CURRICULUM VITAE

AARON T. SMITH

Education

Ph.D.	2012	University of Wisconsin—Madison, Chemistry
M.Sc.	2009	University of Wisconsin—Madison, Chemistry
B.A.	2007	Boston University, Chemistry

Experience in Higher Education

2022 – present	University of Maryland, Baltimore County, Associate Professor, Dept. of Chemistry and Biochemistry
2016 – 2022	University of Maryland, Baltimore County, Assistant Professor, Dept. of Chemistry and Biochemistry
2013 – 2016	Northwestern University, NIH-NRSA Postdoctoral Fellow, Dept. of Molecular Biosciences
2012 – 2013	Northwestern University, Postdoctoral Scholar, Dept. of Molecular Biosciences

Honors Received

2022 – 2025	HHMI Gilliam Fellow Mentor (UMBC)
2022 – 2023	Beckman Scholar Mentor (UMBC)
2022	CNMS Early-Career Faculty Excellence Award (UMBC)
2021 – 2022	UMBC Camille & Henry Dreyfus Teacher-Scholar Nominee
2019	NSF CAREER Award (UMBC)
2019	American Heart Association Career Development Award (UMBC)
2018	Career Center Impact Recognition Award (UMBC)
2017	Summer Faculty Fellowship (UMBC)
2015	Interdisciplinary Biological Sciences Postdoctoral Travel Award (NU)
2013	NIH Ruth L. Kirschstein NRSA Postdoctoral Fellowship (NU)
2011	University Housing's Honored Instructor Award (UW)
2011	Charles & Martha Casey Excellence in Research Award (UW)
2010	Outstanding Chemistry Teaching Award (UW)
2010	Undergraduate Mentoring Award (UW)
2007	Undergraduate Research Award (BU)
2007	Department of Chemistry Research Award (BU)
2005 – 2007	CHEMIA Vice President (BU)
2006	Mark Riemen Summer Research Prize (BU)

Research Support and/or Fellowships

Funded/Approved

2022 – 2025	$156,000 ($156,000 Direct), GT15765 "Biophysical Characterization of the *Pseudomonas aeruginosa* (*Pa*) BqsR and BqsS Two-Component System" (HHMI Gilliam Fellowship), Role: Mentor and Diversity and Inclusion Awardee
2022 – 2024	No direct costs, Advanced Photon Source (APS) General User Proposal (GUP 80032) "Structural Determinants of Post-Translational Arginylation" (UMBC/Argonne National Laboratory), Role: P.I. (100%)
2022 – 2023	$199,540 (Direct), R35 GM133497-03S1 "Administrative Supplement for Equipment: Deciphering the Mechanism of Pathogenic Ferrous Iron Acquisition and the Role of Iron in the Eukaryotic Arginine Transferases" (NIH—NIGMS), Role: P.I. (100%)
2021 – 2023	$141,412 ($96,416 Direct), R35 GM133497-03S1 "Diversity Supplement: Deciphering the Mechanism of Pathogenic Ferrous Iron Acquisition and the Role of Iron in the Eukaryotic Arginine Transferases" (NIH—NIGMS), Role: P.I. and Mentor (100%)
2021 – 2022	$1,300 (Direct), Undergraduate Research Awards (UMBC), Role: Advisor
2019 – 2024	$1,418,165 ($1,000,000 Direct), R35 GM133497-01 "Deciphering the Mechanism of Pathogenic Ferrous Iron Acquisition and the Role of Iron in the Eukaryotic Arginine Transferases" (NIH—NIGMS), Role: P.I. (100%)
2019 – 2024	$548,000 ($408,017 Direct), CAREER Award 1844624 "Structure, Mechanism, and Selectivity of Microbial Ferrous Iron Transport" (NSF—CHE, CLP), Role: P.I. (100%)
2019 – 2022	No direct costs, National Institute of Standards and Technology (NIST), Role: Guest Researcher
2018 – present	No direct costs, Advanced Light Source (ALS) RAPIDD Proposal (SB-00818) "Probing nucleotide-mediated FeoA-FeoB Interactions" (UMBC/Lawrence Berkeley National Laboratory), Role: P.I. (100%)
2018 – present	No direct costs, bioXAS Beamtime Proposal "X-ray Absorption Spectroscopy of Eukaryotic, Iron-Binding Arg Transferases (ATE1s)" (UMBC/Stanford Synchrotron Radiation Lightsource), Role: co-P.I. (50%)

Completed

2020 – 2022	No direct costs, Advanced Photon Source (APS) General User Proposal (GUP 70573) "Structural Determination of Components of Ferrous Iron Transport" (UMBC/Argonne National Laboratory), Role: P.I. (100%)
2020 – 2021	$1,750 (Direct), Undergraduate Research Awards (UMBC), Role: Advisor
2019 – 2021	$365,687 ($275,000 Direct), R21 DE027803-01A1 "FeoA-based Regulation of Pathogenic Ferrous Iron Acquisition" (NIH—NIDCR), Role: P.I. (100%)
2019	$1,500 (Direct), Supplement for Undergraduate Research Experience (UMBC), Role: P.I. (100%)
2019	$231,000 ($210,000 Direct), Career Development Grant 19CDA34760033 "Structural and Regulatory Elements of the Arginine Transferases" (American Heart Association), Role: P.I. (100%) (relinquished early)
2018	$1,500 (Direct), Supplement for Undergraduate Research Experience (UMBC), Role: P.I. (100%)
2018 – 2020	No direct costs, Advanced Photon Source (APS) General User Proposal (GUP 59535) "Structural Determination of Components of Ferrous Iron Transport" (UMBC/Argonne National Laboratory), Role: P.I. (100%)

