



SfRBM

Society for Redox
Biology and Medicine

25TH ANNUAL CONFERENCE

CHICAGO

NOVEMBER 14-17, 2018



PRELIMINARY PROGRAM
& REGISTRATION MATERIALS

PRESIDENT'S INVITE



The Society for Redox Biology and Medicine (SfrBM) is excited to invite you to attend SfrBM's 25th Annual Conference to be held November 14 – 17, 2018, in Chicago, Illinois (SfrBM 2018).



We will continue the strong tradition of the SfrBM annual conference as a premier venue to learn and engage in cutting-edge research in all aspects of redox biology, featuring the latest technologies and applications in basic and translational research. SfrBM 2018 will include plenary speakers, selected abstracts, posters and attendees from around the globe.

SfrBM has always nurtured a diverse and collegial environment for the open exchange of the latest scientific advances, whether from a first-year graduate student or from an established investigator. Our 2018 program offers a broad and extensive range of topics from key opinion leaders in our field. Through poster symposia or our popular oral presentation sessions – where forty-five scientific abstracts will be selected for oral presentations through a rigorous peer review process – your most creative, dynamic and exciting science will be on display.

SfrBM 2018 gears up with a full day pre-conference workshop titled, “Oxidative Stress and Signaling: Methods, Mechanisms and Therapeutics” and a half-day pre-conference workshop titled, “Methods in Lipid Oxidation.”

Highlights of SfrBM 2018 begin with the Wednesday evening opening plenary session titled “Redox Modulation of Hypertension” and the Welcome Reception. SfrBM 2018 continues Thursday through Saturday with plenary sessions and the popular Sunrise Free Radical School (SFRS), now in its 24th year! SFRS provides valuable didactic lectures especially designed for attendees who are new to the redox biology field as well as more seasoned investigators in need of a refresher course.

The SfrBM 2018 Program Committee consisted of more than 40 scientists, half of them women, from 20 US states and 12 countries. This diverse committee worked hard to evaluate and select from among the 17 excellent proposals submitted to arrive at a series of sessions that emphasize scientific excellence, and introduces both new investigators and novel research topics. Again, this year, to enhance the educational value during SfrBM and increase the breadth of topics discussed at the conference, we will present parallel plenary sessions on Thursday and Friday mornings.

Featured plenary sessions include:

- Advances in Cysteine-Based Redox Signaling Mechanisms
- Nutrition and Redox Signaling: From Nutrients to Bioactives
- Regulatory Role of RNA / DNA Oxidation and its Functional Significance in Disease
- Mitochondria in Stem Cell Fate Decisions
- Targeted and Local Delivery of Redox Therapeutics: Intervention Where It Matters

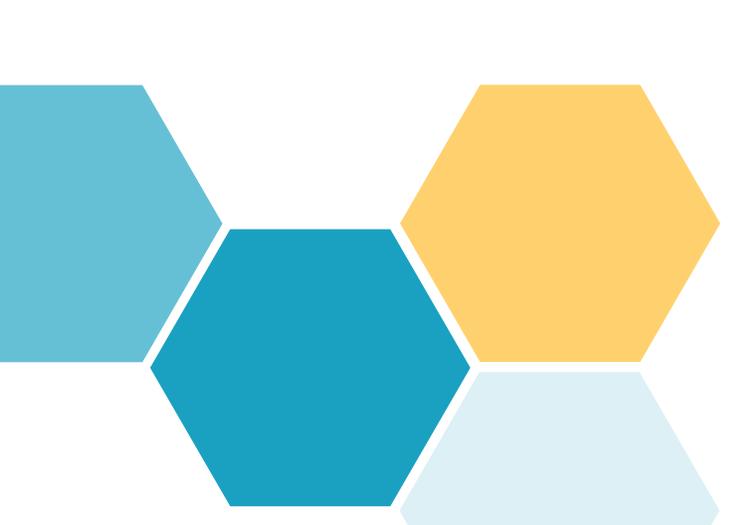
As always, some of the most exciting research will be communicated through dynamic poster presentations. This is one of the best venues to network among peers, make liaisons, and forge future collaborations with key opinion leaders in redox biology and medicine. SfrBM will also continue its commitment to support Young Investigator and Travel Awards to encourage and stimulate the next generation of scientists in our field throughout the Americas and worldwide.

Please plan to join us this November in Chicago to enjoy an educational program that shouldn't be missed, and to share your passion for the most creative, dynamic and groundbreaking science in redox biology and medicine.

Sincerely,

Rick Domann, Ph.D.
President, SfrBM
The University of Iowa





CONFERENCE DATES

WEDNESDAY, NOVEMBER 14 –
SATURDAY NOVEMBER 17, 2018

SfRBM 2018 will begin with a featured full day pre-conference workshop, “Oxidative Stress and Signaling: Methods, Mechanisms, and Therapeutics”, and a half day workshop “Methods in Lipid Oxidation” to be held on Wednesday, November 14. Pre-Conference workshop participants should arrive by Tuesday evening, November 13.

The Registration Desk will open at 5:00 pm on Tuesday, November 13.

PLAN TO ARRIVE in Chicago no later than Wednesday afternoon as SfRBM 2018 will officially kick off on Wednesday evening at 5:30 pm with a featured, “Presidential Plenary Session: Redox Modulation of Hypertension” followed by the 2018 SfRBM Welcome Reception.

PROGRAM GOALS

- Explore the latest issues in redox biology, a unifying theme in the pathophysiology of human diseases
- Instruct new members and students in the basics of free radical chemistry and biology
- Build personal and scientific relationships between newcomers to the field, established researchers, academicians and the private sector



KEY DATES TO REMEMBER

SATURDAY, SEPTEMBER 1

TRAVEL AWARD DEADLINE

- Submission deadline for abstracts to be considered for a Travel Award. You must be a student or postdoc SfRBM member at the time of submission to be eligible for this award.

