



*New York Academy of Sciences and
Columbia University College of
Physicians and Surgeons present:*

April 3-5, 2006

The Abdominal Aortic Aneurysm: Genetics, Pathophysiology, and Molecular Biology



Tenth Anniversary Symposium

at
**St. Luke's-Roosevelt Hospital
Amsterdam & 113th Street
New York City**



COLUMBIA UNIVERSITY

*College of Physicians
and Surgeons*

A CME ACCREDITED SYMPOSIUM

Goals and Objectives

In the past decade, basic and clinical research in the field of abdominal aortic aneurysms has increased beyond the realm of surgery. This course is designed to bridge the basic and clinical aspects of abdominal aortic aneurysm research and to provide a forum for the discussion of improved diagnostic and treatment paradigms.

By the conclusion of this CME activity the participant should be able to:

1. Assess the benefits of risk of rupture at different ages and thresholds of abdominal aortic aneurysm in the context of epidemiologic studies.
2. Examine the use of animal models in the study of abdominal aortic aneurysm and its underlying pathobiology.
3. Integrate data on genetic susceptibility of abdominal aortic aneurysms and thoracic aortic aneurysms.

Target Audience

The target audience for this conference is comprised of physicians, clinical and molecular geneticists, epidemiologists, and scientists who are involved in basic and clinical research in abdominal aortic aneurysm.

An increase in incidence of abdominal aortic aneurysm is predicted as an extension of the advancing age of our population. Novel strategies for treatment and prevention need to be considered. Interdisciplinary approaches to this disease will aid in prevention and treatment. This course will integrate new insights into the etiology and pathology of aneurysmal disease, including physiologic and genetic causes.

CME Credit

The College of Physicians and Surgeons of Columbia University is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The College of Physicians and Surgeons designates this educational activity for a maximum of 18 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

The College of Physicians and Surgeons must ensure balance, independence, objectivity, and scientific rigor in its educational activities. All faculty participating in this activity are required to disclose to the audience any significant financial interest and/or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in his/her presentation and/or the commercial contributor(s) of this activity.

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME).



7:00 - 8:15 am Registration and Continental Breakfast

8:15 Welcome
M. David Tilson, MD
Columbia University College of Physicians and Surgeons
St. Luke's-Roosevelt Hospital Center
and
George J. Todd, MD
Columbia University College of Physicians and Surgeons
St. Luke's-Roosevelt Hospital Center

8:30 Keynote Remarks
Momtaz Wassef, PhD
National Heart, Lung and Blood Institute

***Session I: Epidemiology and Initiatives to
Prevent Death from Rupture***

Moderator: Gilbert R. Upchurch, Jr., MD

9:00 Gilbert R. Upchurch, Jr., MD
University of Michigan
Epidemiology of the AAA in the United States since 1988

9:30 David Vorp, PhD
McGowan Institute for Regenerative Medicine
Finite-element analysis and bioengineering approaches
to fine-tune prediction of rupture risk, independent of
size alone

10:00 Mark F. Fillinger, MD
Dartmouth-Hitchcock Medical Center
Long-term follow up of the relationship of wall stress to
natural history of AAA disease

10:30 Coffee Break

10:45 Frank Lederle, MD
University of Minnesota School of Medicine
Minneapolis Veterans Affairs Medical Center
A summary of the contributions of the coordinated
studies sponsored by the Veterans' Administration of
the United States

- 11:15 am Tim Baxter, MD
University of Nebraska Medical Center
Pharmacological approaches to prevent AAA enlargement and rupture
- 11:45 Marc Schermerhorn, MD
Harvard Medical School
Beth Israel Deaconess Medical Center
Should usual criteria for intervention be "down-sized" considering reported risk-reduction with endovascular repair?
- 12:15 pm Short talks from selected abstracts
- 12:40 Lunch Break (list of restaurants provided)
- Session II: Animal Models: Pathophysiology and Biomechanical Aspects***
Moderator: Robert Thompson, MD, FACS
- 2:00 Robert Thompson, MD, FACS
Washington University School of Medicine
The elastase perfusion model in mice with different genetic backgrounds
- 2:30 William Abbott, MD
Massachusetts General Hospital
The homotransplantation model, from early experience in man to more recent findings with inbred rodents

General Information

Contact Information

New York Academy of Sciences
Programs Department
2 East 63rd Street
New York, NY 10021
T: 212.838.0230, ext. 324
F: 212.838.5640
E: conference@nyas.org

Course Director

M. David Tilson, MD
Ailsa Mellon Bruce Professor of Surgery, Columbia University College of Physicians and Surgeons
Director Emeritus, Department of Surgery, St. Luke's-Roosevelt Hospital Center
New York, NY

