MODULAR TRAINING
FOR CONFOCAL MICROSCOPY AND DIAGNOSIS OF SKIN CANCER
FROM BASIC TO EXPERT

Director: Prof. Giovanni Pellacani
University of Modena and Reggio Emilia - Italy

Scientific Secretary: Caterina Longo, MD, Prof.

Organizational Secretary: Silvana Ciardo, BS
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<tr>
<th>Training Site</th>
<th>Dermatology, University of Modena and Reggio Emilia</th>
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<td>Policlinico Hospital Entrance n. 3, 3rd floor</td>
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<td>Via del Pozzo 71, 41124 Modena – Italy</td>
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<th>Email-Contacts</th>
<th><a href="mailto:confocaltraining@vivascope.com">confocaltraining@vivascope.com</a></th>
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PRESENTATION OF THE TRAINING PROGRAM

This training program is designed specifically for physicians and residents who are interested in becoming confident and independent in skin cancer detection and management, using reflectance confocal microscopy (RCM).

The program is divided into three modules, a basic, a practical and an advanced course aiming at a transfer of complete knowledge and skills for the clinical use of confocal microscopy. The courses we propose are coordinated by leading dermatologists in the field of dermoscopy and RCM, and take place at the University of Modena in the Department of Dermatology.

They include didactic theoretical instructions, self-study and practical experience. The topics covered in the course are the main aspects of melanocytic and non-melanocytic skin lesions, the diagnostic clues for their correct identification, the application of the technology in inflammatory skin diseases, pathophysiology of the skin and cosmetology.

The participants will benefit from the expertise of medical doctors and researchers with long and proven experience in the field of confocal microscopy.

The full training consists of 3 modules.

The duration of the basic and the practical module is 3 days, each.

The advanced module takes 2 days to be completed.

The aim of the courses is to build a high level of competence and confidence in order to ensure the appropriate approach and management of pigmented as well as non-pigmented skin lesions.
Skin tumors are the most frequent cancer in the general population with an upward trend. In Europe and the US an incidence of 150 per 100,000 inhabitants is estimated for Basal Cell Carcinoma and a range between 6-20 for Squamous Cell Carcinoma and Melanoma.

Naked eye diagnosis has a low sensitivity and poor specificity for small and early tumors and can be supplemented by dermoscopy, which enables a more accurate diagnosis.

To excise one melanoma, however, on average 30 benign lesions are unnecessarily excised, with the exception of highly specialized centers. Confocal microscopy is a novel technique enabling in vivo examination of the skin at a cellular level. This method provides excellent diagnostic accuracy, specificity improvement from 30% to 70% in equivocal lesions, and helps to differentiate cosmetically delicate facial lesions. Reducing the number of unnecessary biopsies and excisions can dramatically help reducing referral wait times and provide significant cost savings/aversions for the healthcare system.

Systematic application of Reflectance Confocal Microscopy (RCM) in the triage and management of skin cancer patients may potentially improve diagnostic accuracy and consistently reduce the number of unnecessary biopsies and excisions. Clinicians who learn the specific semiology, build up confidence and competence in using these modalities will help achieving these goals. Therefore, we have established these dedicated theoretical and practical instruction modules on confocal microscopy. Providing a specific education in RCM will generate skilled Physicians in the clinical assessment and management of pigmented as well as non-pigmented lesions.

Physicians will be able to increase their diagnostic ability, reduce the number of unnecessary surgical excisions of benign lesions and thus, patient satisfaction will be improved. The intensive training program provides an organized education in the main aspects of dermatologic diagnosis, focusing on RCM. The program includes both didactic theoretical instruction and practical experience.
The program aims to develop the following specific competencies:

- To confidently recognize the main RCM aspects of skin cancer
- To interpret the patterns of a lesion in the context of the patient and of the clinical situation
- To learn a systematic and effective patient-tailored approach and management
- To develop high level skills in differentiating melanocytic from non-melanocytic skin lesions, and malignant from benign skin lesions
- To achieve early diagnosis of melanoma and other skin malignancy

The courses will be focused on RCM, image interpretation and on difficult clinical situations where confocal microscopy can be applied. Experts in diagnostics, clinicians and researchers will give all the lectures. During the practical courses the trainees will consolidate knowledge through assisted revision of numerous cases and clinical situations. To acquire a strong practical ability and diagnostic confidence the trainees will take part in daily clinical activities of the confocal microscopy clinics.

Collaborative learning represents an important part of the practical training. For this reason, participants will be asked to review and discuss a large number of cases together in the presence of tutors. The most difficult or interesting cases encountered during clinical practice and a case-review session will be supervised by the experts.