ABSTRACT AWARD DEADLINE

- Submission deadline for abstracts to be considered for either oral or poster presentation.

YIA AWARD DEADLINE

- Deadline for indicating you wish an abstract to be considered for a “Young Investigator Award (YIA).” You must be a student or postdoc SfRBM member at the time of submission to be eligible for this award.
- Presenting authors are limited to submitting one (1) abstract to be considered for a Young Investigator Award. SfRBM recommends authors submit their best work for YIA consideration.

MONDAY, OCTOBER 8

EARLY-BIRD DEADLINE, SAVE \$50

- Deadline for early-bird conference registration. Registrations received after this time will be charged an additional \$50 late fee.

HOTEL RESERVATION DEADLINE

- Reservation deadline for conference rate of \$155 USD at the Palmer House Hilton. Reservations received after this date will be accepted on a space-available basis only and a higher hotel room rate may prevail.

WEDNESDAY, NOVEMBER 14

- Full-Day Pre-Conference Workshop, Oxidative Stress and Signaling: Methods, Mechanisms, and Therapeutics
- Half- Day Pre-Conference Workshop, Methods in Lipid Oxidation
- SfRBM 2018 Opening Session
- Welcome Reception

NOVEMBER 14 – 17, 2018

OFFICIAL CONFERENCE DATES

- SfRBM 2018

CONFERENCE PROGRAM

WEDNESDAY,
NOVEMBER 14, 2018

7:00 am - 6:30 pm

Registration/Information Desk

FULL-DAY PRE-CONFERENCE WORKSHOP

Oxidative Stress and Signaling: Methods, Mechanisms, and Therapeutics

Chairs: Sruti Shiva, Ph.D., University of Pittsburgh, USA and Rakesh Patel, Ph.D., University of Alabama at Birmingham, USA

This workshop brings together leading biologists, chemists and physiologists with redox expertise to provide an overview of cutting edge methodology in the field, prevailing mechanistic concepts, and the latest redox based therapeutic approaches. While speakers in this session have a cardiovascular slant, the information presented will cross disciplines and be of value to both budding and experienced redox researchers.

SESSION 1

MEASUREMENT OF OXIDATIVE
STRESS IN VIVO

8:15 am - 8:45 am

Mass Spectrometry Imaging of Lipid Peroxidation

Hulya Bayir, MD, University of Pittsburgh, USA

8:45 am - 9:15 am

EPR Based Imaging of Oxygen Gradients in Vivo

Murali Cherukuri, Ph.D., NIH/NCI, USA

9:15 am - 9:45 am

High Resolution NMR and Imaging of Cardiac Metabolism

Rong Tian, MD, Ph.D., University of Washington, USA

9:45 am - 10:15 am

BREAK

SESSION 2

THIOL OXIDATION, NITROSATION
AND SULFHYDRATION

10:15 am - 10:45 am

Measurement of S-Nitrosation in Cardioprotection

Elizabeth Murphy, Ph.D., NIH/NHLBI, USA

10:45 am - 11:15 am

Measurement of Thiol Oxidation and Electrophilic Modifications Versus S-Nitrosation

Phil Eaton, Ph.D., King's College London, UK

11:45 am - 12:15 pm

Sulfide and Perthiol Measurement and Signaling in Disease Models

Christopher Kevil, Ph.D., Louisiana State University, USA

12:15 pm - 1:30 pm

LUNCH

SESSION 3

REDOX BASED THERAPEUTICS
AND METABOLOMICS

1:30 pm - 2:00 pm

Antioxidant Therapeutics for Islet Transplantation

Hubert Tse, Ph.D., University of Alabama at Birmingham, USA

2:00 pm - 2:30 pm

Targeted Metabolomics and Regulation by RNS

Brad Hill, Ph.D., University of Louisville, USA

2:30 pm - 3:00 pm

Mitochondrial Targeted Redox Modulators as Therapeutic Agents

David Brown, Ph.D., Virginia Tech, USA

3:00 pm - 3:15 pm

CLOSING REMARKS

HALF-DAY PRE-CONFERENCE WORKSHOP

Methods in Lipid Oxidation

Chairs: Henry Jay Forman Ph.D., University of Southern California, USA and Corinne Spickett, MA, DPhil, Aston University, UK

Lipid oxidation generates numerous bioactive products, which can act as either signaling molecules involved in cell growth regulation, and stimulants of increased antioxidant defense, or signal for and participate in cell death. Hence, various acute and chronic human diseases metabolic, degenerative, inflammatory and malignant are associated with lipid oxidation. Therefore, this workshop will give an updated overview on methods in lipid oxidation research that might clarify the most relevant aspects of lipid oxidation and support its positioning within the interdisciplinarity of free radical biology and medicine.

