

## Class of 2022

**Yennifer Delgado,**  
**Mentor Michael Emerman**

A CRISPR Screen of HIV Dependency Factors Reveals That *CCNT1* Is Non-Essential in T Cells but Required for HIV-1 Reactivation from Latency.

Hafer TL, Felton A, **Delgado Y**, Srinivasan H, **Emerman M**. *Viruses*. 2023 Aug 31;15(9):1863. doi: 10.3390/v15091863. PMID: 37766271

A CRISPR screen of HIV dependency factors reveals *CCNT1* is non-essential in T cells but required for HIV-1 reactivation from latency.

Hafer TL, Felton A, **Delgado Y**, Srinivasan H, **Emerman M**. *bioRxiv*. 2023 Jul 28:2023.07.28.551016. doi: 10.1101/2023.07.28.551016. Preprint.

**Christian Andino,**  
**Mentor Kelly Stevens**

Temporal Dynamics of Metabolic Acquisition in Grafted Engineered Human Liver Tissue.

Fortin CL, McCray TN, Saxton SH, Johansson F, **Andino CB**, Mene J, Wang Y, **Stevens KR**. *Adv Biol (Weinh)*. 2023 May;7(5):e2200208. doi: 10.1002/adbi.202200208. Epub 2022 Nov 3. PMID: 36328790

## **Class of 2019**

**Lydia Taverne**  
**Mentor Paul Lampe**

Posttranslational modifications induce autoantibodies with risk prediction capability in patients with small cell lung cancer.

Lastwika KJ, Kunihiro A, Solan JL, Zhang Y, **Taverne LR**, Shelley D, Rho JH, Randolph TW, Li CI, Grogan EL, Massion PP, Fitzpatrick AL, MacPherson D, Houghton AM, **Lampe PD**. *Sci Transl Med*. 2023 Jan 11;15(678):eadd8469. doi: 10.1126/scitranslmed.add8469. Epub 2023 Jan 11. PMID: 36630482 Free PMC article.

CD133 as a Biomarker for an Autoantibody-to-ImmunoPET Paradigm for the Early Detection of Small Cell Lung Cancer.

Kunihiro AG, Sarrett SM, Lastwika KJ, Solan JL, Pisarenko T, Keinänen O, Rodriguez C, **Taverne LR**, Fitzpatrick AL, Li CI, Houghton AM, Zeglis BM, **Lampe PD**. *J Nucl Med*. 2022 Nov;63(11):1701-1707. doi: 10.2967/jnumed.121.263511. Epub 2022 Apr 28. PMID: 35483965 Free PMC article.

**Anthony Reynolds**  
**Mentor Thomas Hawn**

Monocyte metabolic transcriptional programs associate with resistance to tuberculin skin test/interferon- $\gamma$  release assay conversion

Jason D. Simmons, Phu T. Van, Catherine M. Stein, Violet Chihota, Thobani Ntshiqqa, Pholo Maenetje, Glenna J. Peterson, **Anthony Reynolds**, Penelope Benchek, Kavindhran Velen, Katherine L. Fielding, Alison D. Grant, Andrew D. Graustein, Felicia K. Nguyen, Chetan Seshadri, Raphael Gottardo, Harriet Mayanja-Kizza, Robert S. Wallis, Gavin Churchyard, W. Henry Boom, and **Thomas R. Hawn**

J Clin Invest. 2021 Jul 15; 131(14): e140073. Published online 2021 Jul 15.

doi: 10.1172/JCI140073 PMCID: PMC8279582. PMID: 34111032

## **Class of 2017**

**Jasmin Jeffery**  
**Mentor Marshall Horwitz**

Restoring RUNX1 deficiency in RUNX1 familial platelet disorder by inhibiting its degradation

Michelle C Krutein, Matthew R Hart, Donovan J Anderson, **Jasmin Jeffery**, Andriana G Kotini, Jin Dai, Sylvia Chien, Michaela DelPriore, Sara Borst, Jean Ann Maguire, Deborah L French, Paul Gadue, Eirini P Papapetrou, Siobán B Keel, Pamela S Becker, **Marshall S Horwitz**

Blood Adv 2021 Feb 9;5(3):687-699.doi: 10.1182/bloodadvances.2020002709.

PMID: 33560381 PMCID: PMC7876894

**Rachel Eguia.** (FYI Rachel has 19 publications with Jesse. I have included only the two I believe were related to her time while in PREP. The rest are from her time afterward working in his lab as a research tech)

**Mentor Jesse Bloom**

Comprehensive mapping of adaptation of the avian influenza polymerase protein PB2 to humans.

Soh YS, Moncla LH, **Eguia R**, Bedford T, **Bloom JD**. Elife. 2019 Apr 30;8:e45079. doi: 10.7554/eLife.45079. PMID: 31038123

Mapping person-to-person variation in viral mutations that escape polyclonal serum targeting influenza hemagglutinin.

