# **Travis Brady Nielsen**

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### **TRAINING & EDUCATION**

Post-Doctoral Research Fellowship	(anticipated) June 2030
University of California San Diego, School of Medicine	
Fellowship, Infectious Diseases	(anticipated) June 2027
University of California San Diego, School of Medicine	
Residency, Internal Medicine	(anticipated) June 2026
University of California San Diego, School of Medicine	
Internship, Internal Medicine	June 2024
University of California San Diego, School of Medicine	
Doctor of Medicine, M.D.	May 2023
Loyola University Chicago, Stritch School of Medicine	
Master of Public Health, M.P.H. in Policy & Management	May 2023
Loyola University Chicago, Parkinson School of Health Sciences	
Doctor of Philosophy, Ph.D. in Medical Biology	May 2018
University of Southern California, Keck School of Medicine	
Bachelor of Arts, B.A. in Chemistry	Dec 2012
University of California Riverside, College of Natural & Agricultural Sca	iences

#### **EMPLOYMENT**

Post-Doctoral Researcher at University of California San Diego

Apr 2024 – Present

- Conduct translational research to elucidate fundamental mechanisms of bacterial pathogenesis and innate immune responses, with a particular emphasis on multidrug-resistant Gram-negative bacterial infections in humans.
- One project focuses on the development of nanoparticles as a vaccine delivery modality against Gram-negative bacteria.
- Utilize an integrated approach combining molecular genetics, microbiology, proteomics, immunology, and murine infection models to understand host-pathogen interactions and investigate novel therapeutic targets and diagnostics.
- Lead experimental design, execution, and data analysis across multiple projects aimed at developing biotherapeutics, antimicrobial agents, and vaccine candidates to combat antibiotic-resistant infections.
- Responsibilities include presenting research findings at national conferences, contributing to manuscript and grant preparation, mentoring junior lab members, and fostering collaborative efforts to accelerate translational outcomes.

Intern & Resident Physician at University of California San Diego Health Jun 2

• Clinical management of diverse populations across inpatient and outpatient settings under supervising attending physicians.

Jun 2023 – Present

- Rotations include wards, critical care, emergency medicine, and various subspecialties, with progressive autonomy in clinical decision-making and patient care coordination.
- Actively participate in interdisciplinary team rounds, contribute to clinical teaching of medical students, and engage in quality improvement initiatives within the hospital system.
- Responsibilities include performing detailed patient assessments, developing differential diagnoses, formulating evidence-based management plans, and documenting clinical encounters.

Research Consultant at University of Southern California

- Remote management of two translational research projects in an academic research laboratory
- One project focuses on the development of monoclonal antibodies against *Acinetobacter baumannii* for use as adjunct therapy in conjunction with standard antibiotic therapy.
- Another project focuses on the development of a broadspectrum vaccine as prophylaxy against nosocomial infections.
- Responsibilities include experimental design, data analysis, presentations, manuscript preparation, and grant writing.

Research Scientist at Loyola University Chicago

- Worked with Dr. Lara Dugas on the Modeling the Epidemiological Transition Study of the Microbiome project (METS Microbiome project).
- This was a prospective longitudinal cohort study that took place across five countries, including USA (Chicago, IL), Ghana, Jamaica, Seychelles, and South Africa.
- The goal was to investigate whether there is a link between metabolic syndrome, gut microbiota, and country of origin among people of African ancestry.
- Responsibilities included participant enrollment, data collection/management, and management of daily clinical operations.

Research Scientist at University of Southern California

- Worked on various projects in an academic research laboratory at the University of Southern California as a PhD graduate student.
- Projects focused on the immunology of host defense against highly resistant infections.
- Responsibilities included experimental design, BSL2+ pathogen manipulation, laboratory animal handling, data analysis, manuscript preparation, and grant writing.

Research Scientist at Biological Anti-Infective Medicines

- This small business venture was founded to develop antibodies directed at the Gram-negative bacterium *Acinetobacter baumannii*.
- Responsibilities included experimental design, BSL2+

Jun 2018 – Present

Feb 2019 – Aug 2019

Jun 2015 - May 2018

Jun 2014 – May 2018

pathogen manipulation, laboratory animal handling, data analysis/presentation, manuscript preparation, and grant writing.

