

AT HOFSTRA/NORTHWELL.

# Pre-clinical Medical Students' Perceptions of the Utility of High-Fidelity Simulation to Learn the Mechanisms and Presentations of Hypersensitivity Reactions

Cavuoto Petrizzo M,<sup>1</sup> Barilla — LaBarca ML, <sup>2</sup>, Jongco A, <sup>1,2</sup> Cassara M, <sup>1,3</sup> Anglim J, <sup>3</sup> Stern JNH<sup>1</sup>

1. Donald and Barbara Zucker School of Medicine at Hofstra/Northwell 2. Northwell Health Division of Allergy and Immunology 3. Northwell Health Patient Safety Institute

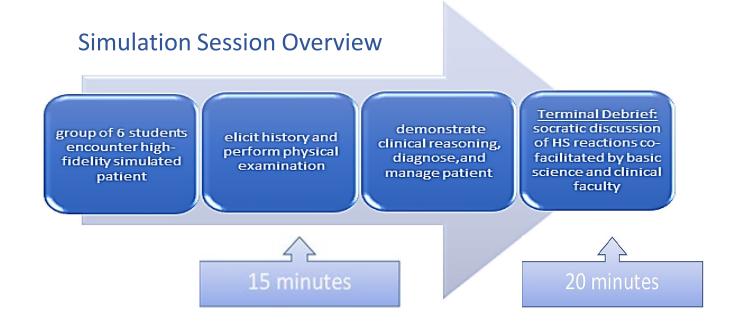
## **Background**

- Clinical recognition and mechanistic understanding of hypersensitivity reactions (HS) is challenging for clinicians, often resulting in underdiagnosis and undertreatment.
- High fidelity simulation-based learning is a novel curricular approach to integrate basic science immunology and clinical allergy/immunology.
- This innovative method can provide relevance, relate theory with practice, and consolidate knowledge for pre-clinical medical students.

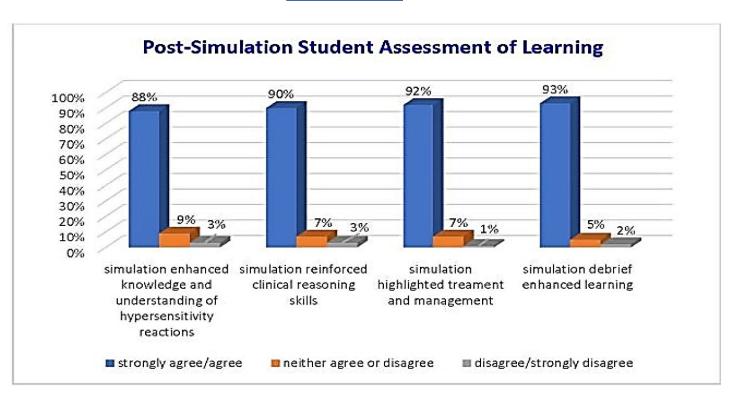
### **Methods**

- 2nd year medical students (N=102) participated in a highfidelity simulation and debrief
- Simulation scenario referenced acute anaphylaxis (type I HS), recent antibiotic exposure (type I vs. type III HS), family history of lupus (type III HS), and contact dermatitis (type IV HS).





### **Results**



### **Conclusions**

- Utilization of simulation in an immunology curriculum is an innovative method of integrating basic science and clinical medicine for <a href="mailto:pre-clinical">pre-clinical</a> medical students.
- Pre-clinical medical students support the utility of simulation during an immunology course to enhance knowledge, comprehension, clinical correlates and overall learning of the mechanisms and presentation of hypersensitivity disorders.