Lee JM, **Eguia R**, Zost SJ, Choudhary S, Wilson PC, Bedford T, Stevens-Ayers T, Boeckh M, Hurt AC, Lakdawala SS, Hensley SE, **Bloom JD**. Elife. 2019 Aug 27;8:e49324. doi: 10.7554/eLife.49324. PMID: 31452511 Free PMC article.

**Dreycey Albin**  
**Mentor Gabriele Varani**

Structure of the RNA Specialized Translation Initiation Element that Recruits eIF3 to the 5'-UTR of c-Jun.

Walker MJ, Shortridge MD, **Albin DD**, Cominsky LY, **Varani G**. *J Mol Biol.* 2020 Mar 27;432(7):1841-1855. doi: 10.1016/j.jmb.2020.01.001. Epub 2020 Jan 14. PMID: 31953146

An evolutionarily conserved RNA structure in the functional core of the lincRNA Cyran0.

Jones AN, Pisignano G, Pavelitz T, White J, Kinisu M, Forino N, **Albin D**, **Varani G**. *RNA.* 2020 Sep;26(9):1234-1246. doi: 10.1261/rna.076117.120. Epub 2020 May 26. PMID: 32457084

## Class of 2016

**Joseph Long**

**Mentor Deok-Ho Kim**

A biomaterial approach to cell reprogramming and differentiation.

**Long J**, Kim H, Kim D, Lee JB, **Kim DH**. *J Mater Chem B.* 2017 Apr 7;5(13):2375-2379. doi: 10.1039/C6TB03130G. Epub 2017 Feb 20. PMID: 28966790

Tunable electroconductive decellularized extracellular matrix hydrogels for engineering human cardiac microphysiological systems.

Tsui JH, Leonard A, Camp ND, **Long JT**, Nawas ZY, Chavanachat R, Smith AST, Choi JS, Dong Z, Ahn EH, Wolf-Yadlin A, Murry CE, Sniadecki NJ, **Kim DH**. *Biomaterials.* 2021 May;272:120764. doi: 10.1016/j.biomaterials.2021.120764. Epub 2021 Mar 18. PMID: 33798964 Free PMC article.

**Yosef Bedaso**

**Mentor Herbert Sauro**

A portable structural analysis library for reaction networks

**Yosef Bedaso**, Frank T Bergmann, Kiri Choi, Kyle Medley, **Herbert M Sauro**  
PMID: 29857031 *Biosystems* 2018 Jul;169-170:20-25 Epub 2018 May 30.  
PMCID: PMC6051435 DOI: 10.1016/j.biosystems.2018.05.008

## Class of 2015

**Ryan Farero.** \*(These papers appear to be from his time in the Phillips lab as a graduate student and may not be relevant)

**Mentor Paul Phillips**

The 5 $\alpha$ -reductase inhibitor finasteride reduces opioid self-administration in animal models of opioid use disorder.

Bosse GD, Cadeddu R, Floris G, **Farero RD**, Vigato E, Lee SJ, Zhang T, Gaikwad NW, Keefe KA, **Phillips PE**, Bortolato M, Peterson RT. J Clin Invest. 2021 May 17;131(10):e143990. doi: 10.1172/JCI143990. PMID: 33848264

Cocaine Seeking And Taking Are Oppositely Regulated By Dopamine.

Burgeno LM, **Farero RD**, Murray NL, Panayi MC, Steger JS, Soden ME, Evans SB, Sandberg SG, Willuhn I, Zweifel LS, **Phillips PEM**. bioRxiv. 2023 Apr 10:2023.04.09.536189. doi: 10.1101/2023.04.09.536189. Preprint. PMID: 37090565  
Free PMC article.

## Class of 2014

**Oscar Rodriguez**

**Mentor William Noble**

A unified encyclopedia of human functional DNA elements through fully automated annotation of 164 human cell types

Maxwell W Libbrecht, **Oscar L Rodriguez**, Zhiping Weng, Jeffrey A Bilmes, Michael M Hoffman, **William Stafford Noble**

Genome Biol PMID: 31462275 2019 Aug 28;20(1):180.  
doi: 10.1186/s13059-019-1784-2. PMCID: PMC6714098

**Liana Hernandez,**

**Mentor Tamara Stawicki**

Cilia-Associated Genes Play Differing Roles in Aminoglycoside-Induced Hair Cell Death in Zebrafish.

**Stawicki TM, Hernandez L**, Esterberg R, Linbo T, Owens KN, Shah AN, Thapa N, Roberts B, Moens CB, Rubel EW, Raible DW. G3 (Bethesda). 2016 Jul 7;6(7):2225-35.

doi: 10.1534/g3.116.030080. PMID: 27207957 Free PMC article.

