers but visitors looking for affordable, quality medical care. According to Patients Beyond Borders, Mexico attracts over one million foreign patients a year, making it the world’s second most popular medical tourism destination. The majority of these patients are Hispanic residents in the US, mainly the states of California, Arizona and Texas.

Once famous for its border odontology, ophthalmology and cosmetic surgery services, Mexico is now deemed a world class healthcare center offering a full range of specialty care and procedures on a par with those available in developed countries.

The industry was valued at 2.85 billion MXN in 2013, which translates into growth of 10% compared to 2012. That trend is expected to continue, with medical tourism in Mexico growing at an average annual rate of 7% through 2016, when its worth will have almost doubled to 3.01 billion MXN.

Deloitte’s report underscores Mexico’s focus on post-op procedures and drugs to facilitate patient recovery. And since there are no regulations from the US, measures are being taken to strengthen ties between Mexican and American health centers for the coordination of proper post-op services.

Thanks to the joint efforts of the private and public sectors, research centers and universities, Mexico has consolidated its reputation as a world class healthcare center, as evidenced by its flourishing pharmaceutical, biotechnology, medical devices and medical tourism industries. Government spending on science and technology stood at 4.5 billion MXN in 2012 but President Enrique Peña Nieto has said that he intends to invest more in the area and leverage development and economic growth, so we can expect to see this figure increase to 1% of GDP by 2018.

A reflection of the successes that can be achieved when business, government and academia work together toward common goals can be seen in the experience of the Association of Biotechnology Companies (EMBIOMEX), which in three years grew from five member companies to bring together 16 firms, along with five other affiliated companies.

The history of the Association of Biotechnology Companies dates back more than 20 years, with the convergence of a group of specialists who were beginning to make advances in the field of biotechnology.

At that time there was no “administrative organization to follow up on ideas and policies in a timely manner. At that time everything was different, there was little control or regulation and there were not many products being generated through biotechnology.” In 2011, the group reaffirmed its interest in working together and the charter of the Association was drafted.

Dulce Contreras, Liaison Manager at ProMéxico, of the founder companies of EMBIOMEX, says that it is an Association of Mexican companies, although some companies of international origin also make up the majority of a productive facility generating jobs in our country,” she says.

Organizations such as the Mexican Foundation for Innovation and Technology Transfer in Small and Medium Enterprises (FUNTEC) also participate in EMBIOMEX. “The Ministry of Economy (SE) is involved and is part of the Association because when an idea is developed, the SE says ‘I have seen activity but don’t know which one of you to approach.’ It is not the same as companies going to discuss an issue with SE as to go as an association. The Association has been a gateway to transmit to the SE a sector-wide vision of the needs we have and, in turn, support us.”

In addition, the SE helped reach more companies in the biotechnology sector for them to be integrated to the Association.

It also asked FUNTEC to: “carry out a diagnosis of the current state of biotechnology in the country and a study that we could use as a base,” says Contreras. As part of that study, companies raised their needs with the government and an industry agenda was established.

EMBIOMEX has helped to consolidate a number of companies with innovative features and established a feedback process with the academic sector, allowing a wide ranging and distinct approach. Work with the National Council of Science and Technology (CONACYT), the National Autonomous University of Mexico (UNAM), the National Polytechnic Institute (IPN) and the Center for Research and Advanced Studies (CINVESTAV) of the IPN, have been instrumental for EMBIOMEX.

The Association also maintains an active communication with Queretaro’s Biotechnology Cluster – which has identified about 40 companies in the sector – and is currently in negotiations with Nuevo Leon’s Biotechnology Cluster to increase the benefits of their affiliates.

Through its links with the government, open calls have been created to fund research projects for the application of biotechnology within the Sectoral Innovation Fund (FINNOVA) of the Ministry of the Economy and CONACYT. Though the 2014 Pro- ducive Biotechnology Call has not been launched, the Association still positive about it and certain that the Mexican Government will not let them down.

Dulce Contreras explains that in the last 20 years: “A great technological resource has been generated; we learned a great deal of expertise and how to be competitive,” Plans are in place to further advance the process. “The project for 2014 has been to expand and double the number of companies –we were five and we are now almost 20. We want to grow and integrate the vision of others because we could fail short if we leave out, for example, the agricultural sector,” explains Contreras.

Together with the expansion, the Association continues a trend towards internationalization. Last May, it was introduced to the World Congress on Industrial Biotechnology in Philadelphia, US, where companies held meetings with players from the sector in other countries.

In words of Dulce Contreras, the efforts of EMBIOMEX represent: “The interests of all Mexicans whose jobs depend on companies involved in biotechnology and the entrepreneurial spirit in research areas. It is a very positive synergy between academia and industry in favor of science.”

A POSITIVE SYNERGY IN FAVOR OF SCIENCE

September 2014
QUERÉTARO BELIEVES IN INNOVATION

The involvement of the Autonomous University of Querétaro as a founder and promoter of the biotechnology cluster in the state (BioTQ) bears witness to the importance of science and the creation of new solutions among associate companies.

BY OSNÁRI NÁRDÁ

In 2012, a trend emerged in Querétaro towards the unification of firms working wholly or partially in the field of biotechnology, including pharmaceutical, agribusiness, chemical and food companies. At the center of this movement is the Autonomous University of Querétaro (UAQ) which, together with other academic and research centers—such as the Tecnológico de Monterrey—articulates and brings together the productive efforts of the industry. It places emphasis on the importance of technological development, strengthens value chains with support for micro, small and medium enterprises (MSMEs), generates links with economic promotion bodies, boosts the training of human capital with the skills to join the biotechnology subsector, and organizes scientific and market knowledge around collective interests.

The organization that has emerged from this partnership between private investment, academia and government—with the Sustainable Development Department (SEDESU) in Querétaro, the federal Ministry of Economy (SE) and ProMéxico representing the latter—is the BioTQ cluster, which formally entered operation in the second half of 2012, with 15 partner organizations. Since then, companies of all sizes have been involved, with different levels of participation in five central issues of the group: food biotechnology, pharmaceuticals, agriculture, bioprocesses and research and analysis services. Those include Roquette, which processes raw materials of plant origin; Koppert, which is active in the field of biological protection of crops and natural pollution; Thor, which manufactures brocades, flame retardants and personal protection equipment; Granotes, a producer of functional and efficient foodstuffs; Grupo Nuteq, which manufactures animal nutrition products and Merieux, which focuses on food safety.

“The work of the cluster is benefited by the fact companies are not in direct competition with each other but can complement each other’s work through production and innovation projects,” says Adriana Cantorán, head of the project planning department for BioTQ.

The associated companies have to date generated 1,200 jobs, according to Cantorán, who emphasizes that one of the objectives of the organization is to bring together not only established firms but also entrepreneurs and MSMEs who can benefit from the incubation programs and company management offered by the cluster.

In different forums, Marcelo López Sánchez, head of SEDESU, has spoken of the presence of more than 100 companies linked to biotechnology in Querétaro, which are responsible for some 25,000 jobs throughout the state.

A DEDICATED TECHNOLOGY PARK

“Since the organization was created, the UAQ began to build the infrastructure of a biotechnology park, which will be a model for maintaining relationships between the university and MSMEs in the Querétaro biotechnology sector,” explains Cantorán.

The park, she adds, will foster the incubation of companies based on knowledge, technology transfer and innovation. The UAQ presented the project for the Park in November 2012. In total, 51 million pesos will be invested for its development—15 million provided by the SE and the rest by UAQ, with support from the state government and entrepreneurs in the sector.

The park will comprise a pilot factory and biotechnology laboratories for food, nutraceuticals, microbial safety of foods and biosystems engineering. Advice will be given to entrepreneurs who wish to join the industry, refresher courses and training will be provided and partnerships with research centers and other national and international clusters in the same field will be established.

The BioTQ cluster offers its partners comprehensive monitoring of changes in politics, economics, technology and industry, and documentation on official standards and government regulations, as well as assistance with developing business abroad. It will bring together all the elements for setting a robust industry on the right path.

One example is the BioTQ cluster’s negotiations with ProMéxico to develop entrepreneurs and consolidation of micro and small enterprises with export potential. Cantorán explains that the aim is to set up two export consortia, one for food and one for agriculture, each with its guidelines and requirements to meet. The project presupposes a process of consultancies, analysis, brand registration, review of regulations, certifications and guidance on trade. It will bring together 10 cluster member companies and other ProMéxico will recruit in the state.

PARTNERING: THE REASON FOR A CLUSTER

The issue of the internationalization of the work of the BioTQ cluster has a crucial relevance. Not only is it paving the way for Mexican biotechnology companies to offer their products abroad, but also it participates in the professional supply chains, but also it seeks to connect, share experiences and find the best industry practices globally.

The partnership between BioTQ and international clusters was established from the start. In December, 2012, BioTQ organized a mission to France and the Netherlands to visit 10 food, plant and molecular analysis clusters. Collaboration agreements were signed with two of them that enable UAQ students to continue their training in biotechnology in these countries.

“We have been working with the molecular analysis cluster on a model. The plan is for someone from there to come to Mexico to assess the sector clusters here,” concludes Cantorán.

The same spirit of collaboration is evident in the conferences on biotechnology organized by BioTQ since 2013 in the cooperation links with bodies such as the Franco-Mexican Chamber of Commerce and Industry and the Valle de México University, the Corregidora Tech University and the Tec de Monterrey.

The BioTQ cluster offers its partners comprehensive monitoring of changes in politics, economics, technology and industry, and documentation on official standards and government regulations, as well as assistance with developing business abroad. It will bring together all the elements for setting a robust industry on the right path.
The Baja California Medical, Dental and Hospital Cluster is founded on the conviction of physicians, governments, and tourism-industry professionals that Tijuana and its neighboring municipalities are the ones best equipped to meet the rising demand for their health services in the US and Canada.

countries—especially people from the US, who “are in the habit of getting regular health checkups” and who “live in a highly regulated environment where there is a culture of prolonging life”—are traveling abroad in search of medical and health care services that fall into the wellness tourism category, such as spiritual retreats and visits to spas and beauty clinics, among others.

The 2013 Life Sciences Roadmap sketched out by ProMéxico states that demand is highest for heart, plastic and gastric bypass surgery, ophthalmological, oncological, dental, trauma, fertility and gynecological services. The same document estimated the value of this sector of Mexico’s economy, including the spa industry, at 2.85 billion USD in 2013, with potential growth of 7% over the coming years.

WELCOME TO TIJUANA

In Tijuana, the Anglo-Saxon market defined trends in the medical tourism sector between 2000 and 2008, but in the last five years or so, Latinos have been the predominant users of these services, either because they don’t have health coverage in the US or, in the case of native Mexicans, because this is a chance to visit friends and relatives on the other side of the border.

This sector of the market resides within a radius that stretches from San Diego to Los Angeles, just a two-hour drive from the border. It’s a sector of the population whose purchasing power has increased, but that finds it more affordable to seek attention in Mexico than in the US, where medical services are costly.

Latinos tend to make the most of their trips this side of the border and the “idea is to offer a range of alternatives,” says Murillo. These users visit the region in search of general or family medical services, dental treatment, orthopedic and aesthetic surgery. Given that most come for minor procedures, there’s a greater chance these patients will visit the local tourist attractions.

“We need to invest more to make our service providers competitive and improve infrastructure, transport, and other areas that have the potential to attract users of those services and generate more revenue,” acknowledges Murillo.

STRENGTH IN NUMBERS

“Gaining access to communications and marketing platforms is very expensive,” says Murillo, but the institutions that belong to the cluster say that working together has made it more cost-effective to launch publicity campaigns for their services in the US, where their prospective clients market is.

As in other sectors, the primary goals of the cluster are to standardize processes and to certify the practices of its members. In the case of the Baja California cluster, funds have been put up to help members improve the quality and safety of their services.

The cluster has two certified medical units, while another eight are currently being audited by the General Health Board. As regards legal aspects, the task at hand consists of “standardizing and adopting criteria to protect users. In the event the patient’s wellbeing is believed to have been compromised, the Baja California Medical Arbitration Commission will step in,” Murillo concludes.

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CHECK IN AND GET CHECKED UP

Tijuana and its neighboring municipalities are making a concerted effort to capitalize on their experience and gain a competitive edge in the health tourism sector.

BY OMAR NAGLÁN

Baja California’s efforts to project a stable image and attract investors, holldaymak- ers and foreigners and Mexicans in search of quality medical services are paying off thanks to projects like the Baja California Medical, Dental and Hospital Cluster. This northwest state is a magnet for more and more people from developed electronics, IT and logistics sectors and for the hospital services industries, but to get ahead in the health tourism sec- tor, providers of these services have had to pool efforts, consolidate their oper- ations, get certified, promote themselves as a group, and earn the trust of their prospective customers.

The Baja California cluster constitutes the crystallization of those efforts and is founded on the conviction of physicians, governments, and tourism-industry professionals that Tijuana and its neighboring municipalities are the ones best equipped to meet the rising demand for their health services in the US and Canada.

Doctor Adrián Murillo, executive coor- dinator of the project in Tijuana, underscores Baja California’s longstanding tradition as a provider of cross-border medical services, especially for Americans and Canadians in search of quality care at a lower cost than in their countries of origin. The cluster cashes in on that experience, unites goals and calls on related sectors to help attract users with more and better accommodation, recreation- al and dining options.

“Generally speaking, those who make use of services in the border zone make the two-to-nine-hour journey by car—the time it takes to drive from San Francisco to Baja California—but their needs and interests go over and beyond health services,” says Murillo.

In the time it’s taken to set up the cluster, bodies like the Tourism and Conventions Committee, the Economic Development Council, the Tijuana’s Economic Devel- opment Secretary and the state govern- ment have come on board. By the same token, the relationship with ProMéxico has helped “highlight Baja California’s vast experience in the provision of medical services. Based on that experience, several strategic lines have been suggested that are very much in keeping with what the fed- eral government is now proposing via dif- ferent institutions,” says Murillo.

According to ProMéxico, since 2000 more and more people from developed
Tourism and health: what better combination? The medical tourism industry in Mexico offers a wide range of health services, and Jalisco is home to one of the most important medical clusters in the country. In 2009, a number of private institutions in the state of Jalisco conceived the idea of forming a cluster to offer quality services in the healthcare market. Initially, the group focused primarily on cosmetic surgery services but over time the catalog was expanded.

“There is a great demand as the global population begins to age. We are seeing an increasing prevalence of chronic diseases such as diabetes and those affecting the heart, the joints, the hips, and so on,” explains Carlos Rodríguez Zárate, president of the Jalisco Medical Tourism Cluster.

Rodríguez Zárate explains that the leading consumer of health services, the US, represents a great opportunity for clusters focused on medicine in Mexico. The costs of coverage of different health systems in the US are high and the health reforms in that country have set restrictions on coverage.

“That creates an important market for us. Another factor is the migration policy of the Obama administration, which is aimed at reaching millions of migrants; many Mexicans are waiting to become citizens of the US in order to come to Mexico and be treated in the health services here,” he adds.

The quality of medical services in Mexico and the warmth with which Mexican doctors treat their patients are added values that attract medical tourism from the US. Jalisco, in western Mexico, is a state with approximately 8 million inhabitants. Its capital, Guadalajara, is the second largest metropolitan area in the country, with just over 4 million residents, and an international airport with flights to 21 cities in the US.

With mountain ranges and the sea, the state has wonderful tourist sites. Puerto Vallarta, on the coast of Jalisco, is one of the most preferred beaches by American tourists. According to figures from the federal Ministry of Tourism, in the first half of 2014, about 600,000 tourists visited the destination, representing an increase of almost 20% compared to the same period in 2013.

The Jalisco Medical Tourism Cluster is composed of 10 hospitals in Guadalajara that are renowned throughout the country, and four hospitals in Puerto Vallarta.

“Jalisco has extensive experience in treating emergency patients, people who are traveling on business, or people living in the US and Canadian dominated neighborhoods on the shores of Lake Chapala,” explains Rodríguez Zárate, who adds that, in the coming years, the Jalisco Medical Tourism Cluster will seek to position Mexico as one of the main destinations for health tourism in the world.

We are focused on international tourism and on developing a comprehensive approach as a country and as a State. Jalisco has been developing for several years as a major center for medical attention care in the country,” concludes the president of the Jalisco Medical Tourism Cluster.
INVESTMENT IN MEXICO’S PHARMACEUTICAL AND BIOTECH INDUSTRIES

Recent changes in the Mexican health sector, its continually growing local market, state investments in biotech, and the country’s growing export potential, may well make the Mexican pharmaceutical and biotech industries the next hot investment opportunity.

