



### Active network for researchers

More research projects than ever before are working to understand how Reuteri contributes to better health.

*Read more on pages 3-5*

### 20th anniversary

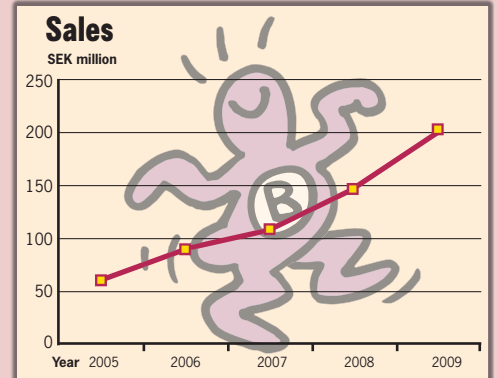
It would have been impossible to predict BioGaia's development twenty years ago. One thing is certain, things never turn out the way you expect.

*Read more on pages 12 and 13*

### BioGaia in brief

This year we have gathered significant data and facts about the company on the last page of the newspaper section.

# BioGaia®



A magazine from BioGaia about the past year

Annual report 2009



## The future is OURS

We are still a small company in the early stages of development and in a relatively new market. The so-called megatrends remain positive for BioGaia. The market for our natural products without side-effects that are suitable for "self-medication" is expected to show continued strong growth.

### Continued strong growth

Operating profit for 2009 was SEK 47.7 million and net sales amounted to SEK 203.5 million. Sales grew by 40% and operating profit by more than 80%. All in all, this proves the effectiveness of the "model" – to achieve higher sales without a proportionate increase in costs.

*Read more in the annual report and in the magazine*



### BioGaia brand growing stronger

More and more partners are choosing to work with the BioGaia brand. Today it is found alone or on co-branded products in more than half of the markets where BioGaia is represented.

*Read more on page 11*

### New probiotic oral rehydration solution

BioGaia's product range has been expanded with an oral rehydration solution for infants. First on the market was Swedish Semper.

*Read more on page 9*

### BioGaia Academy on home ground

Stockholm and its surroundings showed themselves from their best side when BioGaia's partners and researchers gathered to exchange experiences. These meetings contribute effectively to strengthening the company's position around the world.

*Read more on pages 6 and 7*

# “Another successful year”

**ANOTHER FANTASTIC YEAR** has passed and we have essentially met all our high internal goals.

Sales increased by 40%, profit before tax more than doubled and we achieved a net margin of over 25%. However, our annual growth and in particular growth per quarter have varied, and I therefore feel obliged to warn against assessing the company's development on the basis of such short periods.

We are naturally pleased, but can we keep up a rapid growth rate?

There is a lot that suggests it may be possible. We are still a small company in a market that is relatively new, and the so-called megatrends remain favourable for BioGaia's products – natural products without side-effects that are suitable for “self-medication” are expected to continue growing strongly.

Resistance to antibiotics is a serious and growing problem. In the EU, 25,000 people died in 2009 because no antibiotics worked on the pathogenic bacteria they had been infected with. Otto Cars, Chairman of Strama (the Swedish strategic programme against antibiotic re-

sistance) estimates that the real figures are even higher, perhaps as much as five times higher. How can we handle this gigantic problem that is in the process of pushing us 60 to 70 years back in time?

I can't understand how authorities around the world can invest enormous sums in an influenza vaccine while the antibiotics question arouses only lukewarm interest.

It takes 10 to 12 years to develop new antibiotics, but there is no guarantee that this will solve the resistance problem. Strama and other organisations are working to reduce the use of antibiotics in both human beings and animals. Obviously, this is a critical task and it must be tackled globally since the spread of infection today is borderless.

BioGaia's products don't solve the resistance problem, but they do indicate a part of the solution, i.e. to improve our health by building up our immune defence. We can then avoid the overuse of antibiotics and save them for the more serious cases. In studies on children, we have shown that the need for antibiotics decreases if BioGaia products are taken



Peter Rothschild, Managing Director of BioGaia.

for preventive purposes. The new products against the gastric ulcer bacterium *Helicobacter pylori* that we are now being tested in clinical trials may well be a first alternative to the heavy triple therapy consisting of a proton pump inhibitor such as Losec and two different antibiotics.

Although we have a large market share in countries like Italy and Finland, I believe there is still considerable potential there. In many important countries, such as Germany, France, Brazil, Japan and the USA, we are just getting started. We are planning to launch our products in 20 countries over the next 12 months. In China and England we still have no distributor for our tablets or drops.

In the past year we launched two unique new products, an oral rehydration solution with Reuteri and our oil drops with vitamin D, which can make a good contribution to our growth within a year or so.

Our focus on the BioGaia brand is continuing and approximately 30% of our finished products are now sold under our own brand. In the long term this is very important for us and we are trying to persuade several of our distributors to change over to the BioGaia brand completely or to some form of “co-branding”.

For two years we have been working to adapt our business model to conditions in Japan, where distribution is complicated. The solution to this problem is an agreement with Nippon Access, one of Japan's largest wholesalers, which is owned by the major Japanese trading house Itochu. Through this agreement, our products can be offered via the retail trade, pharmacies, home deliveries, etc. Now, Japan could

become a key market for BioGaia.

Through our cooperation with Nestlé, in which they add *Lactobacillus reuteri* to infant and baby formula, the first products are now available on the French market. In 2010 a number of launches will follow around the world and Nestlé could become one of BioGaia's largest customers.

On the oral health side, we have concentrated on conducting additional clinical studies. Today there are seven studies which show that our products have significant effects on bleeding gums, dental plaque and caries, and with the help of these studies we will be able to increase sales of our oral products, which have not quite kept up with the rapid development of our other products.

**GIVEN OUR GROWTH** in established markets, launches in newly contracted markets and contracts for new markets, new products and indications, it is highly probable that we can continue to maintain a high rate of growth.

Since our fixed costs are not increasing at the same rate as our sales and our gross margins are relatively stable, there is good potential to attain high net margins.

We have a successful model and in my opinion, BioGaia's shareholders can therefore look to the future with confidence. □

A handwritten signature in black ink, appearing to read 'Peter Rothschild'.

Peter Rothschild,  
Managing Director of BioGaia

## BioGaia glossary

**Antibiotics:** Compounds that kill or inhibit the growth of microorganisms.

**Biotechnology:** Technical application of natural processes.

**Clinical research:** Research on humans.

**Functional Foods:** Food products that contain ingredients with documented health benefits.

**Gingivitis:** Inflammation of the gingival tissues, characterised by bleeding gums.

**Lactobacilli:** Lactic acid bacteria, i.e. bacteria that are able to ferment various types of sugar and convert them into lactic acid.

**Lactobacillus reuteri:** BioGaia's patented probiotic lactic acid bacterium with the brand name Reuteri®.

**Lactobacillus reuteri Prodentis:** Name of a combination of Reuteri strains used in oral health products.

**Lactobacillus reuteri Protectis:** Name of the Reuteri strain used in BioGaia's gut health and immuno-enhancing products.

**Nutrition:** The science or study that deals with food and nourishment, especially in humans.

**Partner:** BioGaia uses the word partner instead of customer for companies that distribute and sell the company's products.

**Periodontal disease:** Inflammation of the gums leading to tooth loss.

**Premature:** Born after a shorter than normal gestational period.

**Probiotics:** Live microorganisms which when given in adequate amounts confer a health benefit on the host.

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# High activity at all levels

For every year that passes we are gaining more and more knowledge about *Lactobacillus reuteri* and how it interacts and functions in humans. One of the year's most significant findings is that there are clearly human Reuteri strains that have evolved together with humans and are living in symbiosis with us.

**RESEARCH RELATING TO** *Lactobacillus reuteri* spans over a vast area, particularly with regard to the basic research currently underway. For Research Director Eamonn Connolly, one goal is to stay informed about the projects that are contributing to an increased knowledge and understanding of Reuteri both at the fundamental level and in the clinical studies being carried out with lactic acid bacteria. In addition, he is involved in initiating new research.

In the past year, a number of new clinical results were presented at different congresses. Perhaps the most important discovery has been Reuteri's influence on various forms of diarrhoea.

One study has shown that Reuteri reduces the occurrence of antibiotic-associated diarrhoea in adults, and another open pilot study showed that Reuteri could be used together with chemotherapy to reduce the occurrence of diarrhoea in the patients.

Dr. Flavia Indrio presented a new study confirming the effects of Reuteri on the intestinal function of pre-term newborns.

Eamonn Connolly says that there have never been so many clinical studies in progress as at present and that we can look forward to many exciting results and projects in the future.

Clinical studies over the years have clearly shown that Reuteri has a positive effect on human health and that it helps in a good way to strengthen and balance various functions in our bodies.

