

Edited by

Infodent
Infomedix
International
Publishing
& Consulting
House

3-2018October - December

infomedix.it

INFOMEDIX INTERNATIONAL 3/2018- INFODENT Srl - Str. Cassia Nord Km 86,300 01100 Viterbo - Italy







PATENT TARGETED ACTIVE-COMPRESSION SOCKS

146 countries patent app protection!



- · Promote better circulation
- Provide instant leg pain relief
- Reduce leg swelling
- Help support the ankle and arch
- Relieve varicose vein symptoms
- Reduce fatigue
- Improve muscle recovery
- · Class 1 Medical Device

& MUCH MORE!



Invented in Switzerland by Dr. Mazourik

The SANKOM Patent Socks are the FIRST AND ONLY COMPRESSION SOCKS IN THE WORLD to use targeted gradual compression to activate blood flow in the legs and improve blood circulation.









The sock is composed of 4 gradual compression lines, that when pulled one after the other, stimulate the veins to work more efficiently and push the blood back to the heart.



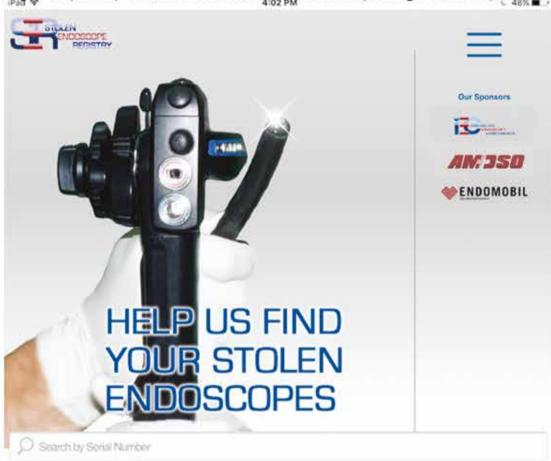






In an effort to protect the international medical equipment trading community as well as hospitals, clinics, physicians, repair facilities, leasing, and insurance companies etc. IEC created the first open database and news platform for stolen endoscopes, ultrasound probes, cameras, light sources etc.

Medical Equipment theft has reached millions in financial damages with an everincreasing number of products missing from facilities all around the world. This FREE APP is brought to you by IEC, LLC and made possible by our generous sponsors.









Automatic Pressure Infusor

BIEGLER GmbH develops and manufactures medical devices and disposables for over 40 years. Biegler serves their customers by offering them not only high quality products and services but comprehensive and personal support as well.

The company based in Austria / Europe introduced the AUTOPRESS device as an important part of its fluid warming philosophy. Autopress works directly with Biegler blood and infusion warmers to deliver blood and fluids at high flow rates or as a stand-alone unit to deliver fluids at constant pressure up to 300 mmHg wherever needed.

Pressure infusing bags are mainly used for irrigation purposes during arthroscopy, laparoscopy and hysteroscopy. The adjusted pressure is constantly maintained and therefore does not require manual compensation.

When connected to an electrical outlet, Biegler Pressure Infusor automatically maintains pressure on blood and IV fluid bags. Pressure range is zero to 300 mmHg.

Features at a glance:

- Pressure is adjustable and always maintained
- Precise pressure setting from zero to 300 mmHg with electronic control
- Accomodates pressure cuffs
 2 x 500, 2 x 1000 or 2 x 3000 cc
- Small and lightweight
- Mains operated
- Pressure cuffs can be emptied rapidly and easily
- Significant reduction of set up time

Biegler GmbH Allhangstrasse 18a 3001 Mauerbach Austria

Tel.: +43 1 979 21 05 email: office@biegler.com

C€ 0123



Medica 2018 12 - 15 Nov, 2018 Hall 11, Stand A 22 www.biegler.com On this Issue



MEDISEPT

PERFECT DISINFECTION

- modern and comprehensive formulas
- effective composition
- state-of-the-art technology
- standards confirmed by certificates
- 24 years of experience
- refreshed layout
- worldwide



visit us:

WORLD FORUM FOR MEDICINE DÜSSELDORF 12-17/2018 NOVEMBER



hall 7, stand no. E04

Medi-Sept Sp. z o.o. Konopnica 159 C, 21-030 Motycz, Poland export@medisept.pl

medisept.pl

Contents

Highlights

Learn more about our Advertisers' Products...

Focus

28-32 The richer you are, the better your health

Market Overview

34-39 The Two Sides of Brazilian Healthcare

Hot Topic

40-48 Shanghai Neuromedical Center and Zhongshan Hospital: Two Examples of Hospital System in China

50-53 Radiology from the web

54-55 Special Asia Derma

56-60 Show Reports

62-67 The Distributors Wall

68-71 Calendar

72 Medica 2018 Hall Map

Cover page SANKOM

SANKOM Export Office Rue de la Molière 2 CH-2800 Delèmont. **SWITZERLAND** Phone: +41-32-422-5000 Fax: +41-32-422-4000 info@sankom.com www.sankom.com

Adhezion Biomedical	23
Ameda	8
Asia Derma 2019	49
Biegler	1
BMI Biomedical International	19
Calze G.T	68
CMEF	59
Control-X Medical	12
ECR 2018	57
General Medical Merate	11
HMD HK	6
Hospitalar 2018	III Cover
IAE	15
IMS Giotto	10
Innovative Endoscopy Components	II Cover
Invivo Medical	26
J.D. Honigberg International	6
Lasotronix	3
Machan International	8
Malaysian Rubber Export	Back Cover
Medical Japan 2019	61
Medi-Sept Sp	2
Multimedical	9
OR Specific	7
Pharmaplast	21
Printex	17
Qioptiq Photonics	13
Rumex International	67
Silfradent	33
Tradex Services	5
Villa Sistemi Medicali	25











Claudia Ragonesi Marketing Consultant Alessia Murano Exhibition Manager













infomedix.it infomedix@infomedix.it

- CEO: Baldo Pipitone baldo.pipitone@infodent.com
- General Manager: Paola Uvini paola@infodent.com
- Editorial Director: Silvia Borriello infodent@infodent.com
- Marketing Consulting Manager: Riccardo Bonati riccardo.bonati@infodent.com
- Exhibition Manager: Alessia Murano alessia.murano@infodent.com
- Newsroom: Nadia Coletta nadia@infodent.com Claudia Ragonesi pressoffice@infodent.com
- Social Media Strategist: Ilaria Ceccariglia
- ilaria.ceccariglia@ infodent.com
- Graphic Dept.: Silvia Cruciani silvia.cruciani@infodent.com Lorenzo Burla lorenzo.burla@infodent.com
- · Account Dept.: Alessandra Mercuri alessandra.mercuri@infodent.com

Publishing House: Infodent S.r.l.

Fubilishing House: mildent 3.1.1. Str. Cassia Nord Km 86,300 011100 Viterbo - Italy Tel: +39 0761 352 198 – Fax: +39 0761 352 133 VAT 01612570562

n°3/2018 - aut. trib. VT n°528 del 21-07-2004 Quatrimestrale di informazione tecnico scientifica

Infomedix tm is the title of this magazine as well as an applied for trademark. Any use there of without the publisher's authorization is to be deemed illegal **CERTIFIED BY DNY GL** and shall be prosecuted.





LASER SMART^M PRO

405nm/635nm/980nm



NEW WAVELENGTH 405NM

QUICK DIAGNOSIS OF CARIES AND SOFT TISSUES

- BLOODLESS SURGERY
- REDUCTION OF PAIN
- REDUCTION OF INFLAMMATIONS
- FASTER HEALING
- SAFE WHITENING

LASOTRONIX 1 ZYTNIA ST, 05-500 PIASECZNO, POLAND MP@LASOTRONIX.PL, +48 500 100 131 WWW.AKADEMIALASEROWA.PL

SHOW ME YOUR CERTIFICATE AND I TELL YOU WHAT I THINK OF YOU



This is exactly what we were thinking of when, back in 2004, we obtained our first certification as service provider, the ISO 9001. A great lot of work was involved in the thorough revision of all our company procedures, but the accomplishments were even greater when we realized that *Infomedix*

International had acquired a different position internationally and our quality of services, together with our professionality, had increased.

An ISO 9001 certificate proves that your quality management system (QMS) has been certified against a best practice standard and found compliant. Certificates issued by a third-party certification body let customers know they can trust that you have implemented the necessary internal processes to meet obligations, producing numerous benefits for any company. ISO 9001 is in fact a

worldwide standard for quality, administered by the International Organization for Standardization (ISO) based in Switzerland. Currently in use by over one million organizations around the world, obtaining ISO 9001 certification puts your company in a very select group and opens-up new markets where you were virtually unable to do business. When the ISO 9001 standard was created over 22 years ago it was mostly seen as a tool for manufacturing organizations. Although there was a specific standard for services, it was not until recent years, since the introduction of the process approach, that ISO 9001 has finally proven that it is the best standard to help any kind of organization improve its processes. So, whether an organization provides only services or not, it stands to gain tremendously from this clearly laid out standard, which focuses on the processes of the organization regardless of what a company makes or provides! Haven't you ever been asked whether you are ISO 9001 certified? Let me list just few of the gains. A quality management system standard is really all about quality so, of course, one result of adopting it should be an improved level of quality for the entire organization — every process and every product. Continued customer satisfaction is the ultimate goal of a QMS and quality means that whatever you produce will work as your customers expect; you will meet not only their stated requirements but their implied requirements, too. Quality means far fewer



Currently in use by over one million organizations around the world, obtaining ISO 9001 certification puts your company in a very select group and opens-up new markets where you were virtually unable to do business. complaints and if your quality management system is working correctly, you should know what your customers expect and you should be providing it, resulting in increased customer satisfaction. On top of this, implementing an ISO 9001 Quality Management System can empower employees, providing them with clear expectations (quality objectives and job descriptions), the tools to do their job (procedures and work instructions) and prompt, actionable feedback on their performance (process metrics). The result? An improved company culture and a more professional staff!

Control of your processes is another target! Control comes from having a clear target to shoot for (objective), collecting data on the process (metrics) and understanding how to adjust the process (procedures and work instructions) to maintain the target output. If your ISO 9001 QMS is working, you should be increasing operational and product consistency. Having the right objectives, metrics and procedures, management and employees should be able to focus better on what's important. Yet, this isn't always the case, it's easy

to lose focus over a time period. Well, the ISO 9001 QMS has a way to ensure the company stays focused, and that's quality auditing, requiring the company to periodically audit its quality processes. Regular process audits and as-needed audits, when done correctly, provide the objective feedback needed to correct any deviations from the quality path and keep the company focused on its goals.

However, no process and no one is perfect... why else would the standard devote a clause to "continual improvement"? A well-run QMS does enable your company to approach perfection. As your processes improve and you achieve your target objectives with greater regularity, you will see tangible results. Your process waste will decrease. Waste is money lost forever. Waste results from poor quality and inefficiency. Inefficiency results from variation and inconsistent processes. Reduce variation, improve consistency, and you'll have less waste... and more money. All this to say that we at *Infomedix International* are ISO 9001:2015 certified and proud it!

Baldo PipitoneCEO Infodent S.r.l.
baldo.pipitone@infodent.com



TRADEX SPECIALIZES IN BRINGING
COMPANIES FROM AUSTRIA,
GERMANY AND SWITZERLAND
TO TRADE SHOWS WORLDWIDE.

Visit us online at tradex-services.com



ISR G3 Interventional / Endovascular Table:

The 1st imaging table for FD C-Arms

The Aspect ISR G3 is the first Imaging table designed for use with FD C-Arms. It's the flagship of the Aspect™ Series table line; designed to be the preferred imaging

solution during interventional and vascular procedures. Featuring true iso-centric lateral roll, anatomy on the iso axis remains centered in the fluoroscopic field of view. enabling comprehensive coverage throughout the anatomical imaging area without C-arm movement, and does so in a table with an ideal overall length of only 213cm.



The ISR G3 provides longitudinal tabletop float of 81cm in a very compact platform

By adding the optional head extension, the imaging area increases to 203cm.

A high-quality carbon fiber tabletop and 5cm thick tabletop pad deliver minimal total x-ray attenuation.

Elevation and tilt functions are fully motor driven (no hydraulics) resulting in lower maintenance cost and no dangerous oil leaks!



www.imagediagnostics.com/isr-g3 // medical@jdhintl.com

Visit us at Medica 2018, Hall 16, Booth D40-8

HMD HK Ltd



HMD Mission is to develop Multi-Functional Medical Devices that can be distributed to Health Professionals to enhance diagnostic ser-

vices to their patients and community. It is a fusion of technology and precision engineering designed to perform precise measurements and calibration as required by qualified medical practitioners in the industry.

Our products are manufactured to meet uncompromising medical standards under the strictest regulatory guidelines in both the USA and Europe. Quality control staff ensures compliance, quality criteria, and best in class manufacturing standards are paramount.

Our company will continue to expand its research, patents and development of innovative devices with unique technologies and multi functional applications that can improve the efficiency of our medical staff. We are committed, that our devices will meet superior standards, high performance and deliver great value to Health Care Professionals that use each one of our products in all medical channels.

www.hmdmedical.com // info@hmd-hk.com Visit us at MEDICA 2018, Hall 6, Booth B57







BIG CASE back tables



NEW! element™ IV stand features a number of unique design elements to further promote safety, organization and efficiency of IV fluid administration.

Featuring:

- interlockingbases technology™

Big Case Back Tables feature an upper tier to promote improved visibility, organization and arrangement of instrument trays without the need for stacking.

Specifically designed to for large cases:

- Neuro Surgery
- Cardiovascular
- Orthopedics
- Endoscopy
- Spinal Fusion
- Craniotomies

visit us at booth



Inquire about distributing the 2 tier table

All products **C**€ certified.



BAILIDA - the best medical trolley

BAILIDA is specialized in medical furniture and hospital equipment and our service has cover over 60 countries worldwide. This new ES series brings unique features and value to users. Its aluminum frame is like the silk ribbon to surround the cart body for protection. Each stylish arc presents the elegance and enhance the brand identity. The launch of ES series leads BAILIDA to a new milestone. We will do the best to create the excellent using experience for BAILIDA users and make BAILIDA to be the top brand of international medical trolley and hospital equipment.

www.bailida-medical.com // sales@bailida-medical.com Visit us at MEDICA 2018 Hall 14, Booth F45D







Villa Sistemi Medicali presents the new mobile application "RAD/AR"

Villa Sistemi Medicali, characterized by its strong propensity for innovation, has decided to invest first in its industry in the use of the latest augmented reality technologies, to promote its products in an unprecedented and effective way.

The result of this project is "RAD/AR", an application for smartphones and tablets that uses these technologies in an original way to visualize and integrate in the real environment the three-dimensional models of its equipment, showing their functionalities and possible applications. RAD/AR is therefore a powerful information tool for customers, and a revolutionary working tool for the commercial network, supporting in a simple and intuitive way the communication, sales and staff training activities, allowing also to work remotely, with consequent reduction in costs and working times.

The "RAD/AR" App, premiered at the European Congress of Radiology 2018 in Vienna, is already available for download on the App Store and on Google Play.



www.villasm.com // vsmmkt@villasm.com Visit us at Medica 2018, Hall 10, Booth D74



Multimedical - ITALY - Elastomeric pumps

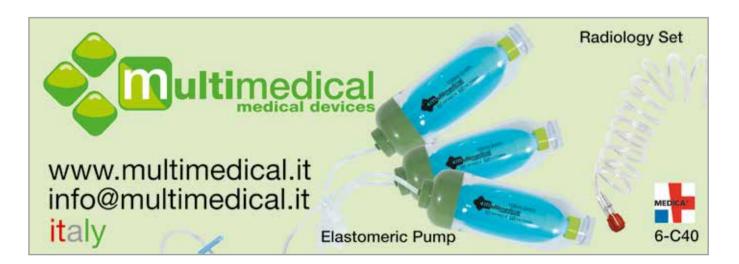
Multimedical, well known as one of the leading manufacturers for medical disposables since 1984, it's located in Italy and it's manufacturer



of standard and customized medical device for anaesthesia, oncology and infusion of contrast media too. Multimedical has long collaborations with Italian and foreign pharmaceutical industries and its products are used daily in the most important hospitals in the world. The Elaspump is an elastomeric pump produced according to the utmost modern standard of safety and reliability. The PVC components are DEHP Free and furthermore all the

raw materials used are Latex Free, all this to assure the maximum biocompatibility of the device. The Elaspump has been designed to satisfy all the requirements where the accurate infusion of the medication is needed, such as, the infusion of chemotherapeutic drugs or pain therapy drugs.

www.multimedical.it // info@multimedical.it Visit us at Medica 2018, Hall 6, Booth C40







Giotto Class, the new dimension in tomosynthesis and prone biopsy

Giotto Class is an advanced breast tomosynthesis (DBT) system including an integrated capability to generate full-field digital mammography (FFDM) images.

Giotto Class is an advanced breast tomosynthesis (DBT) system including an integrated capability to generate full-field digital mammography (FFDM) images. It features a unique, particularly ergonomic design which ensures patient comfort and user-friendliness for the operator. The C-arm stand enables a wide freedom of inclination: it can be tilted downwards and upwards to maximize patient comfort and breast positioning.

The gantry is also able to reach the horizontal position (+90°) for interventional procedures with patient in the prone position. A high-precision tomo-guided biopsy kit allows the operator to reduce the procedure time minimizing patient's anxiety level by choosing the best lesion's approach. The Giotto Class mammography system is also featuring the Dual-Energy Contrast-Enhanced Spectral Imaging. IMS Giotto is a company of GMM Group.

www.imsgiotto.com // imscomm@imsgiotto.com

Visit us at: Medica 2018, Booth 10A7 Visit us at: RSNA 2018, Booth 3939



Design Technology Ergonomy Never seen.

ALL-IN-ONE-SYSTEM

- TOMOSYNTHESIS
- **SYNTHETIC VIEW**
- **2D MAMMOGRAPHY**
- TOMO-BIOPSY in PRONE or UPRIGHT POSITION
- DUAL-ENERGY CESM

Giotto Class

The new dimension in Tomosynthesis and Breast Biopsy

IMS Giotto S.p.A.

www.imsgiotto.com imscomm@imsgiotto.com





CLISIS Evolution, R/F remote-controlled system with digital flat panel detector

CLISIS evolution, R/F remote-controlled system with digital flat panel detector is the actual evolution in top-quality radiography. Our all-new remote-controlled table has been conceived to offer the best user experience ever. The innovative structural design of the system simplifies transferring patients from and onto stretchers ensuring an immediate intervention also in emergency applications. Thanks to its cutting-edge technology, CLISIS evolution provides the most advanced features to optimize image quality and consistent dose reduction. Backed up by an extraordinary user-friendliness, as well as an unrivalled operational efficiency, CLISIS evolution ensures a quick and accurate execution of X-ray examinations in continuous and pulsed fluoroscopy, radiography, tomography, tomosynthesis, digital subtractive angiography, stitching of the column and lower limbs. State-of-the-art digital flat panel detector, powerful image processing, AEC direct control, advanced U.I. with 23" touch screen display, fully DICOM compliant: CLISIS evolution, innovation for definite diagnosis.

www.gmmspa.com // info@gmmspa.com

Visit us at: Medica 2018, Booth 10A7 Visit us at: RSNA 2018, Booth 3939









CONTROL-MEDICAL / Imaging for the Future



Control-X Medical is a dedicated medical and veterinary X-ray equipment manufacturer with an ever-growing international distributor network since 1990.

Our products are sold in over 50 countries for clinics, hospitals, and also for veterinary small animal and equine practices. Our highly qualified engineering team is flexible to handle our customer's special requirements and we always strive to create individual solutions using the latest technology, including DR modalities.

The floor-mounted Perform-X Digi AT provides the best-in class auto-positioning technology with fully automated tracking and manual override positioning. Supports completely automatic procedures,

including auto-tracking, APR positioning. The motorized wall stand and tube stand ensure advanced stitching capabilities for full spine or full leg studies.

Ceiling mounted version is also available!

Find us on facebook: www.facebook.com/controlxmedical

Or check our complete product range on our website: www.cxmed.com

www.cxmed.com // sales@cxmed.hu Visit us at MEDICA 2018, Hall 10, Booth 10 B 56



Qioptiq Introduces SlimLine for X-ray Diagnostics Featuring Spine Mode



SlimLine for X-ray Diagnostics featuring Spine Mode automatically optimizes exposure, iris and gain for maximum contrast and visibility, resulting in improved imaging of spine details without the need for manual adjustment. X-ray images of spines and extremities normally suffer from low contrast because traditional automatic settings are not advanced enough for proper exposure of this specialized case. Designed and optimized especially for X-ray diagnostics, the complete lens and camera OEM solution consists of the SlimLine lens assembly and QioCam X-ray camera. SlimLine lens assembly offers a high-performance combination of optics (lens elements), mechanics (housing, flange) and electronics (motor control board for Iris communication). The QioCam X-ray camera is based on the high resolution and sensitivity of the latest CMOS technology. Slim-Line is offered as a standard product that can also be customized by OEMs to meet specific application requirements.

www.qioptiq.com/x-ray.html // slimline.qpkg@excelitas.com



Visit us at

- MEDICA/Compamed 2018: Hall 8A / 8AF04
- RSNA 2018: Hall A, Booth 4365B and ECR foyer D





IAE - High Quality X-Ray Tubes





IAE history started in 1955 as manufacturer of electronic valves but very soon this production was abandoned and the Company focussed all production efforts on rotating anode tubes. Nowadays IAE is a major role player in the International X-Ray market as the only independent manufacturer in Europe of rotating anode tubes. With its wide product line of more than 100 insert/housing combination, IAE is a strategic and reliable partner to the most important equipment manufacturer globally.