By Johanna Cronin* and Piet Peter Speksnijder**

In the last decade, Mexico attracted a yearly average of 23 billion USD in foreign direct investments (FDI) and drew a record-breaking 35.2 billion USD inflow of FDI in 2013. Traditionally, such success has been attributed to the usual suspects of energy, mining, and automotive industries, since they jointly attract the bulk of foreign investment into the country. In the wake of major reforms in the telecommunications, energy, and financial sectors established by President Enrique Peña Nieto, Mexico’s markets are capturing more attention than ever from foreign investors.

Despite all this potential, the pharmaceutical sector has lagged behind other industries in terms of securing FDI, receiving an annual average of 400 million USD over the last eight years. However, recent changes in the Mexican health sector, in continually growing local market, state investments in biotech, and the country’s growing export potential, may well make the Mexican pharmaceutical and biotech industries the next hot investment opportunity.

STATE OF THE INDUSTRY

Twenty of the world’s 25 largest pharmaceuticals are present in Mexico, with the total pharmaceutical market representing 14.6 billion USD in 2013. According to IMS Health, biomedicine accounted for 5% of this market, amounting to 735 million USD. Over the next five years, the market is expected to grow at an annual rate of 10%, driven by the extension of the state-run health insurance scheme, Seguro Popular, for which the government has voted an increase spending from 7% to 10% of GDP. According to Dagoberto Cortés Cervantes, President of the National Counsel for the Pharmaceutical Industry (CANIFARMA), "this is a very special time for the pharmaceutical industry as the authorities have made it clear that the industry is a priority sector for development." Furthermore, Cortés asserts that biotech products will become increasingly important in Mexico, saying that “in 20 years, 47% of the Mexican population will be older than 45 years, and biotech products will provide the right answers to many of the country’s largest long term challenges. Generics are pivotal to the development of the Mexican healthcare sector, especially since they offer a better utilization of medicines, which, in terms of units, only represent 20% of purchased drugs. Generics represent 80% of all purchases, and yet the government only spends 20% of its budget on these," explains Cortés. Maintaining healthcare costs manageable is going to be a challenge for the government as Mexico’s aging population is requiring healthcare at a higher frequency, complexity, and cost. Authorities from the Mexican Institute of Social Security (IMSS) confirm this by pointing out that the aging population is one of its largest long-term challenges.

The market is under constant scrutiny by pharmaceutical companies that are ready to jump at the chance of introducing a new generic when the patent of an innovative drug expires. Cortés explains that while Mexico has strong intellectual property laws, and that patent terms of 20 years are strictly respected, this does not mean that Mexican producers cannot start developing a generic when the patent expires. Cortés points to a positive relationship between the pharmaceutical companies and COFEPRIS and the Mexican Federal Commission for the Protection Against Sanitary Risks (COFEPRIS) have done an impressive job cleaning up the market and reducing red tape in the system. Since 2010, COFEPRIS has introduced a number of efficiency improvements which have significantly reduced the backlog of registrations in the organization. This has been seen as a boost to the industry since in any sector the efficiency of a regulatory body often directly translates into that industry’s competitiveness. Pharmaceutical companies are in constant discussion with COFEPRIS in order to further improve efficiency, and indicators point to a positive relationship between the industry and COFEPRIS. Pharmaceutical companies are in constant discussion with COFEPRIS in order to further improve efficiency, and indicators point to a positive relationship between the industry and COFEPRIS.

COFEPRIS collaborate on boosting industry competitiveness, combining sensitivity for the needs of the pharmaceutical industry with a constant awareness of the need to protect the Mexican population.

Furthermore, in 2008 COFEPRIS removed the manufacturing presence requirement meaning that foreign drug producers are now allowed to enter the Mexican market without having to establish production in the country. These new regulations inspired drug producers like Sweden’s Meda AB, Italy’s Menarini, and Japan’s Daiichi Sankyo to enter Mexico, as well as allowing Indian generic giants Glenmark, Sun Pharma, and Ranbaxy to gain a foothold here while remaining...
In Mexico, the pharmaceutical industry is of great economic importance, not far behind that of oil refining, production of basic petrochemicals and manufacturing of cars and trucks. It also is a growing market that requires new investment to address the ailments that afflict Mexicans in the 21st century.

By Maria Cristina Rosas

THE PHARMACEUTICAL INDUSTRY IN MEXICO

In Mexico, the pharmaceutical industry is of great economic importance, not far behind that of oil refining, production of basic petrochemicals and manufacturing of cars and trucks. It also is a growing market that requires new investment to address the ailments that afflict Mexicans in the 21st century.
in particular, specialized care; conditions of marginalization and poverty; unequal geographical distribution of the world’s population; the lack of a culture of self-care and prevention of diseases, and the emergence of new diseases.

Paradoxically, in some regions the successful outcomes of public health systems have led to an overall lengthening of life, at the same time creating an aging population meaning that diseases requiring long-term, expensive care have become more widespread—heart and kidney ailments, obesity, mental illnesses associated with old age, among others. To that must be added the appearance of new public health problems related to the emergence of new or little known diseases—the epidemic caused by the H1N1 virus and, most recently, the Ebola virus illustrate those problems. Parallel to the emergence of the pharmaceutical industry are also important for public health. While it is a sector that invests large amounts of human and material resources in the development of new products, those are surrounded by numerous controversial issues—such as intellectual property and patents, conditions for competition, content of regulatory frameworks, international collaboration to classify drugs, sanitary control and oversight policy on drug safety, the guarantee of supply in emergency situations, technological change, and the shared responsibility between the public and private sectors as well as between nations, in the research, production, delivery and access to medicines.

In Mexico there are 224 laboratories for drugs or biological products, belonging to 200 companies. Of those, 46 are part of consortia or majority foreign-owned industries and the remaining ones have predominantly Mexican shareholders.

According to figures from ProMéxico, with information from Hoovers and Markline, 20 of the top 25 global pharmaceutical companies have operations in Mexico. The pharmaceutical industry produces 1.2% of gross domestic product (GDP) and about 7.2% of manufacturing GDP in the country. Also, according to data from ProMéxico with information from Global Trade Atlas, Mexico was the leading exporter in the pharmaceutical sector in Latin America in 2013. From 1993 to 2002, the manufacture of drug-chemical and pharmaceutical products increased at an average annual rate of 4.85%. The Mexican pharmaceutical industry supplies most of the medicines consumed in the country: it produces 86% of them and imports 14%. It is the ninth most important economic activity in Mexico and the fourth largest in the manufacturing sector. According to INEGI, in 2013, production by the Mexican pharmaceutical industry exceeded 13 billion USD.

Thus, Mexico is one of the main markets for health products in the world and the pharmaceutical industry established in the country is considered robust and competitive at a regional level. Together with Brazil, Mexico is the highest value market for pharmaceutical products in Latin America. In recent years, the deficit in the Mexican balance of trade for pharmaceutical products has grown significantly, from $2.8 million USD in 1995 to 2.76 billion USD in November 2008. Today, 90% of Mexican exports are pharmaceutical raw materials. The increase in imports of finished products has been boosted by international investment in pharmaceuticals around the world. As a result, Mexico has placed emphasis on investment to improve production processes, while recognizing the importance of engaging in more medical research. In 1986, with Mexico’s accession to the General Agreement on Tariffs and Trade (GATT), lower tariffs were agreed for imported raw materials and active pharmaceutical ingredients (API) and the gradual elimination of those that were manufactured in Mexico. Simultaneously, the refusal of import permits if the material was produced domestically was removed. Consequently, many supplies began to be purchased in other countries while certain raw materials (intermediates) required for the manufacture of APIs continue to attract tariffs (0.7-5% in tariff codes 20 and 30), despite the fact they are made in Mexico.

A new market currently showing strong signs of growth in the pharmaceutical industry is that of generic drugs. Their success lies in their quality as well as in the savings they represent for consumers. One of the strongest limitations of these drugs is that in the implementation of new drugs on the market, the patent right is maintained for a predetermined period, meaning that people with lower incomes cannot easily access those products.

Distribution on the private market is carried out by a number of wholesalers that have nationwide sales and is complemented by regional distributors; the latter serving small pharmacies and home-visit doctors—who charge the patient for consultation and the drug.

Sale to the end customer focuses on pharmacy chains and supermarkets which, with fewer than 30% of existing outlets, sell about 85% of the total units sold. The latter has led independent pharmacies to reduce their presence in those areas where supermarkets and chains have a strong presence.

For the retail market, part of the sales are through direct sale by some laboratories to different government agencies and another part through dealers specialized in government work on behalf of laboratories and deliver their products to where the institution requires them.

As a result, there is a realignment underway that is seeing independent pharmacies creating negotiating groups. For many years, the complexity of distribution generated a significant space for traditional distributors to operate; with the rapid penetration of private labels several laboratories are now selling directly to chains, supermarkets, state-owned chains and independent pharmacies (grouped into purchasing groups).

A new market currently showing strong signs of growth in the pharmaceutical industry is that of generic drugs. Their success lies in their quality as well as in the savings they represent for consumers.

According to ProMéxico figures with information from KPMG, Mexico is the most competitive country in the Americas for the manufacture of medical devices and pharmaceuticals. From 2003 to 2013, the foreign direct investment attracted by the Mexican pharmaceutical sector amounted to 3.46 billion USD.
The health tourism industry in Mexico has been growing rapidly in recent years. This sector includes both health tourism proper and so-called wellness tourism, which refers to spa services and retirement homes for the elderly, among others.

Mexico is one of the most popular destinations for medical tourism thanks to a fortunate combination of geographical, economic, and infrastructure factors, together with first class public policies.

The medical services most demanded by foreign patients are in specialties such as cardiology, oncology, orthopedics, dentistry, cardiovascular, cosmetic, gastric, reconstructive, and eye surgery.

According to a study by Patients Beyond Borders, Mexico is the country that serves more foreign tourists in dentistry and bariatric surgery (bypass and gastric band). The study indicates that during 2013, the Mexican health system attended about one million foreign patients, which places the country as the second largest destination in the export of medical services in the world, only behind Thailand that catered around 1.2 million foreign patients during 2013.

Medical tourism is an emerging industry that is not yet accounted for in domestic tourism figures, meaning in many cases is difficult to export revenue and the real economic impact that foreign patients leave when visiting an institution in the country. There are no sufficiently robust databases since health care providers do not maintain comprehensive statistics that distinguish domestic and foreign patients.

Some sources estimate that a foreign patient leaves an average economic benefit of 17,000 USD for an eight-day stay in a Mexican hospital or clinic.

Added to that, it should be taken into account that foreign patients are usually accompanied and do not only spend money at the hospital or clinic.

According to informal estimates, foreign patients coming to Mexico have an economic impact of close to 2.5 billion USD annually. It is estimated that figure could grow by 7% a year, to the extent that the number of medical services with international certification increases. The growth will facilitate the generation of specific indicators for the sector which will provide more real statistics within a few years.

Some of Mexico’s competitive advantages which make it one of the most attractive countries as a destination for medical services are costs, favorable geographical location in relation to Canada and the US, a high percentage of specialist doctors—many of them foreign educated—in proportion to the population of general practitioners, and a first class hospital infrastructure.

The Medical Tourism Association (MTA) estimates that foreign patients treated in Mexico save between 36% and 89% over the cost of the same procedure in the US. In 1999, the General Health Council (CSG) of Mexico established a certification program for national hospitals and medical clinics, with international standards. Currently, almost 85% of private hospitals and 14% of public hospitals in Mexico are accredited by the CSG, while in 2006, no Mexican hospital held international accreditation.

In addition, 10 Mexican institutions hold international certification from the Joint Commission International (JCI) –the largest hospital accreditation body in the US. JCI certification allows Mexican hospitals to provide care to US patients insured with Medicare, as well as private insurers, which opens the door to a potential market of millions of American patients.

Health institutions in Mexico that receive most tourists for medical purposes are concentrated in 10 states: Baja California, Baja California Sur, Chihuahua, the Federal District, Jalisco, Nuevo Leon, Quintana Roo, Sonora, Tamaulipas and Yucatan. Those states have approximately 60 hospitals regularly providing health services to foreign patients.

Baja California is a landmark case. According to the study “The profile of medical and health tourism and its impact on the economy of Baja California,” undertaken by the State Tourism Department between 2010 and 2013, the economic impact generated by medical tourism increased 21% due to the surroundings of the cities, the wider supply of services and competitive prices. Additionally, because it is a border state, many American patients can travel by land, which facilitates provision of those services. Of foreign patients coming to Baja California, 83% are from the US (41% are Hispanic born in that country) and 9% are Canadian; the remainder comprises other nationalities.

It is very interesting to observe how the medical and hospital sector in Baja California has been attracting patients from other countries. In 2010, 98.1% of foreign patients receiving medical care in Baja California came from the US. The study also reveals that in 2013 the industry generated 30,390 new jobs in the state.

According to the National Institute of Statistics and Geography (INEGI), states such as Nuevo Leon and Jalisco have a very large workforce of medical staff: 19.3% of the medical staff of hospitals and private clinics in the country live in Nuevo Leon, while 10.3% live in Jalisco. Quintana Roo and Yucatan—states that have developed traditional tourism sector—have begun to improve their medical infrastructure and services to attract that segment of foreign tourists.

Mexico has a highly qualified base of human capital working in medical services. According to the Organization for Economic Cooperation and Development (OECD), the proportion of medical specialists among general practitioners in Mexico is 62.3%—higher than the OECD average (57.7%)—which makes it one of the countries with the 10th highest number of specialists as a proportion of the entire medical community among member countries. Furthermore, in Mexico, 11.6 physicians graduate per 100,000 inhabitants, higher than the OECD average (11.2) and the figure for countries like the US (6.9), Canada (7.6), South Korea (8.2) and France (9.0).

The technological capital available is a window of opportunity in Mexico. For example, the number of magnetic resonance imaging (MRI) units per million population in Mexico is 2.2 units, while the OECD average is 13.9. The same is true in the case of other equipment such as brain scanners. In Mexico there are 5.1 brain scanners per million inhabitants, while the OECD average is 23.7. Another indicator for improvement is the number of hospital beds. There are 1.6 hospital beds per thousand inhabitants in Mexico, while the OECD average is 4.8.

There is no doubt that Mexico has an excellent hospital infrastructure and qualified medical personnel. However, there is a gap in technological capital. That represents a great investment opportunity in order to expand the capacity for attention and make the sector even more competitive. Mexico is a competitive destination for attracting foreign patients, especially from Canada and the US. Costs and high level medical facilities, a broad base of specialized human capital and the country’s geographical location are elements that have made Mexico a suitable destination for medical tourism. If the investment needed to acquire specialized equipment is maintained, and the number of internationally certified health institutions continues to increase, Mexico will undoubtedly be a leading destination for international medical tourism, not only in North America but also throughout the world.
Neolpharma is preparing to take on new markets with an impressive catalogue of 600 medical products and a long list of certifications.

BY ANTONIO VÁZQUEZ

Manufacturing 600 different medical products is no mean feat, as Neolpharma, a Mexican pharmaceutical company that has built up an extensive catalogue of drugs over the last 20 years, will tell you.

The company started out as a cottage industry in 1994. Two years later, it merged with a similar firm to create Neolpharma and today employs over 2,000 people.

“It was a process of taking decisions and integrating technology, innovation and development to offer a more diversified product range. We produce drugs not only for the domestic market but also with export markets in mind,” says Neolpharma CEO Efrén Ocampo.

The diversification Ocampo was referring to meant making the transition from manufacturing general drugs to specialized ones. The company’s labs and plants currently have the capacity to produce drugs for diabetes, Parkinson’s disease, schizophrenia and even drugs to treat cancer and neuropsychiatric conditions, although its main line is drugs for chronic-degenerative diseases.

“We have some 200 active substances that are used to produce different drugs. In total, including active substances and presentations, we have almost 600 products designed to treat the diseases with the highest incidence in the country. We are particularly sensitive to the aging of the population, which is why we focus on drugs for chronic-degenerative diseases, heart conditions, diabetes and cancer, and have several international patents,” says Ocampo.

Mexico’s pharmaceutical market is fairly well distributed among large Mexican and international companies, with Neolpharma taking home 8% of the pie.

One of the company’s main customers is the Mexican Social Security Institute (IMSS), which purchases some 130 million units of medicines a year.