2017 – 2018	$25,000 (Direct), Strategic Award for Research Transitions "The Mechanism of Fe^{2+} Transport in Pathogenic Bacteria" (UMBC), Role: P.I. (100%)
2017 – 2018	$3,000 (Direct), Undergraduate Research Awards (UMBC), Role: Advisor
2017	$6,000 (Direct), Summer Faculty Fellowship "The Mechanism of Fe^{2+} Transport in Pathogenic Bacteria" (UMBC), Role: P.I. (100%)
2016 – 2018	No direct costs, Advanced Photon Source (APS) General User Proposal (GUP 49494) "Structural Determination of the Fe(II) Membrane Transporter FeoB" (UMBC/Argonne National Laboratory), Role: P.I. (100%)

Submitted

2022 – 2024	No direct costs, Advanced Photon Source (APS) General User Proposal (GUP 80032) "Structural Determinants of Post-Translational Arginylation" (UMBC/Argonne National Laboratory), Role: P.I. (100%)

In Revision/Pending Submission

2023 – 2028	$367,206 ($254,233 Direct to UMBC), R01 AI091957-10 renewal of "Characterization of the ferrous iron transporter Feo" (NIH—NIAID), Role: co-PI (100%)

Postdoctoral Researchers

Current

Name	*Department/Program*	*University and Role*
N/A		

Past

Name	*Department/Program*	*University and Role*
Dr. Janae Baptiste Brown	Chemistry & Biochemistry	UMBC; role: postdoctoral adviser

Ph.D. Students

Current

Name	*Department/Program*	*University and Role*
Verna Van	GPILS	UMBC; role: committee chair
Mark Lee (Gabriana)*	Chemistry & Biochemistry	UMBC; role: committee chair
Alexander Paredes^&	Chemistry & Biochemistry	UMBC; role: committee chair
Misti Persaud^	Chemistry & Biochemistry	UMBC; role: committee chair
Charlie Waters*	Chemistry & Biochemistry	UMBC; role: committee member
Joy Thames*	Chemistry & Biochemistry	UMBC; role: committee member
Winny Sun	GPILS	UMBC; role: committee member
Xinmei Dong	Chemistry & Biochemistry	UMBC; role: committee member
Mona Layegh	Chemistry & Biochemistry	UMBC; role: committee member
Christianna Kutz	Chemistry & Biochemistry	UMBC; role: committee member
Xi Chen	GPILS	UMBC; role: committee member
Matthew Sherman	GPILS	UMBC; role: committee member
Naba Krishna Das	Chemistry & Biochemistry	UMBC; role: committee member
Alex Reardon	Chemistry & Biochemistry	UMBC; role: committee member
Karndeep Singh^	GPILS	UMBC; role: committee member

Past

Name (Yr. of Ph.D.)	*Department/Program*	*University and Role*
Alexandrea Sestok* (2022)	Chemistry & Biochemistry	UMBC; role: committee chair
Brianna Young (2022)	GPILS	UMB; role: committee member
Daniel Kazal (2022)	Chemistry & Biochemistry	UMBC; role: committee member
Tyree Wilson^ (2022)	Pharmacy	UMBC; role: committee member
Mickayla Mickle^ (2022)	GPILS	UMB; role: committee member
Jordan Pritts* (2022)	Pharmacy	UMB; role: committee member
Patricia Boyd^ (N/A)	*Chemistry & Biochemistry*	*UMBC; role: committee member*
Rachael Knoblauch (2020)	Chemistry & Biochemistry	UMBC; role: committee member
Canessa Swanson^ (2020)	GPILS	UMBC; role: committee member
Miji Jeon (2020)	Chemistry & Biochemistry	UMBC; role: committee member
Alecia Dent (2020)	GPILS	UMB; role: committee member
Estela Monge^ (2020)	Biology	UMBC; role: committee member
Denise Williams^ (2020)	Chemistry & Biochemistry	UMBC; role: committee member
Mary Yates (2019)	Chemistry & Biochemistry	UMBC; role: committee member
Tonya Santaus (2019)	Chemistry & Biochemistry	UMBC; role: committee member
Courtney Chandler (2019)	GPILS	UMB; role: committee member
Hannah Rosenbach (N/A)	Exchange Student	Heinrich Heine University Düsseldorf
Andrew Butler (N/A)	*GPILS*	*UMBC; role: committee chair*
Janae Baptiste (2017)	Chemistry & Biochemistry	UMBC; role: committee member

Italics indicate the individual finished program without terminal graduate degree; *Selected as UMBC T32 CBI Fellow; ^Indicates Meyerhoff scholar; **Bold and underlined indicates NSF GRF awardee**; &Indicates HHMI Gilliam Scholar