C20

A new compact lightweight housing, specifically designed for mobile equipment.

A low weight, less than 8.5 kg, combined with compact dimensions, 116 mm diameter and 342 mm length, allows significant reductions in the equipment supporting structures.

High voltage sockets are the compact and reliable Mini Claymount, who allow a significant reduction in the size of the unit. Low voltage connections to the stator and pressure safety switch are obtained by fast connection sockets, to ease quick and error proof tube installation and replacement.

A range of tube inserts up to 54 kW peak radiographic power at high rotation speed is available for this unit.



XK1016 T

IAE has recently developed a compact light weight rotating anode mammography x-ray tube unit, with special double angle target, for optimal performances with all techniques.

A non traditional, metal ceramic structure consented to divide by a factor two both the dimensions and the weight, compared to a standard mammographic unit, down to a lightweight 5.5 kg, and at the same time to increase the heat dissipation by a factor 4, obtained by an efficient air cooling.

This high dissipation, combined with the light weight, makes it the ideal tube for high energy imaging techniques with moving X-ray source like tomosynthesis.

Two separate focal tracks, small focus on 10° and large focus on 16°, complete the features of this device.

IAE - CONGRESS AND FAIRS

CMEF AUTUMN 2018 – Shenzhen/PR of China – October 29 th, November 1st MEDICA 2018 – Düsseldorf/De – November 12 th - 15 th ZDRAVOOKHRANENIYE 2018 – Moscow/Russia – December 3rd – 7th ARAB HEALTH 2019 – Dubai/AE – January 28 th -31st ECR 2019 – Vienna/Austria – February 27 th – March 3rd KIMES 2019 – Seoul/Korea – March 14 th - 17 th

I.A.E. SpA

Via Fabio Filzi, 53
20032 CORMANO (MI) - ITALY
Tel: +39 0266303255
www.iae.it
iaexray@iae.it



ALL YOU NEED IS





C100XT

www.iae.it



X-RAY TRANSPARENT STRETCHERS

Let us introduce our new X-ray transparent stretchers range suitable for several different applications, with tabletop available both in standard and carbon fibre material. The most appreciable user features are the easy manoeuvrability and the accessible positioning of all commands and accessories and, of course, the affordable price. The four available models are: basic, floating, variable height and tilting. Wired control for up/down movements and battery powered supply optionally available. Please contact us for more details about the specific model of interest.

www.bmibiomedical.it // info@bmibiomedical.it Visit us at Medica 2018, Hall 10, Booth C28



BICGLC

Biegler Medizinelektronik - more than 40 years of experience in the medical field

Biegler Medizinelektronik, based in Austria/ Europe, has to its credit more than 40 years of research, development and production in the service of medicine. Customers are served by offering them not only high quality products and services but comprehensive and personal support as well. The quality management system was introduced in 1994 with EN ISO 9001 / EN 46001 and developed further in accordance with EN ISO 13485:20012. It covers all processes from development through to after-sales service and provides the guarantee for consisten-



tly high quality. Together with the customer from the start: Research and development is

one of the core competencies at Biegler Medizinelektronik. The company offers not just the technical but all the regulatory prerequisites for successful partnership with OEMs. Biegler's expertise is in the development and manufacture of ready-for-sale medical products. The company operates distribution to end customers in over 70 different countries with distribution partners.

www.biegler.com // office@biegler.com Visit us at Medica 2018, Hall 11, Stand A 22

Tradex-Services GmbH - Your partner for global Life Science Exhibitions





Working exclusively together with some of the biggest Exhibition organisers, we support companies from Germany, Austria and Switzerland. We deal in the procurement of floor space and the comfort of showcasing your company and products within our custom built pavillon. We are here to help with all your needs from A-Z to help you grow your business presence worlwide. With years of experience not only within the MEA and APAC region, our Know-How and high level of customer service, we can

guide you through each step to a successful exhibition experience.

With our unique tools, Tradex+ and Virtual Fair offers you lead generation and networking benefits in the area of Life Sciences. Be seen and search contacts online as well as offline. Additionally our partners can offer you assistance in a wide range of services.

www.tradex-services.com //
tradex@tradex-services.com





RELAXSAN Unisex Fancy Socks with Graduated Compression



Relaxsan fancy cotton socks with graduated compression

It is a new type of compression socks, made with combination of precious fibers and the design developed by a professional fashion designer.

100% Made in Italy.

Product Characteristics:

- Graduated compression 15-21 mmHg at the ankle and 10-15 mmHg at the Calf.
- Medical Device Class I Registered to the Ministry of Health as Medical Device.
- Original Design Every year new design and patterns to be unique and always in line with the fashion trends.
- Natural Fibers More than 50% of cotton.
- Anatomical shape Anatomical shape

of the leg, with anatomic heel pocket for perfect fitting and maximum comfort.

- Seamless toe Completely seamless toe box, to guarantee the maximum comfort and no any noise at foot toes.
- Reinforced heel and toe Made to last long time.
- Unisex 4 sizes that can fit both Men and Women.

All products from Relaxsan are Made in Italy, Certified ISO 9001-13485 and CE as Medical Devices Class I. Available also production for Private Label.

www.gtcalze.com // cristiano@relaxsan.it Visit us at: MEDICA 2018, Hall 05, Booth J19



The SANKOM Patent Socks









The SANKOM Patent Socks are the first and only compression socks in the world to use targeted stimulation and active gradual step-by-step compression to activate blood flow in the legs and improve blood circulation.

Invented by Dr. Mazourik in Switzerland, the **SANKOM** Patent Socks help both men and women with common leg problems such as heavy legs and poor blood circulation caused by sedentary lifestyles, low and intensive physical activity, excess weight, old age, pregnancy etc.

Unlike ordinary compression socks that use extreme compression to restrict blood flow to the lo-wer leg, the **SANKOM**

Patent Sock uses innovative proprietary patented technology to anatomical-ly compress to improve the efficiency of the veins.

The SANKOM patent socks are clinically proven to:

- Promote better circulation
- · Provide instant leg relief
- Reduce leg swelling
- Support the ankle and arch
- Relieve varicose vein symptoms
- Reduce fatigue
- Improve muscle recovery

97% of the participants saw a significant improvement in blood circulation. 93% of

participants saw a significant relief from varicose veins.

The SANKOM Patent Sock is a Clinically Proven Class I Medical Device. Sankom Offers Free Samples To Qualified Distributors, Contact Us Today! Tel.:+41 32 422 50 00

www.sankom.com // info@sankom.com Visit us at Medica 2018, Infomedix International Booth: Hall 16, Booth B43



Innovative Endoscopy Components, LLC Premium Endoscope Repair Parts



Innovative Endoscopy Components, LLC has been the ISO I 3485/ISO900 I Cer-

onents, LLC tified vendor of choice to hundreds of endoscope service facilities and dealers worldwide, for almost 20 years.

Our product range and services are constantly growing with international demand. Rapid prototyping, optical assemblies, injection molding, and CNC machined parts are offered just like OEM endoscope and equipment labeling as well as CCD' repair and multilingual repair training and consulting.

Please contact us: Innovative Endoscopy Components, LLC: 320 International Parkway, Fort Lauderdale, FL 33325, USA Tel: 954-217-8780, Fax: 954-217-8781

www.IECendoscopy.com // info@endoscopy.md

















www.bmibiomedical.it

BMI Biomedical is the ideal partner for any distributor wishing to deal with trustworthy and advanced X-ray systems. We are able to provide a wide range of medical equipments, starting from mobile units up to complete and complex systems, as well as dental radiography and Veterinary Systems. Given our experience in the production of medical equipment, we are your ideal OEM partner.

Meet us at:







OUR ADVERTISERS' PRODUCTS

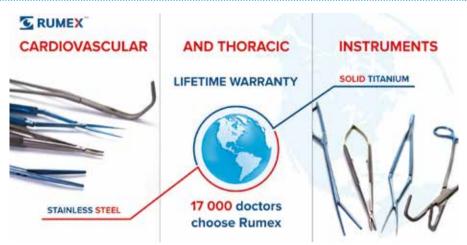


Rumex - Highest Quality Surgical Instruments since 1994

Rumex International Corporation is one of the leading manufacturers of surgical instruments for hand-held surgery with many offices and representatives all over the world, headquartered in the United States. Our major specialization lies within reusable instruments for surgical ophthalmology and cardiovascular and thoracic surgery. For 20 years, industry experts from all over the world have been pleasantly surprised with the most sustainable quality and service provided by Rumex.

Our advantages are:

- Titanium instruments at the price of steel
- Strict quality control which allows producing impeccable and durable instruments
- Product development together with reknowned surgeons



- Ergonomical design
- Data Matrix Barcodes on the instruments Please contact us for any inquiries and cooperation.

www.rumex.com // rumex@rumex.com Visit us at MEDICA 2018, Hall 12, Booth E47



MEDISEPT – Perfect Disinfection





We have been delivering complex solutions for professional hygiene maintenance to healthcare institutions since 1994.

Medi-Sept Sp. z o.o. is a Polish manufacturer of professional cleaning chemistry and products for disinfection.

Our offer includes products for disinfecting three basic areas at healthcare facilities: surfaces, tools and hands.

We cooperate with distributors throughout Europe, Asia, Africa and Middle East. Always focused on expanding, we are open to introduce our products to new markets.

www.medisept.pl // export@medisept.pl Visit us at MEDICA 2018, Hall 7, Booth E04





Fibrosol®

Fibrosol® dressings are sterile dressings used to cover acute and chronic wounds that are excreting pus or other fluids. They offer a unique gelling action that absorbs and locks in exudate and bacteria. Features:

- Provides excellent absorption and retention capabilities for moderate to highly exuding wounds.
- Conforms to the wound surface to form an intimate contact.
- Creates a moist environment that aids wound healing.
- Helps reduce wound pain while the dressing is in situ and upon removal.
- Hemostatic effect
- Bacteriostatic activity

Indication:

Fibrosol® dressings can be used in the management of:

- Infected wounds and those of risk of infection.
- Diabetic foot ulcers, pressure ulcers and leg ulcers.
- Surgical wounds.
- Traumatic wounds.
- Oncology wounds.
- Donor and recipient graft sites.
- Treatment of primary infected wounds
- Effective bacterial barrier that reduces wound infection
- Pressure sores



Instructions for use:

- The dressing should overlap at least I cm onto the skin surrounding the wound.
- Fill 80% in case of deep wounds and leave at least 2.5 cm outside the wound.
- Apply cover dressing to the wound.

www.pharmaplast-online.com // sales@pharmaplast-online.com MEDICA 2018, Hall 6, Booth E35



OUR ADVERTISERS' PRODUCTS



Big Case Back Table

The Big Case Back tables are specifically designed to accommodate a variety of large surgical cases such as orthopedics, spine, cardiovascular, neuro, endoscopy, open heart and craniotomies. The additional space created by the upper shelf promotes improved arrangement, organization, and visibility of the instrument trays without the need for stacking. OR Specific offers two unique styles of the Big Case Back Table, standard and adjustable. The Standard Big Case Back Table is ideal in supporting any surgical procedure that is implant and/or instrument intensive, especially when space is limited. The Adjustable Big Case Back Table accommodates staff heights ranging from 94cm to 198cm (4'11" to 6'6").

The main surface of the table may be adjusted to a maximum height of 97cm (38") or a minimum of 74cm (29").

www.orspecific.eu // europe@orspecific.eu Visit us at Medica, Hall 16, Booth 16E26-1





Ameda

As the original inventor of the hospital breast pump, Ameda's mission is to help moms achieve their breastfeeding goals. We provide clinically differentiated products and services to make every moms' experience more comfortable, safe and convenient in hospital and at home. In addition, Ameda also offers educational support to lactation professionals, institutions and most importantly to moms.

Our dedication to deliver on our mission reflects in our recent launches. Ameda FinesseTM - a sleek, reliable personal breast pump bringing hospital technology home, inspired by Ameda's Platinum® hospital breast pump technology. We are also very proud of our new high quality, premium breastfeeding accessories — Triple Zero LanolinTM - highly purified lanolin cream to help soothe nipple pain and MoistureGuardTM — ultra thin yet super absor-

bent disposable breast pads. To reflect our commitment further, we are one of the only brands in the category to comply with the WHO code.

www.ameda.com //
internationalsales@ameda.com
Visit us at MEDICA 2018, Infomedix
International Booth, Hall 16, Booth B43





Adhezion Biomedical - Advancing the Science of Healing



Adhezion Biomedical's vision is to redefine the way cyanoacrylate-based surgical adhesives and sealants are used in medicine by developing exciting new wound closure, wound care, and infection prevention products.



SECUREPORTIV Catheter Securement Adhesive is a whole new approach to vascular access device securement. It effectively seals the catheter insertion site, establishes a microbial barrier, immobilizes skin flora and is bactericidal on contact in vitro. **SURGISEAL** Topical Skin Adhesive can replace sutures for incision or laceration repair and is designed to save time during wound repair, provide a flexible, waterresistant & antimicrobial protective coating, and eliminate the need for suture removal. FLORASEAL Microbial Sealant is designed to be applied prior to an incision and stays on the skin, eliminating bacteria migration long after surgical procedures are complete.

To learn more about these products and see our entire product portfolio, please visit our website.

www.adhezion.com // info@adhezion.com Visit us at: MEDICA 2018, Hall 16, Booth G-05



OUR ADVERTISERS' PRODUCTS





APTIKA is a device designed for the wellness of the future and to listen to music in 4 DI-MENSIONS: It exalts the therapeutic power of frequencies and music that is heard not only through hearing (through a high-resolution headphone), but also through touch and the whole body. The result is a unique and extraordinarily immersive experience, involving the entire body producing a pleasant-dynamic massage and psycho-physical effects of various types. Thanks to particular algorithms, in fact, the subsonic and acoustic waves produced, move inside the body (from the feet to the shoulders or vice versa, from right to left, diagonally, etc.) coherently with the transmitted music; A highly engaging experience, which can have depending on the music and treatments, relaxing, energizing effects, and many more. The above creates at the same time in the user the sensation of feeling the music through and within his entire body, immersing in music in a complete, new, dynamic and very engaging.

ATRUE INTEGRAL HARMONIC BATH. How it is done: It consists of a mattress on which to lay the body, and a module for the control of audio levels of easy to use. The module has 2 intensity regulators: one for the headphone levels and one for the body. It is foldable, transportable and adaptable to different circumstances or supporting structures (eg. deckchairs-chaise longue, massage beds, etc.). When used in conjunction with a virtual reality screen or viewer, it offers an even more immersive experience.

Possible uses:

I. Listen to the music in 4D (taking advantage of the body receptors that allow you to experience a tactile, dynamic, immersive and enveloping music, that carries musical details and emotions not perceptible otherwise.)

APTIKA

An Italian patent to hear the music in 4D... and more

- **2. To practise anti-stress**, relaxing, regenerating, stimulating, etc. with a synergistic mind-body action
- **3. Make Harmonic bath treatments**, (eg. with gongs, Tibetan bells, ancient therapies, etc.), music therapy and holistic disciplines. (No need for operators, instrumentation, special rooms, etc.).
- **4. Practice rehabilitation treatments and body massages** using frequencies suitable for specific purposes on organs, tissues, cells, etc.
- **5. Enjoy the best of your movies,** favorite concerts, videogames, etc. adding the fourth dimension.
- **6. High quality audio components** (valvular amplification, etc.) confers a rewarding, Audiofila-quality audio experience.
- 7. To perceive the vibrational dance of music to the deaf.
- 8. Carry out experimentation following the recent teachings of physics/ Quantum medicine (use of specific frequencies, brainwaves, etc.)

To whom it is intended:

- 1. To the entire public who loves music and entertainment.
- 2. To all those who need to lower stress and psychophysical tension. (eg. in companies or workplaces stressful and/ or sedentary where it is sufficient to allow themselves 10-15 minutes of treatment to obtain immediate effects of various types, both physical and mental).
- **3.** A spa, wellness centres, hotels, gyms, etc. (the waves and sounds emitted do not propagate incircles close and do not disturb any people nearby.)
- **4. To sportsmen and athletes** to improve performance, health status, etc.
- **5. To therapeutic institutions**, rehabilitation, etc.
- **6.** To persons and organizations who practise or study **holistic disciplines**.

The (optional) use of Bluetooth allows you to remotely manage (from computers, tablets, mobile phones, etc.) even multiple devices simultaneously (e.g. for spas, spas, hotels, collective events, etc. Compatibility with the most common hi-fi systems, videogame con-

soles, 3d glasses, VR, etc. makes it versatile and adaptable to many circumstances and needs. It is not easy to describe in words the effects generated by this device, for this reason a direct experience is recommended. This massage is distributed in and on the body, moving within the same and generating different psychophysical effects consistent with the type of music, sounds and frequencies transmitted. For example, you can obtain massages with soothing, energizing, activating specific bodily functions, since many frequencies are active at the cellular and/ or mental level, following the laws of resonance, and the recent discoveries of physics Quantum, etc. The use therefore allows to obtain mental and psychological effects as well as physical, exceeding limits imposed by the traditional massage, (to which can be matched) revealing a new frontier of massage-wellness. The recent scientific discoveries on the close relationship between mind, organs and cells suggest a new type of massage that involves man in its entirety and gives scientific foundation to millenary treatments and therapies successfully practised by different Civilization. Because this device is also able to emit brain and other frequencies that can interact with both the body and the mind, according to the recent discoveries of physics-Quantum medicine, neuroscience studies, etc. many uses and Applications are the subject of interest, study and experimentation. Es: (Amplification of the effects of music therapy and related disciplines, activation of the parasympathetic system and related consequences such as anti-stress, increased immune defenses, production endorphins, etc., reproducibility of millenary treatments with Gongs, Tibetan bells, voice, etc., use of brainwaves to interact with different mental states, use of the technique of entrainment and binaural beats, use of specific frequencies able to interact with organs and tissues Body and more).

"Music expresses that which cannot be said, and on which is impossible to remain silent". Victor Hugo

www.aptika.it // info.aptika@gmail.com T. +39 3478518968





radiology applications devices in augmented reality



External Access Targeting Device

Assistive Device for Safe and Precision Percutaneous Access

EATD's Features and Strengths:

Effective Systematic Precision

Systematic adjustments with multiple degree of freedom and accurate aiming procedure to simplify 3D alignment of the needle with precision

Reduced Exposure to Radiation

Needle being held by a compliant mechanism, allowing reliable remote adjustment by the surgeon from outside the X-ray burn-field

Intuitive + Touch and Feel

Intuitive to use while retaining the touch & feel of the insertion for the surgeon, ensuring full confidence on the puncture while surgeons make all the calls

Fast yet Safe

SOP that cuts short surgery time to in turn reduce patient exposure to X-ray radiation and lower surgery cost

Flexibility

Support both bi-plane and bull-eye techniques, providing surgeons with flexibility based on needs and preference

Shorter Learning Curve

Cut short learning curve to allow surgeons to pick up and get familiar with this difficult-to-master skill readily

Non-Robotic: Low Cost + Efficient

Non-robotic and passive, enabling easy and fast set up, reliable and safe to use, plus low per-surgery cost allowing its use in a broad spectrum of simple to complex and low to high value procedures

A New Standard for Precise Interventional Procedures

State-of-the-art medical technology and device is the key to modern minimally-invasive surgical procedures and biopsies, demanding solutions that are safe, precise and reliable. The National University Hospital, National University of Singapore and Institute of Technical Education, have hence joined hands to invent an External Access Targeting Device (EATD), which is the world's first non-active Class I / Class A Sterile surgical device and procedure, for assisting surgeons in precision fluoroscopic, CT and ultrasound-based image-guided percutaneous accesses to stones, lesions and abscesses in deep organs such as kidney. EATD can support many applications in intervention radiology and minimally-invasive surgeries, such as Percutaneous Nephrolithotomy (PCNL), as well as complex biopsies that require precision needle targeting and access.

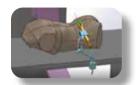
Patented / CE-Marked Device Safe, Effective and Efficient

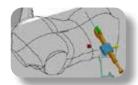
EATD is consisted of a compliant plastic needle holder/clamp unit intended for single use for each percutaneous access, and a reusable guidance controller that is ergonomically designed for the surgeons to remotely control the alignment of the needle external to the burn-field of the fluoroscope, ensuring a safe, precise and accurate penetration.



