

Biovision

Newsletter March 2019

Healthy animals – healthy people

Biovision's holistic “One Health” principle



A future for all, naturally

Sabla Galgalo
Project Manager for “One Health”
comes from Merti, in Kenya



“If we want to improve the health of our pastoral communities, we must understand the impact that animals have on humans.”

“One Health” Projects
in Isiolo (started 2016)

Customised training in animal diseases, prevention and food hygiene improves the health of pastoralists and their animals. The development of an early-warning system reduces the risk of serious epidemics.

- **Aims of current project phase:**
 - Develop a network of animal-disease reporters
 - Increase the resilience of humans to drought
 - Improve milk hygiene
 - Improve disease prevention in local communities
 - Improve cooperation between individual authorities

• **Project Budget 2019:** CHF 305,616

- **Sustainable Development Goals (Agenda 2030):**
This project makes a direct or indirect contribution to four of the 17 Sustainable Development Goals (SDGs): Goal 1 (No poverty), Goal 2 (Zero hunger), Goal 3 (Good health and wellbeing), Goal 15 (Terrestrial ecosystems, soils and biodiversity):



Healthy animals,
healthier people

Pastoralists in Isiolo County (Kenya) live cheek by jowl with their animals – a closeness that brings with it risks to human health.

Simon Gottwalt, Biovision

It’s the “small” rainy season in the north of Kenya: Our all-terrain vehicle has been stuck on the road from Isiolo to Merti for more than 30 minutes, following a cloud burst which transformed the road into a river. However, for the herders in the Horn of Africa the rain is a blessing. After several dry years, the 2018 “big” rainy season from March to May delivered abundant rainfall and now – in December – it seems that the small rainy season will as well. The grazing lands have not been this green for a long time.

Impending danger

However, rain harbours its own risks: Damp weather encourages certain diseases. For example, in April 2018, there was an outbreak of Rift Valley Fever in our project region in Northern Kenya. Many animals died. Fortunately, there were fewer cases of the diseases spreading to humans than in the major epidemic of 2006/7. Biovision supports two projects in Isiolo County to improve animal and human health. I am on my way to find out whether and how our cooperation with the pastoralists contributed to the relatively mild course of the outbreak.

Pastoralists reliant on their own resources

The journey to the remote project region of Merti is a five-hour trip of some 200 kilometres on a road with a corrugated surface. There are no vets in the isolated villages around Merti and the herders are largely reliant on their own resources to keep their animals healthy. This is why Biovision,

through its projects “Camels for drought areas” and “One Health” supports a programme that trains local people on how to recognise key animal diseases. It focusses on diseases that can be transmitted to humans such as Rift Valley Fever and brucellosis. This type of disease transmission is also called zoonoses. To prevent such diseases, the pastoralists are taught to wear gloves before touching animals that are sick or about to give birth, to always boil milk before drinking it and to protect themselves from bites of the vector mosquitoes.

Digital nomads

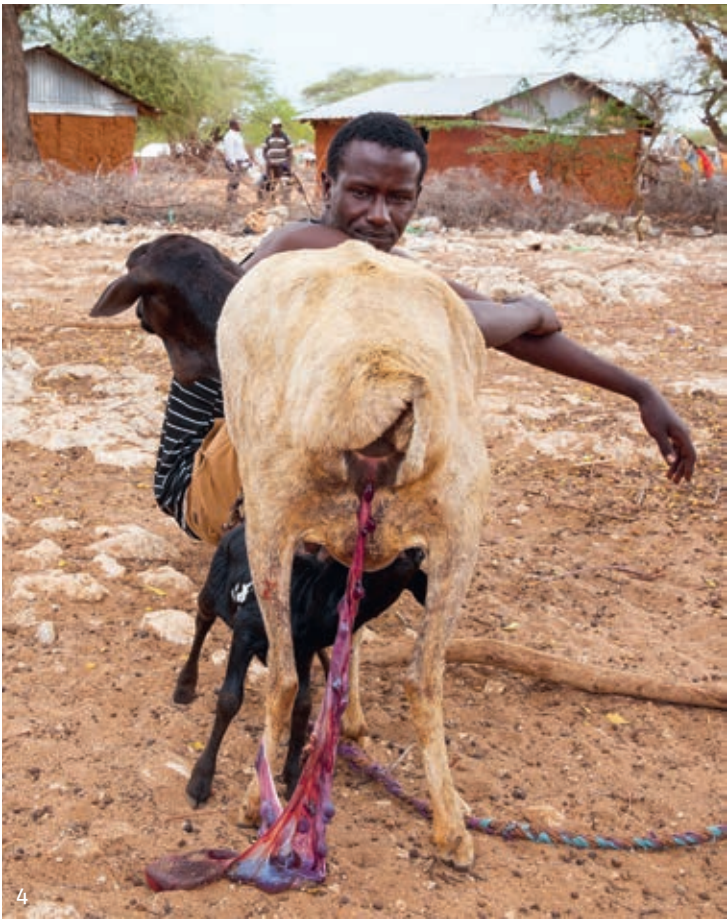
A network of animal disease reporters is being established as part of the project “Camels for drought areas”. Thanks to good mobile phone coverage and a specially designed smartphone app, animal diseases can be reported immediately to government vets. The app has already passed its first serious test: One of the animal-disease reporters trained by our partner VSF-Suisse* successfully alerted the authorities of a suspected case of Rift Valley Fever. Thanks to better communication, this early-warning system can help save lives and money, benefiting both animals and humans.

