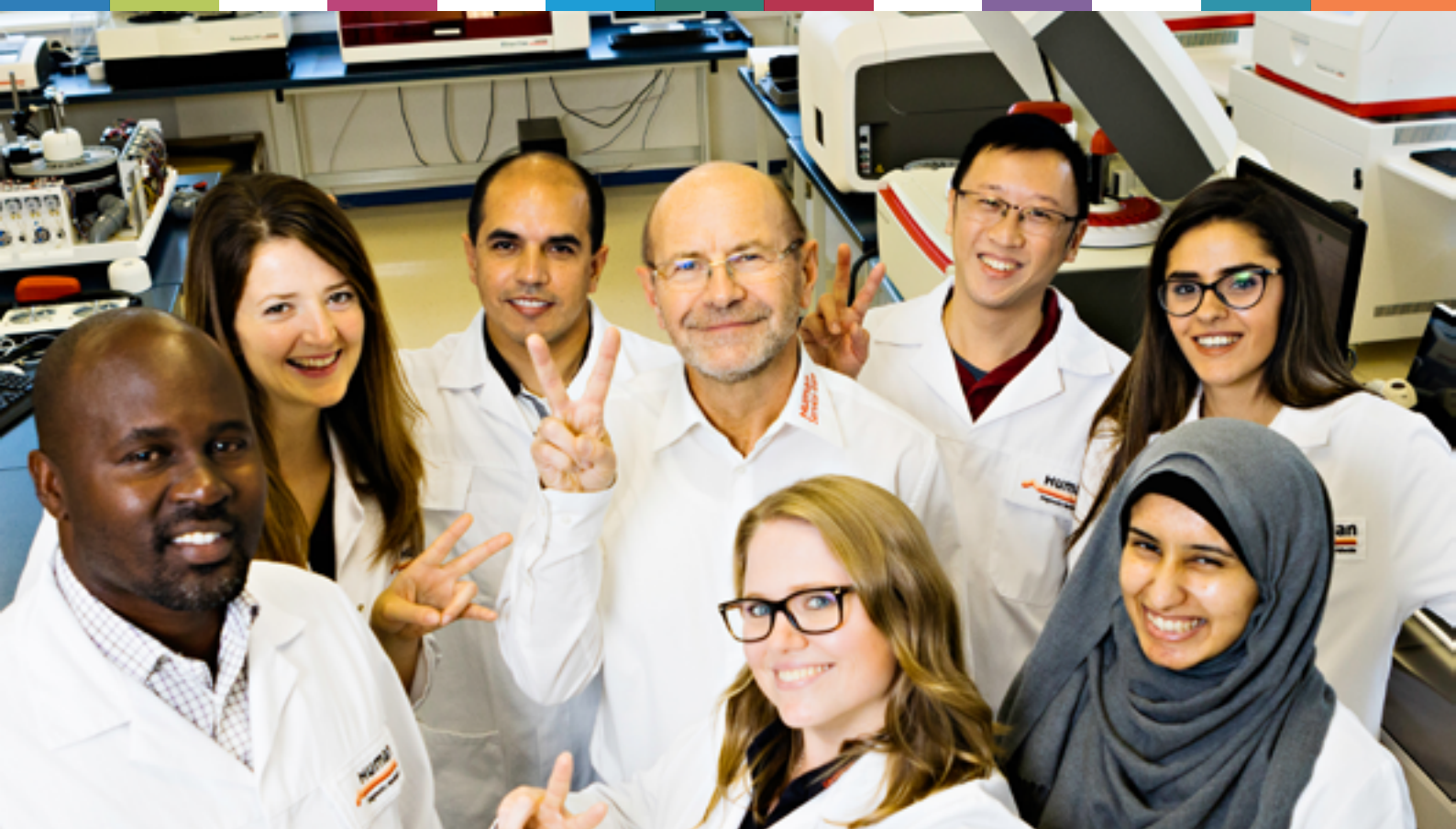


HUMAN Diagnostics

Customer Service Training Catalog 2019/01- 2019/06



Human

Diagnostics Worldwide

Discover HUMAN Diagnostics

Great Training

HUMAN quality systems, excellent service and customer support, combined with the opportunity to educate your team, are fundamental for a sustainable partnership - all you need to satisfy your customers. HUMAN's worldwide training sessions provide your staff with the necessary knowledge to service HUMAN instruments and to guide your customers to successfully use HUMAN instruments in their labs. Our highly skilled trainers include extensive hands-on in their theoretical sessions, always supplemented by detailed training material. Most of our training sessions combine technology and application knowledge to provide your staff with the necessary all-round knowledge. Our training facilities are located in Germany (headquarters), Singapore, UAE, Kenya and Panama. In all centers we provide extensive training on various topics. Discover all about our manifold trainings in our new catalog. We are looking forward to welcoming you.



