Melanie R. McReynolds, Ph.D.

HHMI Hanna H. Gray Fellow
Burroughs Wellcome Fund PDEP Awardee
Lewis-Sigler Institute for Integrative Genomics
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Education and Training

Princeton University

Lewis-Sigler Institute for Integrative Genomics and Department of Chemistry – July 2017- Present
Postdoctoral Research Fellow; Joshua D. Rabinowitz, M.D., Ph.D. Research Group

The Pennsylvania State University

Department of Biochemistry, Microbiology and Molecular Biology, Fall 2011- Summer 2017; Ph.D.
Advisor: Wendy Hanna-Rose, Ph.D.
Dissertation Title: *"Elucidation of the Developmental and Physiological Roles of NAD^+ Biosynthetic Pathways"*

Alcorn State to Penn State Bridges to the Doctorate Program

Alcorn State University

Department of Biological Sciences, Fall 2009- Spring 2011; Degree: M.S. (Highest Honors)
Advisor (Penn State): Craig E. Cameron
Thesis Title: *"Establishment of an Inducible Cell Line to Study Mitochondrial Transcription"*

Alcorn State University

Department of Chemistry and Physics, Fall 2005- Spring 2009; Degree: B.S. (Magna Cum Laude)

Research Experience

- Postdoctoral Research Fellow, Lewis-Sigler Institute for Integrative Genomics, Department of Chemistry, Princeton University; July 2017- Present
- Doctoral Student, Department of Biochemistry and Molecular Biology, Pennsylvania State University; 2011-2017
- Alcorn to Penn State Bridge to the Doctorate Bridge Scholar: Alcorn State University & Pennsylvania State University; 2009-2011
- Army Research Technician at United States Army Corps of Engineers Waterways Experiment Station, Engineer Research and Development Center. Vicksburg, Mississippi; 2009-2010
- Research Intern with the Summer Research Internship Program at the University of Virginia; Summer 2008
- Research Intern at the St. John's Medical College Institute of Population Health and Clinical Research; Bangalore, India; Summer 2007

Current Research

(1): Revealing how NAD^+ homeostasis is achieved and deranged during aging via elucidation of whole-body mammalian NAD^+ metabolism.

(2): Uncovering age-related metabolic perturbations through global/untargeted metabolomic profiling.

Research Support

- HHMI Hanna H. Gray Fellows Program, Princeton University; $1.4 million, 2018-2026
- Burroughs Wellcome Fund Postdoctoral Enrichment Award, Princeton University; $60K, 2018-2021
- Alfred P. Sloan MPHD Scholar, Penn State University; $40K, 2014-2017
- NIH R01 Supplemental Grant, Penn State University; 2012-2016
- Bunton-Waller Fellowship, Penn State University; 2011-2017
- NIH Funded R25: Bridges to the Doctorate Program, Alcorn State and Penn State University; 2009-2011

Publications

Peer Reviewed:

