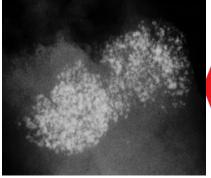


3D image of sclerosing adenosis



Mammogram of sclerosing adenosis



Mammography Education, Inc.



2021

BREAST SEMINAR SERIES

Faculty

LÁSZLÓ TABÁR, MD, FACR (Hon) Course Director *Professor emeritus of Radiology*

Detection and Diagnosis of Breast Diseases
Using the Multimodality Approach

A FULLY INTERACTIVE, UNIQUE LEARNING EXPERIENCE

NEW course design

Jan 12-15, 2021

Shangri-La at the Fort Hotel

30th St. Corner 5th Ave, Bonifacio Global City Taguig City, Metro Manila 1634 Philippines

26 Category I CME credit hours

Designed for:

Radiologists • Surgeons • Pathologists
Gynecologists • Radiology Technologists

This course provides extensive knowledge about diagnostic breast imaging, differential diagnosis of breast diseases, implications for management and newest diagnostic technologies

László Tabár, MD, FACR (Hon)
Course Director

Detection and Diagnosis of Breast Diseases
Using the Multimodality Approach. An interactive course.

FACULTY



László Tabár, MD, FACR (Hon). Course Director

Professor emeritus of Radiology, Department of Mammography, Central Hospital, Falun, Sweden







Photographs from the collection of the non-profit Tabar Foundation dedicated to Research and Education for Breast Cancer (tabarfoundation.org)



László Tabár, MD, FACR (Hon)
Course Director

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Mammography Education, Inc. is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. Mammography Education, Inc. designed these medical education activities for a maximum of **26 credit hours inCategory I** of the Physicians' Recognition Award of the American Medical Association. Each physician should claim only those hours of credit that he / she actually spent in the educational activity.

NEW COURSE DESIGN

- * The lectures on each major subject will be followed by **interactive screening sessions** consisting of a mixture of normal and early cancer cases presented on the large screen exactly as they appear on a viewing station at screening. Using a specially provided polling program downloaded to each participant's smartphone or tablet, the attendees will be asked to vote anonymously on each case. The aggreate results will appear instantly for discussion and evaluation. This new course design gives immediate feedback demonstrating the effectiveness of various screening methods.
- * During the course the attendees will progressively **improve their interpretive expertise**, as they learn the full spectrum of normal breast images, with all important findings explained with the help of 3-dimensional histology images.
- * These skills will lead to **fewer call-backs** and greater confidence in reading a large number of mammograms.
- * Immediate feedback and discussion of every case throughout every reading session.
- * Special emphasis will be placed on finding early phase breast cancers.
- * All abnormal cases are fully worked up and the **complete imaging workup will be presented in detail**, **including ultrasound**, **MRI and large section histopathology**.

CREDITS

We would like to thank the sponsors for their support of the teaching seminars of Mammography Education, Inc (list of vendors will be presented at the beginning of the course)

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Detection and Diagnosis of Breast Diseases
Using the Multimodality Approach. An interactive course.

Day 1 Morning lectures between 9:00 AM - 12:00 PM. Break: 10:30 AM

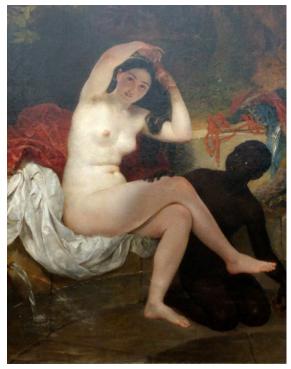
9:00 AM INTRODUCTION FOLLOWED BY DIDACTIC LECTURES COVERING:

• A NEW ERA in the DIAGNOSIS and TREATMENT of BREAST CANCER. A historical perspective.

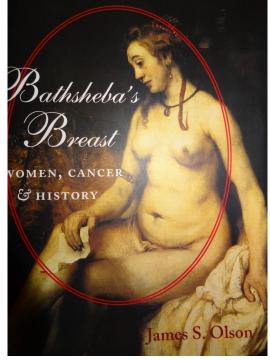


The Edwin Smith papyrus





The young Bathsheba by Briullov, Moscow, Tretyakov museum



Rembrandt's painting of Bathsheba



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Course Director

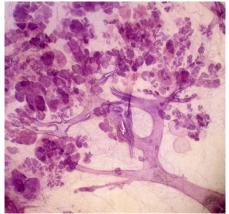
Detection and Diagnosis of Breast Diseases
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Day 1 Morning lectures between 9:00 AM - 12:00 PM. Break: 10:30 AM

A major technical development in the mid-70s: the invention of *low dose film-screen mammography* made it possible to find breast cancers in their non-palpable phase.