This catalog contains all training sessions for the first half of 2019. We hope our presented selection will satisfy you. If you need any specific or additional training session, which is not listed in this catalog, we are happy to receive your suggestions via training@human.de.

Silvia Fischer
Head of Customer Service
& Application International

Christian Schaffer
Head of Technical Service
International

Customer Service training catalog with interactive features

Scan, save, share – We invite you to check out HUMAN's new Customer Service training catalog with interactive features.



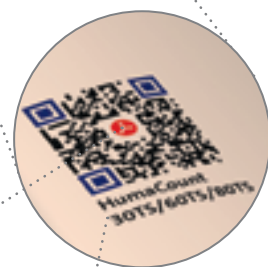
Different QR code indicator icons



Pre-registration E-Mail



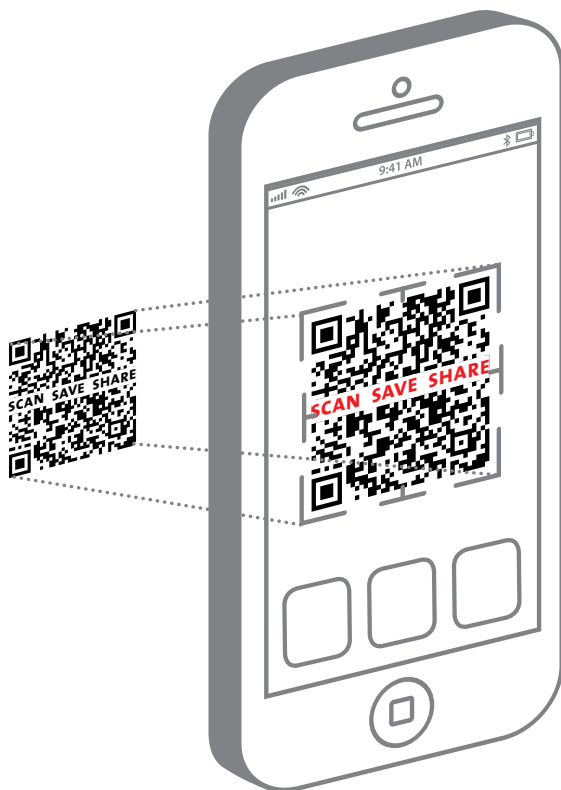
Save the date



Indicator icon.

Description:

Scan QR barcodes to send a pre-registration e-mail to Customer Service or save the date in your calendar.



Free QR code reader applications available in your app store.



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Trainers HUMAN Wiesbaden

Silvia Fischer



After 30 years work experience in the medical field, Silvia has an excellent background in almost all market segments. She started as a certified Medical Lab Technician continued by an education as a teacher. During her career she worked in different positions like product and project management, system integration, first and second level customer support as well as a trainer. With HUMAN she started as a Product Manager in 2017 and took over the leadership of the Customer Support team in 2018

Dr. Jana Borbe

Jana got her Master of Science in Biology and received four years later her Ph-D in Science. Before joining Human in February 2018 she gained experience in different Molecular Pathology labs. In the last lab she has been holding the position of the lab leader. She is focusing on her responsibility for LIA, ELISA as well as for Molecular DX.



Trainers HUMAN Wiesbaden

Jasmin Pfeifer

Before joining HUMAN in 2012 Jasmin was employed as certified Chemical Laboratory Technician in a large German immunology lab working with HPLC/LCMS. At HUMAN Jasmin joined the QC department where she gained broad experience with all HUMAN instruments and reagents. In 2016 she took the next step in her career and strengthened the HUMAN Customer Support team, being responsible for applications and reagents in our range of Clinical Chemistry, Urinalysis and Point-of-Care products.