**Zeinab Mohamed**

**Mentor Shiu-Lok Hu**

Induction of Heterologous Tier 2 HIV-1-Neutralizing and Cross-Reactive V1/V2-Specific Antibodies in Rabbits by Prime-Boost Immunization

Samantha Townsley, **Zeinab Mohamed**, Wenjin Guo, Jennifer McKenna, Brad Cleveland, Celia LaBranche, David Beaumont, Xiaoying Shen, Nicole L Yates 4 , Abraham Pinter 5 , Georgia D Tomaras 4 , Guido Ferrari 4 , David C Montefiori, **Shiu-Lok Hu**

2016 Sep 12;90(19):8644-60. JVirol doi: 10.1128/JVI.00853-16. Print 2016 Oct 1.  
PMID: 27440894 PMCID: PMC5021413

**Ernesto Coronado**  
**Mentor Rachel Klevit**

Tuning BRCA1 and BARD1 activity to investigate RING ubiquitin ligase mechanisms  
Mikaela D Stewart, Emily D Duncan, **Ernesto Coronado**, Paul A DaRosa, Jonathan N  
Pruneda, Peter S Brzovic, **Rachel E Klevit**  
Protein Sci 2017 Mar;26(3):475-483. doi: 10.1002/pro.3091. Epub 2017 Jan 23.  
PMID: 27977889 PMCID: PMC5326557 DOI: 10.1002/pro.3091

## Class of 2013

**Paulos Mengsteab**  
**Mentor Deok-Ho Kim**

Factors associated with the improvement of vocal fold movement: an analysis of LEMG  
and laryngeal CT parameters.

**Mengsteab PY**, Kwon JY, Han TR, Kwon TK, **Kim DH**, Kim SJ. J Electromyogr  
Kinesiol.

2015 Feb;25(1):1-7. doi: 10.1016/j.jelekin.2014.08.004. Epub 2014 Aug 27. PMID:  
25217204 Clinical Trial.

Spatiotemporal control of cardiac anisotropy using dynamic nanotopographic cues.

**Mengsteab PY**, Uto K, Smith AS, Frankel S, Fisher E, Nawas Z, Macadangdang J,  
Ebara M, **Kim DH**. Biomaterials. 2016 Apr;86:1-10. doi:

10.1016/j.biomaterials.2016.01.062. Epub 2016 Feb 4. PMID: 26874887 Free PMC  
article.

**Rossana Colon-Thillet**,  
**Mentor Michael Emerman**

Combinatorial mutagenesis of rapidly evolving residues yields super-restrictor antiviral  
proteins

**Rossana Colón-Thillet**, Emily Hsieh, Laura Graf, Richard N McLaughlin Jr, Janet M  
Young, Georg Kochs, **Michael Emerman**, Harmit S Malik

PLoS Biol. 2019 Oct 1;17(10):e3000181. doi: 10.1371/journal.pbio.3000181. eCollection  
2019 Oct

PMID: 31574080 PMCID: PMC6772013 DOI: 10.1371/journal.pbio.3000181

**Joshua Cochran**,  
**Mentor Gabriele Varani**

$\alpha$ -Sheet secondary structure in amyloid  $\beta$ -peptide drives aggregation and toxicity in Alzheimer's disease

Dylan Shea, Cheng-Chieh Hsu, Timothy M Bi, Natasha Paranjapye, Matthew Carter Childers, **Joshua Cochran**, Colson P Tomberlin, Libo Wang, Daniel Paris, Jeffrey Zonderman, **Gabriele Varani**, Christopher D Link, Mike Mullan, Valerie Daggett  
Proc Natl Acad Sci U S A 2019 Apr 30;116(18):8895-8900. doi:

10.1073/pnas.1820585116. Epub 2019 Apr 19.

PMID: 31004062 PMCID: PMC6500163 DOI: 10.1073/pnas.1820585116

## Class of 2012

**Breanna Wentz,**  
**Mentor Michael Lagunoff**

Isolation and characterization of circulating lymphatic endothelial colony forming cells  
Terri A DiMaio, **Breanna L Wentz**, **Michael Lagunoff**

Exp Cell Res 2016 Jan 1;340(1):159-69 doi: 10.1016/j.yexcr.2015.11.015. Epub 2015 Nov 17.

PMID: 26597759 PMCID: PMC4903174 DOI: 10.1016/j.yexcr.2015.11.015

**Joshua Hewitt,**  
**Mentor Leo Pallanck**

Oxidative stress is not a major contributor to somatic mitochondrial DNA mutations  
Leslie S Itsara, Scott R Kennedy, Edward J Fox, Selina Yu, **Joshua J Hewitt**, Monica Sanchez-Contreras, Fernando Cardozo-Pelaez, **Leo J Pallanck**

PLoS Genet 2014 Feb 6;10(2):e1003974. doi: 10.1371/journal.pgen.1003974. eCollection 2014 Feb. PMID: 24516391 PMCID: PMC3916223 DOI: 10.1371/journal.pgen.1003974