ATS Virtual SPATS Program

SPATS
Student Presenting at ATS

ATS Virtual Student Scholars Program
Rules

• A single static PowerPoint slide is permitted (no slide transitions, animations or 'movement' of any description, the slide is to be presented from the beginning of the oration).
• No additional electronic media (e.g. sound and video files) are permitted.
• No additional props (e.g. costumes, musical instruments, laboratory equipment) are permitted.
• Presentations are limited to 3 minutes maximum, and presenters will have points deducted if they exceed the 3 minutes.
• Presentations are to be spoken word (e.g. no poems, raps or songs).
• Presentations are to commence from the stage (e.g. no walking through the audience).
• Presentations are considered to have commenced when a presenter starts her/his presentation through movement or speech.
• The decision of the adjudicating panel is final.
Judging Criteria

Comprehension & Content

• Did the presentation provide an understanding of the background to the research question being addressed and its significance?
• Did the presentation clearly describe the key results of the research including conclusions and outcomes?
• Did the presentation follow a clear and logical sequence?
• Was the thesis topic, key results, and research significance and outcomes communicated in language appropriate to a non-specialist audience?
• Did the speaker avoid scientific jargon, explain terminology, and provide adequate background information to illustrate points?
• Did the presenter spend adequate time on each element of their presentation - or did they elaborate for too long on one aspect or was the presentation rushed?
Judging Criteria

Engagement & Communication

• Did the oration make the audience want to know more?
• Was the presenter careful not to trivialise or overly generalise their research?
• Did the presenter convey enthusiasm for their research?
• Did the presenter capture and maintain the audience's attention?
• Did the speaker have sufficient vocal range, maintain a steady pace, and have a confident stance?
• Did the PowerPoint slide enhance the presentation - was it clear, legible, and concise?
Today, August 4 SPATS Presenters:

7-830PM EST:

1. Daniel Mai
2. Nicole Robertson
3. Sophia Levan
4. Diego Alexei Tovar Giombini
5. Kermit Zhang
6. Niyati Borkar
7. Brett Curtis
8. Nicole Buchely
Interaction Between AP-1 and SWI/SNF Under Disturbed Flow May Promote Vascular Inflammation

Daniel Mai, BA, Jan-Renien Moonen, PhD, Marlene Rabinovitch, MD

Disturbed Flow Conditions (DSS)

Nucleus

↑ AP-1 (activated)

SWI/SNF

BAF57

BAF53

BAF47

BAF450

BAF155

BAF170

SNF2H

SNF2L

BRG1/BRM

B-actin

CRE

AP-1

↑ Chromatin Accessibility

Pro-Inflammatory Genes (EDN1, etc.)

mRNA

Laminar Shear Stress (LSS)

Disturbed Shear Stress (DSS)

ATF2-BRG1

ATF2-BAF170

Proximity Ligation Assay
Knowledge is Power
Poopology 101:
Using baby poop to predict childhood allergies and asthma
Argument For Sleep: The Intensive Care Unit’s Hidden Killer

- Agitation
- Pain
- Delirium
Its all about the *kiss* – Gender and Asthma

**What is Asthma?**

Asthmatic and non-asthmatic cells from male and female

**Bronchial Smooth Muscle layer**

**Human Airway Smooth muscle cells**

*In vitro* administration of Kisspeptin

**Kisspeptins: A New targeted therapy for Asthma**

**Asthma: Gender Statistics**

**Higher Prevalence in Women**

**Gender and Asthma**

Kisspeptin

β-actin

Males
Females

Protein/β-actin

ATS 2020 VIRTUAL
Goldilocks and $O_2$ in the ICU

- "Too High" $O_2$ Saturations
- "Just Right" $O_2$ Saturations
- "Too Little" $O_2$ Saturations

**Goldilocks Approach**
- ICU: Existing standards of care
- Implementation: Interprofessional education
- Buy-in from the entire care team

**Issues**
- Aversion to lower $O_2$ saturations
- Concern for patient safety
- Belief that too much $O_2$ lacks harm
- Desire for supporting evidence

**Outcomes**
- Better
- Hypoxia
- Death
- Lung damage

**Scales**
- $O_2$
- Less
- More

**Free radicals**