Kagya A. Amoako, Ph.D.

Tenure Track Assistant Professor	Biomedical Engineering, August 2014-date
Founding Director	Biomedical Engineering Graduate Program (45 Students Total, 6 graduates with full time employment)
Founding Director	Biomaterials and Medical Device Innovation Lab
University Research Scholar	University of New Haven (UNH), West Haven CT

Office Address

Department of MIBE
University *of* New Haven, CT
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Faculty Profile http://www.newhaven.edu/faculty-staff-profiles/kagya-amoako.php
GoogleScholar https://scholar.google.com/citations?user=P0juveoAAAAJ&hl=en&oi=ao
Research http://www.unhbmdilab.com/research

Education & Training

BS, Physics with Eng Emphasis	Delaware State University	9/00-5/04
BS, Mathematics	Delaware State University	9/00-5/04
MSE, Mechanical Engineering	University of Michigan	9/04-12/06
MSE, Biomedical Engineering	University of Michigan	12/06-5/08
PhD, Biomedical Engineering	University of Michigan	12/08-12/11
Postdoctoral Training	University of Michigan	12/1107/13
Postdoctoral Training	University of Washington	07/13-06/14

Ph.D. Thesis title: "Nitric Oxide Therapies for Local Inhibition of Platelets' Activation on Blood-Contacting Surfaces"
Ph.D. Thesis Advisors: Dr. Keith Cook (Carnegie Mellon Univ., Biomedical Eng.) Dr. Robert Barttlet (Univ. of Michigan, Surgery), Dr. Joe Bull (Tulane Univ., Biomedical Engineering), Dr. Mohamed EH El-Sayed (Eli Lilly)

Postdoctoral Training: Surface Modification, Chemical Engineering.
Postdoctoral Advisors: Dr. Shaoyi Jiang (University of Washington, Seattle) and Dr. Keith Cook (Carnegie Mellon University)

Professional Milestones

Founding Director, MS-BME program at Univ. of New Haven 08/14 – present

- Conducted program feasibility studies using professional services
- Developed curriculum for grad. Program in Biomed. Eng.
- Obtained Institution and State approval for the program
- Created marketing material content for program
- Developed BME program courses
- Developed a comprehensive course assessment plans
- Created program assessment plans
- Recruited students into the program
- Performs academic advising
- Organized professional development events for students
- Recruited BME faculty into the program
- Program Budget Oversight .

- A total of 45 MS-BME students have been trained so far, 6 have graduated at 80% full-time employment rate

Founding Director, Biomaterials and Medical Device Innovation Lab 05/15-present

- Laboratory instrument identification, procurement and installation
- Organization of lab safety protocols
- Establishing research directions of the lab
- Organization for research supply purchasing
- Organization of an electronic hub for storage of lab resources and products
- Building and maintenance of lab website (www.unhBMDiLab.com)
- Training of undergraduate and graduate students

Founder & Coordinator, Biomedical Engineering Advisory Board 05/15-present

- Developed Mission of the Board
- Recruited Board Members
- Coordinated Board Chair Elections
- Set Board Meeting Agenda
- Handle Board Communications
- Coordinate Board Meetings, 6 meetings total to date.

Chaired Tenure Track BME Faculty Search Committee 9/17-03/18

- Prepared Solicitation Announcement
- Organized Candidate Application Materials
- Developed Applicant Evaluation Rubric
- Organized Committee Meetings and Agenda
- Coordinated Faculty Candidate on-Campus Visit and Job Talks