- Luonogo, T.S., Eller, J.M., Lu, M.J., Niere, M., Raith, F., Perry, C., Bornstein, M.R., Oliphint, P., Wang, L., **McReynolds, M.R.**, Migaud, M.E., Rabinowitz, J.D., Johnson, F.B., Johnsson, K., Ziegler, M., Cambronne, X.A., and J.A. Baur. (2020). SLC25A51 is a mammalian mitochondrial NAD transporter. *Nature. Accepted.*
- Chini, C.S., Tarrago, M.G., Warner, G.M., de Oliveira, G.C., Espindola-Netto, J.M., Puranik, A.S., Kashyap, S., Peclat, T.R., Dang, K., Clarke, S., Childs, B.G., Hogan, K.A., Kanamori, K.S., Witte, M.A., Vidal, P., Chellappa, K., **McReynolds, M.R.**, Jankowski, C., Tchkonia, T., Kirkland, J.L., van Deursen, J.M., Baker, D.J., Cohen, R., van Schooten, W., Rabinowitz, J.D., Baur, J.A and E.N. Chini. (2020). Expression of the ecto-enzymes CD38 is induced by senescent cells and decreases tissues NAD^+ during aging by depleting its precursor NMN. *Nature Metabolism. Accepted.*
- Lu, W., Xing, X., Wang, L., Chen, L., Zhang, S., **McReynolds, M.R** and J.D. Rabinowitz. (2020). Improved annotation of untargeted metabolomics data through buffer modifications that shift adduct mass and intensity. *Analytical Chemistry.* DOI: *10.1021/acs.analchem.0c00985*
- Yang, L., Garcia-Canaveras, J.C., Chen, Z., Wang, L., Liang, L., Jang, C., Mayr, J.A., Zhang, Z., Ghergurovich, J.M., Zhan, L., Joshi, S., Hu, Z., **McReynolds, M.R**., Su, X., White, E., Morscher, R.J., and J.D. Rabinowitz. (2020). Serine catabolism feeds NADH when respiration is impaired. *Cell Metabolism. DOI: 10.1016/j.cmet.2020.02.017*
- **McReynolds, M.R.**, Chellappa, K. and J.A. Baur. (2020). Age-related NAD^+ decline. *Experimental Gerontology. DOI: 10.1016/j.exger.2020.110888*
- **McReynolds, M.R.**, Wang, W., Holleran, L.M. and W. Hanna-Rose. (2017). Uridine monophosphate synthetase enables eukaryotic *de novo* NAD^+ biosynthesis from quinolinic acid. *JBC. C117. 795344.* DOI: 10.1074/jbc.C117.795344
- Ozcelik, A., Nama, N., Huang, PH., Kaynak, M., **McReynolds, MR**., Hanna-Rose, W., Huang, TJ. (2016). Acoustofluidic rotational manipulation of cells and organisms using oscillating solid structures. *SMALL. DOI: 10.1002/smll.201601760*

- Wang W., **McReynolds M.R.**, Gonvalves, J.F., Shu, M., Dhondt, I., Braeckman, B.P., Lange, S.E., Kho, K. Detwiler, A.C., Pacella, M.J. and W. Hanna-Rose. (2015). Comparative metabolomic profiling reveals that dysregulated glycolysis stemming from lack of salvage NAD^+ biosynthesis impairs reproductive development in *C. elegans*" *J. Bio. Chem. 2015, 290:26163-26179.*
- Crook, M., **McReynolds, M**., Wang, W., Hanna-Rose, W. (2014). An NAD^+ Biosynthetic Pathway Enzyme Functions Cell Non-Autonomously in *C. elegans* Development. *Developmental Dynamics.* 243:965-967.

Preprint server:

- Lakhina, V., **McReynolds, M.R.**, Grimes, D.T., Rabinowitz, J.D., Burdine, R.D. and C.T. Murphy. (2019). ZIP-5/bZIP transcription factor regulation of folate metabolism is critical for aging axon regeneration. bioRxiv, 727719; doi: https://doi.org/10.1101/727719
- Fenton, A.R., Janowitz, H.N. **McReynolds, M.R.,** Wang, W. and W. Hanna-Rose. (2017). A Caenorhabditis elegans model of adenylosuccinate lyase deficiency revels a neuromuscular and reproductive phenotypes of distinct etiology. bioRxiv, 181719.
- Change, S.M., **McReynolds, M.R.** and W. Hanna-Rose. (2017). Mitochondrial sirtuins sir-2.2 and sir-2.3 regulate lifespan in C. elegans. bioRxiv. 181727.

Under Review:

- **McReynolds, M.R**.*, Chellappa, K., C.*, Chiles, E., Jankowski, Shen, Y., Chen, L., Descamps, H., Mukherjee, S., Bhay, Y.R., Chu, Q., Ji, X., Song, F., Botolin, P., Lu, W., Thaiss, C., Su, X., Long, F., Rabinowitz, J.D. and J.A. Baur. NAD^+ flux is maintained in aged mice. *Nature Metabolism; under review.*
- Minhas, P., Hernandez, A.L.*, **McReynolds, M.R**.*, He, J., Joshi, A., Linde, M., Wilson, E.N., Rubin, A.J., Wang, Q.A., Swarovski, M., Majeti, R., Mochly-Rosen, D.R., Weissman, I., Longo, F.M., Rabinowitz, J.D. and K.I. Andreasson. Metabolic reprogramming of myeloid cells reverses cognitive decline in aging. *Nature; revision submitted.*
- Lengefeld, J., Cheng, C.W., Maretich, P., Blair, M., Hagen, H., **McReynolds, M.R**., Sullivan, E., Mayors, K., Roberts, C., Kang, J.K., Steiner, J., Miettinen, T.P., Manalis, S.R., Antebi, A., Rabinowitz, J.D., Morrison, S., Lees, J.A., Boyer, L., Yilmaz, O., and A. Amon. Cell size determines stem cell potential during aging. *Cell; revision submitted.*
- Schild, T., **McReynolds, M.R.,** Shea, C., Low, V., Asara, J., Dephoure, N., Rabinowitz, J.D., Gomes, A.P. and J. Blenis. NADK is activated by oncogenic KRAS signaling to sustain pancreatic ductal adenocarcinoma. *Cell Metabolism; under revision.*
- Mukherjee, S., Chellappa, K., **McReynolds, M.R.,** Mo, J., Yucel, N., Paolella, L., Hugo, M., Botolin, P., Chu, Q., Arany, Z., Tong, Q., Sims, C.A., Rabinowitz, J.D., and J.A. Baur. Mitochondrial NAD content is limiting for oxidation in the regenerating liver. *Gastroenterology; under revision.*

