

CURRICULUM VITAE

Dioscaris R. Garcia, PhD

Executive Leader in Academic Medicine, Biomedical Research, and Community Health

dioscarisgarcia@gmail.com • Providence and Central Falls, Rhode Island • linkedin.com/in/dioscaris-r-garcia-ph-d

EDUCATION

Brown University, Providence, RI Doctor of Philosophy, Molecular Pharmacology and Physiology <i>Advisor: Wayne D. Bowen, PhD</i>	2005-2012
University of Rhode Island, Kingston, RI Bachelor of Science, Microbiology; Chemistry Minor	2000-2004

POST-GRADUATE TRAINING

Post-Doctoral Scholar Brown University Health (formerly Lifespan Corp.), Providence, RI <i>Laboratory Director: Christopher T. Born, MD</i>	2013-2015
Visiting Scientist Brown University, Department of Molecular Pharmacology, Physiology and Biotechnology, Providence, RI	2013-2015
Post-Doctoral Scholar Brown University, Department of Molecular Pharmacology, Physiology and Biotechnology, Providence, RI <i>Principal Investigator: Wayne D. Bowen, PhD</i>	2012-2013

ACADEMIC APPOINTMENTS

Assistant Professor Department of Orthopaedics, The Warren Alpert Medical School of Brown University; Department of Molecular Pharmacology, Physiology, and Biotechnology (2017-2021); Providence, RI - Led a nationally recognized translational orthopaedic research program, securing more than \$4 million in research funding while producing 35+ peer-reviewed publications, numerous national presentations, and innovations in musculoskeletal infection and biomaterials research. - Mentored more than 500 undergraduate, medical, graduate, and postdoctoral trainees through research, career development, and the DORSAL Program, earning multiple institutional awards for excellence in teaching and mentorship. - Served in 15+ departmental, institutional, hospital, and national leadership committees, including appointments overseeing faculty recruitment, graduate medical education, diversity, and strategic initiatives within the Department of Orthopaedics. - Established multidisciplinary collaborations across Brown University, Rhode Island Hospital, industry, and national organizations to translate scientific discoveries into clinical innovation while expanding research, educational, and funding opportunities.	2017-2025
---	-----------

Assistant Dean of Diversity, Equity and Inclusion

2023-2025

The Warren Alpert Medical School of Brown University, Providence, RI

- Directed the Office of Belonging, Equity, Diversity, and Inclusion and the Center for Student Belonging, leading institution-wide initiatives that advanced student success, faculty engagement, workforce diversity, and health equity across the Warren Alpert Medical School.
- Created and scaled innovative pathway and mentorship programs, including the Department of Orthopaedics Research Summer Academic Leadership (DORSAL) Program and the Rhode to Medicine seminar series, expanding access to careers in medicine for hundreds of students from high school through postgraduate training.
- Elevated Brown’s national leadership in academic medicine by co-authoring a peer-reviewed framework for operationalizing belonging, equity, diversity, and inclusion, establishing a replicable model for medical schools nationwide.
- Represented Brown University nationally through leadership appointments with the American Society for Microbiology, invited presentations, and strategic collaborations that advanced inclusive excellence, health equity, and medical education across the biomedical sciences.
- Directed an office which served 8 affinity groups within the medical school.

OTHER CONCURRENT ACADEMIC APPOINTMENTS

- | | |
|---|-----------|
| • Co-Director, The Diane N. Weiss Center for Orthopaedic Trauma Research, Rhode Island Hospital, Providence, RI | 2017-2025 |
| • Director, Department of Orthopaedics Research Summer Academic Leadership (DORSAL) Program, Brown University, Providence, RI | 2023-2024 |
| • Co-Chair, Retention and Recruitment Committee, Department of Orthopaedics, Brown University, Providence, RI | 2022-2025 |
| • Instructor of Molecular Pharmacology, Physiology and Biotechnology, Brown University, Providence, RI | 2015-2017 |
| • Instructor of Orthopaedics (Research), The Alpert Medical School of Brown University, Providence, RI | 2015-2017 |
| • Teaching Assistant, Brown University, Providence, RI | 2006-2011 |

HOSPITAL APPOINTMENTS

Senior Research Scientist

2013-2025

Joint appointment: Rhode Island Hospital and University Orthopedics, Providence, RI

EXECUTIVE EXPERIENCE

Executive Director

2025-2026

Central Falls Children's Foundation, Central Falls, RI

- Led de-novo organizational growth and sustainability efforts, securing over \$200,000 in competitive grant funding within the first year, strengthening core operations, staffing, and long-term program viability.
- Designed and implemented a community embedded, culturally aligned service delivery model integrating pediatric care, maternal health, mental health, housing stabilization, and workforce pathways for historically underserved families.
- Launched and scaled flagship initiatives addressing maternal and child health, trauma informed mental health, workforce development, and youth empowerment, positioning CFCF as a replicable public health and housing integration model in the region.
- Strengthened clinical capacity at Jenks Park Pediatrics through physician recruitment and retention, expanded patient access, reduced wait times, and improved care continuity for a high need population.
- Established a housing healthcare integration framework at Jenks Park Residence, embedding on site healthcare, mental health counseling, financial coaching, and social services to support family stability and health outcomes.
- Built and sustained high impact partnerships with healthcare systems, academic institutions, community organizations, and public agencies, enhancing cross sector collaboration and collective impact.
- Provided executive oversight of governance, compliance, evaluation, and mission alignment, reinforcing organizational credibility with funders, regulators, and community stakeholders.

INDUSTRIAL EXPERIENCE

Scientific Advisor / Equity Holder

2017-2026

BI Medical, LLC., Coventry, RI

- Lead pharmacological and biological expert in the production and manufacturing of the Liner Wand.
- Led team of marketing and production in matters relating to troubleshooting of manufacturing of the Liner Wand.
- Lead developer and production designer in novel formulations relating to the Liner Wand.

Chief Technical Officer

2015-2017

BI Medical, LLC., North Kingston, RI

- Led a team of engineers, biologists, prosthetists, surgeons, regulatory experts and business analysts in the development of the Liner Wand amputee liner disinfectant.
- Led the production and manufacturing of the Liner Wand prototypes and full product launch.
- Led integration and implementation of cGMP and ISO protocols in the production of the Liner Wand.
- Led a team of regulatory experts in the approval of the Liner Wand for over-the-counter sales.
- Awarded the Rhode Island Inno 50 on Fire Award.
- Awarded the Providence Business News Top 40 under 40 Award.

Director of Biomedical Research and Operations

2014-2016

Material Science Associates, LLC., North Kingston, RI

- Led a team of engineers and biologists in the testing and validation of experimental variables as a Contract Research Organization.
- Served as lead expert in the testing of legal cases-related variables via Multi-District Litigation matters.

Research Associate, Process Development

2004-2005

Amgen Inc., West Greenwich, RI

- Characterized Bench-Top Purification Systems for their use as small scale purification systems in the production of Enbrel® (etanercept).
- Optimized Ultrafiltration/Diafiltration Systems to increase the protein yield from raw product originating from the main production plant.
- Utilized AKTA Liquid Chromatography Systems to purify the protein product of the Ultrafiltration/Diafiltration Systems.
- Edited and optimized protocols relating to the use of Bench-Top Purification Systems in the manufacturing of Enbrel® (etanercept).
- Produced and optimized buffers according to the exact specifications of protocols directly leading towards the production of Enbrel® (etanercept) in both small and large scales.

HONORS AND AWARDS

-
- | | |
|---|------|
| • Institute of Dominicans in the Exterior (INDEX). Top professional in the Dominican Diaspora | 2025 |
| • City of Central Falls. Community recognition during the Dominican independence flag raising | 2025 |
| • International Oscar de la Renta Award. New England Nominee as the Top Dominican Professional in the Diaspora | 2025 |
| • Institute of Dominicans in the Exterior (INDEX). Awarded Top Science and Medical Professional Award | 2025 |
| • City of Central Falls Mayoral and Council Commendation. Service to City of Central Falls during Dominican flag raising | 2025 |
| • Quisqueya in Action Committee. Named Dominican Festival of Rhode Island Grand Marshall | 2024 |
| • Warren Alpert Medical School of Brown University. Winner of the Positive Champion Award | 2024 |
| • Providence Business News Healthcare Heroes Award for Advancement in Health Care | 2023 |
| • Office of the Lt. Governor of Rhode Island. Outstanding Service to the Hispanic Community During the COVID-19 Pandemic | 2022 |
| • The Dominican Independence and Heritage Award Committee of Rhode Island. Recognized for service to the Dominican Community-at-Large (13 Municipal, State, and Congressional Citations received, not listed individually) | 2022 |
| • Central Falls City Council. Heroic Efforts During COVID-19 Pandemic | 2022 |
| • Congressional Citation by Congressman David Cicilline for Efforts During COVID-19 Pandemic | 2021 |
| • Congressional Proclamation by Congressman Espaillat and Dominican Embassy, Washington, DC. Efforts and Benefits to the Dominican Community at Large during the COVID-19 Pandemic | 2021 |
| • Office of the Governor of Rhode Island Dan McKee. Special Recognition for Exceptional Efforts During COVID-19 Pandemic | 2021 |
| • Central Falls Mayoral Office. Citation for Community Champion During COVID-19 Pandemic | 2021 |
| • Pawtucket Mayoral Office. Awarded Proclamation for Exceptional Leadership and Efforts during COVID-19 Pandemic | 2021 |
| • The Warren Alpert Medical School, Brown University, Office of Diversity and Multicultural Affairs / Faculty Affairs (ODMA FA). Mentorship Award in Diversity and Equity in Medicine | 2021 |
| • The Warren Alpert Medical School, Brown University. Diversity and Inclusion Action Plan Community Award for Faculty | 2021 |
| • Rhode Island State Senate. Citation for Heroism and Service to the Community of Central Falls and Pawtucket during the COVID-19 Pandemic | 2021 |

• Rhode Island State House. Citation for Heroic Efforts to help the City of Central Falls during the COVID-19 Pandemic	2021
• City of Pawtucket. Proclamation for Heroic Efforts to help the City of Pawtucket during the COVID-19 Pandemic	2021
• Rhode Island Senate Black and Latino Caucus. Citation for Service to Minority Communities during the COVID-19 Pandemic	2021
• Central Falls School District. Citation for Guidance during the COVID-19 Pandemic	2021
• Rhode Island State Senate. Award for Visionary Leadership and Invaluable Guidance, and Exceptional Leadership and Dedicated Community Service during the COVID-19 Pandemic	2020
• Pawtucket School District. Recognized for Leadership and Guidance during COVID-19 Pandemic	2020
• The Diane N. Weiss Center for Orthopedic Trauma Research, Rhode Island Hospital. Stein-Bellet Research Fellow (2013-2015); Sipprelle Family Foundation Research Fellow (2015-2025)	2013-2025
• Brown University. Excellence in Research Mentoring Award	2019
• Brown University. Dean's Award on Excellence in Teaching and Mentoring	2018, 2019, 2022
• Rhode Island Inno 50 on Fire Winner	2018
• Rhode Island State Wavemaker, Office of Governor Gina Raimondo	2016-2018
• Rhode Island Business Plan Competition. MedTech and Overall Winner for BI Medical, LLC.	2017
• Providence Business News Top 40 Under 40: Winner	2017
• State Treasurer Seth Magaziner. Citation for being Named Top 40 Under 40 by Providence Business News	2017
• Providence Business News Most Innovative Biotechnology Company: Winner	2017

GRANTS AND RESEARCH FUNDING

1. \$65,000 2012 Stein/Bellet Foundation for Research Fellowship in Orthopaedic Trauma awarded to Dioscaris Garcia, PhD for FY 2013-2014
2. \$20,000 2013 Born CT (PI). Visualization and quantification of bacterial biofilm on orthopaedic trauma explants. Research Grant from Foundation for Orthopedic Trauma (FOT), USA Study Report submitted to FOT Board
3. \$64,000 2013 Born CT (PI), Eberson CP (Co-PI). Bacterial adherence to spinal instrumentation of differing compositions. Stryker Spine Study Report #RA111001 completed and submitted
4. \$65,000 2014 Stein/Bellet Foundation for Research Fellowship in Orthopaedic Trauma awarded to Dioscaris Garcia, PhD for FY2014-2015
5. \$20,000 2015 Born CT (PI), Truntzer J (Co-PI) Orthopaedic Trauma Association Resident Research Grant "Does Timing of Smoking Cessation Impact Bone Healing? Research scheduled to begin summer 2015
6. \$50,000 2015 Sipprelle Family unrestricted research grant (to be paid over 3 years) for the Research Fellowship in Orthopaedic Trauma awarded to Dioscaris Garcia, PhD for FY2015-2016
7. \$20,000 2015 Stein/Bellet Foundation Unrestricted Grant for support for Research Fellowship in Orthopaedic Trauma FY2015-2016
8. \$50,000 2016 to Weiss Center for Orthopaedic Trauma Research, Born CT (Principal Knowledge Provider) for Innovation Voucher by Rhode Island Commerce Corporation to study additional development and clinical laboratory testing of an antibiotic-independent antimicrobial applicator with broad spectrum effectiveness against Drug-Resistant Bacteria (Grant research completed and submitted on time, 2/2017)
9. \$16,000 2016 Foundation for Orthopaedic Trauma Rapid Detection and Quantification of Biofilms on Tissue and Fluids