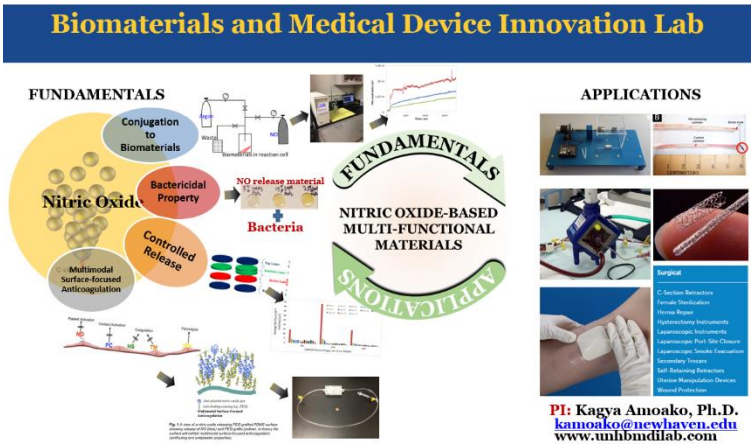
Keynote Speaker, Frontiers in Matl. Sc. for the 21st Century, Symposium. 05/17

Teaching Experience

Biomedical Engineering Seminar	2016-present
Biomaterials and Device Applications	2018
BioSensors and Instrumentation	2017
Advanced Engineering Mathematics	2015-present
Thermal Fluid Science	2015-present
Innovation Discovery in Biomedical Engineering	2017-present
College Algebra	2003
Calculus I and II	2004
Anatomy and Physiology, Physics	2013

Research Interests

The need for implantable devices for the treatment and support of patients is ever increasing, yet their interactions with blood or tissue often lead to complications that increase morbidity and in some cases mortality. When they interact with blood, they can activate the blood into clots and result in embolic complications in the brain, lungs, heart, and peripheries. We see these manifest as stroke, heart attack, deep vein thrombosis, etc. On the other hand because we don't live in a sterile world, these devices can get contaminated with microbial organisms during implantation even against best sterile protocols in the operating room and result in both local and systemic infections.



An objective of the BMDiLab (www.unhbmdilab.com) is to fully understand the interactions between biomaterials that make up the surfaces of the devices and blood, microbial organisms (bacteria), tissue and develop new materials that prevent device-related clot formation and infections. These materials are being designed to present anti-blood adhesion coatings and to release biological agents including nitric oxide (NO), a biological molecule which won molecule of the year in 1992 for its multifaceted biological actions. Our inquiry questions include: how to effectively conjugate NO to biomaterials, how to effectively store and control its release, how to synergize NO with other anti-adhesion coatings, how to effectively incorporate these fundamental knowledge into model devices and test for their safety and efficacy for commercialization.

Active research projects include:

- Cytocompatibility of bactericidal levels of nitric oxide released by polymers
- Anti-fouling activity of super-low fouling zwitterionic polymer coating under flow conditions
- Controlled nitric oxide release for wound dressing and dermal applications
- Model nitric oxide releasing medical devices development and testing (catheters, grafts, artificial lungs)

Other areas of interest:

- Low cost prosthetic arm development
- Impact analysis platform for evaluating football helmet-Chronic traumatic encephalopathy application

Contributions to Science

My research career has focused on improving the biocompatibility of blood-contacting devices used to provide life support. Over the past decade, I have investigated methods for improving device biocompatibility at the blood/biomaterial interface. I have used bioinspired methods of anticoagulation as a template for surface-focused inhibition of clot formation on artificial surfaces and also evaluating bactericidal property of nitric oxide to determine its cytocompatible levels. I have advanced the field of functional devices by fabricating and functionalizing the surfaces of artificial lungs and pediatric catheters with anti-platelet nitric oxide release and anti-fouling zwitterionic coatings, which healthy blood vessels use to control coagulation. My doctoral work resulted in the first prototype of an anti-platelet nitric oxide generating artificial lung. I developed the hollow fiber modification for NO generation and anticoagulation testing concepts. My body of work relevant to "Surface-Focused bioinspired function for Improved Biocompatibility" can be summarized as follows:

a. **Amoako KA**, Cook KE. Nitric oxide-generating silicone as a blood-contacting biomaterial. *ASAIO J.* **2011** Nov-Dec;57(6):539-44. PubMed PMID: 22036723; PubMed Central PMCID: PMC3236560.

