



Overview

The International Human Peroxidase Meeting serves as the premier meeting in the field of mammalian heme peroxidases (i.e. myeloperoxidase, eosinophil peroxidase, lactoperoxidase, thyroid peroxidase, cyclooxygenases) and their role in human health and disease.

Historically, this meeting has been attended by world leaders in areas of both clinical and basic research relevant to mammalian heme peroxidases and disease. The meeting has been scheduled approximately every 2-3 years and held at an attractive international site (e.g. Akaroa, New Zealand 2007; Kyoto, Japan 2004; Vienna, Austria 2000, Frauenchiemsee, Germany 1998).

This time the 6th International Human Peroxidase Meeting is scheduled to be in Chapel Hill, North Carolina, USA (April 19-22, 2009), and will hopefully coincide with spring flowers.

Presentations will cover many new exciting advances in topics including insights into the role of peroxidases in innate host defense; myeloperoxidase as both a novel therapeutic agent, and a target for inhibition; the role of heme peroxidases in asthma and other inflammatory lung pathologies; functional imaging of vulnerable plaque and neurodegenerative lesions using myeloperoxidase-activatable probes; and myeloperoxidase and the pathogenesis of neurodegenerative disorders.

Program Sessions:

- Peroxidases and Inflammation
- Myeloperoxidase (MPO): Role in vascular disease
- Peroxidases in host defense
- Harnessing MPO clinically: Inhibition & as a therapeutic
- MPO and the heart
- The structure and evolution of heme peroxidases
- Peroxidases in the airway



Continuing Medical Education Objectives

Upon completion of this activity, the participant will be able to:

- Comprehend the role of peroxidases in inflammatory diseases
- Describe the role of peroxidases in innate host defense mechanisms
- Appraise the current state of the art of peroxidase activity in functional imaging of inflammatory disease
- Describe new insights into biological roles of peroxidases in allergic inflammatory diseases
- Describe the role of MPO in cardiovascular disease pathogenesis

Target Audience

The meeting is typically attended by physician scientists / clinical investigators and basic researchers alike interested in the general fields related to mammalian heme peroxidases and their role in human health and disease.

Presentations will cover a broad range of basic and clinical topics, including peroxidase chemistry and biochemistry, cell biology, physiology, animal models of disease, and multiple clinical investigations. The role of mammalian heme peroxidases in biology and disease processes in clinical areas relevant to numerous fields of medicine will be covered, including topics relevant to:

- Internal Medicine
- Pediatrics
- Infectious Diseases
- Cardiovascular Medicine
- Pulmonary and Acute Care Medicine
- Neurology



Invited Speakers

Husam Abu-Soud, Ph.D.
Wayne State University, USA
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Charles Jennette, M.D.
University of North Carolina, USA
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Stephan Baldus, M.D.
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Tony Kettle, Ph.D.
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Marie Luise Brennan, Ph.D.
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William Nauseef, M.D.
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Michael Davies, Ph.D.
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Christian Obinger, Ph.D.
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Ronald Falk, M.D.
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Arne Slungaard, M.D.
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Steve Hamburger, Ph.D.
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Kazuo Suzuki, M.D., Ph.D.
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James Hurst, Ph.D.
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Christine Winterbourn, Ph.D.
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** to be confirmed*

THE 6TH INTERNATIONAL
HUMAN PEROXIDASE MEETING
April 19-22, 2009 | 211 Pittsboro Street | Chapel Hill, NC

Program Chairs



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Ronald P. Mason, Ph.D.

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William M. Nauseef, M.D.

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Program

SUNDAY, April 19th

4:00pm – 7:00pm Arrival and Check in
7:00pm – 9:00pm Welcome Reception

MONDAY, April 20th

8.00am Continental Breakfast

8:30am – 12:00pm

SESSION 1: Myeloperoxidase-dependent signs of inflammation Discussion Leader: Stanley Hazen