Master's Students

Current

Name	*Department/Program*	*University and Role*
N/A		

Past

Name (Yr. of M.Sc.)	*Department/Program*	*University and Role*
Timothy Cain (2020)	Chemistry & Biochemistry	UMBC; role: committee chair
Nathan Max (2019)	GPILS	UMBC; role: committee chair
Joseph Sparenberg (2019)	Chemistry & Biochemistry	UMBC; role: committee member

Undergraduate Students

Current

Name, (Yrs. mentored), Awards	*University and Role*
Chioma Iheacho^ (2021 – present)	UMBC role: faculty mentor
Toluwani Akinselure$ (2022 – present)	UMBC role: faculty mentor
Noah Diaz Cruz^@ (2022 – present)	UMBC role: faculty mentor
Yassin Elalamy (2022 – present)	UMBC role: faculty mentor

Past

Nna-Emeka Ejimogu^@, (2019 – 2022), URA Recipient (2021)	UMBC role: faculty mentor
Victor Omokehinde^% (2019 – 2020)	UMBC role: faculty mentor
Sean O'Sullivan, (2019 – 2021), URA Recipient (2020)	UMBC role: faculty mentor
Toan Bui, (2017 – 2021), SURE (2019) and URA Recipient (2020)	UMBC; role: faculty mentor
Korliss Britt, (Summer 2019)	UMBC; role: intern mentor
Julia Miller, (Summer 2018), REU National Conference Nominee	UMBC; role: REU mentor
Daniel Romero Figueroa, (2016 – 2017)	UMBC; role: faculty mentor
Tobias Coombs^ (2018)	UMBC; role: faculty mentor
Samantha Harris, (2017 – 2019), SURE Recipient (2018)	UMBC; role: faculty mentor
Richard Linkous, (2016 – 2018), URA Recipient (2017)	UMBC; role: faculty mentor
Ijaz Mohamed, (2016 – 2018), URA Recipient (2017)	UMBC role: faculty mentor
Kenya Platero Lopez, (2016 – 2017)	UMBC; role: faculty mentor

^Indicates Meyerhoff scholar; @Indicates U-RISE scholar; $Indicates STEM Build Scholar; %Indicates LSAMP scholar; **Bold indicates Beckman Scholar**

PUBLICATIONS, PRESENTATIONS, AND CREATIVE ACHIEVEMENTS

Publications

Pre-Prints and Commentaries

33. Van, V.; Ejimogu, N.-E.[#]; Bui, T. S.[#]; and **Smith, A. T.** The structure of an arginyltransferase 1 (ATE1). **2022**. *bioRxiv*. DOI:
32. **Smith, A. T.** Protein arginylation is regulated during SARS-CoV-2 infection. **2022**. *Rapid Reviews:COVID-19*. DOI: 10.1162/2e3983f5.b4da4031
31. Sestok, A. E.*; Brown, J. B.*; Obi, J. O.; O'Sullivan, S. M.[#]; Garcin, E. D.; Deredge, D. J.; and **Smith, A. T.** Biochemical and structural characterization of the fused *Bacteroides fragilis* NFeoAB domain reveals a role for FeoA **2021**. *bioRxiv*. DOI: 10.1101/2021.09.29.462438v1
30. Van, V.; Brown, J. B.; Rosenbach, H.; Mohamed, I.[#]; Ejimogu, N.-E.[#]; Bui, T. S.[#]; Szalai, V. A.; Chacón, K. N.; Span, I.; **Smith, A. T.** Iron-sulfur clusters are involved in post-translational arginylation. **2021**. *bioRxiv*. DOI: 10.1101/2021.04.13.439645
29. **Smith, A. T.** Linkous, R. O.[#]; Max, N. J.; Sestok, A. E.; Szalai, V. A.; Chacón, K. N.; *Escherichia coli* FeoC binds a redox-active, rapidly oxygen-sensitive [4Fe-4S] cluster. **2019**. *ChemRxiv*. DOI: 10.26434/chemrxiv.8411408.v1