b. **Amoako KA**, Archangeli C, Handa H, Major T, Meyerhoff ME, et al. Thromboresistance characterization of extruded nitric oxide-releasing silicone catheters. *ASAIO J.* **2012** May-Jun;58(3):238-46. PubMed PMID: 22395119; PubMed Central PMCID: PMC3805133.

c. **Amoako KA**, Montoya PJ, Major TC, Suhaib AB, Handa H, et al. Fabrication and in vivo thrombogenicity testing of nitric oxide generating artificial lungs. *J Biomed Mater Res A.* **2013** Dec;101(12):3511-9. PubMed PMID: 23613156; PubMed Central PMCID: PMC3812367.

d. Gupta S, **Amoako KA**, Suhaib A. Multi-modal, surface focused anticoagulation using poly-2-methoxyethylacrylate polymer grafts and surface nitric oxide release. *Advance Material Interfaces*. **2014**; 1(8).

e. **Amoako KA**, et al. "Multimodal, Biomaterial-Focused Anticoagulation via Superlow Fouling Zwitterionic Functional Groups Coupled with Anti-Platelet Nitric Oxide Release." *Advanced Materials Interfaces* (**2016**).

f. Andrew Belanger, Andre Decarmine, Shaoyi Jiang, Keith Cook, and **Amoako KA,** Evaluating the Effect of Shear Stress on Graft-To Zwitterionic Polycarboxybetaine Coating Stability Using a Flow Cell *Langmuir* **2018** Article ASAP DOI: 10.1021/acs.langmuir.8b03078

g. Gbyli R, A Mercaldi, H Sundaram, **Amoako KA**. Achieving Totally Local Anticoagulation on Blood Contacting Devices. *Advanced Materials Interfaces* **2018;** doi: 10.1002/admi.201700954

h. Gbyli R, Zito C, **Amoako KA**. In vitro cytocompatibility of antibacterial levels of polymer nitric oxide release. *Eng Press.* **2018**; 2(1): 66-72. doi: 10.28964/EngPress-2-113

A complete list of works in my bibiliography can be found through the link below.
http://www.ncbi.nlm.nih.gov/sites/myncbi/kagya.amoako.1/bibliography/47516403/public/?sort=date&direction=ascending.

Completed or Obtained Research Support

NASA CT Space Grant Consortium 2016
Amoako, Kagya (PI)
Developing Anti-Bacterial Surfaces for Preventing "Sick" Spacecrafts.
Role: PI

University of New Haven Research Fund 2015
Amoako, Kagya (PI)
Flow cell apparatus for screening medical coatings
Role: PI

University of New Haven Summer Research Grant 2015
Amoako, Kagya (PI)
Stability testing of polyCBMA medical coating
Role: PI

University of New Haven Summer Undergraduate Research Fund 2015
Amoako, Kagya (PI)
Fouling studies of polyCBMA coatings
Role: PI

2014/01/07-2014/01/07
NIH 1 F32 HL 124862-01, National Heart Lung and Blood Institute
Amoako, Kagya (PI)
Surface-Focused Anticoagulation
Leveraging synergy of antiplatelet nitric oxide release and antifouling coatings to reduce thrombosis. Due to a change in status from Postdoctoral Fellow to Assistant Professor, I had to withdraw my application and

therefore the receipt of its award monies.
Role: PI

1996/09/30-2013/07/31
T32 HL007853-15, National Heart, Lung and Blood Institute (NHLBI)
Pinsky, David J. (PI)
Multidisciplinary Cardiovascular Research Training
Role: TA

1996/09/30-2013/03/31
T32 HL007853-14, National Heart, Lung and Blood Institute (NHLBI)
Pinsky, David J. (PI)
Multidisciplinary Cardiovascular Research Training
Role: TA

2006/01/01-2011/01/01
N/A, NIH/NHLBI
Dr. Robert Bartlett (PI)
Developing total Artificial Lung
Role: GR

