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1/2010

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MAGAZINE FOR  
MEDTECH, BIOTECH  
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SPECIAL

## Exporting medical expertise

State-of-the-art technology  
and knowledge from North  
Germany for your health

Mecklenburg-Vorpommern  
Diabetes – an affair of the  
heart at Klinikum Karlsburg

Schleswig-Holstein  
Prof. Jan Born has been  
awarded the Leibniz prize

Hamburg  
Doctor exchange programmes  
as a career stepping stone

SPECIAL ISSUE ARAB HEALTH 2010



ARAB HEALTH



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> **Dear Readers,** For the health industries, the New Year traditionally begins with a major event – Arab Health in Dubai. The fair has developed into one of the world's most significant exhibitions in this field – and Hamburg, Schleswig-Holstein and Mecklenburg-Vorpommern will showcase their strengths jointly. High-tech made in Germany still enjoys an outstanding reputation internationally – especially in the Arab countries. Worldwide, our quality of life depends to a large degree on health – and health is the greatest gift for us all. North Germany offers its inhabitants first-class medical care in hospitals and university clinics. However, our specialists have long since been in demand in other countries as well. Patients come to North Germany from all over the world for treatment – many of them from the Gulf region. They come to us in connection with indications relating to transplants, hip replacements, oncology and cardiology. You can read more about this topic in our special article. In our portrait, we also present two Arab guest doctors that have received training here. There is an intensive exchange of medical personnel and expertise between North Germany and the United Arab Emirates aimed at jointly building up an outstanding healthcare system in the Arab countries. You will discover that: the North of Germany is nearer to the Arab peninsula than you may have assumed in the past.

We hope you enjoy reading the magazine and find it informative.  
Your Life Science Nord Team.

## RAISE THE LIMITS

**Hamburg >** A large section of the Eppendorf stand at the Arab Health 2010 trade fair is designated for the presentation of the new Research® plus pipette. All lab professionals will be given the opportunity to systematically test the new development in a wet area.

The latest version of the Eppendorf Research® plus single-channel pipette weighs only 71 g (lightest fixed-volume pipette) – a real relief if you have to perform multiple dispensing operations in your daily routine. Apart from the low weight, the extremely low power needed to operate the new generation of Eppendorf pipettes makes them incredibly easy to use: only 1.2–1.5 N is needed to move the control button. Conventional pipettes require up to 6 N and are therefore significantly harder to operate. These two innovative enhancements so significantly improve the ergonomics of the Research® plus that it sets entirely new standards in manual pipetting. The product was awarded the »red dot award for product design 2009«.

Eppendorf products are designed for academic and commercial research facilities, but also for industrial companies in the field of biotechnology and in other sectors using biotech research processes. The company was founded in Hamburg in 1945 and has more than 2,500 employees worldwide.

**For more information:** [www.eppendorf.de](http://www.eppendorf.de)

## LEARNING DURING SLEEP

**Lübeck >** Prof. Jan Born, Director of the Institute for Neuroendocrinology at the University of Lübeck, has been awarded the Leibniz prize. The most prestigious German prize for research is also one of the most highly regarded scientific awards worldwide.

Born received the prize from the German Research Foundation (DFG) for his pioneering work in the field of sleep research.

The Lübeck scientist examines how memory is formed during sleep. He has been able to demonstrate that memory is stabilised in sleep and that cognitive processes such as problem solving strategies also occur.

At the same time, he was the first researcher to provide conclusive evidence of a causal link between sleep and learning. Born also examines memory formation through sleep in other organic systems such as the metabolic and immune systems and in doing so is making a significant contribution to basic research.

**For more information:** [www.uk-sh.de](http://www.uk-sh.de)

## NORTH GERMAN-ARAB COLLABORATION

### Doctor exchange programmes to be expanded

A growing number of companies and experts from the health sector are active in the Gulf region. Collaboration began in the Sultanate of Oman

**Hamburg >** Collaboration with Oman has become a tradition especially in Hamburg and there are plans for a successful continuation this year as well. Preventing and combating highly infectious diseases such as swine flu (H1N1 virus) is a very topical area of collaboration. However, doctors from Oman have been coming to Hamburg for years to take part in training programmes for periods of between six months and up to six years, either to complete their further training to qualify as specialists or to train further in specific fields (e.g. minimally invasive surgery). At the same time, our North German doctors offer special courses in Oman to support their colleagues there.

On a similar basis, Hamburg is also seeking to agree on a joint declaration on collaboration in healthcare and the exchange of doctors in 2010

with the Kingdom of Bahrain and the Emirate of Abu Dhabi.

However, direct collaboration with North Germany is not only growing in the Arabian Peninsula. Since September 2009, there has also been a cooperation agreement between Kurdistan (Iraq) and Hamburg, which is unique in Germany. Besides the exchange of doctors, this also involves providing general advice on the restructuring of the Kurdish healthcare system. The focus is on hospital planning and building as well as on setting up a health and social security system.

North German experts are also advising Kurdish specialists on issues regarding the improvement of drinking water quality and food import controls (especially meat).

**For more information:**  
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## GERMAN-ARAB HEALTH FORUM

### Huge potential for collaboration

The latest medical developments, among other things, were presented at the congress organised by Ghorfa in cooperation with the Free and Hanseatic City of Hamburg, the Hamburg Chamber of Commerce and the University Medical Center Hamburg-Eppendorf

**Lively discussions within historic walls: gala dinner at the city hall of the Free and Hanseatic City of Hamburg**

**Hamburg >** Once again, Hamburg proved an outstanding venue for those who attended the 4th German-Arab Health Forum, including the Ambassador of the Kingdom of Saudi Arabia, His Excellency Prof. Ossama Shobokshi. In workshops with distinguished participants, questions on matters such as minimally invasive surgery, metabolic diseases, rehabilitation, telemedicine and prosthetics were discussed. In addition, participants focused in particular on health insurance, education, clinic planning and construction, the pharmaceutical industry and medical tourism. The Secretary General of Ghorfa, Abdulaziz Al-Mikhlaifi, said: »There was a lively exchange of views among German and Arab scientists, doctors and business people, and this is precisely what the forum is all about.« Ghorfa is an expert partner that can effectively pave the way for German companies seeking to enter the Arab market. The 5th German-Arab Health Forum is also due to be held in Hamburg. In addition, the Hamburg Chamber of Commerce and Ghorfa are planning to extend their collaboration to include country events and specialist workshops in addition to the forum.

**For more information:** [www.ghorfa.de](http://www.ghorfa.de)

Photo: eventbegraben.com





The Chamber's President Frank Horch expands and cultivates the relationships to Arab partners

## HAMBURG CHAMBER OF COMMERCE – MIDDLE EAST ACTIVITIES

### A good network that is fostered

Hamburg companies are very interested in the markets in the Middle East and South-West Asia, as these will continue to grow in the medium term. The Hamburg Chamber of Commerce provides strong support to these companies and their activities

**Hamburg >** Hamburg enjoys an outstanding reputation in the Arab world as a centre for health-care services. There are already close ties between the health sectors in Hamburg and in Arab countries. However, there is also huge demand in Arab states for other high-tech industries that require know-how and consulting services. These include medicine and life sciences as well as renewable energies, the maritime economy, logistics, transport and environmental technology. At the end of 2008, the Hamburg Chamber of Commerce and the Dubai Chamber of Commerce and Industry (DCCI) entered into a strategic cooperation aimed at achieving closer economic cooperation between the two locations. This agreement sets out the most important areas of collaboration and forms the basis for concrete projects. These include a cooperation agreement between the Hamburg School of Business Administration, which is supported by the Hamburg Chamber of Commerce, and the University of Dubai, which is backed by the DCCI. The agreement provides for exchanges

involving students and professors as well as excursions. To promote links between the business communities of both cities and to offer a platform for sector-related discussions and sharing experiences, the Hamburg Chamber of Commerce and the DCCI have regularly held the »Dubai Hamburg Business Forum« since 2007. The purpose of the forum is to give business representatives from both sides an opportunity to meet and discuss actual cooperation plans. In view of the event's success in the past, there are plans to hold a third Dubai Hamburg Business Forum.

This year, there are also plans to strengthen cooperation in the field of arbitration between Dubai and Hamburg. The respective arbitration rules are to be translated, information is to be made available, and contact persons named. The aim of this collaboration is to resolve disputes in binding, out-of-court settlements. Besides its partnership with DCCI, the Hamburg Chamber of Commerce is also engaged in a wide range of further activities in the Middle East. For example, it is expanding the cooperation network with sister institutions in other states of the Gulf Cooperation Council, such as the Oman Chamber of Commerce and Industry. In addition, there are very close links to the foreign chambers of commerce throughout the region. This networking offers Hamburg companies seeking to enter the market an opportunity to establish direct links to local businesses.

Furthermore, the Hamburg Chamber of Commerce's expertise is in demand when chamber systems have to be established in the region. The experiences it can share on the work of chambers of industry and commerce are also valued.