Peer-Reviewed Articles and Reviews

28. Van, V.; Ejimogu, N.-E.[#]; Bui, T. S.[#]; and **Smith, A. T.** The structure of *Saccharomyces cerevisiae* arginyltransferase 1 (ATE1). *J. Mol. Biol*. **2022**, *434*, 167816.
27. Cartwright, M.; Van, V.; and **Smith, A. T.** The preparation of recombinant arginyltransferase 1 (ATE1) for biophysical characterization. *Methods Enzymol.* **2022**. In press. DOI: 10.1016/bs.mie.2022.07.036
26. Van, V. and **Smith, A. T**. Reconstitution of the arginyltransferase (ATE1) iron-sulfur cluster. In: *Protein Arginylation: Methods and Protocols, Second Edition*. (Anna Kashina, Ed.). **2022**. In press.[†]
25. Brown, J. B.; Lee, M. A.; and **Smith, A. T.** The NMR structure of *Vibrio cholerae* FeoC reveals conservation of the helix-turn-helix motif but not the cluster-binding domain. *J. Biol. Inorg. Chem.* **2022**, *27*, 485-495.
24. Sestok, A. E.; O'Sullivan, S. O. [#]; and **Smith, A. T.** A general protocol for the expression and purification of the intact transmembrane transporter FeoB. *BBA—Biomembranes*. **2022**, *1864*, 183973.
23. Sestok, A. E.*; Brown, J. B.*; Obi, J. O.; O'Sullivan, S. M.[#]; Garcin, E. D.; Deredge, D. J.; and **Smith, A. T.** A fusion of the Bacteroides fragilis ferrous iron import proteins reveals a role for FeoA in stabilizing GTP-bound FeoB. *J. Biol. Chem.* **2022**, *298*, 101808.
22. Sestok, A. E.; Lee, M.; and **Smith, A. T.** Prokaryotic ferrous iron uptake: exploiting pools of reduced iron across multiple microbial environments. In: *Advances in Environmental Microbiology. Microbial Metabolism of Metals and Metalloids* (Hurst, C. J., ed.). **2022**, *10*, 299-357.
21. Brown, J. B.; Lee, M. A.; and **Smith, A. T.** In and out: recent advancements in membrane-protein mediated prokaryotic ferrous iron transport. *Biochemistry*. **2021**, *60*, 3277-3291.
20. Sánchez-Osuna, M.; Cortés, P.; Lee, M.; **Smith, A. T.**; Barbé, J.; and Erill, I. Non-canonical LexA proteins regulate the SOS response in the Bacteroidetes. *Nucleic Acids Res*. **2021**, *49*, 11050-11066.
    - Article recommended by the Faculty of 1000 (F1000): https://facultyopinions.com/prime/740943184
    - Article promoted by *The Conversation*: https://theconversation.com/viruses-are-both-the-villains-and-heroes-of-life-as-we-know-it-169131

19. Van, V.; Brown, J. B.; Rosenbach, H.; Mohamed, I.[#]; Ejimogu, N.-E.[#]; Bui, T. S.[#]; Szalai, V. A.; Chacón, K. N.; Span, I.; **Smith, A. T.** Iron-sulfur clusters are involved in post-translational arginylation. **2021**. *Nature Comm*. In revision.
18. Cain, T. J. and **Smith, A. T.** Ferric iron reductases and their contribution to unicellular ferrous iron uptake. *J. Inorg. Biochem.* **2021**. *218*, 11407.
17. Van, V. and **Smith, A. T.** ATE1-mediated post-translational arginylation is an essential regulator of eukaryotic cellular homeostasis. *ACS Chem. Biol.* **2020**. *15*, 3073-3085.

16. **Smith, A. T.**; Linkous, R. O.[#]; Max, N. J.; Sestok, A. E.; Szalai, V. A.; Chacón, K. N.; The FeoC [4Fe-4S] cluster is redox-active and rapidly oxygen-sensitive. *Biochemistry*. **2019**. *58*, 4935-4949.
15. Linkous, R.O.[#]; Sestok, A. E.; and **Smith, A. T.** The crystal structure of *Klebsiella pneumoniae* FeoA reveals a site for protein-protein interactions. *Proteins.* **2019**. *87*, 897-903.
14. Sestok, A. E.; Linkous, R. O.[#]; **Smith, A. T.** Toward a mechanistic understanding of Feo-mediated ferrous iron uptake. *Metallomics*. **2018**. *10*, 887-898.[†]
13. **Smith, A. T.** and Sestok, A. E. Expression and purification of functionally active ferrous iron transporter FeoB from *Klebsiella pneumoniae*. *Protein Expr. Purif*. **2018**. *142*, 1-7.
12. **Smith, A. T.**; Ross, M. O.; Hoffman, B. M.; Rosenzweig, A. C. Metal selectivity of a Cd-, Co-, and Zn-transporting P_{1B}-ATPase. *Biochemistry*. **2017**. *56*, 85-95.
11. Hines, J. P.; **Smith, A. T.**; Jacob, J. P.; Lukat-Rodgers, G. S.; Barr, I.; Rodgers, K. R.; Guo, F.; Burstyn, J. N. CO and NO bind to the Fe(II) DGCR8 heme but do not restore primary microRNA processing activity. *J. Biol. Inorg. Chem*. **2016**. *21,* 1021-1035.