2002/01/01-2004/01/01
N/A, NIH/NIGMS/MORE
Dr. Fatma Helmy (PI)
Minority Access to Research Careers-Undergraduate Student Training in Biomedical Research
Role: UGS

Ongoing Research Support

University of New Haven University Research Scholar 2016
Amoako, Kagya (PI)
Bactericidal NO release exploration
Role: PI

Service

1. **Academic**
    - BME program coordination (UNH) 2014-present
    - Graduate Council Member (UNH)
    - Institutional Review Board Member (UNH)
    - Coordination of BME Advisory Board (UNH)
    - Organizing Professional Development workshops for Students (UNH)
    - Graduate Student Academic Advisement (UNH)
    - Undergraduate and Graduate Student Research Training (UNH)

2. Professional

Journal Reviewer

- Reviewer, Annals of Biomedical Engineering (ABME) 2011-present
- Reviewer, Amer. Soc. of Artif. Internal Organs (ABME) 2011-present
- Reviewer, The 2nd International Conference on Biomedical Engineering and Biotechnology (ICBEB 2013) 2013
- Reviewer, Advanced Healthcare Materials 2018-present
- Reviewer, Advanced Materials Interfaces 2017-present
- Reviewer, Small 2018-present
- Reviewer, Polymers 2017-present

Society for Biomaterials Conference Abstract Reviewer 2017-present
Biomedical Engineering Society National Conference Abstract Reviewer 2018-present

Volunteering

- Connecticut Science fair Judge 2018
- KidWind Innovation Challenge Judge, National Society of Black Engineers 2016
- American Society for Artificial Internal Organs Blood-Contacting Surfaces, Session Co-chair 2013-2013
- Claegue Middle School Tutoring, Ann Arbor MI 2007-2007
- DAPCEP - Detroit Area Pre College Engineering Program 2006-2006

Honors and Awards

University of New Haven Research Scholar Fellowship 2016-2019
Connecticut Space Grant Consortium Research Assistant Grant (my student) 2016
Connecticut Space Grant Consortium Faculty Research Grant 2016
University of New Haven Summer Research Grant 2015
University of New Haven Research Fund 2015
University of New Haven Summer Undergraduate Research Fund 2015
NIH F32 Postdoctoral Research Training Award (Withdrew) 2014
NIH T32 Postdoctoral Research Training Award 2012
Outstanding Student Contribution to the Society for Biomaterials 2011
National Heart Lung and Blood Institution Supplementary Grant 2007
Best 1st year student (Eng. Res. Center for Reconfigurable Mfg. Systems), U of M, Ann Arbor 2005
NSF GRS Award Fellowship (honorary mention) 2005
Rackham merit fellowship, Univ. of Michigan 2004
Annual Biomedical Research Conference for Minority Symposium presentation-1st place, San Diego, CA. 2004
Summa Cum Laude (BS dual-degree), Delaware State Univ. 2004
Minority Access to Research Careers (NIH Grant) Award, Delaware State University 2002

Membership in Professional Societies

American Society of Artificial Internal Organs 2009-present
Society for Biomaterials 2010-present
Biomedical Engineering Society 2011-present
National Society of Black Engineers 2009-present
American Heart Association 2009-present

Research Mentorship of Students

Undergraduate Research Opportunities Program, Univ. of Michigan			
Mentor position	Student/level of education	Mentorship Duration	Current Position
Graduate student :	Nithya Vijayakumar	2013-2013	
	Mohamed Ghandour	2011-2011	Project Manager, Visrex
	Nina Abani	2010-2011	Material Science Engineer, Nissan Motor Corp.
	Joshi Tejas	2010-2010	Business Optimization Analyst, Micro Focus
	Mary Kruez	2010-2010	Science Teacher, Springfield High School
	Tony Halyateem	2010-2010	
	Extracorporeal Life Support Lab, Univ. of Michigan		
	Surbhi Gupta	2011-2014	
	Ahmed Suhaib	2011-2014	Regulatory Affairs Associate, Zimmer Biomet
	Summer Research Opportunities Program, Univ. of Michigan:		
	Christian Paul	2005-2005	Lab Analyst, RSR Technologies
	Michael Daugomah	2005-2005	
	Darnell Cowan	2005-2005	Project lead, NASA