1:00 pm - 1:10 pm

WELCOME

1:10 pm - 1:40 pm

MS-Based Identification of Covalent Adducts in Oxidized LDL

Koji Uchida, Ph.D., The University of Tokyo, Japan

1:40 pm - 2:10 pm

Methods to Measure Isolevuglandin Protein and Phospholipid Adducts

Sean Davies, Ph.D., Vanderbilt University, USA

CONFERENCE PROGRAM

THURSDAY,
NOVEMBER 15, 2018

2:10 pm – 2:25 pm **BREAK**

2:25 pm – 2:55 pm

Immunochemical Findings of HNE-His Adducts in Human Diseases

Neven Zarkovic, MD, Ph.D., Rudjer Boskovic Institute, Croatia

2:55 pm – 3:25 pm

Nitro-fatty Acids: Detection, Electrophilic Signaling and Therapeutics

Homero Rubbo, Ph.D., Universidad de la Republica, Uruguay

3:25 pm – 3:30 pm

CLOSING REMARKS

ANNUAL CONFERENCE BEGINS

5:30 pm – 5:40 pm

SfRBM President's Welcome

Rick Domann, Ph.D., The University of Iowa, USA, SfRBM President

PRESIDENTIAL PLENARY SESSION: REDOX MODULATION OF HYPERTENSION

5:40 pm - 7:10 pm

Chair: Christopher Kevil, Ph.D., Louisiana State University, USA

5:40 pm - 6:10 pm

Regulation of Vessel Tone by Heme Globins

Brant Isakson Ph.D., University of Virginia, USA

6:10 pm - 6:40 pm

Nitrate as a Regulator of Vascular Tone

Amrita Ahluwalia Ph.D., William Harvey Research Institute, UK

6:40 pm - 7:10 pm

Redox Signaling in the Brain and Antioxidant-Based

Therapeutics: Consequences for Hypertension

Matthew Zimmerman Ph.D., University of Nebraska Medical Center, USA

7:15 pm – 9:00 pm

WELCOME RECEPTION

7:15 pm – 8:30 pm

TRAINEE WELCOME EVENT

9:00 pm – 11:00 pm

HOSPITALITY

7:00 am – 6:30 pm

Registration/Information Desk

8:00 am - 9:00 am

SUNRISE FREE RADICAL SCHOOL: BACK TO BASICS

Chairs: Ralf Brandes, Ph.D., Goethe-University, Frankfurt am Main, Germany, and Jianhua Zhang, Ph.D., University of Alabama at Birmingham, USA

8:00 am – 8:30 am

Oxygen Chemistry: ROS, Radical, Reactivity

Douglas Spitz, Ph.D., The University of Iowa, USA

8:30 am – 9:00 am

Sources of ROS: Mito, Nox and NOS

Flavia Rezende, Ph.D., Goethe-University, Frankfurt am Main, Germany

PLENARY SESSION 1

Advances in Cysteine-Based Redox Signaling Mechanisms

Chairs: Leslie Poole, Ph.D., Wake Forest School of Medicine, USA and Ben Boivin, Ph.D., SUNY Polytechnic Institute, USA

At the center of redox signaling are oxidoreductive chemical reactions involving low and moderate levels of reactive oxygen species and reductants that modify the thiol-side chain of cysteinyl residues in proteins. In turn, these post-translational modifications cause a spectrum of structural alterations that allow reactive oxygen species production to be coupled to functional outputs in the cell. This session discusses timely and exciting advances in methodological approaches that allow targeted oxidation and monitoring of these cysteine-switches in redox signaling.

9:30 am – 10:00 am

Targetable Reactive Electrophiles and Oxidants (T-REX)

Technology to Identify "Privileged" Redox Sensors

Yimon Aye, Ph.D., Cornell University, USA

10:00 am – 10:30 am

Identification and Analysis of Thiol-Based Signaling Complexes

Tobias Dick, Ph.D., German Cancer Research Center (DKFZ), Germany

10:30 am – 11:00 am

BREAK

CONFERENCE PROGRAM

11:00 am – 11:30 am

Redox Modification of the Cytoskeleton During Cell Adhesion and Migration

Kathy Griendling, Ph.D., Emory University, USA

11:30 am – 12:00 pm

Assessing the Impact of Redox Modification on the Global Substrate Selection of Protein Kinases

Robert Newman, Ph.D., North Carolina Agricultural and Technical State University, USA

PLENARY SESSION 2

Nutrition and Redox Signaling-From Nutrients to Bioactives

Chairs: Cesar G. Fraga, Ph.D., University of Buenos Aires, Argentina and Enrique Cadenas, MD. Ph.D., University of Southern California, USA

This session focuses on how both nutrients and bioactives can prevent or ameliorate disease through mechanisms involving the modulation of redox cell signaling. These mechanisms entail nutrient sensing by redox modulation of functional proteins that impinge on the balance of energy intake and expenditure and they underscore the impact of bioactives controlling pathways leading to metabolic, neurological and cardiovascular dysfunction.

9:30 am – 10:00 am

Mitochondria, Nrf2 and mTOR

Gino Cortopassi, Ph. D., University of California, Davis, USA

10:00 am – 10:30 am

Plant Bioactives and the Intestinal Barrier: Redox Signaling and Implications for Insulin Resistance
Patricia I. Oteiza, Ph. D., University of California, Davis, USA

10:30 am – 11:00 am **BREAK**

11:00 am – 11:30 am

BDNF Signalling and Neurodegeneration: Effects of Anthocyanidins

Jeremy P.E. Spencer, PhD., University of Reading, UK

11:30 am – 12:00 pm

Regulation of HO-1 by Flavonoids: Mechanisms and Health Possibilities

Kevin Croft, Ph. D., University of Western Australia, Australia

12:00 pm – 12:30 pm

SfRBM Year in Review: Annual Member Meeting

12:30 pm – 2:30 pm **LUNCH** (attendees on own)

1:00 pm – 2:15 pm

PROFESSIONAL DEVELOPMENT SESSION 1 **Not Enough Hours in the Day - AKA How to Say NO!**

1:00 pm – 2:15 pm

PROFESSIONAL DEVELOPMENT SESSION 2

In the Land of -omics

2:30 pm - 4:15 pm

Oral Presentations from Submitted Abstracts
(3 concurrent sessions)

4:15 pm – 6:45 pm

Formal Poster Presentation

6:45 pm – 9:00 pm

OPENING DOORS EVENT

Needs a Yoda: Importance of Mentors Throughout Your Scientific Career

Organized by: Maria Clara Franco, Ph.D., Oregon St. University, USA, Samantha Giordano, Ph.D., University of Alabama at Birmingham, USA, and Maria Fernanda Forni, Yale University, USA, and the Women in Science Committee (WIS)

While trying to navigate a career in science, having a strong mentor makes a difference! Join us in an adventure in finding your Yoda! Discover and share insights into how strong mentors can foster productivity, collaborations and be a valuable resource for career advancement. All levels welcome, undergraduates to senior investigators.

9:00 pm – 11:00 pm

HOSPITALITY

FRIDAY, NOVEMBER 16, 2018

7:00 am – 6:30 pm

Registration/Information Desk

8:00 am - 9:00 am

SUNRISE FREE RADICAL SCHOOL: BACK TO BASICS

Chairs: Ralf Brandes, Ph.D., Goethe-University, Frankfurt am Main, Germany, and Jianhua Zhang, Ph.D., University of Alabama at Birmingham, USA

8:00 am – 8:30 am

Thiol Chemistry and Reactivity

Reto Asmis, Ph.D., Wake Forest University, USA

8:30 am – 9:00 am

Principles of Redox Regulation - The Thiol Worlds

Dean Jones, Ph.D., Emory University, USA

CONFERENCE PROGRAM

PLENARY SESSION 3

Regulatory Role of RNA / DNA Oxidation and its Functional Significance in Disease

Chairs: Clare Hawkins, Ph.D., University of Copenhagen, Denmark and Henrik Poulsen, MD, University Hospital Copenhagen, Denmark

The modification of RNA and DNA during oxidative stress is generally regarded as being detrimental to cellular processes, with the formation of modified nucleobases in vivo, particularly 8-oxo-7,8-dihydro-2'-deoxyguanosine (8-oxodG), strongly linked to mutations and decreased gene transcription. This symposium will highlight newly discovered regulatory and epigenetic implications of DNA oxidation and 8-oxodG formation, together with discussing the functional and clinical significance of RNA oxidation.

9:30 am – 10:00 am

8-oxoG Formation: Impact in Gene Promoters on Gene Transcription and Mapping Studies.

Cynthia Burrows, Ph.D., University of Utah, USA

10:00 am – 10:30 am

The Impact of Oxidative DNA Lesions on Telomere Maintenance

Patricia Opreško, Ph.D., University of Pittsburgh, USA

10:30 am – 11:00 am

BREAK

11:00 am – 11:30 am

Cellular Consequences and Repair of Oxidised RNA

Hani Zaher, Ph.D., Washington University, USA

11:30 am – 12:00 pm

Oxidative Stress to RNA/DNA in the Clinical Setting: Clinical Intervention Trials and Epidemiology

Henrik Poulsen, MD, Rigshospitalet, Univ. Hospital Copenhagen, Denmark

PLENARY SESSION 4

Redox Metabolism in Cancer Stem Cell State Switching

Chair: Michael Graham Espey, Ph.D., National Cancer Institute, USA

This session will delve into the roles metabolism and redox crosstalk plays in the determination of cellular identity rooted in the concept of cancer stem cell states. Speakers represent the integrative nature of these regulators in normal physiology and the mechanistic underpinnings of their dysregulation across diverse types of cancer. How metabolic reprogramming can drive heterogeneity and resistance will be explored. This plenary session also highlights how investigation of basic redox processes/mechanisms can be used as the basis for translation of new therapeutic strategies.

9:30 am – 10:00 am

Metabolic Regulation of Cell State

Heather Christofk, Ph.D., University of California, Los Angeles, USA

10:00 am – 10:30 am

PGC1 α at the Nexus of Cancer Stem Cell Fates

Pere Puigserver, Ph.D., Harvard Medical School, USA

10:30 am – 11:00 am

BREAK

11:00 am – 11:30 am

Social Behavior of Breast Cancer Stem Cells in Metastasis

Huiping Liu, M.D., Ph.D., Northwestern University Feinberg School of Medicine, USA

11:30 am – 12:00 pm

Mitochondrial Regulation of Normal and Leukemic Stem Cells

Saghi Ghaffari, M.D., Ph.D., Icahn School of Medicine at Mount Sinai, USA

12:00 pm – 12:30 pm

SfRBM Lifetime Achievement Award Lecture

MnSOD at the Crossroads of Life and Death:

We've Only Just Begun

Daret St. Clair, Ph.D., University of Kentucky, USA

12:30 pm – 2:30 pm

LUNCH (attendees on own)

1:00 pm – 2:15 pm

PROFESSIONAL DEVELOPMENT SESSION 3

Grantsmanship Workshop

1:00 pm – 2:15 pm

PROFESSIONAL DEVELOPMENT SESSION 4

AMA (Ask Me Anything)

2:30 pm – 4:15 pm

Oral Presentations from Submitted Abstracts

(3 concurrent sessions)

4:15 pm – 6:45 pm

Formal Poster Presentation

7:00 pm – 8:00 pm

FRBM & Redox Biology Editors Reception

9:00 pm – 11:00 pm

HOSPITALITY

CONFERENCE PROGRAM

SATURDAY,
NOVEMBER 17, 2018

7:00 am – 6:30 pm
Registration/Information Desk

8:00 am - 9:00 am
**SUNRISE FREE RADICAL SCHOOL:
BACK TO BASICS**
Chairs: Ralf Brandes, Ph.D., Goethe-University, Frankfurt am
Main, Germany, and Jianhua Zhang, Ph.D., University of
Alabama at Birmingham, USA

8:00 am – 8:30 am
Small Molecules Antioxidants
Manisha Patel, Ph.D, University of Colorado, USA

8:30 am – 9:00 am
Nitric Oxide: The "Good" ROS
Sruti Shiva, Ph.D., University of Pittsburgh, USA

PLENARY SESSION 5
**Targeted and Local Delivery of Redox Therapeutics:
Intervention Where It Matters**
Chairs: Edward Moreira Bahnson, Ph.D., University of North
Carolina, USA and Francis Miller, MD, Duke University, USA

Despite the contribution of redox dysfunction to the pathophysiology of multiple diseases, the efficacy of antioxidants as therapies has been disappointing. A fundamental limitation of these therapeutic approaches has been their method of delivery. Localized redox dysfunction necessitates the development of local targeted therapeutic strategies that deliver the redox intervention directly to the cellular and/or subcellular site of disease.

9:30 am – 10:00 am
**Local and Targeted Redox Therapies
for the Vasculature**
Edward Moreira Bahnson, Ph.D.,
University of North Carolina, USA

10:00 am – 10:30 am
Cell-Mediated Delivery of Catalase to the CNS
Elena Batrakova, Ph.D., University of North Carolina, USA

10:30 am – 11:00 am **BREAK**

11:00 am – 11:30 am
**Measurement of Real-time Nitric Oxide (NO) Release from
Macrophages, Fibroblasts and Keratinocytes to Direct the
Development of Smart Dressings for Diabetic Foot Ulcers**
Megan Frost, Ph.D., Michigan Technological University, USA

11:30 am – 12:00 pm
**Harnessing the Therapeutic Potential of Nitric
Oxide Through Nanoparticle Technology**
Joel M. Friedman MD, Ph.D., Albert Einstein
College of Medicine, USA

12:00 pm – 12:30 pm **NEW MEMBER WELCOME MEETING**

12:30 pm – 2:30 pm **LUNCH** (attendees on own)

2:30 pm - 4:15 pm
Oral Presentations from Submitted Abstracts
(3 concurrent sessions)

4:15 pm – 6:45 pm **FORMAL POSTER PRESENTATION**

7:30 pm – 9:30 pm **CLOSING AWARDS BANQUET**

9:30 pm – 11:00 pm **HOSPITALITY**

SfRBM wishes to recognize and thank the following supporters of SfRBM 2017:



Albany
Medical
College



WORKSHOPS and SPECIAL PROGRAMS

WEDNESDAY,
NOVEMBER 14, 2018

PRE-CONFERENCE WORKSHOPS

FULL DAY PRE-CONFERENCE WORKSHOP

8:00 am – 3:15 pm

OXIDATIVE STRESS AND SIGNALING: METHODS, MECHANISMS, AND THERAPEUTICS

Chairs: *Sruti Shiva, Ph.D, University of Pittsburgh and Rakesh Patel, Ph.D., UAB*

This workshop brings together leading biologists, chemists and physiologists with redox expertise to provide an overview of cutting edge methodology in the field, prevailing mechanistic concepts, and the latest redox based therapeutic approaches. While speakers in this session have a cardiovascular slant, the information presented will cross disciplines and be of value to both budding and experienced redox researchers.

Cost: Students/ Postdoc - \$99 (*through October 8*)
\$125 (*Late & Onsite*); Senior Investigator - \$175 (*through October 8*)
\$199 (*Late & Onsite*)

HALF DAY PRE-CONFERENCE WORKSHOP

1:00 pm – 3:30 pm

METHODS IN LIPID OXIDATION

Chairs: *Henry Jay Forman Ph.D., University of Southern California and Corinne Spickett, MA, DPhil, Aston University*

This workshop will give an updated overview on methods in lipid oxidation research that might clarify the most relevant aspects of lipid oxidation and support its positioning within the interdisciplinarity of free radical biology and medicine.

Registration fees for the workshop, which includes lunch and course materials, are not included in the annual conference tuition. Attendees wishing to attend the workshop must clearly indicate their participation on the enclosed registration form.

Attendance will be limited, so it is advisable to register early! Participants should plan to arrive in Chicago on Tuesday to be ready for the Wednesday morning start.

Cost: Students/ Postdoc - \$50 (*through October 8*)
\$75 (*Late & Onsite*); Senior Investigator - \$99 (*through October 8*)
\$125 (*Late & Onsite*)



SPECIAL PROGRAMS

WELCOME RECEPTION 7:15 pm – 9:00 pm

The Welcome Reception is included in your registration fee.

TRAINEE WELCOME EVENT 7:15 pm – 9:00 pm

This event will be during the SfrBM Welcome Reception and has specifically been tailored for students/postdocs (trainees), allowing time to meet and network with each other in a more casual setting!

THURSDAY,
NOVEMBER 15, 2018

SFRBM YEAR IN REVIEW:

ANNUAL MEMBER MEETING 12:00 pm - 12:30 pm

The member meeting will discuss past and future financial, administrative and academic activities of the society and recruit suggestions and comments from the general membership.

16TH ANNUAL OPENING DOORS EVENT

6:45 pm – 9:00 pm

Everyone needs a Yoda: Importance of mentors throughout your scientific career

Cost: \$20

FRIDAY,
NOVEMBER 16, 2018

SFRBM LIFETIME ACHIEVEMENT AWARD LECTURE

12:00 pm – 12:30 pm

MnSOD AT THE CROSSROADS OF LIFE AND DEATH: WE'VE ONLY JUST BEGUN

Daret St. Clair, Ph.D., University of Kentucky

SATURDAY,
NOVEMBER 17, 2018

NEW MEMBER MEETING 12:00 pm – 12:30 pm

This session will inform you of the activities and benefits of being a member of the Society and give you the opportunity to get all of your questions answered about SfrBM.

CLOSING AWARDS BANQUET 7:30 pm – 9:30 pm

The Awards Banquet will feature the recognition of Young Investigator and Travel Award winners and outstanding leaders in the field. The banquet is included in your registration fee.

FORMAT, ABSTRACTS, and AWARDS

FORMAT

SfRBM 2018 will begin on Wednesday, November 14 at 5:00 pm and conclude with the Closing Awards Banquet on Saturday, November 17, 2018.

SfRBM 2018 will feature four days of scientific communication. On Wednesday, the featured pre-conference workshops are NOT included in your Annual Conference registration fee and must be completed separately.

The Annual Conference is scheduled for the following three days (Thursday through Saturday). Each day will begin with the popular Sunrise Free Radical School; continue with morning plenary lectures, afternoon professional development sessions, parallel thematic sessions and poster presentations. In addition, there will be several special programs and receptions to network with fellow scientists.

FREE RADICAL SCHOOL 8:00 am - 9:00 am

For the 24th consecutive year, the Sunrise Free Radical School will kick off each day of our Annual Conference. Led by Ralf Brandes, Ph.D., Goethe-University, Frankfurt am Main, Germany, and Jianhua Zhang, Ph.D., University of Alabama at Birmingham, USA, the Free Radical School is designed to provide a detailed overview of the basic concepts of free radical chemistry and biology and is targeted towards students, fellows and those wishing to learn about new areas. A faculty of highly respected investigators in free radical research will deliver lectures and provide key literature references in their subject areas.

PLENARY SESSIONS 9:30 am - 12:00 pm

Plenary sessions, which will be held during each morning of the Annual Conference, will be comprised of speakers who will address common or closely related topics. Each will deliver a 20 – 25 minute talk followed by a 5-10 minutes question and answer session moderated by a 2 – 3 member panel. Topics to be covered include:

- Advances in Cysteine-Based Redox Signaling Mechanisms
- Nutrition and Redox Signaling: From Nutrients to Bioactives
- Regulatory Role of RNA/DNA Oxidation and Its Functional Significance in Disease
- Mitochondria in Stem Cell Fate Decisions
- Targeted and Local Delivery of Reox Therapeutics: Intervention Where It Matters

DUAL PLENARY SESSIONS

SfRBM 2018 will offer dual morning plenary sessions on Thursday and Friday, providing additional scientific education.

AFTERNOON PARALLEL SESSIONS: ORAL PRESENTATIONS 2:30 pm - 4:15 pm

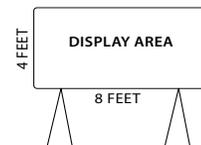
A number of high-quality abstracts are chosen from those submitted to the Society for primary authors to give 20-minute oral presentations of their research. Three concurrent sessions will be structured around basic topic areas and will feature 45 speakers.

POSTER SESSIONS (Thursday – Saturday)

Formal Poster Presentation 4:15 pm – 6:45 pm

Authors must be present during this poster session time

During each day of this three-day session, posters will be on display all day (9:00 am – 9:00 pm) and can be viewed at any time during this period. Each day, two and half hours of formal presentation time (4:15 pm – 6:45 pm) will be scheduled for authors to be available to discuss their work with other attendees. Poster boards for display of abstracts will again be 4 feet (122 cm) wide X 8 feet (244 cm) long for greater display area.



ABSTRACTS

Abstracts for oral or poster presentation consideration should be submitted on-line at <https://www.xcdsystem.com/sfrbm/abstract/index.cfm?ID=LdwA2HN>

The deadline for submitting abstracts for SfRBM 2018 is Saturday, September 1.

Submitted abstracts must be previously unpublished work. Abstracts submitted for oral presentation consideration will be subject to a double-blind review process. Presenting authors of the highest scored abstracts will be invited to share their work in one of 45 oral presentation slots in the program.

All other abstracts will be programmed as a poster presentation, to be presented on one day of SfRBM three-day poster symposia. Decisions on abstract acceptance for SfRBM 2018 will be posted on the SfRBM site during the week of October 15, 2018.

Abstracts must be no longer than 300 words. Abstracts that exceed this size will display a message to resubmit an edited version.

All submitted abstracts will be published in the conference's program and abstract book. If you wish an abstract to be considered for a Travel Award, abstracts must be received by Saturday, September 1, 2018. Submission deadline to be considered for a Young Investigator Award is Saturday, September 1, 2018. Please mark the appropriate box on the on-line abstract form.

FORMAT, ABSTRACTS, and AWARDS

TRAVEL AWARDS

SfRBM's Junior Awards Committee are making Travel Awards available to students and postdocs who wish to attend SfRBM 2018 to present their research. Ten (10) awards at \$500 each will be presented to postdoc and student SfRBM members in the US. An additional ten (10) awards at \$1,000 each will be given by SfRBM to postdoc or student SfRBM members throughout the rest of the world.

Any student or postdoc wishing to submit an abstract for Travel Award consideration must check the appropriate box on the on-line abstract form and submit the abstract no later than Saturday, September 1, 2018.

- Abstract judging will be based on research merit only and applicants must be the first author of the abstract.
- Travel Award winners are not eligible for Young Investigator Awards (YIA) given at the conference.
- You may simultaneously apply for SfRBM membership when submitting an abstract for a Travel Award.
- Decisions on Travel Awards for SfRBM 2018 will be posted on the SfRBM site during the week of October 15.
- Recipients will be given their check at the Closing Awards Banquet on November 17 as well as free conference registration for SfRBM 2019 or SfRBM 2020.

