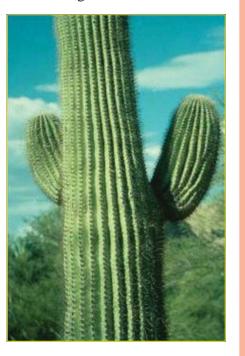


3D image of a milk duct



# Radiological Society of Finland Breast Radiologists of Finland 2011

Detection and Diagnosis of Early Breast
Cancer Using the Multimodality
Approach

- \* Hands-on training in screening
- \* Diagnosis *and* Differential Diagnosis using the Multimodality Approach

HELSINKI, Finland Sept 26-29, 2011

LÁSZLÓ TABÁR, M.D.,F.A.C.R (Hon) Course Director Professor of Radiology and

PETER B. DEAN, M.D.

Designed for:

Radiologists and Radiology Technologists



This course provides extensive knowledge about how to find breast cancer in its early stages, about diagnostic breast imaging, differential diagnosis of breast diseases using the multimodlaity approach

Multimodality Detection and Diagnosis of Breast Diseases

László Tabár, M.D., F.A.C.R.(Hon)

Professor of Radiology, Course Director

Peter B. Dean, M.D., Professor of Radiology

### **FACULTY**



László Tabár, M.D., F.A.C.R. (Hon).

Course Director

Professor of Radiology, University of Uppsala
School of Medicine, Sweden

Director, Department of Mammography, Falun
Central Hospital, Falun, Sweden



Peter B. Dean, M.D.

Professor of Radiology,

Department of Diagnostic Radiology

University of Turku

Turku, Finland

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This educational activity is accredited by the University of Turku for 26 hours of continuing medical education for radiologists. Each physician should only claim those credit hours which he or she actually spent participating in the educational activity.



#### **CREDITS**

We would like to thank the sponsors for their support of this teaching seminar. A list of the vendors will be distributed to all registrants at the beginning of the course.



Images from the non-profit Tabar Foundation for Research and Education for Breast Cancer www.tabarfoundation.org

Multimodality Detection and Diagnosis of Breast Diseases

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1<sub>st DAY</sub>

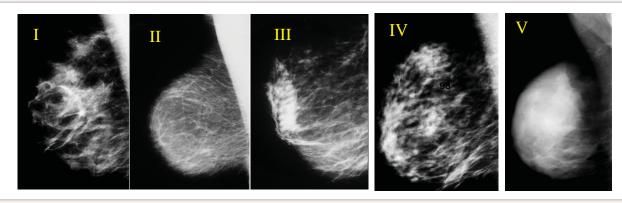
Lectures between 9:00 AM and 12:00 for all attendees

- 9:00 INTRODUCTION ARONEN H, RISSANEN TAND BERG M
- 9:05 DIDACTIC LECTURES COVERING: HOW TO READ A MAMMOGRAM? THE BASIS FOR EFFICIENT INTERPRETATION OF THE MAMMOGRAPHIC IMAGE Tabar L
  - Correlative 3-dimensional, subgross anatomy and mammography of the normal breast

Break at 10:30 AM

#### MAMMOGRAPHIC PARENCHYMAL PATERNS

 Practical implication, problems and solutions. Mammographic patterns and the risk of developing breast cancer. Understanding the mammograms of dense breasts.



HOW TO FIND THE INVASIVE BREAST CANCER WHEN IT IS STILL SMALL . SCREENING COMBINED WITH AN ANALYTICAL APPROACH FOR THE DIFFERENTIAL DIAGNOSIS OF STELLATE/SPICULATED LESIONS - Tabar L

- A systematic method for viewing mammograms.
- Areas on the mammogram where most breast cancers will be found
- Viewing dense breasts
- Viewing relatively easy-to-read breasts

12:00 Lunch

Multimodality Detection and Diagnosis of Breast Diseases

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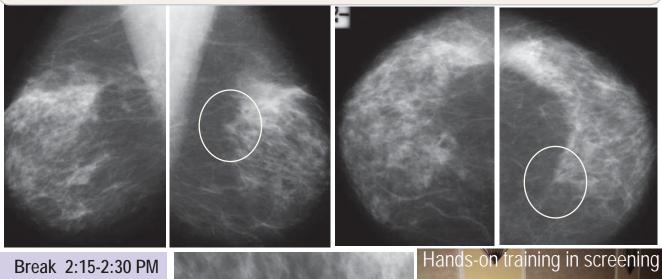
Peter B. Dean, M.D., Professor of Radiology