Undergraduate Research Opportunities Program, Univ. of Michigan			
Mentor position	Student/level of education	Mentorship Duration	Current Position
Principal Investigator	Rana Gbyli/grad. student	2015--2017	Yale, hematology res.
	Chengde Cui/grad. student	2016-2018	
	James Fasano/grad. student	2016-2018	Pfizer, Scientist
	Brittney Sevirino	2016-2018	Medtronic, Quality Ass.
	Saleem haj Sanour/grad. student	2016-present	Medtronic, Quality Ass.
	Hienrick Kufeldt/grad. student	2016-present	Res. Asst, BMDiLab
	Jani Chinmay/grad. student	2016-2017	Pratt and Whitney
	Ashley Widing/grad student	2010-present	Res. Asst, BMDiLab
	Esther Dronyi/grad. student	2017-2018	Res. Asst, BMDiLab
	Rui Yang/grad. student	2017-Present	Res. Asst, BMDiLab
	Brady Reynolds/grad. student	2018-Present	Res. Asst, BMDiLab
	Andrew Belanger/undergrad student	2017	Design Eng. Ward Leonard
	Pasquale Colepietro/undergrad student	2017	Encon Heating
	Cameron Brouilard/undergrad student	2017	Gen. Dynamics Electric Boat
	Andre Decarmine/undergrad student	2017	CT Refining Co.
	Igor Pachenco/undergrad student	2017-present	Res. Asst, BMDiLab
	Abigail Slanski/High School student	2018-present	Res. Asst, BMDiLab

Supervised Research Topics

Rana Gbyli, M.S.	*Title:* **Development of Bactericidal Nitric Oxide-Releasing Polydimethylsiloxane**
Mechanical Senior Design Team Project	*Title:* **Development of Catheter Casting Platform**
Andrew Belanger, B.S.	*Title:* **Anti-Fouling Coating Activity under Flow**
Rana Gbyli, M.S.	*Title:* **Cytocompatibility Evaluation of Antibacterial Nitric Oxide Levels**
Brittney Severino, M.S.	*Title:* **Platform for Developing Nitric Oxide Eluting Stents**
Saleem Haj Ibrahim, M.S.	*Title:* **Developing Stable, Tunable and Bioinspired Nitric Oxide Releasing Biomaterials**
Jani Chinmay	*Title:* **PeGylation of polydimethylsiloxane and Surface Characterization**
Brady Reynolds	*Title:* **Characterization of Impact Forces on Football Helmets**
Chengde Cui, M.S. **Application**	*Title:* **Smart ECG (Electrocardiogram) Device and Android**
Brian Tatro, M.S. **Fabrication**	*Title:* **Low Cost Global Impact Prosthetic Arm Design and**

Scientific Employment

Research Assistant — 01/02 – 12/02
Ballistics Research Lab
Department of Mathematics
Delaware State University

Summer Intern — 6/03 – 8/03
Reconfigurable Manufacturing Research
Center for Reconfigurable Manufacturing Systems
Mechanical Engineering, University of Michigan Ann Arbor

Graduate Student Research Assistant
Medical Science Research Building, Univ. of Michigan — 8/04 – 12/06
Extracorporeal Life Support Lab, Univ. of Michigan — 01/07 – 12/11

NIH T32 Postdoctoral Research Fellow — 01/12 – 08/14
Internal Medicine, Cardiology,
University of Michigan, Ann Arbor

Supervised Consulting Jobs

Research Assistant — 01/09 – 01/11
MedArray Incorporated
Material biocompatibility Test
Ann Arbor MI