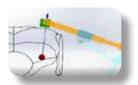
This device solves the problem of needle puncture during minimally-invasive surgery and biopsy, that were traditionally being performed by surgeons with no tool or device but only their hands exposing under radiation from imaging device such as a fluoroscope. This new device/technology makes possible remote, systematic and precision adjustment, accurate aiming and targeting of needle during percutaneous access procedure using either the bi-planar or the bull-eye technique, giving surgeons more options and control during the procedures.











We are looking for Regional/Country Distributors, Surgeons and JV Investors to work together to bring this New Device and Technology to Operating Theatres of Hospitals around the World, Contact Us if You would like to join us in Our Vision and Mission.



DISCOVER THIS NEW GROUNDBREAKING INVENTION FROM SWITZERLAND!

Invented by Dr. Mazourik in Switzerland, the SANKOM Patent Socks are a breakthrough concept to help both men and women with common leg problems such as heavy legs and poor blood circulation caused by sedentary lifestyles, low and intensive physical activity, excess weight, old age, pregnancy etc. The number of people suffering form these problems are growing every year:

The SANKOM Patent Sock is the first compression sock in the world to use unique active anatomically tar-geted compression. Unlike ordinary compression socks that use extreme compression to restrict blood flow to the lower leg, the SANKOM Patent Sock uses innovative proprietary patented technology with tar-geted compression to anatomically to improve the efficiency of the veins.

THE SANKOM PATENT SOCKS ARE CLINICALLY PROVEN TO:

- PROMOTE BETTER CIRCULATION
- PROVIDE INSTANT LEG RELIEF
- REDUCE LEG SWELLING
- SUPPORT THE ANKLE AND ARCH
- RELIEVE VARICOSE VEIN SYMPTOMS
- REDUCE FATIGUE
- IMPROVE MUSCLE RECOVERY
- & MUCH MORE!

The SANKOM Patent Active Compression Socks are CLINICALLY PROVEN to improve blood circulation. 97% of the participants saw a significant improvement in blood circulation. 93% of participants saw a significant relief from varicose veins.



HOW DO THE SANKOM PATENT SOCKS WORK?

SANKOM Patent Socks are the FIRST AND ONLY COMPRESSION SOCKS IN THE WORLD to use tar-geted stimulation and active gradual step-by-step compression to blood flow in the legs and im-prove blood circulation.

The SANKOM Patent Sock is composed of 4 gradual compression lines, that when pulled one after the other, act as a stimulation for the veins to work more efficiently and push the blood back to the heart.

ABOUT SANKOM: SANKOM is a wellestablished company in Switzerland that specialises in inventing and develo-ping functional accessible products that improve health. Its newest development. the SANKOM Patent Sock was created using unique active compression patented technology to combat daily common problems such as heavy legs, poor blood circulation, swelling and sore muscles. For both men and women, the socks offer a never seen be-fore approach to restore the health of legs along side with immediate relief. The SANKOM Patent Sock was develo-ped by medical doctors in Switzerland and is a Clinically Proven Class I Medical Device.

SANKOM OFFERS FREE SAMPLES TO QUALIFIED DISTRIBUTORS, CONTACT US TODAY!



Tel:+41 32 422 50 00 Email: info@sankom.com www.sankom.com

Visit us at MEDICA 2018, Infomedix International Booth, Hall 16, Booth B43













The richer you are, the better your health

WEALTH

Author: Silvia Borriello silvia.borriello@infodent.com

Despite impressive scientific advances and massive economic growth over the past 60 years, disparities in wealth and health have persisted and, in many cases, widened. Unless society focuses strongly on reducing inequalities, the hope of achieving significantly improved health for a greater proportion of the world's people—one of the most pressing problems of our time—is becoming an ever more distant prospect. A boy living in the poorest part of London or Paris, New York or Washington can expect to live 20 years fewer than a boy living in the richest part; girls fare slightly better. But most of us do not live in the poorest part of cities and can surely believe that this kind of thing doesn't apply to us. We are wrong. There is a remarkably close link between where you are on the socioeconomic ladder and your health - the higher the rank, the better the health.

You and I, not the richest or the poorest, can expect to live for fewer years than the richest and more years than the poorest. Unhealthy life means an earlier death and, while you are alive, your hand grip weakens, your mobility slows down, your memory and other cognitive functions decline and various illnesses accumulate; all of this happens at a progressively faster rate the lower down the social hierarchy you are. The scale of the problem seems to be enormous and increasing all over the world. The cause is inequality in the conditions in which people are born, grow, live, work and age; and inequities in power, money and resources that give rise to this inequality.

Although the resources and knowledge for achieving improved global health exist, a new vision, on health as an aspect of human development, human security and human rights is needed. Such a shift is required to sufficiently modify and credibly reduce the present dominance of perverse market forces on global health. Globalization has certainly had many acknowledged beneficial effects, including advances in knowledge, science and technology, increased life expectancy for many, lower rates of infant mortality across the world, enhanced economic growth, greater freedom and prosperity for many, improvements in the speed and cost of communications, transportation and popularization of the concept of human rights. Furthermore, new scientific discoveries have made wide-ranging contributions to improved health for all of us and will continue to do so, nonetheless, for all social classes around the world except the most affluent, household income, wealth and assets have declined since the 1990s. The income gap between rich and poor has been increasing in all countries for decades and bad economic times, such as the Great Recession have only made things worse.

These economic trends have had large implication for population health. Research suggests that health inequities may be generated not only by low absolute income but also by the rising degree of economic inequality and material deprivation.

In spite of the rapid economic growth, with a real-world annual income, measured in purchasing power parities, increasing from \$28.46 trillion in 1990 to \$120.52 trillion

You and I, not the richest or the poorest, can expect to live for fewer years than the richest and more years than the poorest.

in 2015 (World Bank statistics), neoliberalism and the dominance of perverse market forces over the past 30 to 40 years have had many adverse effects on health and health policy, imposing reduced government expenditure on healthcare, education and other social services and encouraging privatization, even within healthcare (thus increasing inequities of healthcare access), globally. One of the enduring characteristics of the current global economic system is that it involves systematic transfers of real resources and wealth from the impoverished majorities of the poorer countries both to the wealthy within such countries and to the richer members of wealthier nations. In response to those who often cite average increases in country per capita GDP (Gross Domestic Product) as a sign of poverty alleviation, these are not the best indicator of progress, as they do not reveal the distributive impact resulting from market liberalization and economic growth and are thus not necessarily associated with poverty reduction.

Neoliberalism involves protection, nationalization and socialization of losses for the strong (such as large banks, big insurance/ financial companies, wealthy investors, auto firms, etc.) and market discipline for the weak, who have little to fall back on if they lose their jobs and income flows. Poor people are more at the mercy of market forces if, for example, the cost of food and healthcare goes up. In a crisis, this vulnerability becomes more acute. As in the global financial, food and energy markets, there has been a shift toward privatization in which health—like food or oil becomes a commodity that can be bought and sold by the few while the majority is increasingly deprived. Power lies with an emerging new hybrid of public and private healthcare institutions that are increasingly governed by the forces of the world market.

To facilitate escape from such global impasse, we need new ways of thinking and acting that transcend national and institu-

tional boundaries. Society, as a whole, should strongly focus on reducing health inequalities and in reproducing strong and caring social institutions which include educational facilities, healthcare services and social services that could enable new generations of children to achieve their potential. These social services constitute the bedrock of civilized societies. Sustainable improvement in health and well-being is a necessity for all and the value placed on healthy living should permeate every area of social and economic activity. Living a healthy life starts with the nature of early child development, continues through school and employment and ends with the conditions in which elderly people live out their lives. Achieving improved global health should be less dependent on new scientific discoveries or technological advances, or on economic growth alone (both of which are necessary but not enough), than on working toward achieving the greater social justice that must lie at the core of public health.

Modern advances in healthcare have so far largely benefited only about 20% of the world's population. Annual per capita expenditure on healthcare ranges, on average, from over \$6,000 in the United States (more than 17% of GDP) to less than \$10 in the poorest countries in Africa (less than 3% of GDP). Half the world's population lives in countries that cannot afford annual per capita health expenditures of more than \$15 and many people do not have access to even basic drugs, benefiting little from progress in science and medicine. At the same time, rising food prices have resulted in a further decline of living conditions for most of the world's population.

Improving population health requires a new critical paradigm of what it means for people to flourish. Human flourishing could be defined as lives in which essential life needs are met, including a safe and nurturing childhood, adequate nourishment and accommodation, clean water, sewerage facilities, childhood vaccination, education and safety from easily preventable everyday health, economic and other social threats within a broadly originated framework of respect for human rights. This is where strong social institutions should really come into play.



Evidence from across Europe shows that countries that spend more generously on social benefits have better health and narrower health inequalities. Interestingly, countries with better benefits also have better employment conditions.

In a framework of public health action, interventions that address social determinants of health have the greatest potential public health benefit. Among social determinants, education is fundamental, because education forms the new members of society - children and youth. It is cumulative, formative, and transformative, both for the individuals who experience it and for the society it recreates and modifies. Affordable education, along with affordable healthcare is a trademark of great and prosperous countries. For a government, investment in education is one of the safest and surest ways to improve the economic condition of the country and standard of living of low-income households and individuals. While there is no magical formula to determine the true value of a degree or diploma as it depends on multiple factors like how one uses that degree or diploma, how productive that person is or which career he/she has chosen, it has been shown by many studies that there is a strong correlation between education, wealth and health. Education improves public health and promotes health equity. Wages and income are not health outcomes but are closely linked with health outcomes because they provide access to healthrelated resources, such as healthy food, a safe environment and healthcare. A recent analysis of trends in US wages over more than 20 years finds higher wages consistently associated with higher educational attainment and a trend toward increasing differences in wages by educational status. Health and income affect each other in both directions. After all, healthy people can work longer and harder than sick people. Healthier children are likely to stay in school longer and learn more, earning more when they enter the workforce. Even across countries the relationship seems clear: those with better health are generally richer, and those that improve their citizens' health grow faster. Countries with weak health and education conditions find it harder to achieve sustained growth. Indeed, economic evidence confirms that a 10% improvement in life expectancy at birth is associated with a rise in economic growth of some 0.3-0.4 percentage points a year. The effects of health on development are clear.

According to the U.S. National Health Interview Survey 2011 (U.S. Department of Health and Human Services), poor adults are almost five times as likely to report being in fair or poor health as adults with family incomes at or above 400 percent of the federal poverty level (which was \$23,850 for a family of four in 2014), and they are more than three times as likely to have activity limitations due to chronic illness.

Basic education is an integral part of being healthy and educational achievement is an especially strong predictor of health independent of income. A person is unhealthy if he or she lacks basic knowledge, the ability to reason, emotional capacities of self-awareness and emotional regulation and skills of social interaction. These embodied personal attributes or mental capacities, the products of formal education as

well as other learning experiences, are conceptually comparable to physical capacities of fitness and coordination – well-established components of health.

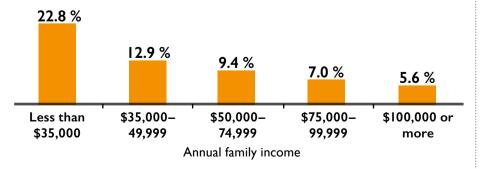
In the United States, although higher self-reported rates of several conditions, such as prostate cancer and sinusitis, are reported among more adults with greater levels of education, for most conditions the reverse direction of association is evident. Rates of major circulatory diseases, diabetes, liver disease and several psychological symptoms (sadness, hopelessness and worthlessness) show higher rates among adults with lower educational attainment. Evidence also exists of a strong association between educational attainment and mortality from many diseases.

There is evidence that when people are exposed to economic disadvantage—especially at critical developmental stages of life—and to other harmful life conditions they become more vulnerable to disease processes and experience harmful physiological reactions to toxins in their environment. The stress associated with financial adversity is believed to have harmful biological effects on the body. Stress is thought to affect hormones and the health of the immune system (a phenomenon called allostatic load), causing damage to organs and increasing the risk of disease over time.

lust as many areas of daily life are recognized domains of legitimate public health action - agriculture (e.g. nutrition and food safety), transportation (e.g. vehicle injuries, air pollution and walking), immigration (e.g. immigrant health and infection control), justice (e.g. violent crime and prison health), urban design (e.g. safety, walkable communities and food deserts) and labor (e.g. occupational safety and health) - so should education (beyond health education in schools) be recognized as a legitimate domain of public health action. Education is a critical component of health and a major, long-term, multifaceted cause of health. Most of all, education is a powerful means of breaking the cycle of poverty (which greatly affects ethnic and racial minority populations) and promoting health equity.

According to the above-mentioned survey, infant mortality and children's health are also highly linked to family income and maternal education. Rates of low birth weight are highest among infants born to low-

SELF-REPORT OF FAIR OR POOR HEALTH, BY INCOME, 2011 Percentage of adults



Source: Schiller JS, Lucas JW, Peregoy JA. Summary health statistics for U.S. adults: National Health Interview Survey, 2011. National Center for Health Statistics. Vital Health Stat 10(256). 2012. www.cdc.gov/nchs/data/series/sr_10/sr10_256.pdf

income mothers. Children in poor families are approximately four times as likely to be in poor or fair health as children in families with incomes at or above 400 percent of the Federal Poverty Level. Lower-income children experience higher rates of asthma, heart conditions, hearing problems, digestive disorders and elevated blood lead levels. Poor children also have more risk factors for disease, such as childhood obesity, which is a strong predictor of obesity as an adult.

Income and wealth are part of a complex web of social and economic conditions that affect health (and each other) over a lifetime; these conditions are associated to education, employment, family structure (e.g., single motherhood), neighborhood characteristics, social policies as well as culture, health beliefs and country of origin.

The reported higher rates of disease among low-income Americans are accompanied by higher rates of risk factors. In 2011, smoking was reported by one out of four (27.3%) adults from families who earn less than \$35,000 a year, three times the rate of those from families who earn \$100,000 a year or more (9.2%). Obesity rates were also higher (31.9 and 21.2 %, respectively), partly because of lower levels of physical activity. In 2011, the proportion of adults who reported getting recommended levels of aerobic exercise was 36.1 %t for those living in poverty compared with 60.1 % for those with incomes at least four

times higher than the Federal Poverty Level. Income is also associated with mental health. Compared with people from families who earn more than \$100,000 a year, those with family incomes below \$35,000 a year are four times more likely to report being nervous and five times more likely to report sadness "all or most of the time". Somatic complaints (i.e., the pain and other physical ailments that people experience due to stress and depression) also occur more commonly among people with less income. Partly because of reduced access to care and reduced affordability, low-income patients are less likely to receive recommended healthcare services, such as cancer screening tests and immunizations. For example, in 2012 the proportion of adults ages 50 to 75 who reported never having been screened for colorectal cancer was 19.5 % for those with annual household incomes of \$75,000 or more but 42.5 % for those with incomes below \$15,000. In 2011, almost one-quarter (23.3 %) of adults with family incomes under \$35,000 per year had no usual place of medical care, compared with 6.0 % of those with incomes of \$100,000 or higher. Similarly, 22.6 % reported not having seen a dentist in more than five years, compared with 4.3 % of adults with family incomes over \$100,000. In conclusion, improving population health is achievable. Better economic conditions for families at many income levels-from those who are poor to those in the middle class-mean longer lives and better health

and consequently, lower healthcare costs. Health should be defined as the ability and the opportunity to use one's natural endowments to achieve the potential to live a full and satisfying life. Achievement of health, so defined, requires attention to the social determinants of disease and a lifelong supportive environment that includes good prenatal care, safe childbirth, a nurturing childhood, adequate education, prevention of avoidable diseases and opportunities to flourish physically, socially and intellectually. Health services in this context should provide access to affordable, effective healthcare, where access to basic healthcare should be considered as an essential human right that nation states should be committed to honoring for all. Health, illness, and medicine should go beyond individuals and their families to involve and affect whole societies, their institutions and their global interconnections and ramifications. By its nature, the right to basic healthcare is a collective right—not an individual or exclusionary right, as is the right to private property, or the private ownership of a commodity. Social solidarity in healthcare implies that governments should provide basic public goods not only as a matter of economic and social efficiency but also as a public duty to their citizens. Nonetheless, if our global economic system continues being geared primarily to the pursuit of profit at the expense of human flourishing and human rights, with direct and indirect impact of policies prioritizing private interests, then disparities in health, in access to healthcare and in life expectancy within and between countries will continue to grow. For this, we should demand action.

PREVALENCE OF DISEASES, BY INCOME, 2011 (PERCENT OF ADULTS)

Annual family income

DISEASE OR ILLNESS	LESS THAN \$ 35,000	\$ 35,000- 49,999	\$50,000- 74,999	\$75,000 99,000	\$100,000 OR MORE
Coronary heart disease	8.1	6.5	6.3	5.3	4.9
Stroke	3.9	2.5	2.3	1.8	1.6
Emphysema	3.2	2.5	1.4	1.0	0.8
Chronic bronchitis	6.3	4.0	4.4	2.2	2.4
Diabetes	11.0	10.4	8.3	5.6	5.9
Ulcers	8.7	6.7	6.5	4.7	4.4
Kidney disease	3.0	1.9	1.3	0.9	0.9
Liver disease	2.0	1.6	1.0	0.6	0.7
Chronic arthritis	33.4	30.3	27.9	27.4	24.4
Hearing trouble	17.2	16.0	16.0	16.2	12.4
Vision trouble	12.7	9.8	7.5	5.7	6.6
No teeth	11.6	7.8	5.5	4.2	4.1

Source: J. S., Schiller, J. W. Lucas, and J. A. Peregoy, "Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2011." Vital and Health Statistics 10, no. 256 (2012): 1–207, tables 1, 4, 8, and 12. http://www.cdc.gov/nchs/data/series/sr_10/sr10_256.pdf.

Among main sources:

-Extracts from "How Are Income and Wealth Linked to Health and Longevity." by the Urban Institute and Virginia Commonwealth University. For full report: 2000 I 78-Howare-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf -Extracts from "Global Health and the Global Economic Crisis" by Solomon R. Benatar, Stephen Gill and Isabella Bakker, For full text: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3052329/

-Extracts from "Education Improves Public Health and Promotes Health Equity" by Robert A. Hahn and Benedict I.Truman. Full text from: https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4691207/

-Extracts from "The richer you are, the better your health — and how this can be changed" by Michael Marmot. Full text from: https://www.theguardian.com/books/2015/sep/11/health-inequality-affects-us-all-michael-marmot

-'The connection between education and Health" by Sourobh Das - http://www.iamwire.com/2017/08/educationwealth-relation/156154

-https://www.economist.com/finance-and-econom-ics/2008/11/20/health-and-wealth



A world first from Silfradent research team:

Plasma therapy - Concentrated Growth Factors (CGF) can cure erectile dysfunction - why suffer in silence?

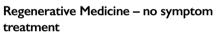


Katrin Rotter-Böttger Independent medical Trainer for Meso-PRP/CGF and CGF denatured Plasma-Gel www.plasma-gel.de info@plasma-gel.de

Erectile dysfunction (ED) is a common condition that affects men of all ages.

The inability to get, or keep, an erection firm enough for sex has often far reaching consequences - low self esteem and diminished

quality of life are typical. There are many causes: psychological disorders, heart disease, hormonal conditions, advancing age, bad lifestyle habits, to name but a few.



CGF is an efficient approach in regenerative medicine and shows quick results in ED. If left untreated ED will progressively worsen. However, treatment with CGF will have a very positive effect at any stage, even in cases where the ED is already well advanced. Vascular tissue is improved. Cell migration and proliferation are enhanced. Furthermore the Platelets (Growth Factors) are a stimulator for (mechano-)re-





ceptors and for over 20,000 nerve endings. The treatment is safe and there is no downtime for the patient. Patients who are fearful of pain can be reassured by the fact that only small gauge needles are used and,

if necessary, an anaesthetic crème can be applied prior to the penial injections.

What to expect

Employing a safe user protocol, sensibility may be improved, resulting in firmer erections and more stamina, even after the first treatment. This therapy is individual and customized. A holistic combination therapy is advisable.

The importance of plasma production

In order for the therapy to be effective, not only are the injection techniques important, but also the manufacture of the plasma (Platelet Rich Plasma).

There can be great differences in quality depending on the production values used. Plasma is not always plasma!

If the yield of thrombocytes, or of the growth factors, is low, the therapy will have hardly any effect. In contrast to other user protocols, here, the focus is targeted on the platelets and CD34+ stem cells.

Decisive factors are: the choice of PRP tubes, the use of the anticoagulant, and correct blood collection. Great attention should be given to the centrifugation. Studies clearly show a low relative centrifugal force (RCF), which should not be confused with the RPM! False centrifugation may push the platelets into the erythrocyte phase, resulting in plasma without the regenerative effect of platelets. Hemolysis and

premature degranulation of the platelets are further negative phenomena that severely impair this therapy.



MEDIFUGE MF 200

Fractional centrifugation makes the difference

The blood samples are centrifuged at different times and at different rates. The centrifugal force is kept deliberately low. In this way, cell groups are dissolved to allow the blood cells to settle in the desired layer. Here, Silfradent sets the international standard with its MF 200 Medifuge. Straightforward handling, including a sterilization cycle to prevent cross-contamination, is a prerequisite for this new technology.