- THE MAGICAL ROLE OF LARGE FORMAT, SUBGROSS HISTOPATHOLOGY IN TRAINING
- Correlating 3-dimensional, subgross anatomy with mammography of the normal breast results in increased confidence in reading a mammogram and finding small abnormalities. Special training in large format thin and thick section (stereoscopic) histopathologic correlation enables the radiologist to account for every linear and nodular density on the mammogram.







László Tabár, MD, FACR (Hon) Course Director

Detection and Diagnosis of Breast Diseases Using the Multimodality Approach. An interactive course.

Day 1 Morning lectures between 9:00 AM - 12:00 PM. Break: 10:30 AM

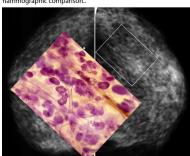




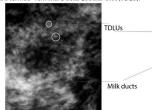
Three of the four basic building blocks (TDLU, ducts and fibrous tissue) are discernable on this 3D histology slice.

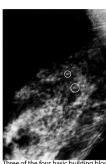


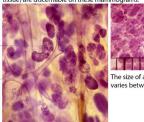
TDLUs on 3D histology and on a galactogram. Terminal duct Illustration of subgross breast anatomy using 3D histologic-nammographic comparison..



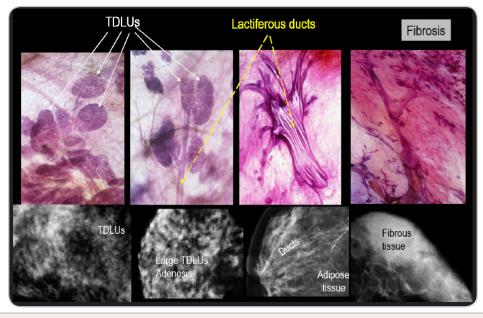
Large format thick section (subgross, 3D) histology image of neighboring TDLUs. The lobule and the terminal duct combined are termed "Terminal Ductal Lobular Unit (TDLU).











The breast, unlike any other organ, has five structurally different mammographic parenchymal patterns.

MEI . JALON INC

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Detection and Diagnosis of Breast Diseases
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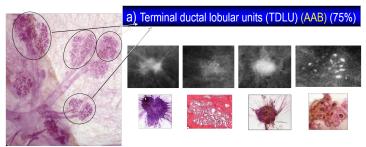
Day 1 Afternoon lectures: 1:00 PM - 5:00 PM. Breaks at 2:30 and 3:30 PM

ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN

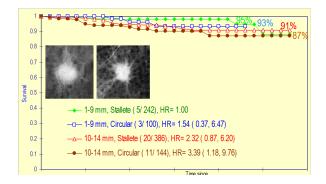
HOW TO FIND THE INVASIVE BREAST CANCER WHEN IT IS STILL SMALL. Malignant stellate and circular/oval-shaped lesions originating from the TDLUs (AAB): clinical presentation, histology, mammographic - MRI - ultrasound appearance and outcome.

- A systematic method for viewing mammograms. Areas on the mammogram where most breast cancers will be found. Viewing dense breasts. Viewing relatively easyto-read breasts.
- The role of hand-held ultrasound / 3D automated ultrasound / MRI in the detection and workup of the findings. The multimodality approach
- Interactive screening session: Using what has just been taught, each participant
 will assess a mixture of normal and early cancer cases, and vote anonymously using
 a smartphone or tablet. The combined results will appear instantly for discussion.
 and evaluation.

We use a classification system which is based on the apparent anatomic site of origin of breast cancer since the long-term patient outcome appears to be largely determined by the site of origin of breast cancer.



with no associated calcifications on the mammogram. Women 40-69 yrs old, diagnosed in Dalarna county, Sweden between 1977-2006

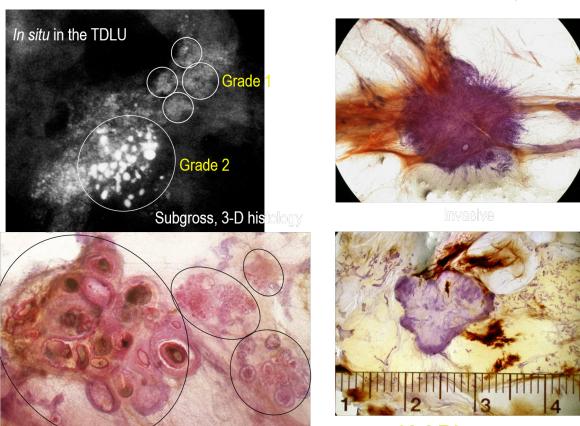




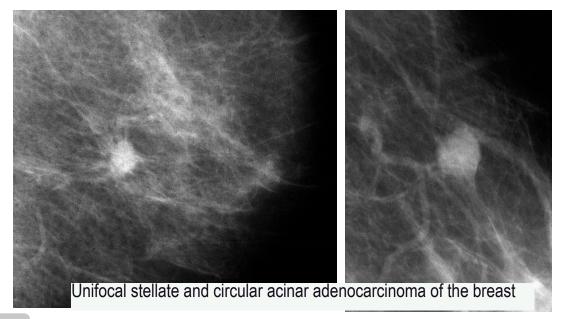
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Using the Multimodality Approach. An interactive course.