“One Health”

My visit to the pilot project in Merti clearly showed how the lives of the pastoralists and their animals are closely intertwined. If human health is to be improved, then the health of animals and the environment must also be improved. This holistic approach is called “One Health” and Biovision is using this principle in several of its projects (see Pages 4/5).

* VSF: Vétérinaires Sans Frontières Suisse

More information:
www.biovision.ch/onehealth-en



1 In Isiolo County (Kenya), Biovision and VSF-Suisse are training local villagers in the use of a disease early-warning system.

2 Animal-disease reporters use their mobile phones to send information to veterinary authorities on suspected outbreaks together with photos of sick animals.

3 Pathogens such as the brucella bacteria can be transmitted from animals to humans by drinking fresh milk.

4 Similarly, there is a significant risk of transmission to humans (zoonoses) when animals are giving birth.

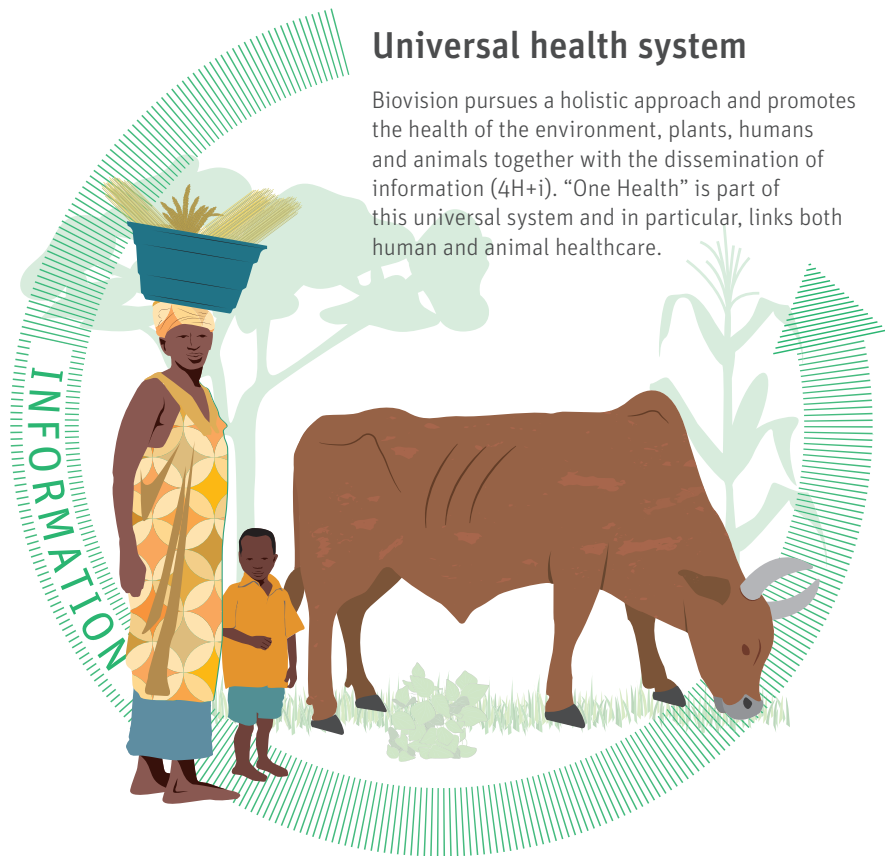
Demonstrating added value

There is an urgent need to promote closer cooperation between human and animal medicine and also with other disciplines. It helps here if we can demonstrate that the “One Health” approach actually produces a measurable added value – if possible a financial one. However, how do you measure added value? To do this, we at Swiss TPH have developed new integrated methods that simultaneously measure the health of animals and humans and compare them. For example, in Chad, we studied rabies, one of the most dangerous viral diseases affecting both dogs and humans.

We compared the cost of vaccinating humans to protect them after a bite from a dog suspected of having rabies with the cost of mass prevention campaigns to vaccinate both dogs and humans. The study demonstrated that in the long term the mass, simultaneous vaccination of both humans and dogs is worth it. With this twin-approach, we were able to eliminate rabies locally and after just five years, the initial investment had been recouped because of the reduction in the ongoing cost of fighting the disease. We were only able to make this clear statement because we had investigated the transmission of rabies to both dogs and humans as a linked system.



Professor Dr. Jakob Zinsstag
Human and Animal Health, Swiss Tropical and Public Health Institute (Swiss TPH)



Universal health system