**For more information:**

**Hamburg Chamber of Commerce, [www.hk24.de](http://www.hk24.de)**

## EUROPEAN GRANT

**Kiel>** Dr Gunnar Wasner, consultant neurologist at the Clinic for Neurology of the University Medical Center Schleswig-Holstein (Campus Kiel), has been awarded an EFIC-Grünenthal grant for his neuropathic pain research project.

The project considers what type of nerve injury results in neuropathic pain. Many patients are affected by the disease – for example diabetics or patients that have suffered from shingles or a stroke. All of them have nerve tissue injuries. However, to this day it is unclear why some patients suffer chronic pain after such a nerve injury while others with apparently the same injury do not. Wasner believes that it is not the injured nerve itself that is critical, but the dimension of special sub-groups which become injured. That is why he is working on a new method to examine his patients' different groups of nerves.

Wasner is one of five European scientists that have been awarded grants for innovative research projects focusing on chronic pain. The EFIC (European Federation of IASP Chapters) is the largest European organisation for interdisciplinary pain research and therapy.

**For more information: [www.uk-sh.de](http://www.uk-sh.de)**

## INNOVATION FOR ADVANCED CARDIAC INSUFFICIENCY

**Kiel>** Cardiologists at the University Medical Center Schleswig-Holstein (Campus Kiel) have applied a new, innovative method to treat advanced cardiac insufficiency for the first time.

The team, headed by cardiac rhythm specialist Prof. Hendrik Bonnemeier and the cardiac insufficiency specialist Prof. Dr Norbert Frey, has successfully implanted a system for cardiac contraction modulation into a patient suffering from advanced heart weakness. This new system, which is connected to the heart through three electrodes, increases the calcium concentration in the heart muscle cells through an electrical impulse, which improves the strength and pump capacity of the diseased heart. During the operation, the surgeons were already able to measure a significant improvement in the pump capacity. The implant caused no complications and the patient was able to leave the clinic just three days after the operation. The University Medical Center will use this innovative method in the future as an additional option for patients with cardiac insufficiency and clear indications.

**For more information: [www.uk-sh.de](http://www.uk-sh.de)**





## ECONOMIC LINKS BETWEEN NORTH GERMANY AND ARAB COUNTRIES

# A relationship based on trust

Hamburg will again be represented at Arab Health in Dubai with a joint stand. The event has in the meantime become a showcase for the healthcare and life science sector in Hamburg, Schleswig-Holstein and Mecklenburg-Vorpommern

**Hamburg** > North Germany can be considered the ideal location for medical technology, thanks in particular to the size of the corporate groups located in this area and the dominant market positions they hold. There are few other regions with such a pronounced economic structure in the field of medical technology research and development. This strength is not ephemeral, but rather based on a solid foundation. Between the North Sea, the Baltic Sea and the Elbe, one of the most significant

locations for medical technology, biotechnology and health industries has developed. In the region, business, science and clinics work hand in hand.

The Arab countries are one of the main regions with which North Germany wants to deepen its international ties.

Life Science Nord spoke with Schleswig-Holstein Minister of Economics Jost de Jager and Hamburg's Health Minister Dietrich Wersich on expectations and opportunities.

## Policy statement from the state of Schleswig-Holstein

**Life Science Nord: Mr de Jager, Schleswig-Holstein is a leading location for medical technology with over 200 companies in this field. Where are the sector's greatest strengths in your view?**

**Jost de Jager:** Besides first-class clinics, notably the University Medical Center Schleswig-Holstein, the state has numerous companies that operate globally – for example Dräger in Lübeck, Johnson & Johnson in Norderstedt, Stryker in Schönkirchen and Eppendorf in Oldenburg. And it is home to a host of specialised medium-sized firms and service providers.

**... whose expertise is also in demand in the Arab region.**

**Jost de Jager:** Indeed! Many Arab states are working to modernise and expand their healthcare systems. With their competencies in operation and supply technology, implantology and diagnostics that are in demand internationally, companies from Life Science Nord are especially well placed to capitalise on these needs.

**The University Medical Center Schleswig-Holstein (UK-SH) has an excellent reputation for top-class medicine and research in the region. Many foreign patients have already recognised this. What is the University Medical Center's role in the internationalisation of Schleswig-Holstein as a life sciences location?**

**Jost de Jager:** For one thing, UK-SH – like

**Jost de Jager, Minister of Science, Economic Affairs and Transport of the Federal State of Schleswig-Holstein**

Photo: Free and Hanseatic City of Hamburg



**Dietrich Wersich, Minister for Social and Family Affairs, Health and Consumer Protection of the Free and Hanseatic City of Hamburg**



other clinics in the region – offers excellent medical care, for which there is a huge demand in the Arab countries and from many patients from Scandinavia and Eastern Europe. In addition, UK-SH is a key partner when it comes to research and development relating to medical and technical applications in the region. First-class research and commercial success go hand in hand.

**The establishment of the oncology particle therapy centre NRock will give Schleswig-Holstein an internationally outstanding research institute. How, and to what extent, are you relying on national and international cooperation?**

**Jost de Jager:** National and international cooperation agreements are undoubtedly the key to making NRock a success both as a therapy, and as a research, institute. I therefore vigorously support all activities in that direction.

**Since 2005, the North has had a joint stand at Arab Health. What is the significance of this presentation under the name of Life Science Nord for economic ties to the Arab countries?**

**Jost de Jager:** The North German joint stand at Arab Health is the focal point for the presentations of our 40 North German participants from Schleswig-Holstein, Hamburg and Mecklenburg-Vorpommern. It draws the attention of visitors from all over the world to the quality of our medical products and services. Ultimately, a successful positioning at Arab Health also secures and creates jobs in the region – and in the fastest growing sector of the 21st century, the region – and in the fastest growing sector of the 21st century.

## Policy statement from the Free and Hanseatic City of Hamburg

**Life Science Nord: Mr Wersich, the metropolitan region of Hamburg has been steadily establishing links to countries in the Arab world in the healthcare field in recent years.**

**Why is Hamburg focusing on this region?**

**Dietrich Wersich:** Since it first participated in Arab Health in 2003, Hamburg has indeed steadily expanded and intensified its connections with countries in the Arab world. Relations with these countries do not arise overnight. They require the trust of our partners. This trust grows slowly, but once it is there it is stable.

The Arab countries attach enormous significance to developing their healthcare systems. Hamburg and Schleswig-Holstein have a large number of companies that offer top-quality products and services especially in the medical field. There is interest and demand for these offerings in Arab countries. We are therefore creating a foundation which can benefit our economy.

**What particular opportunities does this collaboration offer?**

**Dietrich Wersich:** By concentrating on this region, Hamburg is helping to raise the quality of medical care. At the same time, however, it secures jobs in the Hamburg metropolitan region. This offers opportunities for the economic situation of local firms and, as a consequence, for Hamburg's financial situation. In this way, both Hamburg and its Arab partners profit. The products and services provided by the Hamburg

healthcare sector are well known and in demand. As health minister, I am of course pleased that people in the Arab countries benefit from our know-how at first hand, as it were.

**Since the turn of the century, Hamburg has also set itself apart from other German cities as a centre for medicine and life sciences. What special capabilities does the metropolitan region offer compared to its rivals?**

**Dietrich Wersich:** Hamburg, as a city state with the structures of its metropolitan region, offers a uniquely concentrated environment where science, research and practice are closely connected – in production, services and of course our clinics. Customers and our partners do not look to Hamburg only when they want to acquire a finished product. They already make inquiries when they have a problem for which they are seeking a solution. They can quickly find such expert solutions in Hamburg – from analysis to the finished product. This is a major advantage offered by the Hamburg metropolitan region that virtually no other region in Germany can match.

**In which fields can links be further deepened in the future?**

**Dietrich Wersich:** Aside from medical tourism, which I have already mentioned, I see opportunities in education and further training. We can increase the share of students from Arab countries. It will place even more emphasis on its attractions for doctors from the region, will enable them to train here for certain periods and will offer so-called summer and medical schools. Every patient that is treated in North Germany and every doctor that has been able to broaden his or her knowledge and skills here is an ambassador for our region and its outstanding healthcare sector.





**Haroon Haj Ismael and Ayham Nasser are two of about three dozen guest doctors at the UKE**

»There are, however, good reasons for these bureaucratic hurdles regarding the recognition of medical degrees in other countries. The standards in Germany for medical activity are high. For this reason, the UKE and relevant authorities now work closely together.« This takes time, even though Boscher and her team are now fully conversant with the procedures involving the regional authority, the job agency and authority for foreigners. In addition, the Hamburg health authorities provide support, and some foreign doctors come into contact with Hamburg through international cooperation arrangements.

For applicants, the key question is how to finance their stay. The grant that a doctor such as Nassour receives here is equivalent to the salary earned by a medical director in his own country, but is only sufficient to cover the basic costs of living in Germany. And the doctors cannot count on payment until they are able to provide effective assistance in day-to-day work in the clinic.

The Jordanian Ismail came to the UKE because he contacted the head of the Department for Ophthalmology, Professor Gisbert Richard, directly. »I received a positive reply straight away,« reports Ismail. He therefore moved from Amman to Germany. »In the beginning, it was difficult finding my way around and organising everything,« he says. But he has now settled down. As Leonore Boscher points out, finding affordable accommodation can be a problem. Living in Hamburg is very expensive for foreign guests. However, the UKE has a few rooms in a nearby residential home for nurses.