Right now, Neolpharma is in the process of broadening its range of generic drugs by as much as 50% and is working on new formulas in coordination with top experts from the Center for Research and Advanced Studies (CINVESTAV) at the National Polytechnic Institute (IPN), the faculties of Chemistry and Biology at the National Autonomous University of Mexico (UNAM) and the Autonomous Metropolitan University (UAM).

“We have a team that works closely with these institutions, where there is enormous potential for the development of the pharmaceutical industry and a lot of room for innovation,” says Ocampo.

In addition to its Mexican facilities, Neolpharma has offices and plants in Ecuador and Puerto Rico. Its Puerto Rican plant is certified by the US Food and Drug Administration (FDA), which has been something of an experience for the company and will no doubt facilitate its plans to export to other markets.

As will the long list of certifications it boasts. Neolpharma has been certified by the Federal Commission for the Protection Against Sanitary Risks (COFEPRIS), as a Socially Responsible Company and complies with ISO 9000 quality management and ISO 14000 environmental management standards.

According to Ocampo, agencies like ProMéxico have been instrumental in helping companies in the sector pinpoint these markets. “The next goal for Neolpharma,” he says, “is to conquer them.”

“We have what it takes to compete on the international market. We are right next door to the US –the world’s largest pharmaceutical market– where Mexican products are perceived to be extremely reliable and of very high quality,” says Ocampo. www.neolpharma.com
INDUSTRIAS VEPINSA, NATURAL COLOR FOR HUMAN HEALTH

This Mexican company produces natural pigments useful to various industries, but mainly for human health. It exports 40% of its annual production to some 10 nations.

BY ANTONIO VAZQUEZ

The color of natural raw materials is very useful to humans. That is something that Industrias Vepinsa, a Mexican company that for four decades has been devoted to the manufacture of pigments, nutraceuticals, ingredients and flavorings, knows well. Founded in 1969, Vepinsa started out producing natural pigments used in the poultry industry. Over time, the company diversified its product portfolio, which today includes pigments used in the livestock and biotechnology sectors, such as nutraceuticals, says Rogelio Ramos, commercial director of the company.

“We have invested a lot in biotechnology processes to obtain products known as nutraceuticals, which are sold at most drug stores and are of great benefit to health. For example, we have eye care products which prevent macular degeneration in which the active ingredient is lutein, a natural carotenoid found in vegetables, fruits and flowers,” says Rogelio Ramos.

Gustavo Rodríguez, director of research and development at Industrias Vepinsa, claims that natural pigments (carotenoids) are highly useful for different industrial sectors.

“What we’ve done is venture into areas like biotechnology. We are also exploring the use of biomass in the agricultural and fishing industries,”” explains Gustavo Rodríguez.

With a 12-ha site located in the north of the state of Sinaloa, in Northwestern Mexico, Industrias Vepinsa has a workforce of 140 people. The company has taken advantage of its geographic location to reach the US market. Currently, Industrias Vepinsa operates, in addition to the US, in some 10 countries in regions such as Central and South America, Europe, and Asia. Each year, the company exports 40% of its production to those parts of the world.

Gustavo Rodríguez says Industrias Vepinsa is the only one of its kind in Mexico that has a department for research and development of new products made with natural pigments. The company owns more than 10 patents on products for the biotechnology sector. Synergies with universities and national research centers has been decisive for the growth of the company, as well as collaboration with the National Council of Science and Technology (CONACYT), according to Rogelio Ramos.

Industrias Vepinsa is a company that has managed to exploit innovation in the field of biotechnology, according to Gustavo Rodríguez. “We will focus on new products derived from biomass that can be exploited given the region we are located in. It’s a cheap raw material from which many products can be obtained. We are also working on obtaining pigments from blueberries, purple corn and jocote. The implementation of biotechnology is a strategic focus of development for the company,” he says.

In short, Industrias Vepinsa is backing research and development in biotechnology, thereby increasing its portfolio of products that are of great benefit to human health,” concludes Rogelio Ramos.

Founded in 1969, Vepinsa started out producing natural pigments used in the poultry industry. Over time, the company diversified its product portfolio, which today includes pigments used in the livestock and biotechnology sectors, such as nutraceuticals.
LABORATORIOS TORNEL, LEAVING THE FOLD

Now that it has a firm footing on the domestic market, Laboratorios Tornel is looking to make an incursion into the international market for veterinary pharmaceutical solutions. This Mexican firm has the drive and more than one advantage in its favor.

BY OMAR MÁNGA

Laboratorios Tornel has a substantial share of the domestic market for veterinary pharmaceuticals, but penning itself in would be to pass up a shot at double-digit growth. “Our strategy is to channel all our efforts and tenacity into our export markets and to continue to expand internationally,” says Tornel’s Director Mauricio Bravo, who estimates that its global operations will put the company on track for double-digit growth over the next 20 years. Diversity is a factor that works in this particular company’s favor. Mexico is home to countless animal species, all of which have specific needs; hence Tornel’s portfolio of 120 products. And now that the world is its oyster, the opportunities for innovation are as infinite as the number of species roaming the planet.

“Our goal for 2014—which we are close to achieving—is to export 15% of our output and sell the remaining 85% on the domestic market,” says Bravo.

FROM FAMILY BUSINESS TO EXPORT GIANT

Since the late seventies, Laboratorios Tornel has been a familiar name among animal health professionals due to its solutions forgame fowl, race horses, small species, pigs and ruminants. The company produces hormones, antibiotics, painkillers, anti-inflammatory agents, antiparasitics, expectorants, vitamins, supplements, vaccines and biological products at its three plants, each of which is dedicated to a specific product category: injectable drugs, antibiotics and biological products. The company’s most popular products are its “vitamins, which are suitable for all animal species” and its “antibiotics, with which we have made a name for ourselves on the domestic and international markets,” says Bravo.

Tornel’s quality, differentiated products that are competitively priced compared to their foreign equivalents. One of the top 10 companies in its field on its home market, the company has ventured abroad and currently exports to the Middle East, the Caribbean and Central and South America, regions where it is in the process of registering its products.

“We have almost finished isolating these viruses, which are prevalent in the country and cause mortality and associated economic problems,” says Bravo, adding that a vaccine of this type “can create much greater immunity in animals than those that currently exist on the market because it targets specific diseases.” According to Bravo, this will be a highly differentiated product that will guarantee a better response and greater protection of animal species. Furthermore, it will be a viable export product because even though the viruses it targets were isolated in Mexico, these are also a threat in other countries.

Laboratorios Tornel has a broadening its portfolio of pharmaceutical products company by 2020. The manufacture and sale of pharmaceuticals remains its core business but it is broadening its portfolio of preventive medicine to help reduce the risk of disease in the animal husbandry industry. The trend toward prevention has placed greater emphasis on the market for vaccines and Laboratorios Tornel has responded with innovation: a vaccine that recognizes the five most prevalent viruses in Mexico. Participating in the research and development of this new product are the National Institute of Forestry, Agriculture and Fishing Research (INIFAP) and the Faculty of Veterinary Medicine and Zoology at the National Autonomous University of Mexico (UNAM), with the support of the National Council of Science and Technology (CONACYT).

Prevention is better than the cure

Tornel’s goal is to become Mexico’s fastest growing veterinary products company by 2020. The manufacture and sale of pharmaceuticals remains its core business but it is broadening its portfolio of preventive medicine to help reduce the risk of disease in the animal husbandry industry. The trend toward prevention has placed greater emphasis on the market for vaccines and Laboratorios Tornel has responded with innovation: a vaccine that recognizes the five most prevalent viruses in Mexico. Participating in the research and development of this new product are the National Institute of Forestry, Agriculture and Fishing Research (INIFAP) and the Faculty of Veterinary Medicine and Zoology at the National Autonomous University of Mexico (UNAM), with the support of the National Council of Science and Technology (CONACYT).
LIOMONT, A LONG HISTORY OF CONQUESTS

Laboratorios Liomont is one of the top 10 pharmaceutical companies in Mexico, with a 2% share of the domestic market and exports to the US, Europe, and Latin America.

By ANTONIO VAZQUEZ

One of the top 10 companies of its kind in Mexico, Laboratorios Liomont has gone on to conquer pharmaceutical markets in Europe, the US, and Latin America.

Luis Paniagua, manager of new businesses and exports, attributes its success to perseverance, namely as regards the quest for excellence and compliance with stringent quality standards.

These are the qualities that have enabled the company to gain a substantial share of global markets in the 75 years of operation.

“Over the decades, Liomont has persevered, especially in its drive to expand the company, not just in economic terms, but to be a worthy representative of Mexico’s pharmaceutical industry in an international context [...] It’s been a challenge to boost our market share and represent the domestic industry at home and abroad,” says Paniagua.

Authorities from the US and Europe have visited the company’s plant in Mexico City to see for themselves the care with which Liomont’s products are manufactured.

Rica, the Dominican Republic, Colombia, Ecuador, Venezuela, Chile, and Bolivia.

“In the US, products like Conazol and Cicloferon are extremely popular and a year ago we launched a generic product based on Montelukast, an anti-asthma drug, in Europe.”

Two of the factors that have prompted Mexican companies like Liomont to make the leap onto the global scenario are the international trade agreements Mexico has entered into and its talented workforce.

Liomont employs 1,500 people and has a 2% share of the domestic market, according to Paniagua, worth an estimated 10 billion USD. The company manufactures some 60 million products a year, 8% of which are exported.

Innovation has been a constant in Liomont’s long lifetime, during which it has sought out the very best of human talent and forged alliances with government agencies and technological companies. It also has solid ties with prestigious universities like Tec de Monterrey and the National Polytechnic Institute (IPN) and has worked closely with the National Council of Science and Technology (CONACYT) on projects related to new global trends in therapeutic medicine.

The company’s next step will be to explore the biotechnology market and that is the reason why it has set up a new life sciences area. The project is scheduled to come on line in three years and provides for alliances with international firms.

“Liomont is a company that cares about Mexico, it takes care of it and aims to become the country’s top pharmaceutical company in the short term,” says Paniagua.

www.liomont.com
Mexico is meeting growing global demand for skeletal muscle tissue implants that give recipients a new lease on life.

ROOM TO EXPAND AND INCREASE MARKET SHARE

Flores Fleites, who also happens to be a qualified chemist and pharmacist, Biograft is a biomedical technology company specializing in the processing and distribution of implants of human skeletal muscle tissue that have applications in sports medicine, traumatology, odontology, plastic surgery and spinal surgeries. As a pioneer in Mexico in the setting up of private sector tissue banks, Biograft spearheads a branch of the economy characterized by innovation, the use of state-of-the-art technology and strict oversight of safety processes.

Over the last 11 years, Biograft has expanded on the strength of its reinvestment in research and development and expects to diversify its portfolio of solutions with the introduction of human cadaver skin tissue, cartilage and stem cells by 2020.

“We belong to the National Chamber of the Pharmaceutical Industry (CAMEFARMA) and it was through that organization that we came into contact with ProMéxico. Members of the ProMéxico’s team have already visited us and I see them assisting us with marketing and sales efforts on our target markets,” says Flores.

The National Rehabilitation Institute, which generates clinical protocols based on Biograft’s products, and the Tecamac Technological University in Estado de México, where the company participates in a nanotechnology program, are the first and main links in its value chain.

According to Flores, part of the research consists of identifying trends in other countries and taking them on board.

SAFE PRODUCT

“Before we arrived on the scene, there was a lot of reticence toward Mexican-made products of this type, which were very scarce,” says Flores. However, Biograft quickly built up trust in medical circles following the creation of the first private tissue bank in 2003—which required a transferal of technology from the US—and the implementation of a donation program in 2004, which disclosed the special processes the company uses to sterilize its products.

“The first thing we insisted on was that this type of product be registered so consumers have a guarantee that our manufacturing practices are evaluated, audited and certified by an authority, in this case the Federal Commission for the Protection Against Sanitary Risks (COFEPRIS),” says Flores.

The license and certification granted by COFEPRIS provides assurance that Biograft’s products meet market standards. The company has also been audited by the US Food and Drug Administration (FDA), is registered with the American Association of Tissue Banks (AATB) and has ISO 9001: 2008, ISO 13485: 2003 and TUV certification.

The National Transplant Center is fully informed of Biograft’s agreements with health institutions for the donation of lower and upper cadaver extremities. Likewise, the company has an open doors policy vis-à-vis the lab practices it uses to reduce the bioburden of tissue and sterilize it without compromising the very properties that make it viable.

Demand for Biograft tendon to repair anterior cruciate ligaments has increased in Mexico, followed by demand for spongy bone cubes, iliac blocks for spinal surgery and demineralized bone matrix.

Abroad, says Flores, Biograft is viewed as a company that provides quality products, complies with the standards of each individual market it serves and ensures that the product is preserved in prime condition until it reaches the operating room.

INSTITUTIONAL CONNECTING TISSUE

With the support of the National Council of Science and Technology (CONACyT) and ProMéxico, Biograft has continued to invest in research and development and expects to diversify its portfolio of solutions with the introduction of human cadaver skin tissue, cartilage and stem cells by 2020.

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ENMEX: MEXICAN ENZYMES FOR THE WORLD MARKET

Enmex, a company specializing in the production of microbial enzymes for different sectors, is one of the leaders in its field in Mexico; it exports six out of 10 of the products it manufactures to regions including North, Central and South America, the European Union, Asia, and the Middle East.

BY ANTONIO VÁZQUEZ

With 40 years’ experience in the manufacture of enzymes for the industrial and food sectors, Enmex is a leading company in its field, with exports amounting to 60% of its annual production.

Enmex was founded in 1974 as a result of a joint venture between a Mexican company and a specialized laboratory. Since 1993, this 100% Mexican firm has been part of Grupo Industrial Arancia. From the outset, the company set itself the target of becoming a benchmark in the field of manufacturing microbial enzymes.

“An enzyme is a biological catalyst that speeds up, slows down or encourages certain biochemical reactions; they are produced by the fermentation of yeasts, molds and bacteria,” explains Fernando Puig, CEO of Enmex since 1983.

Puig explains that corn and other grains kernels are composed of long chains of polysaccharides and proteins. These macromolecules, in turn, are composed of glucose and aminoacids chains. Enzymes help to break down these chains, thus releasing smaller molecules. The resulting molecules can be used to produce syrups for sweeteners, fermentable sugars for brewing and biofuels, better livestock nutrition, and dairy products, among other products.

“Enzymes are part of our daily lives; they are found in countless products. The body has enzymes that enable its biochemistry to function. Without them, certain biochemical reactions would not be possible and people would get sick,” Puig explains.

The enzymes produced by Enmex are used in a number of different sectors. They are purchased by companies that make nutritional supplements, animal nutrition products, textiles, biological detergents, bread, beer, sugar, marinades, dairy, tanning and protein hydrolys.

Although Enmex does not directly reach the final consumer, many of the products commonly sold in supermarkets contain enzymes made by Enmex. Enmex is the only Mexican manufacturer of microbial enzymes at industrial scale and its offices and production facility are in Estado de México, in the center of the country.

Enmex has a history dating back several decades; this year is accomplishing 40 years in the market, and maintains its own brand, unlike other similar companies that are only engaged in toll manufacturing to foreign brands.

Currently, Enmex exports about 60% of its annual production to countries in North, Central and South America, the European Union, Asia and the Middle East. The company has distribution centers in Europe and Asia. It is the only Mexican representative in the Enzyme Technical Association (www.enzymeassociation.org) and a founding member of EMBIO-MEX, the Mexican Association in Industrial Biotechnology Companies.

The factors that have enabled the company to enter these markets include its innovation spirit, its productiv- ity and quality certifications in food safety, guaranteed by international agencies.

Enmex is FSSC 22000 (food safety management systems), ISO 9000 (quality management) certified, and holds specific certifications such as Kosher and Halal, for Jewish and Arab markets.

“Trade agreements signed by Mexico have been very helpful in allowing us to enter other markets. A lot of competition has entered Mexico, undoubtedly, but for us it is better to have a 5% share of the global market than 100% of the domestic market. The treaties signed by the country have enabled us to enter the European Union, the NAFTA region and South America,” says Fernando Puig.

Mexico’s geographical location and human capi- tal, which Enmex avails of, have also been key factors for exports, highlights Puig, who adds that investment in innovation is very important for the company he runs. Enmex has a unit specializing in biotechnology development, focused on developing new products and integrating new bioprocesses. For that work, the firm has taken advantage of programs set up by the Na- tional Council of Science and Technology (CONACYT).

