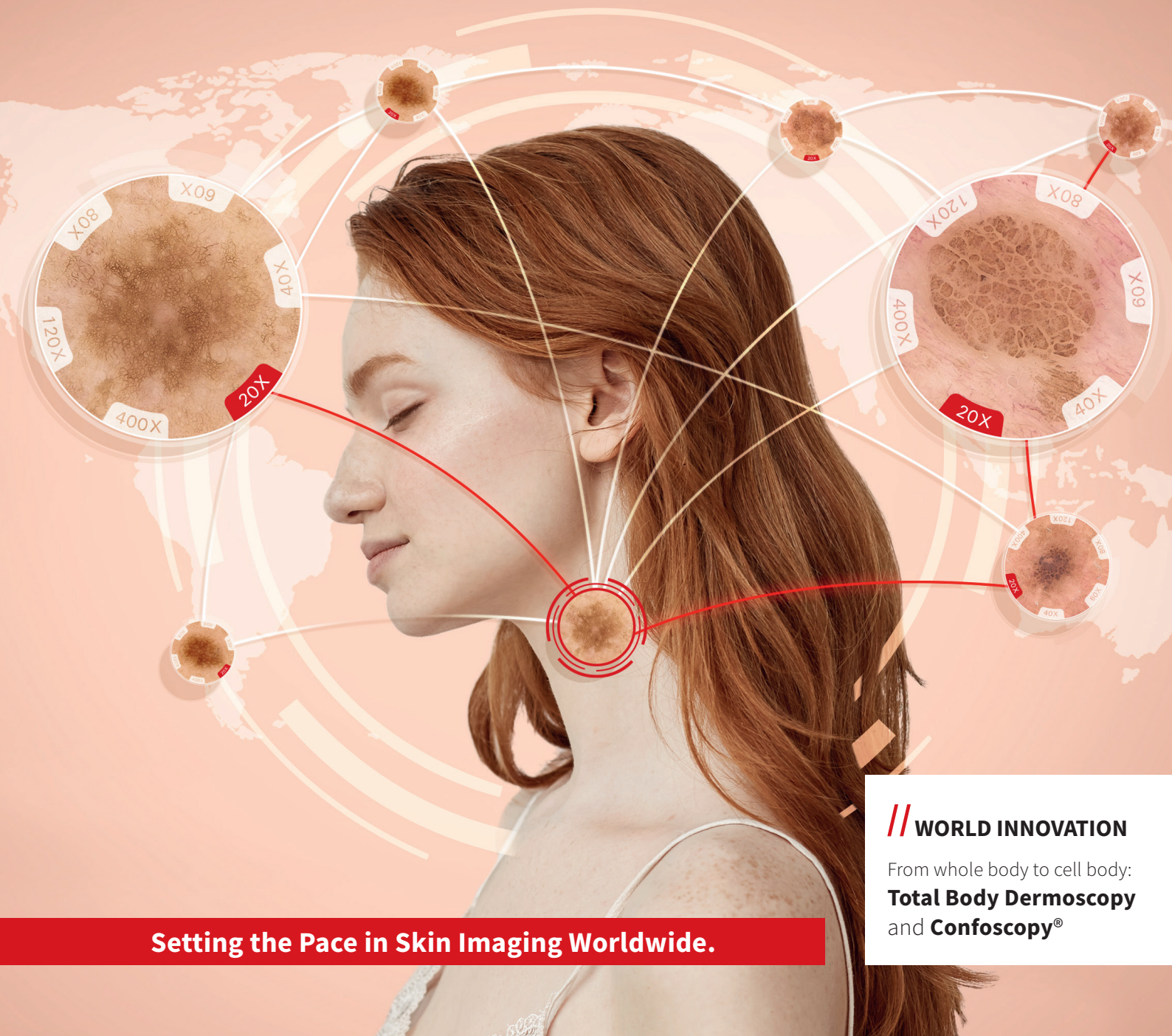


# FotoFinder® INSIGHTS

The customer magazine by FotoFinder Systems

## // The global view of skin

Super high-resolution imaging supported by artificial intelligence



Setting the Pace in Skin Imaging Worldwide.

### // WORLD INNOVATION

From whole body to cell body:  
**Total Body Dermoscopy**  
and **Confoscopy®**



# The FotoFinder Universe

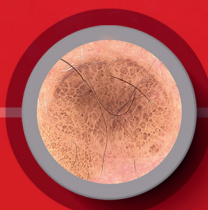
Discover the whole world of skin imaging.



**The perfect solution**  
for your medical practice.



**AUTOMATED  
TOTAL BODY MAPPING**



**DIGITAL  
DERMOSCOPY**



**HAIR &  
AESTHETICS**



**- ATBM -**



**- VEXIA -**



**- AESTHETICS -**



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## EDUCATION

Save the Date:  
FotoFinder Academy  
International

## EDITORIAL



## DEAR FOTOFINDER FRIENDS

FotoFinder is a pioneer in skin imaging because... YOUR PASSION IS OUR PASSION!  
For almost 30 years, we have been committed to image quality and focus on what is  
important for YOU. We listen and we act.

We developed the first Bodyscan software around the turn of the millennium because  
we discovered that a total view of the body was so important for you, even though  
there was no standardized protocol at that time which would allow an analysis with  
perfect images. We therefore went on to develop the first – still manual – bodystudio  
solution that enabled consistent digital documentation of the skin surface. Then  
we automatized the procedure to save you time. We turned the page again and  
again and wrote the different chapters to optimize the workflow and increase  
diagnostic accuracy.

The introduction of the ATBM for Automated Total Body Mapping in 2013 led to a  
breakthrough thanks to the intelligent combination of dermoscopy and fully auto-  
mated whole body photography based on the “two-step method of digital follow-up”.  
We have therefore revolutionized mole monitoring and made great progress in  
detecting de novo melanoma. Today, ATBM proves its worth every day at more than  
a thousand hotspots and is the first choice of key opinion leaders worldwide.

However, the “two-step” workflow can still be time-consuming, especially when it  
comes to dermoscopy on patients with multiple nevi. That’s why FotoFinder now  
introduces the era of Total Body Dermoscopy! The new ATBM master takes you on a  
journey into the skin, enabling you to assess the microscopic structure of moles  
already in the full body photo. With spectacular image quality and powered by  
FotoFinder artificial intelligence, along with increased detection speed and new  
functions to visualize the “ugly duckling” at a glance!

In this issue of INSIGHTS, we proudly present the complete journey from whole body  
to cell body, from Total Body Dermoscopy to Confoscopy – travel with us and discover  
a whole new world of skin experience!

Best regards,

Kathrin Niemela  
Member of the Executive Board

## FOTOFINDER SYSTEMS GMBH

Industriestraße 12  
84364 Bad Birnbach  
Germany

Phone: +49 8563 97720-0  
Fax: +49 8563 97720-10

presse@fotofinder.de  
www.fotofinder.de

### EDITORIAL BOARD:

Kathrin Niemela  
Elena Zinner  
Valeska Marquardt

### DESIGN:

Dominik Gruss  
Florian Forster

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# drmscpy

how chaos arises  
on darkish ridges  
in snowy valleys and  
strawberry fields

in rare constellations  
starburst and cancer  
in milky-red areas and  
shiny streaks

a little lie in symmetry

where the pattern rays  
under blue-white veils

one blink  
think

© kathrin niemela

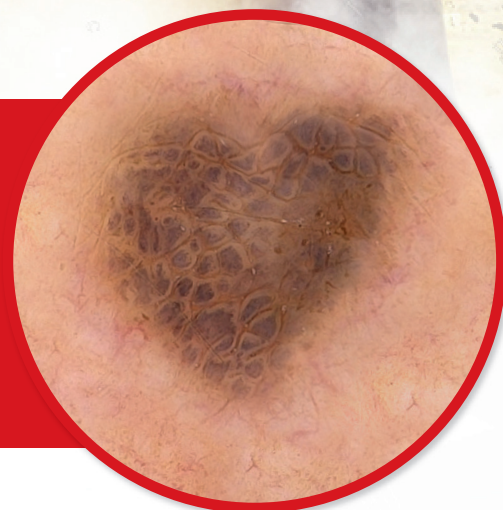
## DISCOVER #DERMOSCOPOETRY

### Become a member of the #dermoscopoetry community on Instagram

Sometimes, you come across everyday magic during the examination of a mole. You have probably already seen lesions through your dermatoscope that have attracted your attention because of their special shape, whether heart or elk!

Become a member of the **#dermoscopoetry community** and share your extraordinary dermoscopic photos on Instagram via the hashtag #dermoscopoetry or email your images to [marketing@fotofinder.de](mailto:marketing@fotofinder.de).

