**Xayathed Somoulay**

Ph.D. Candidate, University of Pittsburgh

John G. Rangos Sr. Research Center, 9159

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somoulayx@pitt.edu

**Education:**

2019 – present Graduate Student

University of Pittsburgh

Program in Microbiology and Immunology

2014 – 2018 B.S. Biology, Minor in Chemistry

St. John Fisher College

**Research Experience:**

**Graduate Student Researcher** (2020 – present)

Laboratory of Dr. Terence S. Dermody, University of Pittsburgh

Projects:

* Determine functions of reovirus nonstructural proteins in remodeling the endoplasmic reticulum
* Investigate reovirus λ2-β1 integrin interactions (rotation project; published work)
* Elucidate function of long chain fatty acids during chikungunya virus replication complex formation (rotation project)

**Postbaccalaureate Fellow** (2018 – 2019)

Laboratory of Dr. Wei-Shau Hu, National Institutes of Health

Projects:

* Characterize functions of unpaired guanosines in HIV-1 genomic RNA packaging
* Identify Gag determinants of specific genome packaging in HIV-1 and HIV-2

**Awards and Honors:**

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| 2020 | Award for “Best Lightning Talk”, Biomedical Graduate Student Association, University of Pittsburgh |
| 2018 – 2019 | NIH Cancer Research Training Award |
| 2017 | Undergraduate Research Grant Recipient, TriBeta National Biological Honors Society |
| 2016 – 2018 | Science Scholars Scholarship, St. John Fisher College |
| 2014 – 2018 | Presidential Scholarship, St. John Fisher College |

**Publications:**

Koehler M, Petitjean SJL, Yang J, Aravamudhan P, **Somoulay X**, Guidice CL, Poncin MA, Dumitru AC, Dermody TS, and Alsteens D. Reovirus directly engages integrin to recruit clathrin for entry into host cells. *Nature Communications* ***12***:2149, 2021.

Nikolaitchik OA, **Somoulay X**, Rawson JMO, Yoo JA, Pathak VK, and Hu WS. Unpaired guanosines in the 5’ untranslated region of HIV-1 RNA act synergistically to mediate genome packaging. *Journal of Virology* ***94***:e00439-20, 2020.

**Abstracts and Conference Proceedings:**

**Somoulay X** and Dermody TS. Functions of reovirus sigmaNS in remodeling of the endoplasmic reticulum. Biomedical Graduate Student Association Symposium. University of Pittsburgh. Pittsburgh, PA. Nov 2020.

Rawson JMO, Nikolaitchik OA, **Somoulay X**, Yoo JA, Pathak VK, and Hu WS. Gag determinants of specific genome packaging in HIV-1 and HIV-2. Conference on Retroviruses and Opportunistic Infections. Chicago, IL. Mar 2020.

Nikolaitchik OA, **Somoulay X**, Rawson JMO, Pathak V, and Hu WS. The role of unpaired guanosines in the encapsidation of HIV-1 genomic RNA. Cold Spring Harbor Retroviruses Meeting. Cold Spring Harbor, NY. May 2019.

**Somoulay X**, Nikolaitchik OA, Rawson JMO, Pathak VK, and Hu WS. Investigating *cis*-acting elements important for HIV-1 genomic RNA packaging. Postbac Poster Day. National Institutes of Health. Bethesda, MD. May 2019.

**Leadership and Service:**

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| 2021 – present | Chair, Biomedical Graduate Student Association Symposium, University of Pittsburgh |
| 2020 – present | Mentor, Biomedical Graduate Student Association Buddy Program, University of Pittsburgh |
| 2018 | Volunteer, Elementary Outreach Program, National Cancer Institute |
| 2017 | Teaching Assistant, General Biology Course, St. John Fisher College |
| 2017 – 2018 | Tutor, Introduction to Chemistry Course, St. John Fisher College |
| 2016 – 2018 | Resident Assistant, St. John Fisher College |
| 2016 – 2017 | Science Peer Mentor, St. John Fisher College |

**References:**

**Dr. Terence S. Dermody**, University of Pittsburgh

Department of Pediatrics, Division of Infectious Diseases

(412) 692-8071

terence.dermody@chp.edu

**Dr. Wei-Shau Hu**, National Cancer Institute

HIV Dynamics and Replication Program, Viral Recombination Section

(301) 846-6013

wei-shau.hu@nih.gov

**Dr. Jonelle L. Mattiacio**, St. John Fisher College

Department of Biology

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