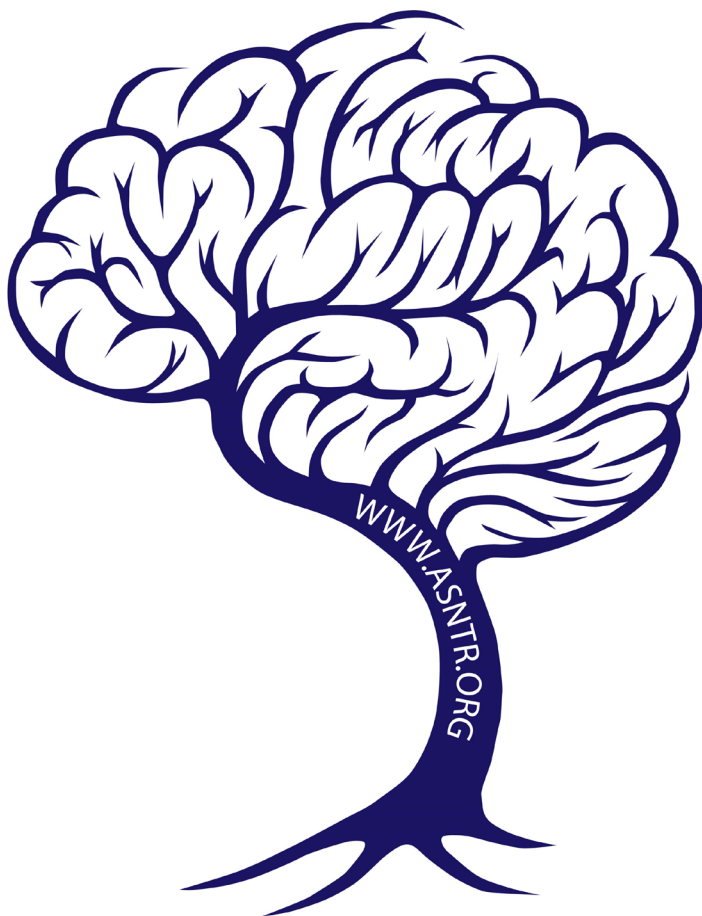


ASNTR

2026

*Innovative Approaches to Neural Repair:
Bridging Science and Medicine*



33rd Annual Conference

American Society for
Neural Therapy and
Repair

Sheraton Sand Key Resort
Clearwater Beach, Florida

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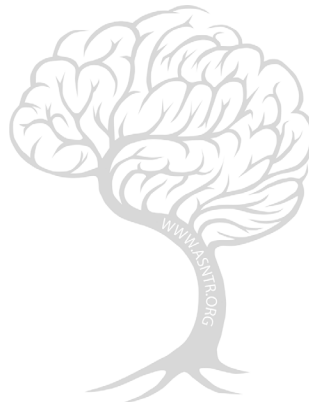
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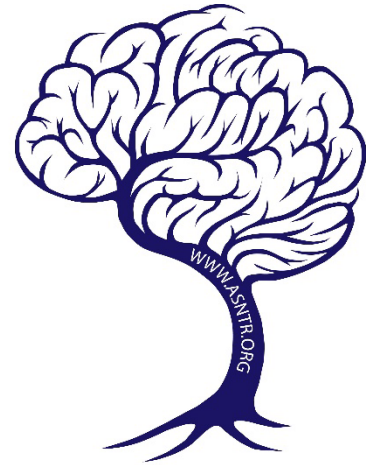


2026 Conference Survey



Dear Friends and Colleagues,

On behalf of the American Society for Neural Therapy and Repair (ASNTR), it is my pleasure to welcome you to ASNTR 2026. Now in its 33rd year, this meeting has a rich history of defining and advancing the field of restorative neuroscience (*I invite each of you to read the 2023 article by Drs. Sanberg, Bjugstad, and Donna Morrison published in Neuroscience and Biobehavioral Reviews*). The goal of this meeting is captured by the ambitious theme, “Innovative Approaches to Neural Repair: Bridging Science and Medicine”. We hope to leverage rapid advances in disease modeling, imaging technology, multi-omics, and data science to catalyze translation of exciting preclinical findings into effective clinical interventions.