 [www.instagram.com/fotofindersystems](https://www.instagram.com/fotofindersystems)





# FotoFinder universe 3

## The beginning of a new software era

**FotoFinder universe 3 is the platform for the newest FotoFinder generation. It offers numerous new functions and areas of application such as Total Body Dermoscopy. Our development team not only updated the basic software logic but also improved performance: for even faster, more secure and more intuitive tasks with optimized workflows.**



**A platform that intelligently connects** Total Body Mapping, Bodyscan, dermoscopy, artificial intelligence, trichoscopy, aesthetics.



20 to 50% less storage space needed with the new standard **JPEG XR image file** format.



**New field of application:** Total Body Dermoscopy with the **ATBM master**.



The **camera control software** easily switches between more than one connected Canon DSLR camera, **medicam** or **leviacam** during use.



Optimized for the use of **artificial intelligence in dermoscopy** and **Total Body Mapping**.



The patient's body shape/height has changed? By recording and determining a **new baseline session** in the **ATBM**, you can match new conditions easily.



The optional **DICOM/HL7 interface** supports complex requirements of modern hospital environments.



Ability to **remove recorded Total Body Mapping sessions** and its associated micro images.



**Optimized marker logic:** each origin marker automatically receives its clone marker in follow-up sessions – for a better overview on the existing markers with dermoscopic images of all sessions.



**Quick Access:** simplified, secure access via USB token.



**New, efficient encryption technology** for data protection-compliant work.



**TOBIAS FUCHS, HEAD OF  
PRODUCT MANAGEMENT AND  
DEVELOPMENT:**

”

*“The new universe is probably the most secure and stable software we have developed to date. With the new camera control software and the new export and import format – to name just two of the numerous features – we have been able to further increase user-friendliness.”*





# The evolution of revolution

Total Body Dermoscopy  
with the new

## FotoFinder ATBM® master

FotoFinder invented the ATBM procedure. Based on the “two-step method of digital follow-up”, it helps physicians to detect new and changed skin lesions as early as possible – a quantum leap in skin cancer diagnostics.

Today, FotoFinder goes one step further and revolutionizes Automated Total Body Mapping: the new **ATBM master** makes Total Body Dermoscopy possible for the first time. The combination of the “whole skin” imaging procedure with artificial intelligence and novel software functions for the visualization of lesions will lead to improved diagnostic accuracy.

### Total Body Dermoscopy

#### Reinvention of Total Body Mapping as Total Body Dermoscopy

With extremely high-resolution, polarized and RAW-processed photos, it is already possible to assess the structure of moles in the whole body image. The supplementary video dermatoscope **medicam 1000s** enables a visual journey into the structures of the skin, enlarged up to 400 times – from full body to cell body.

### Optimized workflow for managing mole patients

A complete, standardized, extremely high-resolution documentation of the skin with the fastest processing unit we ever built.

### Artificial intelligence (AI)

The integrated FotoFinder AI supports the analysis and risk assessment of melanocytic as well as non-melanocytic skin lesions with one of the most powerful algorithms. **ATBM master** integrates this technology even further to optimize Total Body Dermoscopy results.

### PolFlash XE – proprietary computer-controlled xenon flash

Thanks to the sophisticated polarization technology, the flash allows both cross-polarized medical imaging as well as studio lighting for aesthetics.



### Safety, quality and reliability “Made in Germany” – future-proof

State-of-the-art encryption technologies and new user administration ensure data protection-compliant work. FotoFinder is certified in accordance with DIN EN ISO 13485:2016.

### Mosaic View – unmask the “ugly duckling”

The FotoFinder **Bodyscan ATBM** detects skin lesions out of the total body image and arranges them according to their relevance. This Mosaic View enables the physician to unmask the “ugly duckling” among the moles at a glance.

### Intelligent, multifunctional platform with new design

The new benchmark in terms of design and user ergonomics – and versatile in its use: the device offers modules for hair diagnostics, aesthetics and the management of psoriasis patients with the unique **PASiscan**.



# What key opinion leaders say about Total Body Dermoscopy

”

*“The time required to perform body mapping by the new ATBM model is much less than compared to the previous model. Currently, we need less than two minutes for the standard protocol. What excites us is the possible option of identifying dermoscopic structures directly in the clinical image. At present, the dermoscopy camera is still required for those lesions that require special attention. The ‘Mosaic’ represents a great help, since it allows an initial comparative approach to assess the lesion characteristics of a certain patient.”*

**DR. GABRIEL SALERNI AND DR. CARLOS ALONSO**

Dermatologists, e-Derma Center and National University of Rosario | Argentina



*“I think that the FotoFinder bodystudio ATBM has the potential to change the way we are doing digital monitoring. Usually we select lesions by hand-held dermoscopy, and then we take pictures and follow them up. The potential I see with this machine is that I stop taking care of the single mole, but just do total body, and then I do the side-by-side comparison because I don't have to go into too much detail regarding the morphology of a single globule. I need to know if a lesion is changing symmetrically or asymmetrically and that is what I can get from polarized total body photography.”*

**PROF. GIUSEPPE ARGENZIANO**

Professor of Dermatology, Second University of Naples | Italy

”

*“Thanks to the precise high-resolution documentation, new software tools and the capability to future implementation of machine learning tools, the advanced Total Body Mapping technology will dramatically improve digital follow-up in high-risk patients. The workflow improves by reducing time for acquisition of standardized total body maps with high quality images in 2-D. In Barcelona, we run a busy pigmented lesions clinic with a central image reading room, seven dedicated rooms for digital follow-up using different systems and additional rooms for other imaging examinations. With the new Total Body Mapping solution we can potentially reduce the number of individual lesions for a dermoscopic monitoring. Our technical team loves the Total Body Mapping system because of its usability and the professional development. Now, we work more flexible and efficient in two rooms with Total Body Mapping and in additional rooms with digital dermoscopy, confocal and optical coherence tomography. It's our hope that this new technology will facilitate the management of patients with multiple atypical moles worldwide. With the reduced time for acquisition and evaluation, more patients will benefit from digital follow-up. The simplicity of the technique will also facilitate the standardization of the digital follow-up protocols and the documentation of patients. Future clinical trials will help to elucidate the accuracy of high resolution Total Body Mapping in the earliest detection of melanoma compared to the two-step method of digital follow-up described in 2002.”*

**DR. JOSEP MALVEHY**

Dermatologist, Centro de Diagnosis Dermatológica and Hospital Clinic | Barcelona, Spain



Are you already a member of the  
International Dermoscopy Society?  
[www.dermoscopy-ids.org](http://www.dermoscopy-ids.org)

# Total Body Dermoscopy

“The new project sounds fascinating”

---

**Dr. Aimilios Lallas from the Medical School of Aristotle University of Thessaloniki (Greece) shares his view about the trends in dermoscopy and the new ATBM master technology that will enhance the daily routine of every dermatologist.**

Aimilios Lallas has specialized and deals mainly with the prevention, diagnosis and treatment of skin cancer with non-invasive techniques and the management and monitoring of skin cancer patients. Dr. Lallas is an author of more than 200 scientific papers and several book chapters and editor of six textbooks on dermoscopy. He has been awarded several scientific awards, is an invited speaker in domestic and international congresses and is particularly involved in teaching activities on dermoscopy all over the world. Over the last years, Dr. Lallas has established scientific collaboration with numerous colleagues from many countries and trained numerous young dermatologists and fellows from all over the world.

**FF: Dr. Lallas, what are the trends in dermoscopy?**

**AL:** We haven't fully explored the morphologic world of dermoscopy, yet. There are still things to be better understood, better studied and better elucidated. First, the world of non-pigmented tumors – we have to investigate still much more. Second, dermoscopy is expanding in other indications like in hair disorders or in inflammatory and infectious diseases.

**FF: How will skin cancer diagnostics look in the near future?**

**AL:** In my point of view not much different than today, at least in the European countries. I am sure that dermoscopy will be used more and more so that, in the next generation of physicians, using the dermatoscope will be indispensable. A new thing will possibly be the implementation of artificial intelligence in the field of skin cancer diagnosis. If we are very careful with defining its applications, AI might acquire a real role in our daily practice. Another already happening evolution is the spread of the use of other imaging techniques like confocal microscopy or optical coherence tomography of the skin. In the near future – before surgery – we will have much more information on the tumor itself, not only the diagnosis, but specific information on histopathologic and even on genetic characteristics.

**FF: The new ATBM technology will make the step from Total Body Mapping to Total Body Dermoscopy. How will this method improve your workflow?**

**AL:** First of all, the importance of total body photography is and will remain paramount. New moles are very important because most melanomas develop de novo. When I start my round knowing from the beginning there are five new moles, I have to focus my attention on them. This is very important not only because it saves time, but mainly because it reduces the probability that I will miss to examine a new mole. As an addition to it, the new project of “Total Body Dermoscopy” sounds fascinating. The technology that will allow the visualization of structures at a dermoscopy level only from the clinical image will be very valuable for our workflow.