Prior to 2016

10. Kathman, S.; Span, I.; **Smith, A. T.**; Xu, Z.; Zhan, J.; Rosenzweig, A. C.; Statsyuk, A. Discovery and structural characterization of covalent inhibitors of Nedd4-1 ubiquitin ligase processivity *J. Am. Chem. Soc.* **2015**. *137*, 12442-12445
9. **Smith, A. T.**, Barupala, D., Stemmler, T. L., and Rosenzweig, A. C. A new metal binding domain involved in cadmium, cobalt, and zinc transport. *Nature Chem. Biol*. **2015**. *11*, 678-684.
8. **Smith, A. T.**[*]; Pazicni, S.[*]; Marvin, K. A.[*]; Stevens, D. J.; Freeman, K. M.; Burstyn, J. N. Functional divergence of heme-thiolate proteins: a classification based on spectroscopic attributes. *Chem. Rev*. **2015**. *115*, 2532-2558.
7. **Smith, A. T.**, Smith, K.P., and Rosenzweig, A. C. Diversity of the metal-transporting P_{1B}-type ATPases. *J. Biol. Inorg. Chem*. **2014** *19*, 947-960.
6. **Smith, A.T.**; Marvin, K.A.; Freeman, K.M.; Kerby, R.L.; Roberts, G.P.; Burstyn, J.N. Identification of Cys^{94} as the distal ligand to the Fe(III) heme in the transcriptional regulator RcoM-2 from *Burkholderia xenovorans*. *J. Biol. Inorg. Chem.* **2012**, *17*, 1071-1082.
5. **Smith, A.T.**; Su, Y.; Stevens, D. J.; Majtan, T.; Kraus, J.P.; Burstyn, J.N. Effect of the disease-causing R266K mutation on the heme and PLP environments of the human enzyme cystathionine β-synthase. *Biochemistry* **2012**, *51*, 6360-6370.
4. Barr, I.; **Smith, A.T.;** Chen, Y.; Senturia, R.[#]; Burstyn, J.N.; Guo, F. Ferric, not ferrous, heme activates RNA-binding protein DGCR8 for primary microRNA processing. *Proc. Natl. Acad. Sci. U.S.A.* **2012**. *109*, 1919-1924.
3. Barr, I.; **Smith, A.T.**; Senturia, R.[#]; Chen, Y.; Burstyn, J.N.; Guo, F. DiGeorge Critical Region 8 (DGCR8) is a double-cysteine-ligated heme protein. *J. Biol. Chem.* **2011**, *286*, 16716-16725.
2. **Smith, A.T.**; Majtan, T.; Freeman, K.M.; Su, Y.; Kraus, J.P.; Burstyn, J.N. Cobalt cystathionine β-synthase: a cobalt-substituted heme protein with a unique thiolate ligation motif. *Inorg. Chem.* **2011**, *50*, 4417-4427.
1. Majtan, T.; Freeman, K.M.; **Smith, A.T.**; Burstyn, J.N.; Kraus, J.P. Purification and characterization of cystathionine beta-synthase bearing cobalt protoporphyrin. *Arch. Biochem. Biophys.* **2011**, *508*, 25-30.

Articles and Reviews In Preparation

4. Paredes, A.; Brown, J. B.; and **Smith, A. T.** The structure and metal-binding properties of the *Pseudomonas aeruginosa* iron- and quorum-sensing two-component system protein BqsR. **2022**. (In preparation)
2. Szalai, V. A. and **Smith, A. T.** Characterization of the membrane ferric reductase from *Shewanella oneidensis*. **2022**. (In preparation)
1. **Smith, A. T.**; Linkous, R. O. [#]; Sestok, A. E.; Szalai, V. A.; Chacón, K. N.; Reexamination of the *Klebsiella pneumoniae* FeoC [Fe-S] Cluster. **2022**. (In preparation)

[#] *Indicates undergraduate authors;* [*] *Indicates equal contributions of these authors;* [†] ***Selected as journal and/or book cover article***

Presentations

Conference/Poster Presentations

Non-juried/Refereed

23. (Mark Lee) and Aaron T. Smith "Purification and functional analysis of the ferrous iron transport protein B (FeoB) incorporated into SMA-copolymer nanodiscs" Experimental Biology Conference 2022. Poster presentation. Philadelphia, Pennsylvania. **April 2022**
22. (Verna Van), Nna-Emeka Ejimogu, Toan Bui, and Aaron T. Smith "Structural investigations of arginyltransferases" Experimental Biology Conference 2022. Poster presentation. Philadelphia, Pennsylvania. **April 2022**
21. (Nna-Emeka Ejimogu), Verna Van, and Aaron T. Smith "Sequence Conservation and Structural Modeling of an Arginyl-tRNA Transferase 1 (ATE1)" Experimental Biology Conference 2021. Virtual poster presentation. **April 2021**
20. (Verna Van) and Aaron T. Smith "Structural modeling and biophysical characterization of arginyl-tRNA transferase (ATE1)" Experimental Biology Conference 2021. Virtual poster presentation. **April 2021**
19. (Kelly N. Chacón) and Aaron T. Smith "Bioinorganic Investigations of Tellurium Detoxification in Bacteria" Metals in Biology Gordon Research Conference. Poster presentation. Ventura, California. **January 2020**
18. (Aaron T. Smith), Alexandrea E. Sestok, Richard O. Linkous, Nathan J. Max, Veronika A. Szalai, and Kelly N. Chacón "Characterization of the Ferrous Iron Transport Protein C (FeoC)" Metals in Biology Gordon Research Conference. Poster presentation. Ventura, California. **January 2020**
17. (Alexandrea E. Sestok), Sean O'Sullivan, and Aaron T. Smith "Toward a Mechanistic Understanding of Feo-Mediated Ferrous Iron Uptake" Bioinorganic Gordon Research Seminar. Poster presentation. Ventura, California. **January 2020**
16. (Verna Van), Ijaz R. Mohamed, Toan Bui, Kelly N. Chacón, and Aaron T. Smith. "Spectroscopic, biophysical, and functional studies of *Saccharomyces cerevisiae* arginine tRNA transferase 1 (ATE1)" Metallotherapeutics Symposium. Poster presentation. Baltimore, Maryland. **November 2019**
15. (Alexandrea E. Sestok), Sean O'Sullivan, and Aaron T. Smith "Toward a Mechanistic Understanding of Feo-Mediated Ferrous Iron Uptake" Metallotherapeutics Symposium. Poster presentation. Baltimore, Maryland. **November 2019**
14. (Alexandrea E. Sestok), Richard O. Linkous, and Aaron T. Smith "The Ferrous Iron Uptake (Feo) System: Investigating Interactions Between FeoA and FeoB" CanBIC-7. Poster presentation. Parry Sound, Ontario, Canada. **May 2019**
13. (Verna Van), Ijaz R. Mohamed, Toan Bui, Kelly N. Chacón, and Aaron T. Smith. "Spectroscopic, biophysical, and functional studies of *Saccharomyces cerevisiae* arginine tRNA transferase 1 (ATE1)" CanBIC-7. Poster presentation. Parry Sound, Ontario, Canada. **May 2019**
12. (Alexandrea E. Sestok), Richard O. Linkous, and Aaron T. Smith "The Ferrous Iron Uptake (Feo) System: Investigating Interactions Between FeoA and FeoB" FCBIS 12. Poster presentation. NIH, Bethesda, MD. **May 2019**
11. (Verna Van), Ijaz R. Mohamed, Toan Bui, and Aaron T. Smith. "Crystallization and characterization of *Saccharomyces cerevisiae* arginine tRNA transferase (ATE1)" FCBIS 12. Poster presentation. NIH, Bethesda, MD. **May 2019**.
10. (Alexandrea E. Sestok), Richard O. Linkous, and Aaron T. Smith "The Ferrous Iron Uptake (Feo) System: Investigating Interactions Between FeoA and FeoB" Metals in Biology Gordon Research Seminar. Poster presentation. Ventura, California. **Jan. 2019**
9. (Verna Van), Ijaz R. Mohamed, Toan Bui, and Aaron T. Smith. "Crystallization and characterization of *Saccharomyces cerevisiae* arginine tRNA transferase (ATE1)" Biochemistry and Molecular Biology Retreat. Poster presentation. University of Maryland School of Medicine, Baltimore, Maryland. **Jan. 2019**.