8:30am – 8:40am Announcements and Chair's Introductory Remarks
8:40am – 9:00am **Christine Winterbourn** (Christchurch School of Medicine, New Zealand): Glutathione sulfonamide and its detection as a biomarker in infection and inflammation.
9:00am – 9:10am Discussion
9:10am – 9:30am **David A. Ford** (St. Louis University, USA): Haloperoxidases and generation of second messengers from plasmalemmal plasmalogens.
9:30am – 9:40am Discussion
9:40am – 10:00am **Arne Slungaard** (University Minnesota, USA): HOSCN-induced transcriptional modulation of cellular phenotype: a peroxidase-generated signaling agent?
10:00am – 10:10am Discussion
10:10am – 10:30am **Michael Davies** (Heart Research Institute, Australia): Thiocyanate oxidation by myeloperoxidase: a major source of biological damage?
10:30am – 10:40am Discussion
10:40am – 11:00am Break
11:00am – 11:10am Selected Poster, Oral Presentation 1
11:10am – 11:15am Discussion
11:15am – 11:25am Selected Poster, Oral Presentation 2
11:25am – 11:30am Discussion
11:30am – 2:00pm Lunch

2:00pm – 4:00 pm

SESSION 2: Myeloperoxidase: role in vascular disease Discussion Leader: Christine Winterbourn

2:00pm – 2:20pm **Charles Jennette** (University of North Carolina, USA): Pathogenesis of inflammation by anti-MPO antibodies.
2:20pm – 2:30pm Discussion
2:30pm – 2:50pm **Ronald Falk** (University of North Carolina, USA): Epigenetic control of MPO gene expression in ANCA disease

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2:50pm – 3:00pm	Discussion
3:00pm – 3:20pm	Kazuo Suzuki (Chiba University, Japan): Role of the 'Man-1' cluster gene region on chromosome-1 in response in MPO-ANCA vasculitis
3:20pm – 3:30pm	Discussion
3:30pm – 3:50pm	Ernst Malle (Medical University of Graz, Austria): Activation of kinases by HOCl-modified lipoproteins
3:50pm – 4:00pm	Discussion
4:00pm – 4:10pm	Selected Poster, Oral Presentation 3
4:10pm – 4:15pm	Discussion
4:15pm – 4:30pm	Break
4:30pm – 6:30pm	Poster Session
6:30pm – 9:00pm	Free Time
9:00pm – 11:30pm	Social Time / Hospitality Room

TUESDAY, April 21st

8.00am Continental Breakfast

8:30am – 10:40pm

SESSION 3: Peroxidases in host defense

Discussion Leader: Bill Nauseef

8:30am – 8:35am	Announcements and Chair's Introductory Remarks
8:35am – 8:55am	James K. Hurst (Washington State University, USA): MPO Adhesion to Bacterial Cell and Implications for Microbicidal Action.
8:55am – 9:05am	Discussion
9:05am – 9:25am	Greg Conner (University Miami, USA): Lactoperoxidase as an element of innate immune defense in the human airway.
9:25am – 9:35am	Discussion
9:35am – 9:55am	Henry Rosen (University of Washington, USA): Bacterial Methionine oxidation is a sensitive and specific marker for MPO activity in the PMN phagosome and identifies individual protein highly susceptible to oxidation by HOC1.
9:55am – 10:05am	Discussion
10:05am – 10:15am	Selected Poster, Oral Presentation 4
10:15am – 10:20am	Discussion
10:20am – 10:40am	Break

10:40am-12:00pm

SESSION 4: Harnessing MPO clinically: Inhibition & application

Discussion Leader: Ron Mason

10:40am – 11:00am	Tony Kettle (Christchurch School of Medicine, New Zealand): Strategies for inhibiting MPO.
11:00am – 11:10am	Discussion
11:10am – 11:30am	Steve Hamburger (ExOxEmis, USA): Therapeutic application of myeloperoxidase <i>in vivo</i> .
11:30am – 11:40am	Discussion



11:40am – 12:00am **Husam Abu-Soud** (Wayne State University, USA): Kinetic analysis of myeloperoxidase inhibition and heme depletion reactions.

12:00am – 12:10pm Discussion

12:10pm – 2:00pm Lunch

2:00pm – 4:00pm

SESSION 5: Myeloperoxidase and the heart

Discussion Leader: Kazuo Suzuki

2:00pm – 2:20pm **W.H. Wilson Tang** (Cleveland Clinic, USA): Myeloperoxidase-dependent cardiac dysfunction

2:20pm – 2:30pm Discussion

2:30pm – 2:50pm **Stephan Baldus** (University Hospital Hamburg, Germany): Myeloperoxidase – a regulatory switch of structural and electrical homogeneity in atrial myocardium.