Research Assistant — 09/09 – 11/09

Terumo Cardiovascular Systems
Ann Arbor MI

Research Assistant 04/11 – 07/11
Compact Membrane Systems, Newark DE

Bibliography

Peer-Reviewed Publications

1. D. Pokrajac, **Amoako KA**, Patel H, Brooks J, Cenat N, Marcus K, Darden S. Data Mining in Geosciences. ***TELSIKS*** 2003; 534-537

2. **Amoako KA**, Cook KE. Nitric oxide-generating silicone as a blood-contacting biomaterial. ***ASAIO Journal*** 2011; **57**:539–544

3. Major TC, Brant DO, Burney CP, **Amoako KA**, Annich GM, Meyerhoff ME, Handa H, and Bartlett RH. "The hemocompatibility of a nitric oxide generating polymer that catalyzes S-nitrosothiol decomposition in an extracorporeal circulation model: ***Biomaterials*** 2011; **32**: 5957e5969

4. **Amoako KA**, Archangeli C, Major TC, Meyerhoff ME, Annich GM, Bartlett RH. "Thromboresistance Characterization of Extruded Nitric Oxide Releasing Silicone Catheters" ***ASAIO Journal*** 2012; **58**: 238 -246

5. **Amoako KA**, Montoya JP, Major TC, Suhaib AB, Handa H, Brant DO, Meyerhoff ME, Bartlett RH, Cook KE. Fabrication and *In vivo* Thrombogenecity Testing of Nitric Oxide Generating Artificial Lungs. ***J Biomed Mater Res A,*** 2013;**10A**: 3511-3519

6. Handa H, Brisbois JE, Major TC, Refahiyat L, **Amoako KA**, Annich GM, Bartlett RH and Meyerhoff ME. In vitro and in vivo study of sustained nitric oxide release coating using diazeniumdiolate-doped poly (vinylchloride) matrix with poly(lactide-co-glycolide) Additive. ***J. Mater. Chem. B***, 2013,**1**, 3578-3587

7. Gupta S, **Amoako KA**, Suhaib A, Keith E. Cook KE. Multi-modal, surface focused anticoagulation using poly-2-methoxyethylacrylate polymer grafts and surface nitric oxide release. ***Adv. Mat. Interfaces*** **2014**; 1(8) doi: 10.1002/admi.201400012

8. Harihara Sandaram, Xia Han, Ann K. Nowinski, Norman D. Brault, Yuting Li, Jean-Rene Ella-Menye, **Amoako KA**, Keith E. Cook, Patrick Marek, Kris Senecal, and Shaoyi Jiang. Achieving One-step Surface Coating of Highly Hydrophilic Poly(Carboxybetaine Methacrylate) Polymers on Hydrophobic and Hydrophilic Surfaces. ***Advanced Materials Interfaces***. **2014**; doi: 10.1002/admi.201400071

9. Handa H, Major TC, Brisbois JE, **Amoako KA**, Meyerhoff ME, Bartlett RH. Hemocompatibility comparison of biomedical grade polymers using rabbit thrombogenicity model for preparing nonthrombogenic nitric oxide releasing surfaces.***J. Mater. Chem. B***, 2014,**2**, 1059-1067

10. **Amoako KA,** Harihara Sandaram, A Suhaib, S Jiang, and K Cook**.** Multimodal, Biomaterial-Focused Anticoagulation via Superlow Fouling Zwitterionic Functional Groups Coupled with Anti-Platelet Nitric Oxide Release. ***Advanced Materials Interfaces*** **2016**; doi: 10.1002/admi.201500646

11. Gbyli R, A Mercaldi, H Sundaram, **Amoako KA**. Achieving Totally Local Anticoagulation on Blood Contacting Devices. ***Advanced Materials Interfaces* 2018;** doi: 10.1002/admi.201700954

12. Gbyli R, Zito C, **Amoako KA**. In vitro cytocompatibility of antibacterial levels of polymer nitric oxide release. ***Eng Press*. 2018**; 2(1): 66-72. doi: 10.28964/EngPress-2-113