In Prep:

- Chellappa, K.*, **McReynolds, M.R*.,** Zeng, X., Chiles, E., Descamps, H., Mukherjee, S., Bhay, Y.R., Chu, Q., Lu, W., Sims, C., Thaiss, C., Su, X., Baur, J.A. and J.D. Rabinowitz. Circulating NAM feeds NAD^+ Biosynthesis via the Gut Microbiome.
- **McReynolds, M.R.**, Wang, L., Lu, W. and J.D. Rabinowitz. Dysregulation of Aged Transsulfuration.

Commentaries/Opinion Pieces:

- Hinton Jr., A.O., **McReynolds, M.R**., Martinez, D., Shuler, H.D. and C.M. Termini. The Power of Saying No. *EMBO Reports*. Accepted.
- Hinton Jr., A.O., Vue, Z., Termini, C.M., Taylor, B.L., Shuler, H.D. and **M.R. McReynolds.** Mentoring Minority Trainees in STEM. *EMBO Reports*. Accepted.
- **McReynolds, M.R**., Termini, C.M., Hinton Jr., A.O., Taylor, B.L., Vue, Z., Huang, S.C., Roby, R.S., Shuler, H.D. and C.S. Carter. The Art of Virtual Mentoring in the 21st Century for STEM Majors and Beyond. *Nature Biotechnology*. Accepted. Embargo until 12/2020.
- Termini, C.M., **McReynolds, M.R**., Rutaganira, F., Roby, R.S., Carter, C.S., Huang, S.C., Vue, Z., Hinton Jr., A.O., Martinez, D., Shuler, H.D. and B.L. Taylor. Ten Simple Rules for Virtual Mentoring During COVID-19 and Beyond. *Elife*. Submitted.
- Hinton Jr., A.O., Termini, C.M., Spencer, E.C., Rutaganira, F., Chery, D., Roby, R.S., Vue, Z., Pack, A.D., Brady, L.J., Garza-Lopez, E., Marshall, A., James, J.L., Shuler, H.D., Taylor, B.L., **McReynolds, M.R.** and Palavicino-Maggio, C.B. Patching the Leaks: Reimagining the STEM Pipeline. Invited commentary from *CellPress*'s Special Series. Accepted. In Press.
- **McReynolds, M.R.**, Palavicino-Maggio, C.B., Rutaganira, F.U.N., Garza-Lopez, E., Roby, R.S., Owusu, S.A., Vue, Z., Evans, C., Brady, L.J., Lewis, S.C., Termini, C.M., Shuler, H.D., Spencer, E.C. and Hinton, A.O. Best Practices to Facilitate Healthy Recruitment and Retention of PEER Scholars through the Scientific Pipeline. Invited commentary from *CellPress*'s Special Series. In prep.
- Spencer, E.C., Vue, Z., Rutaganira, F.U.N., Garza-Lopez, E., Roby, R.S., Palavicino-Maggio, C.B., Brady, L.J., Pack, A., Chery, D., Pang, A., Termini, C.M., Taylor, B.L., Shuler, H.D., Lewis, S.C., **McReynolds, M.R.**, and Hinton, A.O. Mentoring Toolkit for Multicultural Sensitivity and Awareness. *Nature Human Behavior*. Pre-inquiry invitation.