Biovision pursues a holistic approach and promotes the health of the environment, plants, humans and animals together with the dissemination of information (4H+i). “One Health” is part of this universal system and in particular, links both human and animal healthcare.

Cooperation creates synergies

In biological terms, humans and animals are similar. Their wellbeing is interconnected and linked to their environment. Biovision takes account of this and in various projects adopts a “One Health” approach. However, what does that mean exactly?

Simon Gottwalt, Biovision

Humans are animals – a biological fact used by many bacteria and other microbes to happily jump from animal to humans and vice versa. In contrast, the doctors who look after humans and those who look after animals live in different worlds: Their training is separate, they have different labs and offices, there is a lack of communication between the two and sometimes a lack of understanding.

Key role of communication

This can be seen quite clearly from the Biovision projects in Isiolo County in Kenya (see Page 2). As soon as a veterinary office

receives an alert from an animal-disease reporter about a suspected case of Rift Valley Fever, it ought to share this information immediately with the Ministry of Health. However, those responsible for animal health and human health are located in two different ministries and so this exchange of information is not a matter of course. Moreover, that is not just the case in Africa. For example, in the Netherlands, there was a major outbreak of Q fever amongst humans between 2007 and 2010 because the veterinary office failed to provide information promptly.

Cooperation creates an additional benefit

“One Health” is designed to overcome such shortcomings. In order to improve healthcare, we ought to take account not just of human and animal medicine but also food and the environment. Jakob Zinsstag, Professor of One Health at the Swiss Tropical and Public Health Institute (Swiss TPH) summarises the approach as follows: “One Health is when those involved in animal and human medicine work closely together and so produce an additional benefit, e.g. improving the health of humans or animals, reducing costs or improving ecosystem services.

“One Health” to combat epidemics

Many dangerous infectious diseases spread in animals before humans are infected. The sooner a disease is detected in animals, the sooner action can be taken to save lives and money. “One Health” also provides multiple benefits in other areas such as vector management, antibiotic resistance and food security.



