

# HOW TO RECORD AN AUDIO NARRATION FOR YOUR EPOSTER

**The Role of Calcium in the Stabilization of the NHE1-CHP3 Complex**

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This poster is adapted for promotional purposes by Dr. Zaun, on research performed in the laboratory of Dr. John Orłowski, Professor  
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**ABSTRACT**

pH (pHi) following acidification is of crucial importance for the function of myocardial contractility. The primary function of the sodium/proton exchanger NHE1 is predominantly at the intercalated disks and sarcolemma where it is thought to play an essential role in membrane conductance and excitation-contraction coupling that control the membrane targeting and delivery of proteins. The calcineurin homologous protein (CHP3) is a predominant calcium-binding protein that is thought to control the functional significance of the interaction between NHE1 and CHP3. A study undertaken to determine the biochemical and cellular significance of the NHE1-CHP3 complex for pH regulation and the significance of calcium-binding in this complex.

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**CHP3, CALCIUM & MYO...**

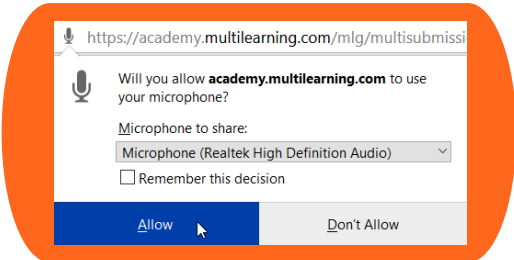
**N-myristoylation and Ca<sup>2+</sup>-binding are essential for the stability of the NHE1/CHP3 complex**


Cells expressing NHE1 alone or co-expressing NHE1 with CHP3, or calcium-binding deficient CHP3 were subject to growth media and proteins were harvested in varying time points. The remaining cell surface NHE1 and CHP3 were analyzed by immunoblotting. The remaining cell surface NHE1 and CHP3 were quantified by densitometry. The initial quantity (t=0) (graph). Cell lysate NHE1 and CHP3 were quantified by densitometry.


• Specifically interacts with the cytosolic tail of NHE1.  
• Novel N-myristoylated regulatory protein containing a putative EF-Hand Ca<sup>2+</sup>-binding motif.  
• Potential role in regulation of NHE1 in cardiac tissues.


0:12 / 0:38


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**2** Locate and click the microphone icon at the bottom of the screen to begin recording 

**3** Speak clearly and concisely into the microphone. 

**4** When you finished your recording, click the stop icon at the bottom of the screen. 

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