The training to become a specialist in ophthalmology lasts five years. Ismail will then be in demand in his own country. Many people there suffer for example from diabetes resulting in massive damage to their eyes.

Nassour came to the UKE because in his home town's hospital he had to treat many cases of infections such as tuberculosis, and infections caused by hospital germs are also a problem. The doctor therefore began a period of further training at the Institute for Medical Microbiology, Virology and Hygiene. The head of the institute is Professor Martin Aepfelbacher. Here, Nassour wants to acquire the necessary knowledge on state-of-the-art methods to identify bacteria and on targeted therapies so that he can apply them later in his own country.

Nassour came to North Germany two years ago. His German is now almost accent-free. He says a host family with whom he still has contact helped him in the first few weeks. He will feel a little homesick for Hamburg, he believes, when he has completed his training in three years time.

## INTERNATIONAL EXCHANGE OPPORTUNITIES FOR DOCTORS

# North Germany as a career stepping stone

The University Medical Center Hamburg-Eppendorf (UKE) offers thorough specialist medical training to guests from other countries

**Hamburg** > Haroon Haj Ismail is 29 years old and is receiving specialist medical training in the Department of Ophthalmology at the University Medical Center Hamburg-Eppendorf. The Jordanian from Amman has lived in Hamburg for six months. Ayham Nassour is 32 years old. The Syrian comes from the city of Latakia on the Mediterranean coast, where he has already worked as a specialist in a hospital. Nevertheless, for the last two years he has been at the University Medical Center Hamburg-Eppendorf to gain an additional qualification in microbiology. Ismail and Nassour are two of about three dozen young doctors that are working as guest doctors at the UKE and are receiving specialist or additional training. The clinic is in demand. According to Leonore

Boscher, applicants not only come from the Middle East and South-West Asia, but also from India and Pakistan as well as the countries of the former Soviet Union. As head of the UKE's International Office, she deals with the international matters for patients and doctors. Specialist medical training in Germany is considered to be especially thorough.

Obtaining a place in the clinics of North Germany is not easy for foreign applicants. »We have some 600 inquiries a year,« reports Leonore Boscher. However, only a fraction of the applicants gain a prized place. The level of the applicants' previous education has to be checked and compared with local requirements. Complicated bureaucratic hurdles also have to be overcome.



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# Clinics treat patients and are involved in projects in Arab countries







## EXPORTING NORTH GERMAN MEDICAL EXPERTISE

**Globalisation makes it possible. Hospitals in Hamburg and Schleswig-Holstein are treating patients from abroad and selling know-how all over the world. And both sides benefit. While some are gaining new markets, others are acquiring the tools to build up their own healthcare systems**

**Hamburg** > Trading ties between Hamburg, the North German federal states and the Middle East have a long tradition. For several years, links between companies and clinics from North Germany and Arab countries have also been increasing in the healthcare sector. The collaboration benefits both sides. North German companies are tapping into new markets in countries that are investing billions of dollars to expand their healthcare systems – even during the economic crisis. At the same time, Arab states are acquiring top-class medical and technical products and profiting from high-quality advisory services. They are also gaining training capacity for their young doctors and nursing staff. Patients come for treatment in North Germany's high-performance hospitals and the clinics are able to earn extra income outside capped budgets. Since 1998, German hospitals have been able to retain additional revenues derived from treating foreign patients: that especially applies to the University Medical Center Hamburg-Eppendorf, the University Medical Center Schleswig-Holstein and the ENDO Clinic, a company of the Damp Group.

Further Hamburg hospitals that are active in Arab countries are the University of the Federal Armed Forces Hospital and the Albertinen Hospital. All clinics offer patients from the Gulf region tailor-made services and give guest doctors an opportunity to acquire new skills and receive further training. At a personal level, the Boberg Trauma Hospital has also established links to the Arab region, as the latter has no rehabilitation facility for paraplegics, a field in which Boberg is highly qualified. After a worldwide tender procedure, the Hamburg-based Asklepios International GmbH has been awarded the contract to establish an initial emergency care facility and the first structures of a healthcare system with a polyclinic in the new King Abdullah Economic City in Saudi Arabia. The intention is that the King Abdullah Economic City will grow into a metropolis with some two million inhabitants over the coming decades. For Asklepios, this is the first investment in the Arab region. The project covers an emergency care facility and a polyclinic offering internal medicine, general surgery, gynaecology, paediatrics and further medical disciplines. A key part of these efforts to

present North Germany as a healthcare location to Arab countries are the cooperation agreements entered into by Hamburg with the Kingdom of Jordan, the Republic of Tunisia, the Sultanate of Oman and the Emirate of Dubai in recent years. Hamburg is also in talks with Abu Dhabi. The goals of these agreements are to provide training to doctors and advice to hospitals and to enable patients to be treated in Hamburg. Delegations of experts from Hamburg and the partner regions maintain the dialogue.

Collaboration with Tunisia for example involved treating patients – above all children in the Asklepios Clinic Nord. Doctors from the North African country also receive further training under a cooperation project with the foreign chamber of commerce. A programme for guest doctors has been established with the Sultanate of Oman. Doctors can choose between training courses lasting six weeks to six months and further training in specialist fields for up to six years. In medicine, Hamburg clinics offer both advice and second opinions as well as diagnostic services and therapy. This includes for example surgery performed in Oman by doctors from the Federal Armed Forces Hospital. However, patients also come from Oman to Hamburg for treatment mainly in the Federal Armed Forces Hospital, the ENDO Clinic and the UKE. The cooperation agreement with Jordan includes further training for doctors. Under an agreement with Dubai, Hamburg offers medical training as well as advice, diagnostic services and patient treatment – in Dubai and Hamburg.

Experts in the United Arab Emirates and the central government of Abu Dhabi are working in the German-Arab Health Forum, which was recently held in Hamburg for the second time. The event serves as a platform where contacts in the field of consulting and healthcare can be established. There are also many contacts under the cooperation agreement with Iraq's autonomous Kurdistan region. Hamburg offers to train doctors over periods ranging from six weeks to six months. In addition, the Institute for Hygiene and Environment provides advice locally on water quality and food control.

**For more information:** [www.life-science-nord.net](http://www.life-science-nord.net)



## Accommodation for all-around comfort: Arab patients feel like hotel guests. The UKE offers particular services such as a prayer room

### University Medical Center Hamburg-Eppendorf

> The University Medical Center Hamburg-Eppendorf (UKE) has consistently organised and strategically expanded its relations with other countries more than any other hospital in North Germany. The UKE's International Office concentrates on the needs of foreign patients and guest doctors. Each year, some 1,000 foreign fee-paying patients are treated in the UKE – about 30 per cent are from Arab countries. Demand is mainly for complex medical services such as stem cell and organ transplants, the treatment of heart diseases and various types of cancer. The clinic offers guests from Arab countries accommodation in the international ward.

The rush of patients from all over the globe is likely to recede as countries build up their own healthcare systems. In all probability, only highly specialised services offered in just a few centres worldwide will be in demand in the future.

For this reason, the UKE is focusing on marketing know-how and advisory services as a form of brand-name medicine. To do so, the clinic joined forces with Hellmann Worldwide Logistics GmbH & Co. KG to establish the subsidiary UKE Consult and Management GmbH (UCM) in 2006. The company offers consulting services and helps develop and manage health projects all over the world. It is headed by Dr Mathias Goyen. The UKE is the only university clinic in Germany that has founded its own subsidiary to deal with foreign business.

UCM offers a broad range of services from the development of operation plans to hospital reorganisation. It also offers expertise on logistics and inventory optimisation and provides consulting services in all areas of quality management and quality assurance. UCM also assists clients in certification and recertification, documentation and setting up complaints and risk management systems. Besides South East Europe, India and China, the main target regions are the Middle East and countries of the former Soviet Union.

For more information: [www.uke.de](http://www.uke.de)

### University Medical Center Schleswig-Holstein

The University Medical Center Schleswig-Holstein (UK-SH) also maintains contacts to Arab countries. Doctors at the two clinic locations in Kiel and Lübeck treat patients mainly from Saudi Arabia, Kuwait and Egypt, and in isolated cases from the United Arab Emirates, Yemen and Syria.

With the establishment of the »International Department« of the University Hospital the UK-SH offers patients from abroad a special service to make the hospital stay as pleasant and smooth as possible. Jörg Meyer, Head of the International Department, says: »The UK-SH maintains diverse international cooperation and each year welcomes hundreds of patients from around the world, including from the Arab countries. Our multilingual, also Arabic-speaking team will help in all organisational matters arising in connection with a treatment.«

Most are fee-paying patients, while a few come through the embassies. The UK-SH maintains contacts to the embassies or health and military departments of the countries. The most frequent diagnoses for patients are liver diseases and cancer requiring liver transplants as well as complex orthopaedic diseases. In total, the clinic treats some 100 patients a year from Arab countries.