**FF: How will this method enhance early skin cancer detection?**

**AL:** It will significantly enhance our daily routine since it will allow us to quickly dermoscopically scan the vast majority of moles without the need to apply dermoscopy. Then, we will be able to focus only on those moles which are not so typical from a dermatoscopic point of view. This means that the total time of each examination will be much shorter and we will be able to examine many more patients.

**FF: Currently, you are the General Secretary of the International Dermoscopy Society. What is your wish for the IDS?**

**AL:** We are very happy and proud of the society. We are one of the most vivid societies worldwide, with more than 15.000 members now. Definitely, our main goal remains to expand even more the method of digital dermoscopy in different countries in which it is not well established, yet.

**FF: What are your next projects in the IDS?**

**AL:** We will definitely continue to support and conduct many research projects in the future. And finally, we aim to launch an official and certified dermoscopy training course and to find a way to respond to the huge demand for second opinion services for our members and doctors. Last but not least, we will definitely continue to organize our events. The World Congress of Dermoscopy has already a great tradition and to it, we will add regional meetings organized every year in different parts of the world.



**AIMILIOS LALLAS, MD, MSC, PHD**  
**DERMATOLOGIST-VENEREOLOGIST**  
**ARISTOTLE UNIVERSITY, THESSALONIKI,**  
**GREECE**

[www.aimilioslallas.gr](http://www.aimilioslallas.gr)

**EXPERIENCE** Aimilios Lallas live at the 2<sup>nd</sup> international Dermoscopy Power Days from 21 – 23 May 2020 in Bad Birnbach (Germany). More information on page 25.





**ATBM**  
MASTER

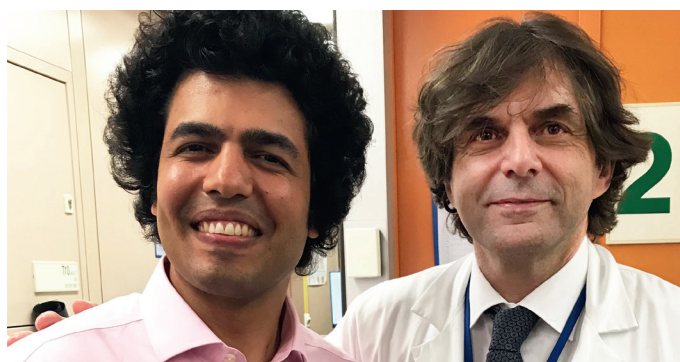


**THE FUTURE IS**  
Total Body Dermoscopy

# Dermoscopy made in Austria

an Interview with Univ.-Prof. Dr. Harald Kittler

**Professor Dr. Harald Kittler from the Medical University of Vienna – pioneer in pattern recognition in dermoscopy – on the advantages of the “two-step method of digital follow-up” and a positive competition that benefits the world!**



Moha Daryaie and Univ.-Prof. Dr. Harald Kittler

**FF:** Professor Kittler, when and where did your passion for dermoscopy begin and what brought you to the algorithm “chaos and clues”?

**HK:** More than 20 years ago, Michael Binder involved me in neural networks and automatic diagnosis; this is how it started. And it was precisely through the subject of pattern analysis, to which Bernie Ackermann, a famous dermatopathologist, introduced me, that I came to “chaos and clues”.

**FF:** Do you consider the approach of pattern recognition easily understandable or do you believe it requires a lot of training?

**HK:** Well, both. The basics are easy to understand, but the details are difficult to comprehend because you need to see a lot and you need experience. However, we have already been trained in pattern analysis since our childhood. What we do is transfer learning: we learn to classify animals and other objects by patterns. We can transfer this learning to pigmented lesions, which is both easy and difficult because, in the end, you have to make a medical decision for which you have to sum up all the morphology and also need further knowledge about the prevalence of the disease and so on. Therefore, it is not only about patterns.

**FF:** Many cases require follow-up and documentation, which is the actual value of digital dermoscopy. When did you start with digital dermoscopy here in this center?

**HK:** Well, this was one of the first centers to start with digital dermatoscopy and to observe lesions on follow-up. Therefore, I was one of the first to observe pigmented lesions using digital dermatoscopy. We learnt that melanomas, when they are small and in their early stage, don't look like melanomas. You can't recognize them by pattern analysis and you need the biology to diagnose them. And both the microscopic and clinical image comparison.

**FF:** For this purpose, you also practice the “two-step method” consisting of dermatoscopy and Total Body Mapping. For which patients is this procedure appropriate?

**HK:** I have to admit we haven't done much body mapping in the past because it was too time consuming. We worked together with a professional photographer, who photographed all poses in an elaborate way. Due to the lack of software support, it was still difficult to compare overview shots taken at different times. Now we are doing Automated Total Body Mapping because this solution is much better suited. In my opinion, both are important: the individual lesion and the overall picture. The best is to capture both with one machine! The relevant patients are patients with multiple nevi, for whom it is very time-consuming to monitor each lesion without body mapping: because you have to choose first, and when you choose, there is always the question of whether you made a good choice.

**FF:** Austria is not the largest country in terms of area, but it is a hub for dermatoscopy. Where does this passion come from?

**HK:** This is historical. Klaus Wolff, Hubert Pehamberger and Andreas Steiner found that the forgotten literature published about dermatoscopy and melanoma in 1971 by Rona McKie was interesting. Vienna was the institution where this was examined more formally and where pattern analysis was introduced to diagnose pigmented lesions in the 1980s. And when you have collected a lot of material, it's natural that you have a certain advantage. Not only Vienna – Graz is another hotspot. These two cities have always been in competition about who is better, more advanced, more innovative in dermatoscopy and therefore, they shaped the development of dermatoscopy.

**FF:** And the world benefits from that competition! Finally, do you have any tips for Vienna travelers?

**HK:** So the best place in Vienna is... Vienna! And you should have “Tafelspitz”, a boiled beef, preferably at the Plachutta.

*The questions were asked by Moha Daryaie.*



**UNIV.-PROF. DR. HARALD KITTLER**  
MEDICAL UNIVERSITY OF VIENNA, AUSTRIA

**EXPERIENCE** Harald Kittler live at the 2<sup>nd</sup> international Dermoscopy Power Days from 21 – 23 May 2020 in Bad Birnbach (Germany). More information on page 25.



# FotoFinder<sup>®</sup> Moleanalyzer pro



Analysis.  
Comparison. Second opinion.  
Artificial intelligence.

A new dimension in the assessment of skin lesions.

# Pocket-sized dermoscopy



The **handyscope 3 App** is now available in the App Store



## New handyscope 3 App

A new era of **eDermoscopy** begins: the new **handyscope 3 App** now offers artificial intelligence for mole risk assessment in the wireless practice. In addition, a second opinion can be requested at the push of a button by a team of renowned international skin cancer experts. In combination with the **handyscope** attachment for iPhone or iPod, this solution opens up completely new possibilities in dermoscopy, independent of the computer or consultation room!



## App features in detail:



**Password protection** via **Touch-ID**



**Easy image recording** by touching the display



**Autofocus** and **20x magnification**



**Localization assignment** on the virtual patient



**Automatic storage** with recording date and time



**Patient data** and **comments** can be added



Optional **AI Score** for the assessment of lesions with artificial intelligence



Optional **Second Opinion Service** from international skin cancer experts



**Email function** supporting **SSL**



**Highest safety standards** (HIPAA)



Many other **individually adjustable** functions



Data transfer from **previous app versions**



## The AI Score

Lesions can optionally be assessed by artificial intelligence. Within seconds, the app provides an **AI Score** (Artificial Intelligence Score), which supports you in the risk assessment of skin lesions. Credits for AI scoring can be acquired via in-app purchase or via the **Hub** account.



## Immediate 2<sup>nd</sup> opinion

An optional second opinion can be requested directly via the app from international dermoscopy experts: within a very short time, you will receive a second opinion report from the professors Andreas Blum, Peter Soyer or Rainer Hofmann-Wellenhof. Like AI, payment follows via the FotoFinder credit system.



## The platform

The FotoFinder **Hub** functions as web storage for your **handyscope**. The online platform securely merges all images of your mobile **handyscope** devices and allows you to easily create comparisons, evaluations and reports on screen. You can choose between different subscriptions. [www.hub.fotofinder.de](http://www.hub.fotofinder.de)



# Moleanalyzer pro®

The future is here

## Artificial intelligence in skin cancer diagnostics

For many people, the everyday use of artificial intelligence (AI) still seems like science fiction. However, as pioneer in this field, FotoFinder is already incorporating AI in dermatological practices with the **Moleanalyzer pro** expert system and, more recently, with the **handyscope 3 App**. The **Moleanalyzer pro** offers unique possibilities in the assessment and follow-up of melanocytic and non-melanocytic lesions, ranging from their initial analysis all the way to a Second Opinion Service.