“We will continue to work to strengthen our pres- ence in the global market and to attract young talent, develop it and ensure a base of highly-skilled staff,” concludes Fernando Puig.

www.enzymes.com.mx
**ÖSSUR, ACCESSING THE AMERICAS THROUGH MEXICO**

A few years ago, Össur, one of the world’s leading manufacturers of orthopedic products, opened a plant in the border city of Tijuana. Today, its manufacturing center in Mexico is increasingly vital to its global operations.

Össur didn’t hesitate to choose Mexico as its operating base to serve the American continent. The country had everything it was looking for and, more importantly, it was close to its number one market: the US.

After years of studying the best options for its expansion in America, it came down to Costa Rica or Mexico, but Mexico was the natural choice “due to factors such as its proximity to the US, which accounts for 50% of the company’s sales. Also, the company’s corporate headquarters are in Irvine, California, which is just two hours from Tijuana,” says Össur Americas Director Sergio Bermúdez.

So, in 2010, Össur set up operations in Tijuana, Baja California, which is not only close to the US border but also has a consolidated medical cluster.

The company’s catalogue is comprised of two main product families: below the waist prostheses and orthopedic products like neck braces, ligament knee braces to support and help rehabilitate the articulation in the event of injury and knee braces to alleviate pain caused by a lack of cartilage in people with osteoarthritis. Each of these product groups represents 50% of total sales.

Globally, Össur’s products tend to be top sellers. In some cases, they are the number one product on the market, in others, the number two. In orthopedics, they are usually the number one product.

What sets Össur apart from the competition is that, in addition to standard products that are sold by authorized stores in a variety of countries, it makes made to measure products, with a guarantee of delivery within three days, at most.

Every month, its 17,000-square-meter Tijuana plant churns out 85,000 parts for the various products the company manufactures and in four years has chalked up a series of certifications, like the ISO 9000 quality management standard, the ISO 13485 standard relating to medical devices and the ISO 14000 environmental management standard. It is also a member of the Customs-Trade Partnership Against Terrorism (C-TPAT), among other initiatives.

Össur has consolidated its presence in Mexico practically since day one and its Tijuana plant is currently operating at 45% of its installed capacity, which means there is plenty of room for growth. In the medium term, the goal is to expand the plant, both physically and in terms of production volumes.

“This plant produces the majority of Össur’s new products. Plus, we have an excellent relationship with corporate headquarters in California. We don’t just manufacture new product lines, we participate in their development and if this trend continues, several processes at the plant could be expanded. The Tijuana plant is the third most important to the company’s global operations in terms of production volumes and is on its way to becoming the second, if not the first, in the next five years,” concludes Bermúdez.

To ensure it gets the crème de la crème of the country’s graduates, the company has cooperation agreements with CETYS Universidad, among other institutions.

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www.ossur.com
The firm Tecnología y Diseño Industrial (TDI) was created on a platform of science and innovation and continues to be nourished by both, as it transitions from a small and medium size enterprise (SME) to a corporation and opens up to new lines of business. The history of the company founded by engineer José Adán Ortega Blanco in Jalisco in the year 2000 is marked by the production of solutions in orthopedics, traumatology and –most recently– biomedicine, with high added value and a wide competitive margin on global markets, as well as by a phased growth grounded in its reputation and in strategic alliances. In 2010, TDI attracted public attention after winning first place in the SME category for the technology innovation prize awarded by the Mexican Association for Applied Research and Technological Development (ADIAT). The jury for the award praised the firm’s “business management for innovative projects, design and development of medical devices and implants in orthopedics and traumatology.”

The following year it also won the SME award for most innovative project, granted by the federal Ministry of Economy (SE) for developing “cutting edge biomedical devices and techniques.” As the SE stated in its citation: “With the support of the SE-CONACYT Innovation Fund, TDI developed the Luna-Fix percutaneous osteosynthesis system, which makes it possible to stabilize, reduce and immobilize fractures in different parts of the body with less discomfort for patients.”

Ortega Blanco remarks: “We have patents, industrial designs and utility models.” The company, he points out, has seen periods of exponential growth, “sometimes around 100% to 400% per year,” and now that growth curve has stabilized, TDI expects to close 2014 with a growth of 50% over 2013. “We had to be well prepared in order to create a substantial, world class company structure, with all the departments and divisions that a German, Swiss or US firm has,” Blanco adds.

SUCCESS STORY
TDI was created at the turn of the new century and in its early years provided Mexican public health institutions with external fixing devices for bone fractures, notably for wrists. From 2003 to 2006 it experienced its first period of growth, which would lay the foundations for its subsequent expansion. In 2006, TDI began to publish the first results of Luna Fix, a system that “enables the possibility of reducing the fragments of a fracture without having to remove the device,” facilitates the placement of permanent implants in knee operations and reduces post operation pain and complications. At the time, TDI was seeking external support and establishing alliances that would enable it to avail of its innovations. It attracted funding from the National Council of Science and Technology (CONACYT), the National Finance Bank (NAHNSA), the SE and the Jalisco State Government. Until 2010, it was also part of the Technology Firm Incubator at the University of Guadalajara.

That backing, together with strategic alliances with medics and engineers, the development of its own manufacturing plant, the launch of its technology –Luna Fix, and other brands it subsequently launched, registered and certified– TDI consolidated the world-class structure that now marks it out. In 2010, it opened its Biomedical Engineering department, which is developing treatments for cell therapy,” he adds.

THE REINFORCEMENTS OF AN EXPORTER
There can be no doubt that certification opens doors – but that is not enough: it is necessary to step through these doors and conquer new markets. Constancy is also required: incorporating innovation and continual training into the company’s culture, TDI is proof of that. Thanks to its policy of innovation and training, the Mexican firm has strengthened its position with regard to the Swiss, German and French companies who are its competitors for the Mexican and South American markets.

TDI has developed the brands Luna Fix (minimally-invasive percutaneous osteosynthesis system), New Fix (external fixing systems), Top Spine (devices and implants for the spine) and Corefix (internal fixing systems).

The company is ISO 13485:2003, 9001:2008, and 93/42/EEC certified and has also registered its products with the US Food and Drug Administration (FDA). The company reports 30% of its income in innovation and development and has set itself the task of maintaining the quality demanded by international markets, without losing its competitiveness in prices. With that calling card it has attended international trade fairs for which ProMéxico provides a platform for the Mexican industry. “ProMéxico has always supported us and we will continue to seek its backing to remain competitive at an international level because our aim is to enter the US and European markets,” remarks Ortega Blanco. He also reports that starting in 2015, TDI will work to organize a conference for Mexican and international experts to discuss the issues relating to the firm’s portfolio of interests and products. Finally, a clinic offering TDI solutions and two civil associations that will serve the low-income population will be shortly established. N

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Zapopan, Jalisco is home to a well-established medical instrument company with a history that combines a love for technology and innovation with a passion for business and market intelligence.

BY OHAN MAGANA

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Atramat: Sutures that Link Mexico and the World

Internacional Farmacéutica Atramat is the fourth largest manufacturer of surgical sutures in the global market. It offers over 2,000 different medical products and exports to 80 countries worldwide.

By Antonio Vázquez

In almost half a century, what started as a workshop in a spare room has become the fourth largest manufacturer of surgical sutures worldwide. Internacional Farmacéutica Atramat began as a family business in a private house. Its founder had the vision to make, by hand, quality surgical material. 45 years later, the company employs 600 people who enable the production of over different models of surgical sutures with different combinations of threads and needles.

Today, Atramat is the leader in sales in the domestic market and in Latin America, and ranks fourth in worldwide production of surgical sutures.

“The strategy has always been quality. From the outset, the company philosophy has been to produce a quality product at a competitive price,” says Clúa Braun. Competing with the best, with the three largest companies, like Johnson & Johnson, among others, says Orlando Clúa Braun, export manager for the company. According to Clúa Braun, half of Atramat’s annual production is exported.

The company plans to enter the US market in the short term, and is already certified by the US Food and Drug Administration (FDA). “We are always concerned with innovation and quality. Our materials are top notch,” says Clúa Braun. Atramat is ISO 9001 (quality management) and ISO 13485 (quality of medical devices) certified. It also holds certifications like the European Union CE Mark, the Mexican government’s good manufacturing practices issued by the Federal Commission for the Protection Against Sanitary Risks (COFEPRIS), Brazil’s ANVISA, and others issued by South Africa and Canada.

Orlando Clúa points out that Mexico’s different trade agreements have allowed medical equipment manufactured by Internacional Farmacéutica Atramat to reach the whole world. “Another important aspect is skilled labor. Our product requires a lot of manpower, above all of a skilled nature. Mexicans tend to have well trained hands, and there is quality labor in the country at a relatively competitive price,” he adds.

Another benefit Clúa Braun sees in Mexico—and which has been exploited by the medical devices sector—is the infrastructure of international airports and ports available for exporting to other global destinations.

Internacional Farmacéutica Atramat has always been one step ahead in global trends; therefore, it has injected significant resources into its innovation department and has maintained close links with specialist medical colleges, which provide knowledge for it to address the different needs of surgical experts. Furthermore, the firm has worked closely with government agencies such as the National Council of Science and Technology (CONACYT). Through organizations like ProMéxico, the company has taken part in specialized trade fairs in countries like Germany and Spain.

Orlando Clúa Braun explains that the main challenge for the medical devices industry in Mexico is to continue to provide quality products, which makes it necessary to maintain a highly competitive workforce. “Going forward, our strategy is to continue to grow and maintain the strongholds and markets we have, as well as to open new markets; above all, to maintain the high quality standards that characterize the firm. The company’s philosophy is: best prices and best quality. We always apply that philosophy to our new projects and products,” he concludes. www.atramat.com

The company’s products reach over countries in the Middle East, Asia, Africa, Europe and Latin America. The company plans to enter the US market in the short term, and is already certified by the US Food and Drug Administration (FDA).
INDUSTRIAS PLÁSTICAS MÉDICAS, INTERNATIONALIZATION IN THREE STEPS

A major supplier of plastic products to Mexico’s health sector, Industrias Plásticas Méxicas is making headway with its internationalization process and is already manufacturing products for leading multinationals in the pharmaceutical sector.

In its bid to internationalize, IPM has implemented a three step plan, the first step of which entails consolidating itself on the domestic market as a supplier of public health institutions, with a view to increasing production volumes, creating economies of scale and developing new products based on the sector’s core list of medical supplies.

“We have the capacity to manufacture virtually any product with plastic components that appears on the health sector’s core list, given the right volumes and reference prices,” says Laura Albarrán. IPM manufactures bags for the collection and fractioning of blood, the collection of urine, colostomy bags and enteral and parenteral feeding bags, among others, I.V. and pediatric sets, volumetric measuring devices, equipment for blood transfusions and measuring central venous pressure, tubes for the administration of photosensitive solutions and oxygen, feeding and suction catheters.

A vertically integrated company, IPM has developed its own PVC mix, designs and injects plastic components out of ABS, PVC, polyester, acrylic, extrudes medical grade tubing in PVC, polypropylene, polyurethane and EVA, radio frequency seals bags in sizes that range from 50 milliliters up to 12 liters and assembles its products in clean areas before packaging, sterilizing and distributing them nationwide.

“When we started operating in Morelos there were only three of us and now we have over 180 employees. The lack of services in the vicinity prompted us to vertically integrate our processes. A lot of the technology we use is our own, 100% Mexican. We have a very creative team that not only designs components but also highly specialized molds, tools and machinery. We have also bought computerized injection machines, modern extruders and diagnostics equipment, such as electronic microscopes and calibration equipment,” says Albarrán.

The second step in IPM’s internationalization strategy has been to position itself as a supplier of quality plastic products for pharmaceutical companies specializing in the medical and veterinary sectors.

“That gives our clients the assurance that our processes are standardized and of a guaranteed quality,” says Albarrán. IPM manufactures everything from special PVC compounds and medical-grade tubing to finished products like equine plasmapheresis apparatus, subassemblies for infusion pump equipment, bags to administer veterinary drugs and equipment to administer contrast dyes.

“Because we are integrated into the production chain of a multinational, we don’t know for certain what percentage of our products are being exported to other countries, but I’m sure we have a presence throughout North and South America at the very least and I wouldn’t be surprised if there were components of ours in Africa and Asia,” says IPM Commercial Director Georges Belanger. “We export components and special products of Morelos, just products directly to the US, Australia and Argentina and regularly ship finished products to Central and South America. In 2011, we sent our first container of ‘private label’ bags, i.e. bags manufactured under another company’s brand, to Brazil and growth projections for that sector are very promising,” says Belanger.

The third step in IPM’s internationalization strategy consists of reiterating the blood bank market, the company’s original business. IPM has designed highly specialized molds, tools and machinery,” says Albarrán.

The coming into effect of NAFTA, IPM was quick to understand the importance of joining the production chains of large multinationals in the medical sector, where the very best quality and service are essential. To meet those standards, the company worked hard to obtain ISO 13485:2003 certification and register with the US Food and Drug Administration (FDA).

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MEXICO INJECTS VALUE INTO BD

After almost six decades manufacturing quality medical devices, Becton, Dickinson and Company’s Mexican subsidiary has consolidated itself as an export platform and receptor of investment.

By Omar Magaña

Conditions on the domestic market and the global scenario indicate Becton, Dickinson and Company’s (BD) already lengthy relationship with Mexico will continue to thrive. Almost six decades after the incorporation of its Mexican subsidiary, the manufacturing activities that BD transferred to its first factory outside its native US have reached maturity. Together, Mexico and this manufacturer of hospital and lab devices have entered a new era in medical services that seeks to universalize health coverage with the aid of mobile technologies and remote communications.

“We are about to launch portable equipment that can be used to perform mainly tuberculosis testing and HIV monitoring and that will benefit many communities,” says BD General Manager for Mexico, Central America and the Caribbean Kurt Wicker. The equipment—a clinical point-of-care system that runs on solar energy and whose use is in the process of being regulated by several countries—allows for the quick, timely diagnosis of patients in inaccessible regions. Haiti will be the first destination for this technology given the high incidence of TB and HIV.

According to Wicker, trends in Mexico point toward the unification, universalization and portability of clinical services and even though this implies lengthy, complex processes, BD is eager to participate.

“The public sector is a significant customer in Mexico, so we aim to meet the goals of the National Health Plan and public health priorities as best we can, by offering the most convenient, innovative and high quality customer services.”

That strategy has required that BD undergo a transformation from a simple supplier to a provider of health-care solutions. To that end, the company helps governments better manage their suppliers in the interests of efficiency, thereby guaranteeing a broader cross-section of society access to health services.

There is a close correlation between public health policies—which are shaped by the prevalence of certain diseases—and the products BD manufactures and sells in Mexico. These include devices for the monitoring and treatment of diabetes and HIV and the detection of cervical-uterine cancer, which are not only sold on the domestic market but in some cases are also exported to some 30 countries.

Another example of the clear link between domestic health policy and BD’s manufacturing activities in Mexico are the annual vaccination campaigns organized by the government. These require millions of syringes, many produced and marketed by BD under the Plastipak® brand. “It’s very satisfying to see how Mexico’s public health priorities are in sync with some of the product lines and solutions we offer,” says Wicker.

BD’S STRONG ARM

BD has been operating in Mexico for 57 years and has three plants here that together employ approximately 9% of the corporation’s entire workforce, while some 85% of the output of its Cuautitlán Izcalli plant is destined for export.

“The corporation values Mexico because of its history here and the results we have delivered in the country. The dedication of our Mexican employees and their ability to specialize has been another point in our favor,” says Wicker.

Furthermore, the company’s Mexican operations have a competitive cost structure, putting it on an even playing field with manufacturers in countries like Brazil, the United Kingdom, the Netherlands, France, Canada, Italy and the US. According to the 2012 Medical Device Manufacturing Cost Index compiled by KPMG, and to which ProMéxico’s 2013 Life Sciences Roadmap refers, it is as much as 23% cheaper to produce these products in Mexico than in the US.

BD began operating in Mexico in the mid-20th century, in the Doctores district of Mexico City, where it manufactured glass syringes, thermometers and materials for dressing wounds. In the nineties, it began building its plant in Cuautitlán Izcalli, Estado de México.