At the end of my two years as President, I reflect back to my first meeting here in 2014. The meeting was great, but at the time I couldn't predict how important ASNTR would be for my career, for me personally, and even for my family. The connections I made over the years were critical for my research and career advancement. I have ridden the roller coaster that is a career in biomedical research for 35 years. Last year I wrote in this space that “this has been a challenging year for science.” Little did we know at the time! To say that we are emerging from the worst 15 months for federally funded scientific research in the United States is not an exaggeration. But we *are* emerging. The FY2026 budget passed by Congress is an unambiguous statement that biomedical research remains a national priority. I repeat my encouragement from 2025 to our trainees: Stay the course! There will always be a need for our skills and expertise.

I would like to thank our sponsors. Your generous support makes the exchange of ideas possible and enhances the scientific networks of our members and our trainees. By supporting ASNTR, you are investing in the next generation of scientists whose discoveries will advance the field beyond what we can imagine now. I would also like to thank our Program Committee for thoughtful input to the program. Thank you to our President-Elect, Dr. Julien Rossignol, whose kindness and sense of humor have helped me navigate these last two years. Finally, thank you to Donna and Inger for your efforts to keep this crazy train on track one more year!

Finally, I want to thank you for your presence and what you will share at this meeting. You will make connections, enhance your scientific networks, and make new friends during this time we have together. I look forward to meeting each of you.

Sincerely,

John A. Stanford
President, ASNTR (2024-2026)

American Society for Neural Therapy and Repair • President: John A. Stanford, PhD

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Conference Agenda

Thursday, April 23, 2026

Platform Presentations – Beach/Gulf

Poster Session – Palm/Bay

01:00 – 06:00 pm	Conference Registration – Lobby II
12:30 – 02:30 pm	Session 1: Workshop – Beach/Gulf
03:00 – 04:00 pm	Session 2: Mentor – Mentee Networking – Beach/Gulf
05:30 – 05:45 pm	ASNTR Welcome and Travel Award Recognition
05:45 – 06:30 pm	Session 3: Keynote Address
07:00 – 10:00 pm	Session 4: Poster Session & Reception

33rd Annual Conference

American Society for Neural Therapy and Repair

Session 1: Good Research/Good Laboratory Practices: From Preclinical Studies to Clinical Trials

Workshop

(open to all attendees)

12:30 pm – 2:30 pm

Moderator: George Quintero, PhD,

University of Kentucky

UK Good Research Practice Resource Center

UK Neurorestoration Center

Session 2: 3 Minute Mentor – Mentee Networking

3:00 pm – 4:00 pm

Moderators: Theresa Thomas & Bhairavi Srinageshwar



ASNTR Welcome & Travel Award Recognition

5:30 pm – 5:45 pm

John Stanford, ASNTR President

Session 3: Keynote Address

5:45 pm – 6:30 pm

Introduction: John Stanford

- 3-1 | 05:45 – 06:30 pm | A Randomized, Sham-Controlled Trial of Hyperbaric Oxygen Therapy for Chronic Traumatic Brain Injury in Veterans and Service Members
Harry van Loveren, MD – University of South Florida



Harry van Loveren, MD, University of South Florida

Dr. van Loveren is the Genshaft and Greenbaum Endowed Chair in Neurosurgery and serves as the professor and chair of the Department of Neurosurgery, Brain and Spine College of Medicine, University of South Florida. He is the Director of the USF Health Neuroscience Institute, and Director of the Tampa General Hospital Neuroscience Institute. He is the vice-Chair of the USF Physicians Group Executive Committee, serves on the Board of Directors of the Academic Medical Group (USFTGP, an affiliation of the USF and TGH Physicians) and on the Advisory Board of the Tampa General Rehabilitation Hospital.

Currently Dr. van Loveren is the Director of the USF Skull Base Surgery Team and regularly performs complex brain tumor surgery. He also conducts clinical research with a current \$28 million grant for the study of Hyperbaric Oxygen Therapy for TBI and PTSD in Veterans.

He is a Summa Cum Laude graduate of the University of Cincinnati with a B.S. in Chemistry. He completed training in Neurosurgery with the combined programs of the Mayfield Neurological Institute and the University of Cincinnati Department of Neurosurgery with an endowed fellowship in the neurophysiology laboratory of Professors Jean Siegfried M.D and Helmut Haas PhD at the University of Zurich, Switzerland. He served as vice-Chair of the U.C Neurosurgery department and currently serves as the Genshaft and Greenbaum Endowed Chair and Chair of Neurosurgery at the University of South Florida. He is a founding member of the Mayfield Neurosurgical Society and the North American Skull Base Surgery Society and Past-President of the Southern Neurosurgical Society. He also served as Interim-Dean of USF Health, Morsani College of Medicine.