Besides the UK-SH's official links, there are also personal and intensive contacts that professors from the Clinic for General Surgery and Thoracic Surgery and the Clinic for General Paediatrics have for example in connection with live donor liver transplants. In some cases, they are regularly available in Saudi Arabia for consultations. The UK-SH is one of the leading centres for live donor liver transplants and aims to expand these programmes especially for foreign patients as well.

In the field of cardiology, the clinic has been organising training events for doctors from the Middle East and Arab countries from Morocco to Pakistan. Other medical directors have personal contacts to clinics and ministries in Arab countries.

For more information: [www.uk-sh.de](http://www.uk-sh.de)





## Arab TV programmes and accessories against homesickness

### ENDO Clinic

The ENDO Clinic can look back on a long tradition of treating international patients. Since it was established in 1976, it has regularly treated patients from Arab countries in particular. As one of the world's leading hospitals for bone, joint and spinal surgery, the specialised clinic in Hamburg attracts patients from all over the world. Particular emphasis is placed on the personal and cultural needs of patients. In addition, an Arab doctor is available to provide support on site and deal with all questions of preparation. This is a special service that also helps dispel fears. For the 40-year-old A. Saber, Dr Alaa Aljawabra provided important support as contact person. For several years, the doctors in Qatar had been advising A. Saber to choose hip prostheses. For a long time, the former sporting Egyptian tried to avoid the operation. But the doctors proved right. A year ago, an operation became unavoidable. The ENDO Clinic treats more than 6,000 patients a year. It performs the highest number of operations worldwide, has the greatest experience with unusual cases and treats the highest proportion of young patients – a decisive criterion for Saber. »I wanted a perfect solution tailored to my needs. I therefore had to find a clinic that has as many years of experience as possible and that is specialised.« In the ENDO Clinic, he was referred to Dr Aljawabra, who helped him deal with all the formalities. »He made further enquiries whenever it was necessary and together with his doctor in Egypt clarified who should pay for the operation and rehabilitation measures.« In addition, he took lots of time to explain my special therapy to me.« The medical director Dr Thorsten Gehrke and Dr Alaa Aljawabra attended closely to the needs of Saber during his treatment; all the necessary steps were jointly discussed. »To begin with, I will go to Damp for rehabilitation and then I will return to Qatar. As soon as I am used to my new hip, I will come back to Hamburg and receive a replacement for the other hip.« Many patients that were provided with a replacement prosthesis 30 years ago return regularly to the ENDO Clinic to be treated by »their« specialist.

**For more information:** [www.damp.de](http://www.damp.de)





## Policy statement from the state of Mecklenburg-Vorpommern

**A word of welcome from the Minister of Economics, Labour and Tourism of Mecklenburg-Vorpommern, Jürgen Seidel**

Mecklenburg-Vorpommern presents itself at the North German joint exhibition stand as a centre of excellence for medical technology and the treatment of the very common disease diabetes mellitus. Companies such as Hoffrichter GmbH from Schwerin have been regular guests at Arab Health, one of the sector's most important exhibitions worldwide, for many years – and their participation has been highly successful. This year, they will be showcasing medical equipment made in Mecklenburg-Vorpommern for the treatment of patients to attract the interest of the international visitors. Special products for racehorses and racing camels will also be presented at the sector's top-rated marketplace.

Mecklenburg-Vorpommern has internationally recognised expertise in diabetes mellitus, a disease that is becoming increasingly common. For the first time, doctors from Mecklenburg-Vorpommern will travel to the United Arab Emirates for discussions. They will present their skills in treating diabetic patients to government representatives and fellow professionals. To further broaden their know-how of the region, the experts of Mecklenburg-Vorpommern are very eager to take part in specialist discussions and joint projects that benefit both sides.

The government of Mecklenburg-Vorpommern welcomes and supports Arab-German cooperation between researchers and experts from industry, hospitals and enterprises. Herzlich Willkommen!

## Experts in the matter of blood sugar

The state of Mecklenburg-Vorpommern is one of the leading regions in medical treatment of diabetes in Germany



### ■ METABOLIC DISEASES – DIABETES

**Greifswald** > Diabetes is a chronic disease that occurs when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. Hyperglycaemia, or raised blood sugar, is a common effect of uncontrolled diabetes, and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels. Untreated diabetes leads to diabetic retinopathy which is a significant cause of blindness. Diabetic neuropathy is damage to the nerves as a result of diabetes and affects up to 50 per cent of people with diabetes. Combined with reduced blood flow, neuropathy in the feet increases the chance of foot ulcers and eventual limb amputation. 10–20 per cent of people with diabetes die of kidney failure.

As one of the former WHO centres of diabetes medical experts in Mecklenburg-Vorpommern, from basic and applied research, clinical research and therapy, education and training offer most modern services for the patients. On top of that patients suffering diabetes can make their holidays and relax in one of the most charming and beautiful holiday regions of Germany without loss of quality in disease therapy.

Our goal:

- Improvement of quality of life of patients with diabetes mellitus, — Prevention of diabetic complications concerning eyes, kidneys, nerves and the cardiovascular system, — Treatment of these complications

### WE OFFER THE FOLLOWING SERVICES

#### BASIC AND APPLIED RESEARCH

- Basic and applied research in all fields of diabetes
- Clinical research in national and international multicentre studies (e.g. HOPE, HOPE-TOO, DREAM, ONTARGET)

#### DIAGNOSTIC

- Development of new diagnostic systems
- Diagnosis of all forms of diabetes and patients at risk of developing diabetes
- Diagnosis and treatment of diabetic retinopathy, nephropathy, neuropathy and diabetic cardiovascular diseases

#### THERAPY

- Outpatient and in-patient treatment of patients suffering acutely and chronically decompensated diabetes mellitus type 1 and type 2 (IDDM, NIDDM)
- Intensive insulin therapy with multiple daily injections and insulin pump therapy
- Invasive and surgical procedures, organ transplantation (pancreas, kidney, liver, islet cells)

#### TRAINING AND EDUCATION

- Structured diabetes education programmes in certified centres



**Quality of life and high-class medicine:  
Mecklenburg-Vorpommern offers both**



**Klinikum Karlsburg:  
specialist for diabetic patients**

- Interactive learning and counselling systems for patients and medical staff, e.g. KADIS® and TeleDIAB®
- Adequate treatment with diet, oral antidiabetic drugs and insulin

#### CONVALESCENCE

- Full medical service for patients to relax in the ambient atmosphere of one of the most beautiful countrysides in Germany

#### CONTACT

BioConValley® is the interdisciplinary network in the field of modern life sciences and healthcare in Mecklenburg-Vorpommern. Universities, hospitals and enterprises belong to its partners as well as representatives of financial institutions and the government. BioConValley®'s activities focus on the management and support of its network, the life science technology centres and serves as the general information and cooperation platform for its young industry. It catalyses potential products and services to transfer from research to their commercial realisation. BioCon Valley® cooperates with NORGENTA, the colleagues in Northern Germany, and is also strongly engaged in ScanBalt, the international life science platform around the Baltic Sea in Northern Europe.

**Dr Heinrich Cuypers**, BioCon Valley® GmbH – Life Science and Health Economy in Mecklenburg-Vorpommern, Visit BioCon Valley at Arab Health in Zabeel Hall.

**For more information: [www.bcv.org](http://www.bcv.org) and at Arab Health in Zabeel Hall (stand Z 19)**

## Diabetes – an affair of the heart

Type 2 diabetes mellitus is a systemic vascular disease – some 65 per cent of all type 2 diabetic patients die of or at least suffer from heart diseases. This is where Klinikum Karlsburg comes into play

**Karlsburg >** The metabolic disease diabetes mellitus is always a vascular disease from the very start. Diabetic patients normally suffer from rapidly advancing arteriosclerosis in their coronary vessels, combined with an increased tendency to blood clotting. Factors such as overweight, high blood pressure and increased blood fat levels frequently add to the strains on heart and blood vessels. As a result of these facts, a type 2 diabetic patient has the same high cardiovascular risk as a non-diabetic patient after the first heart attack.

»Despite this knowledge, diabetes and heart diseases are seldom considered in connection with each other, since diabetic patients are normally treated by diabetologists and patients suffering from heart diseases by cardiologists. Interdisciplinary treatment occurs very rarely,« says Prof. Wolfgang Kerner, Director of the Clinic for Diabetes and Metabolic Diseases in Karlsburg, Vorpommern. There, diabetic patients suffering from heart disease are treated simultaneously by cardiologists and diabetologists during their stay in the clinic. This innovative treatment concept is also promoted and supported by the foundation »Der herzkrankte Diabetiker« (The Cardiac and Diabetic Patient).

The clinic also focuses on treating diabetic children and juveniles. Prof. Kerner says: »We are recognised by the German Diabetes Society as a treatment and training centre. An optimal metabolic adjustment is crucial for the later life of a diabetic child or juvenile. However, this can only be achieved if special pedagogical, psychological and pathophysiological know-how is applied.« Regardless of the specific disease, children and young people in the clinic are therefore motivated above all to inject themselves with insulin and to live with diabetes. For this reason, parents are also integrated very closely into the therapy. The primary objective in the treatment of diabetic patients at Klinikum Karlsburg is to improve the patients' quality of life on a sustained basis.

