GREAT Symposium – Online Abstract Entry Instructions

DEADLINE: February 28th, 2021, 11 pm

Please keep in mind: Your mentor must approve your abstract – please allow time for this review process before the final deadline. An automated email will be sent to your mentor outlining the approval process after your abstract has been submitted. All OUHSC mentors should be in the system, but non-OUHSC mentors must request guest logins on the GREAT Login page (apps.ouhsc.edu/great/). Direct questions to Dr. Amy Tucker in the Graduate College: 405-271-2085, gradcollege@ouhsc.edu.

Procedure

1. Login:
Select appropriate category from the GREAT Login page (apps.ouhsc.edu/Great/). OUHSC students and postdocs use campus username and login. OSSM students should request a Guest account.

2. Complete 'PRESENTER INFORMATION'
- Pick your Program (graduate students) or Department (Postdocs). If it is not on the list, choose "Other" and type it in the box.

3. Complete 'PREFERRED CATEGORY OF PRESENTATION'
- Select one response for each category: (1) competitive or non-competitive; (2) Poster Presentation alone, Oral Presentation alone, Oral Presentation and Flash Talk (FT), Poster Presentation and Flash Talk (FT), FT (Flash Talk) alone.
- Graduate students, Professional students and Postdoctoral Fellows may select competitive oral or poster, non-competitive poster, and/or flash talk.
    - Professional Students: Research must be at least one semester of dedicated work, conducted as part of practicum or other degree program requirement.
- OSSM students must select competitive poster.

4. Complete 'ABSTRACT INFORMATION'
Poster Presentation or Oral Title: 250 characters maximum. Insert your presentation/poster title. Avoid using special characters in your title. To enter flash talk title, scroll down below the Abstract field.

Author Field: 250 words maximum. List all authors as first name and last name; separate names by commas, no academic credentials. Represent affiliations with superscripted numbers.

Author Field Example:
Natalia Davydova[1], Nicole C. Harris[2], and Sally Roufai[1]
[1]Department of Cell Biology, University of Oklahoma Health Sciences Center
[2]Department of Radiological Sciences, University of Oklahoma Health Sciences Center

Funding: 500 characters maximum. List all funding sources separated by commas.

Body of Abstract: 300 words maximum. Structured or unstructured abstract format is acceptable but must contain Introduction, Methods, Results, and Conclusion

Structured Abstract Example

Introduction: A characteristic of irritable bowel syndrome (IBS) is that abdominal pain is exacerbated during periods of anxiety. Our studies have shown that implantation of corticosterone (CORT) onto the amygdala increases both anxiety and visceral sensitivity. CORT acts through two receptor subtypes, glucocorticoid receptors (GR) and mineralocorticoid receptors (MR); therefore, the goal of this study was to determine the specific receptor-mediated mechanisms in the amygdala that regulate anxiety and visceral sensitivity.

Methods: Rats received implants of either CORT or cholesterol (control) on the dorsal margin of the amygdala. A separate group of animals was implanted with CORT combined with either a GR or a MR antagonist. The hippocampus and striatum were also targeted with CORT to determine the amygdala specificity of the micropellets. Anxiety was assessed on the elevated plus maze and quantified as the time spent in open arm exploration. Visceral sensitivity was measured as the number of abdominal muscle contractions in response to colonic distension.

Results: Implantation of CORT on the amygdala significantly increased anxiety ($p<0.01$) and visceral sensitivity ($p<0.05$) compared to cholesterol controls; however, CORT implants outside the amygdala did not affect anxiety or visceral sensitivity. In rats with CORT implants combined with either a GR or MR antagonist, there was a significant ($p<0.05$) inhibition of anxiety and visceral hypersensitivity.

Conclusion: This is the first study to demonstrate a role for GR and MR in visceral pain regulation and suggests that CORT acting at the level of the amygdala may play an important role in IBS symptomatology.

Unstructured Abstract Example

Cellular immune mechanisms detect and destroy cancerous and infected cells via the human leukocyte antigen (HLA) class I molecules that present peptides of intracellular origin on the surface of all nucleated cells. The identification of novel, tumor-specific epitopes is a critical step in the development of immunotherapeutics for breast cancer. In order to directly identify peptide epitopes unique to cancerous cells, secreted human class I HLA molecules (sHLA) were constructed by deletion of the transmembrane and cytoplasmic domain of HLA A*0201. The resulting sHLA-A*0201 was transferred and expressed in breast cancer cell lines MCF-7, MDA- MB-231, and BT-20 as well as in the immortal, non-tumorigenic cell line MCF10A. Stable transfectants were seeded into bioreactors for production of > 25 mg of sHLA-A*0201. Peptides eluted from affinity purified sHLA were analyzed by mass spectroscopy. Comparative analysis of HLA-A*0201 peptides revealed 5 previously uncharacterized epitopes uniquely presented on breast cancer cells. These peptides are derived from intracellular proteins with either well-defined or putative roles in breast cancer development and progression: Cyclin Dependent Kinase 2 (Cdk2), Ornithine Decarboxylase (ODC1), Kinetochore Associated 2 (KNTC2 or HEC1), Macrophage Migration Inhibitory Factor (MIF), and Exosome Component 6 (EXOSC6). Cellular recognition of the MIF, KNTC2, EXOSC6, and Cdk2 peptides by circulating CD8+ cells was demonstrated by tetramer staining or IFN-γ ELISPOT. The identification and characterization of peptides unique to the class I of breast cancer cells provide putative targets for the development of immune diagnostic tools and therapeutics.

5. Flash Talk (FT) Title (If applicable): 250 characters maximum. Insert your Flash Talk title. Avoid using special characters in your title. Remember, the flash talks are for the broader audience so avoid field specific jargon in your title. No abstract is required or allowed.

6. Faculty Sponsor: Select Graduate Faculty mentor name from pull-down. If your mentor is not listed, they can apply for a guest account on the GREAT Login page or they may contact the Graduate College for inclusion (gradcollege@ouhsc.edu).

7. Volunteer: Please consider volunteering to help in the execution of events during GREAT week by clicking “Yes” and you will be contacted on volunteering opportunities the week before GREAT.

8. Talent Release: Photos will be taken during GREAT to showcase our talented participants. Some photos may be used on the GREAT or Graduate College website(s) and/or corresponding social media sites (i.e. Facebook or Instagram), or in future brochures or other promotional materials. Select “Yes” or “No” to indicate your willingness to allow photos of you during GREAT to be used for these purposes. If you agree, an email will be sent later asking you to complete and sign the OU Talent Release form.