Tony Petzold



In 2013 Tony finished his studies in Molecular Biology and Bio-Informatics with his Master's degree. For the following 2 years he gained experience in the department serology/immunology of a medicine lab, primarily working with ELISA, CLIA, HPLC, elektrophoresis, LIA and rapid tests. Prior to joining HUMAN he expanded his knowledge in a software company providing laboratory information systems (LIS). Now at HUMAN Tony is providing support for reagents and applications, with his main focus on Hematology, ELISA and CLIA.

Trainers HUMAN Wiesbaden

Stan Günther



Stan started his career as Junior Service Engineer with HUMAN in 2007 with a background as an electrician. He took care of quality control and technical repairs for most HUMAN instruments. Over the last years, with an enormously increasing number of instruments, his professional career has developed very positively. He was promoted to Manager Technical Service International and took over the sole responsibility in regards to technical service for ELISA, CLIA and Molecular DX instruments.

Alexandra Scherer

In 2011 Alexandra successfully finished her studies with a biomedical engineer's diploma. After expanding her experience in different fields of medical engineering at several German hospitals, she became promoted to head of the medical technology department. Her responsibility was to inspect and mend the medical devices. Last but not least she organized MPG operator trainings and conducted quality audits. Since July 2018 Alexandra supports HUMAN's technical service with her profound expertise. Her main focus lies on ELISA, LIA, Molecular DX instruments.



Trainers HUMAN Wiesbaden

Stefan Theimer

Stefan is the Senior Engineer and responsible for the clinical chemistry line in the Tech-Service department in Wiesbaden. He holds a diploma in Biology and, not to forget, he is a certified Physical Therapist. His career started as International Application Specialist & Engineer for an IVD development company in Germany. Since the beginning of his career at HUMAN in 2008, Stefan is responsible for the HUMAN clinical chemistry analyzers starting from Humalyzer2000 up to HumaStar 600. Last but not least he is the Photographer of the company.



Mathias Kamprath



Mathias joined HUMAN in 2011 as a Master of Engineering. Since then he is working in our technical service team with clinical chemistry analyzers. He is the main responsible for our bestsellers HumaStar 100 and HumaStar 200 as well as for the new HumaStar 300SR. With more than 20 years of broad experience in servicing, teaching and supporting engineers in the IVD industry, he is contributing significantly to our team. Besides the instrument support and training, he is specialized in connecting all HUMAN instruments to any LIS/LIMS systems.

Trainers HUMAN Wiesbaden

Robert Hässelbarth



Robert is one of the newer members of the HUMAN family, as he started in April 2018. Before he joined HUMAN, Robert gained 4 years of experience as field service and application engineer. His studies of biotechnology and his practical education as technical lab assistant were a perfect prerequisite for his previous specialization on fully-automated screening systems. Based on this profound expertise he now supports our technical service department with his main focus on the clinical chemistry analyzers.

Christian Weiß

From his background, Christian is an Electronics Engineer. Nearly his complete career he has worked in the medical and diagnostics field with the opportunity to work in different areas in various companies, like production planning, development or quality control. He joined HUMAN in 2010 and started his work as a Junior Engineer. Soon he developed his career and as Manager Technical Service International he is now responsible for HUMAN's Hematology and Hemostasis Line.



Trainers HUMAN Wiesbaden

Trainers HUMAN Asia Pacific

Jian Min Yeh



Straight from the lab, Jian Min joined our Asia Pacific Service team in 2016 providing regional support and training to our distributors. He is a Medical Lab Technician with a work experience in diagnostics of 8 years. During his work he gained expertise in several different fields and specialized and focused in biochemistry and immunology. Jian Min has also been heavily involved in the lab management to improve workflows and look after quality management.

Tristan Tang

Tristan is holding a diploma in electronics. Now Tristan has over 10 years of technical experience which he gained in various roles, from being in-house technician to field service engineer. His IVD experience is mainly related in hematology, hemostasis and urinalysis. As member of the Asia Pacific Service team, he is now supporting and training our distributors' engineers and taking care of any kind of customer enquiries in the region.