Although our most emblematic products, the ones we are still recognized for, are disposable Plastipak® syringes and Vacutainer® blood collection tubes, we have developed other important business areas,“ says Wicker. These areas consist mainly of “prepared culture media for lab testing” and services for “all types of industries, including the food industry, to help verify that its products are free of bacteria.” BD has three global divisions—medical, diagnostics and bioscience—that sell everything from a 20 cent needle to cellular analysis equipment that can cost more than one million USD.

“The company’s Mexican operations remain its strong arm in terms of quality manufacturing and good practices, while its well developed muscle for audits explains why Mexico continues to receive the bulk of the corporation’s investments in the region.” In 2009, thanks to the intervention of ProMéxico, we were invited to Los Pinos to announce a 200-million-USD investment. Five years later, we’ve doubled that figure, with the associated benefits,” concludes Wicker.

The products BD manufactures in Mexico are exported to the US, France, Belgium, Latin America, six countries in Asia and sixteen in Central America and the Caribbean. www.bd.com
FLAWLESS SMILES, UNIQUE VACATIONS: THE PERFECT BUSINESS

Specializing in dental health care, this Mexican company offers over 300 treatments for foreign visitors. Quality and competitive costs position the company as a leader in medical tourism in Mexico.

BY ANTONIO VAZQUEZ

A perfect smile and a vacation break are possible thanks to Dentalia, a Mexican company that offers foreign tourists a wide range of dental health care services at accessible prices.

With more than 45 branches in more than 10 cities across Mexico, Dentalia is a successful company founded in 2006 with the purpose of improving the dental health of its patients.

Dentalia’s business model has proved profitable during these eight years. This scheme covers three areas: attention in branches, medical tourism and dental plans for insurers and employees of different companies. In that last area, Dentalia provides medical services to more than 500,000 employees from different companies.

“We have a solid infrastructure, a well positioned brand, very high quality standards, a serious staff recruitment process and few warranty claims,” says Joaquin Rivera, director of Dentalia’s medical tourism department. With a workforce of 780 employees – out of which three quarters is medical staff– Dentalia provides services in various specialized areas of dental health.

While consolidating its extensive network of branches across the country, the company realized that citizens of other countries in search of quality medical services represent a profitable market. After a number of studies, Dentalia’s directors realized that tourists visiting the country to undergo medical tests seek the warmth and quality of Mexican health professionals. Added to that, the prices for such services in Mexico are lower than in countries like the US and Canada.

In the area of medical tourism, Dentalia has focused its efforts on its offices in Tijuana –given its proximity to San Diego, California– and in the Riviera Maya. In those branches, the staff is fully bilingual and the firm offers a complete solution for tourists, according to Joaquin Rivera. “One big advantage over our competitors is that Dentalia covers the customer’s needs in one place, such as lodging, transportation and travel insurance. Also, we have a strict policy that if the patient does not need a treatment, Dentalia staff do not offer it nor try to sell it,” he explains.

Dentalia offers tourists around 300 dental treatments ranging from a simple check-up and a root canal, to dental implants or even a full-mouth change.

At Dentalia an orthodontic treatment can cost up to 70% less than in the US; a dental implant up to 60% less, and a change of teeth, may be up to 80% cheaper.

Dentalia offers tourists around 300 dental treatments ranging from a simple check-up and a root canal, to dental implants or even a full-mouth change. An orthodontic treatment can cost up to 70% less than in the US; a dental implant up to 60% less, and a change of teeth, may be up to 80% cheaper.

Added to that, the warmth and quality of Mexican health professionals.

“Mexico could be an immediate solution for the US medical needs. Medical tourism in Mexico has enormous potential and we should work together to take advantage of it. Cross disciplinary partnerships will enable exponential growth in the sector,” he says.

Dentalia has established a series of agreements with agencies such as the National Foreign Trade Bank (Bancomext) and ProMexico to access resources for innovation and development, as well as outreach programs in foreign markets. Dentalia’s plans are ambitious but far from impossible. The company aims to become an international reference in medical tourism, specializing in the dental area. Achieving such a feat will have a lot to do with the amalgam of public and private health institutions, in order to tap into a market that generates millions in income.

Part of Dentalia’s success comes down to incorporating all the companies involved in tourism.

“We have been successful in providing a complete solution for foreign visitors. Not only do we care about their treatment, but also for the hospitality, hotel, transportation, food, entertainment and protection they receive. By solving that, we generate economic benefit for other industries and meet the customer’s needs in a comprehensive manner,” concludes Joaquin Rivera.
NEOTECK: WHEN IT BENEFITS HUMAN HEALTH

Created less than a decade ago, this small Mexican company creates technology tools that help protect against risks to human health. Creator of applications for mobile devices, it has annual sales of over one million USD.

BY ANTONIO VÁZQUEZ

Founded in 2005, Neoteck, a Mexican company dedicated to information technology, has launched a series of applications for mobile devices that protect against risks to human health. More than just a developer of specialized software, Neoteck has set itself the task of using patient information to enable patients themselves to know what steps they need to take to keep healthy.

“Since 2005 we have been thinking about what is now known as ‘the cloud,’ thinking about the need for access to information and timely medical care at any time and anywhere,” says Fernando de Luna Márquez, CEO of Neoteck.

Mexican law establishes a series of ‘locks’ to ensure that medical information is the exclusive property of the patient. In that context, Neoteck created Virtumedik, a kind of user’s clinical record.

Virtumedik is available in cyberspace (www.virtumedik.com). The application can also be downloaded from iTunes. It is a technological tool that supports the user in interpreting vital signs. It requires a patient’s data regarding weight, height and BMI, among other information. The same application provides a risk assessment. Fernando de Luna says that, while the results are not a medical diagnosis, they can be interpreted by a physician in order to recommend the patient follow a series of actions in order to improve their health.

“We have developed these types of projects that interpret vital signs, but also have applications for prenatal care, for example, where pregnant women can measure the size of their uterus and see how their baby grows each week. All of these are models of care that enable patients to document their weight, height, heart and respiratory rate, and their waist and hip measurements, which also reveal their risk of obesity and of being overweight,” adds Fernando de Luna.

One of the more recent tools created by Neoteck is the application My doc in home, which has three personal medical devices: a blood pressure meter, a glucose meter and a heart monitor. The three devices interface to a tablet, which sends the information to a monitoring center that will soon be available.

“The road built for the purpose of diabetes may be used by other vehicles, such as heart disease and tuberculosis,” says Fernando de Luna.

The CEO of Neoteck points out that the use of information technology in the field of medicine is still new in Mexico, but that the market is promising. He notes, for example, that in the US, where the field is well established, the Obama administration has gradually been granting tax breaks to health companies that incorporate the use of electronic records.

With 52 employees and annual sales exceeding one million USD, Neoteck provides its services to bodies such as the State Health Departments in Oaxaca and Aguascalientes, as well as a number of national institutions specializing in health.

Currently, the company is in the process of marketing its various products both in Mexico and in Latin America. “We want to win national recognition above all for the tools we offer in the field of health,” concludes Fernando de Luna Márquez.

www.neoteck.com.mx
Healthy Businesses

**MEDICAL DEVICES INDUSTRY**

- **Largest exporter of syringes, needles, catheters, cannulae and similar instruments**
- **Largest exporter of medical, surgery and dentistry instruments and appliances**
- **Largest exporter of orthopedic appliances and equipment**
- **Largest exporter of electrodiagnostic apparatus**

**Main investors**

Million USD, 2005-2013

- Mexico: 1.691
- US: 1.343
- GER: 0.646
- ITA: 0.378
- SWN: 0.281
- FRA: 0.161
- IRL: 0.151

**Main export destinations**

Million USD, 2013

- US: 6,886
- JPN: 6,072
- GER: 5,064
- ITA: 4,900
- NED: 4,200
- SWN: 3,808
- AUS: 3,500
- UK: 3,400
- FRA: 3,000
- UK: 2,600

**Main exported products**

Million USD, 2013

- Orthopedic devices: 742
- Respiratory, mechanical and massage equipment: 456
- Other orthopedic instruments and apparatus: 512
- Med.: 370

**Export values**

Million USD, 2013

- US: 6,886
- JPN: 6,072
- GER: 5,064
- ITA: 4,900
- NED: 4,200
- SWN: 3,808
- AUS: 3,500
- UK: 3,400
- FRA: 3,000
- UK: 2,600

**Manufacturing costs in the medical devices industry**

Compared to the US, 2013

- Mexico: 18.9%
- CAN: 5.4%
- NED: 5.0%
- UK: 4.1%
- FRA: 2.8%
- ITA: 2.6%
- JPN: 1.1%
- AUS: 0.9%
- GER: 0.1%

Sources: Global Trade Atlas and KPMG (Competitive Alternatives, 2014).

**PHARMACEUTICAL INDUSTRY**

- **Leading pharmaceutical exporter in Latin America in 2013**
- **9.6% compound annual growth rate 2014-2020**

**Main investors**

Million USD, 2005-2013

- Mexico: 1.338
- LUX: 0.777
- NED: 0.367
- ITA: 0.224
- NED: 0.179
- US: 0.452
- VEN: 0.263
- PAN: 0.191
- BRA: 0.105
- COL: 0.096

**Main export destinations**

Million USD, 2013

- US: 96
- LUX: 63
- ITA: 56
- CAN: 37
- FRA: 26
- JPN: 19
- UK: 17
- AUS: 16
- GER: 3

**Main exported products in 2013**

- Medicines containing vitamins or other products: 63
- Medicines containing alkaloids or their derivatives: 56
- Antiserums: 45
- Antibiotics: 17

**Export values**

Million USD, 2013

- Mexico: 386
- LUX: 286
- NED: 177
- ITA: 151
- CAN: 134
- FRA: 96
- UK: 83
- AUS: 53
- GER: 36

**Manufacturing costs in the pharmaceutical industry**

Compared to the US, 2013

- Mexico: 1.7 billion USD in exports 2013
- 13.98 billion USD value of production 2013

- 1st: Mexico, 2005-2013

- 2nd: LUX, 2005-2013

- 3rd: ITA, 2005-2013

- 4th: CAN, 2005-2013

- 5th: FRA, 2005-2013

**Sources:** Global Trade Atlas, KPMG (Competitive Alternatives 2014).
The Lifestyle

The Complete Guide to the Mexican Way of Life

MEXICAN REFUGES OF YESTERYEAR

A great way to relax and soak up some history is to stay at one of Mexico’s stately old haciendas turned luxury hotels.

64 The Lifestyle Briefs

Diego Gómez Pickering, The Ambassador Who Loves Words

66 Carla Fernández: “Mexico’s future is handmade”

72 Sun, Sea, and Surgery
**ARCHITECTURE**

**Arditti + RDT at the Venice Biennale**

The Mexican architecture studio Arditti + RDT Arquitectos was invited to participate in the *Time Space Existence* exhibition by its curator, the architect Rem Koolhas, as part of the events being staged concomitantly to the official program of the 14th Architecture Biennale in Venice, Italy, which will end on November 2014.

On show at Venice’s Palazzo Mora, the firm’s installation consisted of a collage of color photographs of its projects, which include the Memory and Tolerance Museum, the Reforma Diana, Scala, Banoorte and Teléfonica corporate buildings in Mexico City, and Ciudad Gobierno, a complex of government buildings in Zacatecas, as well as a series of black and white photographs portraying universal ills like hate, slavery, inequality, and racism.

The goal of the installation was to get spectators to reflect on the problems architecture has not been able to address and point out the contradictions. In addition to promoting education, culture and arts in Tepoztlán, the center will be used to host cultural activities like film festivals.

Its library—the first privately owned library in the country to be incorporated into the National Council for Culture and Arts’ (CONACULTA) Public Library Network—has over 45,000 books and audiovisual titles and will shortly be receiving more from a private fund for the education of small local communities.

This is the first fully sustainable center of its kind in the country and, as such, will also be the first to obtain LEED certification for its eco-friendly architecture. The building is oriented so as to maximize the collection, storage and distribution of solar energy, thereby reducing dependence on heating and air conditioning systems; it also has rainwater collection and purification systems.

**ARCHITECTURE**

**Sustainable Culture**

The magical town of Tepoztlán in the central state of Morelos has a new asset to boast: the recently inaugurated Pedro López Elias Cultural Center.

In addition to promoting education, culture and arts in Tepoztlán, the center will be used to host cultural activities like film festivals.

In 2010 this first phase, which began in 2010 and will be used to host cultural activities like film festivals.

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**ARCHAEOLOGY**

**Mexico’s Gift to the World: Calakmul, Natural and Cultural Heritage**

The ancient Maya city and tropical jungle of Calakmul in the state of Campeche feature on UNESCO’s list of Mixed World Heritage Sites, which means they meet the criteria for both natural and cultural heritage sites.

Spread over some 750,000 hectares, Calakmul was declared a Biosphere Reserve in 1989 and a National Cultural Heritage Site in 2002. The site is located in one of the best preserved wild areas in the country and boasts the largest tropical rainforest in Mexico and the second largest in America after the Amazonas. It is also the first site in Mexico to be granted mixed heritage status by UNESCO. This paradise on earth is home to 44% of all recorded bird species in Mexico, 23% of butterfly species, five of the six species of felines found in the country, including the largest population of jaguars, and 23 species of orchid.

According to UNESCO representative in Mexico Nuria Sanz no one single culture has as many heritage sites as the Maya: seven cultural, two natural and two mixed. Mexico, she says, leads the way in the area of conservation and makes a valuable contribution to the UN’s development agenda.

**ARCHAEOLOGY**

**History in the Digital Era**

The first stage in the digitalization of the works of the National Anthropology Museum (MNA) has almost been completed.

Coordinated by the MNA—the most important museum of its kind in Latin America, located in Mexico City— in conjunction with the National Council for Culture and Arts and the National Institute of Anthropology and History, this first phase, which began in 2010 consisted of photographing some 8,000 artifacts recovered from archaeological digs. Between 12 and 24 photos were taken of each piece from different angles to offer a 360 degree perspective that makes it possible to appreciate their color, texture, and proportions. These 8,000 pieces represent only half of the artifacts displayed in the museum’s 23 permanent halls and a mere six percent of the 128,000 artifacts in its vaults.

Parallel to that process, 6,000 pieces from the museum’s ethnographic halls and contemporary works and documents from its history archives were digitalized. As a result of these efforts, people from all over the world can now access vestiges of the cultures of Mesoamerica, such as the Sunstone and the Maya stelas in the MNA’s safekeeping.

www.mna.inah.gob.mx
DIEGO GÓMEZ PICKERING, THE AMBASSADOR WHO LOVES WORDS

Internationalist, journalist and writer, Diego Gómez Pickering has been heading the Mexican Embassy in the United Kingdom since January 2014.

BY RASLA BAÑUELOS

A full-time diplomat and an occasional writer, as he defines himself on his Twitter profile, “words and language” are the tools of Diego Gómez Pickering’s (Mexico City, 1977) trades –tools that have served him well as Mexican Ambassador to the United Kingdom, one of the most prestigious posts in the Mexican Foreign Service.

A complex man in terms of both education and passions, he has proven himself capable of defending Mexico on diverse fronts, whether it’s organizing cultural activities or business meetings to promote the country’s fledgling aerospace industry.

Gómez Pickering graduated from the Jauharar Nehru University in New Delhi with a Master’s in Development Journalism and from the University of Columbia in New York with another in Cultural Development. Prior to that, he had taken a Degree in International Relations at the Autonomous Technological Institute of Mexico (ITAM), which would appear to be more related to his current calling than his intellectual aspirations.

Around the same time, he made his initial foray into the literary world as a contributor to the “Gazetas” section of the now discontinued cultural review Arcana and as a columnist for the “Club” section of the Mexican daily Reforma. Over the last eight years, he has regularly contributed to a long list of publications, including EL UNIVERSAL, EXCELSIOR, LETRAS Libres, Proceso, GATAPARDO, TRavesías, EL Huevo and Chilango. Since 2004, he has been writing a weekly column for the US Edition of El Diario de México and acting as an international correspondent for the Panamanian daily La Prensa.

In 2006, he published his first novel, La foto del recuerdo (The Photo of The Recollection. Ediciones Hombre y Mujer), which received excellent reviews and made it onto the bestseller list. “A life story in which the author adeptly domi-
nates emotions in the face of vicissitudes and the most heartfelt pain. A novel that captivates and satisfies the reader from its opening to its closing lines,” wrote the journalist and writer Sergio González Rodríguez in “Escarapate”, his column in “El Ángel”, the prestigious cultural sup-
plement of Reforma.