Day 1 Afternoon lectures between 1:00 PM - 5:00 PM. Breaks: 2:30 AM, 3:30 PM



Garde 1 and 2 carcinoma in *situ* in the TDLUs, not DCIS. The subsequent invasive carcinoma is either a stellate or circular tumor mass (not invasive "ductal" carcinoma), well demonstrable on the mammogram.

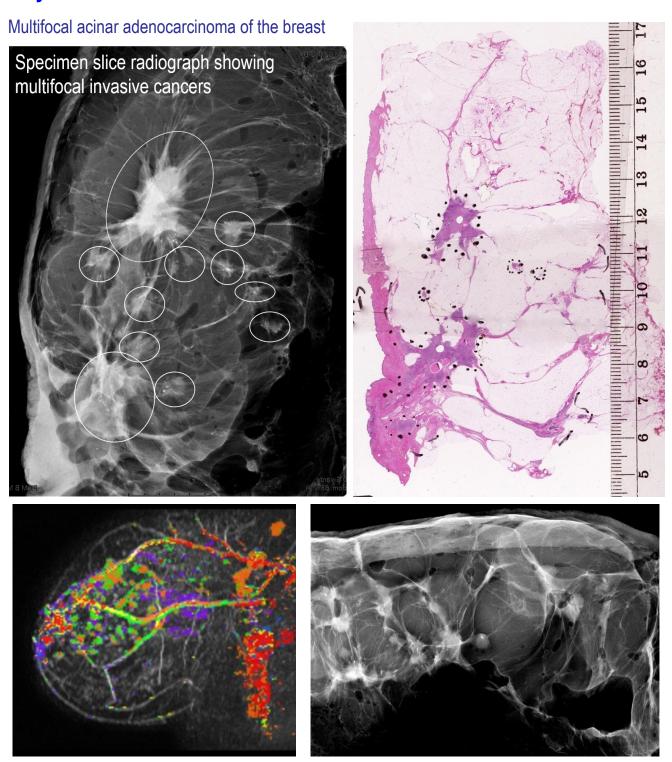




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Day 1 Afternoon lectures between 1:00 PM - 5:00 PM. Breaks: 2:30 PM, 3:30 PM



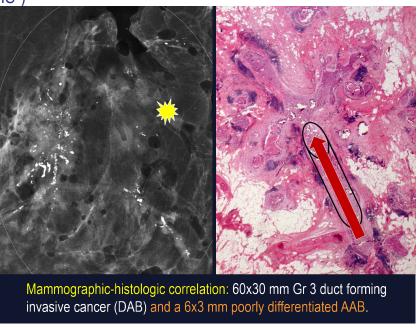
5:00 PM. End of Day 1.

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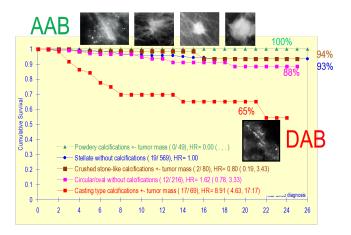
Detection and Diagnosis of Breast Diseases
Using the Multimodality Approach. An interactive course.

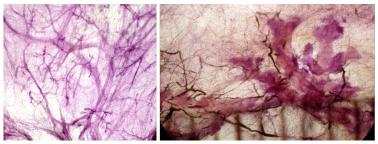
Day 2 Morning lectures between 8:30 AM - 12:00 PM. Breaks: 10:00 AM, 11:00 AM

Diffuse breast canceer originating from the major lactiferous ducts (DAB) (**duct forming invasive carcinoma**, not "DCIS")



Cumulative survival of women aged 40-69 years with 1-14 mm invasive preast cancers by mammographic tumor features. Dalarna county, Sweden.







László Tabár, MD, FACR (Hon) **Course Director**

Detection and Diagnosis of Breast Diseases Using the Multimodality Approach. An interactive course.