Trainers HUMAN Middle East

Osama Ahmed

Osama started his career with servicing various medical instruments in 2008 after receiving a Bachelors Degree in Biomedical Engineering. He built up a very solid experience in the in-vitro diagnostics industry with an American company, being responsible for service and sales for the key accounts within his territory. His focus areas are Clinical Chemistry and Immunology. Joining our Middle East team in 2015 he is now supporting our distributors with his more than 10 years of experience.



Khurram Shahzad



As an Electronics Engineer, he originates from the plant automation industry where he was responsible for rolling out programmable logic controllers in different industries. He soon joined one of our distributors where he gained a broad experience in the IVD field with instruments as well as with applications. With a stop-over in his career in the procurement management of various laboratory and medical devices, Khurram supports our Middle East team in service, support and training since 2011.

Trainers HUMAN Latin America

Nedelka Dominguez



Nedelka is a Professional in biomedical engineering with 8 years of experience in different areas of the medical and industrial field. This experience has been strengthened mainly in the area of clinical laboratory equipment, service, applications and development of control procedures. Since 2015 in our HUMAN Latin America team, Nedelka took over a significant part in supporting her region. Her main focus is providing technical and application assistance as well as training to our partners, distributors and NGOs.

Mario Melgar

Mario holds a diploma in Biomedical Engineering and has worked with HUMAN instruments since the beginning of his career. He joined us when we started operations of our Latin America office in 2013. As a service engineer he is in charge of Latin America and the Caribbean. He gave significant support in setting up our Latin America operations and is providing services and training across the American continent. He focuses in being responsible for the support of our distributors.



HUMAN Customer Service



HumaStar 300SR Basic Training



Introduction

Attending this training will enable you to operate, maintain and service our clinical chemistry analyzer HumaStar 300SR.

We present a basic training for this analyzer with detailed training material for your own reference to follow the training and review the learned contents again at home.

The training presents a hands-on part with the analyzer where the focus is on installation, basic operation, software, firmware, maintenance and troubleshooting.

Furthermore we provide a basic application part which enables you to use the analyzer in the daily routine work.

Additionally we teach you the connectivity of the analyzer to a laboratory information management system (LIMS).

Audience

Application Specialist
Service Engineer

Participant prerequisites:

Clinical chemistry basic knowledge
Ability to speak, write and understand English

Content

Basic knowledge of clinical chemistry
Working experience as service engineer with the responsibility for clinical chemistry
Ability to speak, write and understand English

After Training / To take home

- You are** confident in using the software and handling of the reagents, calibrators and controls.
- You have** extended knowledge about the technical part.
- You can** answer questions, solve difficult issues

Satisfy your customer.



Detailed Content

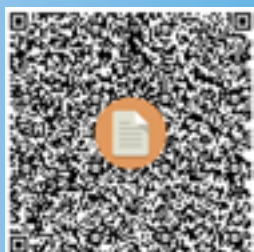
Welcome and introduction of the trainer. We start with basic rules and information about the training. Next step is a presentation and installation of the analyzer (incl. installation preconditions). The practical part is starting with the start-up and shut-down procedure, followed by basics of the Clinical Chemistry. Prior to discovering the analyzer, we start with the application software "HI". The discovering will now show the mechanical, electrical, optical and hydraulic components of the HumaStar 300SR. The use of the service program "TERMINAL" is the first step of trouble shooting and routine service (replacement of lamp, sampling needle, cuvettes, peristaltic pump cassettes). The steps of the annual maintenance of the analyzer will be explained in detail. The discussion of pending issues will close the training. Prior to handing over the training certificate you have to pass the final exam.

Date	City	Trainer
18. February - 22. February	Panama	N. Dominguez / M. Melgar
03. March - 07. March	Dubai UAE	K. Shahzad
01. April - 05. April	Nairobi Kenya	J. Pfeifer / R. Hässelbarth
03. June - 07. June	Wiesbaden	J. Pfeifer / R. Hässelbarth