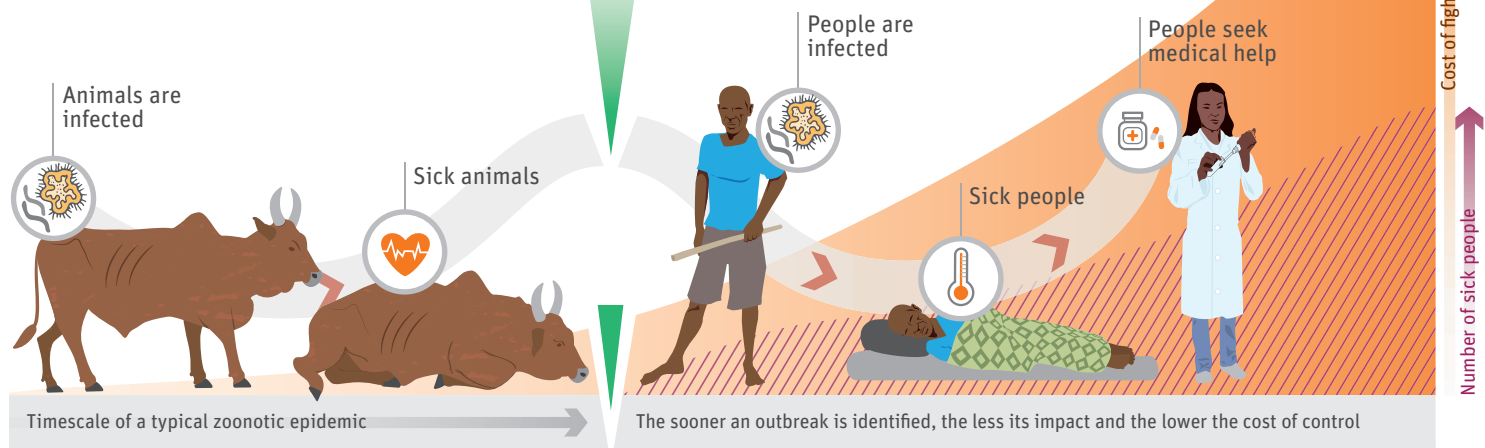
Better health

Early intervention can prevent disease and death in both humans and animals.



Cost savings

The sooner veterinary authorities report diseases, the easier it is to control epidemics.



Without cooperation between human and animal medicine, there will be no such added value.”

This is why in Isiolo County, our project partner, icipe (the international insect research institute) worked with the relevant authorities to draw up clear rules for the prompt exchange of information between different ministries.

Interdisciplinary exchange

At the heart of this approach is the interdisciplinary cooperation between vets, doctors, social scientists, grazing specialists and other experts. For example, in Eastern Ethiopia, the Swiss TPH with support from Biovision has just started to develop an integrated monitoring system for human and animal health and the state of grazing land. This single system will speed up the detection of dangerous diseases (see diagram). That will save money as instead of three separate systems, only one will be required. There is an urgent need for such integrated approaches for nomadic peoples and their cattle, particularly in the Horn of Africa where they receive little care from the static state health system.

Killing several birds with one stone

Starting in 2019, Biovision will also link human and animal health in the area of Integrated Vector Management (IVM), i.e.

the control of ticks, mosquitoes and other insects that transmit diseases. In the past, Biovision’s IVM measures have focussed on malaria control and so on people. The new approach will kill several birds with one stone, i.e. kill several types of flies. Cattle will be sprayed with a bio-insecticide; this will reduce the population of the Anopheles mosquito that transmits malaria. At the same time, there will be measures to control parasitic bloodsuckers such as the Tsetse fly and ticks that also spread dangerous animal diseases.

Universal health system

Linking various areas of health is not something new for Biovision. Our projects have always addressed the health of plants and the environment as well as the wellbeing of animals and humans. Professor Zinsstag considers this to be extremely important: “Health protection must always include factors such as air pollution, global warming and soil fertility.” He regards “One Health” as just one part of EcoHealth, a type of universal health system. “Everything is interdependent! Something that we have actually known for quite some time,” says Zinsstag. If we are to remain one step ahead of the microbes, we must take immediate action that reflects that knowledge.

“One Health” in Biovision Projects

- 1. Camels for drought areas, Kenya:** Develop a network of animal-disease reporters, improve hygiene in milk processing
- 2. Prevent disease in animals and people, Kenya:** Train local people in identifying the main zoonoses; improve cooperation between authorities
- 3. Information systems on disease and drought, Ethiopia (new):** Develop an integrated monitoring system for human and animal health and also grazing land
- 4. Control disease-transmitting insects, Kenya (new):** Combined control of animal and human diseases



Simon Gottwalt,
Molecular biologist (infectious diseases),
Responsible for the animal and human health projects at Biovision