"The microbiology of the human body is an extensive and largely unexplored area," says Eamonn Connolly. "When we see the effects we can achieve with the help of Reuteri, we naturally want to know everything about how and why this takes place. This applies not only to

"Reuteri and humans have evolved together and this is big news in the research world."

EAMONN CONNOLLY

us at BioGaia; many researchers around the world are seeking to understand the relationships between our health and the occurrence of different bacteria in the body."

During the year, Thomas Abrahamsson defended his doctoral thesis at Linköping University Hospital which included work on clinical material from a large allergy study in Sweden. The study shows that Reuteri in the GI tract affects the balance in the immune system, which has been possible to see in the breast milk and blood.

Furthermore, Professor Vito Miniello at the Department of Pediatrics, University of Bari, has shown that Reuteri influences the immune balance in the lungs of allergic school children. These findings show that Reuteri not only affects GI function, which is often talked about, but also lives in symbiosis and can influence the functions of other parts of our body.

**AT THE UNIVERSITY OF MICHIGAN,** research scientist Jens Walter is working to identify the similarities and differences between different strains of *Lactobacillus reuteri*. With the help of modern DNA technology, each strain can be studied down to the smallest detail. There are

hundreds of strains and they occur not only in humans but also in other mammals and in birds.

Eamonn says that Jens Walter and his colleagues have found several clusters of strains, based on the species from which they are derived. One conclusion that can be drawn is that strains of Reuteri have developed and become adapted to their different "hosts", which means that it is easy to see which are human strains.

"This suggests that Reuteri is indeed a natural part of the human bacterial flora," says Eamonn Connolly.

"Reuteri and humans have evolved together and this is big news in the research world. As a result, it is not so strange that we benefit from this symbiosis and that the truly human Reuteri strains are probiotic. Nonetheless, Reuteri does not occur in everyone and even if Reuteri is introduced into an individual, it eventually disappears unless it is replenished."

This gives rise to many questions. Is it our lifestyle, our diet or the environment that is to blame? Were things different a couple thousand years ago? Is there any primitive culture re-



PHOTO: ULF LODIN

For every year there is a growing volume of research on *Lactobacillus reuteri*, which means a wider field of activity for Research Director Eamonn Connolly to keep track of.

maintaining where everyone has Reuteri in their bacterial flora?

"We will be looking into this!" says Eamonn Connolly. □

## REPORTING OF CLINICAL STUDIES

Publication of clinical trial results is a key success factor for BioGaia. The International Committee of Medical Journal Editors has initiated a policy requiring clinical investigators to deposit information about trial design into an accepted clinical trials registry before the onset of patient enrolment, and this is now becoming a prerequisite for publication of trial outcomes in major medical journals. ClinicalTrials.gov is a registry of clinical trials provided by the U.S. National Institutes of Health and BioGaia encourages all clinicians working with BioGaia products to

register their trials on this site. Many of the trials are registered at an early stage, which means that some of the registered trials will not be performed as planned.

Consequently, BioGaia does not take any responsibility for ensuring that the registered trials reach completion or are successfully reported in the register or the scientific literature. When clinical trials results do become available, BioGaia will report these through press releases if such results are of significant importance to its operations.



PHOTO: CHATARINA ANDERSSON

Researchers from around the world meet regularly to learn about each other's research on *L. reuteri*. These inspiring and interesting encounters are important for the exchange of new research findings.

# An increasingly strong research network

**Research on *L. reuteri* is spread all over the world. For BioGaia, it is vital both to stay in contact with and inspire the research scientists and ensure access to the results they obtain. Research Director Eamonn Connolly functions as both a link and an engine in this context.**

**ON 31 AUGUST 2009** a Research Day was held at the head office in Stockholm, where our own staff had the opportunity to listen to and meet a number of research scientists who are working with new discoveries about Reuteri and probiotics.

But these meetings also have another important function in that they give the research scientists an opportunity to meet and exchange experiences. Since there is so much research underway on Reuteri, with BioGaia as the common denominator, a stable network of research scientists is developing. Not least

among those engaged in basic research, which was the subject of this year's Research Day.

"We have a lot to gain if we can contribute to a greater interplay among those conducting research in our area," explained Eamonn Connolly already in his introductory presentation, during which he also showed the scope of research currently in progress.

To a large extent, the day dealt with the progress made in mapping *L. reuteri* in its smallest genetic components and the role it plays in our bacterial flora.

The first speaker was Jens Walter from the University of Nebraska, who has studied the origins of the bacteria and seen how different strains both resemble each other and differ genetically. He has also explored the symbiotic relationships we humans have with beneficial bacteria. (See also interview on the next page.)

Rob Britton from Michigan State University described his studies on how Reuteri influences our health. We already know that it has a positive effect from the clinical studies that have been carried out, but a lot re-

mains to be done before we can explain exactly what happens in different parts of the body.

In addition, there are considerable differences between the various strains. By comparing the genetic compositions of different strains, it is possible to get a better picture of their probiotic properties. This was the theme of a lecture by Dr. Delphine Saulnier from Texas Children's Hospital, where a great deal of research has been done on Reuteri.

At the Agricultural University in Uppsala, Stefan Roos and Hans Jonsson have devoted the past 15 years to mapping the large jigsaw puzzle that our microbiological flora can be likened to. Stefan Roos has shown that we are dealing with a bacterium that is exceptionally stable, with very small mutations over the years. Among other

things, their work means that attempts are being made to remove "unknown" factors from their explanatory models in order to better explain the effects of *L. Reuteri*.

After sitting and listening for an entire day and trying to follow the complicated reasoning of microbiology and genetics, BioGaia's staff went home and tried to digest their impressions.

For the research scientists, it was time for the highpoint of the visit. Throughout the evening they sat together and discussed their findings and theories, new ideas and future plans, cooperation with each other and with BioGaia, at a whole different level where there was no need to take their audience into account.

What such an evening can lead to remains to be seen, but it is all very exciting. □

# Jens Walter searches for Reuteri's roots

**Lactobacillus reuteri** is found not only in humans but also in a large number of animal species. Professor Jens Walter is in the process of studying similarities and differences between a number of strains, mainly to identify what characterises the “human” strains.

**TO PUT IT SIMPLY**, you could say that Jens Walter's research is focused on understanding the microbiological ecosystem in our GI tract and how it is linked to our health. He is looking at the lactic acid bacteria that can be found there, what role they play and how they have developed evolutionarily. In addition, their genetic and functional attributes are being characterised in relation to how they colonise the GI tract.

Jens Walter is interested in developing technologies that can show how these organisms interact with humans and how they affect our intestinal microflora.

Reuteri's “family tree” shows how different Reuteri strains have developed in different hosts. The genetic similarities form clear clusters. Research scientists have also been able to see the strategies that have enabled the bacteria to survive in symbiosis with their environment. The results indicate a very stable relationship between Reuteri and us humans. It has also been possible to ascertain that the Reuteri strains have been very



Jens Walter is searching for Reuteri's origins.

genetically stable throughout the long evolutionary process.

One conclusion to be drawn from this is that Reuteri has both a common evolutionary goal and a stable relationship with its host. Reuteri's health-promoting qualities are perhaps the result of this interaction, an intimate symbiotic relationship that benefits both parties.

How will Jens Walter's results

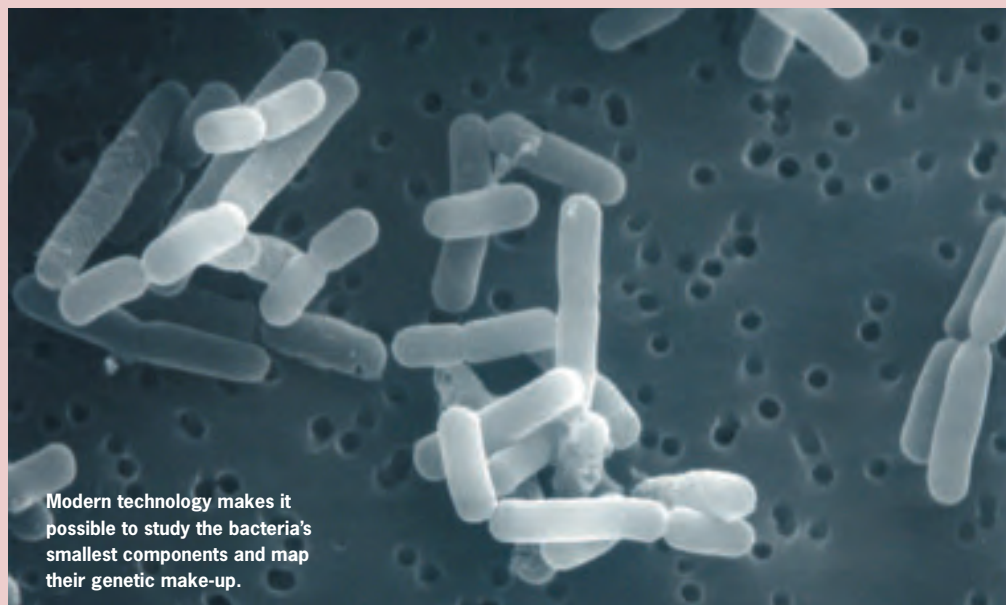
influence the future direction of his research?