Finally, the treatment of diabetic foot is a particular area on which Klinikum Karlsburg specialises. The genesis of diabetic foot is very complex. The main causes are diabetic neuropathy and arteriosclerosis of the leg vessels. The interdisciplinary treatment of this disease aims to avoid amputation and to restore patients' mobility.

**For more information:**  
[www.drguth.de/klinikum-karlsburg](http://www.drguth.de/klinikum-karlsburg)

## MEDICINES AND SUPPLEMENTS

### Power from Mecklenburg-Vorpommern for horses and camels

Since it was established in 2004, TROPMED in Parchim has been engaged in research and development in the fields of human and animal drugs as well as vitamin and mineral supplements. TROPMED also has a strong international presence

**Parchim** > The company's range of products and services extends beyond manufacturing and filling drugs and supplements. In collaboration with research institutes and universities in Africa and Asia, TROPMED tests medicines on behalf of its customers and coordinates registration procedures in the countries into which the products are exported or the patented products are to be sold under licence. Since TROPMED GmbH was established, more than 30 special products for racehorses and racing camels have been developed. These are marketed in the Middle East as well as in the Emirates and North Africa. Research is another important area for TROPMED. »We have devised formulae for veterinary products for sleeping sickness and malaria and these are being further developed in cooperation with research institutes in Europe, Asia and Africa,« said head of sales Alain Bourdichon. Together with the

research team at the Free University of Berlin, the company is also working on a new method to manufacture nanoparticles ([www.aaps-pharmaceutica.com](http://www.aaps-pharmaceutica.com)). TROPMED has developed a new drug combination TRYPLASM. At present, a number of clinical tests on various strains of tropical diseases such as malaria and leishmaniasis are currently being conducted in Europe and in Africa. The nanoparticle-based injection solution offers an efficiency and stability that has never been achieved in the past. According to Bourdichon, the injection solution facilitates treatment and guarantees optimum tolerance and constant long-time effect. In the long term, TROPMED plans to develop new nanoparticle-based vitamin and antibiotic products.

**Visit us at Arab Health in Zabeel Hall (stand ZJ05)**

**For more Information:** [www.tropmed.ag](http://www.tropmed.ag)

## RESPIRATION THERAPY

### Quality makes the difference

Hoffrichter GmbH, established in 1992, is an innovative medical company based in Schwerin that designs and manufactures medical devices for the treatment of sleep apnoea syndrome and disordered breathing

**Schwerin** > For the second decade now, the range of products offered by Hoffrichter GmbH comprises solutions with devices for respiration therapy and ventilation treatment, used in home care, long-term and intensive care.

Innovative medical systems like point, Hoffrichter's smallest CPAP device with a modern design (winner of the Lilienthal Design Award 2006) concept with unique features like integratable

batteries, set new standards. The Hoffrichter variety of respiration therapy devices has been enlarged by the **TREND II** product line – the glamour in sleep therapy. Trend II, the highly qualified CPAP product line, offers therapy modes for treatment of sleep apnoea syndrome with **Monolevel**, **APAP**, **Bilevel** and **Bilevel ST**. Aside from the conventional treatment modes, Hoffrichter's unique comfort CPAP therapy mode **Flexline** complements the Trend II product line.

**The Carat** ventilation system for invasive and non-invasive ventilation of children and adults, all major ventilation modes integrated, pressure- and volume-driven ventilator, easy to use for applications in hospital, home and long-care ventilation treatment. **TRENDvent**, our latest developed ventilator, launched in November 2009, suitable for invasive and non-invasive ventilation, offers highest quality and performance for pressure-controlled and pressure-support ventilation.

Global sales partners in various countries ensure local support, technical service and product training. Hoffrichter focuses on developing new



**TRENDvent – a pressure-controlled, pressure-supported ventilator with single line patient circuit**

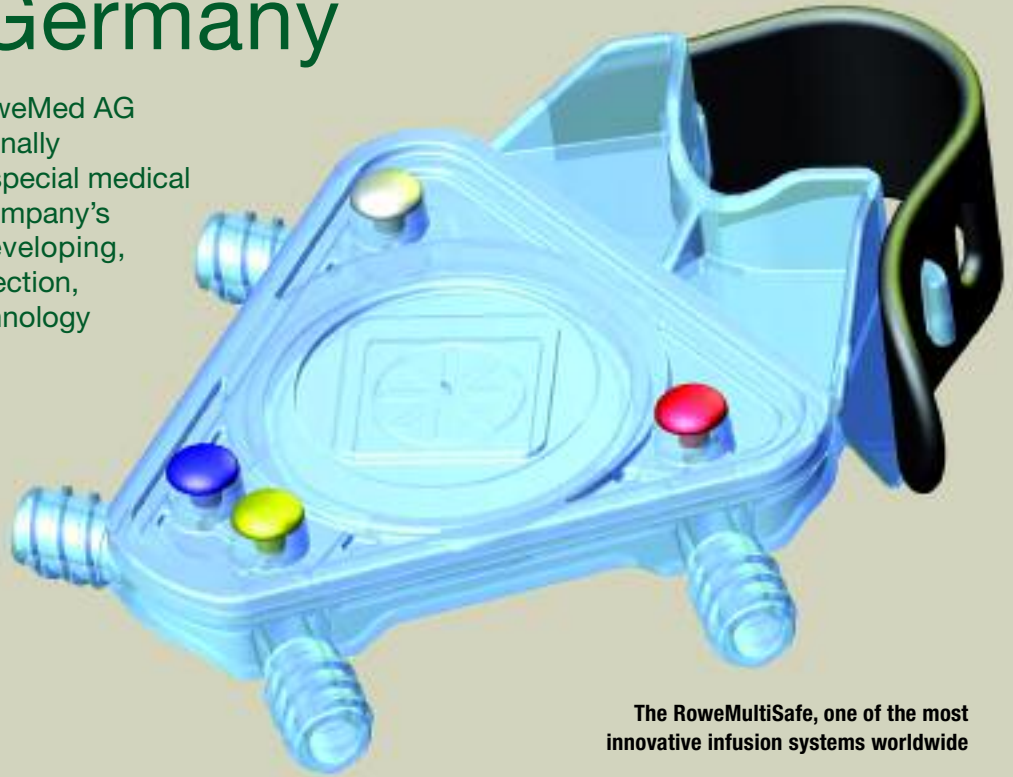
and innovative devices and on building up cooperations with new markets.

If you are interested in our products and in cooperation with Hoffrichter GmbH, we cordially invite you to come and see our latest developments and established products. **Visit us at Arab Health in Zabeel Hall (stand ZG39)**  
**For more Information:** [www.hoffrichter.de](http://www.hoffrichter.de)



# Medical 4 Life – made in Germany

The innovative company RoweMed AG from Parchim is an internationally successful manufacturer of special medical technology products. The company's core competences are in developing, producing and marketing injection, infusion and transfusion technology



**The RoweMultiSafe, one of the most innovative infusion systems worldwide**

## MEDICAL TECHNOLOGY FROM MECKLENBURG-VORPOMMERN

**Parchim** > Healthcare developments are increasing the demand for efficient, low-cost therapy systems. RoweMed is engaged in development work and product care in collaboration with users, industry, universities and research institutes. One result of this intensive work is RoweMultiSafe, the first infusion system worldwide for the collection, filtration and secure administration of infusion solutions with integrated pressure-controlled check valves for pump operations.

The award-winning system offers a replacement for normal, elaborate and cost-intensive manifold systems with downstream infusion filters and valves. Potential sources of error in standardised systems have been completely eliminated and safety for users significantly increased. At the same time, the device saves up to 60 per cent of the costs of conventional products and methods. The device is affixed to the stand rod with a fastener, which does away with

the need for any manifold holding device. After the electrical pump is connected, the integrated valves open as soon as there is pressure in the system. This therefore eliminates the danger that a patient will receive too much or too little medicine because it is forgotten to open or close the stopcocks. The clear colour coding also prevents incorrect use. Depending on the configuration, the integrated filter units that meet the respective requirements remove air, particles, fungi, bacteria and endotoxins. The completely welded housing prevents germs from intruding through micro cracks.

However, it is not just in RoweMultiSafe that filters are important. In other fields of medicine, the use of filtration technology is almost indispensable when it comes to preventing the transfer of particles, gas bubbles or micro-organisms to patients. There is also a cost saving, as the amount of work, personnel costs and the quantity of the medical products can be reduced.

RoweMed offers an extensive portfolio of medical filters.

In view of its international operations, RoweMed will again be present at Arab Health this year. Success in the Gulf region depends crucially on personal contacts to decision makers. RoweMed, which has been CE-certified since 2000, has plenty to offer the international market.

RoweMed products are manufactured exclusively in Parchim in class-10,000 clean rooms in a 650 m<sup>2</sup> production facility. The company also develops and manufactures technically sophisticated medical devices for other companies. RoweMed's production facility uses the most common techniques for joining plastic, including a range of adhesive techniques as well as ultrasonic, circular, thermal and, since 2008, laser welding.