Success and Praise

Andreas Schriber, Biovision

A major success for our sister organisation in Kenya; the Biovision Africa Trust (BvAT): The Trust, which was set up by Biovision and is led by its director David Amudavi, has been commissioned by GIZ, the German corporation for international cooperation to set up a Knowledge Hub for Organic Agriculture in Eastern Africa. “This will add value to the existing Biovision Farmer Communication Programme, established more than 10 years ago and which saw the introduction of a magazine for farmers ‘The Organic Farmer’,” said Amudavi welcoming the announcement. With the support from Germany we can provide even more small-holders with practical knowledge on ecological methods of food production and land use. The new programme strengthens and supplements the implementation of concrete self-help projects in Burundi, Ethiopia, Kenya, Ruanda, Tanzania and Uganda. The Hub will be located in Uganda and managed by the Biovision Africa Trust in Nairobi in cooperation with partners such as FiBL (the Swiss Research Institute of Organic Agriculture), IFOAM (Organics International) and CIAT (the International Centre for Tropical Agriculture) and funded by BMZ, the German Federal Ministry of Economic Cooperation and Development. Its award is a great honour and recognises the expertise of our sister organisation in Kenya.

www.biovisionafricatrust.org



BvAT Trainer Veronika Wamiti (2nd from left) out in the field referring to the Infonet Biovision, a sort of Wikipedia for East African farmers.



In the village of Ruvuma (Tanzania), farmers have successfully adopted agroecological principles. They were given the knowledge needed as part of the Biovision Project “Training Centre for ecological agriculture”.

Both perpetrator and victim

Climate change is now recognised as an enormous challenge. Biovision is seeking solutions to problems in agriculture, focussing in particular on agroecology.

Fabio Leippert, Biovision

Agriculture is responsible for up to one-third of all global greenhouse gas emissions and so is one of the main causes of climate change. At the same time, farmers throughout the world are fighting extreme drought or excess rainfall. For example, East Africa has already had to face drought five times since 2005 and with it, widespread food insecurity.

We cannot allow that to continue. This is why Biovision has been working for many years to bring about an ecological and social transformation in food production. This aim of this paradigm shift is to encourage and strengthen locally adapted, resilient and yet productive methods of agriculture based on the example of natural ecosystems.

Agroecology – a contribution to achieve that aim

Agroecology is an approach that can help us achieve our goal. It is based on natural principles such as diversity, closed cycles

and recycling as well as a positive interaction between animate and inanimate nature. Agroecology also takes account of social aspects such as adding more value locally, cultural dietary needs and gender equality. For example, farmers will be given the capability to grow several different food crops simultaneously (diversification), control pests using biological methods and use natural alternatives such as compost and legumes instead of synthetic fertilisers. This will strengthen the quality of the soil and its resilience to drought and wind. It will also reduce emissions caused by the production of fertilisers.

Advocate for agroecology

With its project “Advocacy for Agroecology: Climate Change”, Biovision is campaigning for a change of course in agriculture, both internationally and in individual countries. For example, at the 2018 UN Climate Change Conference in Katowice (Poland) Biovision demonstrated to policymakers the benefits of agroecological solutions in protecting the climate and retaining natural resources. In Kenya, we are supporting the Ministry of Agriculture with concrete recommendations and a coordinated policy dialogue in order to plan climate-friendly, agroecological measures in agriculture.

www.agroecology-pool.org

Invitation to Spring Event

The effects of climate change are becoming increasingly evident. Yet again, it is the poorest communities in the Global South whose existence is most under threat. However, Switzerland also faces challenges! What can we do in our projects? What can you and each and every one of us do? We shall be tackling these questions at the Biovision Spring Event. We would like to invite you to the event on 28th May at 19.00 at the “kultur und kongresshaus aarau”. Your friends are also welcome!

Information and Registration:
www.biovision.ch/aarau-en
Tel. 044 512 58 58



Water and wood are also in short supply in the semi-arid areas of Isiolo County (Kenya).

Imprint

Newsletter 54, March 2019, © Biovision Foundation, Zurich

Published by Biovision, Foundation for ecological development, Heinrichstrasse 147, 8005 Zurich

Editorial Peter Lüthi

Production Sabrina Nepozitek

Text Simon Gottwalt, Andreas Schriber, Peter Lüthi, Fabio Leippert, Jakob Zinsstag

Languages This Newsletter is available in German, French and English.

Translations Sue Coles (English), Daniel Wermus (French)

Cover photo Farmer in Kayunga, Uganda (Peter Lüthi/Biovision)

Other photos Peter Lüthi/Biovision, except Joachim Pelikan/Swiss TPH: Page 4; tobias-matter.ch: Diagrams Pages 4, 5; Simon Gottwalt/Biovision: Page 5; photoart: Page 7 bottom right.