“An important practical use,” he replies, “is that we can concentrate on the strains that have developed in humans. Our findings are creating a framework for further genetic studies of which properties of Reuteri are important for the bacterium itself and for humans.”

Another question is whether there is an original Reuteri strain, and Jens Walter believes that there was at one time, but we don't know in which animal it first existed and how it has later continued to spread in the animal kingdom.

It is absolutely clear that Reuteri is a naturally occurring bacterium in humans, but that it is not found in everyone.

“We can't expect to find it in every human,” says Jens Walter. “Several studies have shown that there is no single bacterium that occurs in everyone; each individual has significant variations in his or her bacterial flora. At present, we don't know why it is so unusual in humans, but we are very interested in finding the explanation.” □



Modern technology makes it possible to study the bacteria's smallest components and map their genetic make-up.

## News updates

### Reuteri effective in decreasing antibiotic-associated diarrhoea

**AN IMPORTANT CLINICAL** study showed that BioGaia's chewable tablets effectively reduced the incidence of diarrhoea in hospitalised adults being treated with antibiotics.

This double-blind, placebo-controlled study was conducted at University Hospitals Case Medical Center in Cleveland, Ohio. The results were presented by Lisa Cimperman and her colleagues at Clinical Nutrition Week in New Orleans.

It is well known that treatment with antibiotics severely disrupts the bacterial flora in the intestine, often leading to side-effects like diarrhoea and nausea. This is a significant problem that often leads to longer hospital stays and therefore also higher costs.

In the study, which was conducted on hospitalised patients receiving antibiotics for infections like pneumonia and bronchitis, one group was given BioGaia Probiotic chewable tablets and the other group was given an identical placebo for a period of four weeks.

The patients' stools were examined and various gastrointestinal symptoms were registered during the four weeks of the study and for an additional two weeks afterwards.

The results were clear. The incidence of diarrhoea among the patients given Reuteri was 7.7%, compared to 50% in the placebo group. However, no difference was seen in the incidence of nausea, vomiting, constipation and other common side-effects.

The researchers' conclusion was that Reuteri significantly decreased antibiotic-associated diarrhoea.

### New partner in Japan

**FINDING THE RIGHT** way into the Japanese market has long been a top priority for BioGaia. Japan was one of the first non-Swedish markets targeted by BioGaia and today the company also has a local subsidiary and an office in Japan.

Different solutions have been tested with varying results and the search for the ideal partner has been underway for many years.

Now BioGaia has signed an exclusive dealership agreement with Nippon Access Group, the country's largest food and dietary supplement wholesaler with annual sales of SEK 104 billion. Nippon Access is a subsidiary of Japan's fifth largest trading company, ITOCHU Corporation.

Nippon Access will distribute all of BioGaia's products, except for the chewable tablets, under the BioGaia brand. In addition, they will develop and launch dairy and functional food products, beverages, infant formula, baby food and food for the elderly in collaboration with BioGaia Japan.

Keitaro Nomura, President of BioGaia Japan, sees Nippon Access as the best partner for reaching the Japanese market under the BioGaia brand. It has the necessary resources for marketing and distribution and has focused on preventative medical care by building a distribution chain in collaboration with convenience stores, daycare centres and hospitals.

BioGaia has invested considerable resources to find the optimal business model in Japan. Under the agreement with Nippon Access, it will be possible to reach consumers with virtually all of its products through all possible distribution channels without affecting BioGaia's existing customers in Japan.

### BioGaia expanding into the Balkans

**THE SWISS COMPANY** Ewopharma has achieved impressive results with BioGaia's products in Central and Eastern Europe and through an extended agreement is now expanding these sales into Serbia and Croatia. As earlier, Ewopharma is working with the BioGaia brand and will launch the probiotic drops and tablets.

In light of the successful establishment of BioGaia' products in the neighbouring countries, Ewopharma is highly confident about the launch.

# BioGaia Academy – A v

It is difficult to overstate the importance of BioGaia Academy. During two intensive days, research scientists meet, business partners gather together and BioGaia's staff is the hub of the network that makes up the company's business model. This year's BioGaia Academy was held on its own home turf.

**HAVING THE HEAD** office in Stockholm, it is a pleasure to be able to show the guests the city and its surroundings – everything from the Old Town, Stockholm's medieval city centre, to the archipelago with its tens of thousands of islands and rocky islets to the east. Fifteen minutes to the south-east of the city lies Saltsjöbaden, a classic bathing resort full of magnificent 19<sup>th</sup> century mansions. There, at the Vår Gård conference centre, with a breathtaking view over Baggens Bay, around 80 people from all corners of the world gathered to share their experience and knowledge – with *Lactobacillus reuteri* and BioGaia as the common denominator.

Already on Wednesday evening, those who had arrived early were offered a guided bus tour and Salme Portinson from BioGaia held an introductory presentation about *Lactobacillus reuteri*.

The seminar opened on Thursday, 11 June, and the entire morning was devoted to research, where several scientists presented the results of their clinical studies.

Dr. Claudio Romano of the University of Messina, who has worked with Reuteri for many years, has studied and found that Reuteri can significantly reduce abdominal pain in children.

In addition, Professor Alison Steiber of Case Western Reserve University in Cleveland, Ohio, described a study on how Reuteri affects antibiotic-associated diarrhoea. The study was carried out on hospitalised adults and continued for four weeks.

The results were clear compared to the group that had received a placebo. Half of this group still suffered from diarrhoea after the test period, while only 8% of those who had received Reuteri twice a day suffered from diarrhoea.

The presentation that perhaps aroused the greatest interest was Dr. Ruggerio Francavilla's study on how Reuteri can be included in the treatment of patients with serious infections who are prescribed antibiotics. The treatment of *Helicobacter pylori*, the pathogenic bacteria that often causes gastric ulcers, is one such example.

Dr. Francavilla works at the University of Bari and is eager to introduce probiotics into the ongoing debate on the overuse of antibiotics and the danger of resistance, which is increasingly seen as a serious threat in the near future.

When antibiotics are used in the treatment of e.g. *H. pylori*, much of the bacterial flora in the GI tract is eliminated and it can take up to six months before the balance is restored. The result is that the patient can suffer a number of side-effects such as diarrhoea, abdominal pain, etc.

However, if *L. reuteri* is administered to the patient together with the antibiotics, this helps to retain equilibrium in the mi-

croflora and alleviate the side-effects that otherwise occur.

Dr. Francavilla sees major benefits, not only for the patient, but also for the healthcare sector and society in general as result of a more rapid recovery, particularly if this can help to reduce the use of antibiotics and thus prevent the development of antibiotic resistance. The research on *H. pylori* has only just started and further studies will follow.

Research Director Eamonn Connolly summed up the morning and informed the participants about other completed or ongoing studies of relevance.

**IN THE AFTERNOON**, it was time to see and listen to how BioGaia's products are marketed and sold in different markets.

After an introduction by Sales Director Jonas Weimer, Rossella Restignoli from Nóos in Italy showed how they have worked successfully with *L. reuteri* under the Reuterin brand for the oil drops and tablets.

Nóos concentrates primarily on distribution via pharmacies.

"We also have the best possible partners, and this is the best symposium I have ever attended. Nothing can stop us – so our competitors better look out!"

**JENNIFER CHERRY**  
President of Everidis,  
BioGaias partner in USA.

There are 18,000 pharmacies in Italy and competition between products of this type is intense. To give some idea, there are 493 different probiotic products on the market. Sales activities are targeted towards doctors and other healthcare professionals who can in turn recommend the products to their patients.

Nóos has shown a fantastic sales growth in recent years, not least for the oil drops which have multiplied in volume.

Rossella Restignoli explained that the connection between clinical studies in Italy and how the product is perceived leads to strong sales.

Friedrike Skott from Switzerland-based Ewopharma described the conditions for their work with BioGaia's products in Eastern Europe, where the situation is different from that in Italy. There is still a lack of support from local clinical studies, but in a short span of time

PHOTO: KJELL KARLSSON



Dr. Ruggerio Francavilla



Jennifer Cherry, President of Everidis



# valuable meeting place



PHOTO: ULF LÖNN

great advances have been made in a number of countries, particularly Slovakia, Poland and Bulgaria.