That same year saw the publication of Agua, uvas, abusos, problemas, soluciones (Water. Use, Abuse, Problems, Solutions. Mapas) and México visto por sus niños (Mexico Through its Children’s Eyes. Con-
cepto Gráfico-DGE Equilibria) to which the ambassador contributed with investigative re-
ports and poetic narratives, respectively.

His second novel, Los jueves en Nairobi (Thursday in Nairobi. Praxis), was published in May 2010 and was equally well received. “A rich, intense chronicle of the Kenyan capita-
l,” wrote the critic Humberto Musacchio, Sergio González Rodríguez was also full of praise. “With Los jueves en Nairobi, Diego Gómez Pickering brings us one of the most valuable chronicles of contemporary Mexi-
Can literature […] An excellent work”.

In December of that same year, Gómez Pickering won a Young Creator’s award and was invited to participate in the UNESCO-Aschberg artist-in-residence program at the Centre d’Art Marnay (CAMAIC) in Marnay-sur-Seine, France, in 2011.

September 2011 saw the publication of the tenth issue of El Paso-Centro, a review specializing in contemporary Arab literature, compiled and edited by none other than the Ambassador himself.

His most recent novel, La prome-

vá de Damasco (The Damascus Spring. Plaza y Valdes, 2013) has met with resounding success. The title points us to the recent social movements of the Arab world, while the narrative introduces us to an almost mythical city impregnated with fragrances and colors. A multicultural, multithinic and multifaceted city unable to disentangle itself from its tortuous past.

Founded 8,000 years ago, the ancient Syrian capital is home to six million inhab-

ants and today finds itself at the center of a seemingly endless armed conflict that has claimed thousands of lives.

La prome-

vá de Damasco is com-

prised of two chronicles –The Moons of Damascu-

s and The Heart of Damasco– in which the author weaves a tapestry of the city’s intricate identity.

“The heart of Damascus is at the very epicenter of the city, in plain sight but at the same time concealed from prying eyes. […] It is a young, throbbing heart, even though it has been beating for thousands of years and on more than one occasion, like now, has experienced attacks and ar-

rhymthms. […] A resistant, exemplary heart, always ready and available to any-

one who needs it whenever it is needed. But above all, the heart of Damascus is a living one, despite being presumed dead by many,” writes Gómez Pickering.

The author, as it turns out, is also a full-
time diplomat with ambitious goals and a firm commitment to issues related to the environment and human rights.

A man of many interests –film, music and gastronomy– Gómez not only speaks English, French, Italian, and Portuguese, but is also fluent in German. These skills no doubt came in useful when he began his diplomatic career as Cultural and Press Attaché at the Mexican Embassy in Kenya in 2007. After that, he went on to become a consultant and advisor to several United Nations agencies, like the Re-

A complex man in terms of both education and passions, he has proven himself capable of defending Mexico on diverse fronts, whether it’s organizing cultural activities or business meetings to promote the country’s fledgling aerospace industry.

Irf and Works Agency for Palestine Ref-

ugees in the Near East (UNRWA), where he acted as a communications consultant from 2009 to 2011.

He has also acted as consultant and advisor to the United Nations Public Private Alliance for Rural Development, the International Labour Organization (ILO), the United Nations Office for the Coordination of Humanitarian Af-

airs (OCHA) and the Committee on the Elimination of Discrimination Against Women (CEDAW).

To that wealth of experience he can also add a stint as International Media Director for the Mexican Office of the Presidency and International Press Coor-

dinator during the presidential campaign and transitional period of President En-

rique Peña Nieto.

In December 2013, he was appointed Extraordinary and Plenipotentiary Ambas-

sador of Mexico to the United King-
dom of Great Britain and Northern Ire-

land. “Mexico comes with me wherever I go. I’m a person with the capacities, the academic and professional training, the will, the conviction and, above all, the commitment to work in the interests of this country’s project.”

As ambassador, one of his goals is to ensure Mexico remains at the forefront of the international agenda, particularly on issues related to culture, the economy and foreign investment. Due to its grow-

ing dynamism, competitiveness and role as an emerging market, there couldn’t be a better time to invest in Mexico, says Gómez Pickering.
MEXICAN REFUGES OF YEESTERYEAR

A great way to relax and soak up some history is to stay at one of Mexico’s stately old haciendas turned luxury hotels.

BY FOLIA SÁENZ

The cinema photographer Gabriel Figueroa captured magnificent Mexican skies, skies that reflect the surface of lakes, age-old trees and active volcanoes, the elongated shadow of archways on the dusty ground, the faces of beautiful women framed by shawls, horsemen galloping across the fields. Through his lens we get a sense of a bygone Mexico lingering on in the sturdy walls of haciendas that have featured in more than one Golden Age film.

There are some 4,000 surviving haciendas in Mexico, a number of which have been renovated or restored to their former glory, reemerging as boutique hotels offering world-class amenities. Here, guests are guaranteed an unforgettable experience, steeped in authentic Mexican history and set against breathtaking natural backdrops.

HACIENDA SAN ANTONIO
COMALA, COLIMA

Luxury is waking up in the morning to a streaming cup of freshly ground and brewed coffee as you admire the tropical forest and mountains that envelop Hacienda San Antonio in the municipality of Comala, Colima.

The hacienda was built in 1890 by a German called Arnoldo Voguel, who discovered here the perfect coffee-growing conditions. The Fuego and Nevado de Colima volcanoes stand guard on either side of the estate, whose main building is made primarily of volcanic rock and houses 25 comfortable, well-lit guestrooms, decorated with handicrafts that pay homage to Mexico’s rich and diverse artistic traditions.

Guests are welcomed by a beautiful, sprawling garden that merges with the outlying mountains and volcanoes. As far as pastimes go, the options are endless: enjoy a refreshing drink at the Yellow Bar or in the garden as you watch the sun go down, read a novel in the Marador Lounge, explore the foothills of the volcanoes by bicycle or visit the nearby town of Comala.

Coriander soup and caramalized pears doused in tequila are just some of the dishes on Hacienda San Antonio’s delectable menu, which, like all the others, are prepared with fresh, local ingredients.

HACIENDA SANTA CRUZ
MÉRIDA, YUCATÁN

Under a serene sky, concealed by the long branches of leafy peacock flower shrubs, sits a fiery red estate surrounded by exotic gardens. Located in the very heart of Mérida, Hacienda Santa Cruz began life in the 17th Century as a Franciscan monastery and in the late 19th century produced henequen, a type of fiber made from the maize plant, often referred to as the “green gold” of the Yucatán.

In 2007, this southern belle morphosed once again, this time into a luxury, colonial-style hotel with every conceivable modern-day convenience.

Take a dip in one of the hotel’s two pools, enjoy a revitalizing or therapeutic massage or maybe a facial or honey and chocolate exfoliating treatment at the spa or in the privacy of your own room. If you want to get out and about, visit one of the nearby cenotes or Santa Cruz, where we recommend you visit the Cuxtal nature reserve, a refuge for migratory birds and native plants.

And if you fancy sampling the local cuisine, the hotel restaurant, Creóle, serves up dishes like lime gazpacho and tuna nachos marinated in annatto.

www.haciendasantanantonio.com

HACIENDA SAN ANDRÉS
AIYAPANGO, ESTADO DE MÉXICO

Hacienda San Andrés commands impressive views of the Popocatépetl volcano, outlined by fluffy clouds and capped with a thick layer of snow, like wax melting in the sun.

This was the image that inspired La Era (The Threshing Floor), Diego Rivera’s first registered oil on canvas that perfectly replicates the blue hues of the distant sky and rolling green valleys that enfold this 18th Century hacienda.

Located just forty kilometers from Mexico City, today Hacienda San Andrés is a luxury fifteen-suite hotel where guests can kick back and relax at the in-house spa with a quartz-stone massage, detox in a hydrogen-sulfate bath or soak in a tub scented with rose petals and essential oils.

After treating your body, treat your palate to a selection of traditional Mexican dishes made with fresh, organic ingredients.

www.haciendasanandres.com

The invigorating mountain air is best enjoyed astride a horse or a bicycle as you explore the labyrinth of cedar trees that have featured in more than one Golden Age film.

www.haciendasantanantonio.com

www.haciendasantanantonio.com

www.haciendasantacruz.com

www.haciendasanandres.com
Hacienda Santa María Xalostoc
TLAXCALA, TLAXCALA

Hacienda Santa María Xalostoc’s story goes back to the mid-16th Century, when its 3,500 hectares were dedicated to agriculture, maguey plantations and cattle farming. If you listen carefully, you can still hear the echo of revolutionary caval- cades, the whistling of a passing train and the tolling of church bells.

After years of neglect, the estate was purchased and lovingly restored by the Baer family with the help of acclaimed architect Luis Ortiz Macedo, recipient of the National Restoration Prize in 2000 and an expert in the conservation of co- lonial buildings.

A pretty fountain greets you as you cross a heavy wooden door, which opens up onto a courtyard of maguey plants and a giant ash tree. The hotel has eight spacious suites and ten elegantly ap- pointed guestrooms that immediately put you at ease and invite you to relax. A novel way to take in the scenery is to horseback or, if you’re feeling more ad- venturous, in a hot air balloon.

www.haciendaxalostoc.com

Hacienda Sepúlveda
LAGOS DE MORENO, JALISCO

Hacienda Sepúlveda stands on the old silver route to Zacatecas in northeast Jalisco. It was built in the late 17th Century and is named after its original owner, Juan de Sepúlveda of Spain, who was given the land as a gift. Today it is a fabulous bou- tique hotel with 23 guestrooms.

Historic figures like Miguel Hidalgo y Costilla and Pancho Villa have seen the inside of this hacienda, whose decoration remits us to the past with hand carved wooden and tin sculptures, candelabras, antique stoves and radios.

Fresh air and clear skies made this the perfect place to sit back and take in the view or relax with a good book. The hotel spa is housed in “El Aventadero,” origi- nally an old winnowing barn dating from 1890. Here, guests can pamper body and soul with a relaxing hot stone massage, wine therapy and holistic treatments or a Reiki session. Horse riding, barbecues in the garden and bonfires by the light of the moon are some of the other activities guests at Hacienda Sepúlveda can enjoy.

www.haciendasepulveda.com.mx

Hacienda Santa María Xalostoc's story goes right back to the mid-16th Century, when its 3,500 hectares were dedicated to agriculture, maguey plantations and cattle farming. If you listen carefully, you can still hear the echo of revolutionary caval- cades, the whistling of a passing train and the tolling of church bells.

After years of neglect, the estate was purchased and lovingly restored by the Baer family with the help of acclaimed architect Luis Ortiz Macedo, recipient of the National Restoration Prize in 2000 and an expert in the conservation of co- lonial buildings.

A pretty fountain greets you as you cross a heavy wooden door, which opens up onto a courtyard of maguey plants and a giant ash tree. The hotel has eight spacious suites and ten elegantly ap- pointed guestrooms that immediately put you at ease and invite you to relax. A novel way to take in the scenery is to horseback or, if you’re feeling more ad- venturous, in a hot air balloon.

www.haciendaxalostoc.com

Hacienda Sepúlveda
LAGOS DE MORENO, JALISCO

Hacienda Sepúlveda stands on the old silver route to Zacatecas in northeast Jalisco. It was built in the late 17th Century and is named after its original owner, Juan de Sepúlveda of Spain, who was given the land as a gift. Today it is a fabulous bou- tique hotel with 23 guestrooms.

Historic figures like Miguel Hidalgo y Costilla and Pancho Villa have seen the inside of this hacienda, whose decoration remits us to the past with hand carved wooden and tin sculptures, candelabras, antique stoves and radios.

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www.haciendasepulveda.com.mx
CARLA FERNÁNDEZ: “MEXICO’S FUTURE IS HANDMADE”

One of Mexico’s most interesting designers, Carla Fernández has garnered a reputation on international runways with experimental, vanguard collections that pay tribute to the traditional textiles of the country’s indigenous communities.

A samurai warrior à la Kurosawa, but not so far removed. A cascade of multicolored threads. Confetti falling slowly on a body. A two-tone poncho that invites you to lose yourself in Escher’s labyrinths. A deconstructed rebozo, home to a watchful gecko. Tradition and vanguard synthesized in a unique personality.

According to Carla Fernández (Saltillo, Coahuila, 1973) fashion is the first language we use to communicate with others. Creator of the brand that bears her name and founder of Taller Flora—a demi-couture textile initiative in which Fernández works with indigenous women and artisans, this Mexican designer has garnered recognition both at home and abroad, and her creations are sold in Great Britain, Spain, and the US. All as a result of her interest in the textile traditions of Mexico’s indigenous peoples and her efforts to document and preserve them.

Amongst other accolades, these efforts won her the Prince Claus Award in 2013 “for adapting traditional techniques and styles to create surprising contemporary fashion; for empowering communities, especially women, channeling their knowledge and skills into modern design; for reviving Mexico’s native textile traditions and creating a detailed record as a lasting legacy for generations to come and for coming up with an ethical production model that fully respects the intellectual property rights of indigenous peoples.”

Other Mexicans who have received this Dutch award for outstanding achievements in the field of culture and development include writer Carlos Monsiváis, artist Francisco Toledo, architect and designer Oscar Hagerman, photographer Maya Goded, and contemporary artist Teresa Margolles.

In 2008 the British Council presented Fernández with the IYCE Fashion Award for her exceptional work as a businesswoman. She has published a book, The Barefoot Designer: A Handbook, and her work has been displayed at the Isabella Stewart Gardner Museum in Boston.

At Taller Flora, Fernández works with communities from Chenalhó, San Juan Chamula, Aldama, San Juan Cucuch, and Santa Martha in the state of Chiapas; artisans from Xochistlahuaca in the state of Guerrero; Hñä hñü (Otomí) women in Nante, Hidalgo; rebozo weavers in Estadio de México; tailors who make charro suits in Mexico City, and leather bag manufacturers in León, Guanajuato.

Her vision transforms textiles and traditional patterns into sophisticated, geometrical garments that borrow from architects like Luis Barragán and Juan O’Gorman, photographer Graciela Iturbide, with whom she has collaborated on several publications, and the work of other fashion designers like Rick Owens, Dries van Noten, Raf Simons, Lima Feu (Yohi Yamamoto’s daughter), the legacy of Cristóbal Balenciaga (whom she considers “the great designer”) and Rei Kawakubo of Japan, whom she has worked with for Comme des Garçons.

Holder of a degree in art history and haute couture, Fernández also has a quality Mexican-inspired prêt-à-porter line.

But the seed of her passion for the textile traditions of Mexico was sown long before she saw the inside of a university lecture room. The daughter of a historian and museographer, as a child her father’s job as director of the museums of the National Institute of Anthropology and History took them all over the country.

“Where there are archaeological sites, there are indigenous communities that create some of the best textiles in the world. Mexico has fabulous textiles. I’d spend hours studying the clothes worn by indigenous people in each zone. Then I’d try and buy the items of traditional dress I’d seen at the little markets in and around the archeological sites and combine them with my everyday clothes,” she says.

Experimentation has been another of her life-long obsessions, one that is reflected in her creations. As a university student, she did her community service at the now nonexistent Serfín Museum of Indigenous Dress. That gave her access to the museum’s collections and the chance to study how the garments were put together.
“I approach the construction of my garments much as an architect would approach the construction of a building. For instance, one of my star pieces is called Barragán because it imitates the play of light and shadow created by opening and closing the windows of one of his houses. I love architecture and modern and contemporary art and they are a constant source of inspiration for me.”

“That exercise in deconstruction helped me gain an in-depth understanding of the clothes. To my surprise, nearly all of them were based exclusively on squares and rectangles. Each and every piece of cloth was a parallelepiped. My interest in the geometrical origin of clothing tied in with the fashion studies I’d taken as part of my Art History degree. I was especially interested in the first avant gardes, specifically those that had made an incursion into the apparel area. It was from that perspective that I began to view indigenous patterns design not as something primitive but as a creative art form,” she recalls.

—How did you come to choose fashion design as a profession and what does it mean to you?

From a young age I realized that clothes were important in all cultures, in the sense that they’re the first language we use to communicate with others. Before you even speak to someone, you notice how they choose to dress. Clothes are one of the ways in which we decide how others perceive us and beautifying ourselves is how we express our creative side.

Fashion is a highly complex system. Creating a brand requires a lot of geniuses working toward the same goal: it has to be a good idea, a good business, have good managers. One of the catalysts of the Industrial Revolution was the need to manufacture textiles and many of the milestones in world history are related to the apparel industry.