Research Scientist at The Lundquist Institute

Mar 2013 – May 2015

- Assisting in various laboratory projects at an academic research facility related to immunology of host defense against highly antimicrobial-resistant pathogens.
- Responsibilities included experimental design, BSL2+ pathogen manipulation, laboratory animal handling, data analysis/presentation, manuscript preparation, and grant writing.

#### **PUBLICATIONS**

- 31. Slarve M, **Nielsen T**, Yu D, VanOrman J, Luna B, Spellberg B. Evaluating antibody mediated opsonophagocytosis of bacteria via lab protocol: RAW 264.7 cell phagocytosis assay. *PLoS One*. 2025 Sep 9;20(9):e0331445. PMID 40924683; PMCID PMC12419644; DOI 10.1371/journal.pone.0331445.
- 30. Phillips MC, Davar K, Freling S, Tong SYC, Lee TC, McDonald EG, **Nielsen T**, Wald-Dickler N, Mena Lora AJ, Lee RA, Hamilton F, Musher DM, Costa RPL, Ghanem B, Baden R, Spellberg B. Practicing With Intent: How to Teach an Old Dogma New Tricks. *Clinical Infectious Diseases*. 2025 Jun 24:ciaf270. PMID 40581736; PMCID *unavailable*; DOI 10.1093/cid/ciaf270.
- 29. Spellberg B, Gilbert DN, Baym M, Bearman G, Boyles T, Casadevall A, Forrest GN, Freling S, Ghanem B, Hamilton F, Luna B, Moore J, Musher DM, **Nielsen T**, Nori P, Phillips MC, Pirofski LA, Shorr AF, Tong SYC, Lee TC, McDonald EG. Sustainable solutions to the continuous threat of antimicrobial resistance. *Health Affairs Scholar*. 2025 Jan 24;3(2):qxaf012. PMID 39916975; PMCID PMC11798182; DOI 10.1093/haschl/qxaf012.
- 28. Rojas LJ, **Nielsen T**, Pantapalangkoor P, Taracila MA, Introvigne ML, Sharma R, Yeshwante S, Mojica MF, Papp-Wallace KM, Hujer AM, Prati F, Caselli E, Spellberg B, Rather PN, Rao GG, Bonomo RA. Restoring cefepime activity against multidrug-resistant KPC-producing *Klebsiella pneumoniae* by combination with boronic acid inhibitors, MB076 and S02030. *Antimicrobial Agents and Chemotherapy*. 2025 Jan 28:e0096424. PMID 39873501; PMCID 11881554; DOI 10.1128/aac.00964-24.
- 27. Spellberg B, **Nielsen T**, Phillips MC, Ghanem B, Boyles T, Jegorović B, Footer B, Mah JK, Leiu A, Scott J, Wald-Dickler N, Lee TC, McDonald EG. Revisiting diagnostics: erythrocyte sedimentation rate and C-reactive protein: it is time to stop the zombie tests. *Clinical Microbiology and Infection*. 2025 Jan;31(1):1-4. PMID <u>39209263</u>, PMCID 12056944; DOI 10.1016/j.cmi.2024.08.017.
- 26. Yan J, Nielsen T, Lu P, Talyansky Y, Slarve M, Reza H, Novakovic B, Netea MG, Keller AE, Warren T, DiGiandomenico A, Sellman BR, Luna BM, Spellberg B. A protein-free vaccine stimulates innate immunity and protects against nosocomial pathogens. *Science Translational Medicine*. 2023 Oct 4;15(716):eadf9556.
  PMID 37792959; PMCID PMC10947341; DOI 10.1126/scitranslmed.adf9556.
- 25. **Nielsen T**, Yan J, Slarve M, Li R, Junge J, Luna B, Wilkinson I, Yerramalla U, Spellberg B. Development of a Bispecific Antibody Targeting Clinical Isolates of *Acinetobacter baumannii*. *The Journal of Infectious Diseases*. 2023 Apr 26;227(9):1042-1049. PMID 36617220; PMCID PMC10319980; DOI 10.1093/infdis/jiac499.