The day ended with workshops before it was time for dinner and a boat trip through Stockholm's beautiful archipelago.

**FRIDAY'S THEME** was Marketing: Innovation, Network & Synergies, a topic introduced by Marketing Director Cristián Contreras.

The conditions and market situation in the USA were described by Jennifer Cherry, CEO of Everidis, which is BioGaia's distributor in the USA. Their business model is also based on influencing doctors and other professionals who make recommendations to their patients. In nine cases of ten, a patient listens to the doctor and buys what the doctor recommends.

Everidis has developed attractive and serious marketing materials in connection with the launch of BioGaia products, but the American market is challenging. BioGaia's products are classified as dietary supplements and in the USA,

like many other markets, no health benefits may be claimed.

However, this does not stop many miraculous products from being marketed with the most astounding health effects – without the slightest basis in research or clinical studies. In addition, there is a widespread fear of bacteria in general and no broad knowledge about the existence of both good and bad bacteria.

Nevertheless, Jennifer Cherry is determined to ensure that BioGaia is the probiotic brand most widely recommended by paediatricians in the USA.

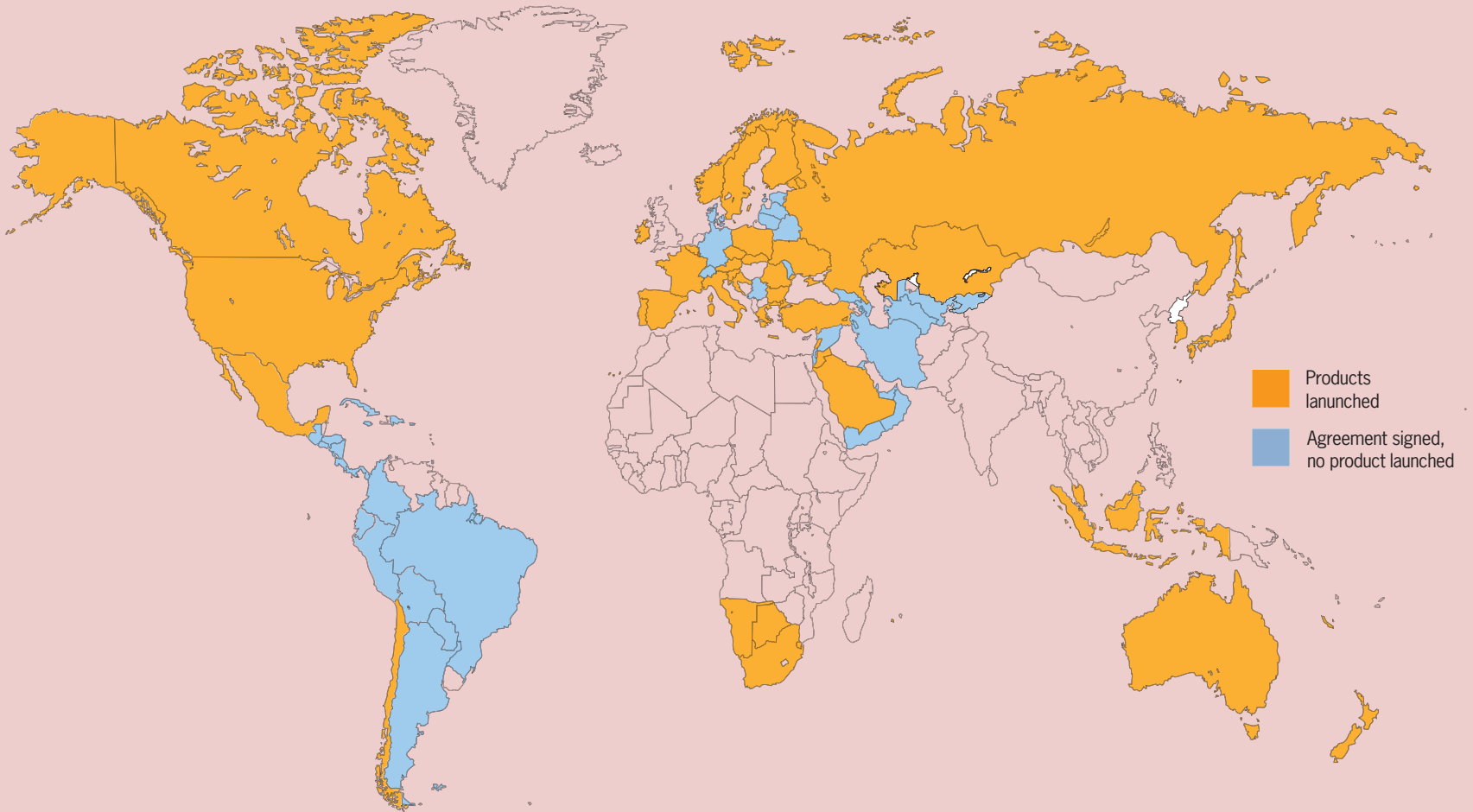
"The reason this will succeed is that together we have the best products, the best research and the best people," she explained in conclusion.

"We also have the best possible partners, and this is the best symposium I have ever attended. Nothing can stop us – so our competitors better look out!"

It was President Peter Rothschild's task to sum up and round off this successful BioGaia Academy. He thanked the participants but said that he could think of no better final words than those expressed by Jennifer Cherry. □



BioGaia Academy provides many opportunities to establish new contacts even outside the well filled programme. Exciting meetings between researchers, marketers and BioGaia's staff generate new ideas for the future.



# BioGaia's international expansion

Take a quick look at this map. It gives a good idea of how BioGaia is expanding. The yellow colour shows the countries and parts of the world where the company already sells the main products drops and/or tablets. The blue colour indicates areas where agreements have been signed with various partners but where sales activities have not yet begun.

**SALES DIRECTOR** Jonas Weimer, who has worked at BioGaia for 12 years and has closely followed the company's long-term development, is very optimistic about the future.

Today BioGaia is represented in more than 40 countries and has agreements covering almost as many new ones. The companies with which we have established relationships over the years through partnership agreements are very diverse in terms of both structure and focus, and include everything from dairies to pharmaceutical companies.

"We are in a very expansive stage at the moment" says Jonas Weimer. "Our ambition is to expand further, mainly by developing the cooperation with our existing partner networks and by broadening our product portfolio. We are cur-

PHOTO: ULF LODIN



Jonas Weimer

rently working to both deepen and refine the sales collaboration with partners that have already begun the sale of drops and tablets. In addition, we are helping partner companies that are preparing to launch our products. These are important, since they will almost exclusively sell

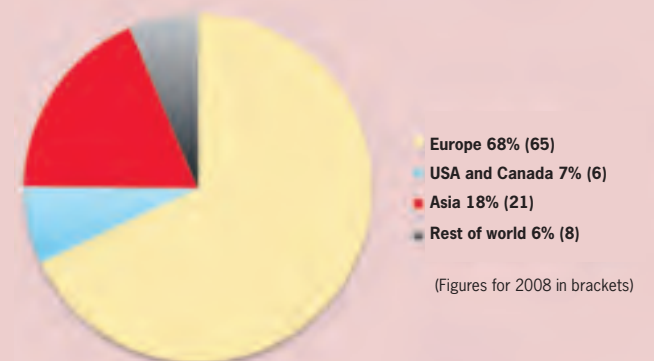
drops and tablets under the BioGaia brand name."

One such market is France, where BioGaia's drops and tablets were recently launched. Previous attempts to enter the French market have been unsuccessful, but Jonas Weimer feels that the Company has now found the right partner.

**A NEW PARTNER** with a strong position on the German market will also start working with BioGaia's products in the coming year.

That BioGaia has had enjoyed strong sales growth in recent years is clearly evident in the financial accounts. This is due to the fact that several partners have succeeded well in their markets. Italy, Finland, Slovakia and Sweden are good examples of countries where BioGaia's

Sales by geographical market 2009



products have secured a strong position among doctors, other healthcare professionals and consumers.

"You don't have to be Einstein to figure out that if we are as successful in a number of large countries that we are now entering, we will be able to maintain a strong growth also in the future," says Jonas Weimer. "Health benefits are equally important in all countries, and with the right partner we can continue working according to our model and achieve further success."

BioGaia is not involved in consumer sales but is exclusively engaged in business-to-business. For Jonas, it is very much a question of two principal tasks, finding new partners that can take the products to new markets and supporting the existing partner network with optimum sales support.

One important source of sales support is the interaction between all those involved in the network. Since they are not competing with each other, the exchange of new ideas and solutions is a great asset to all. □



# Semper first to launch probiotic oral rehydration solution

Karin Kniberg recently started working for BioGaia, where her responsibilities include the Swedish market and a number of countries in Central and Eastern Europe.