UNDERGRADUATE RESEARCH AWARD

SfRBM's Undergraduate Research Award will be presented to an undergraduate student based on the submitted abstract and the presentation of the work as a poster at the Annual Conference. Candidates must be the first author on a submitted abstract, must check the appropriate box on the electronic abstract form and must be fully registered to attend the conference.

- Research presented must have been completed as an undergraduate or high school student.
- Undergraduates are not eligible for the Young Investigator Award.
- To be considered for the award, the author must be an SfRBM student member. (You may simultaneously apply for SfRBM membership when submitting an abstract for the award.)

POSTER NOTIFICATION & PRESENTATION POLICY

SfRBM has seen an increasing number of investigators who formally confirm their posters but do not attend to present their research, we have instituted a policy for poster presentations during its Annual Conference. Should you confirm a presentation in a reply to your acceptance email and do not show up to present your work, you will be ineligible to submit any abstracts for the subsequent year's conference. The same applies to investigators who receive an acceptance email but fail to communicate that they will NOT be presenting. Investigators will have up until November 1, 2018 to indicate whether or not to accept an invitation to present a poster. Investigators in violation of this policy will not be eligible to submit their latest work for SfRBM 2019.

YOUNG INVESTIGATOR AWARDS

SfRBM's "Young Investigator Awards" (YIAs) will be presented to graduate students and postdoctoral fellows based on the submitted abstract and the presentation of the work at the annual conference, either in oral or poster symposia.

- Candidates must be first authors on a submitted abstract, must check the appropriate box on the electronic abstract form and must be fully registered to attend the conference.
- Eligible graduate students must be enrolled in an accredited full-time doctoral degree program at the time of abstract submission.
- Eligible postdoctoral fellows must be engaged in full-time postdoctoral research and must have no more than five years of research experience beyond their doctoral degree.
- Finally, to be considered for the award, the author must be a postdoc or student SfRBM member. You may simultaneously apply for SfRBM membership when submitting an abstract for a YIA.
- YIA awardees will receive a \$500 stipend in recognition of their work as well as free conference registration to SfRBM 2019 or SfRBM 2020.

Presenting authors are limited to submitting one (1) abstract to be considered for a Young Investigator Award. SfRBM recommends authors submit their best work for YIA consideration.

LOCAL, TRAVEL, and ADDITIONAL INFORMATION



PALMER HOUSE HILTON

17 E. Monroe Street,
Chicago, IL, USA, 60603
P: (312) 726-87500
Reservations: (800) 445-8667

The Palmer House Hilton is the host hotel for SfrBM 2018. The hotel is located in downtown Chicago. A special room rate of \$155 USD per night single/double is available for all conference participants. This rate is offered on a space-available basis through October 12, 2018.

Contact Hilton reservations at (800) 445-8667 and indicate you are with "SfrBM 2018" or visit www.sfrbm.org and click on "online hotel reservations."

TRAVEL INFORMATION

Chicago has two major airports to select from, please see below:

- **Midway International Airport** is approximately 12 miles away from the Palmer House Hilton (30-45 mins)
- **O'Hare International Airport** is approximately 17 miles away from the Palmer House Hilton (35-60 mins)

For further transportation options, please contact the Palmer House Hilton Concierge at (312) 726-7500.

ROOM SHARE PROGRAM (ROOMMATE)

If you plan to attend the conference and wish to share a room with another conferee that you do not know, please indicate this request (as well as your gender) on the enclosed registration form no later than October 5, 2018. SFRBM staff will then contact you to match you with a roommate as they become available. Matched roommates will be responsible for making the hotel reservations and for paying half of the room cost per night.

ANNUAL CONFERENCE REGISTRATION

Your Annual Conference Registration includes:

- Networking opportunities with scientists and potential collaborators from around the world
- Access to four days of educational sessions (Wednesday – Saturday)
 - Sunrise Free Radical School
 - Scientific Plenary Sessions
 - Oral Presentations from selected abstracts
 - Poster Sessions
 - Professional Development Sessions
- Formally provided poster space to display your research
- Scientific Exhibit Hall – where you can learn more about the latest products and services that can assist you in your research
- Invited to attend the SfrBM Annual Member Conference
- Welcome Reception on Wednesday evening
- Continental Breakfast & Coffee Breaks (Thursday – Sunday)
- Poster and Networking Sessions and Receptions (Thursday – Saturday)
- Admittance to the Closing Awards Banquet (Saturday evening)
- Hospitality Room for networking with senior faculty and trainees (Wednesday – Saturday evenings)



LOCAL, TRAVEL, and ADDITIONAL INFORMATION

CONFERENCE MATERIALS – MOBILE CONFERENCE APP

The Program and Abstract book will be provided on a mobile app that will include the plenary lectures, oral presentation and poster symposia abstracts by topic. The book is produced as a supplement to the Society's journal, *Free Radical Biology and Medicine* (FRBM), making the abstracts contained within scientifically citeable.

Course materials for the Sunrise Free Radical School and an attendee list will also be included on the SfrBM 2018 mobile conference app.

PRINTED PROGRAM & ABSTRACT BOOK

If you wish to receive a printed version of the program and abstract book, the cost will be \$15 and you must pre-order the printed program and abstract book on the registration form. You can also purchase the Free Radical School book for an additional \$15. Extra printed copies will not be available at the conference.

Upon request, attendees may also receive an official certificate of attendance at the conference.

OFFICIAL LANGUAGE

English is the official language of SfrBM 2018. No simultaneous translation will be provided.

PHOTOS & VIDEOS

SfrBM 2018 prohibits the taking of unauthorized photography and/or videography of any kind during the plenary sessions, lectures, workshops, and poster presentations without consent from the presenter/speaker/author.