8. (Julia M. Miller), Alexandrea E. Sestok, and Aaron T. Smith "Purification and Crystallization of *Porphyromonas gingivalis* NFeoAB" National REU Symposium. Poster presentation. Alexandria, Virginia. **Oct. 2018**.
7. Ijaz R. Mohamed, Andrew F. Butler, Kelly N. Chacón, and (Aaron T. Smith) "Unexpected Binding of an [Fe-S] Cluster by a Eukaryotic Arginine Transferase" Frontiers in Metallobiochemistry. Poster presentation. Pennsylvania State University, State College, Pennsylvania. **June 2018**.
6. Alexandrea E. Sestok, Richard O. Linkous, and (Aaron T. Smith) "Efforts Towards Understanding Feo-Mediated Ferrous Iron Transport" Metals in Biology Gordon Research Conference and Seminar. Poster presentation. Ventura, California. **Jan. 2018**.
5. (Alexandrea E. Sestok), Richard O. Linkous, and Aaron T. Smith "The Ferrous Iron Uptake (Feo) System: Investigating Interactions Between FeoA and FeoB" Graduate Research Conference. University of Maryland, Baltimore County, Baltimore, Maryland. **March 2018**.
4. (Aaron T. Smith), Matthew O. Ross, Brian M. Hoffman, and Amy C. Rosenzweig "Determinants of Metal Selectivity of a Cd-, Co-, and Zn-transporting P_{1B}-ATPase" Metals in Biology Gordon Research Conference and Seminar. Poster presentation. Ventura, California. **Jan. 2016**.
3. (Aaron T. Smith) and Amy C. Rosenzweig "Role of the N-terminal Metal-Binding Domain of the Cd-, Co-, and Zn-Transporting P_{1B}-ATPase CzcP" Frontiers in Metallobiochemistry. Poster presentation. Pennsylvania State University, State College, Pennsylvania. **June 2014**
2. (Aaron T. Smith), Tomas Majtan, Katherine M. Freeman, Matthew J. Scheske, Jan P. Kraus, Judith N. Burstyn "The Effect of the Disease-Causing R266K Mutation on the Heme and PLP Environments of the Human Enzyme Cystathionine β-Synthase" 15th International Conference on Bioinorganic Chemistry. Poster presentation. Vancouver, British Columbia. **Aug. 2011**.
1. (Aaron T. Smith), Katherine M. Freeman, Tomas Majtan, Yang Su, Jan P. Kraus, Judith N. Burstyn "Cobalt Cystathionine β-Synthase: A Cobalt-Substituted Heme Protein with a Unique Thiolate Ligation Motif" Chemistry & Biology of Tetrapyrroles Gordon Research Conference. Poster presentation. Newport Rhode Island. **July 2010**.