From the start she was involved in the launch of a whole new product from BioGaia, a probiotic oral rehydration solution (ORS) that is sold by Sweden-based Semper.

**IN THE PAST YEAR** BioGaia signed an exclusive agreement giving Semper the right to sell an ORS product with Reuteri in both Sweden and Norway. In recent years Semper has launched a number of probiotic products based on Reuteri. BioGaia's drops, which are found in the refrigerators of most pharmacies, and Semper's infant formula, which is available in several varieties with Reuteri, showed steady sales growth during the year.

For the past 50 years ORS has been the cornerstone of therapy for treatment of gastrointestinal conditions like paediatric diarrhoea and gastroenteritis caused by cholera or rotavirus.

"Our experiences with BioGaia's products in recent years confirm the results of extensive studies on the treatment of diarrhoea and other health issues related to the GI tract," says Mona Svensson Puhakka, Marketing Manager at Semper Nutrition. "We therefore wanted to integrate this superior lactic acid bacterium in a truly safe and effective ORS product that could be used even for two month old infants. In keeping with WHO recommendations, we supplement it with zinc but exclude colours and other unnecessary additives that are common in other commercial ORS products."

BioGaia is proud to be the first to combine probiotics, ORS and zinc in an integrated and user-friendly package. The product is delivered in 5.5 gram single-portion sachets.

**THE ORS PRODUCT** has been specially developed for infants and has been very well received by the healthcare community and the pharmacies chains that currently sell the product.

"Because we are targeting infants, we have started by developing the 'purest' possible product without flavour or colour additives," says Karin Kniberg. "In the next stage, we are also looking at flavoured versions."

Karin Kniberg explains that several other countries are interested in selling the new ORS product.

In the Swedish market, sales of BioGaia's chewable tablets under the Probiomax brand have picked up now that they are also carried by most pharmacies. Previously, they were found almost only in natural health stores and certain well assorted grocery stores.

For the BioGaia products that



Karin Kniberg

are distributed through pharmacies, the transformation of the pharmacy structure and entrance of new players has created both more work and great

er uncertainty, but has above all opened up new opportunities for wider distribution of BioGaia's products.

Karin is also seeing a high level of activity in her other markets. In particular, she wishes to highlight Ewopharma's fantastic development in Poland, Bulgaria and Slovakia.

Furthermore, BioGaia's partner Delta Medical has been successful in Ukraine despite a turbulent year from both an economic and political standpoint. Although the pharma market shrank by 30% in 2009, BioGaia's products continued to grow and expand their market share – partly through the drops that were launched in 2008 and



now also the tablets that were launched in August 2009. In the past year, intensive preparations were made for the launch of BioGaia in Kazakhstan and several CIS countries. □



## Launch of BioGaia's drops in France

**IT WAS THE FRENCH** company Laboratoires BIOETHIC that introduced BioGaia's Probiotic drops and tablets on the French market, where the products are sold under the BioGaia brand since the end of 2009. France is a large and important market where it has taken some time to find the right partner.

Sales Director Jonas Weimer is highly satisfied with the start of this collaboration and explains that BIOETHIC has an approach that is perfectly aligned with BioGaia's business model, and is quite simply an ideal partner.

"The company has around 170 pharmaceutical consultants that regularly visit doctors and other healthcare professionals," says Jonas Weimer. "They bring a limited number of products with them, rarely more than four, which means that our products are given a lot of attention and become important to our partner."

Jonas Weimer has high hopes for development in France. It is a huge market, the products are sold under the BioGaia brand and BIOETHIC works according to the model BioGaia wants all of its partners to apply.

"Given BioGaia's extensive clinical studies in this area and the large sales force that will be working with BioGaia's products, we have high expectations for the success of this collaboration," says Frédéric Derome, Managing Director of Laboratoires BIOETHIC, which is specialised in sales and marketing of pharmaceutical products.

# First step onto the market taken

Just over a year has now passed since CapAble AB was started. At first glance it may seem that fairly little has happened, but if you scrape the surface it is evident that a number of important steps have been taken.

“The cooperation with our customers in the past year has made us even better”, says Managing Director Staffan Pålsson.

**AFTER A FINE START** with two agreements around the beginning of the year, most of the company’s time has been devoted to working behind the scenes to further develop and adapt LifeTop Cap to meet customer requirements; a process that has taken place in close cooperation with the customers and has been guided by both their beverages and processes and current trends in beverage packaging of drinks.

LifeTop Cap was originally developed as a means to add probiotics to water. Now, with requests for other ingredients and beverages, products with new qualities will be continuously developed. “We have continued to work on the manufacturing process, the product itself and the product quality,” says Staffan Pålsson. “And this means that we now have more stable and efficient production with a greater delivery reliability. We have also improved the quality and function of the cap itself.”

The first consumer products with LifeTop Cap have now appeared on the market. In the autumn the American company Mass Probiotics trial launched its product PHD, a flavoured probiotic health water, in Cali-

fornia. The collaboration with Mass Probiotics has created a lot of feedback that has been valuable to both CapAble and the packaging company TwoPac, in manufacturing the product.

“The trial launch received a very good consumer response, so good that Mass Probiotics is now preparing a launch throughout the USA,” says Staffan Pålsson. “Agreements have been signed with most of the nationwide grocery chains. As anyone can understand this is a large market we are talking about,



CapAble – Staffan Pålsson

and it will be exciting to follow the results for these products.”

The second agreement that was signed at the start was with a Mexican company, but it has taken longer for them to develop their product, which is also a flavoured probiotic health water – four different beverages with *L. reuteri* Protectis that are planned to be launched at a trade fair in March. Mexico is also a huge market, presumably the second largest after the USA, although it is perhaps not as well developed in this area.

**CAPABLE HAS TWO** main target groups.

The primary and most obvious target group consists of beverage companies seeking to develop unique products with sensitive ingredients in a beverage.

In parallel, Staffan Pålsson is working on what he calls LifeTop Technology Partners, i.e. companies that manufacture and sell ingredients for beverages.

“The idea behind the creation of Technology Partners is that we can together create exciting combinations with LifeTop Cap and new ingredients that are of interest to beverage companies,” explains Staffan Pålsson. “For us, this provides an additional point of access to our primary



PHD is a flavoured probiotic water that has been launched in the USA.

target group, the beverage companies, since our new partners already have well-established contacts with them.”

It turns out that several of the ingredient producers have been discussing new concepts with their customers, but have had no good technical or practical solution. In cases involving probiotics as an ingredient, no other solution has been found that gives sufficiently good protection

for a long shelf life. Together with CapAble, they can now move forward in this process. New for the year is that LifeTop Straw is now also included in CapAble’s product range. Like the cap, the patented straw can be filled with ingredients other than BioGaia’s probiotics. No agreement has yet been signed but there are discussions and trials underway, which will be interesting to follow. □

## News updates

### Next stop Denmark

**FOR SOME INEXPLICABLE** reason BioGaia’s products have not yet reached across the sound to Denmark, but now it is time to take this important step. In 2010 BioGaia’s drops and tablets will be launched by Pharma Nord Aps, which has obtained exclusive rights to the Danish market.

Pharma Nord, one of Europe’s largest manufacturers of natural health products and dietary supplements, has sales in a large number of countries and a strong position in Denmark.

The products will be launched under the BioGaia brand in the first half of 2010. They will be marketed to healthcare professionals and distributed via pharmacies and natural health retailers.

“Now we are found throughout Scandinavia and look forward to a successful launch with the support of our strong clinical data,” comments Jonas Weimer.



### New partner in Germany launches BioGaia’s drops

**THE GERMAN MARKET** is both large and demanding, and so far BioGaia has not had any made any real inroads there. Now BioGaia has pinned its hopes on the pharmaceutical company Infectopharm, which has a strong market position and is the leader in the paediatric niches where it is active. The company has a well established relationship with paediatricians and is a partner whose working methods are well suited to BioGaia’s business model.

The success of the drops in the rest of Europe has opened the door to the German market and Infectopharm sees a big need for the drops among children in Germany.

Karin Kniberg, who is responsible for the German market, says that BioGaia’s drops have been very well received during the intensive preparatory stage and that she is excited about the launch in this major market.

# Strong brand attracting new partners

## BioGaia®

**BioGaia's Marketing Director Cristián Contreras is far from alone in working with the BioGaia brand. He has more "colleagues" than there are employees at BioGaia. All the partner companies around the world who use the brand are namely involved and contributing in their respective markets to building the brand globally.**

**FOR EACH YEAR** that has passed since the decision was made to invest in developing BioGaia's own brand, both the number of markets where the brand is sold and the volumes have increased. By joining forces with its network of partners, BioGaia's brand-building activities have a greater impact.