10. \$9,348 2017 Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF), Co-PI with Christopher T. Born, MD “Comparative Analysis of a Novel Microbial Detection System and Gram Staining Utilizing Synovial Fluid”
11. \$9,348 2018 Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF), Co-PI with Christopher T. Born, MD. “Assessment of the Translational Capabilities of a Visual Diagnostic Tool for the Rapid Detection of Orthopedic Related Infections on Hardware, Tissue and Synovial Fluid.”
12. \$100,000 Unrestricted Grant by the Sipprelle family in support of the Weiss Center for Orthopaedic Trauma Research (\$25,000 per year over 4 years)
13. \$10,130 2019 MTF Biologics Grant, Co-PI with Christopher T. Born, MD. Detection and Quantification of Bacterial Colonization and Endotoxin Content on Tissue Allografts via Rapid Immunologic Screening.
14. \$4,000 2019 Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF), Co-PI with Christopher T. Born, MD. “Detection of Bacterial Colonization and Endotoxin Content on Surgical Material and Tissue Allografts via Rapid Immunologic Screening.”
15. \$12,100 2019 Foundation for Orthopaedic Trauma, Co-PI with Christopher T. Born, MD and Brett Owens, MD. “Detection and Quantification of Bacterial Colonization and Endotoxin Content on Tissue Allografts via Rapid Immunological Screening.”
16. \$6,000 2020 Diane N. Weiss Foundation, Grant to support PPE and summer research for Dioscaris R. Garcia, PhD.
17. \$8,476 2020 Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF), Co-PI with Christopher T. Born, MD. “Rapid Detection of Endotoxin and Bacterial Content on Surgical Materials & Allografts.”
18. \$20,000 2020 Foundation for Orthopaedic Trauma, Co-PI with Christopher T. Born, MD and Valentin Antoci, MD, PhD. “Silver Carboxylate Eluting Titanium Dioxide-Polydimethyl Siloxane Antimicrobial as an Effective Wound Care Antimicrobial against Biofilm-Forming Antibiotic-Resistant Bacteria and Persister Cells”.
19. \$163,709 2021-2023 1R03AI159776-01 National Institutes of Health R03 Grant, USA
20. “Silver Carboxylate-Eluting Titanium Dioxide/Polydimethyl Siloxane Antibiotic-Independent Antimicrobial Coating as a Safe and Efficacious Alternative for Antibiotic Resistance”.
21. \$7,500 2021, Emerging Infectious Disease Scholars (EIDS) Program Dioscaris Garcia, Neel Vishwanath, Sai Allu, Valentin Antoci, MD, PhD, Christopher Born, MD. Silver Carboxylate Eluting Titanium Dioxide-Polydimethyl Siloxane Antimicrobial as an Effective Wound Care Antimicrobial against Biofilm Forming Antibiotic-Resistant Bacteria and Persister Cells/ Assessment of the Potential Necrotic and Apoptotic Effects of Silver-Carboxylate/Chlorhexidine Gluconate Pre-Surgical Skin Preparation Solution on Primary Human Cell Lines Involved in Wound Healing.
22. \$25,000 2021, COBRE Pilot Grant. Dioscaris Garcia, Valentin Antoci, Christopher Born. Silver Carboxylate Eluting Titanium Dioxide-Polydimethyl Siloxane as an Effective Wound Care Coating against Antibiotic-Independent and Biofilm-Forming Antibiotic-Resistant Bacteria and Persister Cells with Translational Potential.
23. 15,000 2021 Equipment Grant by Diane N. Weiss Foundation.
24. 20,000 2022 Foundation for Orthopaedic Trauma. Utilization of a Clinically-Translatable Bacterial and Biofilm Visualization Assay to Assess Pathologic Variance in Pediatric Acute and Chronic Osteomyelitis.
25. 30,000 2022 COBRE Center for Antimicrobial Resistance and Therapeutic Discovery. Characterization of the Antimicrobial Mechanisms of Antibiotic-Independent Antimicrobial Silver Carboxylate (AgCar) Released via a Titanium Dioxide/Polydimethyl Siloxane Matrix in the Context of Multi-Drug Resistant Bacteria and Persister Cells.
26. ~2,000,000 2013 Diane N. Weiss Foundation, Endowment establishing the Diane N. Weiss Center for Orthopaedic Trauma Research.
27. 30,000 2024 Central Falls Children’s Foundation. Post-doc support.

PEER-REVIEWED PUBLICATIONS

1. Socha AM, Garcia D, Sheffer R, Rowley DC. Antibiotic bisanthraquinones produced by a streptomycete isolated from a cyanobacterium associated with *Ecteinascidia turbinata*. *Journal of Natural Products*. 2006 Jul;69(7):1070-3 PMID: 16872146
2. Nhiem Tran, Michael N. Kelley, Phong A. Tran, Dioscaris R. Garcia, John D. Jarrell, Roman A. Hayda and Christopher T. Born Silver Doped Titanium Oxide - PDMS Hybrid Coating Inhibits *Staphylococcus aureus* and *Staphylococcus epidermidis* Growth on PEEK. – *Mater Sci Eng C Mater Biol Appl*. 2015 Apr;49:201-9. PMID: 25686940
3. Eltorai, Adam EM, Haglin, Jack, Perera, Sudheesha, Brea, Bielinsky A, Ruttiman, Roy, Garcia, Dioscaris R, Born, Christopher T, Daniels, Alan H. Antimicrobial Technology in Orthopedic and Spinal Implants. *World J Orthop*. 2016 June 18; 7(6): 361-369. PMID: 27335811
4. Garcia DR, Deckey D, Haglin JM, Emanuel T, Mayfield C, Eltorai AEM, Spake CS, Jarrell JD, Born CT. Commonly Encountered Skin Biome-Derived Pathogens after Orthopedic Surgery. *Surg Infect (Larchmt)*. 2019 Mar 6. doi: 10.1089/sur.2018.161. PMID: 30839243
5. Jack M. Haglin, Dioscaris R. Garcia, Daniel L. Roque,, Carole SL. Spake, John D. Jarrell, Christopher T. Born. Assessing the Efficacy of a Silver Carboxylate Antimicrobial Coating on Prosthetic Liners. *Journal of Prosthetics and Orthotics*. August 7, 2019 - Volume Online First - Issue – p doi: 10.1097/JPO.0000000000000271
6. Johnson JP, Born CT, Thomas N, Truntzer J, Mansuripur PK, Kleiner J, McAlister ST, Garcia D, Korupolu S, Development of a novel murine femur fracture and fixation model. *Journal of Orthopaedics* (2019), doi: <https://doi.org/10.1016/j.jor.2019.06.015>. PMID: 31879498
7. Li Yue, Kayleigh Sullivan, Dioscaris R. Garcia, Brett D Owens. A Review of Biological Mechanisms of Bone Tunnel Enlargement Following Anterior Cruciate Ligament Reconstruction. *JBJS Reviews*: April 2020 - Volume 8 - Issue 4 - p e0120 doi: 10.2106/JBJS.RVW.19.00120 PMID: 32539260
8. Dioscaris R Garcia, David G Deckey, Alexandra Zega, Cory Mayfield, Carole S L Spake, Toby Emanuel, Alan Daniels, John Jarrell, Jillian Glasser, Christopher T Born, Craig P Ebersson. Analysis of Growth and Biofilm Formation of Bacterial Pathogens on Frequently Used Spinal Implant Materials. *Spine Deform*. 2020 Jun;8(3):351-359. doi: 10.1007/s43390-020-00054-z. Epub 2020 Feb 24. PMID: 32096135
9. Dioscaris Garcia, Cory K Mayfield, Jacqueline Leong, David G Deckey, Alexandra Zega, Jillian Glasser, Alan H Daniels, Craig Ebersson, Andrew Green, Christopher Born. Early Adherence and Biofilm Formation of *Cutibacterium acnes* (formerly *Propionibacterium acnes*) On Spinal Implant Materials. *The Spine Journal Spine J*. 2020 Jan 20. pii: S1529-9430(20)30001-2. doi: 10.1016/j.spinee.2020.01.001. [Epub ahead of print] PMID: 31972305.
10. Ellis Berns, Mursal Gardezi, Caitlin Barrett, Carole Spake, Jillian Glasser, Valentin Antoci, Christopher T. Born, Dioscaris Garcia. Current Clinical Methods for Detection of Periprosthetic Joint Infection. *Surg Infect (Larchmt)*. 2020 Feb 11. doi: 10.1089/sur.2019.314. [Epub ahead of print] PMID: 32043924.
11. Mursal Gardezi, Daniel Roque, Douglas Barber, Carole SL Spake, Jillian Glasser, Ellis Berns, Valentin Antoci, Christopher Born, Dioscaris R. Garcia. Wound Irrigation in Orthopedic Open Fractures: A Review. *Surgical Infections Journal*. Published Online:25 Jun 2020 <https://doi.org/10.1089/sur.2020.075> PMID: 32589513
12. Ambler M, Springs S, Garcia D, Born C. Heterogeneity of outcomes for intraoperative music interventions: a scoping review and evidence map [published online ahead of print, 2020 Aug 19]. *BMJ Evid Based Med*. 2020;bmjebm-2020-111382. doi:10.1136/bmjebm-2020-111382 PMID: 32816900
13. Garcia D, Gardezi M, Suliman Y, Glasser J, Spake CS, Barrett C, Berns E, Jenkins D, Evans A, Cohen E, Ebersson C, Hayda R, Daniels A, Green A, Owens B, Antoci V, Born CT. Fluorescent-conjugated antibodies as rapid ex vivo markers for bacterial presence on orthopedic surgical explants and synovium: A pilot study. *J Orthop Res*. 2020 Nov 23. doi: 10.1002/jor.24924. PMID: 33225467

14. Jillian Glasser, Michael Mariorenzi, Travis Blood, Seth O'Donnell, Dioscaris Garcia, Valentin Antoci. Distal femoral valgus cut angles unreliable in total knee arthroplasty, *Journal of Orthopaedics*, Volume 24, 2021, Pages 29-33, ISSN 0972-978X, <https://doi.org/10.1016/j.jor.2021.02.010>. PMID: 33679025
15. Garcia D, Gilmore A, Berns E, Spake C, Dockery DM, Vishwanath N, Glasser J, Antoci V, Daniels A, Born CT. Silver carboxylate and titanium dioxide-polydimethylsiloxane coating decreases adherence of multi-drug resistant *Serratia marcescens* on spinal implant materials. *Spine Deform*. 2021 Jun 25. doi: 10.1007/s43390-021-00380-w. Epub ahead of print. PMID: 34173223.
16. Glasser, Jillian; Barrow, Brooke; Moon, Andrew; Garcia, Dioscaris; Antoci, Valentin. Acetabular Component Position Highly Variable in Early Practice. *Acta Scientific Orthopaedics*, Volume 4 Issue 9, September 2021.
17. Dioscaris R. Garcia, Ellis M. Berns, Carole SL Spake, Cory Mayfield, Dominique M. Dockery, Neel Vishwanath, Jacqueline Leong, Jillian Glasser, Caitlin Barrett, Andrew Green, Valentin Antoci, Alan H. Daniels, Christopher T. Born. Silver Carboxylate-doped Titanium Dioxide-Polydimethylsiloxane Coating decreases *Cutibacterium acnes* Adherence and Biofilm Formation on Polyether Ether Ketone, *The Spine Journal*, 2021, ISSN 15299430, <https://doi.org/10.1016/j.spinee.2021.09.011>. PMID: 34666180
18. Dockery DM, Allu S, Vishwanath N, Li T, Berns E, Glasser J, Spake CSL, Antoci V, Born CT, Garcia DR. Review of Pre-Operative Skin Preparation Options Based on Surgical Site in Orthopedic Surgery. *Surg Infect (Larchmt)*. 2021 Aug 12. doi: 10.1089/sur.2021.085. Online ahead of print PMID: 34388024
19. Spake CSL, Berns EM, Sahakian L, Turcu A, Clayton A, Glasser J, Barrett C, Barber D, Antoci V, Born CT, Garcia DR. In vitro visualization and quantitative characterization of *Pseudomonas aeruginosa* biofilm growth dynamics on polyether ether ketone. *J Orthop Res*. 2021 Dec 21. doi: 10.1002/jor.25252. Epub ahead of print. PMID: 34935196.
20. Barrett C, Barrett T, Testa EJ, Garcia D, Antoci V. A Review of Knee Polyethylene Geometry Design - Progression to Constraining. *Medical Reports & Case Studies* 2022, Vol.7, Issue 1, 003-004.
21. Garcia DR, Vishwanath N, Allu S, Dockery DM, Berns EM, Spake CSL, Li T, Barrett C, Antoci V, Born CT. Synergistic Effects of Silver Carboxylate and Chlorhexidine Gluconate for Wound Care and Prevention of Surgical Site Infections by *Cutibacterium acnes* and Methicillin-Resistant *Staphylococcus aureus*. *Surg Infect (Larchmt)*. 2022 Jan 27. doi: 10.1089/sur.2021.237. Epub ahead of print. PMID: 35085476.
22. Dockery DM, Allu S, Glasser J, Antoci V, Born CT, Garcia DR. Comparison of periprosthetic joint infection rates in the direct anterior approach and non-anterior approaches to primary total hip arthroplasty: a systematic review and meta-analysis. *Hip Int*. 2022 Oct 10:11207000221129216. doi: 10.1177/11207000221129216. Epub ahead of print. PMID: 36214269.
23. Antoci V, Barrett C, Glasser J, Barrett T, Garcia D. The Case of Disappearing Tibia in Rheumatoid Knee Tenosynovitis. *J Orthop Case Rep*. 2022 Feb;12(2):9-13. doi: 10.13107/jocr.2022.v12.i02.2644. PMID: 36199712; PMCID: PMC9499143.
24. Garcia DR, Vishwanath N, Minnah A, Allu S, Whitaker CD, Stone BK, Berns EM, Spake CSL, Dockery DM, Barrett CC, Mette M, Connolly W, Clippert D, Antoci V, Born CT. Silver Carboxylate-Eluting Titanium-Dioxide Polydimethylsiloxane Coating Inhibits Multi-Drug-Resistant *Acinetobacterium baumannii* and Vancomycin-Resistant *Enterococcus faecalis* Adherence and Proliferation on Orthopedic Trauma Fixation and Spinal Fusion Materials. *Surg Infect (Larchmt)*. 2022 Nov 22. doi: 10.1089/sur.2022.279. Epub ahead of print. PMID: 36413347.
25. Vishwanath N, Whitaker C, Allu S, Clippert D, Jouffroy E, Hong J, Stone B, Connolly W, Barrett CC, Antoci V, Born CT, Garcia DR. Silver as an Antibiotic-Independent Antimicrobial: Review of Current Formulations and Clinical Relevance. *Surg Infect (Larchmt)*. 2022 Nov;23(9):769-780. doi: 10.1089/sur.2022.229. Epub 2022 Sep 29. PMID: 36178480.
26. Mette M, Connolly W, Vishwanath N, Allu S, Whitaker C, Stone BK, Antoci V, Born CT, Garcia DR. Silver Carboxylate as an Antibiotic-Independent Antimicrobial: A Review of Current Formulations, in vitro Efficacy, and Clinical Relevance. *Med Res Arch*. 2022 Dec;10(12):10.18103/mra.v10i12.3388. doi: 10.18103/mra.v10i12.3388. Epub 2022 Dec 21. PMID: 36874620; PMCID: PMC9979826.