**Visit us at Arab Health in Zabeel Hall (stand ZP 10).**

**For more Information: [www.rowemed.de](http://www.rowemed.de)**

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**Eppendorf products are an integral part of laboratories all over the world. The company has been active in the Middle East since 2006, with a head office in Dubai**

## MEDICAL EXPORTS TO THE GULF REGION

# North German life sciences conquer the Arab market

Companies from Hamburg and Schleswig-Holstein are seizing business opportunities in the Arab health sector – despite the global economic crisis there is still potential that can be tapped

**Hamburg** > The Gulf economy is still booming. According to a McKinsey study, the overall market is expected to grow to nearly 30 billion US dollars in 2015 and 60 billion US dollars in 2025. Despite the current global economic crisis, healthcare is one of the region's fastest growing sectors. The Life Science Nord region is already contributing significantly towards improving healthcare in Arab countries. In the Gulf states, there is a shortage of experienced managers in particular. No other region in Germany has such a concentration of researchers, developers, producers, health industry service providers and clinics as Hamburg. All of them offer top-class products and services and are extremely well networked – which helps them tap into demand in the Middle East.

Success in the Arab health market depends crucially on personal contacts, strategic partnerships and a local presence. Supported by the Hamburg Chamber of Commerce, the Senate Chancellery and the Hamburg Business Development Corporation (HWF), the Hamburg

Representative Office in Dubai has been established as a local point of contact for companies from Hamburg and Dubai. Many Hamburg businesses already have close links with the United Arab Emirates (UAE). In 2006 Eppendorf AG chose to locate its Middle East head office in Dubai, where it now has a branch and several employees.

### North German companies have successful presences in the Arab region

Eppendorf develops, produces and distributes systems for use in life science research laboratories. The product portfolio covers pipettes, dispensers and centrifuges as well as consumables such as micro test tubes and pipette tips. Eppendorf also offers instruments and systems for cell manipulation, automated liquid handling equipment, complete DNA amplification systems and biochips. Further North German firms such as the medical technology company Weinmann and Söring, a specialist in ultrasound technology, have had a presence in the Arab re-

gion for years through exclusive dealers and representatives.

The Norderstedt-based service provider in the c.a.r.u.s. group also cultivates very close business ties to the UAE. The range of services offered by the c.a.r.u.s. group includes devising and selling solutions for the health and life science industries. In Abu Dhabi, the company is engaged in various projects. For example, the group provides support in the planning of hospital IT infrastructures, evaluates construction documents for new hospitals and alteration work and draws up detailed analyses and specifications to prepare and assist in requests for proposals.

Against a background of undiminished strong investment activity, the UAE and neighbouring states remain extremely attractive markets for German medical technology firms. There are opportunities not only for product suppliers, but also for those offering know-how transfer through services and training. In recent years, the market has become considerably more attractive and conditions remain good.

## ■ INNOVATIONS FOR THE OPERATING THEATRES OF TOMORROW

# Medical technology – on target for the future

Medical technology has always been a particular strength of the North German economy. Hamburg and Schleswig-Holstein are not only home to very many medical engineering firms, including large ones; the Life Science Nord region is also exceptionally innovative. Some 16,000 employees in 250 companies generate nearly 4 billion euros every year



State-of-the-art  
equipment from North Germany  
for doctors worldwide

**North Germany** > It is not just the »big players« in medical technology such as Philips, Olympus, Dräger and Eppendorf that make the Life Science Nord region so successful. Smaller and medium-sized firms such as Bode-Chemie, c.a.r.u.s., Söring and Weinmann regularly surprise the international world of medicine with trail-blazing innovations. Germany's most northerly region has a very clear edge above all in medical imaging and operating room technology. From ultrasonic equipment to endoscopes and ventilation equipment – new and innovative products that make life easier for doctors are making an impression worldwide.

### Innovative operating room technologies

Operating room instruments and equipment – in diagnostics and therapy – have a long tradition in the Life Science Nord region. The first x-ray tubes were manufactured in Hamburg as long ago as 1896 in the Röntgenmüller factory. Today, Philips Healthcare develops and produces state-of-the-art imaging equipment in the same buildings; besides ergonomic x-ray systems, it also focuses on innovative ultrasonic equipment. Although it is a younger company, Söring GmbH is no less successful in ultrasonic technology. Established in 1985 and based in Quickborn (Schleswig-Holstein), the company is also the sole patent holder worldwide for contact-free cold plasma coagulation. The University Medical Center Schleswig-Holstein (UK-SH) and the University Medical Center Hamburg-Eppendorf (UKE) as well as specialist research institutes such as the Medical Laser Center Lübeck also contribute to innovative imaging techniques in North German medical technology.

### Minimally invasive surgery

One particular area in which industry and science in North Germany actively carry out joint research and development work is minimally invasive surgery. At least 60 experienced specialists in Schleswig-Holstein and Hamburg are organised in a cluster to apply their particular expertise in surgery, imaging and supporting systems for developing new concepts and products for the global healthcare market in an interdisciplinary and synergetic manner. Together, they are working on new solutions aimed at further reducing operating risks and enhancing the quality of surgery while at the same time shortening the period of treatment. Today, minimally invasive surgery without high-quality endoscopic systems



**Fearless examination in a high field magnetic resonance tomograph**



such as those of world market leader Olympus Europe is inconceivable. The flexible and rigid Olympus endoscopes play a significant role in minimally invasive therapies and cancer screening. The Hamburg-based company only recently unveiled its new operating system LESS (Laparo Endoscopic Single-Site Surgery), which, thanks to so-called tri- or quad-ports and one tiny incision in the belly button means that a virtually scar-free operating result is possible.

### Operating theatre of the future

How will we operate in the future? Life Science Nord companies already have an answer. Eye or brain surgery without advanced operating microscopes is inconceivable nowadays. Möller-Wedel, situated just outside Hamburg, is a specialist in this field and has gained a worldwide reputation. International customers are increasingly expecting equipment that offers electronic imaging with maximum performance and minimum time requirements. Today, the company founded by Johann Diedrich Möller in 1864 meets this need and takes account of ergonomic considerations, which are assuming ever greater significance for operations that last for hours. Advanced ventilation systems from Weinmann Medical Technology ensure that operations are secure. Today, more than 500 staff

contribute to the success of this Hamburg-based company, which was founded more than 130 years ago. Olympus Europe offers Endoalpha, a centralised operating room control system that provides technical assistance and communications for high-tech operations.

### Economic engine in Schleswig-Holstein

Medical technology is one of the strongest economic sectors especially in Schleswig-Holstein. Approximately 150, predominantly small, companies are engaged in the development and production of technical medical products. Geographically, they are concentrated mainly in the Kiel-Lübeck-Borstel triangle and around Hamburg. In the region of Lübeck alone, 50 firms generate annual revenues of some 500 million euros. The largest company in Schleswig-Holstein is Dräger, whose name has stood for medical and safety engineering for over 100 years. From Lübeck the family company controls some 11,000 employees in over 190 countries worldwide. The products for acute hospital care and home care, including anaesthetic and ventilation systems, are sold worldwide. Patient monitoring and IT solutions are a further business field of Dräger Medical. c.a.r.u.s. AG, based in Norderstedt (Schleswig-Holstein), also offers

high-performance system and software solutions for the healthcare sector. The company has more than 20 years of experience in software engineering and IT project management and is currently focusing on hospital management solutions. Further companies from Schleswig-Holstein known throughout the world are Ethicon and Stryker Trauma, whose innovative products make them leaders in operating room technologies.

### In everyone's hands

Laboratory and hospital staff all over the world hold them in their hands several times every day: pipettes from Eppendorf and disinfectants from Bode-Chemie. The brand recognition of both these traditional Hamburg companies internationally is second to none. Since they were patented in 1961, Eppendorf has manufactured some 5.5 million pipettes and sold them throughout the world. It was not just the increased occurrence of the H1N1 virus which led to the recognition of the Hamburg hygiene specialist Bode & Co. Originally founded as Bacillolfabrik Dr. Bode & Co. in 1924, Bode is now one of the leading hygiene specialists. Sterillium®, the first marketable rub-in alcoholic hand disinfectant developed 40 years ago, is the number one in Europe today.

**For more information: [www.life-science-nord.net](http://www.life-science-nord.net)**



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- Ideal ergonomics: Eppendorf PhysioCare Concept®



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## TRADITION AND INNOVATION

# The universal operating microscope from Möller-Wedel

While most operating microscopes are dedicated to certain micro-surgical fields, the MÖLLER Hi-R 700 is a true multi-purpose tool

**Wedel** > The MÖLLER Hi-R 700 is designed to allow smooth movements and effortless positioning in all directions. For spine, hand and plastic-reconstructive surgery the microscope works in an essentially vertical direction with two surgeons facing each other. For cranial, ENT and CMF surgery the microscope can be inclined and tilted in a wide range and still retains full balance even with a sideways mounted assistant microscope and in an uplooking working direction for fossa posterior surgery. For all surgical procedures the wide range of working distance (224 mm to 510 mm) is as much appreciated as the electromagnetic brakes and the strong 300 W xenon light provided by the floor stand FS 3-33.