"The BioGaia brand, alone or on co-branded products, is now found on more than half the markets where we are represented," says Cristián Contreras. "This in itself is proof that more and more of our partners realise the value of cooperating to build a strong global brand."

Everyone also knows that the stronger a brand is, the more advantages are created for everyone

working with it. And in pace with its success, even more resources are being allocated to support the brand globally in different ways, which is something that benefits all partners. Nowadays, national borders are no hinder to the spread of information and knowledge about new products and services.

"My ambition is for our partners, both existing and new, to experience that working with the BioGaia brand is a clear win-win situation," says Cristián Contreras.



Cristián Contreras

The brand cooperation described by Cristián is a good example of how BioGaia's business model is structured. In this model, BioGaia, its partners and research/clinical studies is a trinity of parts that together

forms a strong whole. These three parts exist in a healthy symbiosis with each other, in the same way that *L. reuteri* lives in symbiosis with us humans.

The business model is based on experience from the markets that have shown the best per-

formance in recent years, where the combination of good results from local clinical studies on the health effects of the products, a strong brand and a professional partner with an effective sales force have led to success in the market.

It is also important to ensure a uniform picture of the brand in all the markets. As a result, there are clear guidelines for graphic representation and communication of the brand. The head office provides continuous support in the form of different types of marketing material and research documentation.

Research and clinical studies are an important component of the business model. Since marketing and sales are often directed to doctors and other healthcare staff, participation in medical congresses is a natural part of the company's operations.

Today there are increasing opportunities for participation, since interest in probiotics is

growing on a wide front. This is particularly true in the paediatric sector, the area where BioGaia's products have gained the most attention. The obvious motto is "clinically proven probiotics".

"We took part in three major paediatric congresses in 2009 and received a lot of attention," says Cristián. "The research symposiums with independent research scientists that we arranged at these events have been well attended and greatly appreciated."

Congresses not only provide the chance to meet existing partners and establish contact with new ones, but also attract influential opinion-builders in this area that are important to BioGaia.

In 2010 BioGaia will continue on its chosen path and participate in several medical congresses to inform about the health effects of *Reuteri*, how different distribution forms work and that BioGaia's product safety is in a class of its own. □

## Participation in congresses an important marketing tool

**FOR A COMPANY** like BioGaia with a focus on research and close cooperation with doctors and other healthcare professionals, participation in medical congresses is a natural part of operations. Much of the company's success is based on the stable platform that can be demonstrated in the form of documented basic research and clear results from clinical studies. The largest number of clinical studies have been carried out and published in the paediatric sector, and it is therefore logical to take part in medical congresses in this area.

"Congresses give us the chance to develop professional contacts and good opportunities to spread knowledge about the BioGaia brand in a serious

manner," says Marketing Director Cristián Contreras.

The large European ESPGHAN congress on paediatric gastroenterology, hepatology and nutrition was held in Budapest on 3–6 June, and was attended by some 1,500 participants from around the world.

**DURING THE CONGRESS**, BioGaia arranged a satellite symposium with the title "Probiotics in Paediatrics: Facts, Fiction and Future". In a full lecture hall, the participants could see and hear Professor Bengt Björkstén, Dr. Teresa del Moral, Dr. Flavia Indrio and Dr. Elena Lionetti present the latest findings from research on *L. reuteri* Protec-tis. The focus of the symposium was nat-urally on the role

of probiotics in paediatric care and it was greatly appreciated.

Many contacts were also made in the stand hosted by BioGaia throughout the congress.

BioGaia held a similar programme at the corresponding American AAP (American Academy of Pediatrics) conference with great success. This is the largest paediatrics conference in the world, and was held in Washington D.C. on 17–20 October.

About 120 people attended the dinner symposium held by BioGaia on the theme of "Advances in paediatric health care – the potential of probiotics".

The lasting impression is that there is a serious interest in probiotics in the USA today, and



BioGaia participated in ESPGHAN with its own stand and a satellite symposium.

that it is continuing to grow.

In Latin America, a relatively new market, BioGaia took part in the LASPGHAN paediatrics congress, which was held in Chile.

"These medical congresses are a good example of how we, together with our partners in the network, can adapt our efforts to the needs of the regional market," concludes Cristián



By chance, Per Hellström ended up next to Sven Lindgren on a ski lift in Verbier, a meeting that led to the birth of BioGaia. Peter Rothschild in centre and Bo Möllstam at right.



In the mid-1990s BioGaia was reinforced with Lotta Johansson, customer support, and Margareta Hagman, who is still in charge of the figures.



# The first twenty years

Twenty years have now passed since BioGaia Biologics was founded. It has been an exciting, tough, surprising and enjoyable journey to reach the position the company holds today. Here below is a brief summary.

**LOOKING BACK**, it can sometimes seem like the development of a company is guided by chance, but it can also be a question of seizing the opportunities that arise along the way.

In jest, it is sometimes said that BioGaia was born thanks to a successful meeting on a ski lift in Verbier. Professor Sven Lindgren, one of Reuteri's discoverers, found himself beside Per Hellström, who at that time was working together with Jan Annwall and Peter Rothschild. Their problem was that the vegetables they were importing to Sweden from southern Europe did not survive the journey particularly well. Sven Lindgren told them about a lactic acid

bacterium that could perhaps be the solution to their problem.

Contact was established and it was discovered that this bacterium had many strings to its bow. It had also been shown to have positive effects on the health of both humans and animals.

Far away in a laboratory in Raleigh, North Carolina, a small team of research scientists were toiling away with *Lactobacillus reuteri* and a company had been formed to commercialise the use of the bacterium. Bo Möllstam was already working with Jan and Peter, and was given the task of preparing the due diligence documentation for a possible acquisition.

His report, which still exists,

“The message was that it would take a long time and cost a lot of money before the venture would be profitable.”

summed up clearly what awaited. The message was that it would take a long time and cost a lot of money before the venture would be profitable.

Nevertheless, a decision was made to start BioGaia Biologics with Jan and Peter as the principal owners together with a number of friends and acquaintances as joint financiers.

Initially, the main focus was on the animal side. With supplements of Reuteri, it would be possible to reduce the use of antibiotics in the chicken and turkey industry. The American market alone would generate revenue in the multi-millions if only the customers understood the advantages.

Parallel to this, the company started to look at the human

side, where Reuteri had a future as a supplement in what are known as Functional Foods.

On the home market, BioGaia developed a product of its own under its own brand name; “BRA milk” to begin with and later “BRA filmjolk”. However, because the Swedish market in the early 1990s was more or less a monopoly, BioGaia had to search for a supplier who stood slightly outside.

**IT WAS THE LITTLE** Falköping Mejeri that produced the BRA products, which were a success despite competition from the dairy giant Arla. Indeed, the concept was so successful that the Ica grocery retail chain became interested and acquired the concept and the brand, bringing a well needed cash infusion.

At the same time, BioGaia started to look for partners abroad in the Functional Food segment, and the first contracts were soon signed at the mid-1990s with ToniLait in Switzerland and Ingman in Finland.

BioGaia still had only a few employees – Peter living in France, Jan on site in Stockholm and Bo Möllstam at the laboratory in Raleigh. To give the company greater momentum, they realised that it was

necessary to consolidate their resources and create a better organisation. In addition, it was still not profitable and the idea of a stock market introduction began to take shape.

At this point BioGaia was strengthened with Lotta Johansson and soon after with Margareta Hagman, who immediately had to start preparing for introduction on the IM (Innovationsmarknaden) exchange in 1996. The year after, MultiFerm in Lund was acquired and was later shown to be a good deal.

The company's activities were still costing more than it was possible to invoice and the target became a listing on the larger



Bra milk and fermented milk challenged the monopoly.





Time to sign the papers to take over *Lactobacillus reuteri*. On the left Walter Dobrogosz, who "discovered" Reuteri together with Sven Lindgren, (centre), and Jan Annwall, (right).

stock exchange list, the O list, which also meant that it would be possible to attract more shareholders and more capital into the company. In 1998 BioGaia was quoted on the "real" stock exchange in Stockholm.

However, things were still not quite taking off. So in 2000 the company sat down for an in-depth discussion about the future and arrived at a number of decisive alternatives.

BioGaia decided to more or less leave the animal side, which had proven considerably more difficult to develop than expected. Instead, the focus was shifted to nutrition and dietary supplements, i.e. the route that led to the BioGaia of today. The next important decision was to start developing its own products and not only ingredients for the products of others, which had previously been the case.

Already the same year, a con-

tract was signed for probiotic tablets.

In 2000 BioGaia finances were considerably strengthened and this was the last time the company had to ask for support from the investors. The sale of Multiferm in 2002 also contributed to BioGaia's not needing to seek external capital.