27. Daffinee KE, O'Neill ET, Bleick CR, Williams G, Antoci V, Garcia D, LaPlante KL. Staphylococcal biofilm: penetration and bioavailability of vancomycin with or without rifampin. *Diagn Microbiol Infect Dis*. 2023 Jul;106(3):115947. doi: 10.1016/j
28. Vera Cruz A, Diaz J, Guthrie T, Garcia D, Poitevien P. The Office of Belonging, Equity, Diversity, and Inclusion in The Warren Alpert Medical School: Aligning Goals, Programming, and Outcomes for Health Equity. *R I Med J* (2013). 2023 Oct 2;106(9):9-13. PMID: 37768155..diagmicrobio.2023.115947. Epub 2023 Mar 29. PMID: 37116243.
29. Jacob Laperche, Caitlin C. Barrett, Jillian Glasser, Daniel S. Yang, Nicholas Lemme, Dioscaris Garcia, Alan H. Daniels, Valentin Antoci. Chronic obstructive pulmonary disease is an independent risk factor for increased opioid use in total hip arthroplasty: A retrospective PearlDiver study, *Journal of Orthopaedics*, 2023. ISSN 0972-978X, <https://doi.org/10.1016/j.jor.2023.09.010>.
30. Laperche J, Barrett CC, Boduch A, Glasser J, Clippert D, Garcia DR, Antoci V. Mechanically stable rifampin antibiotic cement inhibits *Pseudomonas aeruginosa* biofilm surface growth. *J Orthop Res*. 2023 Oct 26. doi: 10.1002/jor.25720. Epub ahead of print. PMID: 37884321.
31. Barrett CC, Laperche J, Clippert D, Glasser J, Garcia D, Antoci V Jr. The Immediate Impact of Total Knee Arthroplasty Removal From The Medicare Inpatient-Only List on Patient Derived Functional Outcomes and Hospital Satisfaction. *J Arthroplasty*. 2023 Nov 10:S0883-5403(23)01128-2. doi: 10.1016/j.arth.2023.11.006. Epub ahead of print. PMID: 37952740.
32. Caitlin Barrett, Drew Clippert, Jacob Laperche, Jillian Glasser, Dioscaris Garcia, Valentin Antoci. Persistent pandemic demand for elective orthopedic surgery despite patient anxieties regarding COVID-19 in at-risk populations, *Journal of Orthopaedic Reports*, 2023. 100244, ISSN 2773-157X. <https://doi.org/10.1016/j.jorep.2023.100244>.
33. Laperche J, Barrett CC, Glasser J, Yang DS, Lemme N, Garcia D, Daniels AH, Antoci V. Chronic obstructive pulmonary disease is an independent risk factor for increased opioid use in total hip arthroplasty: A retrospective PearlDiver study. *J Orthop*. 2023 Sep 22;46:95-101. doi: 10.1016/j.jor.2023.09.010. PMID: 37969229; PMCID: PMC10641556.
34. Allu S, Whitaker C, Stone B, Vishwanath N, Clippert D, Jouffroy E, Antoci V, Born C, Garcia DR. Silver carboxylate-TiO₂/polydimethyl siloxane is a safe and effective antimicrobial with significant wound care potential. *OTA Int*. 2024 Mar 11;7(2 Suppl):e299. doi: 10.1097/OI9.0000000000000299. PMID: 38487399; PMCID: PMC10936150.
35. Garcia D, Navarro J, Allu S, Vishwanath N, Bain R, Dockery DM, Cooper O, Kim N, Antoci V, Born CT. An Analysis of the Chemical and Physical Properties of a Silver Carboxylate Titanium-Dioxide Polydimethylsiloxane Antimicrobial Matrix on Orthopedic Implant Materials. *Surg Infect (Larchmt)*. 2025 Oct 20. doi: 10.1177/10962964251389154. Epub ahead of print. PMID: 41114656.
36. Garcia D, Navarro J, Stone B, Whitaker C, Vishwanath N, Cooper O, Clippert D, Hong J, Kim N, Antoci V, Born CT. The Cytotoxicity Profile of Silver Carboxylate in a TiO₂/Polydimethylsiloxane Matrix in Osteoblasts, Keratinocytes, Endothelial Cells, and Skeletal Muscle Cells. *Surg Infect (Larchmt)*. 2025 Dec 19. doi: 10.1177/10962964251409563. Epub ahead of print. PMID: 41468057.
37. Segal K, Born CT, Navarro J, Eberson CP, Garcia DR. Confocal Analysis and Antibody-Based Rapid Visualization Assays to Diagnose Refractory Pediatric Polymicrobial Osteomyelitis. -Accepted to *Foundation for Orthopedic Trauma*, not yet in print.

BOOKS AND BOOK CHAPTERS

- Anita Shukla, Dioscaris R. Garcia, Jillian Glasser, Valentin Antoci. Osteolysis and Implant Loosening. *Orthopaedic Basic Science: Foundations of Clinical Practice*, Chapter 8, Fifth Edition, Wolters Kluwer, 2021.

ABSTRACTS AND PRESENTATIONS

1. Poster Presentation: Lima L, Mendoza Ailyn, Cooper O, Kim N, Navarro J, Born CT, Garcia DR. Utilization of a Clinically-Translatable Bacterial and Biofilm Visualization Assay as a Potential Tool to Assess Pathologic Variance in Pediatric Acute and Chronic Osteomyelitis". RI IDeA Symposium: Emerging Areas of Science, Providence, RI October, 2024
2. Poster Presentation: Cooper O, Lima L, Mendoza A, Kim N, Navarro J, Born CT, Garcia DR. A Rapid Bacterial and Biofilm Visualization Assay for the Evaluation and Differentiation of Acute and Chronic Pediatric Osteomyelitis. Brown University Academic Symposium, November 2024, Providence, RI
3. Poster Presentation: Mendoza A, Lima L, Cooper O, Navarro, J, Garcia DR, Born CT. Visualizing Staphylococcus aureus Biofilm Formation as an Alternative Assay to Detect Bacterial Presence Under a Chronic Osteomyelitis Diagnosis. Brown University Academic Symposium, November 2024, Providence, RI
4. Poster Presentation: Lima L, Mendoza A, Cooper O, Kim N, Navarro J, Garcia DR, Born CT. Utilization of a Clinically Translatable Bacterial and Biofilm Visualization Assay as a Potential Tool to Assess Pathologic Variants in Pediatric Acute and Chronic Osteomyelitis. Brown University Academic Symposium, November 2024, Providence, RI
5. Poster Presentation: Lima, L, Cooper O, Navarro J, Garcia D, Born CT. Identifying the Potential Presence of Pseudomonas with Biofilm Development and its Characterization in Non-Bacterial Osteomyelitis. First Annual National Undergraduate Research Conference, April 2025, Providence, RI
6. Poster Presentation: Navarro J, Cooper O, Lima L, Mendoza Ailyn, Kim N, Ebersson, Born CT, Garcia DR. Utilization of A Clinically Translatable Bacterial and Biofilm Visualization Assay As a Potential Tool to Assess Pathologic Variance In Pediatric Acute And Chronic Osteomyelitis. American Society for Microbiology Los Angeles, CA June 2025
7. Poster Presentation: Navarro J, Mendoza A, Lima L, Cooper O, Garcia DR, Born CT. Visualizing Staphylococcus Aureus Biofilm Formation as An Alternative Assay to Detect Bacterial Presence Under Chronic Osteomyelitis Diagnosis. American Society for Microbiology, Los Angeles, CA
8. Poster Presentation: Anna Rezk, Patrick Barhouse, Jorge Garavito, Geronimo Garcia, Josue-Marquez-Garcia, Nathaniel Kim, Benjamin Stone, Colin Whitaker, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate Antibiotic-Independent Antimicrobial: A Trojan Horse for the Post-Antibiotic Age? American Society for Microbiology-Microbe Annual Meeting, June 13-17, 2024. Atlanta, GA.
9. Poster Presentation: Patrick Barhouse, Geronimo Garcia, Christopher Born, Valentin Antoci, Dioscaris Garcia. Safety Profile of Silver Carboxylate as an Antimicrobial Coating: Viability and Mechanism in Human Cells. Version Presented locally at: Lifespan Research Day, Thursday, October 5, 2023, Providence, RI. And The Warren Alpert Medical School of Brown University Academic Symposium, November 8, 2023. Providence RI. (Basic Science Winner).
10. Poster Presentation: Josue Marquez; Carolyn Lai; Jorge Garavito; Anna Rezk; Makenna Mette; Drew Clippert; Sai Allu; Liam Connolly; Valentin Antoci; Christopher Born; Dioscaris Garcia. Characterization Of The Antimicrobial Capabilities Of Silver Carboxylate Against Persister Cells And Biofilms. Version Presented locally at: Lifespan Research Day, Thursday, October 5, 2023, Providence, RI. And The Warren Alpert Medical School of Brown University Academic Symposium, November 8, 2023. Providence RI.
11. Poster Presentation: Geronimo Garcia; Patrick Barhouse; Drew Clippert; Benjamin Stone; Colin Whitaker; Valentin Antoci; Christopher T. Born; Dioscaris R. Garcia. Assessment Of The Safety And Application Of Silver Carboxylate As A Pre-surgical Dressing. Version Presented locally at: Lifespan Research Day, Thursday, October 5, 2023, Providence, RI.

12. Poster Presentation: Anna Rezk; Jorge Garavito; Josue Marquez; Carolyn Lai; Alyssa Steinbaum; Blair Williams; Makena Mette; Valentin Antoci; Christopher Born; Dioscaris Garcia. Characterization of Silver Carboxylate's Microbicidal Mechanisms in Multi-drug Resistant *Serratia Marcescens*. Version Presented locally at: Lifespan Research Day, Thursday, October 5, 2023, Providence, RI. And The Warren Alpert Medical School of Brown University Academic Symposium, November 8, 2023. Providence RI.
13. Podium Presentation: Dioscaris Garcia and Christopher Born. Characterization of Silver Carboxylate's Biocompatibility and Efficacy as an Antimicrobial Agent. Orthopaedic Trauma Association Annual Meeting October 18-21, 2023, Seattle, WA.
14. Poster Presentation: Anna Rezk; Jorge Garavito; Josue Marquez; Carolyn Lai; Alyssa Steinbaum; Blair Williams; Makena Mette; Valentin Antoci; Christopher Born; Dioscaris Garcia. Characterization of Silver Carboxylate's Microbicidal Mechanisms in Multi-drug Resistant *Serratia Marcescens*. Orthopaedic Research Society Annual Meeting, February 2 – 6, 2024, Long Beach, CA.
15. Poster Presentation: Patrick Barhouse; Geronimo Garcia Jr; Benjamin Stone; Colin Whitaker; Drew Clippert; Valentin Antoci; Christopher Born; Dioscaris Garcia. Safety And Cell Death Mechanism Of Silver Carboxylate When Used As An Antimicrobial Coating For Orthopedic Implants. Orthopaedic Research Society Annual Meeting, February 2 – 6, 2024, Long Beach, CA.
16. Poster Presentation: Josue Marquez; Carolyn Lai; Jorge Garavito; Anna Rezk; Makenna Mette; Drew Clippert; Sai Allu; Liam Connolly; Valentin Antoci; Christopher Born; Dioscaris Garcia. Characterization Of The Antimicrobial Capabilities Of Silver Carboxylate Against Persister Cells And Biofilms. Orthopaedic Research Society Annual Meeting, February 2 – 6, 2024, Long Beach, CA.
17. Poster Presentation: Geronimo Garcia; Patrick Barhouse; Drew Clippert; Benjamin Stone; Colin Whitaker; Valentin Antoci; Christopher T. Born; Dioscaris R. Garcia. Assessment Of The Safety And Application Of Silver Carboxylate As A Pre-surgical Dressing. Orthopaedic Research Society Annual Meeting, February 2 – 6, 2024, Long Beach, CA.
18. Poster Presentation: Colin Whitaker, Benjamin Stone, Valentin Antoci, Christopher Born, Dioscaris Garcia. Cytotoxicity Profile of Silver Carboxylate Antimicrobial in Endothelial Cells: Promise for Post-Surgical Wound Healing and Vascularization. American Society for Microbiology- Microbe Annual Meeting, June 15 - 19, 2023. Houston, TX.
19. Poster Presentation: Makena Mette, William Connolly, Neel Vishwanath, Sai Allu, Colin Whitaker, Benjamin K. Stone, Valentin Antoci, Christopher T. Born, Dioscaris R. Garcia. Silver Carboxylate Antimicrobial: Current Formulations, in vitro Efficacy, and Clinical Relevance. American Society for Microbiology- Microbe Annual Meeting, June 15 - 19, 2023. Houston, TX.
20. Podium Presentation: Dioscaris Garcia, Colin Whitaker, Benjamin Stone, William Connolly, Sai Allu, Valentin Antoci, Christopher T. Born. Characterization of Silver Carboxylate's Biocompatibility and Efficacy as an Antimicrobial Agent. Orthopaedic Trauma Association Annual Meeting, October 18-21, 2023. Seattle WA.
21. Podium Presentation: Synergistic Effects of Silver-Carboxylate and Chlorhexidine Gluconate for Surgical Site Infection Prevention by *Cutibacterium acnes* and MRSA. Christopher Born and Dioscaris Garcia. International Orthopaedic Trauma Association, Amsterdam, Netherlands. December 14 – 16, 2022.
22. Virtual Presentation: Delaying the Post-Antibiotic Age: Assessing Silver Carboxylate as a Potential Antimicrobial in the Context of Wound Care. Dioscaris Garcia. 8th Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE). Presented Virtually. December 12-14, 2022.
23. Poster Presentation: The Efficacy of Silver Carboxylate on Multidrug Resistant *Acinetobacter Baumannii* and Safety in Skeletal Muscle Cells with Translational Potential in Wound Care. Colin Whitaker, Benjamin Stone, Olive Cooper, Drew Clippert, James Hong, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. Orthopaedic Research Society Meeting. February 10-14, Dallas, Texas.