13. Andrew Belanger, Andre Decarmine, Shaoyi Jiang, Keith Cook, and **Kagya A. Amoako,** Evaluating the Effect of Shear Stress on Graft-To Zwitterionic Polycarboxybetaine Coating Stability Using a Flow Cell ***Langmuir* 2018** Article ASAP DOI: 10.1021/acs.langmuir.8b03078

Papers under Review

1. R Gbyli, A Widing, A Belanger, **Kagya Amoako**, Evaluation of Nitric Oxide (NO)-Polymer Formulations and their Antibacterial Function, ***Advanced Healthcare Materials***, 2018

2. Shue Wang and Kagya Amoako, Bioactive and Biopassive Polymeric Materials in Regenerative Medicine, **Plos One**, 2018.

Book Chapter(s)

Gbyli R and **Amoako, K.** (**2018**). Improving the Hemocompatibility of Biomedical Polymers. *Hemocompatibility of biomaterials for clinical applications: Blood-biomaterial interactions*. Oxford: Elsevier.

Presentations

Extramural Invited

"Stent Machining with Ultrafast Lasers" 6/06
Delaware State University, Dover DE

Keynote/Plenary Address "Nitric Oxide Releasing Polymer-based Systems for Anti-clotting Anti-bacterial Applications", Frontiers in Material Science for the 21st Century, Symposium, New York. (Major Leadership Role). 05/17

Intramural Invited

"Biomedical engineering at University of New Haven", West Haven, CT 3/16

"Seminar, Friends of the Library Presentation University of New Haven", 10/15
West Haven, CT, USA.

"Bioinspired surface modifications to reduce clot formation on 4/15
medical devices" University of New Haven, West Haven, CT

"The artificial lung, Past, Present, and Future" 2/15
University of New Haven, West Haven, CT

At Conferences as Trainee

1. Amoako KA, **2002**, "Integrals as Infinite Sums Over [0-1]" Alpha Chi National College Honor Society Symposium, Washington, DC

2. Amoako KA, Hetal Patel, **2003**, "Data Mining in Geosciences," Alliance for Minority Symposium, Philadelphia, PA

3. Amoako KA, **2003**, "Real time machine data acquisition," Annual Biomedical Research Conference for Minority Symposium, San Diego, CA

4. Amoako KA, **2005**, "Admission into University of Michigan Graduate School," Howard University Career Fair Day, Washington DC, DC

5. Amoako KA, Wu Y, Zhang F, Meyerhoff ME, Bartlett RH, Cook KE. NO generating gas transfer membrane using Cu microparticles. Biointerface Science Conference, August **2008**. [Poster]

6. Amoako KA, Cook KE, Kannatey-Asibu E. Study of roughness from ultrafast laser machined 316l stainless steel foil in-air and underwater. Biomedical Engineering Society Annual Conference, October **2008**.[Poster]

7. Amoako KA, Cook KE, Bartlett RH and Meyerhoff ME. Developing and characterizing Cu-doped Nitric-oxide Generating Gas-transfer Silicone Membrane. Midwest Biomedical Engineering Conference September **2009**. [Poster]

8. Amoako KA, Cook KE and Bartlett RH. Predicting the Gas-transfer Rate of a Silicone Membrane Doped with Cu Microparticles, University of Michigan Engineering Graduate Symposium, November **2009**. [Slides]

9. Amoako KA, Bartlett RH, Cook KE. Towards thromboresistive artificial lungs: the role of copper-doped nitric oxide-generating silicone for blood-contacting surfaces. Society for Biomaterials Annual Conference, **2010**. [Slides]

10. Amoako KA, Montoya PJ, Bartlett RH, Cook KE. Nitric oxide (NO) generating silicone hollow fibers. ASAIO Journal 56: 121, **2010**. [Slides]

11. Amoako KA, Kreuz ME, Bartlett RH, Cook KE. Nitric oxide in sweep gas for platelet inhibition in the artificial lung. ASAIO Journal 57: 113, **2011**. [Slides]