The deep learning algorithm supports dermatologists in the earliest possible detection of skin cancer. Simple. Accurate. Validated. In future, the use of AI in dermoscopy will not only improve the quality of early skin cancer detection but will also facilitate a worldwide network of physicians to ensure fast and easy access to the most modern and uniform diagnostic standards. In the event of any remaining doubt, the FotoFinder Second Opinion Service combines AI with “human intelligence”.

## Artificial intelligence meets human experience

The AI-based software **Moleanalyzer pro** supports the physician in the analysis and risk assessment of skin lesions. It can help to combine specialist competence with AI in dermoscopy, because the software’s neural network was – and is continuously – fed and trained with the currently largest data collection of dermoscopic images, including their associated diagnosis.

**Moleanalyzer pro** works with one of the most powerful deep learning algorithms that has been evaluated in clinical tests so far. In the study “Man against Machine”, conducted at the University Hospital of Heidelberg (Prof. Dr. Holger Haenssle et. al.), the FotoFinder algorithm achieved impressively high results in terms of sensitivity and specificity and can compete with experienced skin cancer experts regarding its diagnostic quality. Another study with new test sets is currently being conducted by the Department of Dermatology at the Heidelberg University Hospital.



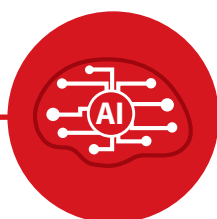
**DR. MED. STEPHAN BOSCH**  
**DERMATOLOGIST**  
**LUDWIGSBURG, GERMANY**

”

*“AI is on everyone’s lips and we were curious about this tool. With the FotoFinder Moleanalyzer pro with AI, I can offer my patients the most modern way of skin cancer diagnostics – and they are impressed! The Moleanalyzer pro gives me additional confidence in deciding whether a lesion should be excised or not. It’s exciting that the increasing size of the database makes the score more and more reliable. We have been using the AI since May 2018. Currently, the results are impressive.”*



**95 %**  
sensitivity



**82.5 %**  
specificity\*

\*ROC curve regarding the median sensitivity of 86.6%.

FotoFinder®  
**Moleanalyzer pro**

More information under  
[www.fotofinder.de](http://www.fotofinder.de)

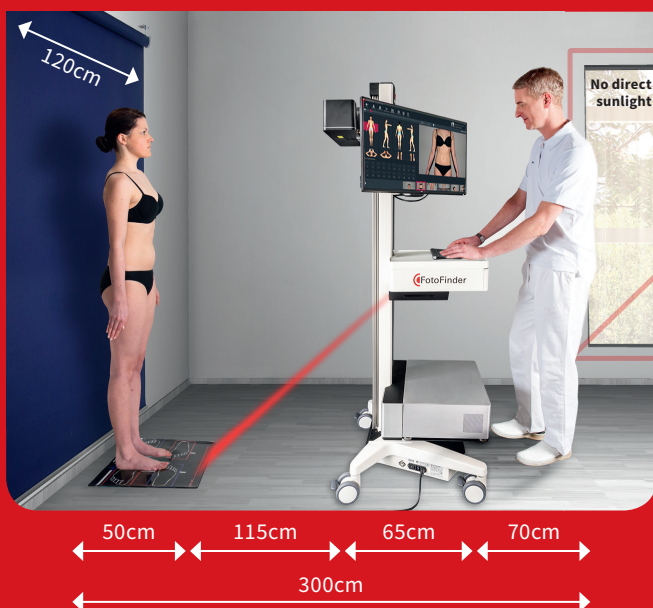


# Body Mapping made easy!

## The room requirements for **ATBM**® systems

You are playing with the idea or have recently decided to purchase a FotoFinder bodystudio ATBM system, but now you have some important questions: what do I have to consider? How do I prepare my examination room for the new system? The most important requirements for your practice are listed here:

- ④ **Spatial dimensions:** your examination room should have a usable space of at least 300 cm in length and 120 cm in width. The distance between bodystudio ATBM and patient should be 115 cm.
- ④ As **background for the photo documentation**, you should only use monochrome, non-reflecting and the smoothest possible surfaces (e.g. the monochrome, dark-blue photography canvas provided by FotoFinder).
- ④ The **distance between person and background** should be as small as possible. Place the positioning mat (provided by FotoFinder) directly in front of the photo background. The distance to the background should be identical during follow-ups.
- ④ Make sure that the examination room is **well lit** with consistent lighting conditions (e.g. LED lighting or halogen lamps). Avoid direct sunlight. Any existing windows should be blinded completely.

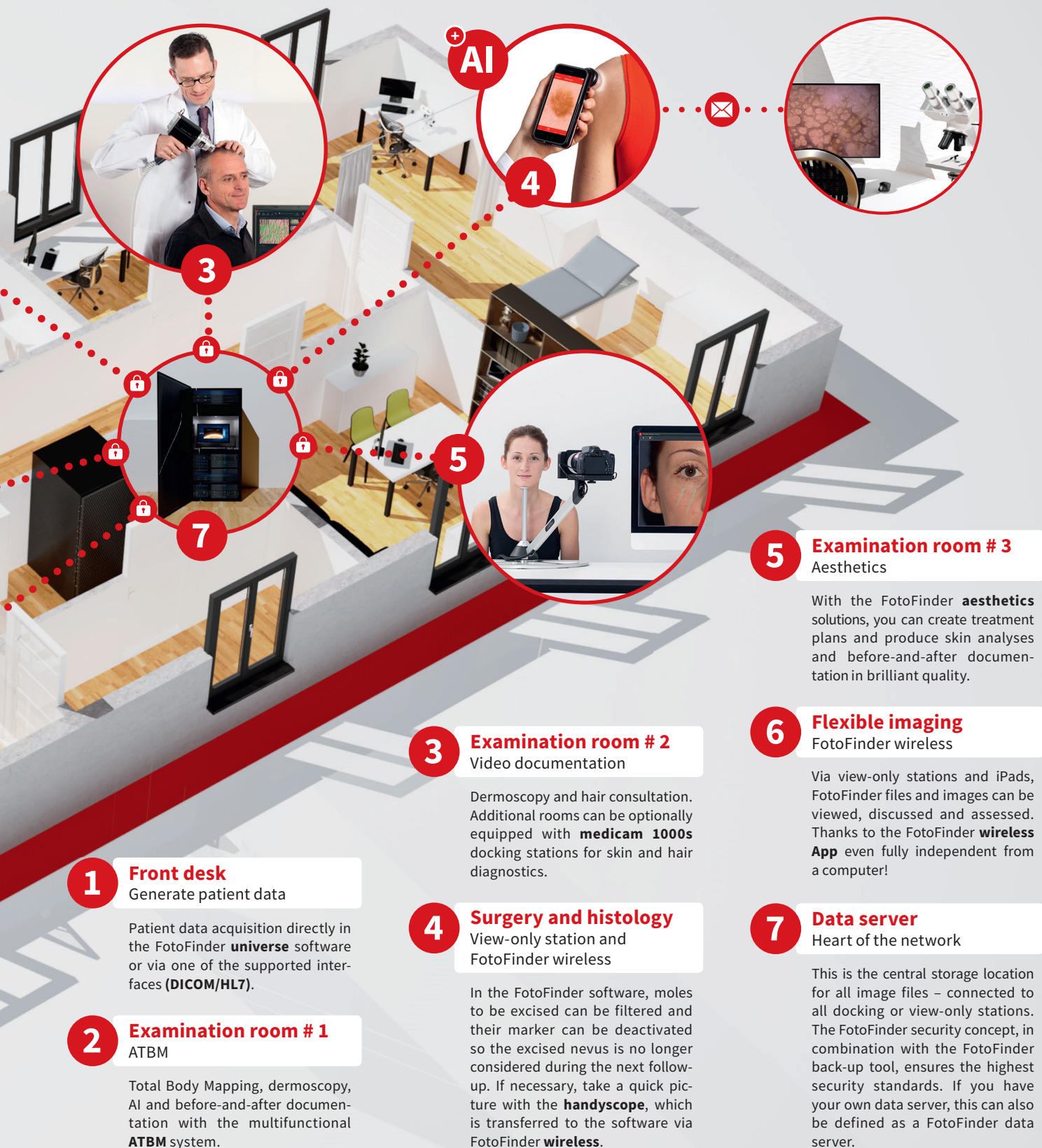




# One network for everything

## The FotoFinder solution

A FotoFinder system can be used both as a stand-alone version and as a multi-user installation. Network integration offers numerous benefits and enhancements for your daily use, creates flexibility in your practice and helps you to optimize workflows and to reduce your workload.





The new benchmark for  
video dermoscopy worldwide

**FotoFinder D-Scope IV and medicam<sup>®</sup> 1000s**



An all-encompassing experience.  
For skin. Hair. Nails.