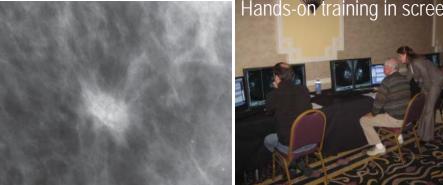
1<sub>st DAY</sub>

Hands-on screening and didactic lecture series

1:00 - 2:15 GROUP 1 HANDS ON SCREENING, SESSION 1 - Dean, PB

1:00 - 2:15 GROUP 2: DEMONSTRATION AND DISCUSSION OF "COMPLEX CASES". Faculty-audience interaction - Tabar L





2:30 - 3:45 GROUP 2 HANDS ON SCREENING, SESSION 1 - Dean, PB

2:30 - 3:45 GROUP 1: DEMONSTRATION AND DISCUSSION OF "COMPLEX CASES". Faculty-audience interaction - Tabar L

4:00 - 5:30 GROUPS 1& 2: DISCUSSION OF THE SCREENING CASES OF SESSION 1 AND LECTURES OF THE AFTERNOON SESSION

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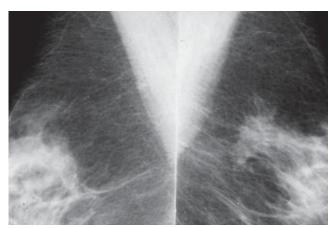


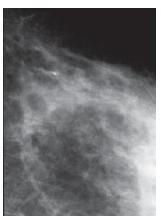
Hands-on screening and didactic lecture series 8:30 - 12:00

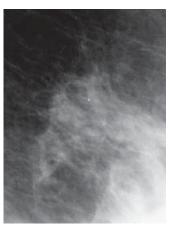
8:00 - 9:15 GROUP 1 HANDS ON SCREENING, SESSION 2 - Dean, PB

8:00 - 9:15 GROUP 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

THE NEW ERA IN THE DIAGNOSIS AND TREATMENT OF BREAST CANCER. The issue of unimultifocality. Clinical implications - Tabar L







Break 9:15 - 9:30 AM

9:30 - 10:45 GROUP 2 HANDS ON SCREENING, SESSION 2 - Dean, PB

9:30 - 10:45 GROUP 1: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

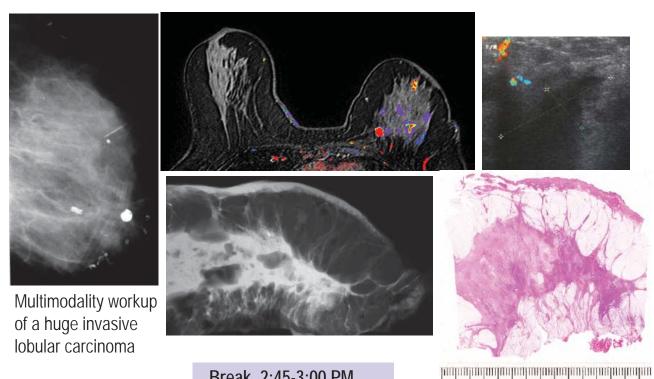
THE NEW ERA IN THE DIAGNOSIS AND TREATMENT OF BREAST CANCER. The issue of unimultifocality. Clinical implications - Tabar L

11:00 - 12:00 GROUPS 1& 2: DISCUSSION OF THE SCREENING CASES OF SESSION 2 AND LECTURES OF THE MORNING SESSION

Multimodality Detection and Diagnosis of Breast Diseases László Tabár, M.D., F.A.C.R.(Hon)

Hands-on screening and didactic lecture series 1:00 - 5:00 PM

1:30 - 2:45 GROUPS 1& 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS: MULTIMODALITY WORKUP OF ASYMMETRIC DENSITIES ON THE MAMMOGRAM - Tabar L IMAGING WOMEN WITH DENSE BREAST TISSUE: Description of the problem and a promising solution - Tabar L