Design Binkert Partnerinnen, Zurich

Printing Koprint AG, Alpnach

Paper quality Cyclus Offset (100% recycled)

The Biovision Newsletter is published five times a year and is available on subscription for a minimum donation of CHF 5.–.



There is a young tree growing at Mbita Point on Lake Victoria – in honour and memory of the late Head of Communication at Biovision.

Farewell to David Fritz

David Fritz died on 13th December 2018 surrounded by his family. Since he was diagnosed some two years ago with motor neuron disease (ALS), this unrelenting illness forced him to gradually place in good hands his much-appreciated work for Biovision.

As a result of his solid experience over many years as a journalist, first at Reuters and then in the Foreign Affairs team of Swiss Radio and Television (SRF), David brought extensive media skills to his communication work at Biovision.

He was both innovative and highly motivated in the way he tackled the concerns of Biovision. He was someone who thrived on communication and was equally fluent in both English and German; this made him a natural fit for his role. For David, his work at Biovision was not just a “job” – he put his heart, mind and soul into it and identified fully with the vision and mission of the Foundation. The communication team and the entire Biovision staff supported and assisted David – both as friends and work colleagues – throughout his terrible illness and right up to the end. We are all very sad and deeply affected by his fate.

Last November, a tree was planted in his honour at the Research Station at Mbita Point on the banks of Lake Victoria in Kenya. It is a living symbol of the appreciation and the deep attachment felt by those in the Biovision family who knew him – in both Switzerland and Africa – and who were profoundly touched by him.

You have a place in the hearts of your fellow colleagues and our friends. You were straightforward, uncompromising and courageous in your path through life. We are lucky to have accompanied you for part of it. David, we shall miss you.

Team Biovision



David Fritz (1957–2018), Head of Communications at the Biovision Foundation 2012–2017



Story from the life of Andreas Schriber, Biovision CEO, Zurich “I am changing ship but not fleet”

Peter Lüthi, Biovision

In Madagascar, they called him a “courant d’air” (a breath of fresh air). That was in 1991 when Andreas Schriber was working for the WWF in Anatanarivo training local editors of VINTSY – a magazine on ecology and forest conservation. Both then and now, Schriber’s nickname matches his personality.

The inquisitive young man from the Zurich suburbs completed an apprenticeship as a typesetter and then trained as a journalist. This allowed him to combine both his talents – design and writing. After several years collecting experience, travelling and working as an editor and photographer in Zurich and Montreux, Schriber’s career took a decisive turn in 1984: He joined WWF Switzerland in Zurich, producing their publications. The heated debates on forest dieback, atomic power and genetic engineering honed his flair for communication and politics. At that time, he also discovered his love of Africa.

After years of commitment to conservation, he fulfilled a personal dream and sailed on an old two-master from the Caribbean to the

South Pacific and French Polynesia. Later he married, fathered a son and moved back to Swiss Television as a science editor on the programme “Menschen Technik Wissenschaft”. Whilst there he made a film about Hans Rudolf Herren, the first Swiss recipient of the World Food Prize. It was a meeting of two visionaries who got on well and shared similar ideals. Together they developed the idea of an organisation committed to improving people’s lives and at the same time protecting the environment. In 1998, they together with two other kindred spirits founded Biovision.

In 2003, Schriber became the CEO of the young organisation and so it was that an energetic, inspired and far-sighted pioneer became the head of the Foundation for Ecological Development. True to his motto, “Action not words”, he has been at the helm of Biovision since then working tirelessly, unerringly and displaying a finely tuned feel for innovation. “Biovision fills important gaps at the interface of environment protection and cooperation

and development; we break new ground and create added value for all those involved,” he says.

Schriber has the gift of anticipating important developments and selecting the right course of action early. If he is convinced that an idea is right, he focusses his attention on that goal with great efficiency and is unstoppable. With him at the helm, he has developed the Foundation into a respected organization.

Today, Biovision is on a firm footing thanks to great support from donors and strong partners; an ideal time for the captain to check the wind and adjust the sails. So, in 2020 Andi Schriber will re-focus his activities to further develop the Biovision

“We create value”

Africa Trust, our sister organisation in East Africa (see Page 6) where he now serves as member of the

Board. In so doing he will make space for the next generation to move into the management team of Biovision in Zurich. “I am changing ship but staying with the fleet,” he says with a smile.