# A new vision in dermoscopy. Flexible as never before!

## A new view of the skin with D-Scope IV precision lens

**A patient is being screened for skin-cancer. All lesions are recorded and saved. All but one... Between the fingers. Small. Inaccessible. Atypical. In need of clarification. Fortunately, there is the new conical cap from FotoFinder.**

**Polarized images or rather immersion:** this freedom of choice remains even with the new conical cap for hard-to-reach parts of the body. The trio of developers around Robert Strenberger, Johannes Exner and Konrad Strenberger have implemented the customer's wishes and even went one step further: the cap can be easily attached and detached from the **medicam** with the special locking mechanism. The flat surface of optical glass provides the best illumination of the lesion, without shading.

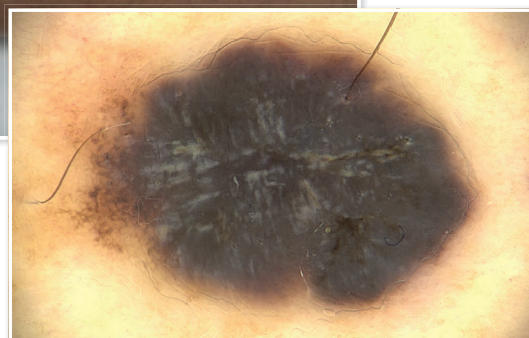
The conical cap completes the possibilities of the new **medicam 1000s** with the **D-Scope IV** lens. The precision optics enable faster and more flexible image capturing. The convenient switch between immersion and polarization – without changing accessories – makes screening more enjoyable. With or without contact to the skin.

### A CASE FROM DR. GARY R. LEVY DERMATOLOGIST JOHANNESBURG, SOUTH AFRICA

Dr. Gary Levy examined a 52-year-old patient with a symmetric dark lesion with a hair coming out of it. He took a great picture with the **FotoFinder medicam** and the **D Scope IV** lens. He was thrilled by the picture quality:



*"I had always thought that the medicam 1000 was a great imaging machine. However, this new lens has transformed it into the most special dermoscopy unit. The clarity is unbelievable: much better than anything I have used before, the colors are perfectly true. See the amazing shiny white streaks/chrysalis structures and then the remnants of a pigment network on the edge. You will only see those structures with polarized light. No doubt, this new combination of the medicam 1000 and the D-Scope IV lens has reset the benchmark for all new scanning devices."*



**The result: a melanoma, with a thickness of 1.01 mm.**

# FotoFinder introduces Confoscopy®

## A new vision with super-high magnification dermoscopy

**The FotoFinder dermoscopy family has grown again: the new member is called Confoscopy and opens up a new vision in skin examination, with optical magnifications of up to 400x.**

### “Melanoma like you have never seen before!”

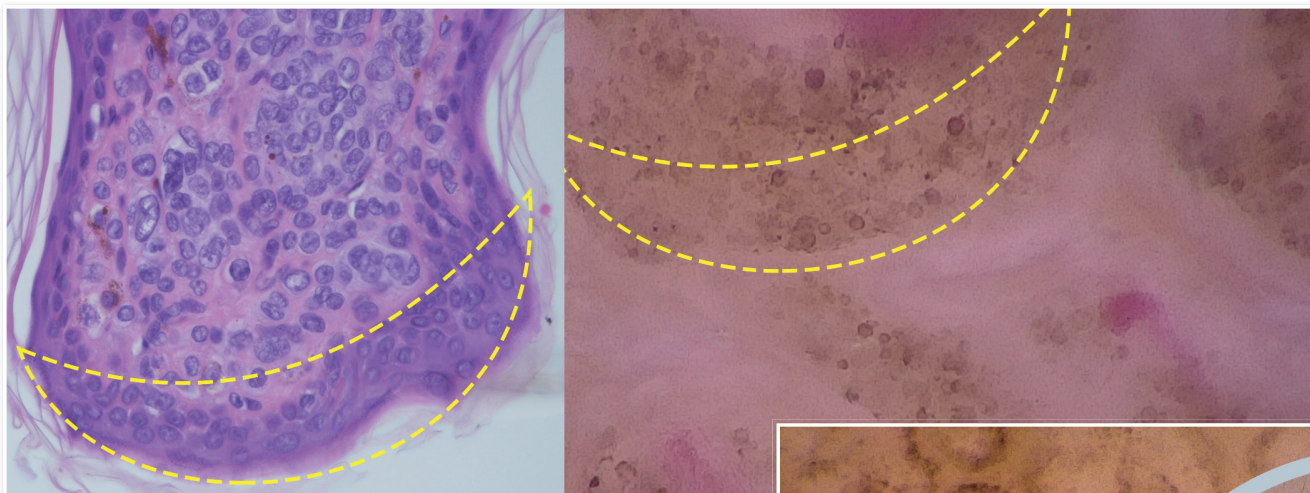
This is the summary of Dr. Renato Rossi from Italy when he talks about his passion for confoscopy or super-high magnification dermoscopy. The new technique with 400x magnification gives dermatologists the impression of facing histological morphology, on which the conventional dermoscopic patterns are not applicable. This opens up a new era in dermoscopy with incredible diagnostic and scientific potential!

Dr. Rossi has carried out his research in collaboration with the pathologist Gerardo Ferrara, one of the most experienced pathologists at international level.

“With the new technology, I was able to obtain images so far never seen, at very high magnification and in color, offering a new dermoscopic iconography: more details, structures, colors and new patterns, which make it much easier to interpret the conventional dermoscopic images: you ‘travel between the cells’ until you can also see the individual cells.”

Dr. Rossi presented the first results of this research at the SIDCO-ISDS World Congress 2018 where he received the SEDONA Award for the best scientific contribution.

The new discoveries spread rapidly in the dermoscopy community. Currently, a study titled “interobserver agreement on the single criteria” discovered by Dr. Rossi is underway and has been joined by several dermatological centers.



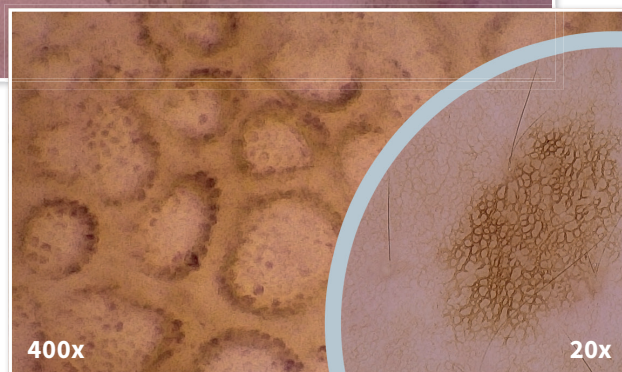
We compare the melanocytes of an exophytic papillary structure of a dermal nevus seen with histology and confoscopy.

### DR. RENATO ROSSI

**PIONEER BETWEEN RESEARCH AND PATIENT CARE**



For Renato Rossi, Italian specialist in dermatology, dermoscopy is a fascinating terrain in which we can still discover new landscapes. That's why he was the first to venture into the field of super-high magnification dermoscopy. With many years of experience at the University of Modena, he conducts his research at the dermatology unit of the Macerata Hospital directed by Dr. Marco Simonacci. He also takes care of his patients at his “Skin Center Senigallia” in the Italian Marche region.



In the nevus network the melanocytes appear as small spheres, around the dermal papillae, forming “pearl necklaces”.





**PROF. JEAN-LUC PERROT, PHD, MD**  
**DERMATOLOGIST AND VENEREOLOGIST**  
**CHU DE ST. ETIENNE, FRANCE**

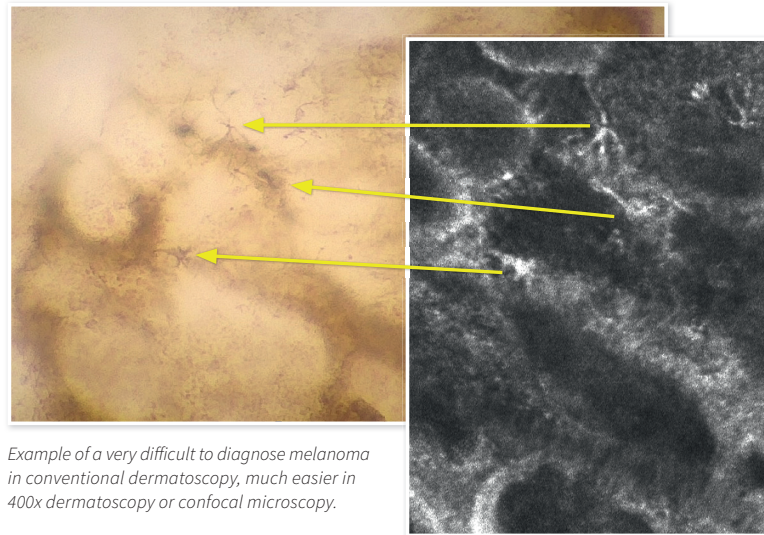
Another investigation group in confoscopy is the team of Professor Jean-Luc Perrot in Saint-Etienne. For several years, he has been collaborating with the team from Siena (Prof. Elisa Cinotti, Prof. Pietro Rubegni), particularly in various fields of microscopic dermatological imaging in and ex vivo (confocal microscopy and LC OCT in particular).