2:50pm – 3:00pm Discussion

3:00pm – 3:20pm **Marie Luise Brennan** (Cleveland Clinic, USA): The PEROX risk score and 1 year risk for myocardial infarction and death.

3:20pm – 3:30pm Discussion

3:30pm – 3:40pm Selected Poster, Oral Presentation 5

3:40pm – 3:45pm Discussion

3:45pm – 3:55pm Selected Poster, Oral Presentation 6

3:55pm – 4:00pm Discussion

4:00pm – 4:10pm Selected Poster, Oral Presentation 7

4:10pm – 4:15pm Discussion

4:15pm – 4:30pm Break

4:30pm – 6:30pm Poster Session

6:30pm – 9:00pm Free Time

9:00pm – 11:30pm Social Time / Hospitality Room

WEDNESDAY, April 22nd

8.00am Continental Breakfast

8:30am – 11:35pm

SESSION 6: The structure and evolution of heme peroxidases

Discussion Leader: Tony Kettle

8:30am – 8:35am Announcements and Chair's Introductory Remarks

8:35am – 8:55am **Christian Obinger** (University Natural Resources & Applied Life Sciences, Austria): Evolution, structure and function of mammalian peroxidases

8:55am – 9:05am Discussion

9:05am – 9:25am **Mary O'Connell** (Dublin City University, Ireland): The phylogeny of the mammalian heme peroxidases, and beyond.

9:25am – 9:35am Discussion

9:35am – 9:55am **Bill Nauseef** (University Iowa, USA): Biosynthesis and processing of human myeloperoxidase.



9:55am – 10:05am Discussion
 10:05am – 10:15am Selected Poster, Oral Presentation 8
 10:15am – 10:20am Discussion
 10:20am – 10:45am Break
 10:45am – 11:05am **Jeff Cheng** (Emory University, USA): Two new members of the animal peroxidase family, VPO1 and VPO2: Identification, characterization and more.
 11:05am – 11:15am Discussion
 11:15am – 11:25am Selected Poster, Oral Presentation 9
 11:25am – 11:30am Discussion
 11:30am – 1:30pm Lunch

1:30pm – 4:30pm

SESSION 7: Proinflammatory aspects of peroxidases
Discussion Leader: Henry Rosen

1:30pm – 1:50pm **Stanley Hazen** (Cleveland Clinic, USA): Peroxidases and Asthma
 1:50pm – 2:00pm Discussion
 2:00pm – 2:20pm **John Chen** (Harvard, USA): MR imaging of myeloperoxidase activity in animal models of cardiovascular and neurological diseases.
 2:20pm – 2:40pm Discussion
 2:40pm – 3:00pm **Jamie Lee** (Mayo Clinic, USA): Eosinophil Peroxidase: Why mediate oxidative damage and other destructive activities in disease when you can simply modulate immune responses?
 3:00pm – 3:10pm Discussion
 3:10pm – 3:30pm **Anna Klinke** (University Hospital, Hamburg, German): Regulation of neutrophil motility by myeloperoxidase.
 3:30pm – 3:40pm Discussion
 3:40pm – 3:50pm Selected Poster, Oral Presentation 10
 3:50pm – 3:55pm Discussion
 3:55pm – 4:05pm Selected Poster, Oral Presentation 11
 4:05pm – 4:10pm Discussion
 4:10pm – 4:30pm Break
 4:30pm – 6:30pm Poster Session
 6:30pm – 7:00pm Free Time
 7:00pm – 9:00pm Dinner Reception
 9:00pm – 11:30pm Social Time / Hospitality Room



Abstracts

Please enter the Title and Abstract for your Poster below. Please try to convert your abstract in such a way that it may be viewed and understood properly in a plain text format as special character symbols or images may not appear correctly. If your Poster Title and Abstract are not yet confirmed, please submit a title and indicate for the abstract "to be submitted at a later date" below. Short oral presentations will be selected from amongst abstracts. All abstracts will be accepted for poster presentation.

Student & Fellow Travel Award

All students and fellows are strongly encouraged to submit a poster. If funding allows we will have a limited number of travel awards for students and postdoctoral research fellows (Ph.D. and M.D.). To be eligible, students and fellows must be no more than 3 years from obtaining their degree. If eligible and interested in being considered for a travel award, please indicate this when submitting your abstract online.