Day 2 Morning lectures between 8:30 AM - 12:00 PM. Breaks: 10:00 AM, 11:00 AM

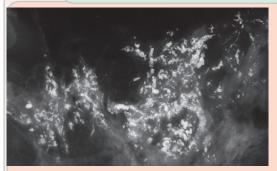
INTERACTIVE LECTURE SERIES WILL COVER THE FOLLOWING TOPICS.

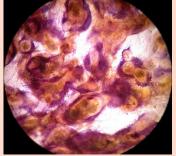
ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN

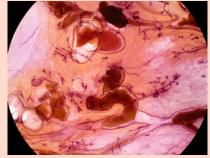
Breast diseases originating in the major ducts

- Benign type calcifications originating in the major ducts a) Secretory disease type calcifications
 - Malignant type calcifications originating in the major ducts
- Interactive calcification analysis.

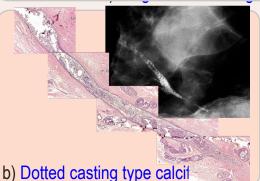






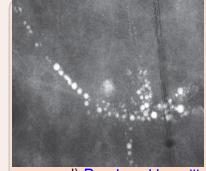


a) Fragmented casting type calcifications.



- * Four different malignant type calcifications developing in the major ducts: a) fragmented casting type b) dotted casting type **c**) skipping stone-like **d**) pearl necklace-like.
- * The concept of **neoductgenesis**. Long-term follow-up results. New aspects, correct terminology.
- * The role of breast MRI examination in demonstrating the extent of Gr 3 in situ carcinoma.
- * Mammographic/3D histologic correlation helping to explain the underlying pathophysiology and outcome.







d) Pearl necklace-like calcifica-



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Course Director

Day 2 Breaks: 2:30 PM, 3:30 PM Afternoon lectures between 1:00 PM - 5:00 PM.

MALIGNANT: lecrosis, no fluid **Ductal Origin** Ca++ on the mammogram



MALIGNANT: Necrosis, no fluid Ca++ in necrosis **Ductal Origin** Ca++ on the mammogram



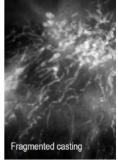
Ca++ in necrosis

Type 1 RAGMENTED CASTING solid bars)

Diffuse, lobar lisease

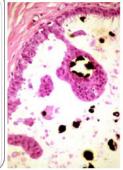
Grade III solid cell roliferation

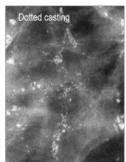


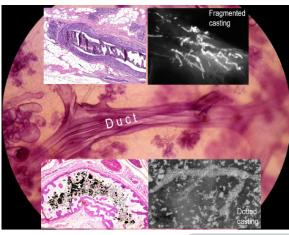


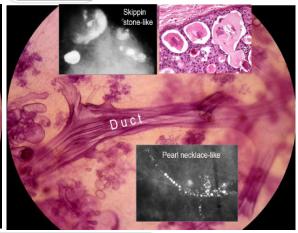
Type 2 DOTTED **CASTING-TYPE** (snakeskin-like)

- -Diffuse, lobar disease
- Grade III
- -micropapillary cell proliferation









Ductal Origin

Interactive calcification analysis.

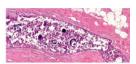
MALIGNANT: No necrosis, fluid

Ca++ in proteinaceous fluid **Ductal Origin** Ca++ on the mammogram



MALIGNANT: No necrosis, fluid

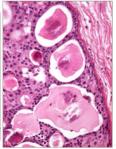
Ca++ on the mammogram Ca++ in



Type 3 "DISCOID" (skipping stone-like)

- -Diffuse lobar disease
- -Grade II

-Micropapillary or/and cribriform

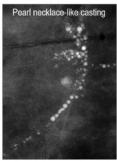




proteinaceous fluid Type 4 "PEARL NECKLACE"

- -large psammoma body-like calcifications within ducts
- -Grade I or/and 2
- Micropapillary, cribriform.







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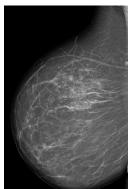
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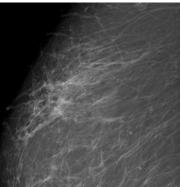
Day 2 Afternoon lectures between 1:00 PM - 5:00 PM. Breaks: 2:30 PM, 3:30 PM

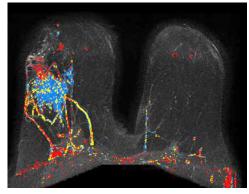
ANALYSIS of MALIGNANT LESIONS PRESENTED as non-calcified RADIATING STRUCTURES on the mammogram. Clinical presentation, mammographic appearance and outcome.

- Duct forming invasive carcinoma / Neoductgenesis cases presenting on the mammogram as architectural distortion. The role of MRI in diagnosing diffuse breast cancer.