Break 2:45-3:00 PM

3:00 - 4:15 GROUPS 1 & 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS: MULTIMODALITY WORKUP OF ASYMMETRIC DENSITIES ON THE MAMMOGRAM - Tabar L IMAGING WOMEN WITH DENSE BREAST TISSUE: Description of the problem and a promising solution - Tabar L

Discussion

4:30 PM End of Day 2

Multimodality Detection and Diagnosis of Breast Diseases

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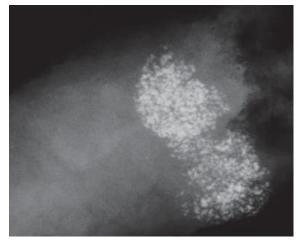
3rd DAY

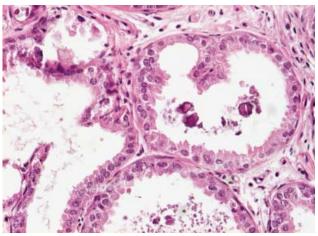
Hands-on screening and didactic lecture series 8:30 - 12:00

8:00 - 9:15 GROUP 1 HANDS ON SCREENING, SESSION 3 - Dean, PB

8:00 - 9:15 GROUP 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

SCHEME FOR THE ANALYSIS OF MAMMOGRAPHIC CALCIFICATIONS PART I - Tabar L





Break 9:15 - 9:30 AM Mammographic-histologic correlation of powdery/cotton ball-like calcifications

9:30 - 10:45 GROUP 2 HANDS ON SCREENING, SESSION 3 - Dean, PB

9:30 - 10:45 GROUP 1: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

SCHEME FOR THE ANALYSIS OF MAMMOGRAPHIC CALCIFICATIONS PART L - Tabar L

11:00 - 12:00 GROUPS 1& 2: DISCUSSION OF THE SCREENING CASES OF SESSION 3 AND LECTURES OF THE MORNING SESSION

Lunch 12:00 PM - 1:30 PM

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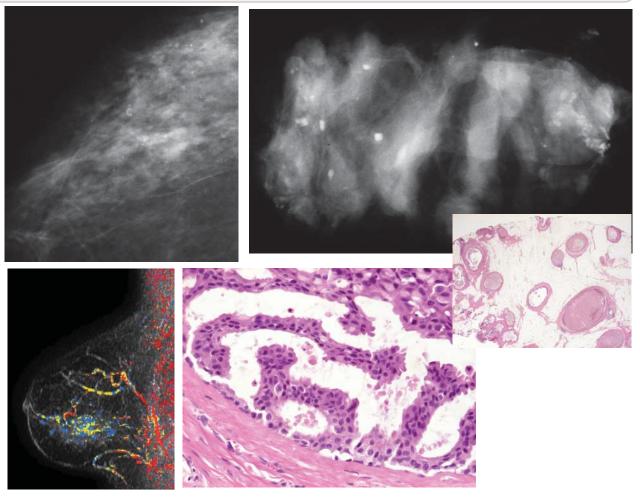
Professor of Radiology, Course Director

Peter B. Dean, M.D., Professor of Radiology

**3**rd DAY Hands-on screening and didactic lecture series 1:00 - 5:00 PM

#### 1:30 - 2:45 GROUPS 1& 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

SCHEME FOR THE ANALYSIS OF MAMMOGRAPHIC CALCIFICATIONS PART II - Tabar L



Break 2:45-3:00 PM

Imaging-histologic correlation of skipping stone-like calcifications

#### 3:00 - 4:15 GROUPS 1&2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

SCHEME FOR THE ANALYSIS OF MAMMOGRAPHIC CALCIFICATIONS PART III - Tabar L

Discussion

4:30 PM End of Day 3

Multimodality Detection and Diagnosis of Breast Diseases

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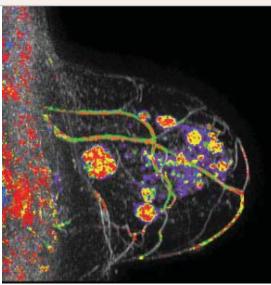
4th DAY Hands-on screening and didactic lecture series 8:30 - 12:00

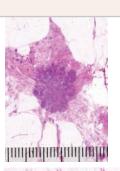
8:00 - 9:15 GROUP 1 HANDS ON SCREENING, SESSION 4 - Dean, PB

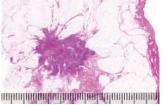
8:00 - 9:15 GROUP 2: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