By checking the box on the registration page, I understand that participation in SfrBM 2018 grants permission for photos and videos taken of the individual participants and groups during the event to be used by the Society for Redox Biology and Medicine in promotional media during the conference and online, unless the Society for Redox Biology and Medicine is notified in writing that an individual or group does not grant permission.

CME CREDIT

NO Category 1 CME Credits will be offered for SfrBM 2018.

CANCELLATIONS & REFUNDS

Fees include all receptions, breaks and banquet. Requests for refunds will be honored if received in writing by November 1, 2018. Please note that all refunds will be issued AFTER the conference and will be subject to a \$50 processing fee.

QUESTIONS?

Questions about SfrBM 2018 can be directed to SfrBM via phone at (317) 205-9482, fax at (317) 205-9481 or e-mail at info@sfrbm.org. Registration forms can be mailed to: SfrBM, 8365 Keystone Crossing, Suite 107, Indianapolis, IN 46240.



SAVE THE DATE

SfrBM  **19**



NOVEMBER 20-23
PLANET HOLLYWOOD RESORT
AND CASINO

SfRBM 2018 REGISTRATION

Name: _____ Degree: _____
Affiliation: _____
Address: _____ City: _____ State: _____ Zip: _____
Country: _____ Phone: _____ Fax: _____
Email: _____

SATURDAY BANQUET CHOICE: (please check one) CHICKEN FISH VEGETARIAN NOT ATTENDING

REGISTRATION FEES:

- FULL/ASSOCIATE – SfRBM MEMBER
- STUDENT/POST-DOC SfRBM* MEMBER
- SFRRI MEMBER** RRS MEMBER**

*Post-doc Members are those with five (5) years or less from the date they received their doctorate.

**The SfRBM member fee is extended to all SFRRI members, provided proof of current membership in an SFRRI affiliate society, and to RRS members that are first-time SfRBM attendees.

- EMERITUS – SfRBM MEMBER
- NON-MEMBER REGULAR
- NON-MEMBER POSTDOC/STUDENT
- UNDERGRADUATE* – SfRBM MEMBER

*Undergraduate Members are working on obtaining their Bachelor's degree.

- ONE-DAY PASS* Day attending: _____

*Cost is the same for members and non-members. This fee does not include the Saturday, November 17 Closing Awards Banquet.

- GUEST REGISTRATION (Receptions, Banquet & Hospitality only)

Guest Name: _____

- PRINTED ABSTRACT AND PROGRAM BOOK
- PRINTED FREE RADICAL SCHOOL BOOK

PRE-REGISTERED (BY OCT. 8TH)

- \$535
- \$275
- \$535

- \$250
- \$685
- \$350
- \$200

- \$225

- \$150

- \$15 (You will NOT be able to purchase at the conference.)
- \$15 (You will NOT be able to purchase at the conference.)

LATE & ONSITE

- \$585
- \$325
- \$585

- \$300
- \$735
- \$400
- \$225

- \$250

- \$200

ROOMMATE

*Require SfRBM to assign you a roommate:

- Yes No

If yes, registrant is: Male Female

*SfRBM will contact you via email for additional information.

POSTER NOTIFICATION & PRESENTATION POLICY

(see page 12 for details) Review and check that you understand and agree to the following terms:

- I agree that if my abstract is accepted for presentation in any format (i.e. oral or poster), I understand I must confirm my attendance for SfRBM 2018 and comply with all conference policies.

PHOTOS & VIDEOS

(see page 14 for details)

- Permission granted for photos and videos taken at SfRBM 2018.

PRE-CONFERENCE WORKSHOPS

(check and circle membership type) *Students, Postdocs & Young Scientists - 5 years or less from the completion of training

Oxidative Stress And Signaling BY OCT. 8TH: \$99 Students, Postdocs & Young Scientists*

- \$175 Senior Scientists

Methods in Lipid Oxidation BY OCT. 8TH: \$50 Students, Postdocs & Young Scientists*

- \$99 Senior Scientists

LATE AND ONSITE: \$125 Students, Postdocs & Young Scientists*

- \$199 Senior Scientists

LATE AND ONSITE: \$75 Students, Postdocs & Young Scientists*

- \$125 Senior Scientists

OPENING DOORS EVENT

Everyone Needs a Yoda: Importance of Mentors Throughout Your Scientific Career \$20

PROFESSIONAL DEVELOPMENT SESSIONS 1:00 PM – 2:15 PM

You may choose to attend one session per day. These sessions are complimentary and part of your conference registration.

THURSDAY, NOVEMBER 15

- Not enough hours in the day - aka how to say NO!
- In the land of -omics

FRIDAY, NOVEMBER 16

- Grantsmanship Workshop
- AMA (Ask Me Anything)

METHOD OF PAYMENT

- Check**
- Visa
- Mastercard
- AmEx

Card Number: _____ Exp.Date: _____ CVV: _____

Cardholder Name (please print): _____ Signature: _____

Unless appropriate check/charge information accompanies this form you will NOT be considered pre-registered. **Payable to the Society for Free Redox Biology and Medicine (SfRBM). All checks must be made in U.S. Dollars, drawn on U.S. Banks. U.S. postal money orders and U.S. travelers checks are also accepted.

SfRBM2018
NOVEMBER 14-17
CHICAGO

PHONE REGISTRATIONS ARE NOT ACCEPTED.
Please register by selecting one of the following three options:

www.SfRBM.org or
fax: (317) 205-9481 or SfRBM -
8365 Keystone Crossing, Suite 107,
Indianapolis, IN 46240



It is very important that you enjoy SfRBM 2018. If due to a disability, you have any special needs or requirements, please call (317) 205-9482 and we will do our best to accommodate your needs.