Visit the Academy at:
<http://www.nyas.org>

- 3:00 pm Alan Daugherty, MD, PhD
University of Kentucky
Aneurysms in the ApoE $-/-$ knockout mouse with
AT-II infusion
- 3:30 Coffee Break
- 3:45 Elisa Konofagou, PhD
Columbia University
Ultrasonic elastography of the mouse aorta:
Possible usefulness in non-invasive analysis of aortic
dilation in mice and risk of rupture in humans
- 4:15 Ronald L. Dalman MD
Stanford University School of Medicine
Palo Alto VA Hospital
The influence of hemodynamic conditions on the
development of experimental aneurysms
- 4:45 Ramon Berguer, MD, PhD
University of Michigan
Refinement in mathematical models to predict aneurysm
growth and rupture
- 5:15 Short talks from selected abstracts
- 5:45 pm Wine and Cheese Reception and Poster Session

Course Co-Directors

Gilbert R. Upchurch, Jr., MD
University of Michigan
Cardiovascular Center
Ann Arbor, MI

Helena Kuivaniemi, MD, PhD
Wayne State University
School of Medicine
Detroit, MI

8:30 - 9:00 am Continental Breakfast

Session III: Enzymology - Another Approach to Interventional Pharmacology

Moderator: William Pearce, MD

9:00 William Pearce, MD

Northwestern University Feinberg School of Medicine
AAA - a complex multifactorial disease: Interactions of polymorphisms of inflammatory genes, features of autoimmunity, and current status of MMP's

9:30 John Shyy, PhD

University of California-Riverside
Complementary DNA microarray studies suggest that oxidative stress is involved in the development of experimental AAA

10:00 Jesper Swedenborg, MD, PhD

Vessel Surgery, Karolinska Institute, Stockholm, Sweden
The intraluminal thrombus as a source of plasminogen-related enzymes and other bioactive molecules

10:30 Jes Lindholt, MD, PhD

Viborg Hospital, Denmark
Relationship between activators and inhibitors of plasminogen and the progression of small AAA's

11:00 Coffee Break

11:15 Colin Funk, PhD

University of Pennsylvania
Is there a role for macrophage 12/14 lipoxygenase for AAA development in apolipoprotein E-deficient mice?

11:45 Galina K. Sukhova, PhD

Brigham and Women's Hospital
Do cathepsins play a role in AAA pathogenesis?

12:15 pm Matt Thompson, MD, FRCS

St. George's Hospital London, U.K.
Has MMP-2 been neglected as a major etiologic driver in AAA?

Meeting Location

Location

St. Luke's-Roosevelt Hospital
Amsterdam and 113th Street
1111 Amsterdam Avenue
New York, NY 10025

Public Transportation and Parking:
Public Garage at 114th between
Broadway and Amsterdam Avenue
Subway:
B or C to 116th stop

- 12:45 pm Lunch Break (list of restaurants provided)
- Session IV: Biological Aspects of Endovascular Devices to Repair AAA***
Moderator: Norman R. Hertzler, MD
- 2:00 Norman R. Hertzler, MD
The Cleveland Clinic Foundation
Current status of endovascular repair in the context of 50 years of conventional repair
- 2:30 Peter Faries, MD, FACS
NewYork-Presbyterian Hospital/Weill Cornell Medical Center
Animal models of endovascular AAA repair
- 3:00 Roy Greenberg, MD
The Cleveland Clinic Foundation
Future of fenestrated grafts for DTAA and suprarenal AAA repair
- 3:30 Coffee Break
- 3:45 Geza Mozes, MD, PhD
Mayo Clinic and Mayo Medical School
Vibrometry: A novel non-invasive application of ultrasonographic physics to estimate wall stress in native aneurysms
- 4:15 Scott A. LeMaire, MD
Baylor College of Medicine
Combining open and endovascular approaches to complex aneurysms
- 4:45 David M. Williams, MD
University of Michigan
What is the probability that the present state-of-the-art in endovascular device design may be improved by a closer alliance with chemical engineering?
- 5:15 Short talks from selected abstracts
- 5:45 pm Poster session

Air Travel Discounts

Special discounts for travel to Academy conferences are available for all attendees and accompanying persons. For information, contact the Academy's travel company representative: **MSW Travel Group**, 71 Fifth Avenue - 10th Floor, Attention: **Roslyn Chelouche**, New York, NY 10003. When corresponding, please include your E-mail address for a prompt quote providing the best fare.
E: rchelouche@mswtravelny.com F: 212.329.7299; T: 212.329.7333/7275.