The MÖLLER Hi-R 700 can be extended by MÖLLER MIOS, the Microscope Imaging and Operation System. The prime functions of this system are recording of operation scenes, capturing and recording of snapshots together with proper identification of patients and hospital data. Images and/or streams can be stored on DVD-R/-RW, HDD, USB sticks and external USB hard disks, or transmitted to the hospital PACS via DICOM.

MÖLLER MEDIS, the Microscope External Display) turns the operating microscope into a microsurgical image control centre. The high-resolution screen, mounted above the oculars, provides images or data for the surgeon which he may see by momentarily looking up from the oculars. A touch screen allows the control of numerous functions sterily through the drape.

**For more information:** [www.moeller-wedel.com](http://www.moeller-wedel.com)

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### HAMBURG HOTELS STEEPED IN TRADITION

## Hotels on the Alster

Hamburg's grand hotels offer Arab guests outstanding service in a historical ambience

**Hamburg** > Hamburg's excellent reputation in the field of healthcare attracts many Arab guests to the city. Patients and their relatives can find comfortable accommodation in the Atlantic Kempinski and the Fairmont Hotel Vier Jahreszeiten. The Hotel Atlantic Kempinski Hamburg is located directly on Hamburg's Outer Alster, a few minutes' walk from the main station, city centre and numerous theatres and museums. The 252 rooms and suites offer every amenity and comfort needed for a successful Hamburg stay.

The Atlantic pays particular attention to the needs of Arab guests. Upon request, personal assistants are assigned to guests to help them around the clock, accompany them on sightseeing and shopping trips around Hamburg and offer valuable insider tips. Thanks to its good contacts to the luxury designer boutiques in the centre of Hamburg, the hotel can arrange individual and very private appointments. Upon request, designers will also come directly to the Hotel Atlantic and present selected pieces and collections. Many rooms and suites in the Hotel Atlantic have connecting doors – a feature that guests from Arab countries in particular inquire about if they travel with a large number of family members. The Atlantic's chefs take account of

preferences and eating times that are unusual for Europeans; room service also serves guests their favourite meals in the late evening. To offer Arab guests a top-class healthcare service, the Hotel has entered into an exclusive partnership with the »Medizinisches Versorgungszentrum«, a new medical centre in the Europa Passage shopping arcade. It can arrange flexible appointments for its guests there without waiting times – for example for general or special manager check-ups or the treatment of acute problems.

There is a free transfer service to the nearby health centre to make treatment especially convenient for hotel guests.

During its long history, the »White Castle on the Alster«, which has just celebrated its 100th anniversary, has had many prominent guests: from the Shah of Persia, Charles de Gaulle and Helmut Schmidt to the Rolling Stones, Michael Jackson and Madonna. And scenes in the James Bond movie »Tomorrow Never Dies« were also shot there.

Visitors to the Fairmont Hotel Vier Jahreszeiten enjoy accommodation that combines historical charm with a high degree of comfort. Situated directly on the Inner Alster, the hotel has 156 rooms and suites that are named after

famous guests: Maria Callas, Sir Peter Ustinov, Prince Heinrich and Thomas Mann.

The rooms feature Flemish gobelins from the 16th and 17th centuries and selected antiquities from the so-called »Gründerzeit« period in the 19th century.

On the fifth floor, the Bel Etage offers a glorious panoramic view over Hamburg's Inner Alster. Those who want to relax after some sightseeing can do so far away from the hustle and bustle of the city in the wellness area that features a spa and fitness club. Gourmets are also spoiled for choice in the traditional Vier Jahreszeiten; guests can dine in some of Germany's best restaurants, including the Haerlin restaurant, which has been awarded a Michelin star, the Jahreszeiten Grill with its original art déco ambience as well as the fashionable restaurant Doc Cheng's. The traditional Jahreszeiten Bar, the Bar Indochine, the Café Condi and the Jahreszeiten Terrace round off the culinary experience. The Fairmont Hotel Vier Jahreszeiten has been a member of »The Leading Hotels of the World« for 80 years. This association is open only to the best five-star hotels worldwide.

**For more information:**  
[www.kempinski.atlantic.de](http://www.kempinski.atlantic.de), [www.hvj.de](http://www.hvj.de)





## Small, but effective, bubbles

A bubble column reactor mixes viscous substances for gentle cosmetics products

**Hamburg/Duisburg** > Three researchers are seeking new biocatalysts that can be used to produce mild and pure cosmetics products. Solvent-free biocatalysts offer enormous advantages in the production of additives in personal care products: the aim is to prevent chemicals getting into the product in the first place, cutting out the time and effort required to remove them from the final product.

The prototype of this new method is embodied in a four-meter-long vertical tube, in which a liquid foams and bubbles. Biotechnology Professor Andreas Liese from the Technical University of Hamburg-Harburg together with his employees wants to establish this bubble column reactor as a new concept in biocatalysis. The scientist is researching into the biocatalytic production of long chain esters: an enzyme combines alcohols and fatty acids to lipids that are used in cosmetics.

Dr Oliver Thum is also interested in these reactions. Thum is head of biotechnological research at the Essen-based Evonik Goldschmidt GmbH, which produces cosmetics components from biocatalysts made of natural materials such as fatty acids or sugar. Continuous innovation is essential for the manufacturer, as the demands of customers and consumers are steadily rising. The products should be safe, but also natural, sustainable and cheap. Not even a company such as Evonik has in-house know-how in every field, explains Oliver Thum. For this reason, cooperation arrangements with researchers and universities are crucial for the innovation process. »The key is »open innovation«. We select suitable experts for the problems we are working on.«

In this case, these are Liese and the third member of the team, Professor Wolfgang Streit, a microbiologist from the University of Hamburg who is also searching for new biocatalysts in the world of unicellulars. Within the framework of the BOKATALYSE2021 cluster, the three successfully applied for funding. Since 1 July 2008, the German Ministry for Education and Research has supported their project.

**For more information:**

[www.ibnord.de](http://www.ibnord.de), [www.biokatalyse2021.de](http://www.biokatalyse2021.de)

## IMPORTANT EVENTS IN NORTH GERMANY UP TO APRIL 2010

### FEBRUARY

2 February 2010, all day

#### **WTSH Innovation Information Day**

This event focuses on customers and their role in the innovation process. Besides a scientific contribution, there will above all be practical tips and ideas from businesses for businesses.

**Venue:** WTSH, Kiel <sup>(4)</sup>

8 February 2010, 2–5 p.m.

#### **Protecting intellectual property in life sciences: the basics and special features**

The event is part of the »Innovation Life Sciences« series. The initiative aims to strengthen the region's competitiveness and to ensure that companies' know-how is up to date on the basis of training measures. In Hamburg and Schleswig-Holstein there are also numerous life science networks. Information is provided on these networks to enable companies to make better use of them for their business success.

**Venue:** Hamburg Chamber of Commerce <sup>(1)</sup>

18 February 2010, 3–6 p.m.

#### **US patent law in practice**

For many companies, patenting innovations in the US is important. At the same time, knowledge on the differences between US patent law and German and European law is a hurdle for many potential applicants. Quite often, this deters them. In this event, the WTSH's service centre on intellectual property rights aims to provide participants with information: - on the points to be considered in applying to register a patent in the US so that the application can be processed quickly and successfully;

- on the aspects to which applicants must pay attention to avoid falling into any formal, technical or financial »traps«.

**Venue:** Flensburg Chamber of Commerce and Industry (IHK) <sup>(4)</sup>

### MARCH

1 and 2 March 2010, 8 a.m.–6 p.m.

#### **Foreign Trade Advisory Days – India and Malaysia**

Schleswig-Holstein companies that are interested in the Indian and Malaysian markets can obtain first-class advice and detailed information on opportunities in these two countries. Registration is essential.

**Venue:** WTSH, Kiel <sup>(4)</sup>

4 March 2010, all day

#### **3rd Life Sciences Research Colloquium – »The fight against hospital germs«**

An event of the research and transfer centre »Applications of Life Sciences« of the Hamburg University of Applied Sciences.

**Venue:** Hamburg University of Applied Sciences, Campus Bergedorf <sup>(1,2,3)</sup>

17 March 2010, to be announced

#### **Open meeting of the Patent Working Group**

Developments and experiences in application and subsequent national and international enforcement of patents.

**Venue:** WTSH, Kiel <sup>(4)</sup>

23–26 March 2010, all day

#### **22nd International Trade Fair for Laboratory Technology, Analysis and Biotechnology**

Analytica 2010 offers its customary high-quality presentation of products and innovations from analysis, laboratory technology and biotechnology. It offers solutions for the entire value chain in laboratories with a clear presentation of products and services in five halls.

**Venue:** Neue Messe Munich <sup>(1)</sup>

24 and 25 March 2010, 8 a.m.–6 p.m.