Session 4: Poster Session

7:00 pm – 9:00 pm

1. Impaired Mitophagy's Relationship with Alzheimer's Disease Pathogenesis
Maggie Benson – University of Kansas Medical School
2. High-Throughput Identification of Mitochondrial-Targeted Therapeutics for Alzheimer's Disease Using Human iPSC Neurons and Astrocytes
Daniel Chen – University of Kansas Medical School – Travel Award Winner
3. Development of Citrate-Based Bioresorbable Flow Diverters for Intracranial Aneurysm Therapy
Hanna Chadwin – University of Florida
4. Investigating Golgi Apparatus Morphology in Dopaminergic Neurons of the Rat Midbrain
Brandon Harvey – National Institute on Drug Abuse
5. Systemic Inhibition of Hyaluronan Synthesis as a Strategy for Neural Repair after spinal cord injury
Lucia Machova Urdzikova – Institute of Experimental Medicine CAS
6. Development of cell-responsive Granular Hydrogels for brain repair after Stroke
Tumpa Mahanty – University of Nevada, Las Vegas
7. Cross-Cohort Blood Gene Signature Linked to 90-Day Stroke Recovery
Saba Majidi – University of Nevada, Las Vegas
8. Transcriptional Evidence of Plasticity and Active Remodeling in Autologous Peripheral Nerve Tissue After Transplantation into the Substantia Nigra of PD Patients
Ares Marlonsson – University of Kentucky Medical Center

9. Targeting CCL20–CCR6 Limits Microglial Synaptic Pruning in rTBI
Subra Mohapatra – University of South Florida
10. Role of Hemispheric Dominance in Stem Cell–Mediated Restoration of Motor Function in the 6-OHDA Model of Parkinson’s Disease
Dipesh Pokharel – University of toledo
11. Mechanisms Underlying Huntington’s Disease Onset Delay by the DNA Ligase 1 K845N Variant
Bhairavi Srinageshwar – Massachusetts General Hospital and Harvard Medical School
12. The Cryo-EM-Delineated Mechanism Underlying Mimicry of CXCR4 Agonism Enables Widespread Stem Cell Neuroprotection in a mouse model of ALS
Kartik Sundaram – Sanford Burnham Prebys Medical Discovery Institute
13. Early Short-Term $\alpha 2\delta$ -1 Modulation is Associated with Thalamic Synaptic Remodeling and Late-Onset Behavioral Outcomes after Traumatic Brain Injury
Theresa Currier Thomas – University of South Florida
14. Preliminary Evaluation of AneuScreen; A Blood-Based Assay to Predict Intracranial Aneurysm Rupture Risk
Kerry Poppenberg – University of Buffalo
15. Modulating Microglial and Monocyte/Macrophage Responses in Chronic Traumatic Brain Injury: Transcriptomic Insights into SCF+G-CSF-Induced Brain Repair
Li-Ru Zhao – SUNY Upstate Medical University
16. Stem Cell Factor and Granulocyte Colony-Stimulating Factor Treatment Increases Oligodendrocyte Progenitors and Enhances Remyelination in the Chronic Phase of Severe Traumatic Brain Injury
Li-Ru Zhao – SUNY Upstate Medical University



Conference Agenda

Friday, April 24, 2026

Platform Presentations – Beach/Gulf

07:00 – 08:00 am	Continental Breakfast – Lobby II
07:30 – 12:00 pm	Conference Registration – Lobby II
08:15 – 09:15 am	Session 5: Metabolic Factors in Neural Injury and Disease
09:15 – 10:15 am	Session 6: Multi-Approach Therapeutics: Successes and Challenges
10:15 – 10:30 am	Morning Break – Lobby II
10:30 – 11:30 am	Session 7: New Approach Methodologies
11:30 – 01:30 pm	Free Time
01:45 – 02:45 pm	Session 8: Workshop – Medical Anthropology, Artificial Intelligence, and Neural Therapy and Repair
02:45 – 03:45 pm	Session 9: “Meet the Patient” Grand Rounds
03:45 – 04:00 pm	Afternoon Break – Lobby II
04:00 – 04:45 pm	Session 10: Roy A.E. Bakay Memorial Lecture

