

The Rockefeller University
C. David Allis' Laboratory
1230 York Ave, Box 78
New York, NY 10065

Lab: 212-327-7872
Cell: 929-317-1222
Email: ysoto@rockefeller.edu

EDUCATION

2010 – 2016 **Doctor of Philosophy (PhD)**
Department of Biology
Massachusetts Institute of Technology (MIT)
Advisor: Dr. Michael T. Hemann

2004 – 2008 **Bachelor of Science (BS)**
Department of Chemistry
University of Puerto Rico-Mayagüez

RESEARCH EXPERIENCE

2016 – Present **Damon Runyon-Sohn Pediatric Cancer Postdoctoral and K99/R00 Fellow**
The Rockefeller University
Laboratory of Dr. C. David Allis

Project: Understanding mechanisms of transcriptional regulation by chromatin adaptor/scaffold proteins using functional genomics and chromatin biology approaches.

2011 – 2016 **Graduate Research Fellow**
Massachusetts Institute of Technology (MIT)
Koch Institute for Integrative Cancer Research
Laboratory of Dr. Michael T. Hemann

PhD Thesis Title: PHF6 is a novel regulator of B-cell identity in acute lymphoblastic leukemia.

Projects:

- I. Identify novel dependencies in B-cell leukemia using *in vivo* functional genomics.
- II. Study the context-specific functions of PHF6 in acute leukemias.

2008 – 2010 **Research Assistant**
Massachusetts Institute of Technology (MIT)
Koch Institute for Integrative Cancer Research
Laboratory of Dr. Robert S. Langer

Project: Development of novel biomaterials for intracellular delivery of mRNA and proteins for gene-therapy applications.

2007 **Summer Undergraduate Research Fellow**
Stanford University
Department of Chemistry
Amgen Scholars Program - Stanford Summer Research Program (SSRP)
Laboratory of Dr. Richard N. Zare

Project: Establishment of a surface plasmon resonance (SPR)-based sensor system for real-time detection of citrullinated-fibrinogen, as a clinical diagnostic tool for rheumatoid arthritis.

2004 – 2008

Undergraduate Research Fellow

University of Puerto Rico-Mayagüez
Center for Chemical Sensors Development/Chemical Imaging Center
Department of Chemistry
Laboratory of Dr. Samuel P. Hernández-Rivera

Project: Development of chemical sensors using Raman and Infrared spectroscopy for chemicals and biologicals detection on surfaces.

FELLOWSHIPS and AWARDS

2021 – 2026	NIGMS MOSAIC K99/R00 Postdoctoral Career Transition Award (1K99GM140265-01)
2021	2021 Intersections Science Fellowship (Inaugural Class)
2020	Awardee of the Dr. Eddie Méndez Scholar Award, Fred Hutch Cancer Research Center
2020	Selected among 100 Inspiring Hispanic/Latinx Scientists in America by Cell Mentor (Cell Press)
2017 – Present	Damon Runyon-Sohn Pediatric Cancer Postdoctoral Fellow (DRSG 21-17)
2014 – 2016	NCI-F31 Ruth L. Kirschstein National Research Service Award Predoctoral Fellowship (F31-CA183405-02)
2013	Koch Institute Joseph C. Jefferds, Jr. Research Travel Fellowship
2008	Bachelor of Science awarded with high honors, University of Puerto Rico-Mayagüez, PR
2007	Amgen Scholars Summer Fellowship, Stanford University, CA
2007 – 2008	NIH-Minority Access to Research Careers (MARC-U*STAR Program) Program Fellowship
2005 – 2008	NSF-Puerto Rico Louis Stokes Alliance for Minority Participation (PR-LSAMP) Program Scholarship
2005 – 2008	Dean's List, University of Puerto Rico-Mayagüez, PR

PUBLICATIONS and PREPRINTS

1. **Soto-Feliciano YM***, Sánchez-Rivera FJ*, Barrows DW, Gates L, Soshnev A, Cheon D, Carroll T, Ho YJ, Kasthuber E, Beytagh MC, Armstrong SA, Lowe SW#, Allis CD#. Antagonism between mammalian MLL complexes dictates response to epigenetic therapies. *Submitted*, *Co-first author, #Co-corresponding author.
2. Hoffmann HH*, Sánchez-Rivera FJ*, Schneider WM*, Luna JM*, **Soto-Feliciano YM**, Ashbrook AW, Le Pen J, Leal AA, Ricardo-Lax I, Michailidis E, Hao Y, Stenzel AF, Peace A, Zuber J, Allis CD, Lowe SW, MacDonald MR, Poirier JT#, Rice CM#. Functional interrogation of a SARS-CoV-2 host protein interactome identifies unique and shared coronavirus host factors. *Cell Host & Microbe. In press* (2020). *Co-first author, #Co-corresponding author. Early pre-print version posted on bioRxiv. DOI: <https://doi.org/10.1101/2020.09.11.291716>.
3. Jiang T, Sánchez-Rivera FJ, **Soto-Feliciano YM**, Yang Q, Song C-Q, Bhutkar A, Haynes CM, Hemann MT, Xue W. Targeting *de novo* purine synthesis pathway via ADSL depletion impairs liver cancer growth by perturbing mitochondrial function. *Accepted in Hepatology* (2020).
4. Sánchez-Rivera FJ*, Ryan J*, **Soto-Feliciano YM**, Beytagh MC, Xuan L, Feldser DM, Hemann MT, Letai A#, Jacks TJ#. Mitochondrial apoptotic priming is a key determinant of cell fate upon p53 restoration. *In Revision* (2020). *Co-first author, #Co-corresponding author.