Now, the results of the company's own product development started to emerge. LifeTop Straw was launched in 2002, probiotic drops came onto the market in 2004 and probiotic chewing gum was introduced a year later.

The decision to develop its own products was found to be correct and, as a natural result of this, the next important decision was now taken – to invest in launching the products under the BioGaia brand.

The company had now arrived at the year 2006 and the

long-awaited turnaround came. For the first time, BioGaia was able to earn money from its business activities. The curves reversed and began to point upwards. Three years later, they are still pointing in the same direction and the BioGaia brand is now represented on half of the markets where BioGaia is active.

Trying to predict what the company will look twenty years from now is impossible, just as impossible as it was for Jan Annwall and Peter Rothschild twenty years ago to know what could be achieved with the help of a small bacterium called *Lactobacillus reuteri*. □

**In 2000 BioGaia made a strategic decision to focus the business on dietary supplements for humans and on development of its own products. As a result of this and the decision to launch its own BioGaia brand, BioGaia now has a wide and successful product range.**



The boat carried guests to the restaurant at the Museum of Modern Art.

## Let's celebrate!

**IN JANUARY 2010** marked the 20th anniversary of BioGaia, an event that was celebrated with a full day of festivities.

In the morning a seminar was held to both review the ins and outs of Reuteri and shed light on the unknown chapters of BioGaia's history.

Research Director Eamonn Connolly served as moderator and gave a talk of his own. Professors Sven Lindgren and Bengt Björkstén guided the participants on an entertaining journey through the complex world of microbiology that attracted many laughs.

President Peter Rothschild's

address, titled "The Untold Story of BioGaia", was an irreverent retrospective stretching from his and Jan Annwall's first faltering steps into a whole new industry that had few similarities with their previous speciality in shipping and up to the present day.

In the evening, the guests had the chance to see Stockholm in its winter finery from the water. A boat excursion among the city's islands carried them to the party venue – the beautiful restaurant at the Museum of Modern Art. This was followed by dinner and a series of tributes, congratulatory speeches and speeches of gratitude. □



The film about BioGaia's history got many laughs.



Founders Annwall and Rothschild thanked everyone for their contributions to making BioGaia the successful company it is today.



# Jan intends to spend more time in his hammock

Jan Annwall leans back in the chair where he is seated in a conference room at BioGaia's headquarters in Stockholm. He has every reason to feel satisfied. The company's performance last year was good, you could even say excellent.

"It feels fantastic to be able to leave figures like this behind me. In 2010 the company is celebrating its 20th anniversary and it has taken many years of hard work for Peter and me to get where we are today," he says with some relief.

## Leave behind you?

"Yes, in fact, since I will be retiring on 1 April. No, it's not an April Fool's Day joke! Of course I will not be leaving the company completely but will be involved as a consultant and hopefully still serve on the Board."

## And what are you otherwise planning to do as a pensioner?

"I don't understand why so many people ask that question. I get the impression that people can only imagine one type of life, and that is to work. Of course, retirement will be a change from the role I have had as Deputy Managing Director and general keeper of order. But as a pensioner I am hoping to do a lot of travelling, I enjoy seeing new countries and places. I also want to spend more time in my hammock on Gotland."

Peter Rothschild and Jan Annwall started BioGaia in 1990, and in the 20 years that have passed since that time the company has shown impressive development. The initial intention was to focus the business on replacement of antibiotics in animal feed. But after a while the emphasis shifted to working

"I will be retiring on 1 April. No, it's not an April Fool's Day joke!"

JAN ANNWALL

with functional foods, which later led to the successful idea of marketing the company's own finished probiotic products. **It took 16 years for BioGaia to start making a profit. Did you ever doubt that you were on the right track?**

"No, well perhaps a little during the first year, but basically we never did. We had a long-term plan and knew that it would take time to both develop the products and introduce them onto the market. This meant that we were also expecting many years of losses. One thing that also increased our costs was that we were forced to have a

relatively large organisation in order to secure our long-term business objectives."

## Didn't the shareholders become anxious and demand some answers?

"At first, the only shareholders were ourselves and a few close friends, but after our stock market introduction in 1998 there were a number of people who were clearly becoming nervous. However, we were able to retain their confidence and continue pursuing our long-term plans."

## And then the turning point came in 2006?

"Yes, that's when we made a profit for the first time. It was fantastic, a confirmation of all our years of stubborn work. I have amused myself by looking at our operating cash flow over the years. In 2001 we had a negative cash flow of roughly SEK 50 million and in 2009 we had a positive cash flow of the same amount. At year-end 2009 we had net cash of SEK 100 million and no bank debts. I think that gives a good idea of the company's turnaround and position.

## And your success is growing and growing in terms of sales and profits?

"Yes, that's correct. The input to output ratio, or whatever you like to call it, has an increasing effect. We and our products are now represented in 36 countries and we have contracts with an equal number of new partners.

"Our current sales of over SEK 200 million are expected to continue increasingly strongly. But the point is that the costs of running the business are not rising to anywhere near the same extent. In 2009 our sales and gross profit improved by 40%, while our profit before tax increased by 120%. It looks very promising, and as a pensioner I



After 20 years of hard work, Jan Annwall looks forward to a slower pace.

will probably be able to live on the future dividends."

## What is your assessment of the probiotics market in general?

"In my opinion, the future looks bright. There are many positive signals and it is clear that the pharmaceutical companies are starting to take notice of probiotic products. We get a lot of enquiries from them.

"But I'm not worried about

competition, mainly because we have such strong research of our own and because our own BioGaia brand accounts for almost a third of total sales.

"In fact, I think it would be good if the pharmaceutical companies entered our market. This would contribute to making probiotics better known and would significantly expand the total market, which would in turn benefit us." □

## Jan Annwall

**Name:** Jan Annwall

**Age:** Almost 60

**Family:** Married to Gunilla, with two children, Linda and Joakim, and two grandchildren

**Home:** Hammarby Sjöstad, Stockholm

**Education:** M.Sc. (Econ) and building engineer

**Business career:** Shipping, fruit trading, BioGaia

**Hobbies:** House on the island of Gotland, travel, books and soon golf

**Latest book read:** His bank book

**Latest film seen at a cinema:** Sherlock Holmes

**Latest opera/theatre:** Singing in the Rain

**My best quality:** Many ideas and rapid decisions

**My worst quality:** A lack of patience and sometimes too rapid decisions

**How I would like my friends to describe me:** Someone to rely on

# A strong defence

**OUTSIDE THE LIMELIGHT** and all the attention surrounding the profits and good margins of recent years, work is ongoing in one of the key areas of BioGaia's business. It is time to highlight the work on patents and other rights that protect BioGaia's interests all over the world.

This has been Bo Möllstam's area from the start, and the scope of his responsibilities has steadily grown in pace with the addition of new areas of use, new distribution forms and new markets.

## Why is this work so important for BioGaia?

"BioGaia has succeeded in becoming a world-leader in probiotic products and research, although we 'only' have about 40 employees. This is due not only to our very competent staff but also largely to our business model. You could say that we are a 'network company'. We are working with the top research scientists around the



Bo Möllstam works with BioGaia's patents.

world to understand new mechanisms and the use of different specific probiotic strains for various health indications. On the marketing side, our partners are selling BioGaia products or their own products with our

technology on an exclusive basis. This is a model that has enabled us to grow rapidly without incurring high costs.

"On both the research and marketing side, our business model requires strong positions in intellectual property, e.g. patents and trademarks, in order to function well."

## Is the patent work today different from when you started?

"Yes it is. Today, we talk more about IPR (Intellectual Property Rights) and this includes patents, trademarks, copyrights, etc. One major difference is that we are now selling more and more products under our own brand name. This, together with the patents, strengthens the protection of our business.

"Another aspect is that we are at the cutting edge with respect to new knowledge in the probiotics area, which means that we can find new and specific strains for different health indications.

This is creating opportunities for new, specific and strong patent positions."

## Are we talking about one patent in many countries, different patents in different countries or many patents in many countries?

"There are no global patents, so you have to apply for and hold patents in all of the countries where you want protection. This means that we apply for patents in all countries that we consider relevant for the business and where there is a functioning patent system. Since knowledge development in our industry has been very strong in recent years, it has been possible to protect new specific strains and indications or fields of application. Today, we have a young portfolio, with new patented strains in more countries than ever before."

