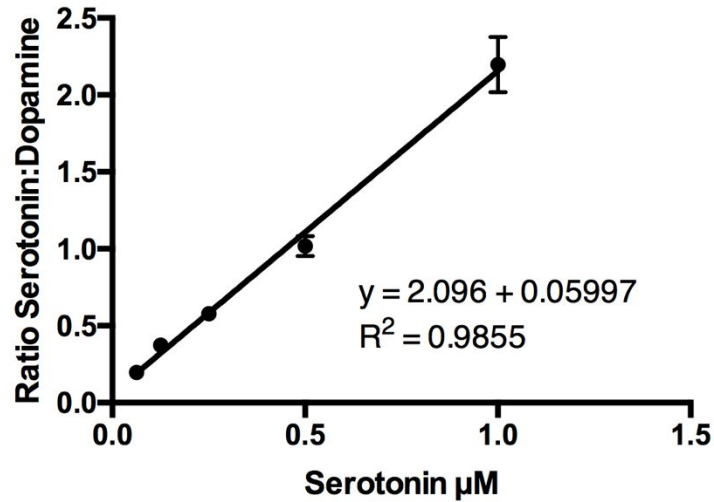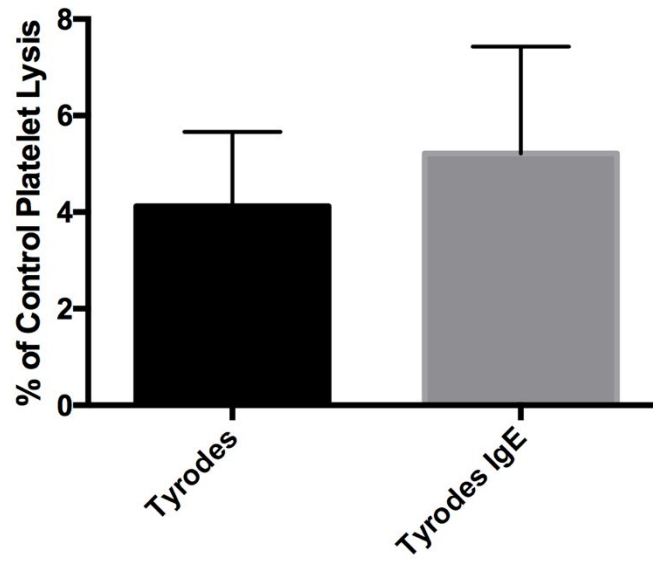# Platelet Response to Allergens, CXCL10, and CXCL5 in the Context of Asthma