Session 5: Metabolic Factors in Neural Injury and Disease

8:15 am – 9:15 am

Session Chair: John Stanford

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|------------|------------------|---|
| 5-1 | 08:15 – 08:35 am | Metabolic Profiling of iPSC Based Models of Alzheimer's Disease
<i>Heather Wilkins – University of Kansas Medical Center</i> |
| 5-2 | 08:35 – 08:55 am | Mitochondria and Mitochondrial Cascades in Alzheimer's Disease
<i>Russell Swerdlow – University of Kansas Medical Center</i> |
| 5-3 | 08:55 – 09:15 am | Testing the Link Between Fitness and Disease in ALS
<i>John Stanford – University of Kansas Medical Center</i> |

Session 6: Multi-Approach Therapeutics: Successes and Challenges

9:15 am – 10:15 am

Session Chair: Mike Modo

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|-----|------------------|---|
| 6-1 | 9:15 – 09:35 am | Modulation of Neural Plasticity Improves Cognitive Performance in Aging and Neurodegeneration
<i>Pavla Jendelova – Institute of Experimental Medicine, Czech Academy of Sciences</i> |
| 6-2 | 09:35 – 09:55 am | Hematopoietic Growth Factors Reprogram Microglia and Macrophages into a Reparative State in Chronic Traumatic Brain Injury
<i>Li-Ru Zhao – SUNY Upstate Medical University</i> |
| 6-3 | 09:55 – 10:15 am | Multi-color 19F MR Imaging of Immune Cells Infiltrating ECM Hydrogel Implanted into a Stroke Cavity
<i>Michael Modo – University of Pittsburgh</i> |

Session 7: New Approach Methodologies

Panel Discussion

10:30 am – 11:30 am

Moderator: Corinna Burger

Heather Wilkins – University of Kansas Medical Center

Greg Gerhardt – University of Kentucky Medical Center

Gary Dunbar – Central Michigan University

Daniel Lende – University of South Florida

**Session 8: Medical Anthropology, Artificial Intelligence,
Neural Therapy and Repair**

An Interactive AI Workshop Session

1:45 pm – 2:45 pm

Daniel Lende – University of South Florida

Francis Hahn – University of South Florida

Session 9: “Meet the Patient” Grand Rounds

Session Sponsor – KU Medical Center, University of Kansas

2:45 pm – 3:45 pm

Ann Hanley, Lexington, KY and Greg Gerhardt, University of Kentucky

Ann Hanley is the Program Director for the Neurorestoration Center at the University of Kentucky. She was diagnosed with Parkinson’s disease at the age of 49. She has been a Parkinson’s Advocate in Research at the Parkinson’s Disease Foundation (PDF) since 2012. She was invited to join the Michael J. Fox Foundation’s policy forum in Washington, D.C. in February of 2017.

In November 2016 she created the Ann Hanley Parkinson’s Research Fund at the University of Kentucky, which supports neurorestoration projects at UK. She currently works with the Neurorestoration Center and she is one of the study subjects in the Phase I clinical trials at UK that focus on peripheral nerve cell therapy combined with Deep Brain Stimulation (DBS+).



Session 10: Roy A.E. Bakay Memorial Presentation

4:00 pm – 4:45 pm

Introduction: Jeffrey Kordower

10-1 | 04:00 – 04:45 pm | Autologous Peripheral Nerve Grafts for Parkinson’s disease
Craig G. van Horne, MD, PhD – University of Kentucky



Craig G. van Horne, MD, PhD, University of Kentucky

Dr. Craig van Horne is a nationally and internationally recognized expert in neurosurgery who specializes in the diagnosis and treatment of movement disorders. His research focuses on innovative surgical treatment strategies for Parkinson’s disease.

Since his days as an undergraduate, van Horne has been interested in neuro-regeneration and the treatment of Parkinson’s disease. While working on his bachelor’s degree in biology at Williams College in Massachusetts, he completed an honors thesis in neurobiology, transplanting peripheral nerve tissue to the central nervous system in goldfish. During his MD-PhD studies at the University of Colorado, van Horne expanded his work on neuro-transplantation for his doctoral thesis, focusing on an animal model of Parkinson’s disease.

Van Horne completed his residency in neurosurgery at Brigham and Women’s Hospital in Boston, where he later served on the neurosurgery faculty. After 20 years in Boston, he moved to Kentucky to join UK HealthCare, where he practices as a neurosurgeon and serves as co-director of the Brain Restoration Center (BRC), part of the Kentucky Neuroscience Institute. As a leader of the BRC, van Horne collaborates with a multidisciplinary team that is helping patients find relief from movement disorder symptoms while also pursuing innovative treatments in the fight against Parkinson’s.