Katrin Rotter-Böttger organizes (English) courses. Next (English) course: 11.11.2018 Munich

For Registration & further information info@mesotherapie-ausbildung.de www:plasma-gel.de



The Two Sides of Brazilian Healthcare

Author: Silvia Borriello silvia.borriello@infodent.com

Despite its many problems, Brazil's universal public health system represents an enormous achievement for Brazilian society. Brazil has not only managed to significantly improve access to healthcare, especially among the poorer inhabitants, but its system also represents a significant social and political commitment, by the government, and an effort to realize rights that are a key aspect of citizenship for millions of Brazilians. Nevertheless, health and social inequalities remain.

Economic Profile - As of late 2010, Brazil's economy is the largest of Latin America, the second largest in the Americas (after the U.S.) and among the ten largest in the world. From 2000 to 2012, Brazil was one of the fastest-growing major economies in the world, with fast expanding business opportunities and an average annual GDP growth rate of over 5%, with its economy in 2012 surpassing that of the United Kingdom. However, its growth decelerated in 2013 and the country entered into a deep recession in 2014. Per capita GDP decreased 4.4% in 2016 for a combined drop of almost 10% over two years. While unemployment stood at just 6.5% as recently as 2014, it ended 2017 above 13%. From 2017, however, the economy started to recover again, with a 1% GDP growth in the first quarter. In the second quarter the economy grew 0.3% compared to the same period of the previous year, officially, but slowly, exiting the recession. According to OECD forecasts, Brazil's GDP growth would pick up to 2.2% this year and 2.4 % in 2019. Unemployment has also turned around falling by over a percentage point from its 14% peak earlier this year. Lower inflation and interest rates will further support a gradual economic recovery.

The long and deep recession seems to be over, but more needs to be done. Brazil remains a highly unequal country, recent corruption allegations have revealed significant challenges in economic governance and the situation of its fiscal accounts is also challenging, with high and rising public debt. Gross public debt has in fact increased by approximately 20 percentage points of GDP over the last 3 years and stands around 75% of GDP. In 2016, Brazil spent 16% of its budget on interest payments on government debt, which is held by investors, business and upper middle-class savers. This was more than on education and health (9%). According to the 2018 survey on Brazil, published by the OECD, interest payments were the second biggest outlay in the budget, beaten only by social benefits (35%), which were mostly pensions. Given that Brazil's pension system benefits disproportionately relatively better off public servants, Brazil's budget actively benefits the wealthy over the poor and leaves no money for investment. Without an urgent reform (expected by 2019), pension expenditure will more than double by 2060, leading to unsustainable fiscal dynamics.

Improving the effectiveness of public spending, particularly public transfers, will be crucial for further social progress. At present, a large and rising share of social benefits is paid to households that are not poor, which reduces their impact on inequality and poverty. Public transfers to the corporate sector, which have increased markedly over recent years, also need adjustment. These transfers, often granted in the form of tax exemptions or subsidized lending, have not been associated with visible improvements in productivity or investment, but they benefitted primarily the more affluent, besides creating fertile ground for corruption and political kick-backs.

The OECD report looks at other distortions needing to be untangled. Among them, the high tax burden. Manufacturing companies in Brazil spend an average of nearly 2,000 hours a year preparing their taxes compared with 800 for Venezuela and less than 200 for the US. Furthermore, Brazil has the highest applied import tariffs of the countries listed in the report, about double the level of China and four times that of the US. Brazil has not gained new markets for its exports in recent years. In terms of imports and exports as a percentage of GDP Brazil is the least open country on the OECD's list, less even than Argentina. Lastly, a factor that increases inequality and costs in the economy is how much Brazilians overpay for consumer goods and services.

President Michel Temer, that took over from August 2016 as interim President after the impeachment of former President Dilma Rousseff, is now pursuing corrective macroeconomic, marketoriented policies to stabilize the economy; but the outcome of Brazil's October 2018 presidential election is still uncertain, posing risks to its continuity.

The proposed economic reforms aim to slow the growth of government spending and reduce barriers to foreign investment. Congress approved a landmark constitutional federal spending cap and is debating complementary constitutional reforms to curb social security spending. Additional reforms to increase labor market flexibility and to rationalize Brazil's complex tax system are also on the agenda. International capital markets have recognized Temer administration efforts, lowering risk premiums significantly

from 2015 peak levels and boosting the value of the real. Both portfolio and direct investors, however, remain sensitive to political uncertainties. Brazil has been taking steps to improve infrastructure and education, expand trade and increase the presence of multinational businesses in the development of Brazil's huge oil reserves. Immense natural resources, a strong industrial base, a sizeable domestic market and a large and relatively diversified economy makes Brazil an attractive country for investors.

Health profile - With the creation of the National Health System (Sistema Único de Saúde – SUS) some 30 years ago, Brazil was one of the first and few countries outside the OECD (Organization for Economic Cooperation and Development) to integrate the goal of universal health coverage in its legislation, recognizing health as a right of citizens and a responsibility of government. The 1988 constitution, in fact, enshrined health as a citizens' right, requiring the state to provide universal and equal access to health services. Its National Health System is based on decentralized universal access, with municipalities providing comprehensive and free healthcare to each individual in need (citizen or anyone legally residing in Brazil), with a public sector covering almost 75% of the population and an expanding private sector offering health services to the rest of the population.

The public sector is funded through a variety of taxes and social contributions collected by the three levels of government (federal, state and municipal). The states receive money from the federal government, while the municipalities receive funding from both the federal and state governments.

SUS provides healthcare through a decentralized network of clinics, hospitals and other establishments, as well as through contracts with private providers (subsidized by the federal government via the Social Security budget). SUS is also responsible for the coordination of the public sector. The private sector includes a system of insurance schemes known as Supplementary Health which is financed by employment-based or individually purchased private insurance.

The public and private components are thus distinct but interconnected, as people can use both, depending on ease

of access or their ability to pay. The law states that "health assistance is open to private enterprise", evidencing the existence of two health sub-systems within Brazil. The SUS is the public face of the system and is characterized by public financing and public/private delivery. It also serves a portion of those covered by private health insurance. The SUS aims to provide universal and free at the point of delivery healthcare services, through two main lines of action: the Family Health Program (Programa Saúde da Família), where family health teams provide primary care and act as gatekeepers to determine access to more specialized and hospital-based services; and a network of public and SUS-contracted private clinics and hospitals which delivers secondary and tertiary care nationwide. The private health sector offers duplicate coverage for most healthcare services.

Through the creation of the SUS, Brazil laid the foundations for a better health system and contributed to improving the quality of life of its population. The many measures have led to huge health gains, with an infant mortality rate of about 14 per 1,000 live births, down from about 27 in 2000. Maternal mortality has also been cut in half since 1990. The average Brazilian only lived to about 66 in 1990; today, life expectancy is at 75. The SUS is cherished, by rich and poor Brazilians alike, as a protection against steep medical bills with Brazil having the lowest rate of catastrophic health expenditures (2.2 %) of nearly any other country in the region, achieving higher level of financial protection than other countries such as Chile. Mexico and even the U.S..

The SUS triggered a fundamental restructuring of how the health system is governed; a process of decentralization and new arrangements for sharing of responsibilities across federal, state and municipal levels; as well as a gradual increase of public spending on health. The increase in health spending was accompanied by an improved allocation of federal and state resources in favour of the poorest parts of the country and segments of the population. This contributed to a significant improvement in access to primary healthcare services, which in turn has led to a reduction in avoidable mortality and hospital admissions from The proposed economic reforms aim to slow the growth of government spending and reduce barriers to foreign investment.



primary care sensitive conditions. Overall, in a twenty-year period, the number of primary care facilities increased from 2.2 per 10,000 inhabitants in 1990 to 3.6 in 2009, while the number of primary care consultations per person increased by 70 % during the same period. In large part, this reflected the introduction and expansion of the Family Health Program.

All three levels of government – federal, state and municipal – have worked to encourage the population to use and benefit from the health system through the Family Health Program and through the deployment of community health workers or agentes de saúde working with the poor. Created in 1994, the Family Health Program - Brazil's main primary healthcare strategy - seeks to provide a full range of quality healthcare to families in their homes, at clinics and in hospitals. Today, roughly 40,000 health centres are active in nearly all Brazil's 5,570 municipalities, covering well over 100 million people. A family health team includes a family physician, a nurse, a nurse assistant and five to seven community health workers; when expanded, it includes the oral healthcare team, with a dentist, a dental hygienist and a dental assistant. The Family Health Program has been an important factor in reducing child mortality and improving other health indicators, especially in the country's poorer North and Northeast regions. Even if long queues at hospital emergency departments, beds spilling into corridors, outdated and malfunctioning equipment and a scarcity of doctors and medicine in rural areas remain common complaints, Brazil's public health system has brought quality healthcare to millions of poorer inhabitants who were previously denied even basic care.

But several are the challenges. First. notwithstanding heavy demand for healthcare services, the government has only modestly increased spending for SUS and federal healthcare spending is minimal at best, failing to meet ongoing **needs.** Brazil spends on average 9 % of its GDP on healthcare (by comparison the U.S.'s 16-18 %) with less than 50% of health financing coming from public sources, one of the lowest shares in the OECD area. Competing with SUS, there is a vigorous market of private insurers and private providers, amounting to approximately 55 % of health financing: private health insurance covers more than 70 million people and generates revenues of more than 40% of the federal funding on healthcare, and direct out-of-pocket (OOP) expenses represent as much as one-third of total healthcare expenses. This mix of health financing makes the health system regressive: the lowest income decile, which accounts for 1% of the total country's income, is responsible for 1.8% of the total OOP expenditure, while the highest income, who have 46% of wealth, are responsible for only 37% of total OOP. Put differently, OOP represents 7% of family income for the poor, while only 3% for the richest, highlighting the difficulties of the public system to ensure quality access to underprivileged populations. This quality gap between the public system and private providers also helps to explain a soaring market for private health insurance (an increase of more than 50% in the last decade). On top of this, public health policies have helped the development and maintenance of this parallel private market: federal government tax exemptions to private expenses with healthcare have doubled in the last decade and now account to as much as a quarter of total public financing with healthcare, depriving the public system from important financing that could be directed towards a higher investment in the public system around the country.

Second, SUS hospitals and the Family Health Program have often had a difficult time treating individuals in hard to reach areas, such as the Amazonian region while individuals often have to wait a long period of time for prevention and treatment services. Government-funded hospitals and clinics offer quality medical services but often time there is shortage of essential infrastructure, such as beds (only about 2 hospital beds for every 1,000 people), Xray machines. On the contrary, the private system comes with shorter wait times, high quality and well-equipped facilities and, even if high-earners tend to visit private doctors, they also turn to the public system to get costly procedures.

On this regard, people with private insurance report having better access to preventive and curative services through their insurance, but often receive vaccines, high-cost services and complex procedures such as transplants through the SUS, crowding out people who have no choice but to use the SUS.

There are some 6,761 hospitals in Brazil. Of these hospitals, 70 % are private/not for profit hospitals and over 50% of hospitals are found in 5 states: São Paulo, Minas Gerais, Bahia, Rio de Janeiro and Parana. The public hospital infrastructure required

hospitals to be spread over a territory of 8,516 million square kilometers, as such the public hospital infrastructure relies on a vast network of small hospitals where over 55% of public hospitals have less than 50 beds. Brazil is one of the leading medical tourism destinations in South America and has some of the highest quality hospitals in Latin America, attracting patients from neighbouring countries, mostly for plastic surgery, cancer and cardiovascular treatment.

What's more, there is a high level of inequality in medical technology and infrastructure, with larger, more affluent municipalities able to provide better technological equipment and medical care. SUS funding is split between the federal, state and municipal governments, creating disparities and misuse of public funds in the system. Brazilians in the south tend to live better, healthier lives than their poorer northern countrymen. Infant mortality rate of the north is twice as high as that of the south. The richest fifth of Brazil's population is twice as likely to receive prenatal care as the poorest fifth.

And finally, there is a chronic shortage of doctors and nurses, especially in rural areas. Many hospitals are also poorly managed, lacking autonomy from state governing boards.

Over the years, within the "Mais Medicos" (More Doctors) program, the government imported doctors from abroad, primarily Cuba, to serve the poor and those in inadequately served rural areas. Mais Medicos participants provide primary care and are expected to serve for three years, while Brazil expands long-term plans to put more stu-

dents in medical school. Brazil has between 360,000 – 475,000 active doctors (numbers vary according to different sources), of which over half are specialists. Most doctors are concentrated in the richest areas: the state of Rio de Janeiro has 3.44 doctors per 1,000 residents, compared with less than one per 1,000 people in Acre, far away on the Bolivian and Peruvian borders or 0.58 in the poor north-eastern area of Maranhao.

The public health system will need to continue to develop - improving the quality and coordination of care, continuing the expansion of primary care coverage, addressing the significant barriers to accessing specialized and high-complexity care and reducing the relatively high level of dependence on private spending to finance the health system. These challenges are expected to become more pressing in the future, as the Brazilian population ages and the national health system needs to face the double burden of infectious diseases and the increased risk of non-communicable diseases such as cancer, cardiovascular disease as well as trauma resulting from violence and accidents, obesity and diabetes. Nearly half of Brazilians are overweight (46.6 % in 2013 up from 42.7 % in 2006, according to figures released by the Ministry of Health) and about 15 % are obese. Among the reasons for the rapid shift from malnutrition to obesity is Brazil's newish middle class-36 million people who climbed out of extreme poverty in the past few decades, now struggling with non-communicable diseases, being junk food the first thing that comes with economic development.

Industry Profile - In spite of political uncertainty, the healthcare industry is expected to grow. To create a more dynamic business environment, Brazil would need to streamline public sector governance, both at the federal and sub-federal levels, with a view to reforming the notoriously complex tax system, ending fiscal competition among federative states; modernizing the outdated labour regime; cutting red tape and delays (e.g. for starting a business and for processing intellectual property rights applications); and increasing transparency, including in the operations of enterprises with public participation. The Government of Brazil is in fact the nation's largest buyer of healthcare goods

Brazil health indicators, comparison with other countries

Health Indicators (2015)	Brazil	Argentina	Germany	USA
Maternal mortality ratio (per 100 000 live births)	44	52	6	14
Neonatal mortality rate (per 1000 live births)	8.9	6.3	2.1	3.5
Under-five mortality rate (probability of dying by age 5 per 1000 live births)	16.4	12.5	3.7	6.5
Life expectancy at birth (both sexes)	75	76.3	81	79.3
Healthy life expectancy at birth (years), both sexes	65.5	67.6	71.3	69.1

Source: WHO

and services but navigating the government procurement process is challenging. Exporters may find themselves at a competitive disadvantage if they do not have a significant in-country presence — whether via established partnerships with Brazilian entities or some type of Brazilian subsidiary.

There are around 4,000 manufacturers of medical and dental products in Brazil and over 10,000 distributors. Many of the largest multinational companies have set up manufacturing facilities in Brazil to reduce costs and to be more competitive within the public system. For most small and medium-sized exporters, it is essential to work through a qualified representative or distributor when developing new business. Brazil's business culture relies heavily upon the development of strong personal relationships and requires intimate knowledge of the local business environment. In addition to high tariffs, there is a complex legal system and customs procedures. In 2016, imports of medical products and devices have suffered a 16 % reduction from previous year but are expected to grow in the near future. The value added tax on sales and services (ICMS) exemption is expected to continue for a few products until September 2019. A few notable growth areas were in dental products, where imports increased 10.6 % and in imaging diagnostics, where imports increased by 32.4 %.

ANVISA, the Brazilian Health Regulatory Agency, monitors the price of medical products and pharmaceuticals and regulates commercialization and registration. Foreign companies must have a Brazilian representative or establish a local office to submit the registration of products to AN-VISA. Other government bodies involved in the introduction of new medical products are the National Institute of Metrology, Quality and Technology (INMETRO), certifying electromedical devices and implants and the National Commission for Incorporation of Technologies in the Brazilian public healthcare system (CO-NITEC) which incorporates new medical technologies in the public health system.

Brazil is ranked among the top ten largest pharmaceutical markets in the world, accounting for 3.5 % share of the world market. While Brazil hosts manufacturing plants of some of the largest international pharmaceutical companies, local industries are mostly

	Brazil	Germany	USA
Skilled health professionals density (per 10 000 population), 2005–2015:	93.0	176.0	117.8
Physicians density (per 10 000 population), 2007-2013:	18.9	38.9	24.5
Radiotherapy units per million population (public sector only), 2013:	1.74	6.4	12.37 (not specified if data are delivered for public or private sector)

Sources: WHO, World Health Statistics

focused on the production of generic and similar brand medicines. Generics comprise 29 % of Brazilian's pharmaceutical market and to expand the access of the population to drugs, incentives have been offered for marketing generic products, which cost an average of 40% less than brand-name products. Also, public laboratories supply chronic disease medicines that are distributed for free or at discounted prices to the public. Brazil aggressively negotiates drug prices to help keep prescriptions cheap and available.

More info on registration of medical products at ANVISA:

http://portal.anvisa.gov.br/registros-eautorizacoes/produtos-para-a-saude/ produtos/registro and http://portal.anvisa.gov.br/exporting-

Among main sources:

to-brazil

-Extracts from "The hallmark of the Brazilian National Health System (SUS)", Magnus Lindelow, Sector Leader for Human Development for the World Bank. For full article: Brazil.http://www.worldbank.org/en/news/opinion/2013/12/20/brazil-sus-unified-publichealthcare-system-new-study

-Extract from "Exporting to Brazil – Market Overview" by Export.gov.The U.S. Department of Commerce's International Trade Administration collaborates with 19 U.S. Government agencies to bring Export.gov.For full overview on Brazil: https://www.export. gov/article?series=a0pt0000000PAtOAAW&type=Count ry_Commercial__kav

- Extract from "The Brazilian Health System: A tale of two countries", by Pedro Ramos, a medical doctor and holds a Master in Health Management and Economics from Porto University, Portugal. He is currently working as Assistant Director at the Physician-in-Chief Office in a Brazilian hospital. For full report: http://ghnetwork.org/article/the-brazilian-health-system-a-tale-of-two-countries/

- "Flawed but fair: Brazil's health system reaches out to the poor" by WHO (World Health Organization). For full text: http://www.who.int/bulletin/volumes/86/4/08-030408/en/

-Extract from "In Brazil, health care is a right" by Eduardo J. Gomez, special to CNN. Full article at: https://edition.cnn.com/2012/07/13/opinion/gomezbrazil-health-care/index.html

- "What the U.S. Can Learn from Brazil's Healthcare Mess", by Olga Khazan, staff write at The Atlantic. Full article at: https://www.theatlantic.com/health/ archive/2014/05/the-struggle-for-universal-healthcare/361854/

-Hospitalar website: http://www.hospitalar.com/en/the-fair/health-sector

-"The Health System of Brazil" https://www.ncbi.nlm. nih.gov/pubmed/21877078

-WHO data from: http://apps.who.int/gho/data/node.country.country-BRA?lang=en

http://apps.who.int/gho/data/node.main.688?lang=en-WHO, World Health Statistics 2017 and World Health Statistics 2015

- Financial Times, March 2018 https://www.ft.com/content/f3d2cd90-1e46-11e8-aaca-4574d7dabfb6-Extracts from "Towards a more prosperous and inclusive Brazil" by Jens Arnold and Alberto Gonzalez Pandiella, OECD, for full article: https://oecdecoscope.wordpress.com/2018/02/28/towards-a-more-prosperous-and-inclusive-brazil/

-Central Intelligence Unit: https://www.cia.gov/library/publications/resources/the-world-factbook/geos/br.htmlhttps://www.cia.gov/library/publications/resources/the-world-factbook/geos/br.html

	Brazil	Argentina	Germany	USA
Mortality due to non-communicable diseases (Probability of dying from any of cardiovascular disease, cancer, diabetes, chronic respiratory disease between age 30 and exact age 70 (%), 2015)	16.9	17.1	12.0	13.6
Road traffic mortality rate (per 100 000 population), 2013	23.4	16.3	4.3	10.6

Sources: WHO

Shanghai Neuromedical Center and Zhongshan Hospital: Two Examples of Hospital System in China

Author: Claudia Proietti Ragonesi pressoffice@infodent.com

As reported in the last edition of our magazine, thanks to the partnership with Reed Sinopharm, Infomedix International has the opportunity to take part to the fourth edition of The Health Industry Summit (tHIS) in Shanghai, focusing more on the 79th China International Medical Equipment Fair (CMEF Spring 2018). On the third day of our stay we visited Shanghai Neuromedical Center, to learn more about private hospitals in China, and Zhongshan Hospital, the only public hospital to be rated as Model Unit in Shanghai for 28 consecutive years and awarded with other important honorary titles too.

We are reporting such a memorable and very interesting experience at Chinese clinics in the following article.

The Chinese medical system has both private and public hospitals and in a lot of cities there are hospitals which are specifically for foreigners where all doctors speak English.