#### **Foreign Trade Advisory Days – Brazil**

Schleswig-Holstein businesses that are interested in the Brazilian market can obtain first-class advice and detailed information on opportunities in Brazil. Registration is essential.

**Venue:** WTSH, Kiel <sup>(4)</sup>

### APRIL

21 and 22 April 2010, all day

#### **German Biotechnology Days**

The German Biotechnology Days are a meeting place for companies and researchers as well as politicians, administrators and representatives of development institutions. All who want to help shape the development of German biotechnology, discuss important issues and make and cultivate contacts are invited.

On the first day, the conference will focus on theragnostics. This will be followed by workshops on overriding topics such as funding, entrepreneurship and technology transfer.

**Venue:** Berlin <sup>(1)</sup>

### PLEASE NOTE THE FOLLOWING

Current dates of BAY TO BIO – Förderkreis Life Science e.V. are available at [www.baytobio.de](http://www.baytobio.de).

#### **In addition, on the last Thursday in every month:**

»I.D.E.E. Advisory Days – Industrial Property Rights« – talk on the foundations of industrial property rights: patents, utility models, trademarks and design patents (2–3 p.m.). Followed by an opportunity to receive free, individual advice from a patent lawyer (from 3 p.m.)

**Venue:** WTSH, Kiel <sup>(4)</sup>

**In the internet you can find further information and all updates on dates and contacts:**

(1) Norgenta GmbH [www.life-science-nord.net](http://www.life-science-nord.net)

(2) TuTech Innovation GmbH [www.tutech.de](http://www.tutech.de)

(3) BAY TO BIO e.V. [www.baytobio.de](http://www.baytobio.de)

(4) Wirtschaftsförderung und Technologietransfer Schleswig-Holstein GmbH [www.wtsh.de](http://www.wtsh.de)



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## MEDICAL OPPORTUNITIES IN OTHER COUNTRIES

# German-Arab relations in healthcare

The healthcare sector in the Arab countries is growing rapidly. Everywhere, health facilities are being built or modernised

**Berlin > The Arabian region is evolving** into a huge market for healthcare products. Both demand for health services and health expenditure are increasing as incomes rise and life expectancy increases. Demand is also being driven by rapid population growth. At the same time, the state and private players in healthcare in many Arab countries have sufficient capital to invest heavily in medical technology, buildings and specialist personnel. Everywhere, the goal is to substantially improve the quality of healthcare. Many Arab countries are in the process of establishing totally new health insurance models and systems.

The Arab states in the Gulf region in particular have set up ambitious healthcare programmes. But it is by no means just the oil-rich countries that are expanding their healthcare systems. In Morocco, Jordan and Egypt, improving healthcare is also very high on the list of political priorities. There is a huge demand for medical products, services and systems in the Arab countries – medical technology, hospital expansion and management, education and training, the pharmaceutical industry and medical tourism. German medicine and medical products are of high quality and enjoy a good reputation. The healthcare sectors in the Arab world therefore offer excellent opportunities for German firms, doctors, hospitals and medical schools.

This relates above all to hospital management, patient aftercare and rehabilitation, health insurance, preventive healthcare, consulting services, doctor exchanges, education, training and the further training of medical specialists. For German institutions and companies there is considerable scope to do business and enhance their image, with lasting benefits for the Arab side. German industry has already been relatively successful in supplying hospital equipment, medical technology and pharmaceutical products; however, international competitive pressures are steadily increasing.

It is not possible to do business with Arab customers from a distance. This means that German manufacturers, suppliers and medical service providers will have to raise their presence in the region – whether by increasing their participation in exhibitions such as Arab Health, organising sector-specific trips for delegates or setting up local branches or representative offices. It is also advisable to acquire intercultural skills, which can play a crucial role in the success of German companies.

Small and medium-sized firms offering top-class medical and technical products and services can increase their market share in Arab countries. Undoubtedly, companies and institutions that rely on long-term cooperation and strategic partnerships will enjoy sustained success.

**Abdulaziz Al-Mikhlaifi** is Secretary-General of Ghorfa, the Arab-German Chamber of Commerce and Industry Ghorfa. He has the same rank as an ambassador and is committed to promoting and expanding Arab-German business ties.



Photo: Ghorfa – Arab-German Chamber of Commerce and Industry

## IMPRINT

The following organisations are responsible for the presence of the North German federal states Schleswig-Holstein and Mecklenburg-Vorpommern, as well as of the Free and Hanseatic City of Hamburg, at Arab Health 2010.

**For further information feel free to contact us:**

**norgenta:**

[www.norgenta.de](http://www.norgenta.de)



[www.hamburg.de](http://www.hamburg.de)



[www.hk24.de](http://www.hk24.de)



[www.bcv.org](http://www.bcv.org)



[www.wtsh.de](http://www.wtsh.de)

## PUBLISHER

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## PRODUCTION

nicole suchier\_science communication hamburg,  
[www.nicolesuchier.de](http://www.nicolesuchier.de)

PROJECT MANAGEMENT: Nicole Suchier, Simone Maader  
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PROOFREADING: Bill Gruenke

ART DIRECTION: Lesprenger Hamburg, Jennifer Kuck

PHOTO EDITOR: Stefanie Herrmann

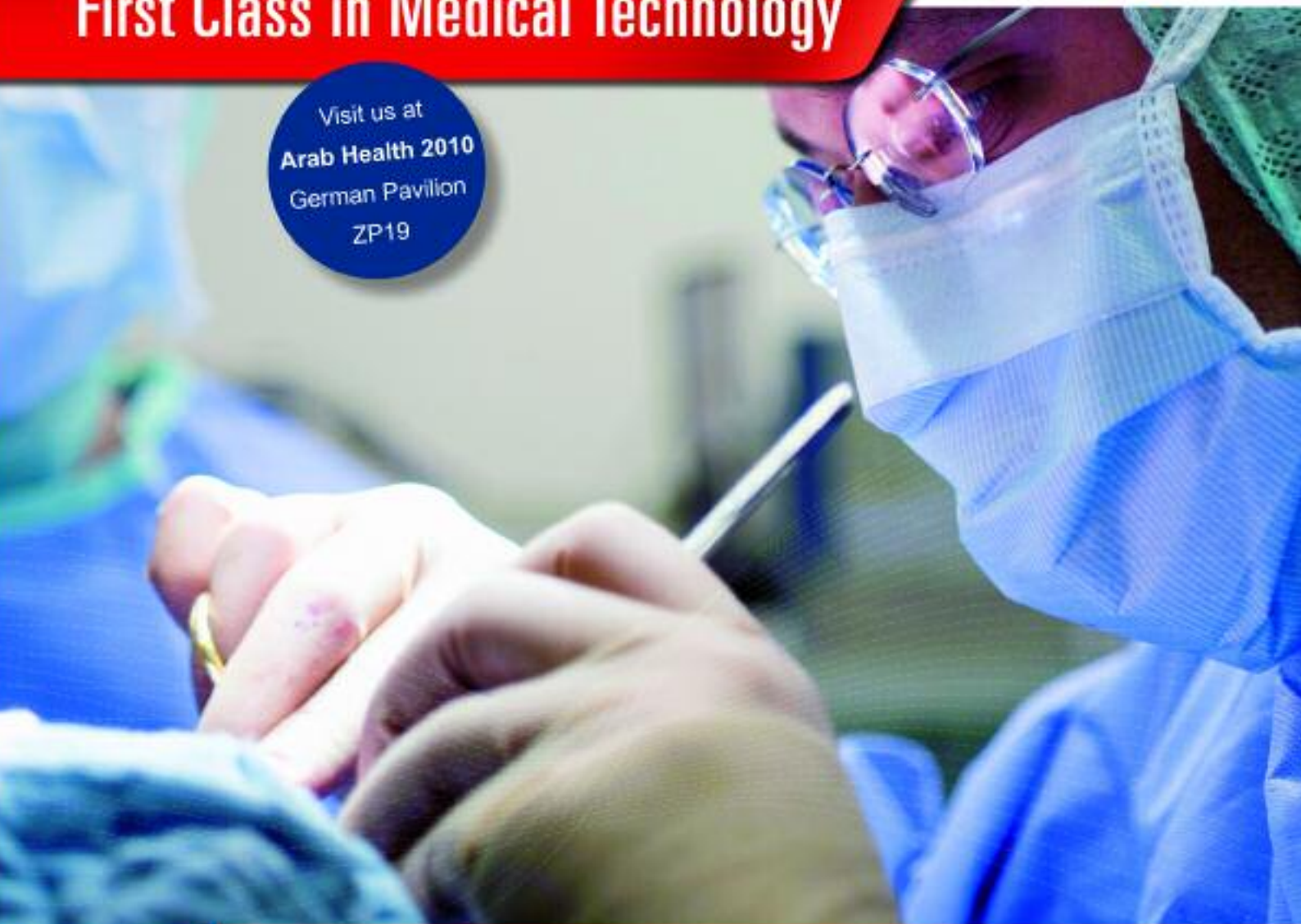
PRINT: Von Stern'sche Druckerei, Lüneburg

Life Science Nord – Magazine for Medtech, Biotech  
and Pharma appears quarterly.



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