5. Phillips RE, Yang Y, Smith RC, Thompson BM, Yamasaki T, **Soto-Feliciano YM**, Funato K, Liang Y, Garcia-Bermudez J, Wang X, Garcia BA, Yamasaki K, McDonald JG, Birsoy K, Tabar V, Allis CD. Target identification reveals lanosterol synthase as a vulnerability in glioma. *PNAS*, 16: 7957-7962 (2019). PMID: PMC6475387.
6. **Soto-Feliciano YM***, Bartlebaugh JME*, Liu Y*, Sánchez-Rivera FJ, Bhutkar A, Weintraub AS, Buenrostro JD, Cheng CS, Regev A, Jacks T, Young RA, Hemann MT. PHF6 regulates phenotypic plasticity through chromatin organization within lineage-specific genes. *Genes Dev.* 31: 973–989 (2017). *Co-first author, **Cover article**. PMID: PMC5495126.
7. Meacham CE, Lawton LN, **Soto-Feliciano YM**, Pritchard JR, Joughin BA, Ehrenberger T, Fenouille N, Zuber J, Williams RT, Young RA, and Hemann MT. A genome-scale *in vivo* loss-of-function screen identifies *Phf6* as a lineage-specific regulator of leukemia cell growth. *Genes Dev.* 29: 483-488 (2015). PMID: PMC4358400.
8. Pallasch CP, Leskov I, Braun CJ, Vorholt D, Drake A, **Soto-Feliciano YM**, Bent EH, Schwamb J, Iliopoulou B, Kutsch N, Rooijen N, Frenzel LP, Wendtner CM, Heukamp L, Kreuzer KA, Hallek M, Chen J, and Hemann MT. Sensitizing protective tumor microenvironments to antibody-mediated therapy. *Cell.* 156: 590-602 (2014). PMID: PMC3975171.
9. Sun S, Wang M, Knupp SA, **Soto-Feliciano Y**, Hu X, Kaplan DL, Langer R, Anderson DG, and Xu Q. Combinatorial library of lipidoids for *in vitro* DNA delivery. *Bioconjug Chem* **23**, 135–140 (2012). PMID: PMC3261308.

SCIENTIFIC PRESENTATIONS

Oral Presentations

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| 2021 | Invited Speaker , University of Utah/Huntsman Cancer Institute Rising Stars in Cancer and Cell Biology Seminar Series (scheduled for May 2021) |
| 2021 | Invited Speaker , MSKCC/Sloan Kettering Institute Cancer Biology & Genetics Program Research Seminar Series, New York, NY (scheduled for February 2021) |
| 2021 | Invited Speaker , Intersections Science Fellows Symposium (scheduled for January 2021) |
| 2020 | Invited Speaker , Dr. Eddie Méndez Postdoctoral Symposium, Fred Hutchinson Cancer Center |
| 2020 | Speaker , LLS-SCOR Annual Retreat/Site-Visit |
| 2020 | Speaker , St. Jude's Initiative on Cancer Epigenetics |
| 2019 | Speaker , Damon Runyon Annual Fellows' Retreat, Beverly, MA |
| 2019 | Speaker , LLS-SCOR Annual Retreat, The Rockefeller University, New York, NY |
| 2019 | Speaker , The Rockefeller University Postdoctoral Association (PDA) Summer Seminar Series, New York, NY |
| 2019 | Speaker , St. Jude's Initiative on Cancer Epigenetics, The Rockefeller University, New York, NY |
| 2017 | Speaker , GRAAM Meeting (Chromatin Biology Multi-Lab Meeting), Princeton University, Princeton, NJ |
| 2017 | Speaker , The Rockefeller University's Stem Cells, Regeneration, and Cancer Retreat, New York, NY |
| 2015 | Invited Speaker , Mechanisms and Models of Cancer Meeting, Salk Institute, La Jolla, CA |