Most Chinese hospitals are run by the government. As a matter of fact, many physicians were previously quasi-government employees with little freedom in the choice of the hospital to work with. Decades of planned economic policy discouraged physicians from opening their own clinics, and the practice of medicine was generally non-private.

Nowadays, physicians are encouraged to open private clinics or hospitals and those who have been practicing medicine for five years, after receiving national physician licenses, can open their own clinics. China has 16,900 private hospitals as of April 2017, accounting for 57.2% of all hospitals in China.

The number of private hospitals in China has doubled since 2011, according to China's National Health and Family Planning Commission (NHFPC). The number of private health institutions also rose to 444,000, accounting for 45% of all health institutions, said the NHFPC.

The country's healthcare authorities have been relaxing policy controls and encouraging the private sector to build health institutions, said Jiao Yahui, an official with the NHFPC. To continue to encourage private investment, the NHFPC released a series of policy changes to stimulate market vitality, including inviting foreign investment to join the competition.

Hospitals in China are organized according to a 3-tier system that recognises the hospital's ability to provide medical care, medical education, and conduct medical research. Based on this, hospitals are designated as **Primary, Secondary** or

Tertiary institutions.

A primary hospital is typically a township hospital that contains less than 100 beds. They are tasked with providing preventive care, minimal health care and rehabilitation services.

Secondary hospitals tend to be affiliated with a medium size city, county or district and contain more than 100 beds, but less than 500. They are responsible for providing comprehensive health services, as well as medical education and conducting research on a regional basis.

Tertiary hospitals round up the list as comprehensive or general hospitals at a city, provincial or national level with a bed capacity exceeding 500. They are responsible for providing specialist health services, perform a bigger role with regards to medical education and scientific research and they serve as medical hubs providing care to multiple regions.

Further, based on the level of service pro-



vision, size, medical technology, medical equipment, and management and medical quality, these 3 grades are further subdivided into 3 subsidiary levels: A, B and C (甲[jiǎ], 乙[yǐ], 丙[bǐng]). This results in a total of 9 levels. In addition, one special level - 3AAA (三级特等) - is reserved for the most specialised hospitals.

This system is hence referred to in Chinese as 三级十等 (sānjí shíděng), 3 grades and 10 levels.

In China, public hospitals are considered the most important health facilities, providing both outpatient and inpatient care. They also bear major teaching, training and research responsibilities.

However, several problems posts challenges to accessible and affordable hospital healthcare. To begin with, prices for medicine are set unreasonably high to make up for low service price. Doctors are also dissatisfied about their income. Secondly, great tension in patient-doctor relationships sometimes causes conflicts or even violence against doctors (yinao 医闹). Furthermore, patients are not distributed by seriousness among hospitals and lower health facilities, which leads to over-consumption of high-level medical resources in hospitals.

The aim of hospital reforms is to maintain the social welfare nature of public hospitals and encourage them to perform public service functions, thereby providing accessible and affordable healthcare services for the people.

Reforms started as pilot in 2010 in 16 cities. In 2015, a new version of guidelines came out with extra attention given to county-level hospitals. In 2017, public hospital reforms expanded with focus on eliminating drug price difference between hospital pharmacies and wholesales.

Various studies have shown mixed results on the effectiveness of the results. Case survey found that reforms in compensation systems increased service quantity and quality but caused drastic drop in management efficiency. Regional evidence showed that total out-of-pocket expenditure actually increased, despite

the decrease in inpatient medications. Health staff's job satisfaction increased while exposed to higher pressure and overtime working.

The first hospital we visited in our tour was the Shanghai Neuromedical Center, a proprietary hospital in Shanghai specialised in clinical neuroscience.

Shanghai Neuromedical Center



Shanghai Neuromedical Center was founded in 2013 and has been noted as a key livelihood project of the 12th Five-Year Plan of the government of Putuo

District and one of the designed public healthcare hospitals in Shanghai. In addition, it's the largest emergency center located in the northeast of Shanghai.

Equipped with 350 beds, it is a specialist hospital built on the scale of tertiary specialized hospital standards and excels in several comprehensive key areas, especially clinical neuroscience. Shanghai Neuromedical Center receives patients from all over China, since not so common diseases are treated in this hospital. In 2017, Shanghai Neuromedical Center became the Shanghai Clinical Medical School of Qingdao University (the Ninth School of Clinical Medicine).

It is the only one of the proprietary hospitals in Shanghai to recruit postgraduates















and post-doctoral students, and to realize the key university teaching hospital from undergraduates — postgraduates — postdoctoral training.

Key areas of Shanghai Neuromedical Center include functional neurosurgery, neurosurgery, internal neurology, neurorehabilitation and emergency intensive healthcare. But it is not just a specialist hospital. In accordance with the standards of general hospitals, Shanghai Neuromedical Center has set up key departments such as cardiology, general medicine, general surgery, triage, orthopaedics, pain rehabilitation, TCM orthopaedics & traumatology, medical imaging and medical nutrition.

Its performance results for brain and spinal cord tumour operations rank among the top in the country, and epilepsy surgery operations have reached internationally advanced levels. More than 1,200 spinal cord operations and more than 1,500 operations concerning neuromuscular diseases have been performed successfully in Shanghai Neuromedical Center.

First among Shanghai hospitals in providing a ketogenic diet for the treatment of refractory epilepsy in children and malignant tumors. It also possesses Asian's largest nerve electrophysiology center. Introduced the **first neurosurgery operating robot-ROSA** in Shanghai and other six provinces of east China. All directors of departments in Shanghai Neuromedical Center are from tertiary hospitals.

Patients suffering from epilepsy are controlled 24h/24h thanks to electronic stations. The more seriously ill have a per-

sonal video monitor directly connected to the consulting room.

Along the hospital corridors there are many **red banners with gold writings** hung on the walls, donated to Shanghai Neuromedical Center by patients who wanted to thank doctors and hospital staff for their caring.

At present, among the leaders of all disciplines there is I current national director, I former national director, 6 national committee members, and 3 shanghai Municipal committee members. Among them, 8 deans enrol postgraduates and 3 deans recruit post- doctoral students.

In our visit we have been accompanied by Dr Guo Hui who is founder, chairman and director of Shanghai Neuromedical Center. He decided to establish this new clinic to enhance the Chinese





public hospitals situation, since they are in a dreadful state. At the moment his purpose is to buy and improve another public hospital in Henan. Dr Guo Hui, who is post-doctoral of medicine, professor, chief physician and graduate tutor, won the Shanghai "Top Ten Doctors" nomination award in 2015. After obtaining a PhD degree from the School of Medicine at the Shanghai Jiaotong University, he moved to to the United

Key areas include functional neurosurgery, neurosurgery, internal neurology, neurorehabilitation and emergency intensive healthcare.

States to pursue a postdoctoral degree at the University of California in San Francisco. He served as an assistant professor of neurosurgery at New York University Medical Center after graduation. He decided to return to China due to the "outstanding overseas talent introduction plan" launched by the State Ministry of Education.

Since then, he served as director of neurosurgery, leader of functional neurosurgery and director of the wards & laboratories at Beijing Hospital and Shanghai Tongji University Affiliated Hospital of East China in succession.

Dr Guo Hui has been engaged in neurosurgery treatment and research for more than 20 years, since 1993.

He is especially adept at the treatment of functional neurological diseases, such as: epilepsy, Parkinson's disease and cerebral palsy as well as other neurosurgical diseases.

The operation quantity and clinical therapeutic effect of epilepsy surgery performed by Dr Guo Hui, ranking the leading position in Shanghai, have reached internationally advanced levels.

In the afternoon we continued our visit to Zhongshan Hospital, a public clinic where Dr. Zhu Chouwen led us in the various departments of the hospital.





Zhongshan Hospital

Located in 180 Fenglin Road in Shanghai, Zhongshan Hospital, a Budget Management Unit under the National Health and Family Plan-

ning Commission, is a comprehensive teaching hospital affiliated to Fudan University. Founded in 1927, the hospital was the first large-scale general hospital managed by Chinese people. Previously affiliated to Shanghai Medical College, the hospital was first named Sun Zhongshan Memorial Hospital to commemorate Mr. Sun Yat-Sen, pioneer of the Chinese democratic revolution. It was later renamed Zhongshan Hospital. The hospital has been called Zhongshan Hospital affiliated to Shanghai First Medical College and Zhongshan Hospital affiliated to Shanghai Medical University in post-liberation China. It started using its current name from 2001. In December 1991, Zhongshan Hospital was approved by the Ministry of Health as one of the first top tertiary hospitals in Shanghai. With nearly 80 years of development, the headquarters of Zhongshan Hospital now cover an area of 96,501.6 square meters, while the total construction area of the hospital reaches 326,955.28 square meters. It has 2,005 regular hospital beds and 52 clinic divisions. In 2017, the hospital handled 4,152,700 outpatient and emergency visits, discharged 153,261 patients and received 98,146 hospitalized patients for surgery. Among the over 4,345 hospital staff, there is I academician of Chinese Academy of Sciences, 2 academicians of Chinese Academy of Engineering, 1,633 doctors, 1,770 nurses, 584 technicians, 574 professors and associate professors and nearly 400 staff members of management & other staff.

The hospital possesses a wide range of specialties and subspecialties with strong comprehensive strength. Diagnosis and treatment of heart diseases, liver cancer, kidney and lung diseases are the main and featured services of Zhongshan Hospital, taking the lead in the specific fields at home. The hospital has 18 specialties under National Construction Projects of Key



Clinical Specialties, namely, Gastroenterology, Clinical Laboratory, Anaesthesiology, Cardiovascular Medicine, Endocrinology, Thoracic Surgery, Major Coronary Artery Surgery, Clinical Nursing, Traditional Chinese Medicine Encephalopathy Section, Respiratory Medicine, Nephrology, General Surgery, ICU, Oncology, Medical Imaging, Organ Transplantation, Emergency Medicine and Neurology; 3 Clinical Centers (top priorities) for Cardiovascular and Kidney Disease and Liver Cancer and 8 attached Clinical Quality Control Centers of Shanghai Municipality for Nosocomial Infection, Ultrasonic Diagnosis, Respiratory Medicine, Cardiovascular Medicine, Cardio-Thoracic Surgery, General Surgery, Traditional Chinese Medicine Work of General Hospitals and Haemodialysis.

The hospital has several advanced medical

equipment, including Tomotherapy, PET-CT, 320-row and 640-slice high speed spiral CT, tablet-style DSA, linear accelerator, 3.0T MRI, DVSS, SPECT, DR, ICU, Distance Medical Education System and so on.

Since they daily receive a lot of patients from all over China – and from other counties as well, especially from South Korea and South East Asia – fast and accurate equipment is indispensable: GE Healthcare, Siemens, United Imaging are the most used brands in the radiology department, which receives every day 500/700 patients from 7 a.m. to 10 p.m. In a medium-sized hospital we can find 1 or 2 x-ray machines, whereas Zhongshan Hospital has 10 x-ray machines available to output more than 1,000 x-rays every day.









Diagnostic Radiology Department was founded by Prof. Rong Dushan, who was one of the founders of radiology in China. With the joint efforts of Prof. Rong Dushan, Prof. Lin Gui and Prof. Zhou Kangrong, the department has developed into a well-known imaging depart-

ment with leading techniques in China. The department boasts strong technical strength. It has 118 medical staff including 40 physicians and 78 technicians.

The department is equipped with advanced devices and equipment, such as dual source 320 slice CT; 7 sets of MRI, including 4 sets of 3.0T and 3 sets of 1.5T; 14 sets of DR (for gastrointestinal, IVP and bedside examination); 2 sets of digital mammogram machines, 3 flat panel digital subtraction angiography (DSA) machines, and 2 bone density scanners.

Over the past 5 years, the number of patients received in the department has increase by an incremental 10% every year.

The Diagnostic Radiology department has advantages in the following aspects:
a) cancer imaging diagnosis of hepatoma, tumour imaging with small hepatocellular core carcinoma and early diagnosis and post treatment assessment of pancreatic cancer, renal cell carcinoma, breast cancer, gastric cancer, colorectal cancer;

- b) non-invasive imaging diagnosis of coronary heart disease and other vascular disease;
- c) imaging diagnosis and functional assessment of early hepatic fibrosis and cirrhosis;
- d) assessment of organ transplant before and after operation with combined imaging technique.

The establishment of the Diagnostic Radiology Specialist Outpatient Clinic fundamentally changed the old work model of only reading images without contact with the patient. Specialists now directly communicate with patients, investigate patients' medical history and perform examinations. Combined with rich imaging diagnostic and clinical experience, direct patient contact enables our physicians to individualize clinical imaging diagnosis and improve the accuracy of the diagnosis.

Additionally, the department also provides senior specialist outpatient clinic. The nationally renowned radiology professors Prof. Zeng Mengsu and Prof. Jiang Lin provide quality, convenient and focused VIP consultation to patients.









As Shanghai's first HIMSS EMRAM certified Level-6 hospital, Zhongshan Hospital endeavours to build up and improve the clinical information system based on electronic medical records and independently create a "Digital Hospital".

Another department worthy of attention is the **Outpatient Pharmacy**. There are 10 Outpatient Pharmacies in Zhongshan Hospital, we visited the one located at the hospital entrance. **Every day more than 2,000 people receive assistance in this pharmacy and 6,000 kinds of drugs are available – for liver and cardiovascular diseases above all. Since Zhongshan hospital pharmacists must deal with a lot of people and medicines, the hospital has purchased an automated drugs delivery machine**, which processes 50 prescrip-

tions in I hour. One of the pharmacists has the delicate and not easy consulting role, recommending patients on the best medication or specifying how to use it, whereas the others just provide medicines according to the doctor's prescription. In addition to outpatient pharmacy, the **Department** of Pharmacy includes a pharmacy of traditional medicine, an emergency pharmacy, an inpatient pharmacy, a transfer pharmacy, an operation pharmacy (a three-level drug administration center), a drug storehouse, a warehouse for infusion and disinfectants, pharmacy intravenous admixture service (PIVAS), a clinical pharmacy room, a hospital preparation room, a drug analysis room, a pharmaceutical research laboratory and other divisions. There are 182 workers in the department, 7 with senior professional

titles, I with doctoral degree, I7 with master's degree, 78 with bachelor's degree and 68 with college degree. They provide comprehensive professional services in various aspects of pharmacy.

Prof. Lyu Qianzhou is the director and academic leader from 1998, and Associate Chief Pharmacist Zhang Jianzhong is deputy director.

Finally, after being accurately clothed with white coats and medical face masks by the department staff, we visited the **Department of General Surgery.**

The Department of General Surgery of Zhongshan Hospital was founded in 1946 by the renowned professor of surgery Shen Kefei. General Surgery is now









a Key Constructive Discipline of Project 211, a National Key Subject of the Ministry of Education as well as a National Key Subject of Health and Family Planning Committee. After over 60 years of development and dedication, the department enjoys a national reputation with its advanced technology, rigorous work style and selfless work ethics. Many world-famous surgeons have worked here, including Cui Zhiyi, Feng Youxian, Wu Zhaoguang, Meng Chengwei, Wang Chengbei, Wu Zhaohan and Qin Xinyu. The department has 198 beds. It handles 130,000 outpatient visits, 12,000 emergency room visits and performs 8,000 medium or major surgeries yearly. The overall level of the department's medical treatment, teaching and research has been in the national forefront. The department is, in particular, characterized by its research in the field of clinical nutrition, gastrointestinal surgery, biliary surgery, pancreatic surgery and gastroenteric motility, among which studies on gastrointestinal cancer and minimally invasive surgeries have reached the international advanced level.

Currently, with the development of subspecialties as its focus, multidisciplinary treatment, endoscopy and minimally invasive surgery as important platforms, the department is gradually growing into a diagnostic and treatment center for untreatable and critical illnesses in the field of general surgery nationwide and a teaching and training ground for

standardized diagnosis and treatment.

The department's academic team is highly qualified and appropriately structured, with more than 10 members taking core academic positions in professional organizations such as the Chinese Medical Association. In the future, the Department of General Surgery will continue to uphold the spirit of Zhongshan Hospital, put patients first, work diligently to accumulate knowledge and experience in order to become Asia's leading center for diagnosis, treatment, education and clinical research of general surgery diseases.

Zhongshan Hospital has 13 National Key Disciplines, 2 Provincial Engineering Research Centers, 4 Provincial Key Laboratories, 2 Key Disciplines of Shanghai Municipality, 2 Key Disciplines of Clinical Medicine of Shanghai, 3 Key Medical Disciplines of Shanghai Municipality, 2 Key Weak Disciplines of Shanghai Municipality, 2 Key Disciplines of Public Health of Shanghai Municipality, 7 of research institutes in Shanghai and 12 of research institutes in Fudan University.

Since 2005, the hospital has undertaken more than 20 projects of Important National Basic Research Program of China (973 Program), National High Technology Research Program of China (863 Program), National Support Plan, and other major programs of specific subject studies, 2 projects of the Program for Innovative Research Team of the Ministry of Educa-

tion, an Innovative Research Group Project of National Natural Science Foundation of China, nearly 500 other projects of the National Natural Science Foundation of China and over 70 Provincial Personnel Training Projects of various types.

The annual research fund has reached 100 million yuan. The quantity and quality of SCI theses have been increasing steadily, with 471 papers published in 2014 and the total impact factor reaching 1,477.777 scores.

In the recent decade, the hospital has been granted 8 national awards, one of which is first prize and 52 provincial awards, among which 15 are first prizes. Meanwhile, the hospital has applied for 286 patents, with 194 licensed at home and 8 licensed abroad.

Zhongshan Hospital has set up 18 doctoral programs, 21 master's programs and one mobile post-doctoral station for Clinical Medicine of Fudan University. There are 138 Master supervisors and 91 doctoral supervisors among its staff. The hospital has 15 standardization training bases for residents and 28 standardization training bases for specialist physicians approved by the National Health and Family Planning Commission and the Shanghai Health and Family Planning Commission. It is a demonstration standardization training base for residents and the first demonstration (pilot) training base for general practice teachers approved by the National





Health and Family Planning Commission. Each year the hospital runs the Continuing Medical Education Program for over 60 times, recruiting more than 700 visiting doctors, thus training many senior medical talents for the country.

In recent years, the hospital has been honoured a second prize of National Teaching Achievement Award, a special prize and a second prize of Shanghai Teaching Achievement Award, and as main research institute, a special prize of National Teaching Achievement Award and Shanghai Teaching Achievement Award respectively.

Zhongshan Hospital has been rated as Model Unit in Shanghai for 28 consecutive years, and granted the National Model Unit, National Labour Award, National Advanced Unit of Hospital Medical Insurance Management, Model Unit of Shanghai Health System, National Most Popular Top Tertiary Hospital, Shanghai Excellent Hospital of High-Quality Nursing Service, Shanghai Advanced Unit of Hospital Transparency and Democratic Management, Shanghai Volunteer Service Base and other important honorary titles.

Adhering to its "patient-centered" spirit and advocating its motto of being "rigorous, pragmatic, united and dedicated", Zhongshan hospital endeavours to build itself into an Asian leading and internationally renowned hospital with its rigorous professional style, exquisite medical skills and strict scientific management.

Both the visit to Shanghai Neuro-medical Center and Zhongshan Hospital helped us change our perception of the Chinese hospital system, whether private or public clinics. Friendly and experienced staff, English-speaking physicians, latest generation medical equipment, clean and tidy rooms: that's the common point between these two organizations and that's what we didn't expect to find in a Chinese hospital.

Especially the award-winning Zhongshan Hospital surprised us with its huge amount of first-rate radiology machineries, various departments that can handle many different diseases, numerous employees and a wide, full bloom garden which makes you forget to be in a hospital.







Asia-Pacific Dermatology and Aesthetic

Conference & Exhibition

5 - 7 December 2018

Singapore

SUNTEC Convention & Exhibition Centre

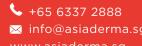
Dubai World famous Dermatology Event now coming to Asia!















Engineers Develop A.I. System to Detect Often-Missed Cancer Tumors

A team at UCF's Center for Research in Computer Vision have created a system that can detect trace amounts of lung cancer with 95 percent accuracy

University of Central Florida, August 21, 2018 – Doctors may soon have help in the fight against cancer thanks to the UCF's Center for Research in Computer Vision.

Engineers at the center have taught a computer how to detect tiny specks of lung cancer in CT scans, which radiologists often have a difficult time identifying. The artificial intelligence system is about 95 percent accurate, compared to 65 percent when done by human eyes, the team says.

"We used the brain as a model to create our system," says Rodney LaLonde, a doctoral candidate and captain of UCF's hockey team. "You know how connections between neurons in the brain strengthen during development and learn? We used that blueprint, if you will, to help our system understand how to look for patterns in the CT scans and teach itself how to find these tiny tumors."

The approach is similar to the algorithms that facial-recognition software uses. It scans thousands of faces looking for a particular pattern to find its match.

Engineering Assistant Professor Ulas Bagci leads the group of researchers in the center that focuses on Al with potential medical applications.

The group fed more than 1,000 CT scans – provided by the National Institutes of Health through a collaboration with the Mayo Clinic – into the software they developed to help the computer learn to look for the tumors.