Other Professional Presentations

Invited Lectures and Seminars

27. "Structural and Regulatory Elements of Post-Translational Arginylation." Departmental seminar. Boston University, Department of Chemistry. Boston, Massachusetts. **April 2022**.
26. "A New Regulatory Element of Post-Translational Arginylation." Oral presentation. Experimental Biology (EB) 2022, Philadelphia, Pennsylvania. **April 2022**.
25. "Structural and Regulatory Elements of Post-Translational Arginylation." HHMI/U-RISE seminar. University of Maryland, Baltimore County, Baltimore, Maryland. **March 2022**.
24. "Structural and Regulatory Elements of Post-Translational Arginylation." Departmental seminar. University of Texas—Dallas, Department of Chemistry and Biochemistry. Dallas, Texas. **January 2022**.
23. "Feo-Mediated Prokaryotic Ferrous Iron Transport: The Delicate Dance of FeoA and FeoB." Oral presentation. Cell Biology of Metals Gordon Research Conference. Mt. Snow, Vermont. **October 2021**.
22. "The ABCs of Pathogenic Ferrous Iron (Fe^{2+}) Acquisition." Departmental seminar. Cornell University, Department of Microbiology, Ithaca, New York. **October 2021**.
21. "Structural and Regulatory Elements of Post-Translational Arginylation." Departmental seminar. University of Maryland, Baltimore County, Department of Chemistry and Biochemistry, Baltimore, Maryland. **October 2021**.
20. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation." Institutional seminar. Aix Marseille Université, Laboratoire Information Génomique et Structurale (IGS), Marseille, France. **June 2021**.
19. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation." Oral presentation. 13th Frontiers at the Chemistry-Biology Interface Symposium (FCBIS), University of Maryland, College Park, Department of Chemistry and Biochemistry, College Park, Maryland. **May 2021**.

18. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation." Departmental seminar. University of Maryland, Baltimore, Department of Pharmaceutical Sciences, Baltimore, Maryland. **April 2021**.
17. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation." Departmental seminar. University of Wisconsin—Madison, Department of Chemistry, Madison, Wisconsin. **April 2021**.
16. "The ABCs of Pathogenic Ferrous Iron (Fe^{2+}) Acquisition." Departmental seminar. Washington University, Department of Chemistry, St. Louis, Missouri. **September 2020**.
15. "The ABCs of Pathogenic Ferrous Iron (Fe^{2+}) Acquisition." Departmental seminar. Lehigh University, Department of Chemistry, Bethlehem, Pennsylvania. **February 2020**.
14. "Characterization of the Ferrous Iron Transport Protein FeoC." Metallotherapeutics Symposium. University of Maryland, School of Pharmacy, Baltimore, Maryland. **November 2019**.
13. "The ABCs of Pathogenic Ferrous Iron (Fe^{2+}) Acquisition." Departmental seminar. George Mason University, Department of Chemistry and Biochemistry, Fairfax, Virginia. **October 2019**.
12. "The ABCs of Pathogenic Ferrous Iron (Fe^{2+}) Acquisition." Departmental seminar. University of Delaware, Department of Chemistry and Biochemistry. Newark, Delaware, **September 2019**.
11. "*Escherichia coli* FeoC binds an oxygen-sensitive, redox-active [4Fe-4S] cluster." 19th International Conference on Bioinorganic Chemistry. Oral presentation. Interlacken, Switzerland. **August 2019**.
10. "Little Proteins, Big World: Investigating the roles of FeoA and FeoC in Pathogenic Ferrous Iron Acquisition" Young Researchers Conference (YRC). Oral presentation and plenary lecture. Texas A&M University. College Station, Texas. **June 2019**.
9. "Ironing Out Protein-Protein Interactions of the Ferrous Iron Transport (Feo) System" Mid-Atlantic Regional ACS Meeting. Oral presentation. UMBC, Baltimore, Maryland. **May 2019**.
8. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation" Biochemistry and Molecular Biology Retreat. Oral presentation. University of Maryland School of Medicine, Baltimore, Maryland. **Jan. 2019**.
7. "Iron-Sulfur Clusters are Involved in Post-Translational Arginylation" Departmental seminar. The George Washington University, Department of Chemistry, Washington D.C. **Dec. 2018**.
6. "Ironing Out Pathogenic Ferrous Iron Acquisition" Departmental seminar. University of Maryland School of Medicine, Department of Biochemistry and Molecular Biology, Baltimore, Maryland. **Dec. 2017**.
5. "Structure and Mechanism of Pathogenic Ferrous Iron Acquisition" NIH New Faculty in Organic and Biological Chemistry. Oral presentation. Kansas City, Missouri. **June 2017**.
4. "Fe(II) Transport in Pathogenic Bacteria: the Difference One Electron Makes" Biochemistry and Molecular Biology Retreat. Oral presentation. University of Maryland School of Medicine, Baltimore, Maryland. **Jan. 2017**.
3. "The ABCs of P_{1B}s" Departmental seminar. University of Maryland, Baltimore County, Department of Chemistry and Biochemistry. Baltimore, Maryland. **April 2016**.
2. "The ABCs of P_{1B}s" Departmental seminar. University of Arizona, Tucson, Department of Chemistry and Biochemistry. Tucson, Arizona. **Feb. 2016**.
1. "Characterization of a Novel Metal Binding Domain Involved in Cadmium, Cobalt, and Zinc Transport" Metals in Biology Gordon Research Conference and Seminar. Oral presentation. Ventura, California. **Jan. 2015**.