—How did Taller Flora come about and what was your vision when you started it?

Taller Flora are workshops we run in various municipalities and regions of Mexico, like Oaxaca, Guerrero, Chiapas, Estado de México, and Guanajuato, among others, in collaboration with their indigenous communities and artisans or sometimes even individuals.

I know Mexico like the back of my hand. I was born in the north, have traveled extensively in the south, and live in Central Mexico. Mexico’s cultural wealth is an asset very few other countries can lay claim to. I’m interested in carrying the cultural diversity expressed in the traditional dress of our indigenous peoples into the future. Mexico needs to turn its past into a business of the future. That’s why I always say Mexico’s future is handmade.”

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Many people return from their vacations to Mexico rested and looking better than ever... after having paid a visit to one of the country’s expert cosmetic surgeons and been pampered post-op in paradisiacal surroundings. The scalpel can do miracles for the physique, but listening to the lapping of the waves as you rock in a hammock, sun-bathing on the beach, or taking in the local culture in one of the country’s cosmopolitan cities sure does wonders for the spirits.

The number of tourists who come to Mexico for plastic surgery or some other type of cosmetic procedure is on the rise. In fact, according to the 2012-2013 World Travel Trends Report compiled by Internationale Tourismus-Börse, Mexico is among the top five medical tourism travel destinations in the cosmetic surgery category. Advanced technology, quality services, accessible prices, and special post-op facilities in unrivaled locations may be the reason 1.1 million people visited Mexico in 2013 for some form of medical treatment, according to Patients Beyond Borders, an international organization specializing in health tourism. And demand for these services is growing to the tune of seven percent a year.

ALL-INCLUSIVE

Several hospitals in Mexico City, Guadalajara, Monterrey, and Tijuana offer package deals that include round-trip plane tickets, accommodation, meals, transfers, and medical care provided by board-certified surgeons. Discounts of between 10 and 40% on prices that are already low compared to other countries account for the appeal of these packages, but it’s the care provided during recovery that has made them a hit among overseas patients.

And by care we’re not talking your run-of-the-mill nursing home, but full-service villas fitted out with kitchen, dining room, bedrooms, Jacuzzi, and swimming pool, where patients are looked after by a trained nurse and can hire a chauffeur for transfers. Some packages even provide for a travel companion.

Another point in favor of Mexico’s burgeoning medical tourism industry is that cosmetic procedures are generally more affordable than in other countries. Not only do you get to spend your convalescence in surroundings on a par with some of the best spas in the world, but also most clinics offer financing plans.

Tummy tucks, breast augmentations, eyelid lifts, wrinkle reductions, hair implants, and tooth whitening are among the cosmetic services in highest demand in Mexico. So whether you choose to heal on a white-sand beach splashed by a turquoise blue ocean, in a cosmopolitan city with beautiful colonial architecture, or breathing in the fresh air of the mountains, you’re guaranteed a pleasant and speedy recovery.

sUN, sEA, AND sURGERY

These days, tourists are visiting Mexico not only for its pyramids and white-sand beaches. Many are including a visit to the country’s world-class plastic surgeons and consultations with expert health professionals in their vacation plans.

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The financial factor is another reason more and more foreigners are visiting Mexico for liposuction, tummy tucks, and breast and gluteus implants. According to AMCPER, breast implants cost $3,350 USD on average in other countries, but only $1,900 USD in Mexico. And if you want bigger booty, you’ll pay $6,100 USD elsewhere, compared to only $2,680 USD in Mexico. An abdominoplasty, or tummy tuck as it is more commonly known, will set you back as much as $7,650 USD in other countries, but you can have one in Mexico for around $2,300 USD. And with all the money saved, you can afford to relax and enjoy some post-op pampering before returning home to awe friends and family with your rejuvenated image. Only Mexico offers the whole package!

### TOP SURGERIES

According to AMCPER, the most popular surgeries are:

1. Liposuction
2. Breast implants
3. Gluteus implants
4. Rhinoplasty
5. Facelifts

Close runners-up are MACS facelifts, tummy tucks, eye lifts, post-bariatric surgery, and hair implants.

www.cirugiaplastica.org.mx

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**HI-TECH, LOW-COST**

Cosmetic procedures are a lot less risky today than a few years back, due to the introduction of less invasive techniques. A decade ago, it took surgeons about seven hours to do a facelift; today, most operations of that type take only a couple of hours, including the first phase of recovery.

Some European procedures are performed in Mexico under local anesthetic, which implies fewer complications and renders better results. Botox injections, laser surgery, endoscopic surgery that requires only small incisions, and more specialized operations like post-bariatric surgery (to remove excess skin after dramatic weight loss) are just a few of the many treatment choices available, all of which comply with the highest operating and recovery standards and employ state of the art technology.

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**LAS REFORMAS Y SU INCIDENCIA PARA UN MÉXICO MÁS COMPETITIVO**

Durante las últimas décadas diversos países han impulsado la modernización de sus gobiernos para agilizar la apertura y el funcionamiento de las empresas. México no se ha quedado al margen y en paralelo a las recientes reformas estructurales ha sentado las bases para mejorar la apertura y administración de empresas.
Las bebidas nacidas en México son cada vez más demandadas en el mercado internacional. La cerveza y el tequila no son los únicos productos reconocidos en el exterior. El mezcal se ha posicionado como una bebida mexicana que ha trascendido fronteras y forma parte significativa del mercado internacional de bebidas espirituosas.

Durante varias décadas el mezcal fue considerado como un producto regional, apreciado solo por las comunidades productoras y cuya expectativa de negocio era muy baja. Sin embargo esta perspectiva ha cambiado drásticamente; como se analiza en una breve nota sobre el tema, en la actualidad esta bebida se exporta a más de 30 países. Durante 2013 los principales destinos de exportación fueron Estados Unidos, Australia, Chile y Reino Unido. Actualmente se busca posicionar esta bebida insignia en otros mercados.

Asimismo, se publica en esta edición una nota sobre la competitividad en el escenario global, basada en conceptos como innovación y logística, y en la productividad de las diversas regiones que conforman el país. En este sentido se publica una reflexión sobre la relevancia de las reformas en el entorno empresarial, haciendo énfasis en las recientes modificaciones a la Ley General de Sociedades Mercantiles (LGSM) en México, con el propósito de facilitar la creación de empresas y promover la atracción de inversión extranjera. Estas adecuaciones a la norma impactarán sin duda alguna en el posicionamiento y participación de las empresas mexicanas en el mercado internacional.

¡Bienvenidos a Negocios ProMéxico!
UNA SEMANA DEDICADA AL COMERCIO ELECTRÓNICO

La Asociación Mexicana de Internet (AMIPCI) realizará la Expo Comercio Electrónico AMIPCI, del 7 al 10 de octubre de 2014, en las instalaciones del World Trade Center en la Ciudad de México. Se trata de la primera exposición dirigida a empresas que desean incursionar en el comercio electrónico, y su propósito es vincular a especialistas en negocios online con quienes han decidido iniciar o mejorar sus negocios a través de Internet. Este evento se organiza con apoyo del Programa de Desarrollo del Sector de Servicios de Tecnologías de Información (PROSOFT 3.0) impulsado por la Secretaría de Economía.

El programa de Expo Comercio Electrónico AMIPCI está compuesto por cuatro grandes actividades:

1. Dominios en América Latina (7 y 8 de octubre). Se analizará el futuro y los efectos de las transformaciones que se han registrado en la mecánica de los dominios en los últimos años. También se analizará el impacto comercial y social de la creación de nuevos dominios en América Latina.

2. Exposición de comercio electrónico (8, 9 y 10 de octubre). Se trata de la primera exposición en México enfo- cada de manera exclusiva al comercio electrónico. Su objetivo es reunir a las empresas que acaban de incursionar en el comercio electrónico o tienen planes de hacerlo, con los principales proveedores de servicios en el país. Además, se mostrarán aspectos relevantes sobre infraestructura, estrategias de mercadotecnia y financiamiento.

3. E-Commerce Day (9 de octubre). Es la conferencia con mayor trayectoria en México, organizada por la AMIPCI desde hace casi una década con la participación de los expositores más reconocidos en la materia.

4. Seminario (10 de octubre). Consiste en un seminario en el que participan ponentes nacionales e internacionales para intercambiar ideas y puntos de vista sobre mercadotecnia digital.

www.ebusinessweek.mx
El Grupo Aeroportuario Centro Norte (OMA), realizará una inversión de 350 millones de pesos para remodelar el aeropuerto internacional de Acapulco Guerro, como parte de su programa de modernización aeroportuaria para 2014.

El proyecto contempla dos etapas; la primera comenzará en octubre de 2014 y consistirá en la demolición de un edificio y la construcción de uno más moderno que se adecue a las necesidades de los miles de viajeros que transitan por ese aeropuerto cada año.

www.oma.aero

Cementos Fortaleza inició operaciones en su nueva planta El Palmar, en el estado Hidalgo, para lo que requirió una inversión de más de 300 millones de dólares. La empresa, filial del consorcio mexicano Elementia especializado en el ramo de la construcción e industrial, proyecta producir un millón 100,000 toneladas de cemento al año, en la que es considerada como una de las plantas productoras de cemento más modernas de América Latina.

Ahmsa y Siemens firman contrato

Altos Hornos de México (AHMSA) contrató a Siemens VAI para que construya una planta de desgasificación de acero al vacío dentro de la Siderúrgica 2. La nueva planta, que entrará en operación en octubre de 2015, requerirá una inversión de 83 millones de dólares y tendrá capacidad para procesar dos millones de toneladas métricas de acero líquido al año.

www.ahmsa.com
www.industry.siemens.com

Grupo Cinemex planea abrir 11 salas de cine en Miami, Florida, donde espera a cerca de 400,000 asistentes al año. De este modo, la cadena inicia su expansión internacional. El primer complejo de la cadena fuera de México estará ubicado en Brickell City Center –el complejo inmobiliario en desarrollo más importante de Miami, localizado en el distrito financiero de la ciudad. El cine contará con 11 salas tipo Platino con capacidad para 622 asientos y una asistencia estimada de 400 mil personas al año. El nuevo complejo abrirá sus puertas a principios de 2016.

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www.industria.siemens.com

El Servicio de Administración Tributaria (SAT) invertirá aproximadamente 9,300 millones de pesos en los próximos cuatro años para mejorar la infraestructura de aduanas en el país y facilitar el procesamiento aduanal.

El objetivo es fortalecer el dinamismo que ha mostrado México durante los últimos 20 años, en los que ha duplicado su participación en el comercio mundial y se ha convertido en el principal exportador de mercancías y manufacturas en América Latina.

www.sat.gob.mx
MEZCAL: UNA BEBIDA QUE HA TRASCENDIDO FRONTERAS

El mezcal representa la historia, la cultura y la diversidad del país. La bebida que hace tres décadas era considerada como un producto regional con poco valor económico ha cambiado de paradigma por completo. Hoy día esta bebida representa una fuente de ingresos para miles de familias de distintas comunidades rurales del país.

Mezcal es el nombre de la bebida mexicana tradicional obtenida por destilación y rectificación del maguey, preparado con los azúcares extraídos de las cabezas de agave, previamente cocidas, molidas y sometidas a fermentación. Dado que el maguey es endémico de América, se ha demostrado que desde hace más de 9,000 años nuestros antepasados utilizaban el maguey como alimento. Existen más de trescientas especies de maguey y México concentra más de 75% -35% de dichas especies son endémicas del país. El agave también es llamado maguey. Nuestros ancestros lo utilizaban para múltiples propósitos. Era utilizado como alimento y bebida, también para fabricar calzado, utensilios e inclusive para construir techos y paredes. Ha estado presente en la vida religiosa, social y cultural de todo el país. Tan importante era, que algunas culturas tenían diidades que representaban al maguey, como Mayahuel, la diosa mexica de especies silvestres. Tanto el maguey y el aprovechamiento de sus frutos como el uso de la agave, han sido utilizadas en diferentes tierras y climas.

La bebida que hace tres décadas fue incorporada en los rituales de maguey, como Mayahuel, la diosa mexica de especies silvestres. Dado que el maguey es endémico de América, se ha demostrado que desde hace más de 9,000 años nuestros antepasados utilizaban el maguey como alimento. Existen más de trescientas especies de maguey y México concentra más de 75% -35% de dichas especies son endémicas del país. El agave también es llamado maguey. Nuestros ancestros lo utilizaban para múltiples propósitos. Era utilizado como alimento y bebida, también para fabricar calzado, utensilios e inclusive para construir techos y paredes. Ha estado presente en la vida religiosa, social y cultural de todo el país. Tan importante era, que algunas culturas tenían diidades que representaban al maguey, como Mayahuel, la diosa mexica de especies silvestres. Tanto el maguey y el aprovechamiento de sus frutos como el uso de la agave, han sido utilizadas en diferentes tierras y climas.

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Los atributos que hacen del mezcal un producto exportable son su carácter artesanal, ser una bebida 100% natural y las concentraciones altas de alcohol que refuerzan su sabor y lo distinguen de otras bebidas espirituosas.

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El mezcal se exporta a más de 30 países. Actualmente hay más de 280 marcas registradas en operación. En 2013, 142 empresas exportaron mezcal: Baja California, Oaxaca y el Distrito Federal concentraron, en conjunto, 49% del valor total del mezcal exportado. Al menos 33 empresas mercadearán están exportando a Europa, 30 de ellas son de Oaxaca. Durante 2013 los principales destinos de exportación de mezcal fueron Estados Unidos (con una participación de 55%, Australia (9%), Chile (4%) y Reino Unido (3%). Las categorías más demandadas por el consumidor extranjero son el mezcal joven, joven con Gusano, reposado y reposado con Gusano –en conjunto representan 93.3% del mezcal exportado. N

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La competitividad en el escenario global se basa en la conjunción de tres elementos clave: innovación, logística y productividad. Estos conceptos han sido piedra angular para el desarrollo regional, así como para impulsar la integración económica mundial.

En las últimas décadas el papel de México en el escenario global ha tenido una gran transformación, resultado de un crecimiento en las actividades industriales, logísticas y de exportación del país. En algunos casos el desarrollo regional ha sido impulsado por la apertura de la economía nacional al mercado global. En el periodo relativamente corto México cambió de ser una economía cerrada –bajo fuertes controles gubernamentales ejercidos a través de empresas parasestatales, monopolios y regulaciones aduaneras–, a un verdadero campeón del libre comercio en el mundo.

La apertura económica del país comenzó en 1986, cuando México se convirtió en miembro del Acuerdo General de Aranceles y Comercio (GATT), y estableció el camino para incrementar la competitividad de su sector industrial. Este incremento en la productividad nacional vino acompañado de procesos que transformaron la vida social, económica y política del país. Este gran momento de cambio para México se vio reflejado en una nueva política económica nacional cuya flexibilidad permitió la llegada de nuevas inversiones de origen extranjero, fortaleciendo la reciente capacidad productiva nacional.

Este fue el primer gran paso hacia el establecimiento de una región económica más integrada, en donde el impulso al intercambio comercial entre Canadá, Estados Unidos y México representaba una oportunidad única para los tres países, con el propósito de crear un bloque económico productivo frente a la creciente competitividad registrada en Europa y Asia. Al concretarse la firma del Tratado de Libre Comercio de América del Norte (TLCAN), México ingresó a la era del libre comercio y las economías interconectadas. Este mecanismo sirvió para detonar un intercambio de mercancías, bienes y personas más intenso.

El proceso de liberalización de la economía mexicana y la apertura a mercados globales propició la llegada de inversiones productivas que han generado múltiples empleos, así como la especialización de los trabajadores mexicanos. Esta dinámica entre inversión y productividad ha sido sumamente significativa. Al principio la industria mexicana tuvo que sortear distintas dificultades con su contraparte en el norte, por ejemplo. Sin embargo, la apertura comercial ha sido un elemento fundamental para su apuntalamiento.

América del Norte es uno de los bloques económicos más competitivos a nivel mundial. La región del TLCAN representa un producto interno bruto (PIB) de 19.2 billones de dólares, que constituyen más de 25% del PIB mundial. Su intercambio comercial se estima en más de 100 millones de dólares por hora. A 20 años de la entrada en vigor del TLCAN, el comercio de los tres soseos se ha triplicado. Esto se ha logrado gracias al compromiso político y económico de los países que conforman la región –especialmente México, donde el fortalecimiento de la industria nacional se logró pese a que el país estaba en condiciones de desventaja competitiva frente a sus socios al momento en que entró en vigor el acuerdo. Con el objetivo de promover políticas públicas que impulsen el intercambio comercial en la región, se creó la North American Strategy for Competitiveness (NASCO), una coalición y plataforma que tiene como objetivo promover la competitividad de América del Norte a través de iniciativas relacionadas con el desarrollo y especialización de capital humano, así como con otros temas como la autoeficiencia energética, logística y transporte.