Session V: Genetics and Immunology in AAA

Moderator: Helena Kuivaniemi, MD, PhD
Wayne State University School of Medicine

- 9:00 am Chris D. Platsoucas, PhD
Temple University School of Medicine
Increasing evidence for the importance of an immune response in AAA pathogenesis
- 9:30 Janet Powell, MD, PhD
Leicester Warwick Medical School, Coventry, U.K.
Perspectives on genes that have been investigated as AAA susceptibility factors and possible roles in aneurysms at other sites (popliteal and elsewhere)
- 10:00 Dianna Milewicz, MD, PhD
University of Texas-Houston Medical School
Genetics of the thoracic aortic aneurysm: Potential relevance to AAA
- 10:30 Coffee Break
- 10:45 Craig Basson, MD, PhD
Weill Medical College Cornell University
Are there known interactions/associations of mutations associated with congenital cardiac anomalies and aneurysmal diseases of the aorta?

Call for Abstracts

We invite you to submit an abstract for participation in a poster session.

Deadline for abstract submission is Friday, February 24, 2006. Subject to editorial review, selected presenters will be requested to submit a short manuscript for publication in the conference proceedings. Please submit by email, a maximum of 350 words, to:

Candice Giordano
E: cg2238@columbia.edu

Deadline is Friday, February 24, 2006.

- 11:15 am Helena Kuivaniemi, MD, PhD
Wayne State University School of Medicine
Genome-wide approach to finding AAA susceptibility genes in humans
- 11:45 M. David Tilson, MD
Columbia University College of Physicians and Surgeons
St. Luke's-Roosevelt Hospital Center
The "candidate gene" approach to identifying etiologic gene substitutions and premature stop codons: The galaxy includes black holes along with new star formations
- 12:15 pm Eric A. Rose, MD
Columbia University College of Physicians and Surgeons
Translational Research and the Future of Biomedicine
- 12:30 Concluding Remarks
Should We Wait Another 10 Years?
Helena Kuivaniemi, MD, PhD and Gilbert R. Upchurch, Jr. MD
- 1:00 pm Adjournment

Fellowships

Subject to available funding, a **limited number of fellowships** in the form of travel awards will be awarded to qualified junior investigators. Individuals applying for a fellowship will be expected to author a poster presentation (sole or first authorship is not required). Applicants must provide an original fellowship request letter on letterhead (university department, organization etc.) with a counter signature from a department chair or supervisor verifying student, postdoc or fellow status. Mail this original letter to:

Candice Giordano
Columbia University Department of Surgery
400 Kelby Street, Floor 8
Fort Lee, NJ 07024

T: 201.346.7009

Registration Fees

Hotel Information

The Lucerne Hotel
201 W 79th Street
New York, NY 10024

T: 800.492.8122

Special rate of \$220/ night
until March 2, 2006

Please reference group
#223112 to receive this rate.

Empire Hotel New York
44 W 63rd Street
New York, NY 10023

T: 212.265.7400

T: 888.822.3555

For additional hotels visit
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Category	Tuition
until March 5	
NYAS Member	\$500
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Nonmember (corporate)	\$800
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after March 5	
NYAS Member	\$550
Nonmember (not-for-profit/academia)	\$650
Nonmember (corporate)	\$850
Student/Postdoc/Fellow (NYAS Member or Nonmember)	\$300
at the door	
NYAS Member	\$600
Nonmember (not-for-profit/academia)	\$700
Nonmember (corporate)	\$900
Student/Postdoc/Fellow (NYAS Member or Nonmember)	\$325

Register early. If you have special needs, please let us know if you will require any assistance during this meeting.

This fee Includes:

- Academic Presentations and Course Materials
- Refreshments
- One Year Introductory NYAS Membership for Nonmembers
- Proceedings Published in a Volume of the Annals of the New York Academy of Sciences

Registration Form

The Abdominal Aortic Aneurysm:

Genetics, Pathophysiology, and Molecular Biology

April 3-5, 2006

I wish to register as

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(Student/Postdoc/Fellow)

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Last Name

Degree

Affiliation/Organization

Indicate if this is your affiliation address or home address

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Programs Department
Abdominal Aortic Aneurysm
Registration
2 East 63rd Street
New York, New York 10021

Address

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Cancellations

Written requests for refunds postmarked by **March 5, 2006** will be issued minus an administrative fee of \$50. Absolutely no refunds will be honored after this date.

Payment method

- Payment enclosed is by check or international Money Order made payable to New York Academy of Sciences
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