Save the date
for Panama



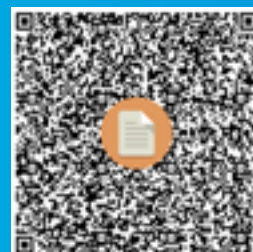
Pre-register
for Panama



Save the date
for Wiesbaden



Pre-register
for Wiesbaden



Save the date
for Dubai



Pre-register
for Dubai



Save the date
for Nairobi

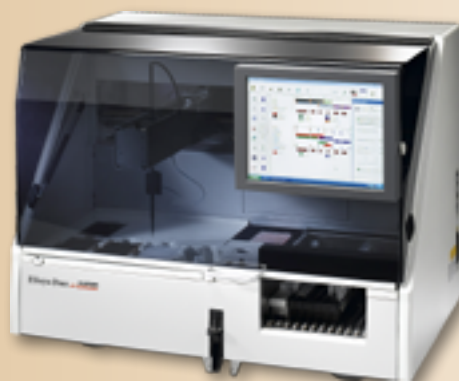


Pre-register
for Nairobi



ELISA Advanced Application

ELISA



Introduction

The advanced application training for ELISA gives a deep insight into the adjustment and programming of ELISA assays.

We provide a training for these analyzers with detailed training material for your own reference to follow the training and review the learned contents again at home.

The training is splitted in a hands-on part with the analyzers where the focus is on software, QA analysis reports and troubleshooting.

Furthermore we provide a detailed application part which enables you to create own applications and have a better understanding of ELISA principles.

You will receive comprehensive training material equipped with valuable and up-to-date information.

Audience:

Service Engineer
Application Specialist

Participant prerequisites:

ELISA basic knowledge
Practical experience with the system
(minimum 6 months)
Ability to speak, write and understand English

Content

Overview instruments
ELISA theory
QA Analysis Report
Calibration of systems and usage of control material
Validation criteria
Create your own assay
Detailed software explanation
Troubleshooting samples and start a test

After Training / To take home

You are confident in ELISA application
You have gained knowledge and confidence in troubleshooting.
You can answer questions, solve difficult issues and

Satisfy your customer.

Detailed Content

Welcome and introduction of the trainer. We start with basic rules and information about the training. Next step is the presentation of the analyzer and the explanation of the differences between Elysis Duo and Quattro.

The practical part is starting with a run of plates with varying parameters simultaneously. Explanation of calibration of systems to the usage of control materials and the importance of lot specific values for QA report is given during this training. The software explanation will include all parts of application programming, which will allow you to program an assay on your own. The training session ends with a trouble shooting for ELISA Application. Prior to handing over the training certificate, you have to pass the final exam.

Date	City	Trainer
04. March - 08. March	Wiesbaden Germany	Dr. J. Borbe

Save the date
for Wiesbaden



Pre-register
for Wiesbaden



Hematology Basics incl. HumaCount 5D and 30/80^{TS} / SRate 24^{PT}



Introduction

Attending this training will enable you to operate, maintain and service our hematology analyzers HumaCount 5D, HumaCount 30/80TS and HumaSRate 24PT.

We provide you a basic training for these analyzers with detailed training material for your own reference to follow the training and review the learned contents again at home.

The training presents a hands-on part with the analyzers, where the focus lies on basic operation, software, maintenance and troubleshooting.

Furthermore we provide a detailed application part which enables you to have a better understanding about hematology principles and determining different blood cells.

Audience:

Application Specialist
Service Engineer

Participant prerequisites:

First experience with hematology analyzers.
Worked already as Service Engineer with the responsibility for hematology
Ability to speak, understand and write in English

Content

Installation of the analyzer
Basic operation: reagents, startup, sample measurement, calibration, Quality control
Software in details
Service software
Maintenance
Troubleshooting
-

After Training / To take home

You are feeling comfortable in working with the analyzers.
You have basic understanding about hematology in total.
You can perform maintenance and basic service for the analyzers

Satisfy your customers



Detailed Content

Theory

Complete life cycle of the red blood cells (erythropoiesis of the erythrocytes and their progenitors)

Pathobiology: Erythrocytes and their abnormalities such as size, color, shape and inclusions. Examples of abnormal red blood smears and disease

Generation of white blood cells (leucocytes) and different types of normal leucocytes in the peripheral blood. The role of the leucocytes in the immune system

Examples of blood smears and diseases

HumaCount 5D

Basic overview of technology and detection principle you can find in the analyzers

Overview of instrument and basic operation of instrument; reagents; startup; quality control; calibration; running a sample; CBM Mode; administrative features; service software. Maintenance of the HumaCount 5D

HumaCount 30 & 80^{TS}

Overview of instrument and explanation of the software including maintenance and trouble shooting.