“400x dermatoscopy has become a very active field of investigation for us. To explain to my patients the difference between dermatoscopy and confocal microscopy, I used to compare the examination of the tumor to reading a book. Thus, if we consider that the tumor is a book, then the pages are read one by one with the confocal microscope, chapter by chapter with the dermatoscope, and all together during the clinical examination. This comparison has been made more complex with the major innovation of 400x dermatoscopy, which allows only a few pages to be read at a time.”

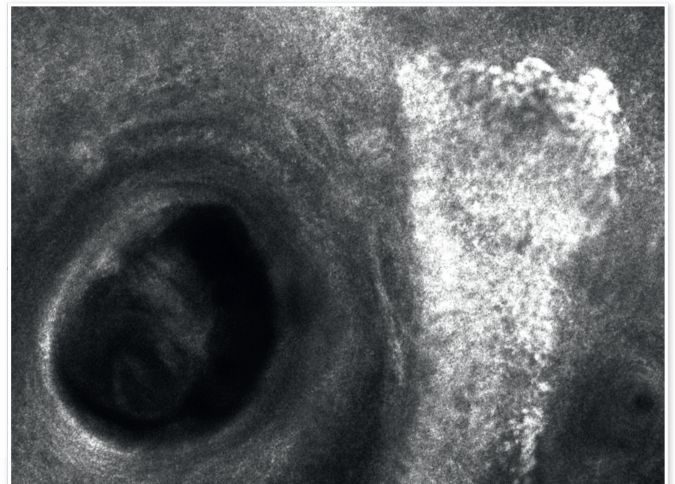
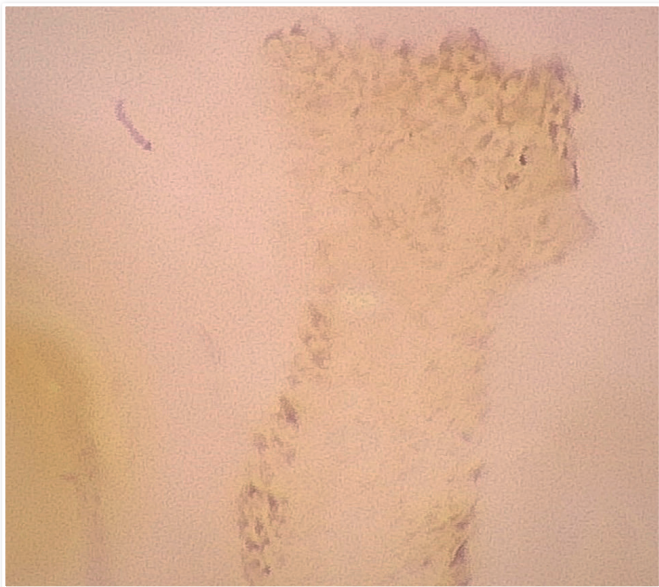
The following two examples of cell-to-cell correlation between confocal microscopy and 400x dermatoscopy illustrate Jean-Luc Perrot's comparison.



**PROF. ELISA CINOTTI, PHD, MD**  
**DERMATOLOGIST**  
**UNIVERSITÀ DEGLI STUDI DI SIENA, ITALY**



*Example of a very difficult to diagnose melanoma in conventional dermatoscopy, much easier in 400x dermatoscopy or confocal microscopy.*



*Example of actinic lentigo: perfect match of 400x dermatoscopy and confocal microscopy*

## The FotoFinder technology behind: D-Scope III

Confoscopy can be performed with the unique **D-Scope III** lens together with **medicam 1000(s)**. The lens is also perfectly suited for capillary microscopy, facilitating the analysis of microvascular abnormalities. It is even possible to see the blood cells that flow through the capillaries!



# Supertrend trichoscopy

## Hair consultation of the future

Jerry Shapiro, MD, is one of the most experienced hair dermatologists in the world and has specialized in hair and scalp disorders. As a Professor of Dermatology at the New York University School of Medicine, he has already published more than 150 manuscripts, 30 book chapters and three textbooks and held more than 500 guest lectures on the subject. He has appeared in national and international radio and television such as USA Today, ABC News, Men's Health, The Oprah Magazine and Scientific American. Professor Shapiro's three main professional goals have always been patient care, research and education. We met Professor Shapiro and talked about the supertrend trichoscopy and his work.

**FF:** Dr. Shapiro, why did you focus on hair and scalp disorders?

**JS:** If you really want to be one of the best in your field, you need to focus on one particular niche. I was asked to do it 30 years ago and I developed a passion for it. In the early days, it was difficult as there were so few therapies. Medical treatments have certainly evolved and the management of hair disorders has become very sought after. My journey started at the University of British Columbia where my hair practice grew significantly. Over time, it became so popular that I was recruited by New York University just to do hair.

**FF:** You dedicate so much time to one single patient – in some cases one hour – and this is an exception. Please explain how you proceed during a consultation.

**JS:** As Director of Hair and Scalp Disorders at New York University School of Medicine, I have been given the luxury of being able to spend at least one hour with the patient. On many occasions, it may be more than one hour. I never end a consultation, the patient ends it because hair is such an emotional part of a person's being and it's a matter of self-esteem. My job is to give the right treatments, to give the right diagnosis and to calm them down. We can try to slow down the hair loss, stop it and even regrow it – depending on the diagnosis.

**FF:** That is a very patient-centered way of treatment. How do you integrate digital technology in your consultations?

**JS:** It's an interaction between me and the patient. We like to count hairs in order to get a data point, a graph, and we are both finally satisfied, that we counted every hair on the screen. Every patient wants to be a part of this process and with this measurement we want to confirm if the treatment is helping or not.

**FF:** So many young dermatologists from all over the world are extremely interested in hair measurement and analysis of scalp disorders. What's your message to all those young people?

**JS:** Things have changed over the past three decades: technology has changed, treatments are a lot better. But you have to prove to the patient it's really working. The only way to do that is to show them with reliable numbers. I think anyone who is serious about hair should try to integrate that in their practice – quantification. Trichoscopy is very important for diagnosis but also for quantification. The FotoFinder is extremely good in its photographs of the hyperkeratosis of the erythema and I guide my treatment based on what I see on FotoFinder.

**FF:** And finally, a personal question: New York City is so diverse and so beautiful – what's your favorite food?

**JS:** There are so many. I like so many cuisines, like French, Italian, Indian, Middle Eastern, Eastern European and Asian. Within a particular cuisine there is a spectrum of restaurants and there are certain places in the city that are so wonderful to eat at.

*The questions were asked by Moha Daryaie.*



**JERRY SHAPIRO, MD**  
PROFESSOR OF HAIR AND SCALP DISORDERS  
NEW YORK CITY, USA

[www.doctorjerryshapiro.com](http://www.doctorjerryshapiro.com)



# New: FotoFinder studio

## Dermsthetics and hair examinations - all in one system

The new FotoFinder solution combines tools for hair diagnostics and hair surgery, mole mapping and aesthetics all in one single device.

### 1 Skin & scalp photography

The **Portrait Stand** with its unique **PolFlash** lighting system can be swiveled 180° from left to right and guarantees consistent photography. With the **headrest for scalp photography**, you can take impressive cross-polarized global pictures to visualize the areas affected by hair loss. Switch to the **chin rest for aesthetics** and take brilliant, perfectly illuminated before-and-after photos of the face, neck and décolleté.

### 2 A multifunctional imaging platform

The modular setup allows combining various imaging platforms:

- Use the FotoFinder **dermoscope** platform for mole mapping and dermoscopy – for follow-up, comparison and analysis of skin lesions, powered by FotoFinder AI.
- FotoFinder **aesthetics** with the customized **Proposer** tool is the platform for before-and-after photography and consultation. Create personalized treatment plans or use the **Adonia Compare** software to analyze facial images for redness and pigment damage.
- Speed up your hair consultations with the **TrichoLAB** service and receive a precise trichoscopy report as a base for diagnosis, whereas the **Trichoscale pro** software is the tool for digital trichograms.

### 3 Dermoscopy of skin, hair & nails

Use the **medicam 1000s** as an impressive all-round camera: no matter whether in video dermoscopy, trichoscopy, inflamoscopy or capillaroscopy, you can take panoramic and micro images in brilliant and spectacularly sharp quality. The unique **TwinLight** guarantees convenient switching between polarized and non-polarized light, with or without contact to the skin.

### + Hair transplant planning & documentation

Attention, all hair surgeons: with the new **TrichoLAB TransPlanner** you can design hair transplants quickly and easily. With reliable figures, and without having to shave the patient, it helps you to determine how many grafts have to be excised and inserted to obtain an optimal result.



Product image serves as example.