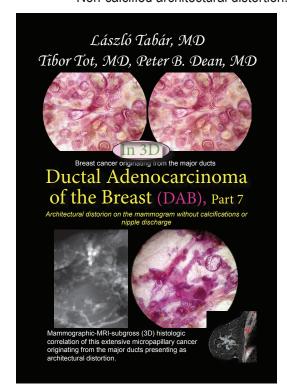
Interactive session for detecting architectural distortion on the mammogram.

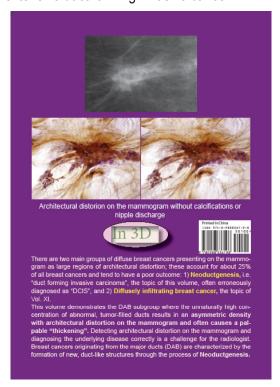






Non-calcified architectural distortion: extensive duct forming invasive cancer







2021

BREAST SEMINAR SERIES of MEI

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Course Director

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Day 3 Morning lectures between 8:30 AM - 12:00 PM. Breaks: 10:0 AM, 11:00 AM

ASYMMETRIC DENSITIES ON THE MAMMOGRAM

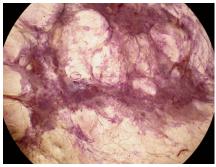
- · Didactic workup of non-specific asymmetric densities without architectural distortion
- Didactic workup of non-specific asymmetric densities with architectural distortion
- A suggested algorithm for the workup of lesions with architectural distortion.







Neoductgenesis (DAB)

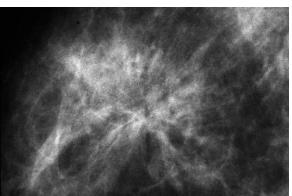


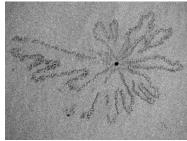
Diffusely infiltrating cancer of mesenchymal origin

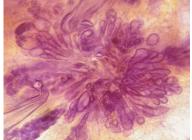
ANALYSIS of BENIGN RADIATING STRUCTURES on the mammogram, originating in the ducts:

Radial scar / sclerosing ductal hyperplasia











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Course Director

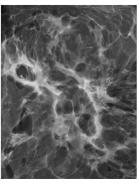
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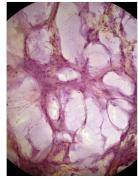
Day 3 Morning lectures between 8:30 AM - 12:00 PM. Breaks: 10:00 AM, 11:00 AM Diffusely invasive breast cancer of mesenchymal origin (a k a invasive lobular).

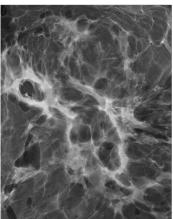
Long-term patient outcome appears to be largely determined by the site of origin of breast cancer.

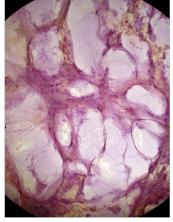


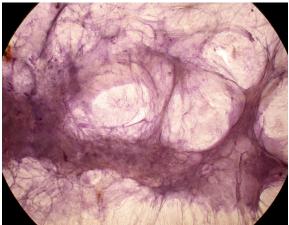
c) Mesenchyme (MET) (5 %)



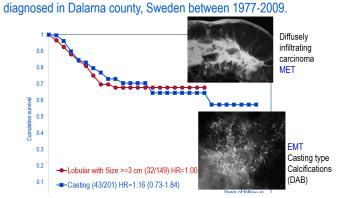








Mammographic-subgross histopathologic correlation of diffusely infiltrating breast cancer of mesenchymal origin.



12:00 PM - 1:00 PM Lunch

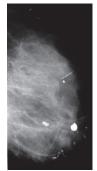
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Course Director

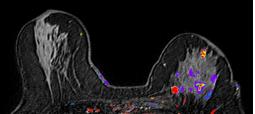
Detection and Diagnosis of Breast Diseases
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Day 3 Afternoon lectures between 1:00 PM - 4:30 PM. Breaks: 2:00 PM, 3:00 PM

ANALYSIS of MALIGNANT LESIONS PRESENTING as RADIATING STRUCTUREs on the mammogram. Clinical presentation, mammographic appearance and outcome, cont.

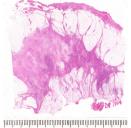
2) Diffusely infiltrating breast cancer of mesenchymal origin: the most deceptive and frequently missed cancer of the breast. The value of ultrasound and MRI in finding and diagnosing this spider's web-like malignancy. Case demonstrations, large section histopathologic-imaging correlation. Long-term outcome.