All abstracts must be submitted by February 1, 2009. Submit abstracts at:

<https://www.clevelandclinicmeded.com/live/courses/2009/human-peroxidase/abstracts.htm>

Meeting History

The International Peroxidase Meeting has been held approximately every 2 to 3 years at an international site.

Prior meetings:

	Location	Chairs	Date
	Luxembourg	Professor William Nauseef & Drs. Dolph Kutter & Petro Petrides	October 1996
	Frauenchiemsee, Germany	Professor William Nauseef & Dr. Petro Petrides	September 1998
	Vienna, Austria	Dr. Christian Obinger	September 2000
	Kyoto, Japan	Professor Kazuo Suzuki	October 2004
	Akaroa, New Zealand	Dr. Tony Kettle	February 2007

This meeting has served as the premier meeting in the field of mammalian heme peroxidases and their role in human health and disease.

It is attended by world leaders in areas of both clinical and basic research in the field.



Many clinical and basic investigators that are leaders in the field have agreed to speak at the coming meeting. Thus, the program for 2009 promises to continue the tradition of excellence in set by prior International Peroxidase meetings.

Many new major advances in basic and clinical roles of peroxidases have been made over the past few years. Presentations will cover new and exciting advances in numerous topics. For a complete list of talks see the 2009 program.

Continuing Medical Education (CME) Information

Accreditation

The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this educational activity for a maximum of 15.75 *AMA PRA Category 1 Credit(s)*TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This activity may be submitted for American Osteopathic Association Continuing Medical Education credit in Category 2.

Faculty Disclosure

The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Americans with Disabilities Act

The Cleveland Clinic Foundation Center for Continuing Education intends to fully comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify at 216-445-2097 at least 2 weeks before the activity.



Location

Carolina Inn

211 Pittsboro Street, Chapel Hill, North Carolina, USA
(919) 933-2001
www.carolinainn.com

Registration **does not** include hotel accommodations.

Participants are required to make their own reservations for rooms within the Carolina Inn for the meeting. A block of rooms are reserved for meeting participants. Please make sure to tell the hotel staff you are attending the Peroxidase Meeting.

About the Carolina Inn

Recognized as one of America's "cultural resources worthy of preservation," The Carolina Inn is listed on the National Register of Historic Places.

From the day it opened in 1924, the Inn has played an important role in the life of the University of North Carolina and the Chapel Hill community. And it has long been one of the most popular sites in North Carolina for special events, weddings, business meetings, and academic conferences.

The Inn was built by John Sprunt Hill, a UNC graduate who, in 1935, gave the Inn to the University to serve as "a cheerful inn for visitors, a town hall for the state, and a home for returning sons and daughters of alma mater." Still owned by UNC, as per the original deed - profits generated from the operation of the inn are given back the university to fund the library system.

In addition to having a rich cultural history, The Carolina Inn is architecturally significant, blending elements of antebellum Southern plantation houses with Georgian and neoclassical features often found in the Northeast. The original front of the building was modeled after the Potomac River front of Mt. Vernon.

Directions to The Carolina Inn

The nearest airport is Raleigh, NC, which is about 16 miles from the Carolina Inn.

From Greensboro:

On I-40 East, take the Chapel Hill 86 South exit 266 (Airport Road/Columbia Street) 4 1/2 miles into Chapel Hill. Turn right on Cameron Avenue, then left on Pittsboro Street, and The Carolina Inn is on the left.

From Raleigh and RDU Airport:

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On I-40 West, take the Chapel Hill 273A exit. Follow Raleigh Road/South Road up through campus. Turn right on Columbia Street (86 North) and merge to the left lane, then turn left on Cameron Avenue, then left on Pittsboro Street, and The Carolina Inn is on the left.

From Durham:

On I-85, exit right at the 15-501 South (Chapel Hill) exit. At the edge of Chapel Hill, take the Franklin Street exit. In the downtown area, turn left on Columbia Street (86 South), then right on Cameron Avenue, and left on Pittsboro Street. The Carolina Inn is on the left.