Poster Presentations

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| 2020 | CSHL Mechanisms & Models of Cancer, Cold Spring Harbor, NY |
| 2019 | Nature/MSKCC - The Tumour Cell: Plasticity, Progression and Therapy Meeting, New York, NY |
| 2018 | Anderson Cancer Symposium, The Rockefeller University, New York, NY |
| 2017 | Anderson Cancer Symposium, The Rockefeller University, New York, NY |
| 2017 | Damon Runyon Annual Fellows' Retreat, Beverly, MA |
| 2017 | CSHL Mechanisms of Eukaryotic Transcription, Cold Spring Harbor, NY |
| 2014 | CSHL Mechanisms & Models of Cancer, Cold Spring Harbor, NY |
| 2014 | Ludwig Center for Molecular Oncology Annual Retreat, MIT Endicott House, Dedham, MA |
| 2013 | Nature/CNIO - Frontiers in Tumor Heterogeneity and Plasticity Meeting, Madrid, Spain |

2013 Ludwig Center for Molecular Oncology Annual Retreat, MIT Endicott House, Dedham, MA
2013 Integrative Cancer Biology Program (ICBP), MIT Endicott House, Dedham, MA
2012 CSHL Mechanisms & Mouse Models of Cancer Meeting, Cold Spring Harbor, NY
2012 Ludwig Center for Molecular Oncology Annual Retreat, MIT Endicott House, Dedham, MA

TEACHING EXPERIENCE

2014 Teaching Assistant, *Principles of Human Disease* advanced undergraduate course, MIT
2013 Teaching Fellow, *Genetics, Genomics & Evolution* undergraduate course, Harvard University
2012 Teaching Fellow, *Foundational Chemistry & Biology* undergraduate course, Harvard University
2011 Teaching Assistant, *Cell Biology* undergraduate course, MIT

MENTORING EXPERIENCE

David Cheon Research Assistant in the Allis lab at Rockefeller University
Mary Clare Beytagh Summer Undergraduate Research Student in Allis lab at Rockefeller University; 2018 Rhodes Scholar; currently an MD/PhD student at UCSF
Xiaozhe Xiong Visiting PhD Student from Tsinghua University in Allis Lab at Rockefeller University; currently a postdoctoral fellow in the Dong lab at Harvard Medical School
Ryan Stott MIT Biology PhD rotation student in the Hemann Lab at MIT; currently a PhD student in the Tsai Lab at MIT Brain and Cognitive Sciences Department
Elizabeth Hemann High School Student in the Hemann Lab at MIT; currently a JD Candidate at Emory University School of Law

CAREER DEVELOPMENT and MEMBERSHIPS

2020 Tri-Institutional Responsible Conduct in Research (RCR) Course
2019 Tri-Institutional 'Launching Undergraduate Science Teaching Career' Course - *Certified*
2019 – Present Member of Women in Science at Rockefeller (WiSeR)
2019 – Present Member of the Rockefeller Inclusive Science Initiative (RiSI)
2019 – Present Member, American Association for Cancer Research (AACR)
2019 – Present Member, American Association for the Advancement of Science (AAAS)
2016 – Present Member, The New York Academy of Sciences (NYAS), New York, NY
2016 – Present Member, Science Alliance, New York, NY

OUTREACH and SERVICE

2020 Invited lecturer for "Conversations with Puerto Rican Scientists" at CeDIn Escuela Laboratorio de la Universidad Interamericana Recinto Metro
2017 – Present Organizer of the Garcia/Roeder/Allis/Armstrong/Muir (GRAAM) bi-monthly chromatin biology joint meeting
2018 & 2019 Graduate Women in Science (GWIS) National Fellowship Applications Reviewer
2017 & 2018 *Scientista* Symposium Presentations Judge, Microsoft Headquarters NYC

REFERENCES

C. David Allis, PhD

Laboratory of Chromatin Biology & Epigenetics
The Rockefeller University
1230 York Ave
New York, NY 10065
Email: alliscd@rockefeller.edu
Phone: 212-327-7839

Scott Lowe, PhD

Memorial Sloan Kettering Cancer Center / Sloan Kettering Institute
Cancer Biology & Genetics Program
417 E 68th Street
New York, NY 10065
Email: lowes@mskcc.org
Phone: 646-888-3342

Michael T. Hemann, PhD

Koch Institute for Integrative Cancer Research
Massachusetts Institute of Technology
500 Main Street
Cambridge, MA 02139
Email: hemann@mit.edu
Phone: 617-324-1964

Tyler Jacks, PhD

Koch Institute for Integrative Cancer Research
Massachusetts Institute of Technology
500 Main Street
Cambridge, MA 02139
Email: tjacks@mit.edu
Phone: 617-253-0263

Robert G. Roeder, PhD

Laboratory of Biochemistry & Molecular Biology
The Rockefeller University
1230 York Ave
New York, NY 10065
Email: roeder@rockefeller.edu
Phone: 212-327-8000