24. Poster Presentation: Silver carboxylate cytotoxicity in human osteoblasts, keratinocytes, and skeletal muscle cells compared to commonly used antibiotics and crude silver: an early characterization of the safety profile. Benjamin Stone, Colin Whitaker, Olive Cooper, Drew Clippert, James Hong, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. Orthopaedic Research Society Meeting. February 10-14, Dallas, Texas.
25. Poster Presentation: Antimicrobial Efficacy of Silver-Carboxylate against Drug-Resistant Pathogens in the Context of Prevention of Lower Spinal Infections by Vancomycin-Resistant *Enterococcus Faecalis*. William Connolly, Ben Stone, Colin Whitaker, Makena Mette, Jacob Ebersson, Madison Liesching, Valentin Antoci, Christopher Born, Dioscaris Garcia. Orthopaedic Research Society Meeting. February 10-14, Dallas, Texas.
26. Poster Presentation: Cytotoxicity Profile of Silver Carboxylate Antimicrobial in Endothelial Cells: Promise For Post-surgical Wound Healing And Vascularization. D. Garcia, C. Whitaker, B. Stone, V. Antoci, C. Born. American Society for Microbiology Meeting, June 15-19, Houston, Texas.
27. Poster Presentation: Silver Carboxylate Antimicrobial: Current Formulations, In Vitro Efficacy, And Clinical Relevance. Makena Mette, Liam Connolly, Neel Vishwanath, Sai Allu, Colin Whitaker, Benjamin Stone², Valentin Antoci, Christopher Born. American Society for Microbiology Meeting, June 15-19, Houston, Texas.
28. Poster Presentation: The Efficacy of Silver Carboxylate on *Acinetobacter baumannii* and Safety in Skeletal Muscle Cells. Colin Whitaker, Benjamin Stone, Liam Connolly, Sai Allu, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. 2023 Emerging Researchers National Conference in STEM. Washington, D.C. on February 9-11, 2023. (Third Place Poster Presentation).
29. Poster Presentation: Makena Mette, Sai Allu, Alyssa Steinbaum, Carolyn Lai, Benjamin Stone, Colin Whitaker, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate Antimicrobial Shows Ability to Disperse *Staphylococcus aureus* MW2 Biofilms and Attenuates Viability of Persister Cells. Lifespan Research Day, Oct. 4th, 2022. Rhode Island Hospital, Providence, RI.
30. Poster Presentation: Benjamin Stone, Colin Whitaker, Olive Cooper, Drew Clippert, James Hong, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. Assessment of Silver Carboxylate's Cytotoxicity in Primary Cell Lines: an Early Characterization of its Safety Profile Relating to Wound Care. Lifespan Research Day, Oct. 4th, 2022. Rhode Island Hospital, Providence, RI.
31. Poster Presentation: Alayna Bellavia, Carolyn Lai, Alyssa Steinbaum, Makena Mette, Valentin Antoci, Christopher Born, Dioscaris Garcia. Assessment of Silver Carboxylate's Ability to Decrease Bacterial Viability and Penetrate the Bacterial Outer Membrane. SACNAS, National Diversity in STEM Conference. October 27 – 29, 2022 in San Juan, Puerto Rico. –Did not attend due to Hurricane Fiona.
32. Poster Presentation: Colin Whitaker, Neel Vishwanath, Caitlin Barrett, Benjamin Stone, James Hong, Drew Clippert, Sai Allu, Elia Jouffrey, William Connolly, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate-eluting Titanium dioxide/Polydimethylsiloxane as a Safe and Effective Antibiotic Independent Antimicrobial and Its Emerging Clinical Applications. APSA Research Fair. Alpert Medical School, Brown University, Providence, RI. November 5, 2022.
33. Poster Presentation: Caitlin Barrett, Makena Mette, Neel Vishwanath, Dioscaris Garcia, Valentin Antoci. APSA Research Fair. Determining the Immediate Impact of the Removal of Total Knee Arthroplasty from the Centers for Medicare and Medicaid Inpatient Only List on Patient Reported and Surgical Outcomes. Alpert Medical School, Brown University, Providence, RI. November 5, 2022.
34. Poster Presentation: Christopher Born, Dioscaris Garcia, DR McDonald. Synergistic effects of silver-carboxylate and chlorhexidine gluconate for surgical site infection prevention by *Cutibacterium acnes* and MRSA. 1st Triennial Meeting IOTA / Trauma Dagen, Amsterdam, December 14 to 16, 2022.
35. Podium Presentation: Dioscaris R. Garcia, Sai Allu, Colin Whitaker, Ben Stone, Neel Vishwanath, Drew Clippert, Elia Jouffroy, James Hong, Valentin Antoci, Christopher Born. Silver Carboxylate-TiO₂/Polydimethyl Siloxane Is a Safe and Efficacious Antimicrobial With Significant Wound Care Potential. Orthopaedic Trauma Association. October 12-15, 2022, Tampa, Florida.

36. Poster Presentation: Makena Mette, Alyssa Steinbaum, Carolyn Lai, Sai Allu, Benjamin Stone, Colin Whitaker, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate Shows Penetrance of Staphylococcus aureus MW2 and VRS1 Biofilms and Hinder Viability of Persister Cells. American Society for Microbiology Conference on Biofilms, Nov. 13-17, 2022 in Charlotte, N.C.
37. Poster Presentation: Benjamin Stone, Colin Whitaker, Sai Allu, Olive Cooper, Drew Clippert, James Hong, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. A characterization of the safety profile of silver carboxylate in human-derived osteoblasts, keratinocytes, and skeletal muscle cells. AMS Symposium, The Alpert Medical School of Brown University. November 9, 2022 in Providence, RI
38. Poster Presentation: Makena Mette, Sai Allu, Alyssa Steinbaum, Carolyn Lai, Benjamin Stone, Colin Whitaker, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate Antimicrobial Shows Ability to Disperse Staphylococcus aureus MW2 Biofilms and Attenuates Viability of Persister Cells. AMS Symposium, The Alpert Medical School of Brown University. November 9, 2022 in Providence, RI
39. Poster Presentation: Olive Cooper, Colin Whitaker, Benjamin Stone, Liam Connolly, Sai Allu, Neel Vishwanath, Valentin Antoci, Christopher Born, Dioscaris Garcia. The Efficacy of Silver Carboxylate on Multidrug Resistant Acinetobacter baumannii and its Safety in Human Skeletal Muscle Cells: Relevance to Infections Common in Military Wounds. Annual Biomedical Research Conference for Minority Students (ABRCMS), Anaheim, CA, November 9-12, 2022.
40. Poster Presentation: Olive Cooper, Colin Whitaker, Benjamin Stone, Valentin Antoci, Christopher Born, Dioscaris Garcia. The Efficacy of Silver Carboxylate on Multidrug Resistant Acinetobacter baumannii and its Safety in Human Skeletal Muscle Cells: Relevance to Infections Common in Military Wounds. The Leadership Alliance National Symposium (LANS) in Hartford, CT, July 29 – 31 and Brown University Summer Undergraduate Symposium, Providence RI. August 4, 2022.
41. Poster Presentation: William Connolly, Ben Stone, Colin Whitaker, Jacob Eberson, Madison Liesching, Valentin Antoci, Christopher Born, Dioscaris Garcia. Antimicrobial Efficacy of Silver-Carboxylate against Drug-Resistant Pathogens in the Context of Prevention of Lower Spinal Infections by Enterococcus Faecalis. Brown University Summer Undergraduate Symposium, Providence RI. August 4, 2022.
42. Poster Presentation: Alayna Bellavia, Carolyn Lai, Alyssa Steinbaum, Makena Mette, Dioscaris Garcia. Assessment of Silver Carboxylate's Ability to Decrease Bacterial Viability and Penetrate the Bacterial Outer Membrane. RI Summer Research Symposium (RI-SURS) at the University of Rhode Island on Friday, July 29, 2022.
43. Poster Presentation: Carolyn Lai, Alyssa Steinbaum, Alayna Bellavia, Makena Mette, Christopher Born, Dioscaris Garcia. Increased Penetrance of Silver Carboxylate into Bacterial Outer Membrane, Cell Wall, Biofilms, and Effect Persister Cells Relative to Nanoparticle and Colloidal Silver. Brown University Summer Undergraduate Symposium, Providence RI. August 4, 2022.
44. Podium Presentation: Dioscaris R. Garcia, Neel Vishwanath, Sai Allu, Drew Clippert, Elia Jouffroy, Colin Whitaker, James Hong, Valentin Antoci, Christopher Born. Silver Carboxylate-TiO₂/Polydimethyl Siloxane is a Safe and Efficacious Antimicrobial with Significant Wound Care Potential. Orthopaedic Trauma Association. October 12-15, Tampa Bay, FL.
45. Poster Presentation: C. Whitaker, S. Allu, E. Jouffroy, W. Connolly, N. Vishwanath, D. Clippert, P. Ajayi, J. Hong, C. Lai, B. Stone, C. Barrett, V. Antoci, C. Born, D. Garcia. Silver Carboxylate-eluting Titanium Dioxide Polydimethylsiloxane Shows Promise Against The Rising Threat Of Antibiotic Resistant Acinetobacter Baumannii In Wound Applications. American Society for Microbiology, Microbe, June 6-9, 2022. Washington, DC.
46. Poster Presentation: William Connolly, Benjamin Stone, Neel Vishwanath, Drew Clippert, Colin Whitaker, James Hong, Elia Jouffroy, Sai Allu, Peter Ajayi, Carolyn Lai, Caitlin Barrett, Valentin Antoci, Christopher Born, Dioscaris Garcia. Silver carboxylate as a promising antibiotic-independent antimicrobial wound care agent: preliminary data describing efficacy in MDR Pseudomonas Aeruginosa and cytotoxicity in keratinocytes. American Society for Microbiology, Microbe, June 6-9, 2022. Washington, DC.

47. Poster Presentation: C. Lai, C. Barrett, C. Whitaker, D. Clippert, E. Jouffroy, S. Allu, N. Vishwanath, J. Hong, W. Connolly, B. Stone, P. Ajayi, V. Antoci, C. Born, D. Garcia. An Immunologic-based Assay As A More Sensitive Means Of Detecting Endotoxin Than The Limulus Amebocyte Lysate Test. American Society for Microbiology, Microbe, June 6-9, 2022. Washington, DC.
48. Poster Presentation: D. Garcia, D. Clippert, E. Jouffroy, J. Hong, B. Stone, C. Whitaker, N. Vishwanath, S. Allu, C. Barrett, W. Connolly, P. Ajayi, V. Antoci, C. Born. Silver-carboxylate Eluting Titanium Dioxide/polydimethylsiloxane Antimicrobial as a Promising Agent in The Treatment Of Osteomyelitis Caused by Staphylococcus aureus. American Society for Microbiology, Microbe, June 6-9, 2022. Washington, DC.
49. Podium Presentation: Dioscaris R. Garcia, Neel Vishwanath, Sai Allu, Drew Clippert, Elia Jouffroy, Colin Whitaker, James Hong, Valentin Antoci, Christopher Born. Silver Carboxylate-TiO₂/Polydimethyl Siloxane is a Safe and Efficacious Antimicrobial with Significant Wound Care Potential. Orthopaedic Trauma Association Annual Meeting, October 12-15, 2022. Tampa, Florida.
50. Poster Presentation: Caitlin Barrett, Makena Mette, Neel Vishwanath, Dioscaris Garcia, Valentin Antoci. Determining the Immediate Impact of the Removal of Total Knee Arthroplasty from the Centers for Medicare and Medicaid Inpatient Only List on Patient Reported and Surgical Outcomes. Advance CTR Emerging Areas of Science: 2022 IDEa Symposium, June 10th, 2022, Providence, RI.
51. Poster Presentation: Colin Whitaker, Neel Vishwanath, Caitlin Barrett, Benjamin Stone, James Hong; Drew Clippert; Sai Allu, Elia Jouffroy, William Connolly, Valetin Antoci, Christopher Born, Dioscaris Garcia. Silver Carboxylate-eluting Titanium dioxide/Polydimethylsiloxane as a Safe and Effective Antibiotic Independent Antimicrobial and it's Emerging Clinical Applications. Advance CTR Emerging Areas of Science: 2022 IDEa Symposium, June 10th, 2022, Providence, RI.
52. Accepted Poster Presentation: Jillian Glasser, Caitlin Barrett, Dioscaris R. Garcia, Valentin Antoci, Janine Molino, Thomas Barrett. Orthopedic Problems Remain a Priority Despite COVID 19 Anxieties .AAOS 2022 Annual Meeting, March 22 - March 26 in Chicago, Illinois.
53. Accepted Poster Presentation: Dioscaris R. Garcia, Mursal Gardezi, Caitlin Barrett, Neel Vishwanath, Ellis Berns, Carole Spake, Valentin Antoci, Christopher Born. Immunofluorescent Techniques As A Tool For Rapid And Quantifiable Detection Of Bacterial Biofilms And Bioburden On Surgical Explants, Tissue, And Synovial Fluid. Orthopaedic Research Society Annual Meeting, Feb. 4-8, 2022. Tampa, Florida.
54. Accepted Poster Presentation: Neel Vishwanath, Dioscaris R. Garcia, Sai Allu, Dominique Dockery, Caitlin Barrett, Valentin Antoci, Christopher Born. Silver Carboxylate In Wound Care: A Novel Solution For Antibiotic Resistance? Orthopaedic Research Society Annual Meeting, Feb. 4-8, 2022. Tampa, Florida.
55. Poster Presentation: N. Vishwanath, S. Allu, C. Spake, E. Berns, D. Dockery, E. Akelman, D. Garcia, C. Born Synergistic Effect of Silver Carboxylate and Chlorhexidine Gluconate Coated Sutures decreases Surgical Site Infections and Wounds of the Hand and Wrist by Methicillin-resistant Staphylococcus aureus and Cutibacterium acnes. Alpert Medical School Annual Academic Symposium. November 10th, 2021.
<https://repository.library.brown.edu/studio/item/bdr:y35rtz3k/>
56. Podium Presentation: Adrian Turcu, Ellis Berns, Caitlin Barrett, Carole Spake, Jacqueline Leong, Christopher T. Born, Dioscaris Garcia. Computational Analysis and Visualization of Biofilm Development on Implant Materials. Orthopaedic Trauma Association Annual Meeting. Oct. 21-24, Conference Paper. 2021
57. Abstract Presentation: Dioscaris Garcia, Mursal Gardezi, Caitlin Barrett, Neel Vishwanath, Ellis Berns, Carole Spake, Valentin Antoci, Christopher Born. Immunofluorescence as a Tool for Rapid and Quantifiable Detection of Biofilms and Bioburden on Surgical Explants, Tissue, and Synovial Fluid. Lifespan Research Day, October 5th, 2021 Providence, RI.
58. Abstract Presentation: Neel Vishwanath, Dioscaris Garcia, Sai Allu, Dominique Dockery, Caitlin Barrett, Valentin Antoci, Christopher Born. Silver Carboxylate: A Viable Tool for Antibiotic Resistance? Lifespan Research Day, October 5th, 2021 Providence, RI.