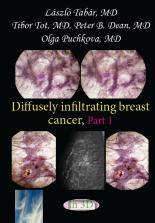


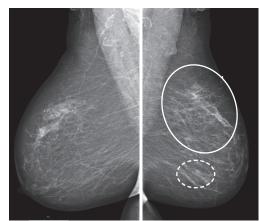


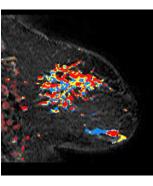
Example 1. Multimodality workup of a huge diffusely infiltrating breast malignancy of mesenchymal origin.

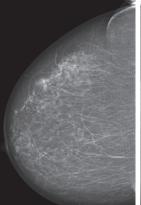






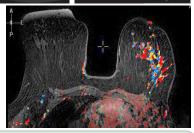








Example 2. Diffusely infiltrating (spider's web-like) carcinoma of mesenchyal origin in the upper half of the breast and a shperical, round lesion, originating from the TDLU (AAB) is seen in the lower portion of the left breast.



Interactive session for detecting architectural distortion on the mammogram.

4:30 End of the lectures for Day 3



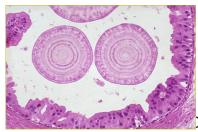
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Course Director

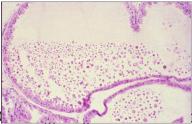
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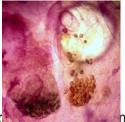
Day 4 Morning lectures between 8:30 AM - 12:00 PM. Breaks: 10:0 AM, 11:00 AM

ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN

- Benign breast diseases originating in the TDLU and associated with calcifications on the mammogram
 - **Fibrocystic change. Fibroadenoma. Different types of adenosis.** Understanding pathophysiology leading to calcified and non-calcified hyperplastic breast changes.



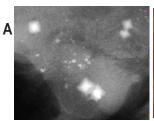


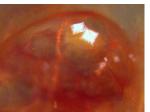


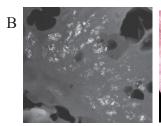


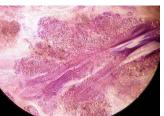
body-like calcifications, seen as "teacup-like calcifications on the mammogram.

- Detailed analysis of calcifications associated with hyperplastic breast changes: Weddellites (A), powdery calcifications (B), cluster skipping stone-like calcifications on the mammogram.

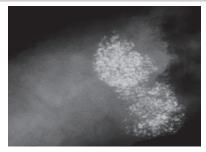


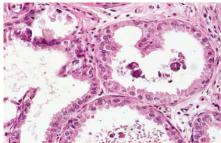






The morphologic analysis of calcifications representing a less aggressive carcinoma:
 Grade 1 / well differentiated CIS





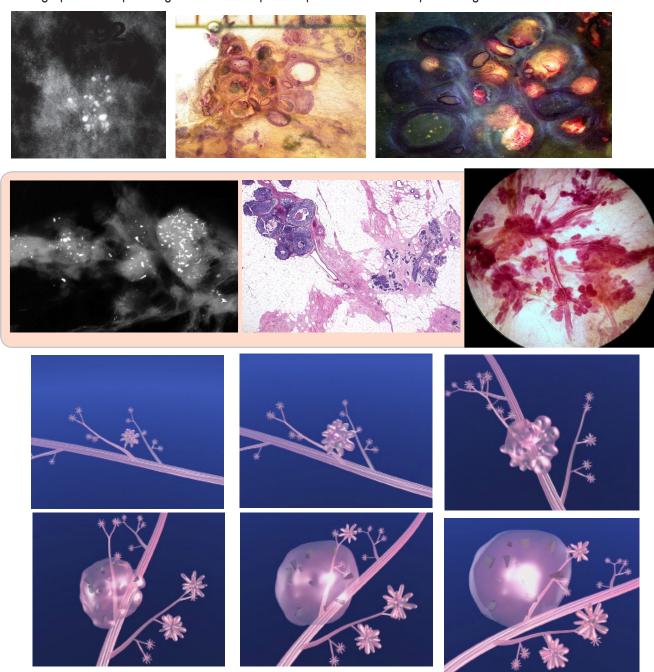
Grade 1 in situ carcinoma:
Mammographic / 3D histologic / MRI correlation
of cases with powdery calcifications on the mammogram.

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Course Director

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Day 4 Afternoon lectures between 1:00 AM - 3:30 PM. Break: 2:00 PM

Mammographic / histopathologic correlation of pleomorphic calcifications representing Gr 2 CIS within the TDLU



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**.