Technical Presentations (Selected)

- Virtual Presentation, Invited Speaker, Special Seminar, University of Southern California, Leonard Davis School of Gerontology, "NAD Flux is Maintained in Aged Mice", September 2020
- Virtual Presentation, Invited Speaker, BMB Fall Seminar Series, Pennsylvania State University, "NAD Flux is Maintained in Aged Mice", September 2020
- Virtual Presentation, Dr. Samuel Nabrit Conference for Early Career Investigators, Brown University, "NAD Flux is Maintained in Aged Mice", August 2020
- Poster Presentation, HHMI Scientific Meeting, Janelia Research Campus, "NAD Flux is Maintained in Aged Mice", October 2019
- Keynote Speaker, STEM Open House, Pennsylvania State University, "Oh the Places You Can Go with a Penn State Graduate Degree", October 2019
- Oral/Poster Presentation, Gordon Research Conference: Biology of Aging, "NAD^+ Degradation during Aging", July 2019
- Oral/Poster Presentation, FASEB SRC: NAD^+ Metabolism and Signaling Meeting, "Quantitative Survey of NAD^+ Flux during Aging", June 2019

- Oral Presentation, Dr. Samuel Nabrit Conference for Early Career Investigators, Brown University, "NAD^+ metabolism in aged mice: Insight from quantitative analysis", May 2019
- Oral/Poster Presentation, ASBMB-Experimental Biology, ASBMB Spotlight Session, "Quantitative Survey of NAD^+ Flux in Aged Mice", April 2019
- Oral/Poster Presentation, HHMI Scientific Meeting/Hanna Gray Fellows Orientation, Janelia Research Campus, "Quantitative Survey of NAD^+ Flux in Aged Mice", November 2018
- Oral Presentation, HHMI Hanna H. Gray Semifinalist Symposium, HHMI Headquarters, "From Worms to Aged Mice: Mapping NAD^+ Flux to Elucidate the Mechanisms of NAD^+ Homeostasis", June 2018
- Oral Presentation, 36th Summer Symposium in Molecular Biology: Metabolism— Disease Models and Model Organisms, "Eukaryotic *de novo* NAD^+ biosynthesis from tryptophan in the absence of a QPRTase homolog", May 2017
- Oral Presentation, Postdoctoral Candidate Seminar, Princeton University— Joshua Rabinowitz Research Group, "Elucidation of the Developmental and Physiological Roles of NAD^+ Biosynthetic Pathways in *C. elegans*", November 2016
- Oral Presentation, Postdoctoral Candidate Seminar, Children's Hospital of Philadelphia—Charles Stanley Research Group, "Elucidation of the Developmental and Physiological Roles of NAD^+ Biosynthetic Pathways in *C. elegans*", November 2016
- Oral Presentation, Postdoctoral Candidate Seminar, St. Jude Children's Research Hospital, "Elucidation of the Developmental and Physiological Roles of NAD^+ Biosynthetic Pathways in *C. elegans*", October 2016
- Oral Presentation, Animal Development Floor Meeting, Penn State University, "*de novo* Synthesis from Tryptophan and Nicotinamide Riboside Both Contribute to NAD^+ Biosynthetic Capacity and Homeostasis in *C. elegans*", September 2016
- Oral Presentation, Penn State's Life Science Symposium, "Deciphering Molecular Mechanisms of Metabolic Disease using *C. elegans*", May 2016
- Poster Presentation, Penn State's Life Science Symposium, "*de novo* Synthesis from Tryptophan in the Absence of a QRPTase Homolog Contributes to NAD+ biosynthesis in *C. elegans*", May 2016
- Oral/Poster Presentation, ASBMB-Experimental Biology, "*de novo* Synthesis from Tryptophan in the Absence of a QRPTase Homolog Contributes to NAD+ biosynthesis in *C. elegans*", April 2016
- Oral/Poster Presentation, St. Jude National Graduate Student Symposium (NGSS), "*de novo* Synthesis in the Absence of a QPRTase Homolog Contributes to NAD+ biosynthesis in *C. elegans*", March 2016
- Poster Presentation, 20th International *C. elegans* Meeting, "Cytoplasmic-Specific NAD+ Deficiency Disrupts Glycolysis and Activates Amino Acid Catabolism Affecting Reproductive Development in *C. elegans*", June 2015
- Poster Presentation, 20th International *C. elegans* Meeting, "Maintaining Global NAD+ Homeostasis Reveals Separable Functional and Compensatory Roles for NAD+ Biosynthetic Pathways in *C. elegans*", June 2015
- Oral Presentation, Graduate Student Research Seminar, Biochemistry and Molecular Biology Department, Penn State University, "Cytoplasmic-Specific NAD+ Deficiency Triggers Changes in Metabolic Energy Pathways Affecting Reproductive Development in *C. elegans*", April 2015
- Poster Presentation, 2014 American Society of Cell Biology Meeting (ASCB/IFCB), "NAD+ Deficiency Triggers Changes in Metabolic Energy Pathways Affecting Gonad Development in *C. elegans*", December 2014