Graduate students working on the project had to teach the computer different things to help it learn properly. Naji



"We used the brain as a model to create our system" says Rodney LaLonde

Khosravan, who is pursuing his doctorate degree, created the backbone of the system of learning. His proficiency at novel machine learning and computer vision algorithms led to his summer as an intern at Netflix helping the company with various projects.

LaLonde taught the computer how to ignore other tissue, nerves and other masses it encountered in the CT scans and analyze lung tissues. Sarfaraz Hussein who earned his doctorate degree this past summer, is fine-tuning the Al's ability to identify cancerous versus benign tumors, while graduate student Harish Ravi Parkash is taking lessons learned from this project and applying them see if another Al system can be developed to help identify or predict brain disorders.

"I believe this will have a very big impact," Bagci says. "Lung cancer is the number one cancer killer in the United States and if detected in late stages, the survival rate is only I7 percent. By finding ways to help identify earlier, I think we can help increase survival rates."

The team will present its finding in September at the largest premier conference for medical imaging research – the MICCAI 2018 conference in Spain. The team's work has been published in advance of the conference.

The next step is to move the research project into a hospital setting; Bagci is looking for partners to make that happen. After that, the technology could be a year or two away from the marketplace, Bagci says.

"I think we all came here because we wanted to use our passion for engineering to make a difference and saving lives is a big impact," LaLonde says.

Ravi Prakash agrees. He was studying engineering and its applications to agriculture before he heard about Bagci and his work at UCF. Bagci's research is in the area of biomedical imaging and machine learning and their applications in clinical imaging. Previously, Bagci was a staff scientist and the lab manager at the NIH's Center for Infectious Disease Imaging lab, in the department of Radiology and Imaging Sciences.

Source: UCF, article by Zenaida Gonzalez Kotala -https://today.ucf.edu/engineers-develop-system-detect-often-missed-cancer-tumors/



New Method Refines Cell Sample Analysis

Innovation in the field of biomedicine: Researchers have developed a novel method which increases more than tenfold the number of proteins that can be visualized per sample, making it possible to generate a comprehensive map of cellular organization across the various cellular states. This highly sophisticated and refined view can be used to advance precision medicine and is already being applied in cancer medicine.

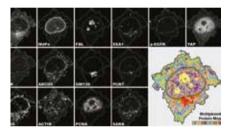
University of Zurich, August 2, 2018 - Researchers at the University of Zurich have developed a novel method for analyzing cells and their components called Iterative Indirect Immunofluorescence Imaging (4i). This innovation greatly refines the standard immunofluorescence imaging technique used in biomedicine and provides clinicians with an enormous amount of data from each individual sample. 4i makes it possible to observe the spatial distribution of at least 40 proteins and their modifications in the same cell for hundreds of thousands of cells simultaneously at various levels, from the tissue down to the organelle level.

Ten times more proteins visualized at the same time

"4i is the first imaging technique which gives us a multiplexed tissue-to-organelle view of biological samples. We can, for the first time, link multiplexed information derived at the tissue, cellular and subcellular level in one and the same experiment," says Gabriele Gut, lead author of the study and postdoctoral researcher at the Institute of Molecular Life Sciences at UZH.

Immunofluorescence (IF) uses antibodies to visualize and locate proteins in biological samples. While the standard IF method usually marks three proteins, 4i uses off-the-shelf antibodies and conventional fluorescence microscopes to visualize ten times more proteins by iterative hybridization and removal of antibodies from the sample. "Imagine cell biologists to be journalists. Every experiment is an inter-

view with our cells. With conventional IF I can ask three questions, whereas with 4i I can have a discussion on more than 40 topics," explains Gabriele Gut.



Map provides systematic survey of cellular landscape

Once acquired, the huge amount of data must then also be able to be analyzed -the next hurdle for the researchers. "We generated images with subcellular resolution for thousands of cells for 40 channels for more than 10 treatment conditions. The human eye and brain cannot process the biological complexity collected by 4i." To make full use of the 4i data, Gabriele Gut developed a new computer program for visualization and analysis called Multiplexed Protein Maps. It extracts the multiplexed fluorescence signal for millions of pixels and generates an abstract but representative map of the multiplexed protein distribution in cells.

The researchers were thus able to generate a systematic survey of the cellular landscape: They managed to visualize the spatial intracellular organization of most mammalian organelles along the cell cycle and in different microenvironments.

Advancing precision medicine

The applications for 4i and multiplexed

protein maps are manifold, ranging from basic research to precision medicine. "We hope that 4i and multiplexed protein maps will help researchers to understand processes better that have been at the center of biological research for decades," says Gut. At the same time, the researchers plan to use these technologies to advance the frontiers of precision medicine, particularly in cancer diagnosis and therapy selection.

New method already being applied in tumor therapy

The new Iterative Indirect Immunofluorescence Imaging (4i) analysis method can also be used to determine the effects of pharmacological substances on the organization and physiology of cells. It is currently being used in a translational research collaboration with clinicians and a pharmaceutical company with the aim of improving treatment outcome of cancer patients. Lucas Pelkmans, professor at the Institute of Molecular Life Sciences at UZH, and his research team aim to characterize tumor cells of patients who have been treated with different cancer medications. The scientists hope that the lab results will provide information to support clinical decision-making for the individual treatment of patients. Moreover, the researchers plan to implement 4i and multiplexed protein maps on tissue sections of tumors to identify relevant biomarkers and thus improve diagnoses and prognoses for cancer patients.

Source: University of Zurich. Article taken from: https://www.sciencedaily.com/releases/2018/08/180802141553.htm

High-Strength MRI May Release Mercury from Amalgam Dental Fillings

Exposure to ultra-high-strength MRI may release toxic mercury from amalgam fillings in teeth, according to a new study appearing online in the journal *Radiology*. The effect was not seen, however, in the lower strength, more commonly used 1.5-Tesla (T) MRI.

Oak Brook, III.- June 26, 2018— Amalgam fillings, also known as silver fillings, have been a staple of dentistry for many years. Amalgam consists of approximately 50 percent mercury, a known toxin that can cause a host of harmful effects in humans. Despite the presence of mercury, the U.S. Food and Drug Administration considers amalgam fillings safe for adults and children older than age six.

"In a completely hardened amalgam, approximately 48 hours after placing on teeth, mercury becomes attached to the chemical structure, and the surface of the filling is covered with an oxide film layer," said the study's lead author, Selmi Yilmaz, Ph.D., a dentist and faculty member at Akdeniz University in Antalya, Turkey. "Therefore, any mercury leakage is minimal."

Previous research has found that exposure to the magnetic fields of MRI could cause mercury to leak from amalgam fillings. This concern has been heightened by the recent arrival of ultra-high-strength 7-T scanners in the clinic. The stronger magnetic field of 7-T MRI yields more anatomical detail, but its effects on amalgam dental fillings have not been studied.

To learn more, Dr. Yilmaz and colleague, Mehmet Zahit Adişen, Ph.D., evaluated mercury released from dental amalgam after 7-T and 1.5-T MRI in teeth that had been extracted from patients for clinical indications. While 7-T MRI was approved by the FDA in 2017, it has extremely limited availability. The lower-strength 1.5-T MRI is widely available and commonly used for patient exams.

"In our study, we found very high values of mercury after ultra-high-field MRI"
Dr. Yilmaz said.
"This is possibly caused by phase change in amalgam material or by formation of microcircuits, which leads to electrochemical corrosion, induced by the magnetic field."



The researchers opened two-sided cavities in each tooth and applied amalgam fillings. After nine days, two groups of 20 randomly selected teeth were placed in a solution of artificial saliva immediately followed by 20 minutes of exposure to 1.5-T

or 7-T MRI. A control group of teeth was placed in artificial saliva only. When the researchers analyzed the artificial saliva, the mercury content in the 7-T, I.5-T and control group was 0.67 ± 0.18 , 0.17 ± 0.06 and 0.14 ± 0.15 parts per million (ppm), respectively. At 0.67 ppm, the mercury content in the 7-T group was approximately four times the levels found in the I.5-T group and the control group.

"In our study, we found very high values of mercury after ultra-high-field MRI," Dr. Yilmaz said. "This is possibly caused by phase change in amalgam material or by formation of microcircuits, which leads to electrochemical corrosion, induced by the magnetic field."

An important point of discrimination concerning safety and hazard to human health is the amount of mercury that is absorbed by the vital tissues. "It is not clear how much of this released mercury is absorbed by the body," Dr. Yilmaz said. Further studies may be warranted, Dr. Yilmaz added, to evaluate the relationship between high-field MRI and release of mercury from dental amalgam. The researchers have three ongoing projects focused on phase and temperature changes of dental amalgam across different magnetic fields. As no evidence of harmful effects was found in the 1.5-T group, patients with amalgam fillings should not be unduly concerned about having an MRI exam.

Source: News from the RSNA Journal Radiology - https://www.radiologyinfo.org/en/news/ target.cfm?ID=745

Taken from RSNA website, section Media, Press Releases: http://press.rsna.org/timssnet/media/pressreleases/index.cfm



How Blueberries Help to Kill Cancer Cells

Blueberries are sometimes branded a "superfood," and for good reason; they are packed full of antioxidants that offer a wealth of health benefits. Now, a new study has uncovered another use for these little berries: helping to treat cancer.

By studying human cervical cancer cell lines, a team of researchers discovered that adding blueberry extract to radiation therapy can significantly improve treatment efficacy. Lead study author Dr. Yujiang Fang, who works in the School of Medicine at the University of Missouri-Columbia, and colleagues recently reported their results in Pathology and Oncology Research. According to the American Cancer Society (ACS), around 12,820 new cases of cervical cancer will be diagnosed in the United States this year, and more than 4,200 women are expected to die from the disease. Radiation therapy remains a primary treatment for cervical cancer. It involves using highenergy radiation to destroy cancer cells. "For some cancers, such as late stage cervical cancer, radiation is a good treatment option," says Dr. Fang. "However, collateral damage to healthy cells always occurs." For their study, the researchers set out to determine whether or not blueberry extract could be used as a radiosensitizer, which is a compound that makes cancer cells more vulnerable to radiation therapy.

Blueberry extract 'tricks' cancer cells

In previous research, Dr. Fang and colleagues revealed that resveratrol — a compound present in grapes and red wine — helped to sensitize prostate cancer cells to radiation therapy.

The researchers note that blueberries also contain resveratrol, as well as flavonoids. "Flavonoids," notes Dr. Fang, "are chemicals that may have antioxidant, anti-inflammatory, and antibacterial properties."

The team tested blueberry extract on human cancer cell lines for their latest study. The extract was tested both alone and in combination with radiation therapy. These effects were compared with those of radiation therapy alone.



"Blueberries are very common and found all over the world. They are readily accessible and inexpensive. As a natural treatment option for boosting the effectiveness of existing therapies, I feel they would be enthusiastically accepted." Dr. Yujiang Fang

While radiation therapy alone reduced the number of cancer cells by 20 percent, the blueberry extract alone led to a 25 percent reduction in cancer cells. However, when the blueberry extract and radiation therapy were combined, the number of human cervical cancer cells fell by around 70 percent. The researchers explain that the blueberry extract does not only make cancer cells more sensitive to radiation, but it also reduces the abnormal cell growth that fuels cancer development.

"Cancer cells avoid death by remodeling themselves," continues Dr. Fang. "Along with reducing cell proliferation, the extract also 'tricks' cancer cells into dying. So, it inhibits the birth and promotes the death of cancer cells."

While further studies are needed, the researchers say that their findings indicate that blueberries may be a promising treatment strategy for cervical cancer and other cancer types.

Source: Article by Honor Whiteman, taken from MedicalNewsToday - https://www.medicalnewstoday.com/articles/320517.php



INDEX, Organizer of 18 Successful Editions of Dubai Derma to Launch the First Edition of Asia Derma in Singapore

Inspired by the successful Dubai Derma, INDEX Conferences and Exhibition, member of INDEX Holding, launches the first edition of Asia Derma Conference and Exhibition in Singapore, dedicated to all neighboring countries within the Asia-Pacific region. The Asia-Pacific Dermatology & Aesthetic Conference & Exhibition-Asia Derma - is held from 5th to 7th December 2018 and will feature some of the best regional and international minds and faculty experts in the clinical and aesthetic dermatology, enriching the scientific program. Its co-located trade exhibition will offer exhibitors and buyers as well as medical end users unparalleled opportunities to discover new products, devices and latest technologies.

We have interviewed Dr. Abdul Salam Al Madani, INDEX Holding Chairman, to learn more about the new event.

Dr. Al Madani, thank you for your time and for your respectable consideration of our magazine. The Dubai world famous dermatology event, the DERMA Show has a new, upcoming edition in Asia, precisely Singapore, next December. What made you take this decision? Undoubtedly, skin diseases and their relevant laser surgeries and microsurgeries have become among the most important scopes of competitiveness on the global health scene and one of the components for therapeutic tourism revitalization. In addition, they have become a form of investment that has its presence and strength, derived from institutions, hospitals and specialized international centers, as well as the parallel industry and the large market which is expanding, day by day, with the latest hi-tech equipment and diagnostic, preventive and therapeutic facilities.

In addition to that and inspired by 18 successful editions of the famous Dubai Derma in Dubai, we have taken the initiative to organize the Asia-Pacific Dermatology and Aesthetic Conference & Exhibition - Asia Derma in Singapore which will be focusing on the Asia-Pacific markets. Asia Derma is set to be an exclusive platform dedicated to dermatologists, skin specialists and in-



Dr. Abdul Salam Al Madani, INDEX Holding Chairman

dustry leaders in Asia-Pacific region. The event will be held from the 5th to the 7th December 2018 at SUNTEC Convention & Exhibition Centre in Singapore.

Why did you choose Singapore as the place for Asia Derma? Can you give us your personal outlook on the markets for dermatology in the Asia Pacific Area?

Dermatology in Asia has always been a rich and robust specialty. What we promise in Singapore is a medium that will help showcase this, shed the spotlight on the specialty and the success of those who

have practiced it. Information, knowledge and education will be key elements shared and the inaugural edition of Asia Derma will help do that.

Moreover, while the global dermatology market is projected to reach 33.7 billion dollars in 2022, latest estimates by GBI market research suggest that the 'Asia-Pacific' region is the fastest growing market for dermatology devices leaving North America and Europe behind. With the increasing prevalence of skin disorders, increasing awareness of aesthetic procedures, developing technologies and

W

rising disposable income in emerging markets, the Asia Pacific region is today driving the industry's quest for effective skincare solutions. The 'Asia Derma' Conference and Exhibition has made its debut at the right opportune time in Singapore, which is the business and financial nerve centre of the Asia-Pacific region, and we hope visitors and participants attending this global international skincare event will take advantage of the highly interactive environment provided at the venue. Moreover, according to the latest news from the dermatology market, the Asia-Pacific dermatology treatment devices market will cross USD 1,891.20 million by 2025. It was valued at USD 747.06 million in 2017, which means that the market is growing at a CAGR of 12.4% in the forecast period 2018 to 2025.

Can you give us some data on your renowned Derma show in Dubai?

For the past 18 years, Dubai Derma has proven to be an outstanding platform to share the latest scientific advances and innovations in the field of Dermatology, Laser and Aesthetics. It is being held annually under the patronage of H. H. Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of the Dubai Health Authority. Dubai Derma provides the best platform for all participants to boost and update their knowledge in dermatological science and technology through a variety of courses, workshops and lectures. Additionally, the scientific program provides an ideal setting for specialists and practitioners in this field to strengthen existing collaborations and develop new ones with their counterparts from all over the world. In addition to the excellent educational opportunities, a specialized exhibition held in conjunction with the conference, provides an avenue for business entities in the industry to showcase and promote the most upto-date equipment, machine and product. Last year, Dubai Derma witnessed one more successful edition, with the number of business deals sealed during the 3 days event reaching 440 million dirhams.

However, Dubai Derma has firmly positioned itself as the leading global skin conference and exhibition in the Middle East,

North Africa and the Indian subcontinent. With its rich scientific agenda, key trending topics and a list of world-renowned speakers, Dubai Derma 2018 has attracted over 15,000 visitors and participants, while also featuring the participation of 540 companies from 95 countries. The agenda of Dubai Derma last year fortures 164 agents agents 72 world.

The agenda of Dubai Derma last year features 164 scientific sessions, 72 workshops and 70 poster presentations.

For our readers. Can you tell us something about INDEX Conferences and Exhibitions?

Established in 1991, INDEX Conferences & Exhibitions - a member of INDEX Holding, is a leading national company specialized in events management and solutions. Over the years, INDEX Conferences and Exhibitions has organized a range of events in various fields that included Medical, Economic, Industrial, Academic, Trade, Investment, Business and many others. Over the past 28 years, INDEX's achievements have contributed to more than 25% of the UAE's market share in the events industry, and attracted more than I million visitors from 133 countries to come to Dubai in order to participate, visit, and benefit from the events it organized.

Does INDEX Conferences and Exhibitions have future plans of expansion in the dermatology field or in any other sector or countries?

At INDEX, we are driven by the vision of H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which aims at making Dubai one of the leading cities in the world. Moreover, from a belief that the private sector is a pivotal partner for the development of the country, INDEX Holding with its vision and mission is strongly committed to be one of the active contributors in the growth of the economy of the nation. In accordance with this role, and in order to translate its commitment and the Vision of INDEX Holding; to provide innovative services to our clients around the world. INDEX has expanded its companies and partnered with the leaders of the world to serve clients with high professionalism, greater enthusiasm and innovative & revolutionary services in many parts of the world. INDEX Holding has a number of offices in a number of cities, so in addition to our offices in Dubai and Abu Dhabi, we have offices in Kuwait, Seoul and Singapore and the door is always open for expanding in other different cities.

What is your view on future market development in the Middle East and Dubai area?

Dubai is positioned in the heart of one of the world's rapidly advancing countries, thus, with an unlimited selection of world class hotels, restaurants, resorts and shopping centers, excellent infrastructure and transportation. Dubai also possesses a fascinating heritage, rich traditional culture and a civilized cosmopolitan community, which offers all its visitors a Memorable Experience. Dubai, and the entrepreneurship it has achieved in various fields, is perhaps the main platform in the region to embrace this world-class development at the level of smart medical techniques. It is also the ideal destination for investment in the healthcare sector in general, and in dermatology and plastic surgery in particular, a fact that the Dubai Health Authority is aware of and stimulates its expansion, in order to promote health tourism pillars and make Dubai the first choice for health and happiness seekers.

What can you tell us about the Asia Derma conference and its trade exhibition? and what are your objectives?

Asia Derma 2018 Scientific Committee is composed of eminent regional and international dermatology experts and collaborates with regional dermatology and aesthetic societies. It is also supported by the Aesthetic Dermatology Educational Group-ADEG. The organising committee has planned a comprehensive scientific programme that will provide an exceptional opportunity for practitioners to share their experience, improve their knowledge, and enhance their skills in dermatology and aesthetic medicine. The trade exhibition, running parallel to the conference, will also create an opportunity for the industry professionals to introduce the latest skincare technologies in medical care.

Technology and Innovation Drives the Success of Medical Fair Asia & Medicak Manufacturing Asia 2018







The two synergistic trade exhibitions for the medical, healthcare and MedTech sectors, MEDICAL FAIR ASIA and MEDICAL MANUFACTURING ASIA 2018 closed to resounding success on 31st August. With its largest edition to date, more than 14,000 trade visitors from 72 countries visited the fairgrounds of MEDICAL FAIR ASIA this year — a 16 per cent increase from 2016. MEDICAL MANUFACTURING ASIA 2018 registered some 6,000 visitors from 56 countries — making it a 12 per cent increase from the previous edition.

The three-day synergistic exhibitions hosted more than 1,220 exhibitors from 62 countries who reached out to a diverse, international profile of visitors.

FREE Bionics Group's Head of Business Development, Ms Huang Tinlan, said: "Through this exhibition, we made new contacts, including doctors and therapists from rehabilitation centres as well as neurological departments from Mount Elizabeth Hospital, Tan Tock Seng and Sengkang General Hospitals. The event was a good platform to present our products and we will definitely be back in 2020."

For healthcare and pharmaceuticals venture capitalist Dr Anand Govindaluri, Founder and Managing Director of Govin Capital Pte Ltd, the Start-Up Park was a great place to listen to product pitches on new innovations and digital health solutions in a faceto-face setting. "This is my first visit to MEDICAL FAIR ASIA and I am particularly impressed by the Start-Up Park concept, and Future for Health (FTR4H) digital health lounge," he said. Strengthening their positions as the sourcing and procurement platforms of choice, both exhibitions welcomed visiting delegations and VIP buyers. According to Dr Prapa Wongphaet, Director, S. Medical Enterprise Co Ltd, who led the Thai Medical and Wellness Tourism Association delegation, seeing the isolation tank from a UK-based company was unexpected; "This is the first time we have seen something like this, and it is exactly what we need. We can now use this tank to isolate patients in case of an epidemic. Visiting the exhibition with my team also fostered many on the spot idea generation and exchange sessions, and I am glad to bring these best practices back to our hospital," she said.