Upcoming

1. Departmental seminar. Temple University, Department of Chemistry. **October 2022**.
2. Departmental seminar. Ball Statue University, Department of Chemistry. **Fall 2022**.
3. Departmental seminar. Johns Hopkins University, Department of Biochemistry and Molecular Biology. **February 2023**.
4. Departmental seminar. University of Maryland, Baltimore County, Departmental of Biology. **Spring 2023**.

SERVICE TO THE DEPARTMENT, UNIVERSITY, COMMUNITY AND PROFESSION

Service to the Department

2022 – Present	Biochemistry Undergraduate Teaching Committee (UMBC). Role: Committee Member.
2021 – 2022	Biochemistry Teaching Division (UMBC). Role: Teaching Unit Head (Assoc. Prof. Songon An, normal Teaching Unit Head, on sabbatical)
2021	Dept. of Chemistry and Biochemistry Assistant Professor of Organic Chemistry/Toxicology Recruitment *ad hoc* Committee (UMBC). Role: Committee Member.
2020	Dept. of Chemistry and Biochemistry Online Assessment *ad hoc* Committee (UMBC). Role: Committee Member.
2019	Dept. of Chemistry and Biochemistry New Chair Search *ad hoc* Committee (UMBC). Role: Committee Member.
2019	Dept. of Chemistry and Biochemistry Assistant Professor of Biochemistry Recruitment *ad hoc* Committee (UMBC). Role: Committee Member.
2019 – Present	LGBTQ+ SafeZone Trained (UMBC). Role: LGBTQ FSA SafeZone Member.
2019	Dept. of Chemistry and Biochemistry Seventh Year Review Graduate Student Concerns *ad hoc* Committee (UMBC). Role: Committee Member.
2019	Dept. of Chemistry and Biochemistry Seventh Year Review Scholarship Preparation *ad hoc* Committee (UMBC). Role: Committee Member.
2018	Dept. of Chemistry and Biochemistry Seventh Year Review *ad hoc* Committee (UMBC). Role: Committee Member.
2018	Dept. of Chemistry and Biochemistry Pre-Faculty Recruitment *ad hoc* Committee (UMBC). Role: Committee Member.
2017	Dept. of Chemistry and Biochemistry Assistant Professor of Analytical Chemistry Recruitment *ad hoc* Committee (UMBC). Role: Committee Member.
2016 – 2021	Dept. of Chemistry and Biochemistry Graduate Recruitment Committee (UMBC). Role: Committee Member.
2016 – Present	Dept. of Chemistry and Biochemistry CHEM 101H (UMBC). Role: Guest Lecturer.

Service to the University

2022 – Present	Chemistry-Biology Interface (CBI) Program. Role: Director
2020 – 2022	Chemistry-Biology Interface (CBI) Program. Role: Assistant Director
2019 – Present	Permanent member of the UMB-UMBC Joint Biochemistry & Molecular Biology Program (GPILS) Governing Board. Role: Governing Member.
2018 – Present	University of Maryland, School of Pharmacy Metallotherapeutics Research Center. Role: Laboratory Member.
2018 – 2019	*Ad hoc* member of the UMB-UMBC Joint Biochemistry & Molecular Biology Program Governing Board. Role: Governing Member.
2018	Graduate Research Conference (UMBC). Role: Judge.
2016 – Present	LGBTQ+ Faculty-Staff Association (UMBC). Role: Association Member.
2016 – Present	UMB-UMBC Joint Biochemistry & Molecular Biology Program. Role: Faculty Member
2016	Undergraduate Research Symposium (UMBC). Role: Judge.

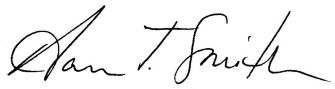
Service to the Community and the Profession

2022	American Chemical Society Division of Biological Chemistry Fall National Meeting, Chicago, Illinois. Role: Session Chair
2020	FCBIS 13 Poster Judge
2020 – Present	American Chemical Society Division of Biological Chemistry Executive Committee. Role: Alternate Councilor
2020 – 2021	AAAS Science & Technology Policy Fellowship Committee. Role: Committee Member
2020 – Present	Proposal reviewer for SSRL Bio XAS/Single Crystal XAS Beamtime Requests
2020 – Present	Proposal reviewer for NSF Chemistry of Life Processes (CLP) division
2019 – Present	American Society for Biochemistry and Molecular Biology. Role: Member.
2019	FCBIS 12. Role: Session Chair
2018 – 2019	NIH Early Career Reviewer Program. Role: Participant.
2018	Metals in Biology Power Hour “Nurturing Inclusivity” Session. Role: Session Leader
2016 – 2020	American Heart Association. Role: Member.
2016 – Present	Society of Biological Inorganic Chemistry. Role: Member.
2012 – Present	American Chemical Society. Role: Member.

Volunteer Reviewer for the following scientific journals: *ACS Chemical Biology*; *Analytical Biochemistry; Archives Biochem. Biophys.; Biochemistry*; *Biometals*; *Communications Biology; Front. Cell Develop. Biol.*; *Inorganic Chemistry*; *J. Am. Chem. Soc.*; *J. Mol. Biol.; J. Inorg. Biochem.; Molecules; Scientific Reports*

Guest editor for the following scientific journals: *PNAS*

I certify that this document is accurate and true.



Aaron T. Smith Date: October 4, 2022