Van Horne is the Virginia T. Barrow Endowed Chair at UK and a professor of neurosurgery in the UK College of Medicine. He is currently leading a first-of-its-kind clinical study on “DBS+,” a novel approach to Parkinson’s treatment that involves transplanting peripheral nerve tissue into the brain during deep brain stimulation (DBS) surgery.



Conference Agenda

Saturday, April 25, 2026

Platform Presentations – Beach/Gulf

07:15 – 08:15 am	Continental Breakfast – Lobby II
08:30 – 09:30 am	Session 11: Barriers, Signals, and Systems: New Human Models of Neurodegeneration
09:30 – 10:30 am	Session 12: Brain Injury: Interventions and Long-Term Effects
10:30 – 10:45 am	Morning Break – Lobby II
10:45 – 11:45 am	Session 13: Stroke – Linking Human Data and Experimental Models in Cerebrovascular Disease
11:45 – 02:30 pm	Free Time
02:30 – 03:30 pm	Session 14: Emerging Methods for CNS Delivery and Delivery
03:30 – 04:30 pm	Session 15: Morphology and Modeling for Neural Therapy and Repair
04:30 – 04:45 pm	Afternoon Break – Lobby II
04:45 – 05:30 pm	Session 16: Presidential Lecture
05:30 – 06:00 pm	ASNTR Business Meeting
07:00 – 10:00 pm	ASNTR Dinner & Dancing

Session 11: Barriers, Signals, and Systems: New Human Models of Neurodegeneration

8:30 am – 9:30 am

Session Chair: Julien Rossignol

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|-------------|------------------|--|
| 11-1 | 08:30 – 08:50 am | Effect of APOE4 iPSC Derived Astrocytes on Blood Brain Barrier Integrity and Amyloid Clearance
<i>Dallas Nash – University of Central Florida – Travel Award Winner</i> |
| 11-2 | 08:50 – 09:10 am | A Bioluminescent Kinase Sensor (Blinks) Platform for Monitoring and Controlling Neuroinflammation
<i>Osheen Dubey – Central Michigan University – Travel Award Winner</i> |
| 11-3 | 09:10 – 09:30 am | Large-Scale Deep Proteomic Analysis in Alzheimer’s Disease Brain Regions Across Race and Ethnicity
<i>Fatemeh Seifar – Mayo Clinic</i> |

Session 12: Brain Injury: Interventions and Long-Term Effects

9:30 am – 10:30 am

Session Chair: Theresa Currier-Thomas

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| 12-1 | 09:30 – 09:50 am | The Brain Does Not Heal Alone: Neuroplasticity and Social Context Operationalizations
<i>Rebecca Campbell-Montalvo – University of South Florida</i> |
| 12-2 | 09:50 – 10:10 am | Targeting Glioblastoma via Co-delivery of Kif23 and Kif18a siRNAs Using G4 70/30 PAMAM Dendrimers
<i>Nadia Allahyarzadeh Khiabani – Central Michigan University</i> |
| 12-3 | 10:10 – 10:30 am | Aging with Injury: Time-Dependent Neurodegenerative and Glial Changes After Diffuse Axonal Injury in Rats
<i>Theresa Currier Thomas – University of South Florida</i> |

**Session 13: Stroke – Linking Human Data and Experimental
Models in Cerebrovascular Disease**

10:45 am – 11:45 am

Session Chair: Koji Hosaka

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| 13-1 | 10:45 – 11:05 am | Gaining Insight into Stroke via Intracranial and Systemic Blood from Thrombectomy Patients
<i>Keith Pennypacker – University of Kentucky</i> |
| 13-2 | 11:05 – 11:25 am | Evaluation of Large Familial Intracranial Aneurysm Database
<i>Vincent Tutino – University of Buffalo</i> |
| 13-3 | 11:25 – 11:45 am | Adropin Reduces Early Brain Injury and Delayed Cerebral Ischemia After Severe Subarachnoid Hemorrhage in a Mouse Model
<i>Zahra Hasanpour Segherlou – University of Florida</i> |

Session 14: Emerging Methods for CNS Diagnostics and Delivery

2:30 pm – 3:30 pm

Session Chair: Bhairavi Srinageshwar

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| 14-1 | 02:30 – 02:50 pm | The Use of DCS as a Predictive Model for the Development of DCI Following aSAH – Preliminary Experience
<i>Amy Letavay – University of South Florida</i> |
| 14-2 | 02:50 – 03:10 pm | Engineered pro-angiogenic hydrogel for neural stem cell transplantation after stroke
<i>Ivy Pham – University of Nevada, Las Vegas</i> |
| 14-3 | 03:10 – 03:30 pm | Engineering of Novel AAV Capsids for Targeted CNS Delivery
<i>Fredric Manfredsson – Barrow Neurological Institute</i> |