- Poster Presentation, Annual Biomedical Research Conference for Minority Students (ABRCMS), "NAD+ Deficiency Triggers Changes in Metabolic Energy Pathways Affecting Gonad Development in *C. elegans*", November 2014
- Oral Presentation, Alcorn State: Penn State Bridges Research Symposium, Alcorn State University, "Linking Development and Metabolism: NAD+ Deficiency Triggers Changes in Metabolic Energy Pathways Affecting Gonad Development in *C. elegans*", October 2014
- Poster Presentation, Society of Developmental Biology Mid-Atlantic Regional Meeting, John Hopkins University, "Elucidating NAD+ Homeostasis in *C. elegans*", May 2014
- Poster Presentation, The 29th Annual Graduate Exhibition, The Pennsylvania State University, "Maintaining NAD+ Homeostasis in *C. elegans*", April 2014
- Oral Presentation, Graduate Student Research Seminar, Biochemistry and Molecular Biology Department, Penn State University, "All Roads Lead to NAD+: Exploring the Compensatory Networks of NAD+ Biosynthesis in *C. Elegans*", October 2013
- Poster Presentation, 19th International *C. elegans* Meeting, "Exploring the Flexibility of NAD+ Biosynthesis in *C. elegans*", June 2013
- Thesis Defense, "Establishment of an Inducible Cell Line for the Mitochondrial Transcription Factor A to Study Mitochondria Transcription", Alcorn State University, April 2011
- Poster Presentation, Annual Biomedical Research Conference for Minority Students (ABRCMS), "Establishment of an Inducible Cell Line for the Mitochondrial Transcription Factor A to Study Mitochondria Transcription", November 2010

Awards and Honors

- HHMI Hanna H. Gray Fellows Program; 2018
- Burroughs Wellcome Fund Postdoctoral Research Enrichment Program; 2018
- Ruth L. Kirschstein National Research Service Award (F32) – Declined; 2018
- University Student Way Paver Award—Council College of Multicultural Leaders (CCML), Penn State University; 2017
- FASEB MARC Travel Award- Postdoctoral Preparation Institute Workshop; 2016
- ASBMB 2016 Best Thematic Poster Award- Metabolism, Disease and Drug Design; 2016
- St. Jude National Graduate Student Symposium (NGSS)—Invited/Selected Participant; 2016
- ASBMB MAC Travel Award- Experimental Biology meeting; 2016
- FASEB MARC Travel Award- FASEB Grant Writing Seminar & Responsible Conduct of Research Workshop; 2015
- FASEB MARC Program Poster/Oral Presentation Travel Award- GSA: 20th International *C. elegans* meeting; 2015
- Alfred P. Sloan MPHD Scholar, Penn State University; 2014
- Bunton-Waller Fellowship, Penn State University; 2012

Teaching Experience

- Adjunct Faculty of Chemistry, Department of Chemistry and Physics, Alcorn State University; (Courses taught: Green Chemistry, Earth and Space Science, Virtual Biochemistry Lab); Fall 2019, Fall 2020
- Lead Postdoctoral Instructor, Summer Undergraduate Research Program, Department of Molecular Biology, Princeton University; Summer 2019, Summer 2018
- Instructor, Creative Summer Academy of the Sciences, Upward Bound Program, "Introduction to Biochemistry", Pennsylvania State University; Summer 2014
- Instructor, Creative Summer Academy of the Sciences, Upward Bound Program, "FUNdamentals of Biochemistry: The Chemistry of Life", Pennsylvania State University; Summer 2013
- TA; BMB443W, Protein Purification and Enzymology Lab, Penn State University; Fall 2012
- TA; BMB212, Elementary Biochemistry Lab, Penn State University; Spring 2012, Fall 2015
- Instructor; BI191L, Honors Biology Lab, Alcorn State University; Spring 2010, Spring 2011
- Instructor; BI110L, Biological Concepts Lab, Alcorn State University; Fall 2009, Spring 2010, Spring 2011
- Instructor; BI425L, Principles of Immunology Lab, Alcorn State University; Fall 2009, Spring 2010