NASCO tiene como socios a diversas instancias gubernamentales, privadas y académicas de Canadá, Estados Unidos y México, así como a representantes de los tres órdenes de gobierno –federal, estatal y municipal– que trabajan en la generación de propuestas con el objetivo de incrementar la competitividad en la región. Es un referente obligado para la formulación de políticas públicas que incrementen el desarrollo de capital humano orientado al trabajo, la autoeficiencia energética, logística y eficiencia en la distribución.

En México el comité NASCO tiene la finalidad de apoyar a los sectores público y privado en un esfuerzo por coordinar y promover un sistema logístico de clase mundial en el país, así como para consolidar su posicionamiento en la región como un excelente destino para hacer negocios. Asimismo, está enfocado a difundir mejores prácticas y uso de tecnologías de punta sobre infraestructura de transporte y logística para el beneficio de sus socios. NASCO se ha involucrado en el desarrollo de políticas públicas a nivel nacional. Se puede mencionar, por ejemplo, la creación y el desarrollo de un Sistema Logístico Nacional (SIN), el cual se ha basado en el estudio Sistema de Plataformas Logísticas, elaborado a través de sus ocho componentes.

El Sistema Logístico Nacional permitirá la detección de zonas prioritarias en el país, con el objetivo de impulsar el desarrollo de corredores logísticos que incentiven la interconexión con otros corredores existentes en Canadá y Estados Unidos.

**LOGÍSTICA Y TRANSPORTE:**

**HACIA UNA AMÉRICA DEL NORTE MÁS COMPETITIVA**

Por José Pablo Majadu Pontón*

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*Secretario de Desarrollo Económico del Estado de Hidalgo y Presidente del Comité NASCO, México.
México es un destino competitivo para atraer pacientes extranjeros –principalmente de Canadá y Estados Unidos. Los bajos costos comparativos, el alto nivel de las instalaciones médicas, una amplia base de capital humano especializado y una posición geográfica conveniente, son elementos que han hecho que México sea un destino preferido por el turismo médico.

En los últimos años la industria del turismo de salud ha crecido rápidamente en México –esta industria incluye tanto al turismo propiamente médico como al denominado turismo de bienestar, que incluye servicios de spa y casas u hogares de retiro para personas de edad avanzada, entre otros servicios. Así, México es hoy uno de los destinos más populares para el turismo médico gracias a una combinación muy afortunada de factores geográficos, económicos, infraestructurales y de políticas públicas de primer nivel. Los servicios médicos que más demandan los pacientes extranjeros son cardíacos, cardiólogía, oncológica, ortopedia, odontología y cirugía cardiovascular, cosmética, gástrica, reconstruyente y terapéutica.

Según un estudio de Patients Beyond Borders, México es el país que más turistas extranjeros atiende en odontología y cirugía cardíaca. El estudio señala que durante 2013 México atendió a más de un millón de pacientes extranjeros, lo que colocó al país como el segundo destino de servicios médicos en el mundo –después de Taiwanda, país que atendió a 1.8 millones de pacientes extranjeros.

El turismo médico es una industria emergente que se contabiliza como ingreso por conceptos del turismo en general. Algunas fuentes calculan que un paciente extranjero deja un promedio de 17,000 dólares por hospedaje, comidas, viajes y medicamentos. En 2006 ningún hospital mexicano estaba acreditado internacionalmente, actualmente son 10 instituciones las que han sido certificadas por el CSG, que prestan servicios de salud de manera regular a pacientes extranjeros.

De acuerdo con algunas estimaciones, los pacientes extranjeros que se atienden en México dejan una derrama económica cercana a 2,500 millones de dólares anuales. Se estima que esta cifra podría crecer 7% al año, en la medida en que aumente el número de instituciones mexicanas con certificación internacional. México tiene una base de capital humano altamente calificada en servicios médicos. Según datos de la Organización para la Cooperación y el Desarrollo Económico (OCDE), la proporción de médicos especialistas entre médicos generales en México es de 62.3% –proporción superior al promedio de la OCDE (57.7%)–, que nos coloca como el décimo país con más médicos especialistas dentro del total de la población médica mundial.

En 1999 el Consejo de Salubridad General (CSG) de México inició un programa de certificación de hospitales y clinicas nacionales de salud con estándares internacionales. Sin duda, este crecimiento propiciará la generación de indicadores específicos, lo que en unos años permitirá contar con estándares más confiables sobre el turismo médico en México.

Asimismo, en México se gradúan 11.6 médicos por cada 10,000 habitantes, mientras que el promedio de la OCDE es de 4.8. La misma entidad médica entre los países miembro.

Según cifras del CSG, en 2013 México de la OCDE es de 4.8.

Lo anterior representa una gran oportunidad para ampliar la capacidad de atención y hacer todavía más competitivo al sector. Si se mantienen las inversiones necesarias para adquirir equipos especializados y continúa el número de instituciones de salud certificadas a nivel internacional, México será sin duda un destino internacional líder para el turismo médico, no solo en América del Norte sino en el mundo entero.

**Por Cecilia Ramos Avila**

SERVICIOS MÉDICOS DE MÉXICO PARA EL MUNDO

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**Por Cecilia Ramos Avila**
MÉXICO: PROMESA MUNDIAL PARA EL TURISMO MÉDICO

La infraestructura de servicios médicos del sector privado, la cercanía con Estados Unidos y la fuerte demanda de servicios médicos de calidad posicionan a México como potencia líder en el sector.

A LA VANGUARDIA
Según estadísticas publicadas en Patients Beyond Borders, México ocupa el segundo lugar como destino de turismo médico a nivel mundial – detrás de Tailandia –, con más de un millón de pacientes extranjeros al año, entre los cuales destacan visitantes estadounidenses, canadienses y de algunos países europeos y sudamericanos. Los pacientes de Estados Unidos provienen principalmente de tres estados sureños: California, Arizona y Texas.

De acuerdo con datos de la Secretaría de Turismo, México tiene más de una docena de destinos especializados en este tipo de turismo, industria a la que también se unen otros prestado-

En los últimos años el incremento a nivel global del flujo de pa-

cientes y profesionales de la salud, así como los avances en la ciencia médica, las tecnologías de la información, el financiamiento de capital y los regímenes regulatorios en las fronteras internaciona-

les han dado lugar a nuevos patrones de consumo y producción de servicios de salud.

Cada vez más pacientes cruzan fronteras en busca de trata-

mientos y atención médica. El fenómeno, que de acuerdo a la Or-

ganización para la Cooperación y el Desarrollo Económicos (OCDE) se denomina turismo médico, abarca una amplia gama de servicios médicos pero se concentra principalmente en trata-

mientos dentales, cirugías, terapias y rehabilitación.

Son varios factores los que favorecen a la industria del turis-

mo médico en México; entre ellos: la proximidad geográfica con Estados Unidos, la calidad del capital humano –prestadores de servicios de salud altamente capacitados–, las certificaciones internacionales de hospitales y clínicas de atención médica, además del costo de los tratamientos –en algunos casos hasta 80% más baratos que en Estados Unidos.

Joint Commission International (JCI) se encarga de certificar a las instituciones de salud en el mundo para que puedan conside-

rarse como destinos de turismo médico. La JCI identifica, mide y comparte con el mundo las mejores prácticas relacionadas con la calidad y la seguridad de los pacientes.

El Consejo de Salubridad General de México ha certificado (hasta julio de 2014) un total de 90 hospitales privados y 119 es-

tratos en proceso de certificación para poder ofrecer servicios vin-

culados con el turismo médico. Dentro de estos establecimientos certificados se encuentran grupos líderes como el Centro Médico ABC y Médica Sur, entre otros.

LÍDERES EN EL MERCADO
En su misión por contribuir al fortalecimiento de la industria mexicana y la consolidación y facilitación del comercio con Est-

ados Unidos, la American Chamber of Commerce of Mexico (AmCham) promueve políticas públicas que permitan impulsar una mayor prosperidad económica en la región. En este senti-

do, se ha identificado al turismo de salud como industria con grandes oportunidades que crece y evoluciona a un ritmo muy rápido y que representa un segmento económico muy próspero que no debe pasar desapercibido.

Socios de AmCham participan activamente en la promoción del turismo médico. Tal es el caso de Médica Sur, complejo hos-

pitralario que ha generado ingresos considerables en México.

Se ha mencionado en los medios que “México tiene las con-

diciones idóneas para rebasar a Tailandia, principalmente por la cercanía geográfica con Estados Unidos, el mercado de turismo, que representa 40% del total del turismo de salud en el mundo”.

En su publicación Doing Business in Mexico: Turismo, PwC –otro socio de AmCham– señala que un sector importante al que puede dirigirse el turismo médico son los ocho millones de adultos en proceso de retiro en México, además de los cinco millones de ciudadanos estadounidenses que residen en estados colindantes con la frontera de México. En este estudio se sos-

tiene que 250,000 estadounidenses salen de su país para recibir servicios de atención médica, lo que representa un gasto anual de 5,500 millones de dólares –considerando que 47 millones de estadounidenses no tienen seguro o cobertura médica.

Finalmente, un grupo importante que impulsa esta industria es el de las compañías aseguradoras, las cuales buscan ofrecer planes de cobertura que ayuden a reducir los costos de trata-

miento y tener una mayor cobertura de servicios a escala inter-

nacional, beneficiando a los pacientes con ahorro en los costos de primas, copagos o deducibles.

*Director General y Vicepresidente Ejecutivo de American Chamber of Commerce of Mexico (AmCham).

Por Guillermo Wolf*
Las recientes reformas estructurales en México tienen como uno de sus propósitos convertir al país en un destino cada vez más atractivo para la inversión extranjera y para el establecimiento de inversiones productivas en distintos sectores. A la par de estas modificaciones sustantivas, México —siguiendo recomendaciones puntuales del Banco Mundial— ha realizado cambios y mejoras regulatorias con el propósito de modernizar y simplificar la apertura de nuevas empresas, así como su administración.

El Banco Mundial señaló que en los países donde existe un gobierno electrónicoflexible, las empresas tienen una mayor facilidad para hacer negocios. El gobierno electrónico surgió en la década de 1980 y se ha convertido en el mecanismo más efectivo para impulsar el desarrollo de las empresas a nivel mundial. Hace un par de meses se publicaron varias reformas que modifican el régimen legal de las sociedades mercantiles (LGSM), las cuales tienen como propósito modernizar, flexibilizar e incorporar reglas más eficientes para el tipo de sociedad mercantil más común en México: la Sociedad Anónima (SA).

Las recientes reformas permiten a las empresas disminuir, de manera significativa, los costos financieros que representaba costos notariales y de giro o incluir nuevas facultades, lo que modifican sus estatutos para cambiar de giro repentinamente en un monto equivalente a 0.07% del Producto Interno Bruto (PIB) del país, es decir, alrededor de 8,739 millones de pesos.

La Secretaria de Economía, a través de la Subsecretaría de Competitividad y Normatividad, ha señalado que con estas nuevas regulaciones México podrá avanzar varias posiciones en el rubro “facilidad para hacer negocios” del reporte Doing Business del Banco Mundial —en este análisis se desglosa una medición objetiva de las normas que regulan la actividad empresarial, así como su puesta en práctica en 189 economías y ciudades seleccionadas.

La nueva Sociedad Anónima en México

A continuación se enlistan las modificaciones más representativas realizadas a la LGSM, las cuales tienen como propósito modernizar, flexibilizar y optimizar el gobierno corporativo:

1. **Objeto social flexible.** Antes de estas reformas, las empresas no podían realizar varias funciones expresamente establecidas en sus actas constitutivas. Para llevar a cabo actividades distintas a las contempladas en su objeto social, era necesario reformar los estatutos. Esto no era congruente con las prácticas comerciales actuales. En la actualidad las empresas pueden cambiar de giro y así incluir nuevas facultades, lo que representaba costos notariales y de tiempo.

2. **Fedatarios Públicos.** Se actualizaron los artículos de la LGSM en los que se alude a notarios y correderos públicos, quienes tienen facultades para realizar ciertos actos jurídicos. De esta manera se aclaran algunas controversias sobre las facultades de los correderos públicos, lo que genera una mayor competencia y calidad en la prestación de los servicios fedatarios.

3. **Libertad contractual,** mejora al gobierno corporativo y derechos de minorías. Antes de las reformas, el régimen de las sociedades era rígido —por ejemplo, la celebración de acuerdos entre accionistas y la organización de los órganos societa-
rio-, lo cual generaba cierta desventaja con respecto a otros países para atraer inversión. La legislación mercantil en materia de gobierno corporativo y derechos de minorías se diseñó hace décadas y, a pesar de que en la práctica se realizaban convenios entre accionistas, no había libertades como las que se contemplan en la reformada LGSM. Ahora las SA pueden pactar restricciones respecto a la transmisión de acciones, la exclusión de accionistas y la emisión de acciones que no confieran derecho de voto, entre otras medidas. Asimismo, la ley permite que se amplíen, limite o nieguen el derecho de suscripción preferente, con lo que podrán incluirse candados en los estatutos sociales correspondientes, además de limitar la responsabilidad en daños y perjuicios ocasionados por consejeros y funcionarios.

Aunado a lo anterior, los accionistas de las SA podrán convenir entre ellos sobre:

- **Derechos** y obligaciones que esta- blezcan opciones de compra o venta de acciones.
- **Actos**, **acciones de liquidación** de empresa,
- **Acuerdos** para el ejercicio del derecho de voto.
- **Acuerdos** para la enajenación de acciones en oferta pública, entre otros.

Respecto del derecho de minorías, las reformas dotan de mejores derechos a los accionistas que tengan una participación minoritaria en la empresa, sin comprometer la operación de las sociedades. Asimismo, ahora es factible tener acciones con y sin derecho a voto. En suma, los derechos de minorías se ven reflejados básicamente en los siguientes supuestos:

- Disminución del porcentaje necesario para ejercer una acción civil en contra de los miembros del consejo de administración, de 33% a 25%.
- Reducción del porcentaje necesario para aplazar por tres días y sin necesidad de nueva convocatoria, la votación de cualquier asunto respecto del cual no se consideren suficientemente informados, de 33% a 25%.
- Disminución del porcentaje necesario para oponerse judicialmente a las resoluciones de las asambleas generales, de 33% a 25%.

Asimismo, antes de las reformas de las SA tenían que publicar en el DOF y en el DOF, en caso de aumentos de capital social. Acuerdos para el ejercicio de derecho de voto. Acuerdos para la enajenación de acciones en oferta pública, entre otros. Los costos de publicación fueran sumamente altos y muchas empresas no acataban esta norma, o publicaban en periódicos con bajo tiraje, lo cual provocaba incertidumbre jurídica, irregularidades y fomentaba los litigios.

Con las modificaciones a la LGSM se optimizan las actividades comerciales de las empresas. En este sentido se establecerá un sistema electrónico regido por la Secretaría de Economía, que deberá publicarse el 14 de junio del 2015 en el DOF. Algunos de los temas que antes se publicaban en diarios impresos ahora deberán difundirse en medios electrónicos. Son los casos de reducciones y aumentos de capital social, convocatorias para asambleas, acuerdos sobre fusión de empresas, resolución de exclusión de empresas, balance final de liquidación de compañías y balances generales de las sociedades extranjeras en México, entre otros.

Sin lugar a dudas, estas modificaciones modernizan la legislación mercantil mexicana, acercándola a las mejores prácticas internacionales. Esto se traducirá en una simplificación administrativa para las empresas y, por tanto, en mayor competitividad.
MEXICO IS THE SECOND LARGEST MARKET IN LATIN AMERICA FOR THE PHARMACEUTICAL INDUSTRY.

- FROM 2005 TO 2013, FDI CAPTURED BY THE PHARMACEUTICAL INDUSTRY AMOUNTED TO 3.465 BILLION DOLLARS.
- IN 2013, MEXICAN PRODUCTION IN THE PHARMACEUTICAL INDUSTRY EXCEEDED 13 BILLION DOLLARS.

Source: ProMéxico with information from Global Insight, the Ministry of Economy, and INEGI 2013.