Complementing MEDICAL FAIR ASIA and MEDICAL MANUFACTURING ASIA 2018 were a series of industry-focused conferences, seminars and workshops covering a wide-range of topics such as Sports Medicine, Wearable Technologies, Robotic Surgery, Community Care and MedTech that attracted 700 international attendees.

The next editions of the co-located exhibitions will take place from 9 to 11 September 2020 at the Marina Bay Sands, Singapore.

For more information, visit www.medicalfair-asia.com and www.medmanufacturing-asia.com



CMEF

China International Medicinal Equipment Fair

China International Medicinal Equipment Fair (CMEF), launched in 1979, is held twice annually – spring and autumn. After over 40 years of continuous innovation and self-improvement, CMEF has become the largest fair of medical devices, related products and services in the Asia-Pacific region. The fair widely covers 15,000 products such as medical imaging, IVD equipment and reagent, medical electronics, medical optics, first aid, rehabilitation devices, nursing, telemedicine, wearable devices and outsourcing services, and it serves the entire value chain of medical devices from the source to the end in a direct and all-round way. At each fair, almost 4,200 medical device manufacturers from over 28 countries, and about 120,000 visitors and buyers who are government procurement agencies, hospital buyers and dealers from over 100 countries and regions gather in CMEF for trading and exchanges; With in-depth professional development of the exhibition, CMEF has initiated conference forums and established a series of sub-brands in medical field.

Facts & Figures of the 79th CMEF (Spring 2018 in Shanghai)

- Over 220,000 square meter exhibition space
- 120,000 Visitors from 150+ countries and regions
- 90% Visitors come from medical institutions/ distributors & agents
- 4,200 Exhibitors from 28 countries and regions
- 600+ New products were launched at the fair
- 70 Conference and forums

Exhibitor Profile

Medical Imaging Equipment (X-ray/Ultrasound/Nuclear Medicine) In-Vitro Diagnostic Equipment/Preparation, Laboratory Equipment

Surgery and Emergency Equipment

Orthopedic Devices and Supplies

Electro medical devices

Hospital Equipment (Sterilize/Use-Infection Control)

Medical Optical Equipment

Medical consumables

Hospital Construction

Medical IT (Portable Medical) Product

Rehabilitation Equipment and Homecare Equipment

Aesthetics & Plastic Surgery Products

Healthcare Services (training, physical check, healthcare management etc.)

Mobile Medical (APP, dynamic blood sugar, blood pressure, blood oxygen test)

TCM Clinical and Treatment Equipment (acupuncture, TCM clinical equipment)

Wearable Equipment



Visitor Profile

Medical Institution

Medical Devices Manufacturer & Distributor/Agent

R & D Institute

Association/Government Agency

Hospital Build and Design

Scientific Researchers

Import and Export Agency

E-commerce Business

Media/Press

Education/Training

Accessories, Components and Design of Medical Devices/

Investing & Financing/Financial Institution

Facts & Figures of Shanghai Medical Industry

5,011 medical and health institutions, with an increase of 53.24% compared with year of 2010

349 hospitals, including 35 top-class hospitals

13,481 medical device manufacturers

13,701 Medical device Mandiacturers

\$312.34 million government funding in medical industry, accounting for 53.98% of total public expenditure Shanghai customs total import and export volume was \$818.79 billion, with import volume \$318.21 billion and export volume \$500.58 billion

Foreign direct investment in 2016 was \$39.6 billion













The Digital era of Healthcare

2019.5.14-17

National Exhibition and Convention Center (shanghai)







Medical Japan Tokyo

(a spin-off from MEDICAL JAPAN OSAKA) concluded with huge success!



The first Tokyo edition of MEDICAL JAPAN drew great attention from the entire industry. The Tokyo edition, MEDICAL JAPAN TOKYO 2018 — 1st Int'l Medical and Elderly Care Expo & Conference Tokyo was held from September 12th — 14th, 2018 at Makuhari Messe, Japan. Reed Exhibitions Japan Ltd. launched this Tokyo edition fulfilling high expectations from the industry after 4 editions of MEDICAL JAPAN in Osaka. Together with the co-organisers, Japan Hospital Association, Japan Care Association and the support from the Ministry of Health, Labour and Welfare, Japan, MEDICAL JAPAN is designed to activate and energise the medical industry with 5 specialised shows. The launch in the biggest metropolitan city of Japan, where medical and elderly care fields are considered top priority by the government, gathered great attention from the entire industry.

392 exhibitors and **14,947** visitors gathered under one-roof. From the first edition, the numbers of the exhibitors and the visitors were more than expected. The show was originally expecting 350 exhibitors. However, with exhibitors rushing in, it summed to 392 exhibitors in total. This proved high demand of this platform and potential in its future growth. These 392 exhibitors made great impact on the first success of MEDICAL JAPAN TOKYO.

Exhibitors showcased their latest products, attracting the visitors.

OMRON HEALTHCARE CO., LTD. presented their latest product called OMRON CONNECT. Their technologies utilising IoT caught the visitors' attention that the booth was always busy. The long-established healthcare giant surprised the audience with their innovative technologies. FITBIT INC. exhibited at MEDICAL JAPAN for the first time in this Tokyo edition. Their well-known FITBIT products were introduced to the healthcare industry. It is easy to say that the expectations for wearable devices are high and FITBIT has brought innovation to the industry for professional use. This strong penetration in the Healthcare and Elderly care market is showing no signs of slowing down.

KYOCERA DOCUMENT SOLUTIONS JAPAN INC., chose this exhibition to meet their prospective customers. Their IT solutions attracted huge attention from the visitors from hospitals and clinics, where there are high demands in IT solutions for patient data ma-

nagement. Many more companies showcased their latest products and met many buyers from the target industry. Leading companies such as Siemens AG and Philips Japan, Ltd. have already decided to exhibit at the next edition. There is a huge excitement for the next edition to be another success.

MEDICAL JAPAN 2019 OSAKA

Dates: February 20 – 22, 2019 Venue: INTEX OSAKA Organised by: Reed Exhibitions Japan Ltd.

Consists of 6 shows

- 5th Medical Devices & Hospital Equipment Expo
- 5th Hospital BPO Services Expo
- 4th Medical IT Expo
- 5th Elderly Care & Nursing Expo
- 2nd Community Care Expo
- 9th Medical Device Development Expo Osaka [MEDIX OSAKA]

MEDICAL JAPAN 2019 TOKYO

Dates: October 23 – 25, 2019 Venue: Makuhari Messe Organised by: Reed Exhibitions Japan Ltd.

Consists of 6 shows

- 2nd Medical Devices & Hospital Equipment Expo
- 2nd Hospital BPO Services Expo
- 2nd Medical IT Expo
- 2nd Elderly Care & Nursing Expo
- 2nd Community Care Expo
- 10th Medical Device Development Expo Tokyo [MEDIX TOKYO]

To Exhibit: www.medical-jpn.jp/ex_en
To Visit: www.medical-jpn.jp/inv_en

Organiser: Reed Exhibitions Japan Ltd.

MEDICAL JAPAN Show Management
TEL: +81-3-3349-8586 Email: medical-japan@reedexpo.co.jp
www.medical-jpn.jp/en-gb.html

Japan's Largest Medical & Elderly Care Show

MEDICAL JAPAN 2019

5th Int'l Medical and Elderly Care Expo & Conference Osaka

February 20th - 22nd, 2019 @INTEX Osaka, Japan



Exhibitors

Manufacturers/traders dealing in:

- Medical Devices
- Medical IT
- Hospital Supplies
- Hospital Facilities
- Nursing Care Products
- Medical Device Components/Materials
- **▶OEM Services**

BUSINESS MEETINGS

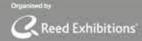
- Introduction of Products/Technologies
- Technical Consultation
- Arranging Quotation and Timing of an Introduction

Visitors

- Hospitals/Clinics
 - Doctors
 - Managers
 - Nurses
 - Medical Engineers
- Manufacturers
 - Medical Devices
- Importers/Distributors

More details www.medical-jpn.jp/en/





The Distributors Wall

Looking for distributors?

Interested to deal new products and improve your business? These are the pages for you: announcements of companies and distributors searching for each other.

Your next partner is already waiting for you. Write to classified@infomedix.it to be in the next issue. Always free for distributors!

Find your next partner:

Looking for products

Looking for distributors



Miscellaneous



Infodent International Advertisers





FREE SAMPLES FOR QUALIFIED DISTRIBUTORS!

SANKOM PATENT SOCKS!
SANKOM PATENT BRA!
SANKOM PATENT SHAPER!

UNIQUE IN THE WORLD:

highly effective, patented, class I medical device, new generation of functional clothing.

We are looking for partners and distributors worldwide.

info@sankom.com. +41 79 790 75 77 www.sankom.com





WORLD PREMIERE!

SANKOM Patent Active Compression socks CLINICALLY PROVEN!

SANKOM is a Swiss company that specialises in the development of patented functional wear such as compression socks, posture bras and shapers.

Discover SANKOM Switzerland's product range at Medica Dusseldorf 12-15th November 2018, BOOTH B43 HALL 16

www.sankom.com info@sankom.com







OR Specific is a leading provider of stainless steel operating room back tables and surgical instrument tables. Big Case Back Tables are specifically designed to accommodate large cases such as orthopedics, spinal fusions, neuro, endoscopy, open heart and craniotomies. **OR Specific** delivers quality and innovative solutions to the healthcare industry.

Windmolen 22, 7609 NN Almelo, The Netherlands - europe@orspecific.eu www.orspecific.eu





HMD presents "Omni Pro" II in I Patented Medical Device. The compact set is light weight and micro USB rechargeable. The device includes a Stethoscope, Reflex Hammer, Otoscope, Tongue depressor holder, Ophthalmoscope, Magnifying glass, Cobalt Blue Filer, Caliper, Tuning Forks, Audiometer and Transilluminator:

The Omni Pro is like the Swiss Army of Medical Devices.

We are looking for distributors.

www.hmdmedical.com info@hmd-hk.com





Multimedical SrI, based in Italy, is manufacture of medical disposables like: Elastomeric pumps, Huber needles, Radiology products, disposables for preparation and delivery of oncology drugs, needle-free connector disposables. We are looking for distributors in free areas.

www.multimedical.it info@multimedical.it





BAILIDA, certified by ISO9001 & ISO13485 and located in Taiwan, is specialized in medical furniture and hospital equipment. Our service has covered over 60 countries worldwide. To create the excellent using experience and value for BAILIDA users is our target.

www.bailida-medical.com sales@ bailida-medical.com





Pharmaplast established 1985 in Egypt by 3 Pharmacists. Today producing in 4 production sites shipping daily 3 containers to 82 countries worldwide. Our company specialized in production of advanced wound care dressings, hydrocolloids, foams, hydrogels, CMC hydrofibers and bandages.

www.pharmaplast-online.com sales@pharmaplast-online.com





JD Honigberg International is looking for Distributors

Distribution Opportunity: IDI C-arm compatible imaging tables offer large imaging areas, easy C-arm access and positioning. Equipped with the highest-quality carbon fiber tabletops, offering very low x-ray attenuation (minimizes x-ray exposure). An integrated battery enables usage if no power. The tables are very easy to maneuver and have high weight capacity.

Contact: J.D. Honigberg Intl at medical@jdhintl.com www.jdhintl.com





Multi Radiance Medical, leading manufacturer of super pulsed laser therapy devices for pain relief and accelerated recovery in veterinary and human medicine, is seeking distributors in Brazil and Europe.

Recently cleared by Anvisa and pending CE Mark, MRM lasers are backed by over 20 peer-reviewed studies for safety and efficacy.

www.multiradiance.com info@multiradiance.com



We introduce ourselves as the Medical & Healthcare Infrastructure Division, a part of the multi divisional Khimji Ramdas (KR) Group one of the largest business conglomerates in the Sultanate of Oman.

The Group was founded more than 148 years ago in 1870, with interests in trading, distribution, retailing, training, restaurants, manufacturing etc.

Khimji Ramdas LLC (Medical & Health Infrastructure Div.) PO Box-19, Muscat-100, Sultanate of Oman r.varghese@kr.om www.kr.om



Novamed is a privately-owned Costa Rican Company. Our team has over 20 years combined medical sales experience. We have extended experience at the institutional market, which is the most important in our country. We are very enthusiastic to find and distribute specialized products and new alternatives to the healthcare system.

Contact person: Paulo Carvajal

p.carvajal@novamedcr.com

T. +1 506 2281 3678 // 2253 8412 M. +1 506 8826 7974



Trade And SAS is the exclusive agent for the Latin America market and sole Colombia's importer of IAE's Spa, the sixth largest worldwide manufacturer of x-ray inserts and housings. IAE is the biggest standalone X-ray tube manufacturer in Europe for rotating anode tubes. Claudio Molinari

T. +57-5-4313234 molinari@iae.it info@tradeand.com www.iae-latam.com www.tradeand.com





Biegler Medizinelektronik, based in Austria/Europe, has to its credit more than 40 years of research, development and production in the service of medicine. Biegler's expertise is in the development and manufacture of ready-for-sale medical products. The company operates distribution in over 70 different countries with distribution partners.

office@biegler.com www.biegler.com





Adhezion Biomedical is a manufacturer of medical devices including topical surgical adhesives, sealants and catheter securement technologies.

For more details, please visit our website at **www.adhezion.com** or contact us at: **info@adhezion.com**.





IEC Endoscopy - With over 25 years of Experience in the Surgical service industry, IEC is offering training and consulting for technical companies that want to start their own in-house Endoscope repair program or an existing facility expansion. We customize single day training events as well as full staff training over several weeks. Please contact us for further information **www.IECendoscopy.com**





Looking for distributors for Graduated Compression medical stockings and Anti-Embolism stockings. Looking for distributors for Shapewear and modeling underwear. All products Made in Italy, certified CE, ISO 13485 and Oekotex.

Calze G.T. S.r.I. Via Walter Tobagi 14/21, 46040 Casaloldo MN, Italy Mr. Gorgaini Cristiano +39-0376-780686 cristiano@relaxsan.it





TRADEX

Discover the latest products and innovations from Austria, Germany and Switzerland in the area of Life Science and Healthcare.

Visit us across our international exhibition portfolio or contact any company any time 24/7/365 with our Tradex

www.tradex-services.com/company-database





External Access Targeting Device (EATD) World's first non-active Class I surgical device to assist surgeons in precision image-guided percutaneous accesses to deep organs such as kidney, is looking for regional/country distributors, surgeons and JV investors to work together to bring the device into operating theatres around the world. business@invivo-medical.com www.invivo-medical.com



We are looking to distribute Medico Surgical Equipment and Disposables.

We are an importer, marketing and distribution organisation in the field of medico-surgical disposables and equipment, covering the western zone of india in the field of anaesthesia, critical care, cath lab, urology, gastroenterology, radiology, wound drainage, gen. surgery.

P K Enterprises

205 -B, Dhanraj Indl, Premises, Sitaram Jadhav Marg, Shah and Nahar Compound, Lower Parel- W, 400013, Mumbai India

pkenterprises201@gmail.com pkenter@mtnl.net.in





Medisept - Perfect disinfection Modern European manufacturer of effective products for disinfection is looking for distributors worldwide. Almost 25 years of experience in delivering complex solutions for professional hygiene maintenance to healthcare institutions in Europe, Asia, Middle East and Africa.

Medi-Sept Sp. z o.o. www.medisept.pl export@medisept.pl



We are registered company that established on 2003. We have registered five Indian Pharmaceutical companies and have good business with them. Now we are at the position to work with overseas company and want to make partnership with them. Our quality accepted by our people and our market.

Ghayur Azizia LTD, register # 7296 and business certificate # 8024 Abdul Hakim Ghayur, President CEO

Ghauyr Azizia Ltd

Office No: 11, Shamshad Market, 3rd Part of Khair Khana, Kabul - Afghanistan T. +93 7 8957 7303 / +93 7 9918 7192

hakim_abdul7866@yahoo.com





LASOTRONIX is looking for distributors - Lasotronix is an innovative company who specialized in high-tech laser devices designed for the use in medical and dental sectors. We are looking for worldwide distributors who are serious about marketing excellent products.

For more details please kindly contact us at mp@lasotronix.pl



We are interested in any new products and German or Japanese Operation Tables & LED Lights, European Hospital Furniture and Import. We are looking to distribute new products for introduction in India.

Calicut Surgicals

Red Cross Road, C.H.Fly Over -Cherooty Road Junction, Calicut 673001 - Kerala - India

saleemambalapurath741@gmail.com



We are looking to distribute Physiotherapy and Rehabilitation, Home Care medical Equipment. We are one of leading medical equipment distributors in Vietnam with variety of products such as physiotherapy and rehabilitation, acupuncture, herbal extract machine, homecare.

Our mission is supplying the complete solution for customers such as traction bed, electrode therapy, ultrasound stimulator. We have a large customer network, our customers are small, medium and large hospitals, clinics, health cares, trading companies especially new private hospitals operating in Vietnam.

Dong A Medical Equipment JSC

Lot A2-CN3, Tu Liem Industrial Zone, Minh Khai Ward, North Tu Liem Dist Hanoi - Vietnam

anna.nguyen@damec.com.vn





Rumex Int. based in FL, USA. is a manufacturer of highest quality surgical instruments for ophthalmology and cardiovascular surgery. With more than 25 years of development and manufacturing experience, our company is fully certified - ISO, FDA, CE. We are a global company with distribution in over 40 countries.

www.rumex.com rumex@rumex.com



We are looking to distribute Pharmaceuticals, Lab Equipment, Medical Devices and Stem Cells treatments.

We are fast growing distributor in Gulf region based in Saudi Arabia looking for new innovative products to distribute it in our region.

Essam Hamaydeh (Executive Manager) M. +966 500111494

Sabeel AlDawa Mediway Co.

Dhabaab st., Rusayes bld., Floor # 1, Unit # 101,11311 Riyadh Kingdom of Saudi Arabia T. +966 11 4125022 F. +966 11 4125001

essam@medi-way.com www.medi-way.com



We are looking to distribute Medical equipment and consumables for hospitals, Laboratory equipment and consumables, Dental equipment, Research products, Physio/Rehab products. We are a local distributor in the UAE with 30 years experience in this market and looking for high quality products to import and distribute in this country, we have sales and service team covering the country.

Advanced Medical Systems Technology

P.O.Box 30524, Abu Dhabi - UAE ams_tech@emirates.net.ae



We are keen to find worldwide distributors for body supports for ladies and gents to be worn inside. They are a relief for spine pain and they make you feel better. Herbal tea for diabetes, menstruation pain and discomfort. It reduces fat.

Medex Holdings (PVT) Ltd

No 7 Dickmans Road - Colombo-05 Sri Lanka **sales@medex.com.lk**



We are one of leading distributors for Cardiology Diagnostics Products in Kerala, India. We have been operating in this field since 2006 and I have 20 years of experience. We have a huge number of fully satisfied customers all over Kerala, India.

Baseline Systems 3rd, Vilanganpara Buildings, Good Shepherd Road, Kottayam 686 001 Kerala - India **baselinesystem@gmail.com**





Digital ceiling mounted system with auto-tracking movement at Control-X Medical Ltd!

Ceiling mounted, Digital Radiographic System for advanced general purposes with full range of motorized movement, auto-tracking and auto-positioning options Visit Control-X Medical and discover our ATC system 12-15th November 2018, BOOTH B56 HALL 10

www.cxmed.com, sales@cxmed.hu



We distribute the following items across East African countries: Pharmaceuticals, Medical Equipment, Surgical Instruments and hollow ware, Non Pharmaceuticals, Hospital Linen and uniforms, Laboratory Equipment and reagents, Dental items, Orthopaedic implants, Diagnostic items, Baby Kit and Invalid Solutions.

Pasaiba Tourmaline Ltd

P.o. Box 17151, 00100, Nairobi - Kenya

amos@pasaiba.com www.pasaiba.com



Our company specializes in distributing foreign medical devices and medical products in China. We are very interested in collaborating with you to bring your products into the market of China.

Donglian Technologies, Ltd.

T. +86 177 5744 9080 - Dong Liang, M. D., Ph. D. Skype: d.liang5, wechat: 17757449080

dongjian.business@outlook.com



We are looking to distribute lab reagents and equipment, theatre & medical equipment, hospital furniture, surgical consumables, pharmaceuticals. Looking for manufacturers to partner with for exclusive distribution within Kenya & East Africa.

Mica Pharmaceuticals Ltd. Nairobi - Kenya info@micapharma.com



Extramile is an Egyptian limited liability company based in Cairo, where we are exclusive partner for a range of medical solutions. Recently, we are open to penetrate with new products specially in the nuclear medicine devices and supplements, Cardiology supplements and we are also interested in all laparoscopic instruments. For any other suppliers would like to contact us, please feel free.