24. **Nielsen** T, Santarossa M, Probst B, Labuszewski L, Lopez J, Barsanti-Sekhar M, Albarillo F. Introducing antimicrobial stewardship to the outpatient clinics of a suburban academic health system. *Antimicrobial Stewardship & Healthcare Epidemiology*. 2022 Jan 01; 2(1):e9. PMID 35899218; PMCID PMC9319114; DOI 10.1017/ash.2021.228.

- 23. **Nielsen T**, Yan J, Luna B, Talyansky Y, Slarve M, Bonomo R, Spellberg B. Monoclonal Antibody Requires Immunomodulation for Efficacy Against *Acinetobacter baumannii* Infection. *The Journal of Infectious Diseases*. 2021 Dec 15;224(12):2133-2147. PMID 34036366; PMCID PMC8672769; DOI 10.1093/infdis/iiab265.
- 22. **Nielsen** T, Yan J, Slarve M, Lu P, Li R, Ruiz J, Lee B, Burk E, Talyansky Y, Oelschlaeger P, Hurth K, Win W, Luna B, Bonomo R, Spellberg B. Monoclonal Antibody Therapy against *Acinetobacter baumannii. Infection and Immunity.* 2021 Sep 16;89(10):e0016221. PMID 34310884; PMCID PMC8445169; DOI 10.1128/IAI.00162-21.
- Spellberg B, Nielsen T, Casadevall A. Antibodies, Immunity, and COVID-19. *JAMA Internal Medicine*. 2021 Apr 1;181(4):460-462.
   PMID 33231673; PMCID PMC8371694; DOI 10.1001/jamainternmed.2020.7986.
- 20. Talyansky Y, **Nielsen T**, Yan J, Carlino-MacDonald U, Di Venanzio G, Chakravorty S, Ulhaq A, Feldman M, Russo T, Vinogradov E, Luna B, Wright M, Adams M, Spellberg B. Capsule carbohydrate structure determines virulence in *Acinetobacter baumannii*. *PLoS Pathogens*. 2021 Feb 2;17(2):e1009291. PMID 33529209; PMCID PMC7880449; DOI 10.1371/journal.ppat.1009291.
- 19. Luna B, Trebosc V, Lee B, Bakowski M, Ulhaq A, Yan J, Lu P, Cheng J, **Nielsen T**, Lim J, Ketphan W, Eoh H, McNamara C, Skandalis N, She R, Kemmer C, Lociuro S, Dale G E, Spellberg B. A nutrient-limited screen unmasks rifabutin hyperactivity for extensively drugresistant *Acinetobacter baumannii*. *Nature Microbiology*. 2020 Sep 1;5(9):1134-1143.
- 18. Spellberg B, **Nielsen T**, Gilbert D, Shorr A, Brass E. Ensuring Sustainability of Needed Antibiotics: Aiming for the DART Board. *Annals of Internal Medicine*. 2019 Oct 15;171(8):580-582.

PMID: 32514072; PMCID PMC7483275; DOI 10.1038/s41564-020-0737-6.

- PMID <u>31590184</u>; PMCID <u>PMC7296826</u>; DOI <u>10.7326/M19-1893</u>.
- 17. Luna B, Ershova K, Yan J, Ulhaq A, **Nielsen T**, Hsieh S, Pantapalangkoor P, Vanscoy B, Ambrose P, Rudin S, Hujer K, Bonomo R, Actis L, Skaar E, Spellberg B. Adjunctive Transferrin to Reduce the Emergence of Antibiotic Resistance in Gram-negative Bacteria. *Journal of Antimicrobial Chemotherapy*. 2019 Sep 1;74(9):2631-2639. PMID 31170282; PMCID PMC6736376; DOI 10.1093/jac/dkz225.
- 16. Nielsen T, Brass E, Gilbert D, Bartlett J, Spellberg B. