

GENERAL INFORMATION

Information on conference location, transportation, parking, and participant resources can be found at: www.rice.edu/aaas.

REGISTRATION

Rice University
BRC Building
Prefunction Space

Days and hours are:

Thursday

8 April 7:30AM-5:00PM

Friday

9 April 7:30AM-5:00PM

Saturday

10 April 8:00AM-NOON

All participants are required to check in at the registration tables, where you will sign in and receive meeting materials. Registrants are required to wear their name badges at all times when attending the Annual Meeting. Anyone without a valid meeting badge may be denied entry to a session. For registrants who did not pre-pay, we can only accept cash or check for payment on-site.

COFFEE BREAKS

Coffee/Tea and light snacks will be provided in the prefunction space at mid-morning (10:00am-10:30am) and mid-afternoon (3:00pm-3:30pm).

PRESENTER GUIDELINES

Oral Presentations: Presenters planning on using powerpoint, should bring their presentation on a flash drive and arrive to their session room at least 15 minutes prior to the start of their session to upload their presentation on the provided laptops. Contributed paper presentations should last 20 minutes, with 2-3 minutes for questions.

Poster Presentations: Posters will be mounted on walls using mounting clay provided by the conference. Poster dimensions should not exceed either 36 x 56" or 42 x 48". Student poster presenters who indicated they would like to be judged for an award should remain with their poster until the conclusion of the judging.

PRELIMINARY SCHEDULE

THURSDAY MORNING, 8 APRIL

REGISTRATION

Thursday, 8 April
BRC Building

7:30 am-Noon
Prefunction Space

SPECIAL TOPIC SYMPOSIUM: NUCLEAR RECEPTORS AND CO-REGULATORS: MECHANISMS AND TRANSLATIONAL POTENTIAL IN CANCER: PART I

Thursday, 8 April
BRC Building

8:00 am - 12:30pm
Room:TBA

8:00 WELCOME AND INTRODUCTIONS

8:10 O'Malley, Bert W.
THE ROLE OF COACTIVATORS IN PHYSIOLOGY AND DISEASE

8:40 Tsai, Sophia
THE ROLE OF COUP-TFII, AN ORPHAN NUCLEAR RECEPTOR, IN TUMOR
GROWTH AND TUMOR METASTASIS

9:05 Tsai, Ming-Jer
COUP-TFII IN ENERGY METABOLISM AND CELL FATE DETERMINATION OF
MESENCHYMAL STEM CELLS

9:30 DeMayo, Francesco
IN VIVO ANALYSIS OF PROGESTERONE RECEPTOR SIGNALING IN THE MOUSE
UTERUS

9:30 Xu, Jian-Ming
TITLE FORTHCOMING

10:20 BREAK

10:50 Gustafsson, Ja-Ake
ESTROGEN RECEPTOR BETA - A POTENTIAL TARGET FOR ANTI-CANCER DRUGS

11:15 Weigle, Nancy
TARGETING ANDROGEN RECEPTORS IN ANDROGEN DEPENDENT AND
ANDROGEN INDEPENDENT PROSTATE CANCER

11:40 Li, Wei
A GENOMIC VIEW OF EPIGENETIC AND TRANSCRIPTION REGULATION: A CASE
STUDY ON THE MOLECULAR MECHANISMS OF PROSTATE CANCER
PROGRESSION

12:05 Fuqua, Suzanne
NOVEL MECHANISMS OF HORMONE RESISTANCE IN BREAST CANCER

SPECIAL TOPIC SYMPOSIUM: POLYMER NANOCOMPOSITES: PART I

Thursday, 8 April

8:00am-Noon

BRC Building

Room:TBA

8:00 Beall, Gary (Texas State University-San Marcos)
TITLE FORTHCOMING

8:30 Guo, Bing (Texas A & M University)
TITLE FORTHCOMING

9:00 Li, Yu-Chin (Texas A & M University)
ANTI-FLAMMABLE THIN FILM COATINGS FOR FOAM AND FABRIC

9:15 Priolo, Morgan (Texas A & M University)
OXYGEN BARRIERS OF NANO BRICK WALL THIN FILMS

9:30 BREAK

10:00 Feller, Jean-Francois (University of South Brittany)
SENSING BEHAVIOR OF POLYMER NANOCOMPOSITES

10:30 Sun, Luyi (Texas State University - San Marcos)
DESIGNING NANOPLATELETS FOR THE PREPARATION OF POLYMER
NANOCOMPOSITES

11:00 Zhu, Jiahua (Lamar University)
ELECTROSPUN POLYIMIDE NANOCOMPOSITE FIBERS REINFORCED WITH CORE-
SHELL STRUCTURED FE@FEO NANOPARTICLES

11:15 Levin, Zachary (Texas A & M University)
THERMOELECTRIC BEHAVIOR OF SEGREGATED NETWORK POLYMER
NANOCOMPOSITES

**PLENARY LECTURE: TERAHERTZ RADIATION: AN INTRODUCTION AND OVERVIEW OF
LATE BREAKING FINDINGS OF THE LAST SPECTRAL BAND OF THE ELECTROMAGNETIC
SPECTRUM**

11:00 Wilmink, Gerald J. (Air Force Research Laboratory)

THURSDAY AFTERNOON, 8 APRIL

REGISTRATION

Thursday, 8 April
BRC Building

Noon - 5:30 pm
Prefunction Space

SPECIAL TOPIC SYMPOSIUM: POLYMER NANOCOMPOSITES: PART II

Thursday, 8 April
BRC Building

1:00pm-4:00pm
Room:TBA

- 1:00 Guo, Zhanhu (Lamar University)
CONDUCTIVE POLYMER AND ITS NANOCOMPOSITES
- 1:30 Park, Yong Tae (Texas A & M University)
HIGHLY CONDUCTIVE AND TRANSPARENT CARBON NANOTUBE THIN FILM ASSEMBLAGES
- 1:45 Zhang, Di (Lamar University)
MAGNETIC AND ELECTROMAGNETIC EVALUATION OF THE MAGNETIC CORE-SHELL STRUCTURAL NANOPARTICLES FILLED POLYURETHANE NANOCOMPOSITES
- 2:00 Sukhonosova, Galina (Texas A & M University)
ANTIMICROBIAL THIN FILM ASSEMBLAGES CONTAINING QUATERNARY AMMONIUM SURFACTANTS
- 2:15 Ding, Wei (Lamar University)
ELECTROSPUN POLY (VINYL ALCOHOL) NANOFIBERS
- 2:30 BREAK
- 3:00 Chen, Jonathan and Liangfeng Sun (University of Texas - Austin)
TITLE FORTHCOMING
- 3:30 Yang, You-Hao (Texas A & M University)
INFLUENCE OF DEPOSITION TIME ON GROWTH AND BEHAVIOR OF CLAY-BASED THIN FILM ASSEMBLIES
- 3:45 Mavinakuli, Pallavi (Lamar University)
CONDUCTIVE POLYMER NANOCOMPOSITES
- 4:00 Chen, Xuelong
ELECTROSPUN MAGNETIC FIBRILLAR POLYSTYRENE NANOCOMPOSITES REINFORCED WITH NICKEL NANOPARTICLES

SPECIAL TOPIC SYMPOSIUM: MICRORNAS IN DEVELOPMENT AND DISEASE

Thursday, 8 April
BRC Building

1:00 pm - 7:00 pm
Room: TBA

Session Chair: Preethi Gunaratne (University of Houston)

- 1:00 Gunaratne, Preethi H. (University of Houston)
A FUNCTIONAL GENOMICS PLATFORM FOR IDENTIFICATION AND VALIDATION
OF TUMOR SUPPRESSOR MICRORNAS FROM THE CANCER GENOME ATLAS
(TCGA) CONSORTIUM DATA
- 1:30 Matzuk, Martin M. (Baylor College of Medicine)
SMALL RNAS IN THE FEMALE REPRODUCTIVE TRACT OF MAMMALS
- 2:00 Anderson, Matthew L. (Baylor College of Medicine)
MICRORNAS AS THERAPEUTIC TARGETS IN FEMALE REPRODUCTIVE TRACT
CANCERS
- 2:30 Shohet, Jason (Baylor College of Medicine)
A GENOME-WIDE SCREEN FOR MYCN REGULATED MICRORNAS WITH CHIP-SEQ
REVEAL ONCOGENIC AND TUMOR SUPPRESSOR MICRORNAS IN NEUROBLASTOMA
- 3:00 BREAK
- 3:20 Lee, Soo-Kyung (Baylor College of Medicine)
THE ROLE OF AN INTRONIC MICRORNA FAMILY IN THE GENE REGULATORY
NETWORK DURING SPINAL CORD DEVELOPMENT
PROGRAMS OF 3' UTR VARIATION IN NORMAL AND TRANSFORMED
MAMMALIAN CELLS
- 3:50 Neilson, Joel (Baylor College of Medicine)
PROGRAMS OF 3' UTR VARIATION IN NORMAL AND TRANSFORMED
MAMMALIAN CELLS
- 4:20 Cooper, Tom (Baylor College of Medicine)
PROGRAMS OF 3' UTR VARIATION IN NORMAL AND TRANSFORMED
MAMMALIAN CELLS
- 4:40 BREAK
- 5:00 Cooney, Austin J. (Baylor College of Medicine)
MIRNA REGULATION OF PLURIPOTENCY FACTORS
- 5:30 Schwartz, Robert J. (University of Houston)
SERUM RESPONSE FACTOR MICROMANAGES HEART DEVELOPMENT
- 6:00 CONTRIBUTED SYMPOSIUM POSTERS

**SPECIAL TOPIC SYMPOSIUM: NUCLEAR RECEPTORS AND CO-REGULATORS:
MECHANISMS AND TRANSLATIONAL POTENTIAL IN CANCER: PART II**

Thursday, 8 April
BRC Building

2:00pm - 8:00pm
Room:TBA

- 2:00 Moore, David
BILE ACIDS AND HIPPOS
- 2:25 Qin, Jun
MAPPING ENDOGENOUS HUMAN NR CO_REGULATOR INTERACTIONS
- 2:50 Edwards, Dean
TITLE FORTHCOMING
- 3:15 Smith, Carolyn
TITLE FORTHCOMING
- 3:40 BREAK
- 4:00 Safe, Stephen
TR# (NR4A1) IS A PRO-ONCOGENIC ORPHAN NUCLEAR RECEPTOR AND A DRUG
TARGET FOR PANCREATIC CANCER CHEMOTHERAPY
- 4:25 Webb, Paul
TITLE FORTHCOMING
- 4:50 Lonard, David
TITLE FORTHCOMING
- 5:15 Niederreither, Karen
ENDOGENOUS RETINOIC ACID REGULATES CARDIAC PROGENITOR
DIFFERENTIATION
- 5:40 Brown, Powell
TITLE FORTHCOMING
- 6:00 CONTRIBUTED SYMPOSIUM POSTERS

FRIDAY MORNING, 9 APRIL

REGISTRATION

Friday, 9 April
BRC Building

7:30am -Noon
Prefunction Space

SPECIAL TOPIC SYMPOSIUM: DEVELOPING YOUR TEACHING AND EDUCATIONAL LEADERSHIP SKILLS: PART I

Friday, 9 April
BRC Building

8:30 am - Noon
Room:TBA

- 8:30 Slaughter, Gayle (Baylor College of Medicine)
FROM MENTEE TO MENTORING: PREPARING WOMEN FOR SUCCESS IN SCIENCE CAREERS
- 9:30 BREAK
- 9:45 O'Neill, Paula (University of Texas - Dental Branch)
FINDING AND BEING A GOOD MENTOR
- 10:45 BREAK
- 11:00 Searle, Nancy (Baylor College of Medicine)
TRICKS FOR SUCCESSFUL TEACHING IN SMALL GROUPS

SPECIAL TOPIC SYMPOSIUM: GENOME INSTABILITY AND TUMORIGENESIS: PART I

Friday, 9 April
BRC Building

9:00 am - 12:15pm
Room:TBA

- 9:00 Zhang, Pumin (Baylor College of Medicine)
TITLE FORTHCOMING
- 9:30 Yu, Hongtao (University of Texas Southwestern Medical Center)
A HELICASE COMPLEX RESOLVES ANAPHASE THREADS AND MAINTAINS CENTROMERE INTEGRITY
- 10:00 Rosenberg, Susan (Baylor College of Medicine)
TITLE FORTHCOMING
- 10:30 BREAK
- 10:45 Donehower, Laurence (Baylor College of Medicine)
HOMEOSTATIC REGULATION OF THE DNA DAMAGE RESPONSE BY THE ONCOGENIC PHOSPHATASE WIP1
- 11:15 Lin, Shiaw-Yih (University of Texas MD Anderson Cancer Center)
THE ROLE OF BRIT1/MCPH1 IN CHROMATIN REMODELING, DNA DAMAGE RESPONSE, AND CANCER

SPECIAL TOPIC SYMPOSIUM: SYNTHETIC BIOLOGY AND MOLECULAR NETWORKS

Friday, 9 April
BRC Building

Schedule: TBA
Room:TBA

FRIDAY AFTERNOON, 9 APRIL

REGISTRATION

Friday, 9 April
BRC Building

Noon -5:00 pm
Prefunction Space

SPECIAL TOPIC SYMPOSIUM: REGULATION OF EMBRYONIC AND TISSUE SPECIFIC STEM CELLS

Friday, 9 April
BRC Building

12:00 pm - 8:00pm
Room:TBA

12:00 WELCOME AND INTRODUCTION

12:30 Zwaka, Thomas (Baylor College of Medicine)
CASPASES AND RONIN IN EMBRYONIC STEM CELLS

12:55 Barton, Michelle (MDACC)
TITLE FORTHCOMING

1:20 Liang, Jiancong (Baylor College of Medicine)
TITLE FORTHCOMING

1:45 BREAK

2:00 Cooney, Austin (Baylor College of Medicine)
A NEW SIGNALING AXIS SUPPORTING PLURIPOTENT GENE EXPRESSION

2:25 Schwartz, Robert (University of Houston)
TITLE FORTHCOMING

2:50 Gunaratne, Preethi (University of Houston)
TITLE FORTHCOMING

3:15 Behringer, Richard (Baylor College of Medicine)
TITLE FORTHCOMING

3:40 BREAK

4:10 McCarrey, John (University of Texas - San Antonio)
ENHANCED MAINTENANCE OF GENETIC INTEGRITY IS A FUNDAMENTAL
PROPERTY OF PLURIPOTENT STEM CELLS

4:35 Nguyen, Hoang (Baylor College of Medicine)
REGULATION OF EPIDERMAL HOMEOSTASIS

5:00 Dineen, Benjamin (Baylor College of Medicine)
TITLE FORTHCOMING

5:25 Challen, Grant (Baylor College of Medicine)
TITLE FORTHCOMING

6:00 SYMPOSIUM POSTER SESSION

SPECIAL TOPIC SYMPOSIUM: DEVELOPING YOUR TEACHING AND EDUCATIONAL LEADERSHIP SKILLS: PART II

Friday, 9 April
BRC Building

1:00 pm - 5:00pm
Room:TBA

1:00 Nelson, Elizabeth (Baylor College of Medicine)
NEGOTIATING SKILLS FOR ACADEMIC SUCCESS - A WORKSHOP

3:00 BREAK

3:15 McNeil, Sara (University of Houston)
DEVELOPING A DYNAMITE PRESENTATION - LARGE GROUP TEACHING AT ITS BEST

SPECIAL TOPIC SYMPOSIUM: GENOME INSTABILITY AND TUMORIGENESIS: PART II

Friday, 9 April
BRC Building

1:15 pm - 5:25pm
Room:TBA

1:15 Zou, Hui (University of Texas Southwestern Medical Center)
TITLE FORTHCOMING

1:45 Ira, Gregory (Baylor College of Medicine)
MECHANISM AND REGULATION OF DOUBLE STRAND BREAK RESECTION

2:15 Nicholoff, Jac (Colorado State University)
METNASE PROMOTES RESTART OF STALLED AND COLLAPSED DNA REPLICATION FORKS AND PROMOTES CHROMOSOME DECATENATION

2:45 Li, Yi (Baylor College of Medicine)
DEFINING THE ATM-MEDIATED BARRIER TO TUMORIGENESIS IN SOMATIC MAMMARY CELLS FOLLOWING ERBB2 ACTIVATION

3:15 BREAK

3:30 Wang, Bin (University of Texas MD Anderson Cancer Center)
BRCA1 A COMPLEX AND DNA DAMAGE INDUCED UBIQUITIN SIGNALING

4:00 Pati, Debananda (Baylor College of Medicine)
TARGETING ANEUPLOIDY FOR CANCER THERAPY: THE SEPARASE ROUTE

4:30 Li, Kaiyi (Baylor College of Medicine)
BRIT1/MCPH1 IS ESSENTIAL FOR MITOTIC AND MEIOTIC RECOMBINATION DNA REPAIR AND MAINTAINING GENOMIC STABILITY IN MICE

5:00 Jin, Jianping (University of Texas Health Science Center, Houston)
CONTROL OF DNA REREPLICATION THROUGH THE REGULATION OF P21

SATURDAY MORNING, 10 APRIL

REGISTRATION

Saturday, 10 April
BRC Building

8:00am - Noon
Prefunction Space

CONTRIBUTED PAPERS: SESSION I

Saturday, 10 April
BRC Building

9:00 am - 12:30 am
Room: TBA

9:00 Lauter, Judith (Stephen F. Austin State University)
OBJECTIVE PHYSIOLOGICAL MEASURES OF RESPONSES TO VIDEO-GAME SOUND
EFFECTS: AUDITORY BRAINSTEM RESPONSES, EYE MOVEMENTS, SPEECH
PRODUCTION

9:25 Wilmink, Gerald (Air Force Research Laboratory)
IDENTIFICATION AND CHARACTERIZATION OF MICRORNAS ASSOCIATED WITH
HYPERTHERMIA-INDUCED CELLULAR STRESS RESPONSE

9:50 Lanier, Megan (Southeastern Louisiana University)
SYNTHESIS OF SINGLE GEOMETRIC ISOMERS OF OXIME ETHERS OF
UNSYMMETRICAL BENZOPHENONES BY PALLADIUM-CATALYZED CROSS
COUPLING REACTIONS

10:15 DeBoer, Gary (LeTourneau University)
POGIL: PRELIMINARY RESULTS IN THE GENERAL CHEMISTRY CLASSROOM

10:40 BREAK

10:55 White, Judith (University of New Mexico)
TEACHING COMMUNICATORS SCIENCE: BOON TO PUBLIC SCIENCE LITERACY
OR FRUITLESS ENDEAVOR?

11:15 Stephanopoulos, Athena (Wichita State University)
SCOURGE OF THE OSAGE FROM THE HAND THAT HELD THE QUILL: THE
DARWINIAN SURVIVAL AND SUCCESS OF THE OSAGE NATION WHILE PLAGUED
BY INDIAN REMOVAL

11:40 Chi, Eric (Rice University)
ROBUST STATISTICAL MODELING IN HIGH DIMENSIONS

12:05 Eskew, Russell (University of Texas - Austin)
GRAVITY AND TRIG

CONTRIBUTED PAPERS: SESSION II

Saturday, 10 April
BRC Building

9:00 am - 12:10pm
Room: TBA

- 9:00 Apt, Tyner (USAF Academy)
EXERCISE AS A COUNTERMEASURE TO MITIGATE TOTAL HEMOGLOBIN LOSS DURING THREE WEEKS AT SEA LEVEL AMONG MODERATE ALTITUDE RESIDENTS
- 9:25 Steinhaus, Mara (Arizona State University)
A TWO-DIMENSIONAL SPATIAL MODEL FOR THE SPREAD OF RABIES THROUGH THREE RESERVOIR POPULATIONS IN ARIZONA
- 9:50 McWilliams, Edward (Texas A & M University)
THE CULTIVATED FLORA, CLIMATE CHANGE AND INVASIVE PLANTS
- 10:15 BREAK
- 10:30 Heuberger, Shannon (University of Arizona)
GENE FLOW FROM GENETICALLY ENGINEERED PLANTS: THE CONTROVERSY AND A CASE STUDY
- 10:55 Van Driessche, Jeremy (USAF Academy)
COYOTE ABUNDANCE AND DISTRIBUTION ON THE US AIR FORCE ACADEMY (1990-2009)
- 11:20 Powell, Thomas (USAF Academy)
EFFECTS OF GINGER ON MOTION SICKNESS IN USAF ACADEMY SOARING CADETS
- 11:45 Franklin, Dustin (Arizona State University)
HOW LARGE SHOULD A FORECAST ENSEMBLE BE FOR A COMPLEX ATMOSPHERIC FLOW?

GENERAL POSTER SESSION

Saturday, 10 April
BRC Building

9:30 pm - Noon
Room:TBA

- (#1) Nordine, Jeffrey (Trinity University)
RETHINKING ENERGY INSTRUCTION IN HIGH SCHOOL PHYSICS
- (#2) Lu, Benjamin (Rice University)
CONTROLLING THE RELEASE OF BONE MORPHOGENETIC PROTEIN-2 USING GELATIN MICROPARTICLES AND MULTI-DOMAIN PEPTIDES IN POROUS POLY(PROPYLENE FUMARATE) SCAFFOLDS FOR BONE TISSUE ENGINEERING APPLICATIONS
- (#3) Mao, Qilong (Baylor College of Medicine)
STRUCTURAL ANALYSIS OF HUMAN SORORIN AND SEPARASE

- (#4) Gibbon, Bryan (Baylor University)
SUPPRESSION OF OPAQUE2 PHENOTYPES BY ALTERED STARCH GRANULE STRUCTURE
- (#5) Jayaweera, Thilanka (Texas State University)
REGULATION OF THE EXPRESSION OF PIC115 GENE IN ARABIDOPSIS
- ((#6) Karunarathna, Nirmala (Texas State University - San Marcos)
THE GAIN-OF-FUNCTION MUTATION IAA28-2 IN ARABIDOPSIS CAUSES SEVERE DEFECTS IN GROWTH AND DEVELOPMENT.
- (#7) Alexander, Blythe (University of Kansas)
NO VIEWPOINT EXTRAPOLATION IN HOMING HOUSE MICE (MUS MUSCULUS)
- (#8) Yang, You-Hao (Texas A & M University)
INFLUENCE OF DEPOSITION TIME ON GROWTH AND BARRIER BEHAVIOR OF CLAY-BASED THIN FILM ASSEMBLIES
- (#9) Mukherjee, Malini (Baylor College of Medicine)
HAPLO-INSUFFICIENT LOSS OF SEPARASE COOPERATES WITH THE LOSS OF P53 IN THE INITIATION AND PROGRESSION OF LYMPHOMA IN MICE
- (#10) Norwood, David (Southeastern Louisiana University)
STUDENT ENTREPRENEURS AS ACTIVE LEADERS
- (#11) McCullum, Elizabeth (Baylor College of Medicine)
DEVELOPING NOVEL PEPTIDE INHIBITORS TO CHROMOSOMAL COHESION USING MRNA DISPLAY FOR "NANO-DRUG" DELIVERY IN BREAST CANCER THERAPY
- (#12) Panigrahi, Anil (Baylor College of Medicine)
EXPLORING THE COHESIN PROTEIN INTERACTOME
- (#13) Moon, Sung-Hwan (Baylor College of Medicine)
THE ONCOGENIC ROLE OF WIP1 PHOSPHATASE IN DNA DAMAGE RESPONSE
- (#14) Shee, Chandan (Baylor College of Medicine)
DOUBLE-STRAND-BREAK-ASSOCIATED STRESS-INDUCED MUTAGENESIS IN CHROMOSOMES OF FEMALE E. COLI
- (#15) Akilla, Neeraja (Baylor University)
NOVEL GENE THERAPY FOR POMPE DISEASE

SATURDAY AFTERNOON, 10 APRIL

JOHN WESLEY POWELL MEMORIAL LECTURE

DARK ENERGY AND THE FUTURE OF SCIENCE

Presented by Stephon Alexander (Haverford College)

Saturday, 10 April
BRC Building

2:00 pm - 3:00 pm
Room: Auditorium

ADDITIONAL PLANNED SYMPOSIA WITH AGENDA TBA:
NANOTECHNOLOGY IN BIOLOGY AND MEDICINE
PHYSICAL BIOLOGY
SYSTEMS AND NETWORK BIOLOGY

SATURDAY EVENING, 10 APRIL

SWARM AWARDS BANQUET (tickets required)

Saturday, 10 April

7:30 pm-9:30 pm
Location:TBA