12. Amoako KA, Archangeli C, Major TC, Annich GM, Meyerhoff ME and Bartlett RH. Extruded Nitric oxide-releasing silicone catheters for newborns. Society for Biomaterials Annual Conference, **2011**. [Slides]

13. Amoako KA, Patrick J Montoya, Terry Major, David O Brant, Mark E Meyerhoff, Robert H Bartlett, Keith E Cook. Nitric Oxide Generating Artificial lungs: Fabrication and in-vivo Testing. Society for Biomaterials Annual Conference, **2012**. [Slides]

14. Amoako KA, Harihara S Sundaram, Ahmed Suhaib, Yuting Li, Jules Lin, Shaoyi Jiang, Keith E Cook. Studying the Synergistic Effect of Coatings and Nitric Oxide release on Platelet Adsorption. Society for Biomaterials Annual Conference, **2013**. [Slides]

15. Amoako KA, Suhaib AB, Gupta S, Sundaram HS, Li Y, Jiang S, Cook KE. Bio-inspired, Anti-coagulant Surfaces: Role of Surface Coating Type. ASAIO Journal 59: 9, **2013**. [Slides and

Poster]

16. Amoako KA, Suhaib AB, Gupta S, Cook KE. Bio-inspired, Anti-coagulant Surfaces: Role of Flow Rate and NO Concentration. ASAIO Journal 59: 17, **2013**. [Slides]

17. Amoako KA, Harihara S, Jiang S, and Cook KE, Multimodal, Surface-Focused Anticoagulation University of Washington, Seattle, WA**. 8/15** [Slides]

At Conferences as Principal Investigator

18. Electromyography Sensor Development - EMG Communicator, UNH Graduate Student Showcase, Symposium, West Haven CT, November **2016**, Cui, C., Amoako, K. [Poster]

19. Intravascular Catheter Extruder Platform, UNH Graduate Student Showcase, Symposium, West Haven CT, November **2016**, Ying, M., Amoako, K. [Poster]

20. A Mechanical Platform Design to Study Sport-Related Head Injury, Biomedical Engineering Society, Conference, Minnieapolis, MN, October **2016**, Bruillad, C., Colapietro, P., Amoako, K. [Poster]

21. Nitric Oxide Reactor for Conjugating NO to Polymeric Materials, Biomedical Engineering Society, Conference, Minnieapolis, MN, October **2016**, Mercaldi, A., Gbyli, R., Amoako, K. [Poster]

22. Developing Anti-Bacterial Surfaces for Preventing "Sick" Spacecrafts, CT Space Grant Consortium Expo, Symposium, Pratt and Whitney Hanger, Hartford CT, October **2016**, Mercaldi, A., Gbyli, R., Amoako, K. [poster]

23. Analyzing Nitric Oxide Release from Polymer Based Systems, Northeast Bioengineering Conference, Conference, New Jersey, March **2017**, Gbyli, R., Mercaldi, A., Amoako, KA. [Slides]

24. Open Storage Effect on Nitric Oxide Releasing Materials, American society of Artificial Internal Organs, Conference, Chicago, June **2017**, Gbyli, R., Gurahoo, C., Amoako, K. [Poster]

25. TH–366 Evaluation of Nitric Oxide (NO)-Polymer Formulations and their Antibacterial Function, Biomedical Engineering Society, Conference, Atlanta, GA, October **2018**, Rana Gbyli and Kagya Amoako [Poster]

26. FR–161 Developing Stable, Tunable and Bioinspired Nitric Oxide Releasing Biomaterials, Biomedical Engineering Society, Conference, Atlanta, GA, October **2018**, Saleem Ibrahim, Heinrick Kufeldt, and Kagya Amoako [Poster]

27. FR–441 Platform for Developing Nitric Oxide Eluting Stents, Biomedical Engineering Society, Conference, Atlanta, GA, October **2018**, Brittney Severino, Saleem Ibrahim, and Kagya Amoako [Poster]

Revised: 10/27/18