## What is the current situation – are you maintaining the

## existing patents or expanding and gaining new ground?

"To the utmost degree it is a question of gaining new ground and exploiting our scientific advantage. We also seek to protect the new delivery methods that we are developing to make the products better for our customers. IPR and patents in particular are essentially a matter of building and protecting our business. In pace with our growth on all fronts, this work will gain importance in the future – there is quite simply more to be protected in more countries. □

## Facts

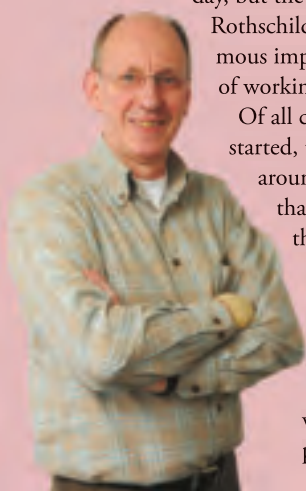
**PATENTS:** 31 families  
140 issued + 11 notices of allowance  
**TRADEMARKS:** 43 countries + EU  
**INTERNET DOMAINS:** 21 countries

## Karlsson's column

# A strong and vital culture

**IN THE PAST FEW YEARS** I have taken a close look at BioGaia while writing the annual report, and in the process I have gotten to know the business and nearly all of the employees fairly well.

I usually write a short reflection on the last page, but this year I decided to try and give my perspective on the attributes of BioGaia's founders, Jan Annwall och Peter Rothschild, and my explanation for why things have turned out the way they have. In this case, it's more a matter of corporate culture than a bacterial culture. Many people have contributed to making BioGaia the successful company it is today, but the team of Annwall and Rothschild has had an enormous impact through its way of working.



Of all companies that are started, they say that only around 25% survive. And that's keeping in mind that most companies are started by people who know what they are doing. I have no idea what the chances of survival are for a company started by people

who don't know the first thing about their intended business, and in an industry that is entirely new to them.

Janne and Peter knew pretty much all there is to know about shipping, but hardly anything about microbiology or bacteria. And yet it was a bacterium that was to be the backbone of the company. To be honest, it all seems a little unlikely.

I still don't think you could call them experts at microbiology after all these years, though you would have to ask Eamonn about that. But they have learned one thing along the way, and that is how to build and manage a company based on a bacterium.

From my outside perspective, I have identified four qualities that I think characterise BioGaia today.

## ENDURANCE

There is no doubt that you need endurance, determination and pure pigheadedness not to give up when you are confronted with losses year after year and the money is flowing out of the company in a torrent – sixteen consecutive years except for the year when the fermentation plant in Lund was sold. Then the curve shot skyward and the profits started rolling in.

## FRUGALITY

Bordering on stinginess according to some. You might suspect that the constant outflow of money

was the reason, but I would dare to say that it isn't any different today.

## CREATIVITY

Creativity doesn't mean inventing something entirely new, but finding new combinations and areas of use for things that already exist. Putting bacteria in a straw, storing bacteria in a cap – both are clearly creative solutions to find new distribution forms for Reuteri. I would also describe BioGaia's business model as highly creative – to succeed at doing business in some 40 countries with a roughly equal number of employees.

And last but not least, it has taken creativity to secure new funds to keep the ship afloat.

## UNPRETENTIOUS

You would have to search high and low for a more down-to-earth management! This is a quality I have seen throughout the organisation, and I know that many customers and partners would agree. I believe this attitude underlies the good atmosphere that is tangible in all contacts with BioGaia.

My simple analysis is that these four qualities not only exemplify Janne and Peter's leadership, but are also cornerstones of the entire corporate culture.

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EDITOR

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## BIOGAIA IN BRIEF

- BioGaia was founded 1990 by Peter Rothschild and Jan Annwall.
- BioGaia is a biotechnology company that develops, markets and sells probiotic products.
- Probiotics = Live micro organisms which when administered in adequate amounts confer a documented health benefit (Source: WHO)
- BioGaia's mission is to make well-documented probiotics globally available through innovative and appealing supplements and food concepts.
- BioGaia's products are primarily based on different strains of the lactic acid bacterium *Lactobacillus reuteri* (Reuteri).
- BioGaia has also developed unique delivery systems, such as probiotic-containing straws and caps that make it possible to create probiotic products with a long shelf life.
- BioGaia's sells finished consumer products (tablets, drops and oral health products) to distributors, component products such as Reuteri cultures to licensees, which are used in infant and baby formula, and straws and caps with Reuteri.
- BioGaia's products are sold in some 50 countries worldwide and are normally registered as dietary supplements and in certain cases as pharmaceuticals.
- BioGaia holds patents for the use of Reuteri and certain delivery systems in all major markets.
- BioGaia's sales have increased by 38% per year on average over the past five years. Since 2006 the Company is profitable.
- BioGaia has 45 employees, of whom 19 are based in Stockholm, 19 in Lund, 3 in Raleigh, USA, and 4 in Hiroshima, Japan.
- The class B share of the Parent Company BioGaia AB is quoted on the Small Cap list of the NASDAQ OMX Nordic Exchange Stockholm.

## THE BIOGAIA BRAND

BioGaia's licensees add Reuteri culture to their products and sell these under their own brand names. On these products, the BioGaia brand is shown on the package as the licensor/patent holder.

Some of BioGaia's distributors sell finished consumer products under their own brand names. For these products, the BioGaia brand is shown on the consumer package since BioGaia is both the manufacturer and licensor.

At the end of 2005 BioGaia launched its own consumer brand and today there are a number of distributors that sell BioGaia's finished products under the BioGaia brand in a large number of markets. One central part of BioGaia's strategy is to increase the share of sales consisting of BioGaia-branded products.

## RESEARCH AND CLINICAL STUDIES

BioGaia's research is focused on selection of different probiotics for gut health, the immune system and oral health. Extensive clinical studies have shown that BioGaia's various probiotic products:

- stimulate the human immune system,
- protect against GI tract infections,
- alleviate the side-effects of antibiotic treatment,
- reduce the level of *H. pylori* infection,
- reduce the occurrence of infantile colic,
- reduce the risk of infection and improve gastrointestinal function in pre-term newborns,
- reduce gum inflammation, plaque and the risk for dental caries.

## BIOGAIA 2009

### IMPORTANT EVENTS IN 2009

New sales agreements with:

- Ewopharma for the sale of tablets and drops in Serbia and Croatia.
- InfectoPharm for the sale of drops in Germany.
- Semper for the sale of probiotic oral rehydration solution in Sweden and Norway.
- Laboratoires BIOETHIC for the sale of tablets and drops in France.
- Pharma Nord for the sale of tablets and drops in Denmark.
- Aqua Scandik for the sale of LifeTop Cap with Reuteri in Mexico.

### LAUNCHES DURING 2009

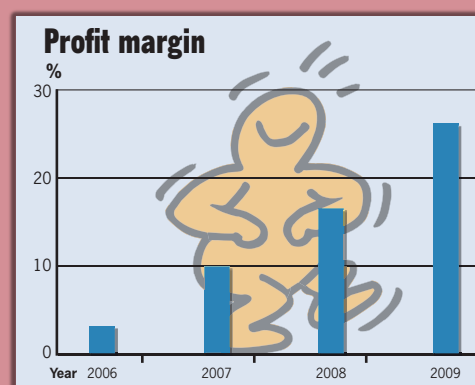
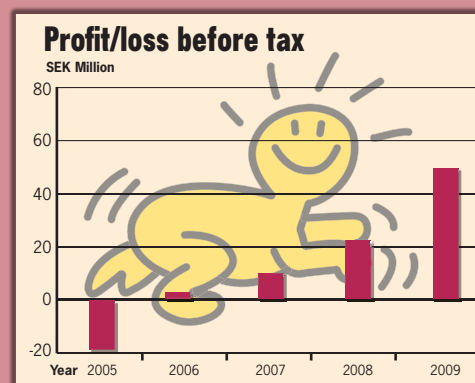
- **Biolife.** Single-portion sachet containing colostrum and Reuteri
- **Delta Medical.** Tablets in Ukraine, drops in Kazakhstan
- **Ewopharma.** Drops and tablets in Romania and Croatia.
- **Ferring.** Tablets in Mexico. Drops in Lebanon, Greece, Ireland and Saudi Arabia.
- **Laboratoires BIOETHIC.** Drops and tablets in France.
- **Neocare.** Drops and tablets in Belgium and Luxembourg
- **Nestlé.** Infant formula with Reuteri in France.
- **Semper.** Oral rehydration solution with Reuteri in Sweden
- **Tablets India.** Capsule with Reuteri in India.

### OTHER EVENTS IN 2009

- Study shows that BioGaia's Probiotic chewable tablets are effective in reducing diarrhoea caused by antibiotics.

### FINANCIAL PERFORMANCE IN 2009

- Net sales amounted to SEK 203.5 million, an increase of 40% compared to the previous year.
- Operating profit was SEK 47.7 million, an improvement of SEK 21.9 million compared to the previous year.
- Profit before tax was SEK 53.1 million, an increase of SEK 29.1 million compared to the previous year.



Profit before tax in relation to sales.