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For more information and registration please contact:

Mammography Education, Inc. 4429 E. Spur Drive CAVE CREEK, AZ 85331, USA

Phone: (480) 419 0227

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e-mail: info@mammographyed.com

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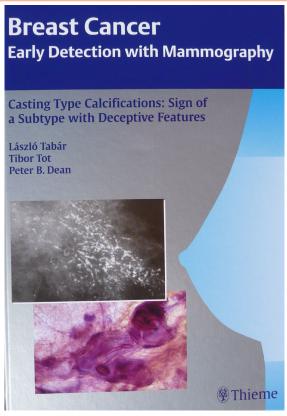
A photograph from the collection of the non-profit Tabar Foundation dedicated to Research and Education for Breast Cancer

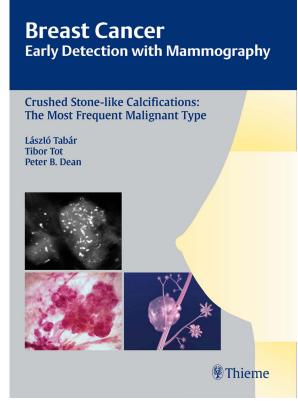


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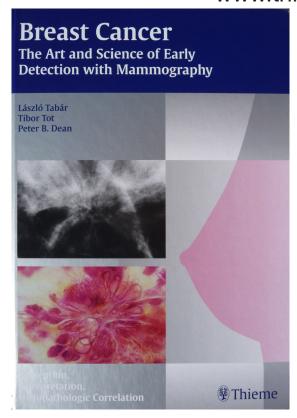
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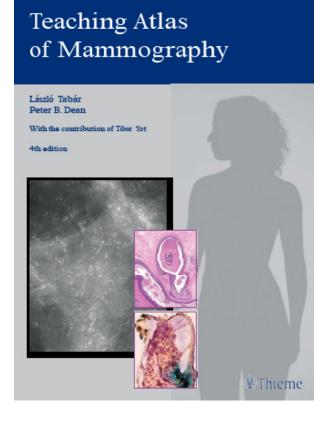
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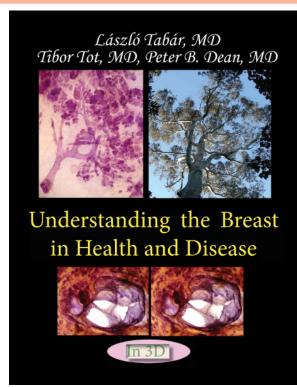


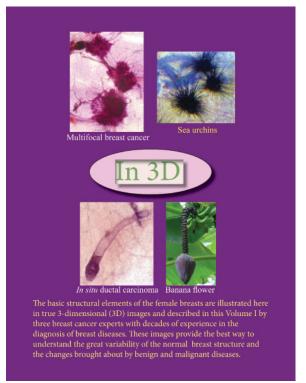




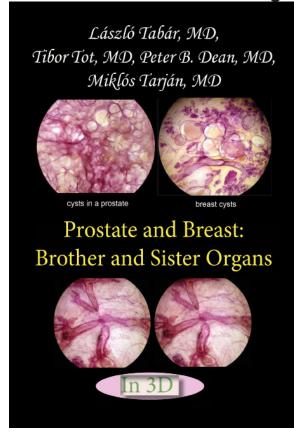
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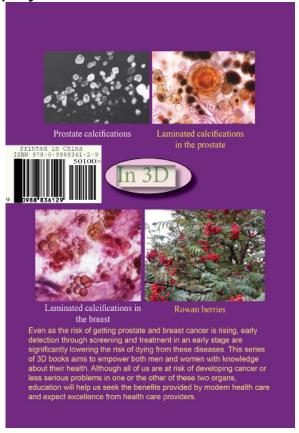
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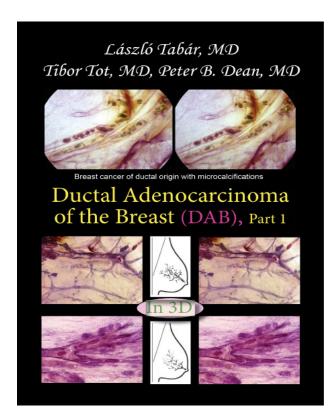