Session 15: Morphology and Modeling for Neural Therapy and Repair

3:30 pm – 4:30 pm

Session Chair: Marina Emborg

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|------|------------------|--|
| 15-1 | 03:30 – 03:50 pm | Single Nucleus RNA Sequencing Identifies Early Transcriptional Changes to Midbrain and Striatum Neuronal Populations Following the Selective Loss of Tyrosine Hydroxylase in Adult rat Midbrain Dopaminergic Neurons
<i>Lacey Greer – National Institutes of Health</i> |
| 15-2 | 03:50 – 04:10 pm | Spinning Bioreactor Growth Method Allows for Faster Midbrain Organoid Maturation
<i>Madeline Cox – Gateway Institute for Brain Research</i> |
| 15-3 | 04:10 – 04:30 pm | uPAR Expression and Disease Associated Microglial Transcripts Are Increased in Mice with Alzheimer’s Disease-like Pathology
<i>Jeannette Metzger – University of Wisconsin - Madison</i> |

Session 16: Presidential Lecture

4:45 pm – 5:30 pm

Introduction: John Stanford

16-1 | 04:45 – 05:30 pm | Tsunamis in the Brain: Surprising Mechanisms Underlying Progression of Acute Brain Injury

William Shuttleworth – University of New Mexico



William Shuttleworth, PhD, University of New Mexico

Bill Shuttleworth received his PhD from the University of Melbourne in Australia and, following postdoctoral training, moved to the University of New Mexico in 1998.

He is currently Chair of the Department of Neurosciences at the UNM School of Medicine and maintains an active research laboratory and clinical collaborations focused on spreading depolarizations (also known as “brain tsunamis”). These waves of brain activation are now recognized as being centrally involved in the progression of brain injury, and current work includes exploring their contribution to a broader range of brain disorders.

His preclinical laboratory studies focus on the fundamental mechanisms of spreading depolarization and strategies to mitigate their deleterious effects in stroke. Collaborative clinical studies involve recording spreading depolarizations in patients and identifying approaches to limit their incidence and improve patient outcomes.

Dr. Shuttleworth also directs the UNM Center for Brain Recovery and Repair, which provides resources for both preclinical and clinical research, with a particular focus on junior faculty development.

ASNTR

Business Meeting

5:30 pm – 6:00 pm

All members and nonmembers are encouraged to attend this meeting and to become actively involved in the future direction of society.



ASNTR BEACHSIDE DINNER

JOIN US FOR DINNER & DANCING

7:00 pm - 10:00 pm

*WRIST BAND REQUIRED FOR ADMISSION





Gulf of Mexico

10 Acres of Beach

Volleyball Nets

Outdoor Function Space

Outdoor Function Space

Children's Playground

Tennis Courts

Outdoor Function Space



Bluewater Provisions

Telephone ATM Info Stand

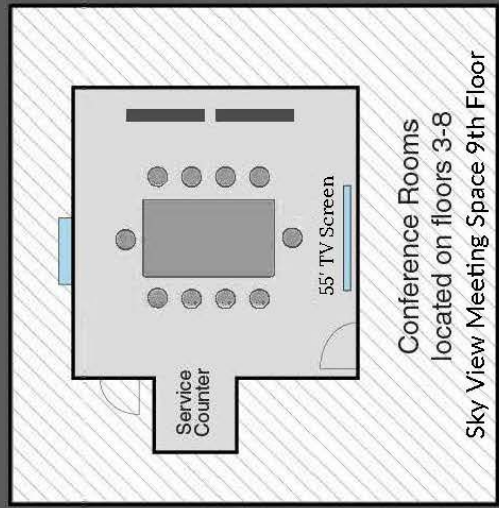
Sales Office

SeaGrapes Apparel

The Mainstay Tavern

Reception Lobby

Intracoastal Waterway



Coastal Patio

Lobby III

Island Room II
Island Room I

Coastal Room

Lobby II

Grand Ball Room
Bay Room
Palm Room
Gulf Room
Beach Room

Rusty's Bistro

Banquet Kitchen Service

Sand Key Park