59. Poster Presentation: Neel Vishwanath, Sai Allu, Carole SL Spake, Ellis M. Berns, Dominique M. Dockery, Edward Akelman, Dioscaris R. Garcia, Christopher T. Born. Synergistic Effect of Silver Carboxylate and Chlorhexidine Gluconate Coated Sutures decreases Surgical Site Infections and Wounds of the Hand and Wrist by Methicillin-resistant *Staphylococcus aureus* and *Cutibacterium acnes*. 2021 AAHS Annual Meeting, January 11-15, Carlsbad, CA.
60. Podium Presentation: Abigail Boduch, Jillian L Glasser, Caitlin Barrett, Dioscaris Garcia, Valentin Antoci. Rifampin Loaded Antibiotic Cement Maintains Structural Integrity while Inhibiting Bacterial Growth. 2021 AAHKS Annual Meeting, November 11-14 Dallas, Texas, USA.
61. Virtual Presentation: Michael Amankwaah, Neel Vishwanath, Sai Allu, Christopher Born, Dioscaris Garcia. Synergistic Implementation of Silver Carboxylate and Chlorhexidine Gluconate is Effective at Preventing Colonization by *Cutibacterium acnes* (*C. acnes*) and MRSA in Wound Care Applications. Leadership Alliance Brown University Summer Presentation. August, 2021 (Virtual).
62. Podium Presentation: Born CT, Garcia DR. "Infected or Not? Next Generation Immunofluorescent Techniques for Determination of Bacterial Infection". 11th Annual Research Day for the Harvard Medical School Orthopaedic Trauma Initiative. June, 2021 (Virtual).
63. Paper Presentation: A. Clayton, C. Barrett, C. Moscinski, E. Berns, A. Turcu, J. Glasser, N. Vishwanath, C. S. L. Spake, S. Allu, L. Sahakian, D. Barber, V. Antoci, C. Born, D. Garcia; Brown Univ., Providence, RI. Dynamics of Biofilm Formation and Development of *Pseudomonas aeruginosa* and *Staphylococcus epidermidis* on PEEK. ASM/FEMS World Microbe Forum, June 20-24, Live-Streamed Due to COVID-19 Restrictions.
64. Paper Presentation: D. Dockery, S. Allu, N. Vishwanath, E. Berns, T. Li, V. Antoci, C. Born, D. Garcia; Brown Univ., Providence, RI. Synergistic Effects of Silver-carboxylate on Chlorhexidine Gluconate in the Context of Preventatives of Surgical Site Infections by *Cutibacterium acnes* (*C. acnes*) and MRSA. ASM/FEMS World Microbe Forum, June 20-24, Live-Streamed Due to COVID-19 Restrictions.
65. Paper Presentation: N. Vishwanath, S. Allu, A. Turcu, L. Sahakian, E. Berns, A. Clayton, V. Antoci, C. Born, D. Garcia; Brown Univ., Providence, RI. Characterization of *Pseudomonas aeruginosa* and *Staphylococcus epidermidis* Biofilm Developmental Dynamics on Titanium Alloy Spinal Implants. ASM/FEMS World Microbe Forum, June 20-24, Live-Streamed Due to COVID-19 Restrictions.
66. Paper presentation: Dominique M. Dockery, Sai Allu, Jillian Glasser, Valentin Antoci, Christopher T. Born, Dioscaris R. Garcia. Comparison of Periprosthetic Joint Infection Rates in the Direct Anterior Approach and Non-anterior Approaches to Primary Total Hip Arthroplasty. AAOS 2021 Annual Meeting, August 31 - September 3 in San Diego, California.
67. Poster Presentation: Ellis Berns, Dioscaris R. Garcia, Ahsia Clayton, Catherine Moscinski, Adrian Turcu, Caitlin Barrett, Valentin Antoci, Christopher T. Born. Rapid Visualization and Analysis of Fluorescently Conjugated Antibodies as Ex-Vivo Markers for Bacterial Presence on Orthopaedic Explants, Tissue, and Synovial Fluid. AAOS 2021 Annual Meeting, August 31 - September 3 in San Diego, California.
68. Poster Presentation: Ellis M. Berns; Dioscaris R. Garcia; Christopher Born; Caitlin Barrett; Adrian Turcu; Catherine Moscinski; Ahsia Clayton; Valentin Antoci. Removal Of *Staphylococcus Epidermidis* Biofilm From Orthopedic Implants With A Novel Irrigation Cocktail. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.
69. Poster Presentation: Adrian Turcu; Ellis Berns; Caitlin Barrett; Ahsia Clayton; Catherine Moscinski; Christopher Born; Valentin Antoci; Dioscaris Garcia. Rapid Visualization and Analysis Of Orthopaedic Device Related Infections With A Novel Software. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.
70. Poster Presentation: Dominique M. Dockery; Sai Allu; Jillian Glasser; Valentin Antoci; Christopher T. Born; Dioscaris R. Garcia. Comparison Of Periprosthetic Joint Infection Rates In The Direct Anterior Approach And Non-anterior Approaches To Primary Total Hip Arthroplasty. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.

71. Poster Presentation: Jillian Glasser; Valentin Antoci; Brooke Barrow; Christopher Born; Dioscaris Garcia. Titanium Surface Roughness May Increase Bacterial Adherence On Orthopedic Implants. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.
72. Poster Presentation: Caitlin Barrett; Ellis Berns; Gabriella Sansaricq; Christopher Born; Dioscaris R. Garcia. Usage Of A Point Of Service Rapid Visualization Assay In The Delineation Of Surgical Site Infection. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.
73. Poster Presentation: Ryan A. Bain; Christopher Born; Dioscaris R. Garcia. An Analysis of The Chemical And Physical Properties Of Polyetheretherketone (PEEK) Implants Coated With A Silver Carboxylate Titanium-Dioxide Polydimethylsiloxane (TiO₂-PDMS) Antimicrobial Matrix. Orthopaedic Research Society Annual Meeting, Long Beach California, February 13-16, 2021.
74. Podium Presentation: Turcu, Adrian, Berns, Ellis, Barrett, Caitlin, Spake, Carole, Leong, Jacqueline, Born, Christopher, Garcia, Dioscaris. "Application of a Novel Software for Analysis and Visualization of Biofilms on Implant Materials" (2020). Warren Alpert Medical School Academic Symposium. Brown Digital Repository. Brown University Library. <https://repository.library.brown.edu/studio/item/bdr:1149006/>
75. Podium Presentation: Dockery, Dominique, Allu, Sai, Born, Christopher, Garcia, Dioscaris. "Silver-Carboxylate/Chlorhexidine Gluconate Eluting Hybrid Matrix as Preventatives of Surgical Site Infections by MRSA and Cutibacterium acnes (C. acnes)" (2020). Warren Alpert Medical School Academic Symposium. Brown Digital Repository. Brown University Library. <https://doi.org/10.26300/05vf-de74>
76. Podium Presentation: Valentin Antoci, Jillian L Glasser, Brooke Barrow, Christopher Born, Dioscaris Garcia. Titanium Surface Roughness May Increase Bacterial Adherence on Orthopedic Implants. 30th AAHKS Annual Meeting. November 5 – 8, 2020. Dallas, Texas, USA.
77. Podium Presentation: Adrian Turcu, Ellis Berns, Caitlin Barrett, Carole Spake, Jaqueline Leong, Christopher Born, and Dioscaris Garcia. Computational Analysis and Visualization of Biofilm Development on Implant Materials 36th OTA Annual Meeting, September 30th-October 3rd, 2020. Nashville, Tennessee.
78. Poster Presentation: C. Barrett, E. Berns, A. Turcu, C. Born, D. Garcia. Rapid Detection of Endotoxin and Bacterial Content on Surgical Materials & Allografts. ASM Microbe 2020, June 18-22, 2020, Chicago, USA. Meeting Cancelled because of Corona Pandemic.
79. Poster Presentation: Ellis Berns, Caitlin Barrett, Adrian Turcu, Carole Spake, Christopher Born, and Dioscaris Garcia. In vitro platform for the prevention and removal of microbial biofilms during wound debridement with a multi-functional irrigation agent. 30th ECCMID 2020, Abstract number: 4120, Paris, France. Meeting Cancelled because of Corona Pandemic.
80. Poster Presentation: Caitlin Barrett, Ellis Berns, Jacqueline Leong, Dioscaris Garcia, and Christopher Born. A rapid visualization assay for the detection of orthopaedic-related infection on surgical hardware, tissue, synovial fluid and allografts. 30th ECCMID March, 18, 2020, Abstract number: 4123, Paris, France. Meeting Cancelled because of Corona Pandemic"
81. Poster Presentation: Caitlin Barrett; Jillian Glasser; Dioscaris Garcia; Christopher Born. A Rapid Visualization Assay For The Detection Of Orthopedic Related Infection On Surgical Hardware, Tissue, Synovial Fluid And Allografts. Orthopaedic Research Society Meeting. Phoenix, Arizona Feb. 2020.
82. Poster Presentation: Dioscaris R. Garcia; Troy Li; Christopher Born Silver Carboxylate Antimicrobial: A Novel Wound Care Therapeutic. Orthopaedic Research Society Meeting. Phoenix, Arizona Feb. 2020.
83. Poster Presentation: Alexis Fairman; Soobin Wang; Dahlia Alkekha; Alessia Battigelli; Wentian Yang; Douglas Moore; Valentin Antoci; Dioscaris R. Garcia; Christopher Born; Roy Aaron; Joseph Crisco; Anita Shukla Modification Of Biomaterials With Polyelectrolyte Multilayer Films For Controlled Delivery Of Osteolysis Inhibitors. Orthopaedic Research Society Meeting. Phoenix, Arizona Feb. 2020.
84. Poster Presentation: Ellis M. Berns; Lori Sahakian; Carole SL Spake; Zayn Biviji; Dioscaris R. Garcia; Christopher T. Born In-vitro Platform For The Prevention And Removal Of Microbial Biofilms During Wound Debridement With A Multi-functional Irrigation Agent. Orthopaedic Research Society Meeting. Phoenix, Arizona Feb. 2020

85. Poster Presentation: Ryan Bain, Andrea Gilmore, Dioscaris Garcia, and Christopher Born. An Assessment of the Biofilm-Prevention Efficacy of a Silver Carboxylate Eluting Titanium Dioxide and Polydimethylsiloxane Matrix on Spinal Implant Materials 2019 Annual AIChE Student Conference” and went from November 8-11 in Orlando.
86. Poster Presentation: Berns E, Barrett C, Turcu A, Sahakian L, Garcia D, Born, C "In-Vitro Platform for the Removal of Microbial Biofilms and Bacterial Content with an Irrigation Solution. Warren Alpert Medical School Academic Symposium. Providence, RI, November, 2019.
87. Poster Presentation: Dioscaris Garcia, Zayn Biviji, Carole Spake, Ellis Berns, Christopher Born. Quantitative In-Vitro Model for the Visualization and Characterization of Bacterial Biofilms on Medical Implants. ASM/ESCMID Conference on Drug Development, Boston, MA on September 3-6, 2019.
88. Poster Presentation: Dioscaris Garcia, Troy Li, Sai Allu, C. Born. Silver-Carboxylate Eluting Hybrid Matrix Coated Sutures as Preventatives of Surgical Site Infections by *Cutibacterium acnes*. ASM/ESCMID Conference on Drug Development, Boston, MA on September 3-6, 2019.
89. Poster Presentation: Dioscaris Garcia, Andrea Gilmore, Ryan Bain, Christopher Born. Silver Carboxylate-Eluting Titanium Dioxide Polydimethyl Siloxane Coating Prevents *Serratia marcescens* Adherence on PEEK. ASM/ESCMID Conference on Drug Development, Boston, MA on September 3-6, 2019.
90. Poster Presentation: Dioscaris Garcia, Grace Plassche, Olivia Lee, and Christopher Born. Novel Enviromimetic Culturing Prototype for Elucidation of Soil-Derived Marine Bacteria. ASM/ESCMID Conference on Drug Development, Boston, MA on September 3-6, 2019.
91. Poster Presentation: Dioscaris Garcia, Sai Allu, Troy Li, and Christopher Born. Silver-Carboxylate Eluting Hybrid Matrix Coated Sutures as Preventatives of Surgical Site Infections by Methicillin-Resistant *Staphylococcus aureus*. ASM/ESCMID Conference on Drug Development, Boston, MA on September 3-6, 2019.
92. Poster Presentation: Lori Sahakian, Ellis Berns, Dioscaris Garcia, and Christopher Born. Biofilm Platform for Development of Irrigation Agents. Brown University Summer Research Symposium, August 1, 2019-August 2, 2019, Brown University, Providence RI.
93. Poster Presentation: Troy Li, Dioscaris Garcia, and Christopher Born. Silver Carboxylate Antimicrobial: A Novel Wound Care Therapeutic for the Antibiotic Resistant Era. Brown University Summer Research Symposium, August 1, 2019-August 2, 2019, Brown University, Providence RI.
94. Poster Presentation: Andrea Gilmore, Ryan Bain, Dioscaris Garcia, Christopher Born. An Analysis of the Antimicrobial Effects of a Silver Carboxylate Coating on Multi Drug Resistant *Serratia marcescens* on Orthopaedic Biomaterials. Brown University Summer Research Symposium, August 1, 2019-August 2, 2019, Brown University, Providence RI.
95. Poster Presentation: Caitlin Barrett, Gillian Melikian, Zeenat Gardezi, Dioscaris Garcia, and Christopher Born. Determining Endotoxin Content and Bacterial Colonization using a Rapid Visualization Assay on Synovial Fluid, Tissue and Allografts. Brown University Summer Research Symposium, August 1, 2019- August 2, 2019. Brown University, Providence, RI.
96. Poster Presentation: Gillian Melikian, Caitlin Barrett, Zeenat Gardezi, Dioscaris Garcia, Christopher Born. Detection of Bacterial Colonization and Endotoxin Content Surgical Material and Tissue Allografts via Rapid Immunologic Screening. INBRE SURF, July 26, 2019. University of Rhode Island, Kingston, RI.
97. Podium Presentation: Gilmore, Andrea J. Dioscaris Garcia, Christopher, Born. Silver Carboxylate Coating Prevents Adherence of Multi Drug Resistant *Serratia marcescens* on Polyetherether Ketone. 4th International PEEK Meeting, April 25-26, 2019. Washington, D.C.
98. Podium Presentation: Garcia, D.R., Jarrell, J.D., Born, C.T. The Efficacy of a Silver Carboxylate Coating on Prosthetic Liners. 2019 American Academy of Orthotists and Prosthetists. March 6-9, 2019. Orlando, FL.
99. Poster Presentation: Dioscaris R. Garcia; Troy Li; Daniel Roque; Christopher Born. Eradication of Methicillin-Resistant *Staphylococcus aureus* and *Propionibacterium acnes* Colonization by a Silver Carboxylate Complex-Eluting Skin Surgical Prep. 2019 Orthopaedic Research Society. February 2-5, 2019. Austin, TX.