# Fascination Laser Medicine

An interview with  
**Dr. med. Bettina Rümmelein**

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After working in Germany and Zurich University Hospital, Dr. Bettina Rümmelein settled down in Switzerland as a private physician about ten years ago. In 2016 she founded Dr. Rümmelein AG together with the House of Skin & Laser Medicine clinic and the Smartaging Swiss Academy training center. In doing so, she established one of the world's best-known addresses for advanced training in dermatological and aesthetic laser medicine. In use there for more than 20 years: FotoFinder imaging solutions.

**FF:** Dr. Rümmelein, what were your reasons for specializing in the field of dermatology?

**BR:** Some things in life happen by chance. I have always been fascinated by laser medicine: to “conjure” something from the skin with bundled light.

**FF:** What range of treatments do you offer at the House of Skin & Laser Medicine?

**BR:** We are four dermatologists, one gynecologist and four assistant doctors and offer the entire spectrum of dermatology. We work with more than 40 lasers and other devices for skin therapy, such as high-intensity focused ultrasound, radiofrequency therapy or soft tissue X-ray.

**FF:** What key messages would you like to convey at the two locations in Zurich?

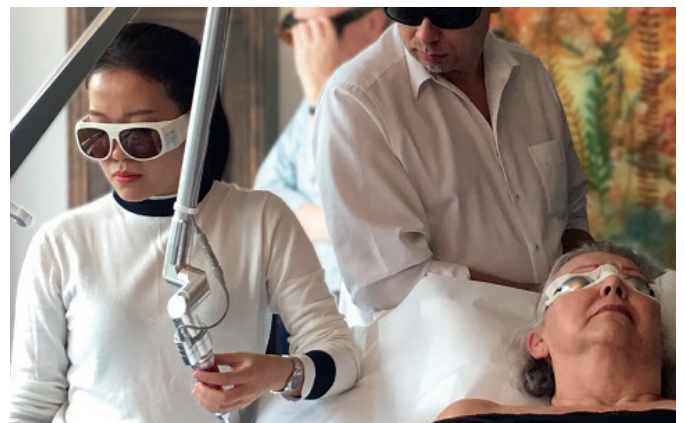
**BR:** Dr. Rümmelein AG is a training center in various areas: on the one hand, we are a so-called training center C with the University of Basel and Zurich. This means that we train residents to become specialists in dermatology and educate them in general dermatology. On the other hand, we are a training center for laser medicine recognized by the FMCH Laser Commission (editor's note: FMCH = competence program “Laser treatments of the skin and skin-near mucous membranes”). Specialists can complete their apprenticeship, which they need to obtain the certificate of competence for laser medicine. We also teach doctors from abroad.

**FF:** How long have you been working with FotoFinder?

**BR:** The FotoFinder was the very first device I bought – that was in 1998. I worked with it for a long time in Hamburg and was very happy to own this very useful tool. Even today the FotoFinder is indispensable: we examine all patients with the FotoFinder, no matter what they have. Every lesion check is done with the FotoFinder system, every aesthetic procedure has to be recorded before the treatment.

**FF:** You use FotoFinder systems specifically for laser treatments. When exactly is it used?

**BR:** Before each laser treatment, you have to assess in detail what you are actually treating. It is particularly important for pigmented lesions. You have to make sure that you do not accidentally laser a malignant finding. It is essential to record everything photographically and it is not possible to work without dermoscopy.



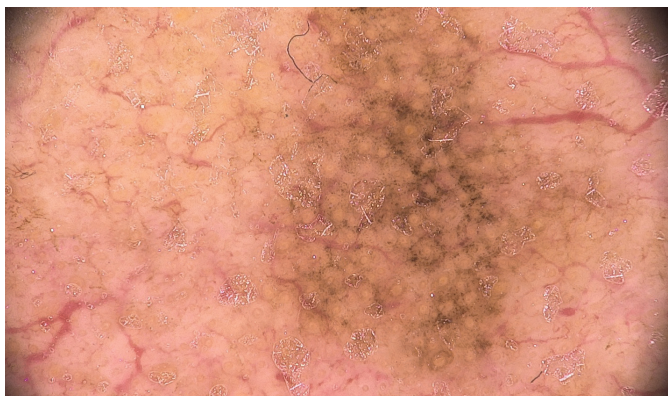


**FF: Can you give us an example?**

**BR:** To remove a brown spot on her right zygomatic arch with a laser, a 63-year-old female patient was sent to us by a colleague. She had already been treated with nitrogen on several areas of her face. We took the following pictures with our FotoFinder system:



**Clinical picture:** lentil-sized light brown macula on zygomatic arch on actinically stressed skin.



**Micro picture (immersion):** fine black dots can be seen, dark-brown asymmetrically pigmented follicle apertures as a typical distinguishing feature of the lentigo maligna from the lentigo senilis.

**FF: How did you proceed?**

**BR:** We excised the lesion, histologically we found a superficial invasive cutaneous melanoma, a lentigo maligna melanoma. The tumor thickness according to Breslow was 0.1mm, without ulceration and without regression. Afterwards, the tumor was excised with a localization-adapted safety distance of 5mm. We decided to undergo adjuvant radiotherapy.

**FF: What feedback do you receive from your course participants and patients?**

**BR:** The precise, high-quality photos I use for my lectures underline the professionalism of our treatments. However, course participants particularly appreciate the FotoFinder case studies. With these photos they can clearly see that it is the unadulterated truth.

**FF: What are the trends in dermatology?**

**BR:** Traditional dermatology and aesthetic dermatology are inseparably linked with each other. Today's patients not only want to be healthy, they also want to look neat. For example, an age wart is a medically harmless finding, but it can be disturbing and then the patient may want an aesthetically perfect removal.

**FF: Dr. Rümmelein, after a long working day: what do you like to do in your free time?**

**BR:** I love good films! I love going to film festivals like the Venice International Film Festival. I have two dogs and – like all dogs – they like to go for a walk.

**DR. MED. BETTINA RÜMMELEIN**

PRESIDENT SGML  
(Swiss Society for Medical Laser Applications),  
SPECIALIST IN DERMATOLOGY  
AND VENEROLOGY FMH,  
LASER CERTIFICATE FMCH



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[www.dr-ruemmelein.ch](http://www.dr-ruemmelein.ch) | [www.smartaging-swiss.academy](http://www.smartaging-swiss.academy)

# International flair

## in skin cancer diagnostics

In 2019, the first international FotoFinder Academy took place under the scientific direction of Professor Peter Soyer and Professor Giuseppe Argenziano entitled “Dermoscopy Power Days”. The participants were enthusiastic about the great time spent with passionate dermoscopists:

”

*“This workshop is maybe the best dermoscopy activity I’ve ever taken part in – I’m pretty happy to be here. The FotoFinder Dermoscopy Power Days are a nice event with high quality, the lessons will improve my dermoscopy knowledge. In our country we see a high number of melanoma each year. At the moment, I work with FotoFinder in order to examine and to detect skin cancer as early as possible as well as to control high risk patients. In the future, we will expand to use the FotoFinder for psoriasis and trichoscopy.”*

**DR. ISMAEL SÁNCHEZ UMAÑA**

Dermatologist | San José, Costa Rica



”  
*“It is a great experience. The lectures are very interesting and were held by the top experts in the world – Professor Argenziano and Professor Soyer. We also have the opportunity to enjoy the Bavarian food, the Bavarian culture and meet people from all over the world to expand our knowledge and exchange ideas. It was a very great experience for us! Although we are very recent FotoFinder users, we can definitely say that this system has upgraded the diagnostic level of our private clinic and patients are really excited with its clarity. FotoFinder is an irreplaceable tool for our clinical and research projects on genetic predisposition for the detection of melanocytic nevi.”*

**DR. MARIA & DR. ALEXANDRA VOUDOURI**

Dermatologists – Venereologists | Athens, Greece

”

*“This is a very good experience for me: I would say I’m not a beginner, I’m a user, but I have to develop myself everyday – otherwise I stop developing. Thanks to these two excellent speakers and the many case studies, I can gather a lot of knowledge for myself and expand my own knowledge. I would like FotoFinder to continue this educational program. Not only doctors in my clinic love this device, but also our patients because it’s great when they can see the comparison of their changed lesions on the screen. I’m looking forward to cooperating with FotoFinder in the future – especially Total Body Dermoscopy – and I will soon be able to work with the new ATBM master in my clinic.”*

**DR. RAIMONDS KARLS**

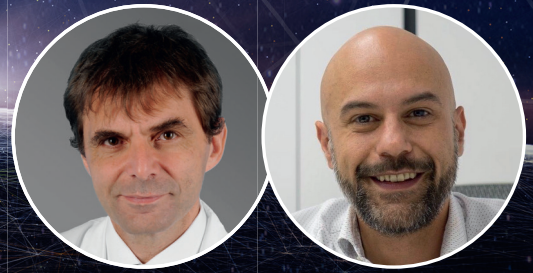
Dermatovenereologist | Riga, Latvia





# Our Dermoscopy Power Days

will enter the next round!