Extramile For Trading, Cairo - Egypt medhat.helal@extra-mile.net



DANSON srl is a very well know distribution company for medical equipment in Romania, 25 years old. We want to develope our activity and we are looking for new and modern products. In Romania there are many projects for new hospitals and private clinics. We propose to be your distributor:

DANSON srl Str: Aurel Vlaicu 39, sector 2 - 020092 Bucharest - Romania office@danson.ro



Our company, Homeland Pharmaceuticals Trading PLC privately owned and engaged in import and distribution of Human medicines and different medical supplies in Ethiopia. Do you want to market your products in our country? You are welcome and we are ready to cooperate and work with you.

Homeland Pharmaceuticals Trading PLC

Cairo T. +251 9 3010 0300

homelandpharmatradingplc@gmail.com



We are looking to distribute Surgical line, ENT, Plastic surgery, Operating room products. We import medical device more that 20 years. Our main market is Thailand. **Max High Top Co., Ltd** 167 Soi Jasod Yack 2 10260 Bangna Bangkok Thailand **medicalhigh@hotmail.com**



Altima Care INC., is a registered wholesaler of drugs and devices in the state of New York. At Altima Care INC., we handle the distribution of medical supplies, devices, FDA approved brand and generic pharmaceuticals over-the-counter products to customers spanning a wide array of networks. We offer competitive assessment through world-class sourcing and uncompromisingly negotiated pricing. We work on services to provide quality goals. **Altima Care INC.**

95 Madison Ave Hempstead Hempstead, NY 11550 - USA

fmukhi@altimacareinc.com



We are one of the best distributors of medical devices and products; we are looking for high quality products for distributing in Morocco. **DISPROPAL**12. Rue 24 Hay lalla Soukaina
30000 Fes cedex - Morocco
dispropal@yahoo.fr



We are looking to distribute Respiratory care, Endo surgical, Telemedical Devices. We supply to govt. and private hospitals in the Kingdom Of Saudi Arabia. We have 3 years contract for John hopkins for different medical supplies.

Yasmin Al Bilali Trading Est P.O 929 Malaz, Riyadh Saudi Arabia pervezrahman@gmail.com



Brown pharmaceuticals PLC is well organized importing and distributing medical products in tertiaries of Ethiopia. We believe on quantity and we are looking to work on quantity based company world wide.

Brown pharmaceuticals PLC

Bole sub city, worda 09 Addis Ababa - Ethiopia asfawmed@yahoo.com



We are in the field of rehabilitation only with top class products in the biomechanics assessment.

We are looking for theraphy devices too.

Mariani Medical

P.zza A. Imperatore, 27 Rome - Italy

info@marianimedical.it



We are fast growing company based in Saudi Arabia. Our leadership team has mixed experience of multinational companies. We are looking for medical devices that have competitive edge by its uniqueness especially in diabetes, ortho or IVF sectors.

Life Gate

Riyadh - Saudi Arabia

wael.yousef@lifegate.us



Distributor for all laboratory chemicals equipment, lab disposables, dermatology, microbiology. **BIOMEDICA ALEX CO.** 49 SAFIA ZAGLOL STREET EL RAMEL STATION Alexandria - Egypt

biomedegypt95@yahoo.com



Founded in 2003, National Ultrasound supplies new and used ultrasound machines, probes and parts. Our focus on being the most knowledgeable in a single industry has led to our position as the #I dedicated supplier in the U.S., providing the best equipment and service to health care professionals globally. **National Ultrasound, Inc.** 2730 North Berkeley Lake Rd Suite B-400 30096 Duluth, GA - USA **info@nationalultrasound.com**



Unimedi is a Georgian distributor that consists of three companies, Dental-Georgia (dental company, operating since 2003), Primax-Georgia (representation of Primax-Berlin, dealing x-ray viewers and cassettes since 2012) and Unimedi (main company operating since 2011 in general medical field). We are cooperating with many brands in almost every product line in medical field, mostly famous for our reputation in ventilation, anaesthesia, patient monitoring, medical imaging and diagnostic products. We are looking for long time partnership with companies. Magda Kubusidze

import@unimedi.geT.+995 322969215 Unimedi LTD Tbilisi - Georgia



Our company **Viamed Pharmaceutical Pvt. Ltd. Co** (Ethiopia) is an importer and distributer of IVD products (laboratory equipments, laboratory consumables and reagents).

Viamed Pharmaceutical Pvt. Ltd. Co mentesnotzewdie@viamedplc.com



BIORTESIC TECH. is a distributing company of medical devices in Dominican Republic, with 5 years of experience. We are open to other products: National and Regional Coverage. Feel free to contact: Dr. Kelvin Acosta — CEO BIORTESIC TECH. dr.kelvinacosta@biortesic.com
T.+1 809 806 2612



We are looking to distribute endoscopic accessories, items for anesthesia & airway management, products for ICU & ER. Our company has been providing medical devices to the leading university hospitals and clinics in Korea, for over 20 years.

Young In Healthcare Co., Ltd. 2Fl, 21, Anam-ro, Seongbuk-gu 02857 Seoul - Korea, South yihealth@yahoo.com



Located in Puerto Rico we are importers and we would like to find manufacturers for prescription plastic vials and bottles, disposable non woven products and gowning, gloves (nitrile, vinyl – industrial and medical exam), disposable drapes, gauze, exam paper table, underpads, packaging materials as stretch films and carton pallet dividers.

Ramon Canela, Inc. Carr 190 Km 1.7 Charlyn Industrial Park Lote 15 PR 00987 Carolina - Puerto Rico rcimports.jr@gmail.com



We are a suture manufacturer company interested in foreign investment. We are looking for an international partner who is looking to manufacture locally his products and sell them in our market and elsewere.

Surgitures Sas
Carrera 18C # 121-40
of 101 Bogota - Colombia
gabrielber@surgituresas.com



We are looking to distribute dental and surgical instruments, fiber optical in light applications. We have strong teamwork in our market area.

Save time and contact us.

Jeza Trading Co. Old Railway Gate, UK Rd, Muzafer Pur 51340 Sialkot - Pakistan **jeza681@gmail.com**



Kersten Healthcare is an integrated health care distributor, in Suriname - South America, who is committed to working with hospitals, surgeries and independent pharmacies at the highest level of customer satisfaction. We don't just offer products and services but we offer confidence to all our Healthcare Partners.

Stefanie K. Amsari

stefanie.amsari@kersten.sr

Kersten Healthcare Waterkant 80, Paramaribo, Suriname T. +597 426079

www. kersten health care.sr



We offer Indian products of excellent quality at most competitive prices with prompt shipment & timely services. We are open to do business even on private label. Lets do business!

TIME OTC CHEM #103, Bldg. 6, Jogani Indl. Complex, Chunabhatti East400022 Mumbai - India timeotc@gmail.com



Medix is a system for hospitals and medical centers management, it has many modules which help the customer to convert from paper to paperless. For more information please visit our website www.horizon.sa

Horizon Information Technology Riyadh - Saudi Arabia

omansour@horizon.sa



EUROMEDEX is a French international pharmaceutical wholesaler able to purchase more than 200 000 different products, providing also drugs for use in cinical trials.

EUROMEDEX' expertise in pharmaceutical business and logistics guarantees short delivery terms according to GMP and GDP conditions.

Euromedex

24 Rue des Tuileries B.P.684 F - 67460 Souffelweyersheim T.+33 3 88180730 F.+33 388180733

www.euromedex.com



We are looking to distribute surgical equipment and disposables for Urology Ophthalmology and Endoscopy lines in Saudi Arabia, UAE and Bahrain. First Gulf Medical company has a goal to provide complete medical solutions to health care sector in the kingdom of Saudi Arabia and GCC region. Relying on our expertise in the medical field and our professional team, we provide a wide range of premium quality equipment, supplies and services.

First Gulf Medical Company

Head Office Address: Makkah Road 11476 Riyadh - Saudi Arabia M. +966568815182

adnan.rouh@fgcmedical.com



We are distributors based in Mumbai, India. We deal in government Hospitals only. If anyone needs Distributor for Government tenders pls contact us.

Chirag Surgicals

Mahim west, Mumbai - India Mr. Jenish Dave (Partner) T. +91 98 6793 4512.

chiragsurgicals2010@gmail.com



RUMEX INT. IS AN AMERICAN MANUFACTURER

OF HIGHEST QUALITY
SURGICAL INSTRUMENTS.



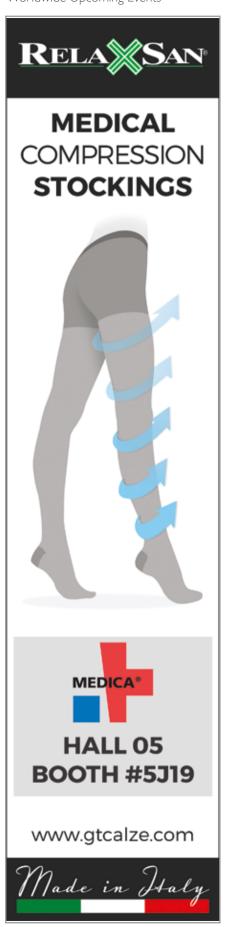
WE ARE LOOKING FOR DISTRIBUTORS GLOBALLY.



USA quality. Since 1994 www.rumex.com | shop@rumex.com

R-Optics in Hall 12 / E47

Worldwide Upcoming Events



Calendar

Here our trade shows selection.

Discover all worldwide medical exhibitions at
www.infomedix.it/calendars/tradeshow

November

01-03 11 2018

Ovarian Club XI

Meeting 2018
Building a bridge

between science

and clinical practice

Paris - France

Organised by:
CME Congresses Ltd.
Phone: +972 35550188
Fax: +972 35401566
Email: oc@cme-congresses.com
Website: www.cme-congresses.com

Venue: Novotel Tour Eiffel Hotel 61 Quai De Grenelle 15th arr. - Porte de Versailles 75015 Paris - France

www.oc2018.cme-congresses.com



01-03 11 2018

AR-Medica 2018
24th Edition -

International Fair of Medicine

Arad - Romania

Arad Chamber of Commerce, Industry and Agriculture 310017 Arad, Closca No. 5 Phone: +40 257 208 800 -+40 730 188 290 Email: armedica@ccia-arad.ro Website: www.ccia-arad.ro

Contact: Simona Vacaru Phone: +40 730 188 290 Email: simona.vacaru@ccia-arad.ro

Venue: EXPO ARAD Calea Aurel Vlaicu, nr. 300 Arad - Romania

Miau - Nomania

www.ccia-arad.ro/ar-medica





12-15 11 2018 MEDICA 2018 Düsseldorf



November

05-08 11 2018 **Himss**

AsiaPac 2018

Brisbane - Australia

HIMSS Asia Pacific 3 Killiney Road, #04-04 Winsland House I, Singapore 239519 Phone: +65 6664 1100 Fax: +65 6836 7728

Exhibition and Sponsorships Suhailah Ishak Executive, Business, Development Mobile: +65 6664 1184 Email: sishak@himss.org

Venue: Brisbane Convention & Exhibition Centre Brisbane Australia

www.himssasiapacconference.org





12-15 11 2018

MEDICA and COMPAMED 2018

Infomedix Booth: 16B43

Düsseldorf - Germany

Organised by Messe Duesseldorf GmbH Messeplatz, Stockumer Kirchstrasse 61 D-40474 Duesseldorf Germany
Postal Address: PO Box: 10 10 06 D-40001 Duesseldorf Germany
Phone: +49 211 45 60 01 Infophone: +49 211 45 60 900 Fax: +49 211 45 60 668 Email: info@messe-duesseldorf.de Website: www.messe-duesseldorf.de

Venue: Duesseldorf Trade Fair Centre Messeplatz 40474 Duesseldorf

www.medica-tradefair.com www.compamed.de

25-30 11 2018 RSNA 2018 The 104th Scientific Assembly and Annual Meeting

Chicago - USA

Radiological Society
of North America (RSNA)
820 Jorie Blvd
Oak Brook, IL 60523-2251 USA
Phone: +1 630 571 2670
Toll Free (U.S. and Canada only):
1 800 381 6660
Fax: +1 630 571 7837
Website: www.rsna.org

Venue: McCormick Place Chicago IL - USA

www.rsna.org/Annual-Meeting

Worldwide Upcoming Events

November / December

28-29 11 2018

15th Annual Congress on Pedriatics 2018

Barcelona - Spain

Pulsus Group - 40 Bloomsbury Way Lower Ground Floor London, United Kingdom - WC1A 2SE USA/Canada Toll Free: +1 800 982 0387 UKToll Free: +0 800 088 5419 Email: annualpediatrics@pulsusevents.org Best Western Hotel Mediterraneo Passeig Marítim, 294 08860 Castelldefels - Barcelona, Spain

www.pediatrics.cmesociety.com

29 11/02 12 2018 EyafExpo 2018 Rehabilitation, Integration, Prevention and Care

Istanbul - Turkey

Organised by: MBA Grup International Trade Fairs. Ltd. Atakan Sk. No: 22/4 Mecidiyekoy, Istanbul, Turkey Phone: +90 212 568 47 11 Fax: +90 212 568 47 12 Email: international@mbagrup.com Website: www.mbagrup.com

Venue: Istanbul Expo Center -Hall II - Istanbul, Turkey

www.engelsizyasamfuari.com

05-07 12 2018 ASIA DERMA 2018

04-06 12 2018

PharmChina 2018

Guangzhou - China

Organized by: Reed Sinopharm exhibitions Co., Ltd.
15th Floor Tower B,Ping
An International Finance Center
No.1-3, Xinyuan South Road,
Chaoyang District, Beijing, 100027,
PR.China
Phone: +86 10 84556677
Fax: +86 10 62033210
Venue: Guangzhou International

Venue: Guangzhou International Convention and Exhibition Center 382 Yuejiang Middle Road, Guangzhou, Guangdong - China

www.pharmchina.com.cn

05-07 12 2018 Asia Derma 2018 1st Asia-Pacific Dermatology and Aesthetic Conference & Exhibition

Singapore - Singapore

For more information please contact: Marine Delahaye
Phone: + 971 4 520 8888 - Ext: 665
Fax: + 971 4 338 4193
Email: info@asiaderma.sg
Venue: SUNTEC Convention
& Exhibition Centre Singapore
www.asiaderma.sg/#aspx?ln=2



06-08 12 2018 Vietnam Medi-Pharm 2018 The 25th International

Medical, Hospital & Pharmaceutical Exhibition

Hanoi - Vietnam

Organised by: rade Fair & Advertising JSC (VINEXAD) Address: 9 Dinh Le St., Hanoi, Vietnam Phone: +84 90 48 | 1648 Fax: +84 24 379 | 1864 Email: contact@vinexad.org.vn Website: medipharm.vinexad.org.vn

Venue: Hanoi International Center for Exhibition (ICE) Hanoi - Vietnam

www.hn.medipharmexpo.com/en



13-16 12 2018 SILMO Istanbul 2018 Optical Fair

Istanbul - Turkey

Contact person: İlayda Şahinler Phone: +90 533 205 03 25 Email: i.sahinler@silmoistanbul.com

Venue: Istanbul Exhibition Center Hall 9-10-11 Istanbul - Turkey

www.silmoistanbul.com

21-23 12 2018 SurgiMed Expo 2018 1st Edition

Jalandhar, Punjab - India

Office Address: SCO 1064-65, 2nd Floor, Sector 22-B, Chandigarh, India Phone: +91 172 4025256 Email: surgimedexpo@gmail.com

Venue: PIMS (Punjab Institute of Medical Science) Jalandhar, Punjab India

www.surgimedexpo.in

09-11 04 2019

The 22nd Southeast Asian Healthcare & Pharma Show



Kuala Lumpur - Malaysia

Organizer:
ABC Exhibitions Malaysia
No. 8 16/6C
46350 Petaling Jaya
Selangor
Phone: +60 3 79 54 65 88
Fax: +60 3 79 54 23 52
Email: sales@abcex.com
Website: www.abcex.com

Venue: KLCC Kuala Lampur Convention Centre Kuala Lumpur - Malaysia

www.abcex.com

21-24 05 2019



Hospitalar 2019
26th International event
of solutions, products,
services, technology,
innovation and equipment
for the healthcare sector

São Paulo - Brazil

Hospitalar Fair and Congress
Rua Padre Joao Manuel, 923 6° andar
01411-001 - Sao Paulo
Brazil
Phone: +55 | 1 3897 6100
Fax: +55 | 1 3897 6161
Email: international@hospitalar.com.br

Venue: Expo Center Norte Exhibition Center Add: Rua Jose Bernardo Pinto, 333, Vila Guilherme Sao Paulo Brazil

www.hospitalar.com/en



Leading International Trade Fair

WORLD FORUM FOR MEDICINE

www.medica.de

MEDICA FOREN/FORUMS

MEDICA FACHMESSE/TRADE FAIR

Hallen/Halls 3, 3a, 18

Halle/Hall 6
MEDICA WOUND
CARE FORUM

Diagnostics

Laboratory Equipment/ Labortechnik/Diagnostica

Halle/Hall 12 MEDICA TECH

FORUM

Halle/Hall 15

Bedarfs- und Verbrauchsartikel

Hallen/Halls 5, 6, 7.0, 7.1, 7a

Orthopaedic Technology Physiotherapy/ Physiotherapie / Orthopädietechnik

Hallen/Halls 4, 5

FORUM MEDICA HEALTH IT

Member of (M) MEDICAlliance

12-15 NOVEMBER 2018 DÜSSELDORF, GERMANY

Monday – Thursday Montag – Donnerstag

10.00 a.m. – 6.00 p.m. 10.00-18.00 Uhr

COMPAMED

Leading International Trade Fair

FOR MEDICAL TECHNOLOGY **HIGH-TECH SOLUTIONS**

www.compamed.de

Member of (M) MEDICAlliance





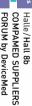




for Medical Technology Hallen/Halls 8a + 8b
COMPAMED - High-Tech Solutions

Halle/Hall 8a

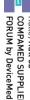




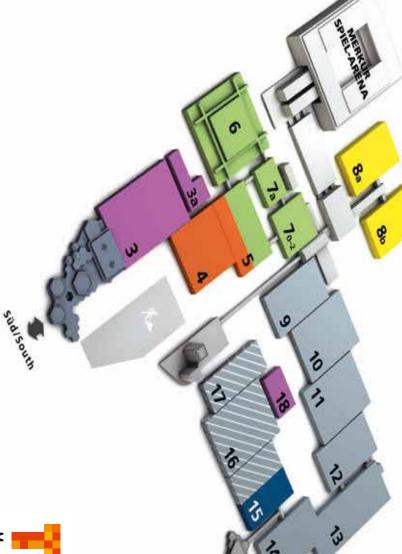




MordiMorth







KONFERENZEN/CONFERENCES

CCD Süd/South
MEDICA ACADEMY

Joint Participants National and International Medical Technology Electromedical Equipment/ Gemeinschaftsstände Nationale und internationale Elektromedizin/Medizintechnik Hallen/Halls 15, 16, 17 Halle/Hall 15
MEDICA ECON

FORUM by TK

HEALTHCARE FORUM

MEDICA CONNECTED Halle/Hall 15

Halle/Hall 18

Information and Communication

Technology

Informations- und

Halle/Hall 15

Kommunikationstechnik

Medical Technology Electromedical Equipment/ Elektromedizin/Medizintechnik Hallen/Halls 9-14 Consumer Goods Commodities and

FORUM MEDICA LABMED



+ SPORTS CONFERENCE MEDICA MEDICINE CCD Süd / South

CCD Süd/South
DIMIMED - INTERNATIONAL
CONFERENCE ON DISASTER





AND MILITARY MEDICINE

Messe Düsseldorf



The future of healthcare

21-24 May 19

I Iam - 8pm | Expo Center Norte | São Paulo

The future lies in partnership.

You and the company you represent are essential to this journey.

Book your stand at the main trade show in the Americas.

- Take the opportunity to raise your brand profile and boost business with local and foreign buyers
- Showcase your products and services to a highly qualified target audience
- Prospect for new customers and network with potential partners



More information: comercial@hospitalar.com.br 55 11 4878-5990

80% of our stands are already booked. Make sure you don't miss this opportunity.

hospitalar.com







WHEN IT COMES TO PROTECTION QUALITY MAKES THE DIFFERENCE



Medical gloves are your first line of defense against infection. For all top healthcare providers, the proper use of **Quality** medical gloves is important in infection control and prevention of Hospital Acquired Infections (HAIs).

Our commitment to **Quality** is the reason why Malaysia continues to be the leading exporter of medical gloves of natural rubber latex as well as nitrile.

MALAYSIA: WORLD'S NO. 1 FOR MEDICAL GLOVES





Advancements In Material And Design





Conformity to International Standards such as ASTM, ISO and EN

MEET US AT

MEDICA 2018 Dusseldorf, Germany 12 – 15 Nov 2018 Arab Health 2019 Dubai, UAE 28 - 31 January 2019 CMEF Spring 2019 Shanghal, China 14 – 17 May 2019



Malaysian Rubber Export Promotion Council

Unit No 36-02, Level 36, Q Sentral, 2A Jalan Stesen Sentral 2, KL Sentral, 50470 Kuala Lumpur, Malaysia.

Tel: (603) 2782 2100 Fax: (603) 2782 2199 E-mail: mpd@mrepc.com WWW.mrepc.com Malaysia • USA • Europe • China • India