100. Poster Presentation: D. R. Garcia, C. C. Spake, C. Fonseca, D. Barber, C. T. Born; Combinatorial Platform for the Visualization and Quantification of Bacterial Biofilms on Orthopaedic Implants. 8th Annual American Society for Microbiology: Biofilms. October 7-11, 2018. Washington D.C.
101. Poster Presentation: D. R. Garcia, J. Glasser, I. Lopez Lopez, L. Sippelle, J. Leong, M. Gardezi, Y. Suliman, C. T. Born; A Rapid Visual Quantitative Diagnostic Methodology for the Detection of Bacterial Infections in Orthopaedics. 8th Annual American Society for Microbiology: Biofilms. October 7-11, 2018. Washington D.C.
102. Poster Presentation: Dioscaris R. Garcia, Troy Li, Dan Roque, Christopher T. Born; Silver Carboxylate Complex-Eluting Skin Surgical Prep Eliminates Methicillin-resistant *Staphylococcus aureus* and *Propionibacterium acnes* Colonization. 8th Annual American Society for Microbiology: Biofilms. October 7-11, 2018. Washington D.C.
103. Poster Presentation: Spake C., Fonseca C., Garcia, D., Born C. Platform for the Visualization of Bacterial Biofilms on Orthopaedic Implants. Brown University Warren Alpert Medical School Annual Summer Research Showcase. October, 2018. Providence, RI.
104. Poster Presentation: Dioscaris R. Garcia, Troy Li, Dan Roque, Christopher T. Born. Eradication of Methicillin-Resistant *Staphylococcus aureus* and *Propionibacterium acnes* Colonization by a Silver Carboxylate Complex-Eluting Skin Surgical Prep. When to Heal: Timing Interventions for Maximal Effectiveness -- Wound Care Symposium. September 14-15, 2018. Providence, RI.
105. Podium Presentation: Dioscaris R. Garcia, PhD, John D. Jarrell, PhD, PE Christopher T. Born. Inhibiting *Pseudomonas aeruginosa* Growth Associated with Prosthetic Liners. 2018 American Orthotic Prosthetic Association. September 25-29th, 2018. Vancouver, Canada.
106. Poster Presentation: Li T, Garcia DR, Born CT. Silver Carboxylate Complex-Eluting Surgical Skin Prep Eliminates Methicillin-resistant *Staphylococcus aureus* and *Propionibacterium acnes* Colonization. Brown University Summer Research Symposium, Providence, RI. August, 2018.
107. Poster Presentation: Glasser J, Lopez IL, Leong J, Sippelle L, Garcia DR, Born CT. Rapid Visualization Quantitative Diagnostic Tool for the Detection of Bacterial Bioburden. Brown University Summer Research Symposium, Providence, RI. August, 2018.
108. Poster Presentation: Plassche G, Garcia DR, Born CT. Novel Culture Methodologies to Maximize the Growth of Rare *Actinomyces* and Their Production of Secondary Bioactive Metabolites with Antimicrobial Activity. Brown University Summer Research Symposium, Providence, RI. August, 2018.
109. Poster Presentation: Gilmore A, Garcia DR, Born CT. An Analysis of the Antimicrobial Effects of a Silver Carboxylate Coating on Multi-Drug Resistant *Serratia marcescens* on Orthopaedic Biomaterials. Brown University Summer Research Symposium, Providence, RI. August, 2018.
110. Poster Presentation: Fonseca C, Spake CSL, Garcia DR, Born CT. Platform for the Visualization of Bacterial Biofilms on Orthopaedic Implants. Brown University Summer Research Symposium, Providence, RI. August, 2018.
111. Poster Presentation: Jillian Glasser; Irmaris Lopez Lopez; Jaqueline Leong BA; Lynne Sippelle; Dioscaris Garcia, PhD; Christopher Born, MD. Rapid Visualization Quantitative Diagnostic Tool for the Detection of Bacterial Bioburden. 11th Annual RI-INBRE-SURF Conference. July 27th, 2018. Kingston, RI.
112. Podium Talk: Christopher T. Born and Dioscaris R. Garcia. Rapid Visualization and Classification of Bacterial Biofilms on Orthopaedic Materials. Foundation for Orthopaedic Trauma Meeting. February 2nd, 2018. Las Vegas, NV.
113. Poster Presentation: D. Roque, D. Garcia, J. Haglin, C. Born. Imparting Antibiotic-Independent Antimicrobial Properties to Prosthetic Liners Through the Application of a Silver-doped Hybrid Coating. ASM/ESCMID Conference on Drug Development to Meet the Challenge of Antimicrobial Resistance. September 6-8th, 2017. Boston, Massachusetts.
114. Podium Presentation: Justin Kleiner, Joseph Johnson, Jeremy Truntzer, Scott McAllister, Mathew Edward Deren, Mursal Gardezi, Olivia Cummings, Melanie Ambler, Dioscaris Garcia, Christopher T. Born. The Effect of Smoking Cessation on Serum Biomarkers of Fracture Healing. Orthopaedic Trauma Association. October 12, 2017.

115. Poster Presentation: Anthony Minnah, Eric Nguyen, Dioscaris R. Garcia, John D. Jarrell, Christopher Born. An Analysis of the Antimicrobial Effects of a Ag-doped TiO₂-PDMS coating on the adherence and proliferation of Multidrug Resistant *A. baumannii* and Vancomycin Resistant *E. faecalis* on Orthopaedic Biomaterials. 2017 AAOS/OTA/SOMOS/ORS Extremity War Injuries XII: Homeland Defense as a Translation of War Lessons Learned (EWI XII) research symposium. January 30-February 1, 2017, Washington D.C.
116. Paper Presentation: David G. Deckey, Alexandra Zega, Dioscaris R. Garcia, Alan Daniels, John Jarrell, Craig Eberson, Christopher T. Born. Analysis of Growth and Biofilm Formation of Bacterial Pathogens on Frequently-Used Spinal Instrumentation. AAOS, 2017, Annual Meeting, March 14-18 in San Diego, California.
117. Poster Presentation: Kevin Mertz; Dioscaris R. Garcia; John Jarrell; Christopher Born. A Silver-based, Titanium Dioxide/polymer-hybrid Coating as a Preventative for *C. Albicans* Biofilms. Orthopaedic Research Society, March 19-22, 2017, San Diego, California.
118. Poster Presentation: Douglas T. Barber; Dioscaris Garcia; Christopher Born. Rapid Detection and Quantification of Biofilms on Orthopaedic Implants. Orthopaedic Research Society, March 19-22, 2017, San Diego, California.
119. Poster Presentation: Cory K. Mayfield, Alexandra Zega, David Deckey, Dioscaris Garcia, John D. Jarrell, Christopher Born. Adherence and Proliferation of *Propionibacterium acnes* on Materials of Orthopaedic Relevance. ASM Microbe 2016 in Boston, Massachusetts, June 16-June 20, 2016.
120. Poster Presentation: Jack M. Haglin, Artym V. Hayda, Dioscaris R. Garcia, John D. Jarrell, and Christopher T. Born. Assessing the Efficacy of Silver-doped Antimicrobial Coatings on Prosthetic Liners. ASM Microbe 2016 in Boston, Massachusetts, June 16-June 20, 2016.
121. Poster Presentation: Cobb, Caryn, Fox, Henry M., Deckey, David G., Kondo, Ayano, Hayda, Artym V., Garcia, Dioscaris R., Daniels, Alan, Jarrell, John D., Born, Christopher T. Development of in vitro Co-Culture Model for the Detection and Quantification of Biofilm on Orthopaedic Explants. Student National Medical Association Dr. Wilbert C. Jordan Research Forum, Austin, Texas March 23-27, 2016.
122. Poster Presentation: Dioscaris R. Garcia, Alan H. Daniels, Alexandra Zega, David Deckey, Ayano Kondo, John Jarrell, Craig Eberson, Andrew Green, Roman A. Hayda, Christopher Born. Characterization of the Adherence Patterns and Biofilm Density of Commonly Encountered Bacterial Pathogens to Spinal Instrumentation of Differing Compositions. Orthopaedic Research Society, Orlando FL, March 5-8, 2016.
123. Poster Presentation: Deckey DG, Garcia DR, Daniels AH, Zega AM, Kondo A, Jarrell JD, Eberson CP, Green A, Hayda RA, Born CB. Characterization of the Adherence Patterns and Biofilm Density of Commonly Encountered Bacterial Pathogens to Spinal Instrumentation of Differing Compositions. Poster Presentation. 10th Annual Massachusetts Medical Society (MMS) Research Poster Symposium, Waltham, MA, December 2015.
124. Poster Presentation: Anthony Minnah, Eric M. Nguyen, Dioscaris R. Garcia, John D. Jarrell, Christopher Born. Characterization of the Antimicrobial Effects of a Silver-Doped Titanium Dioxide-PDMS Hybrid Coating on the Adherence and Proliferation of Multi-Drug Resistant *A. baumannii* on Spinal Implant Rods of Varying Compositions. Biomedical Engineering Society Annual Meeting, Tampa, FL, October 7-10 2015.
125. Poster Presentation: Anthony Minnah, Eric Nguyen, Dioscaris R. Garcia, John D. Jarrell, Christopher Born. An Analysis of the Antimicrobial Effects of a Ag-doped TiO₂-PDMS coating on the adherence and proliferation of Multidrug Resistant *A. baumannii* and Vancomycin Resistant *E. faecalis* on Orthopaedic Biomaterials. Biomedical Engineering Society Annual Meeting, Minneapolis, MN, October 5-8 2016.
126. Poster Presentation: Anthony Minnah, Eric Nguyen, Dioscaris R. Garcia, John D. Jarrell, Christopher Born. An Analysis of the Antimicrobial Effects of a Ag-doped TiO₂-PDMS coating on the adherence and proliferation of Multidrug Resistant *A. baumannii* and Vancomycin Resistant *E. faecalis* on Orthopaedic Biomaterials. Society for the Advancement of Chicanos and Native Americans in Science National Conference, Long Beach, CA, October 13- 15 2016.
127. Poster Presentation: Gardezi M, Garcia D, Born C, Jarrell J. Effects of Temperature and Ionic Strength on Rapid Visualization Assay for Identifying Gram Negative and Gram Positive Bacteria on Orthopedic Infection Sites: POSTER #41. Rhode Island Hospital Poster Symposium October, 2016.

128. Poster Presentation: Barber D, Garcia D, Born C. Developing a Model for the Classification of Bacterial Biofilms on Orthopaedic Materials. Rhode Island Hospital Poster Symposium October, 2016.
129. Poster Presentation: Irons B, Hayda T, Garcia D, Born C. Elucidation and Purification of Secondary Bioactive Metabolites with Antimicrobial Activity from Natural Sources: POSTER #26. Rhode Island Hospital Poster Symposium October, 2016.
130. Poster Presentation: Mertz K, Garcia D, Born C. A Silver-based, Titanium Dioxide/polymer-hybrid Coating as a Preventative for *C. albicans* Biofilms: POSTER #42. Rhode Island Hospital Poster Symposium October, 2016.
131. Poster Presentation: Minnah A, Jarrell JD, Garcia DR, Born C. An Analysis of the Antimicrobial Effects of a Ag-doped TiO₂-PDMS Hybrid Coating on *E. faecalis* on Orthopaedic Biomaterials: POSTER #43. Rhode Island Hospital Poster Symposium October, 2016.
132. Poster Presentation: Gardezi M, Garcia D, Born C, Jarrell J. Effects of Temperature and Ionic Strength on Rapid Visualization Assay for Identifying Gram Negative and Gram Positive Bacteria on Orthopedic Infection Sites: POSTER #41. Brown University Summer Undergraduate Poster Symposium. August, 2016.
133. Poster Presentation: Barber D, Garcia D, Born C. Developing a Model for the Classification of Bacterial Biofilms on Orthopaedic Materials. Brown University Summer Undergraduate Poster Symposium. August, 2016.
134. Poster Presentation: Irons B, Hayda T, Garcia D, Born C. Elucidation and Purification of Secondary Bioactive Metabolites with Antimicrobial Activity from Natural Sources: POSTER #26. Brown University Summer Undergraduate Poster Symposium. August, 2016.
135. Poster Presentation: Mertz K, Garcia D, Born C. A Silver-based, Titanium Dioxide/polymer-hybrid Coating as a Preventative for *C. albicans* Biofilms: POSTER #42. Brown University Summer Undergraduate Poster Symposium. August, 2016.
136. Poster Presentation: Minnah A, Jarrell JD, Garcia DR, Born C. An Analysis of the Antimicrobial Effects of a Ag-doped TiO₂-PDMS Hybrid Coating on *E. faecalis* on Orthopaedic Biomaterials: POSTER #43. Brown University Summer Undergraduate Poster Symposium. August, 2016.
137. Podium Talk: Dioscaris R. Garcia, Alan H. Daniels, Alexandra M. Zega, David G. Deckey, Ayano Kondo, John D. Jarrell, Craig P. Eberson, Andrew Green, Roman A. Hayda, and Christopher T. Born. Characterization of the Adherence Patterns and Biofilm Density of Commonly Encountered Bacterial Pathogens to Spinal Instrumentation of Differing Compositions. Scoliosis Research Society, September 30-October 3, 2015, Minneapolis, Minnesota, USA.
138. Poster Presentation: Nhiem Tran, Michael N. Kelley, Phong A. Tran, Dioscaris R. Garcia, Alan Daniels, John D. Jarrell, Roman A. Hayda, and Christopher T. Born. Silver Doped Titanium Oxide - PDMS Hybrid Coating Inhibits *Staphylococcus aureus* and *Staphylococcus epidermidis* Growth on PEEK, 2nd International PEEK Meeting, Washington D.C., April, 2015.
139. Poster Presentation: Adherence Patterns and Biofilm Density of Commonly Encountered Bacterial Pathogens to Spinal Instrumentation of Differing Compositions with Silver-Doped Polydimethylsiloxane/Titanium Dioxide Coatings, Alexandra Zega, David G. Deckey, Henry M. Fox, Ayano Kondo, Artym Hayda, Dioscaris Garcia, PhD, Alan Daniels, MD, Craig Eberson, John D. Jarrell, PhD, and Christopher T. Born, MD. 2015 Annual Undergraduate Research Poster Day in the Biological Sciences, Providence, RI, April, 2015.
140. Poster Presentation: Development of an in vitro Co-Culture Model for the Detection and Quantification of Biofilm on Orthopaedic Explants, Caryn B.C. Cobb, Henry M. Fox, Janice A. Havasy, David G. Deckey, Artym V. Hayda, Alan Daniels, MD, Craig Eberson, MD, John D. Jarrell, PhD, Dioscaris R. Garcia, PhD, and Christopher T. Born, MD. 2015 Annual Undergraduate Research Poster Day in the Biological Sciences, Providence, RI, April, 2015.
141. Poster Presentation: Development of an in vitro Co-Culture Model for the Detection and Quantification of Biofilm on Orthopaedic Explants, Caryn B.C. Cobb, Henry M. Fox, Janice A. Havasy, David G. Deckey, Artym V. Hayda, Alan Daniels, MD, Craig Eberson, MD, John D. Jarrell, PhD, Dioscaris R. Garcia, PhD, and Christopher T. Born, MD. New England Science Symposium, Boston, MA April, 2015.