DISCUSSION OF COMPLEX CASES - Faculty-audience interaction



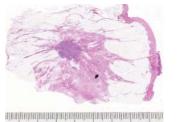






Break 9:15 - 9:30 AM

9:30 - 10:45 GROUP 2 HANDS ON SCREENING, SESSION 4 - Dean, PB



9:30 - 10:45 GROUP 1: DIDACTIC LECTURE SERIES COVERING THE FOLLOWING TOPICS:

DISCUSSION OF COMPLEX CASES - Faculty-audience interaction

11:00 - 12:00 GROUPS 1& 2: DISCUSSION OF THE SCREENING CASES OF SESSION 4 AND LECTURES OF THE MORNING SESSION

DISCUSSION 12:00 End of course

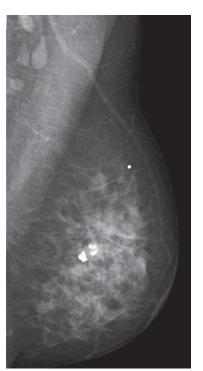
Multimodality Detection and Diagnosis of Breast Diseases

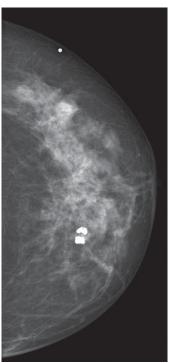
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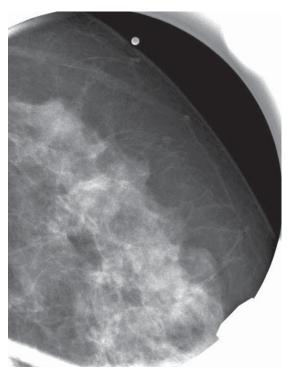
Professor of Radiology, Course Director

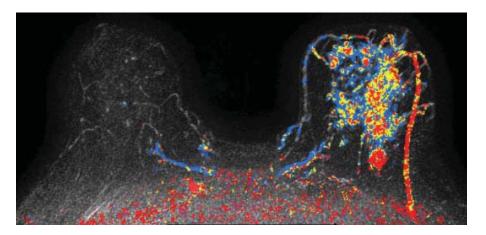
Peter B. Dean, M.D., Professor of Radiology

## DISCUSSION OF COMPLEX CASES. THE VALUE OF USING THE MULTIMODALITY APPROACH IN THE WORKUP OF COMPLEX CASES









Multifocal invasive and in situ carcinoma.

Multimodality Detection and Diagnosis of Breast Diseases

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Professor of Radiology, Course Director

Peter B. Dean, M.D., Professor of Radiology

# For more information and registration please contact:

For more information, registration and hotel booking please contact: Mrs. Katariina Kortelainen

Phone: +358 400231791

e-mail: katariina.kortelainen@suomenrontgenhoitajaliitto.fi

website: WWW. Suomenrontgenhoitajaliitto. fi



Hands-on training in screening

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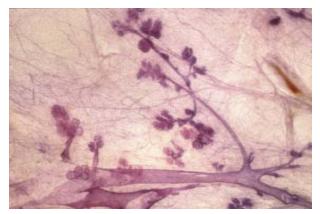


Multimodality Detection and Diagnosis of Breast Diseases

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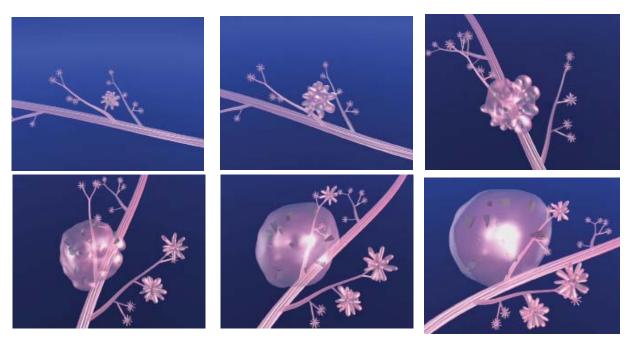
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3-D histologic image of TDLUs



Computer simulation images of the development of Grade 2 *in situ* carcinoma within the TDLU. The lobule becomes gradually distended and deformed. Calcifications are formed within the necrotic debris and are seen on the mammogram as **crushed stone-like calcifications**.