**Harald Kittler**  
Vienna



**Aimilios Lallas**  
Thessaloniki

## 21 - 23 May 2020

The lessons will be held in English. EACCME and CME certified.  
Advanced knowledge of dermoscopy is recommended.

The first international event of our FotoFinder Academy took place in April 2019. More than 90 specialists from 27 nations – including China, Taiwan, Costa Rica and South Africa – took part in the intensive workshop and followed the interactive presentations of our two world-famous skin cancer experts with great interest. Due to a limited number of participants, sign up early for the next event when Univ.-Prof. Dr. Harald Kittler and Aimilios Lallas, MD, MSc, PhD will present advanced dermoscopy insights from 21 – 23 May 2020.

### Dermoscopy Power Days – a world-class program!

The Dermoscopy Power Days are a two-day international class with structured and complete units on dermoscopy and associated areas. The aim is to provide participants with theoretical and practical knowledge, related cases and workflows so that they can improve their diagnostic skills and exchange experience.

### International flair, Bavarian style!

During the opening evening in the FotoFinder company building on the 21<sup>st</sup> of May, you will have time to exchange ideas with other seminar participants and visit the FotoFinder headquarters and manufactory. On the 22<sup>nd</sup> of May, you can join our entertaining Bavarian evening with local beer and food.

### Impressions from the first FotoFinder Academy International

More information and registration:  
[www.fotofinder.de/academy-int](http://www.fotofinder.de/academy-int)



**SAVE THE DATE: 21 – 23 May 2020 | Bad Birnbach, Germany**





# Around the world

## with FotoFinder

State-of-the-art technology from Bavaria – at home all over the world. FotoFinder is used in more than 100 countries. Take a look inside the FotoFinder universe:



### FotoFinder GlamCam

High-tech and bling-bling – a combination that has become reality: FotoFinder presented the **GlamCam**. Upon special request, the **medicam** was gold-plated and refined with almost 3.000 Swarovski crystals. With loving attention to detail, the precious and unsaleable piece was produced in the FotoFinder manufactory. The **GlamCam** proved an eye-catcher and selfie-hotspot during the presentation at the AMWC in Monaco.



### Mallorca Body Mapping

Dr. Cordula Ahnhudt-Franke has been working in Mallorca for 16 years. Her team now has the most extensive diagnostic and treatment equipment in the Balearic Islands and recently bought a new **ATBM** system. Dr. Ahnhudt-Franke offers Total Body Mapping examinations to tourists and residents facing a higher risk of developing skin cancer since they are subjected to far longer sun exposure than in Northern and Central Europe.



### Welcome to the FotoFinder Family

The FotoFinder family warmly welcomes clinic physician and skin expert Dr. Karla Arias from San José in Costa Rica. Recently she bought a brand-new **ATBM** tower for the Hospital Clínica Bíblica. Many people from Costa Rica will already know her from various TV appearances. As an expert in her field, she will devote more time to the Automated Total Body Mapping procedure and the care of high-risk patients since the clinic focusses on check-up programs.



**Join in!**

Your FotoFinder is in an equally great place or you thoroughly enjoyed an encounter with us?  
Send your photo to: [marketing@fotofinder.de](mailto:marketing@fotofinder.de)



# OUTLOOKS

## +++ FOTOFINDER NEWS

### +++ Integration of Medical Message Server



**FotoFinder devices can be integrated in the IT infrastructure and workflows of a hospital using HL7 or DICOM.**

The FotoFinder Medical Message Server software offers various options like DICOM worklist integration or HL7 examination order management. FotoFinder Medical Message Server is also able to send automatically generated examination reports to the patient data management system and store images in the central image storage PACS. The key to successful integration is detailed planning and structured integration testing.

For detailed information and best practice examples please write to [info@fotofinder.de](mailto:info@fotofinder.de).

### +++ Trichoscopy Cruise

**10 – 17 August 2019**



**Combine a 7-night Caribbean Cruise with Antonella Tosti's Trichology Course!**

In the 7-day course, you will learn everything you need to run a successful hair clinic, from trichoscopy to trichogram, from diagnosis to treatment! As the workshops are interactive hands-on sessions with discussions, this is not a conference but intense personal training with Prof. Antonella Tosti, world expert in hair and nail disorders. Welcome aboard!

FotoFinder customers benefit from exclusive discounts! More details under [www.doctortosti.com](http://www.doctortosti.com).

### +++ EADV Congress in Madrid

**09 – 13 October 2019**



**Missed the World Congress but still have the time and desire to meet colleagues internationally?**

Come and visit us at the 28<sup>th</sup> EADV Congress in Madrid, it's worth it! Take the chance to explore our latest innovations from handheld to automated imaging and participate in the FotoFinder AI Challenge!

**The FotoFinder team is looking forward to your visit at booth G56!**



### TRADE SHOWS:

**29 – 31 August 2019**

Dermoscopy Excellence  
International Masterclass, Rome

**29 August – 01 September 2019**

5CC, Barcelona, booth: 22

**04 – 06 September 2019**

Congreso Latinoamericano  
de Dermatoscopia 2019,  
Ciudad de México

**03 – 05 October 2019**

Dermoscopy Excellence  
International Masterclass, Rome

**09 – 13 October 2019**

28<sup>th</sup> EADV Congress  
Madrid, booth: G56

**18 – 19 October 2019**

FotoFinder Academy,  
Bad Birnbach

**13 December 2019**

FotoFinder Academy UK, London

**30 January – 01 February 2020**

IMCAS, Paris

**20 – 24 March 2020**

AAD, Denver

**01 – 05 April 2020**

AMWC, Monaco

**22 – 25 April 2020**

EADO Congress, Vilnius, booth: 16

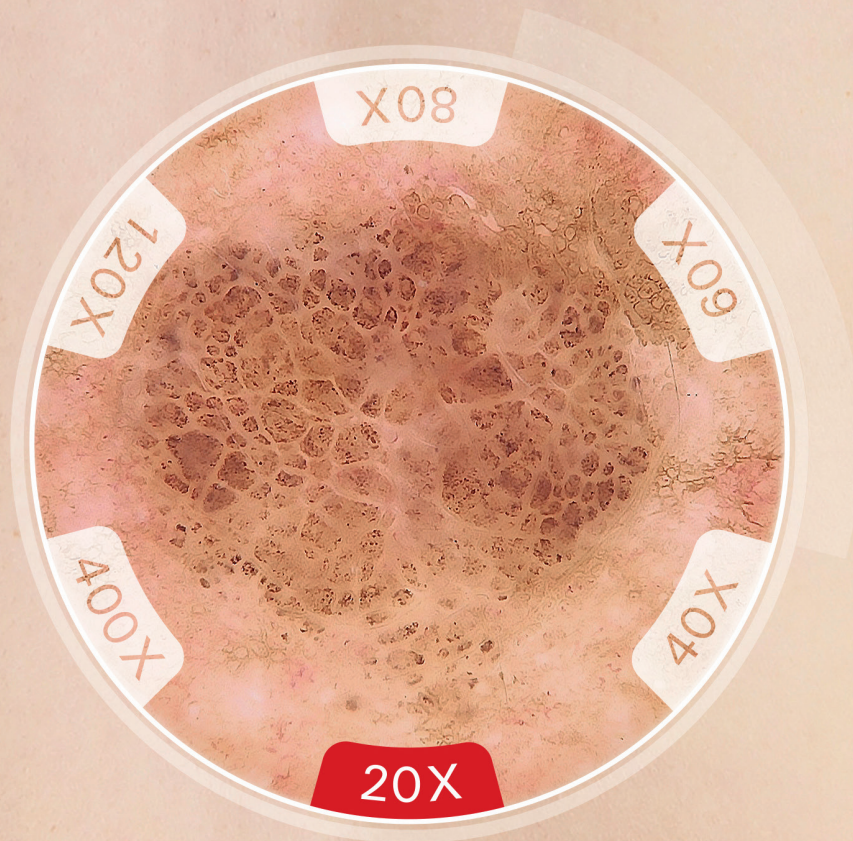
**07 – 09 May 2020**

2<sup>nd</sup> World Congress of Trichoscopy,  
Sorrento

**21 – 23 May 2020**

FotoFinder Academy International:  
Dermoscopy Power Days,  
Bad Birnbach





[MEDICAM 1000S/D-SCOPE IV/ZOOM 20X]

# FASCINATION SKIN AND HAIR

PASSION IN THE FOCUS

Skin is the most fascinating organ of our human body. We carry it for a lifetime, feel through it, perceive with it and look good in it. It embraces and protects us every day anew. This fascination motivates us to visualize skin. With innovation and continuous development, we support your passion to heal and care for skin. This passion unites.

Read more about our passion under

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