142. Poster Presentation: A Silver-Doped TiO₂-PDMS Hybrid Coating to Deter Infection in Orthopaedic Surgery, David G. Deckey, Alexandra Zega, Henry M. Fox, Ayano Konda, Dioscaris Garcia, PhD, Alan Daniels, MD, Craig Eberson, MD, John D. Jarrell, PhD, and Christopher T. Born, MD. 2015 Annual Undergraduate Research Poster Day in the Biological Sciences, Providence, RI, April, 2015.
143. Poster Presentation: Development of a Rapid-Detection Assay for the Visualization and Quantification of Bacterial Colonization and Biofilm Formation on Orthopaedic Trauma Explants, Henry M. Fox, Janice Havasy, Caryn B. Cobb, David G. Deckey, Ayano Kondo, Artym V. Hayda, Dioscaris R. Garcia, PhD, Alan Daniels, MD, John D. Jarrell, PhD, and Christopher T. Born, MD. 2015 Annual Undergraduate Research Poster Day in the Biological Sciences, Providence, RI, April, 2015.
144. Podium Talk: Dioscaris R. Garcia, PhD., Henry Fox, Caryn Cobb, Janice Havasy Alan Daniels, MD, John Jarrell, PhD., Craig Eberson, MD, Roman A. Hayda, MD, Christopher T. Born Development of a Rapid-Detection Assay for the Visualization and Quantification of Bacterial Colonization and Biofilm Formation on Orthopaedic Trauma Explants, Foundation for Orthopaedic Trauma Research, Las Vegas, NV, March 2015.
145. Poster Presentation: Visualization and Characterization of Bacterial Biofilm on Orthopaedic Trauma Explants, Henry M. Fox, David G. Deckey, Ayano Kondo, Artym V. Hayda, Dioscaris R. Garcia, PhD, Alan Daniels, MD, John D. Jarrell, PhD, and Christopher T. Born, MD. Brown University Undergraduate Summer Research Symposium, 2014. Brown University, August, 2014, Providence, RI.
146. Poster Presentation: The Characterization of Biofilm Formation on Spinal Implants of Varying Compositions. David G. Deckey, Henry M. Fox, Ayano Kondo, Dioscaris Garcia, PhD, Alan Daniels, MD, John D. Jarrell, PhD, and Christopher T. Born, MD. Brown University Undergraduate Summer Research Symposium, 2014. Brown University, August, 2014, Providence, RI.
147. Poster Presentation: Mullur, Jyotsna, Garcia, Dioscaris, Bowen, Wayne. Characterization of Sigma-2 Mediated Signaling in Human Neuroblastoma. Brown University Undergraduate Honors Symposium. April, 2012.
148. Poster Presentation: Pham, Vincent, Garcia, Dioscaris, Bowen, Wayne. Sigma-2 Receptor-Activated of SPC Transiently Mobilizes [Ca²⁺]_i in the SK-N-SH Neuroblastoma Cell Line. Brown University Undergraduate Honors Symposium. April, 2012.
149. Poster Presentation: Savoca, Emily, Garcia, Dioscaris, Bowen, Wayne. Sigma-2 Receptor Expression in Proliferating Tumor Cells and Changes in Drug Sensitivity. Brown University Undergraduate Honors Symposium. May, 2011.
150. Poster Presentation: Garcia, Dioscaris, McCurdy, Christopher R., Bowen, Wayne. Sigma-2 Receptor-Mediated Apoptosis and Calcium Signaling: Are They Bifurcating Pathways?. Society for Neuroscience, November, 2010. 470.17.
151. Poster Presentation: Garcia, Dioscaris, Bowen, Wayne. Exploring the sigma-2 receptor-selective ligand SN79 as a tool for studying possible sigma-2 receptor heterogeneity. NABRIT Conference. March 2010.
152. Poster Presentation: Garcia, Dioscaris, Bowen, Wayne. Sphingosylphosphorylcholine promotes cell survival and proliferation parallel to sigma-2 receptor ligand CB-64D in Neuroblastoma SK-N-SH cells. NABRIT Conference. March, 2008.

INVITED PRESENTATIONS (SELECTED)

1. INDEX Launches Health-Focused Forum in Washington, Presidency of the Dominican Republic 2/8/24 Dioscaris Garcia
2. Panelist: Garcia, Dioscaris R. INDEX-Health, Dominicans on the Hill, US Capitol, Washington, DC.
3. Speaker: Garcia, Dioscaris R. University of Rhode Island College of Pharmacy Retreat.
4. Seminar Speaker: Garcia, Dioscaris R. Race, Racism, and Health: Lessons from the Bench to the Frontlines. Race, Racism, and Health, School of Public Health, March 1, 2023. Providence, RI.

5. Townhall Presentation: Garcia, Dioscaris R. IDEAA, Science and Society. American Society for Microbiology Microbe Conference, Houston, TX, June 15-19, 2023.
6. Keynote Speaker: Garcia, Dioscaris R. Belonging: Uplifting Ourselves & Carving Your Own Space. MEDSTEP 2.0 Series. Brown University Medical School, May 1, 2023.
7. Keynote Speaker: Garcia, Dioscaris R. Developing the Next Generation of Black Leaders in Health. Brown University Medical School, May 13, 2023.
8. Townhall Presentation: Garcia, Dioscaris R. Utilizing Diversity as an Asset in Academia: Alternative Approaches in Mentoring of Historically Underrepresented Groups (HUGs). ASM Microbe, June 9-13, 2022, Washington D.C.
9. Seminar Presentation: Garcia, Dioscaris R. Bushwhacking To Success: Challenges Facing Minorities in Higher Academia. Special Presentation on Diversity and Inclusion for the Department of Orthopaedics Seminar. Rhode Island Hospital, October 6, 2021, Providence, RI. Presented again at the Orthopaedics Surgery Department Grand Rounds on 12/15/21.
10. Podium Presentation: Born CT, Garcia DR. "Infected or Not? Next Generation Immunofluorescent Techniques for Determination of Bacterial Infection". 11th Annual Research Day for the Harvard Medical School Orthopaedic Trauma Initiative. June, 2021 (Virtual).
11. Seminar Presentation: Translational Approaches to Orthopaedic-Related Infections. Dioscaris R. Garcia, Rhode Island Hospital Department of Orthopaedics Seminar. April, 2016.
12. Seminar Speaker: Characterization of the Adherence Patterns of Staphylococcus aureus on Various Spinal Implant Materials, Dioscaris R. Garcia, PhD, Alan Daniels, MD, Craig Eberson, MD, John D. Jarrell, PhD, and Christopher T. Born, MD. Orthopaedic Department Seminar, Rhode Island Hospital, January, 2014 Providence, RI.
13. Guest Lecturer: Brown University. The Importance of Intellectual Property in Biotechnology, October, 2016.
14. Invited Participant: Rally for Medical Research Hill Day, Washington D.C., September, 2013.
15. Invited Speaker: University of Rhode Island, 6th INBRE SURF Conference, July, 2013.
16. Invited Panelist: Morgan State University. 13th Annual Graduate Career Workshop, September, 2012.
17. Guest Lecturer: Brown University. Principles of Pharmacology, July, 2012.

SCHOLARLY WORK IN OTHER MEDIA

1. INDEX Launches Health-Focused Forum in Washington, Presidency of the Dominican Republic 2/8/24
2. Dioscaris Garcia, Providence Business News Healthcare Hero, Providence Business News, by PBN Staff – 4/24/2023
3. Five Questions With: Dr. Dioscaris Garcia, Providence Business News, by Claudia Chiappa -01/29/2023
4. Utilizing Diversity as an Asset in Academia: Alternative Approaches in Mentoring of Historically Underrepresented Groups (HUGs). By Dioscaris Garcia, American Society for Microbiology.
5. When All Else Fails, Medicine @ Brown, 5/2022 by Phoebe Hall
6. Increasing diversity in STEM, Program Newsletter in Biology, 3/2022 by Phoebe Hall
7. "It's been Crazy" Long lines, few appointments plague COVID Testing Sites in RI, Providence Journal, 1/2022 by Amy Russo
8. Orthopaedics This Week, by Elizabeth Hofheinz
9. 'It's been crazy': Long lines, few appointments plague COVID testing sites in RI, Providence Journal, 12/30/21 by Amy Russo
10. The Pandemic Changed Everything—Except Who Gets Left Behind, Medicine @ Brown, 5/2021 by Phoebe Hall.
11. MPP Alumnus Dioscaris Garcia Receives Honor from State of RI for Covid-19 Efforts in Pawtucket & Central Falls. 9/30/2020

12. Brown Boosts Immunity combats vaccine hesitancy in Rhode Island. Brown Herald, Publish date: 2/8/21 by Oliver Keen.
13. Smoother orthopedic implants may minimize bacterial adherence. Rheumatology News, Publish date: September 18, 2015. By: Doug Brunk
14. PBN Top 40 Under Forty, PBN. Published date: 7/20/17. By: PBN Staff.
15. Introducing Rhode Island's Inno's Inaugural 50 on Fire. Published date: 12/19/17. By: Courtney Gabrielson.
16. Laser Focus, Brunonia, Published date: 7/9/2018. By: Amy Anthony.
17. URI Senior Aims for Career in Cancer Research. URI Today. Published date: 5/5/2004. By Todd McLeish.

UNIVERSITY TEACHING, ADVISING, AND MENTORING

Additionally, Dr. Garcia has served as an informal mentor to over 300 students at the university since 2005. Named mentees include:

- Imani McGregor, Brown University, '27
- Leslie Lima, Brown University, '28
- Elissa Byrne, Brown University, '26
- Blaire Williams, California State University-Bakersfield, Leadership Alliance, '25
- Patrick Barhouse, Brown University, '25
- Anna Rezk, Brown University, '25
- Nathaniel Kim, Brown University, '26
- Josue Marquez-Garcia, Brown University, '26
- Jorge Garavito, Brown University, '26
- Mathieu Caron, Brown University, '25 (UTRA)
- Jacob Eberson, UCLA, '24
- Alyssa Steinbaum, Brown University, '19 (BIO1950/60)
- Olive Cooper, Tougaloo College, Leadership Alliance, '23
- Alaynna Bellavia, University of Rhode Island, INBRE, '26 PharmD
- Makena Mette, Brown University, '25 MD
- William Connolly, Brown University, '25 MD
- Benjamin Stone, Brown University, 25 MD
- Peter Ajayi, Brown University, 25 MD
- Carolyn Lai, Brown University, '23 (BIO1950/60)
- James Hong, Brown University, '22 (BIO1950/60)
- Colin Whitaker, Brown University, '25 MD
- Michael Amankwaah, Rutgers University-Newark, Leadership Alliance (2021)
- Gabriella Sansaricq, Brown University, '24 MD
- Neel Vishwanath, Brown University, '25 MD
- Ahsia Clayton, Brown University, '24 MD
- Nikki Moscinski, Brown University, '24 MD
- Dominique Dockery, Brown University, '23 MD, Summer Assistantship
- Drew Clippert, Brown University, '22 Sc.B. Health and Human Biology (BIO1950/60)
- Ellia Jouffroy, Brown University, '22 Sc.B. Biochemistry and Biology (BIO1950/60)
- Nicolas Ortega, Brown University, '22 Sc.B. Biomedical Engineering (UTRA, 2020) (BIO1950/60)
- Alexis Fairman, Brown University, '20 ScM, Biomedical Engineering
- Lori Sahakian, Brown University '20 BS, Biology, Honors, (LINK, 2019) (BIO1950/60)
- Zeenat Gardezi, Georgetown University '23 BS,
- Gillian Melikian, Providence College (Summer Internship, RI-INBRE Grant)
- Adam Fuller, Brown University '21 BS, Biology (BIO1950/60)
- Ellis Berns, Brown University (PLME) '18 Sc.B. in Neuroscience, Alpert Medical School '22
- Ryan Bain, Brown University '21 BS, Biochemical Engineering, (LINK, 2019, UTRA, 2020) (BIO1950/60)
- Zayn Biviji, Brown University '21 Sc.B Applied Mathematics-Biology (BIO1950/60)
- Sai Allu, Brown University (PLME) '21 BS, MD '25 (Summer Research Assistantship, 2020) (BIO1950/60)
- Olivia Lee, Brown University, Sc.B. Applied Mathematics, '19 (BIO1950/60)
- Celina Fonseca University of Massachusetts (Amherst), BS Biochemistry and Molecular Biology'20
- Jacqueline Leong, Brown University Alpert Medical School, MD '21
- Lynne Sipprelle, Horace Mann School '19 (Summer Internship)
- Latsany Lopez, Sophia Academy '15 (Brown University Sophia-Royce Summer Internship 2018)
- Caitlin Barrett, Brown University, BA Biology '21, (Royce Fellowship, 2020, SURF, 2020) (BIO1950/60)
- Carole Spake, Brown University Alpert Medical School, MD '21
- Irmari Lopez-Lopez, University of Puerto Rico, BS '19 (Karen T. Romer Undergraduate Teaching and Research Award Team Grant 2018 \$3570)