Prior to handing over the training certificate, you have to pass the final exam.

Date	City	Trainer
13. May - 16. May	Nairobi Kenya	C. Weiß / T. Petzold

Save the date
for Nairobi



Pre-register
for Nairobi



Hematology Basics incl. HumaCount 5L and 30/80^{TS} / SRate 24^{PT}



Introduction

Attending this training will enable you to operate, maintain and service our hematology analyzers HumaCount 5L, HumaCount 30/80^{TS} and HumaSRate 24^{PT}.

We provide you a basic training for these analyzers with detailed training material for your own reference to follow the training and review the learned contents again at home.

The training presents a hands-on part with the analyzers, where the focus lies on basic operation, software, maintenance and troubleshooting.

Furthermore we provide a detailed application part which enables you to have a better understanding about hematology principles and determining different blood cells.

Audience:

Application Specialist
Service Engineer

Participant prerequisites:

First experience with hematology analyzers.
Worked already as Service Engineer with the responsibility for hematology
Ability to speak, understand and write in English

Content

Installation of the analyzer
Basic operation: reagents, startup, sample measurement, calibration, Quality control
Software in details
Service software
Maintenance
Troubleshooting
-

After Training / To take home

You are feeling comfortable in working with the analyzers.
You have basic understanding about hematology in total.
You can perform maintenance and basic service for the analyzers

Satisfy your customers



Detailed Content

Theory

Complete life cycle of the red blood cells (erythropoiesis of the erythrocytes and their progenitors)

Pathobiology: Erythrocytes and their abnormalities such as size, color, shape and inclusions. Examples of abnormal red blood smears and disease

Generation of white blood cells (leucocytes) and different types of normal leucocytes in the peripheral blood. The role of the leucocytes in the immune system

Examples of blood smears and diseases

HumaCount 5L

Basic overview of technology and detection principle you can find in the analyzers

Overview of instrument and basic operation of instrument; reagents; startup; quality control; calibration; running a sample; CBM Mode; administrative features; service software. Maintenance of the HumaCount 5L

HumaCount 30 & 80^{TS}

Overview of instrument and explanation of the software including maintenance and trouble shooting. Prior to handing over the training certificate, you have to pass the final exam.

Date	City	Trainer
10. June - 14. June	Singapore	Tristan Tang

Save the date
for Singapore



Pre-register
for Singapore



Hemostasis including HumaClot Line



Introduction

Driving high quality results needs an even higher quality training.

During this training session, we will present information tailored to your needs about our HumaClot Line, the technical background and hemostasis theory.

Our easy accessible and most comprehensive training material will enable you to take your expertise to the next level.

A general understanding of instrument installation, operation procedures, reaction principles and troubleshooting will be given. Learn more about the magical triangle of analyzer, application and reagent by joining one of our upcoming HumaClot training sessions.

.

Audience:

Application Specialist
Engineer (resp. for application)

Participant prerequisites:

Interest in training
Ability to speak, understand and write in English

Content

Detailed software explanation
Practicing using different reagents
Reagent, control and calibrator handling
Troubleshooting on technical and application side
Programming of methods using HUMAN application sheets
Maintenance routines (daily – yearly)
Answering of open questions

After Training / To take home

You are confident in using software and handling of reagents, calibrators and quality controls.
You have extended knowledge of curve interpretation.
You can answer questions, solve difficult issues

Satisfy your customer.

Detailed Content

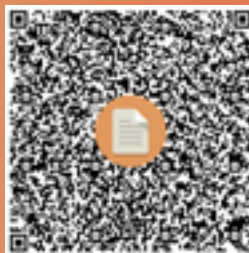
Welcome and introduction of the trainer with an overview of the basic rules and information about the training. We start with a detailed and step by step user software explanation. This is the basis for the next step: using of the analyzers with different type of reagents. In addition we will explain the handling of reagent, calibrator and controls. The next step is the trouble shooting of technical and application issues, followed by the maintenance routines (daily - yearly). This knowledge will enable us to program new methods with HUMAN application sheets. The training ends with a last discussion about open questions. Prior to handing over the training certificate you have to pass the final exam.