Parking around The Carolina Inn

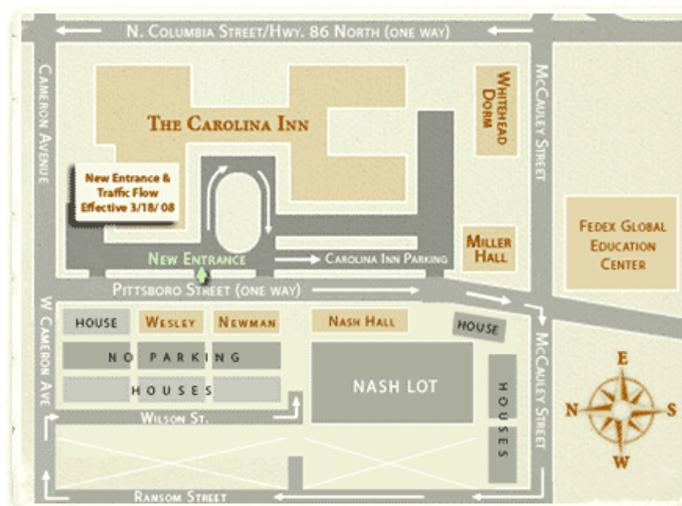
The Carolina Inn maintains a gated parking lot. Both self parking & valet parking are available for \$10.00 a night.

Overflow Parking:

Nash Lot overflow parking is available after 5:00 pm on weekdays all day on the weekends, and on University Holidays (except for UNC special events, i.e. football games.) Vehicles will be ticketed/towed if parked in Nash lot at any other time.

To Nash Lot:

- **Left** out of Carolina Inn parking lot.
- **Right** at first stoplight (McCauley St).
- **Right** at 4-way stop (Ransom St).
- **Right** at next light (Cameron Ave).
- **Right** onto Wilson St. (1st right).
- **Nash Lot entrance on left** at the end of Wilson St.



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Chapel Hill Attractions

Chapel Hill was named after the New Hope Chapel, which stood upon a hill at the crossing of two primary roads. Chapel Hill is nicknamed “the Southern Part of Heaven” and is best known as the home of the University of North Carolina, our nation’s first state university. Town lots were auctioned in 1793, when work began on the university’s first building. Along Franklin Street, the town’s center of activity, visitors will find foods to please every palate, specialty shops for the most discriminating shopper and a variety of nightlife.



- [Restaurants in Chapel Hill](#)
- [Franklin Street Restaurant Guide](#)
- [Local Landmarks and Points of Interest](#)
- [Museums & Gardens](#)
- [Arts & Entertainment](#)
- [Shopping in Chapel Hill](#)
- [Sightseeing around Chapel Hill](#)
- [Sports & Recreation](#)
- [Chapel Hill Nightlife](#)



6th International Human Peroxidase Meeting

FEES: Early (before 2/1/09) \$585.00

- Assistant Professor
- Associate Professor
- Full Professor
- Physician
- Research Director
- Research Scientist
- Post Doctoral Fellow
- Clinical Research Fellow

FEES: Late (after 2/1/09) \$685.00

- Assistant Professor
- Associate Professor
- Full Professor
- Physician
- Research Director
- Research Scientist
- Post Doctoral Fellow
- Clinical Research Fellow

COURSE CODE: # 020547	
Office Use Only	
Fee	_____
Date	_____
M.O.P.	_____
Cxl/Fee	_____

www.cfcme.org

FEES: Early (before 2/1/09) \$450.00

- Student

FEES: Late (after 2/1/09) \$550.00

- Student

Registration fee includes registration material, all sessions, continental breakfasts, refreshment breaks, lunches, welcome reception, and closing dinner. Registration does NOT include hotel accommodations.

(Please print)

Last name _____ First name _____ MI _____ Degree _____

Institution _____ Dept _____

Title _____ Gender _____ Background: Academic Institution
 Industrial Corporation
 Government Agency

Address _____

City _____ State _____ Zip _____ Country _____

Phone number _____ Fax number _____

Specialty _____ Email address _____

- Additional guest for social events -\$175.00 per person _____

Total amount enclosed or to be charged: \$ _____

Make check payable to: The Cleveland Clinic Educational Foundation
P. O. Box 931653, Cleveland, OH 44193-1082

Fax: (216) 445-9406

Charge the following account: Visa MasterCard American Express Discover

Card number: _____ Expiration date _____

Signature _____ 3/4 Digit Verification Number _____ (Found on back of card)
Not valid without signature