- Patricia Rodarte, Brown University (PLME) BA Health/Human Biology, '20, MD '24 (2018 Awarded and declined Brown Summer Research Assistantship (SRA))
- Troy Li, Brown University, ScB Biochemistry, '20 (2018 Karen T. Romer Undergraduate Teaching and Research Award Team Grant \$3570) (2019 Karen T. Romer Undergraduate Teaching and Research Award \$3570), Honors. (BIO1950/60)
- Andrea Gilmore, Brown University, BA Health and Human Biology, '20 (2019 Karen T. Romer Undergraduate Teaching and Research Award \$3570), Honors. (BIO1950/60)
- Grace Plassche, Brown University, ScB Biology, '19 (Honors Thesis: Development of Novel Enviromimetic Culturing Prototypes for Soil Derived Marine Bacteria). (BIO1950/60)
- Geronimo Garcia, Jr: Brown University, BA Health and Human Biology, '19 (BIO1950/60)
- Jillian Glasser: Brown University, BA Health and Human Biology, '19 (2018 Research at Brown (RAB) travel award \$250, 2018 grant award from Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF \$9000), 2018 Top Poster Presentation at American Society for Microbiology, 2019 Nominated Brown Chapter Sigma Xi Honor Society, (Honors thesis: 2. Rapid Quantitative Visualization Assay for the Detection of Bacterial Bioburden) (BIO1950/60)
- Olivia Cummings: Brown University, BA Health and Human Biology, '19 (BIO1950/60)
- Melanie Ambler: Brown University, B.Sc. Neurobiology, '19 (2018 RAB \$350 travel grant) (Honors Thesis: The Physiological and Psychological Effects of Intraoperative Music on Surgical Patients: A Systematic Review) (Awarded Fubright Scholarship) (BIO1950/60)
- Toby Emmanuel: MS4, Alpert Medical School (Recipient of Ruth Sauber Medical Scholars Program grant)
- Brianna Irons: Brown University, ScB Biology '18 (Honors Thesis: Elucidation and Purification of Secondary Bioactive Metabolites with Antimicrobial Activity from the Rhode Island Coastline) (Gap year Research Boston, MA. Applying to Medical School) (BIO1950/60)
- Justin Kleiner: Brown University, ScB; AMS MD '19
- Mursal Gardezi: Brown University, ScB Biology '18 (Honors Thesis: Fluorescent-Conjugated Antibodies as Markers of Bacterial Infection on Surgical Sites Ex Vivo), (Recipient Travel Scholarship to Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) 2016 National Diversity in STEM Meeting, San Diego, CA) (Awarded Brown University Royce Fellowship 2017) (RAB travel grant \$200 2018) (one of "7 Exceptional Seniors" profiled in the Brown Alumni Magazine, 2018) (Senior Biology Prize for Academic Excellence) (Yale University School of Medicine) (BIO1950/60)
- Yasmine Suliman: Brown University, ScB Biology '18 (Honors Thesis: Comparative Analysis of a Novel Microbial Detection System and Gram Staining Utilizing Synovial Fluid), (Karen T. Romer Undergraduate Teaching and Research Award 2017), (Grant from Rhode Island IdEA Network for Excellence in Biomedical Research Award Summer Undergraduate Research Fellowship (INBRE-SURF \$9348) 2017) (Research at Brown (RAB) travel grant \$250, 2018) (Washington University School of Medicine) (BIO1950/60)
- Daniel Louis Roque: Brown University, ScB Biology '18 (Honors Thesis: Imparting Antibiotic-Independent Antimicrobial Properties to Surgical Sutures and Prosthetic Liners With a Silver-doped Coating), (Karen T. Romer Undergraduate Teaching and Research Award 2017) (Awarded \$300 Research at Brown Travel Grant 2017) (Senior Biology Prize for Academic Excellence, Brown University 2018) (Tufts University School of Medicine) (BIO1950/60)
- Anthony Minnah: Brown University, ScB Biology '18 (Honors Thesis: An Analysis of the Antimicrobial Effects of a Silver doped Titanium-dioxide Polydimethylsiloxane (PDMS) coating on Multi Drug Resistant *Acinetobacter baumannii* and Vancomycin Resistant *Enterococcus faecalis* on Orthopaedic Biomaterials) (Karen T. Romer Undergraduate Teaching and Research Award) (Recipient Travel Scholarship to Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) 2016 National Diversity in Stem Meeting, San Diego, CA) (RAB travel grant \$300 2017) (Tech Consultant Cambridge MA applying to Medical School) (BIO1950/60)
- Douglas Barber: Brown University, ScB Biology '18 (Honors Thesis: Developing an in vitro Model for Visualizing and Classifying Bacterial Biofilms on Orthopaedic Materials), (Karen T. Romer Undergraduate Teaching and Research Awards 2016 and 2017) (Research at Brown Travel Grants, 2017 and 2018), 3rd Place Basic Science Research Award for Abstract and Poster 25th Annual Lifespan Research Day) (Yale University School of Medicine) (BIO1950/60)
- Kevin Mertz: Brown University, ScB Biology '17 (Honors Thesis: A Silver-based Titanium Dioxide-Polymer Hybrid Coating as a Preventative of *Candida albicans* and *Aspergillus fumigatus* Biofilms) (Awarded \$300 Research at Brown Travel Grant, 2017) (USC School of Medicine) (BIO1950/60)
- Eric M. Nguyen: Brown University, ScB Biology '16 (Honors Thesis: Antimicrobial Effects of a Silver-Doped Titanium Dioxide-PDMS Hybrid Coating against the Adherence and Proliferation of Multi-Drug Resistant *A. baumannii* on Spinal Rod Implants of Varying Compositions) (Tech Consultant Boston applying to Medical School) (BIO1950/60)

- Nathan Thomas: Brown University, PLME Program in Liberal Medical Education, ScB, AB'14, Warren Alpert Medical School, MD/PhD '18 (Research at Brown Grant December 2013; Summer Research Assistantship Grant, Alpert Medical School; AAOS Sponsored Summer Internship Program, 2015) (Brown University Alpert Medical School)
- Cory Mayfield: Brown University, ScB Biology '16 (Honors Thesis: Characterization of the Early Adherence and Proliferation of *Propionibacterium acnes* on Materials of Orthopaedic Relevance and the Effects of Silver-Doped Titanium Dioxide-PDMS Hybrid Coating), (Karen T. Romer Undergraduate Teaching and Research Award) (USC School of Medicine) (BIO1950/60)
- Jack Haglin: Brown University, ScB Biology '16 (Honors Thesis: Assessing the Efficacy of Silver-doped Antimicrobial Coatings on Prosthetic Liners), (Karen T. Romer Undergraduate Teaching and Research Award) (Recipient of Senior Biology Prize for Academic Excellence) (Mayo Clinic School of Medicine) (BIO1950/60)
- Janice Havasy: Brown University, ScB Biology '16 (Honors Thesis: Optimization of a Rapid-Detection Assay to Visualize and Quantify Bacterial Colonization on Orthopaedic Trauma Explants) (Columbia University School of Medicine) (BIO1950/60)
- Alexandra Zega: Brown University, ScB Biology '15 (Honors Thesis: Adherence Patterns and Biofilm Density of Commonly Encountered Bacterial Pathogens to Spinal Instrumentation of Differing Compositions with Silver-Doped Polydimethylsiloxane/Titanium Oxide Coatings) (U Penn Dental School) (BIO1950/60)
- David Deckey: Brown University, ScB Biology '15 (Honors Thesis: Characterization of the Effect of a Silver-Doped Titanium Dioxide-PDMS Hybrid Coating on the Adherence and Proliferation of Methicillin-Resistant *S. aureus* and *P. acnes* on Spinal Implant Rods of Varying Compositions (Royce Fellowship 2014) (Tufts University School of Medicine) (BIO1950/60)
- Alexander Vesprey: Brown University, ScB Biology '15 (Emory University School of Medicine) (BIO1950/60)
- Caryn Cobb: Brown University (PLME) BA'15 Health and Human Biology, MD '19 (Honors Thesis: Development of an in vitro Co-Culture Model for the Detection and Quantification of Biofilm on Orthopaedic Explants) (Brown University Alpert Medical School) (BIO1950/60)
- Henry Fox: Brown University, AB Biology '15) (Honors Thesis: Development of a Rapid Detection Assay for the Visualization and Quantification of Bacterial Colonization and Biofilm Formation on Orthopaedic Trauma Explants) (Karen T. Romer Undergraduate Teaching and Research Award) (Oregon Health Sciences University Medical School) (BIO1950/60)
- Ayano Kondo: Brown University, ScB Biology '14 (UPenn PhD Biology) (BIO1950/60)
- Kate Krug: University of Rhode Island, BS '16 Marine Biology
- Artym Hayda: Wheeler School, '15 (Summer Intern 2014, 2015)
- Phillip Rasnick: Penn State University, ScB '14 (Summer Intern 2013)
- Oakley Olson: Brown University (BIO1950/60)
- Hanae Fuji-Rios: Brown University (BIO1950/60)
- Mathew Pitman: Leadership Alliance.
- David Callianese: Providence College
- Anthony Marcello: University of Rhode Island
- Martha Amoako: Brown University (BIO1950/60)
- Paul Jeng: Brown University (BIO1950/60)
- Wudan Yan: Brown University (BIO1950/60)
- Matthew Dallos: Brown University (BIO1950/60)
- Daniel Woolridge: Brown University (BIO1950/60)
- Rajiv Iyengar: Brown University (BIO1950/60)
- Vincent Pham: Brown University (BIO1950/60)
- Kevin Pan: Brown University (BIO1950/60)
- Justin Shaya: Brown University (BIO1950/60)
- David Segar: Brown University (BIO1950/60)
- Igryl Cordero: Brown University (BIO1950/60)
- Eunice Cho: Brown University (HHMI)
- Vira Behnam Roudsari: Brown University (HHMI)
- Vaishali Mittal: Brown University (BIO1950/60)
- Jyotsna Mullur: Brown University (BIO1950/60)
- Lisa Kumar: Brown University (BIO1950/60)
- Kathryn Linder: Brown University (BIO1950/60)
- Emily Savoca: Brown University (BIO1950/60)
- Hilary Nicholson: Brown University (BIO1950/60)

THESIS COMMITTEES

- Discovering Novel Regulators of Osteoclastogenesis using RNA-Sequencing Technology. Alexander Vesprey, MS, Brown University, 2016.
- Cartilage Progenitors Stimulate Meniscus Tear Reintegration and Fibrochondrocyte Proliferation to Facilitate Healing in Two Independent Ex-Vivo Models of Meniscus Injury Repair Jake Newberry, MS, Brown University, 2019.
- Clinical implementation of a new technology: provider perspectives and perceived effects of an incentive spirometer patient reminder. Joshua Pangborn, MS, Brown University, 2019.

HOSPITAL TEACHING, ADVISING, AND MENTORING

- Advisor and Mentor to approximately 14 students per semester.
- Member of the Justice, Equity, Diversity and Inclusion Faculty Association.

HOSPITAL COMMITTEES

- | | |
|---|-----------|
| • Spine Surgeon Search Committee Member, Department of Orthopaedics, Warren Alpert Medical School of Brown University, Providence, RI | 2023-2025 |
| • Lifespan Diversity, Equity and Inclusion Committee Member, Rhode Island Hospital, Providence, RI | 2023-2025 |
| • Graduate and Medical Education Committee Member, Warren Alpert Medical School of Brown University, Providence, RI | 2023-2025 |
| • Department of Orthopaedics Equipment Committee, Rhode Island Hospital, Providence, RI | 2018-2023 |
| • Department of Orthopaedics Diversity and Inclusion Action Plan Committee, Rhode Island Hospital, Providence, RI | 2021-2025 |
| • Co-Chair, Diversity and Equity Committee, Department of Orthopaedics, The Alpert Medical School of Brown University, Providence, RI | 2022-2025 |

OTHER APPOINTMENTS AND PROFESSIONAL SERVICE

- | | |
|---|--------------|
| • Liaison to the American Academy of Microbiology, American Society for Microbiology's Progress, Impact, Access and Accountability (PIAA) Committee of the Board | 2026-Present |
| • Member, American Society for Microbiology's Nominating and Appointments Committee | 2024-Present |
| • Inaugural Member, American Society for Microbiology Inclusive Diversity with Equity, Access and Accountability (IDEAA) Standing Committee of the Board (PIAA Committee) | 2022-Present |
| • Member, Orthopaedic Research Society Open-Door Committee | 2023-2024 |
| • Member, Orthopaedic Research Society Diversity Equity and Inclusion Committee | 2023-2024 |
| • Board of Editors, Frontiers in Microbiology | 2022-2024 |
| • Member, ORS Musculoskeletal Infections Research Interest Group | 2021-2024 |
| • Member of the RI COVID-19 Equity Council | 2021-2023 |
| • Reviewer, Journal of Bone and Joint Infections | 2021-2023 |
| • Reviewer, Polymer Engineering & Science | 2021-2023 |
| • Reviewer, Annals of Translational Medicine | 2021-2023 |
| • Reviewer, Infection and Drug Resistance Journal | 2021-2023 |
| • Reviewer, Injury Journal | 2020-2023 |
| • Reviewer, Biofouling Journal | 2020-2023 |
| • Scientific Advisor, BI Medical, LLC. Coventry, RI | 2017-2025 |
| • Board of Advisors, BioSci Labs, LLC. Coventry, RI | 2017-2019 |

• Chief Technical Officer, BI Medical, LLC. North Kingston, RI	2015-2016
• Director of Biomedical Research and Operations, Material Science Associates, LLC. North Kingston, RI	2014-2019
• Associate/ Laboratory Director, Material Science Associates, LLC. North Kingston, RI	2013-2016
• Consultant, BioIntraface, Inc., North Kingston, RI	2013-2016
• Research Associate, Process Development, Amgen Inc., West Greenwich, RI	2004-2005
• Research Associate, University of Rhode Island, Kingston, RI	2003-2004
• Research Associate, Hybrigene LLC., West Kingston, RI	2002-2003

NON-ACADEMIC COMMITTEES AND BOARDS

• Founding Member, INDEX (Institute of Dominicans in the Exterior) Health	2024-Present
• Member, State of Rhode Island Cannabis Advisory Board	2023-Present
• Board Member, Blackstone Valley Preparatory School	2021-Present
• Vice-Chairman, Board of Directors, Blackstone Valley Preparatory School	2022-Present
• Board of Directors, Neighborhood Health Plan of Rhode Island	2022-Present
• Vice-Chairman, Clinical Affairs Committee, Neighborhood Health Plan of Rhode Island	2025-Present
• Board of Directors, Central Falls Children's Foundation	2022-2025
• Advisor to the office of the RI Governor	2021-2023
• Advisor to the office of the Lt. Governor	2021-2023
• Advisor to the Mayor of the City of Central Falls	2020-2023
• Advisor to the Mayor of the City of Pawtucket	2020-2023
• Vice-President, Central Falls Youth Baseball Association, RI.	2021-2024
• Chairman, Board of Directors, The United Community Martial Arts Institute of Rhode Island, RI	2019-2023
• Board of Advisors, Regional Fight Sports, Providence, RI	2019-2020

PROFESSIONAL MEMBERSHIPS

• American Society for Microbiology	2017-Present
-------------------------------------	--------------

SERVICE TO THE COMMUNITY

- Participate in advising and providing guidance for minority students through MAPS (Minority Association of Pre-Health Students).
- Lecture urban high schools on STEM, and provide career, life, and college advice (Central Falls High School, UCAP).
- Reviewer in the Central Falls High School Alumni Association Scholarship Committee.
- Provide internship opportunities for underserved high school students (Central Falls High School, UCAP).
- Lecture elementary students on STEM.
- Serve as mentor to doctorate-bound undergraduate, graduate, and medical students within the university.
- Provide mentorship to first-generation college students.
- Founder of the Made in Central Falls Seminar Series.
- Advisor to Central Falls and Pawtucket School Districts during COVID-19 Pandemic.
- Advisor to Cities of Central Falls and Pawtucket during COVID-19 Pandemic.
- Advisor to CommerceRI during COVID-19 Pandemic.
- Invited member of the Central Falls/Pawtucket Emergency Management Agency as Deputy Director.
- Advisor to the Office of the Lt. Governor through Diversity and Inclusion COVID-19 Committee.
- Advisor to the Office of the Governor for COVID-19 Strategies.

PATENTS

- **International Patent Application:** PCT/US2015/066460, “Visualization of Bacterial Colonization and Biofilm Formation on Orthopaedic Trauma Explants”, 2015.
- **U.S. Patent No.:** 9,174,103 (April 26, 2016).
- **Provisional Patent** submitted for U.S. Patent Application No.: 62/837,021. Title: NOVEL ENVIROMIMETIC CULTURING PROTOTYPE FOR ELUCIDATION OF SOIL DERIVED MARINE BACTERIA. Filing Date: April 22, 2019. Inventors: Dioscaris R. Garcia, Christopher T. Born.