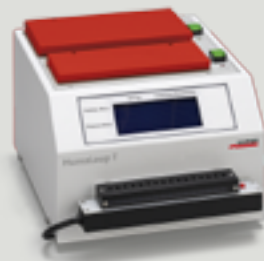
Date	City	Trainer
27. May - 31. May	Singapore	J. M. Yeh

Save the date
for Singapore



Pre-register
for Singapore





Introduction

Our training turns you into a specialist for HUMAN's LoopAmplification products.

The training content is divided into various topics, and provides you with all relevant information from instrument installation to trouble shooting at the customer site.

Easy and most comprehensive training materials enable you to gain methodological competencies and specialist knowledge about Malaria, Tuberculosis and the principle of Loop Amplification.

The combination of the fundamental training in application and the technical knowledge equips you with skills that go beyond simple sample processing.

Our passionate trainers are looking forward to welcoming you to one of our upcoming training sessions.

Audience:

Application specialist

Engineer

Staff working with LAMP

Participant prerequisites:

Interest in training

Ability to speak, understand and write in English

Content

Detailed pathogen information

Installation service

DNA extraction and amplification

Good laboratory practice (including personal protective equipment and skills required in molecular biology)

Maintenance routines

Answering of open questions

After Training / To take home

You are well equipped with skills to train your customers.

You have gained knowledge and confidence in using LoopAmp technique.

You can deliver professional service

Satisfy your customer.



Detailed Content

Introduction in LAMP technology

LAMP products in an overview

What is Tuberculosis?

Pathogen Info Tuberculosis

Installation of HumaLoop T/HumaTurb if applicable

Workflow (HumaLoop HumaTurb if applicable) hands-on Tuberculosis

Maintenance / Service HumaLoop M/T/HumaTurb if applicable

What is Malaria?

Installation of HumaLoop M/HumaTurb if applicable

Workflow (HumaLoop/HumaTurb if applicable) hands-on Malaria

Train the Trainer

How to prepare for the training

The training ends with a last discussion about open questions. Prior to handing over the training certificate you have to pass the final exam.

Date	City	Trainer
24. February - 26 February	Dubai UAE	O. Ahmed

Save the date
for Dubai



Pre-register
for Dubai



Training Schedule by Region

Wiesbaden (Germany)

ELISA Advanced Application

04. March - 08. March

HumaStar 300SR Basic

03. June - 07. June

Singapore

Hemostasis incl. HumaClot Line

27. May - 31. May

Hematology Basics incl. 5L/30-80^{TS}/SRate 24^{PT}

10. June - 14. June

Panama

HumaStar 300SR Basic

18. February - 22. February

HumaNex A1c + HumaClot Pro

08. April - 12. April

Dubai (UAE)

HumaLoop M/T and HumaTurb C+A

24. February - 26. February

HumaStar 300SR Basic

03. March - 07. March

Nairobi (Kenya)

HumaStar 300SR Basic

01. April - 05. April

Hematology Basics incl. 5L/30-80^{TS}/SRate 24^{PT}

13. May - 16. May

Training Schedule by Date

February 2019

HumaStar 300SR Basic	18.02 - 22.02	in Panama
HumaLoop M/T and HumaTurb C+A	24.02 - 26.02	in Dubai UAE

March 2019

HumaStar 300SR Basic	03.03 - 07.03	in Dubai UAE
ELISA Advanced Application	04.03 - 08.03	in Wiesbaden Germany

April 2019

HumaStar 300SR Basic	01.04 - 05.04	in Nairobi Kenya
HumaNex A1c + HumaClot Pro	08.04 - 12.04	in Panama

May 2019

Hematology Basics incl. 5D/30-80 ^{TS} /HumaSrate ^{PT}	13.05 - 16.05	in Nairobi Kenya
Hemostasis incl. HumaClot	27.05 - 31.05	in Nairobi Kenya

June 2019

HumaStar 300SR Basic	03.06 - 07.06	in Wiesbaden Germany
Hematology Basics incl. 5L/30-80 ^{TS} /SRate 24PT	10.06 - 14.06	in Singapore