Sarah Gruba, Xiaojie Wu, Eleni Spanolios, Jiayi He, Kang Xiong-Hang, and Christy L. Haynes*
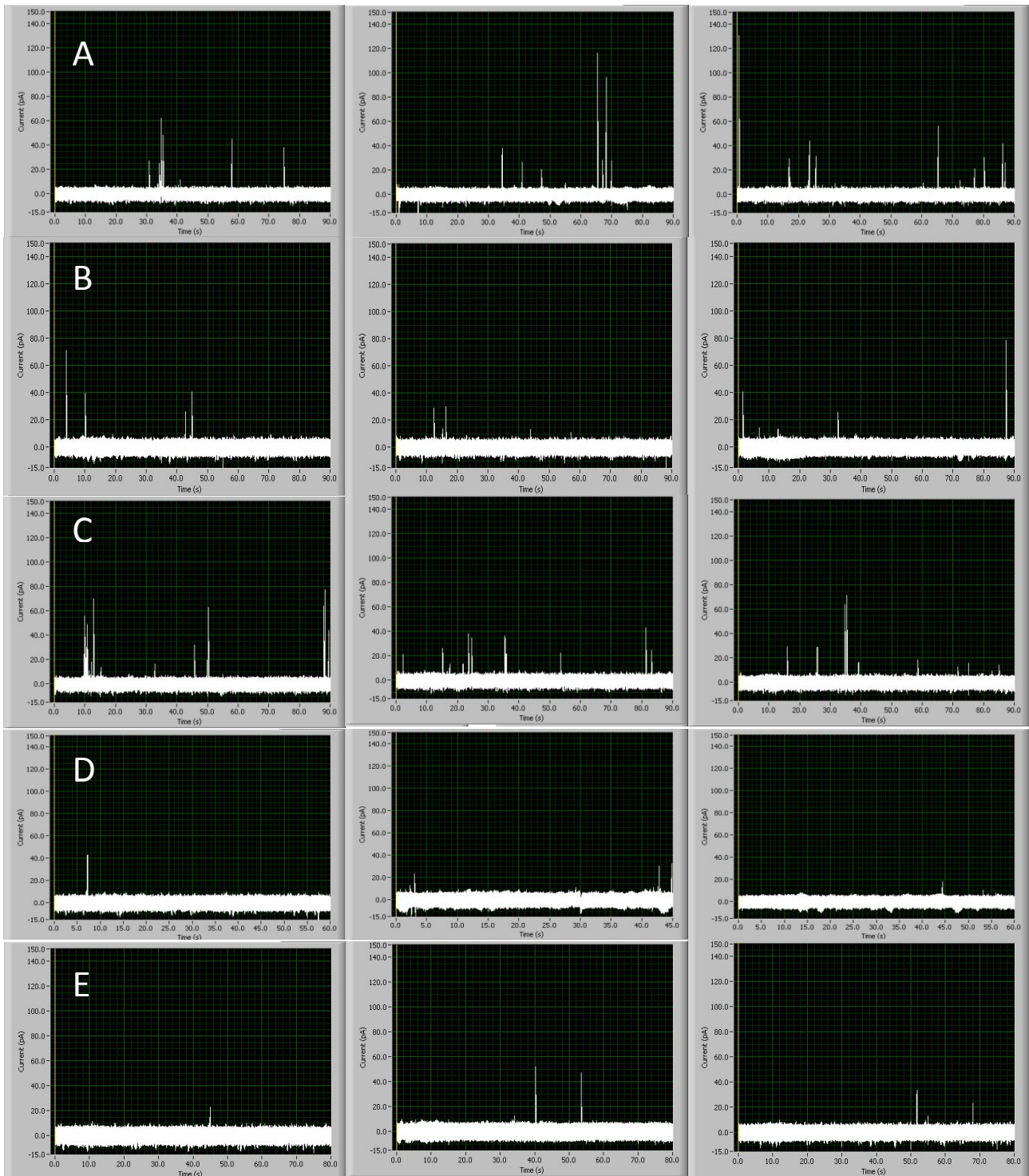
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SI 1. A representative serotonin calibration curve for HPLC analysis from known serotonin concentration (0.0625, 0.125, 0.25, 0.5, and 1 µM). The calibration curve was constructed by plotting the ratio of serotonin peak: dopamine peak (internal standard) vs. serotonin concentration. A new calibration curve was created using the same serotonin concentrations for each experiment.

SI 2. Serotonin secretion of platelets in Tyrodes buffer with and without IgE incubation. No significant differences were noted between the two conditions. This suggests that IgE incubation does not lead to platelet activation.

SI 3. Representative carbon-fiber amperometry runs for different conditions: IgE and thrombin (A), thrombin (B) , TNP-OVA (C), No IgE (D), IgE (E).

Author response to the ARRIVE Guidelines:

1. Study Design: In addition to what can be found in the "Experimental" section, platelets were collected from 1 to 5 euthanized C57BL/6 male mice. Typically, platelets from one to two mice (combined) would be used per experimental depending on the number of conditions tested.
2. Sample Size: In order to ensure a minimum number of platelets needed for testing, a minimum quantity of blood was collected, typically 1-2ml
3. Inclusion and Exclusion Criteria: All mice purchased for this study were used. The platelets collected from them were used so long as they were not activated.
4. Randomization: The mice used were not randomized since all biological treatments occurred after platelet isolation. When processing the data, we ensured the HPLC would provide data for each condition before moving on to the second set of replicates, thus eliminating the likelihood of an HPLC malfunction resulting in statistically significant findings for one condition over another.
5. Blinding: All researchers were aware of which set of platelets they were analyzing at the time of analysis.
6. Outcome Measures: Outcomes are stated within the "Results and Discussion" Section
7. Statistics: Details of the statistical analysis performed can be found in the "Data Analysis" section of the "Experimental Section".
8. Experimental Animals: Male C57BL/6 mice were used. The age varied, and the specific age of the mice was not recorded. The mice were housed in Moos Tower at the University of Minnesota. They had standard husbandry and were given constant access to food and water.
9. Experimental Procedure: Details are accounted for within the "Experimental Section."
10. Results: Details are accounted for within the "Results and Discussion" section.