**FRONTAL LESSONS / COURSES**
(Faculty: G. Pellacani, C. Longo, F. Farnetani, S. Bassoli, A. Witkowski, M. Ulrich, M. Ardigò, S. Ciardo)

*Courses will provide a general view on the diagnostic clues detectable by the use of the different techniques, considered in the clinical contest, along with expert suggestions for practical management.*

**TUTORED CLINICAL ACTIVITY**
(Tutors: F. Farnetani, F. Giusti, S. Bassoli, A. Casari)

*Daily attendance to the clinical activities of the Melanoma and Skin Cancer Clinic of the University of Modena. Trainees will participate in patients evaluation and management, assisted by skilled dermatologists from 8:30 am to 1:00 pm. Selected interesting cases will be examined with RCM in the presence of expert Confocalists.*

**TUTOR-ASSISTED CASE REVIEW**
(Tutors: F. Farnetani, S. Bassoli, A. Casari, A. Witkowski)

*The afternoons will be dedicated to daily peer review of interesting dermoscopic cases, also including confocal images.*
MODULES IN DETAIL

MODULE 1

REFLECTANCE CONFOCAL MICROSCOPY – BASIC COURSE
Faculty: G. Pellacani, C. Longa, M. Ulrich, M. Ardigò, S. Ciardo

The course will provide a general view on the main confocal patterns and clues, along with expert suggestions for practical management of different clinical situations. HOW TO USE THE TECHNOLOGY will provide the skills to correctly use and integrate the technology as well as develop practical skills needed for an appropriate lesion documentation.

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<th>THURSDAY</th>
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<td>9:00 - 11:00</td>
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<td>RCM Basic Course</td>
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<td>11:00 - 13:00</td>
<td>How to use the technology</td>
<td>RCM Basic Course</td>
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<td>14:00 - 16:00</td>
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THU
11:00 - 11:30 The hardware and software of digital dermoscopy and confocal microscopy
11:30 - 12:30 Hands-on: the use of the technologies with simulated patients
12:30 - 13:00 Storage and data management. Image evaluation

THU
14:00 - 14:30 Why to use reflectance confocal microscopy
14:30 - 15:30 Correlation of RCM with dermoscopy and histopathology and RCM terminology
15:30 - 17:00 Melanocytic neo: confocal correlates and interpretation

FRI
09:00 - 10:30 Melanoma: different faces of the disease
10:45 - 11:30 Benign non-melanocytic tumors
11:30 - 13:00 Basal cell carcinoma and malignant non-melanocytic tumors – AK. and SCC
14:00 - 17:00 Cases and situations: interactive session

SAT
09:00 - 09:30 Normal skin, dry skin and hydration, skin aging
09:30 - 10:30 Pattern analysis for inflammatory skin diseases
10:45 - 11:30 Spongiotic Hyperkeratotic and Interface dermatitis
11:30 - 13:00 Granulomatous disorders, follicle/gland diseases, hair and adenexa
14:00 - 14:30 Pigment disorders (Vitiligo, Melasma, Post-inflammatory pigmentation)
14:30 - 15:00 Bullous diseases
14:30 - 16:00 Practical use of confocal findings in inflammatory diseases

MODULE 2

REFLECTANCE CONFOCAL MICROSCOPY – PRACTICAL ACTIVITIES
Faculty and tutors: G. Pellacani, F. Farnetani, S. Bassoli, A. Casari, A. Witkowski, S. Ciardo

TUTORED CLINICAL ACTIVITY
Daily attendance to the clinical activities of the Melanoma and Skin Cancer Clinic of the University of Modena. Trainees will participate in patient evaluation and management, assisted by skilled dermatologists. Selected interesting cases will be evaluated with RCM in the presence of expert Confocalists.

SELF-STUDY AND TUTOR-ASSISTED CASE REVIEW
The afternoons will be dedicated to review of interesting cases, followed by discussions with experts focussing on clinical issues.
MODULE 3

REFLECTANCE CONFOCAL MICROSCOPY – ADVANCED COURSE
Faculty: G. Pellacani, C. Longo, A. Witkowski

Difficult clinical situations, in which confocal can be particularly useful, will be presented along with expert tricks and interactive case discussions.

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<tr>
<td>9:00 - 11:00</td>
<td>Advanced RCM Course</td>
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<td>14:00 - 16:00</td>
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TABLE OF COSTS
(Exclusive Travel Expenditures)

MODULE 1
REFLECTANCE CONFOCAL MICROSCOPY – BASIC
(Maximum of 20 Participants, Language: English)
1,500.00 € +VAT

MODULE 2
TUTORED CLINICAL ACTIVITY
(Maximum of 10 Participants, Language: English)
500.00 € +VAT

MODULE 3
REFLECTANCE CONFOCAL MICROSCOPY – ADVANCED
(Maximum of 20 Participants, Language: English)
800.00 € +VAT

ADVANCED REFLECTANCE CONFOCAL MICROSCOPY
FRI 9:00 - 11:00 Differential diagnosis: difficult pigmented lesions, atypical nevi and early melanoma
11:00 - 13:00 Amelanotic-hypopigmented tumors. The diagnostic challenge
14:00 - 16:00 Lesions on the face and sun-damaged skin
16:00 - 17:00 Papules and nodules: where the trap is hidden
SAT 9:00 - 10:00 Confocal microscopy in dark lesions
10:00 - 11:00 Lesions on special sites and use of the hand-held probe
11:00 - 11:30 Telediagnosis platform: how it works and what are the limitations
11:30 - 13:00 Cases on a telediagnosis setting (confidence and how to avoid pitfalls)
Training Site

Dermatology, University of Modena and Reggio Emilia
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