Affiliations/Memberships

- Member, American Aging Association (AGE); 2020-Present
- Member, American Society of Biochemistry and Molecular Biology (ASBMB); 2015-Present
- Member, American Society of Cell Biology (ASCB); 2014-2017
- Member, Society of Developmental Biology (SDB); 2014-2017
- Member, Metabolomics Interest Group (MIG), Pennsylvania State University; 2014-2017
- Member, Genetics Society of America (GSA); 2013-2017
- President, Black Graduate Student Association (BGSA), Pennsylvania State University; 2011-2017
- Member, Graduate Women in Sciences (GWIS); 2012-2017
- Member, Graduate Student and Professional Association (GPSA), Pennsylvania State University; 2011-2017
- Member, Alpha Kappa Alpha Sorority, Incorporated; 2009-Present
- Resident Hall Association President, Student Government Association (SGA), Alcorn State University; 2008-2009

Science Education and Outreach (Selected)

- Invited Panelist, The Graduate School's Alumni Career Panel and Exploration Workshop, Pennsylvania State University; October 2019
- Invited Panelist, Burroughs Wellcome Fund's Graduate Diversity Enrichment Networking Event, Duke University School of Medicine; March 2019
- Presider, Solo Success: How to Thrive in Graduate School When You're the Only ___ in Your Department, Institute on Teaching and Mentoring; October 2017
- Meetings Planning Committee Member, Postdoctoral Representative, American Society of Biochemistry and Molecular Biology (ASBMB); June 2017

- Selected Participant, NextProf Workshop, University of Michigan; May 2017
- Invited Moderator, 2016 SROP and Ronald E. McNair Research Symposium, Penn State University; July 2016
- Selected Participant, FASEB Postdoctoral Preparation Institute Workshop; June 2016
- Invited Speaker, "Presenting Research: OGEEP Professional Development", Office of Graduate Educational and Equity Programs, Penn State University; April 2016
- Invited Panelist, "Conferencing & Professional Networking", Office of Graduate Educational and Equity Programs, Penn State University; February 2016
- Recruiter for Biochemistry and Molecular Biology Department, Annual Biomedical Research Conference for Minority Students (ABRCMS), Penn State University; November 2015
- Selected Participant, FASEB Grant Writing & Responsible Conduct of Research Workshop; September 2015
- Committee Member, Biochemistry and Molecular Biology Department Climate and Diversity Committee, Penn State University; August 2015
- Invited Participant, 2015 Princeton University Graduate Consulting Club Competition, EmpowerSci Solutions – Team Leader; July 2015
- Invited Graduate Panelist, "Life as a graduate student", Summer Research Opportunities Program (SROP), Penn State University; July 2015
- Invited Moderator, 2015 SROP and Ronald E. McNair Research Symposium, Penn State University; July 2015
- Invited Graduate Panelist, Plenary Session and Workshop for Undergraduate Researchers, 20th International *C. elegans* Meeting; June 2015

Students Supervised and Mentored:

Penn State Undergraduates or Summer Interns:

- Sarah Chang, Schreyer Honors Scholar; Best Schreyer Honors College Thesis Award, 2016; Current position: MD/PhD candidate, Harvard/MIT
- Lauren Holleran, Schreyer Honors Scholar; Current position: MD candidate, Drexel University
- Haley Janowitz, Schreyer Honors Scholar; Best Schreyer Honors College Thesis Award, 2018; Current position: PhD candidate, Johns Hopkins
- Michael Clupper, CIRES Research Distinction Scholar; Current position: PhD candidate, University of Delaware
- Adam Fenton, CIRES Research Distinction Scholar; CIRES Distinguished Thesis Award, 2017; Current position: PhD candidate, UPenn
- Jennifer Prestipino, CIRES Research Distinction Scholar; Current position: Graduate student, Drexel University
- Liyano Ido, Millenium Scholar; Current position: MPH, Johns Hopkins
- Jemimah A. Royer, SROP Scholar; Best Research Award—Summer Research Opportunities Program at PSU, 2016; Invited ABRCMS Oral Presentation, 2016; Current position: PharmD candidate, Binghamton University