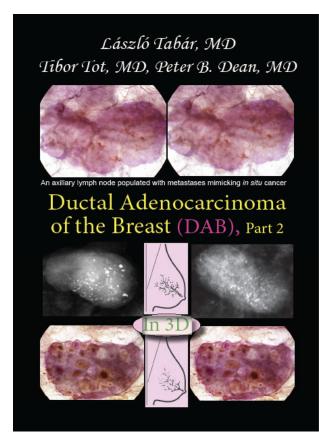


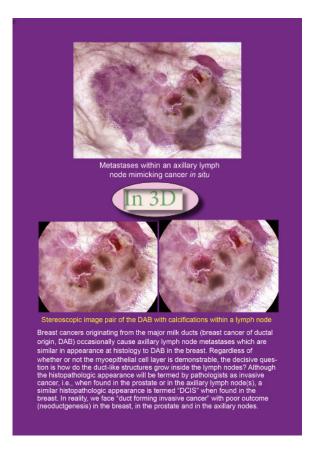
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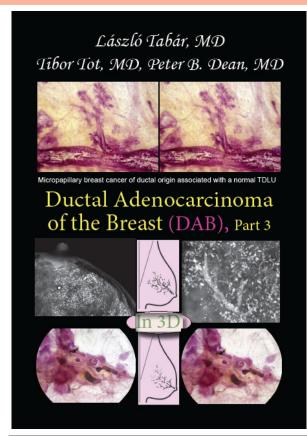




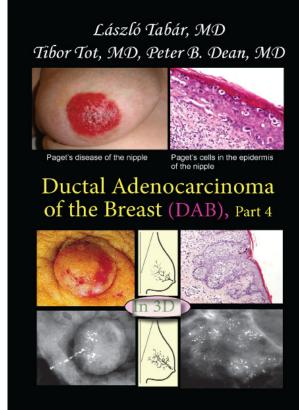


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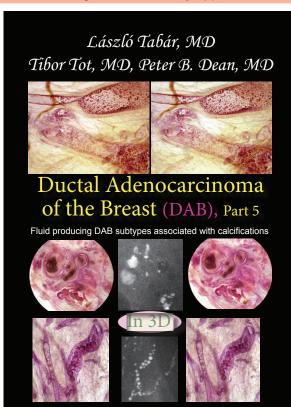


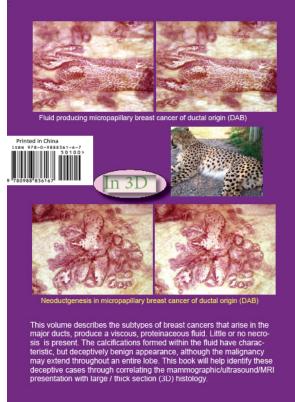


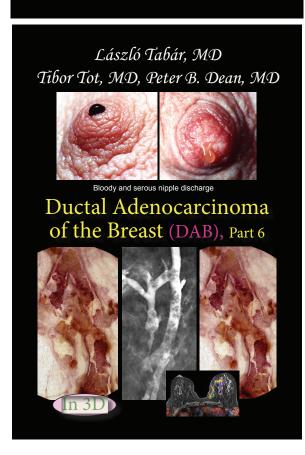


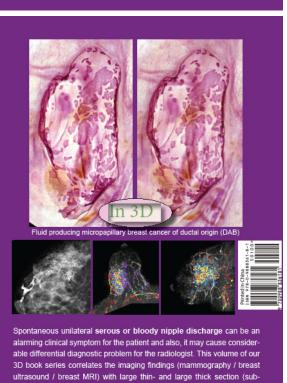
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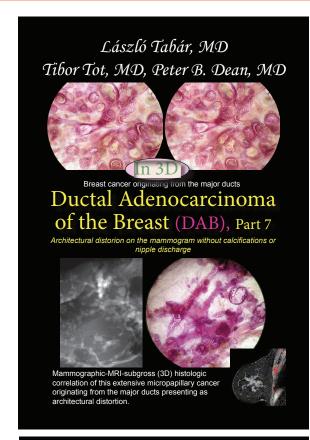


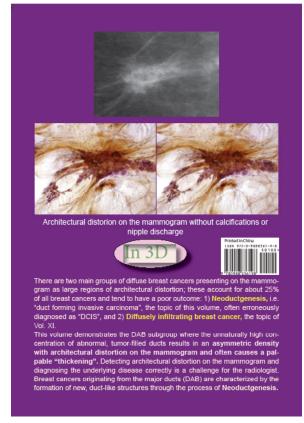
gross, 3D) histology in cases when the underlying cause of the discharge is fluid-producing breast cancer originating from the major ducts (DAB).

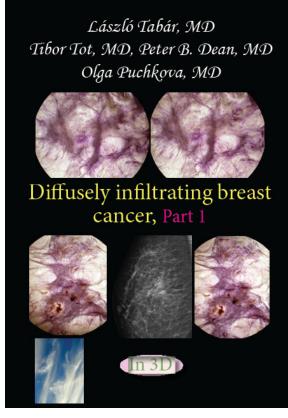


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The mission of the Tabar Foundation is to support research and education to fight against breast cancer. Dr. Tabar's own photographs are now available as high-quality prints. All proceeds from your tax-deductible purchase will support young physicians who are learning how to detect breast cancer when it is still curable. Visit: tabarfoundation.org

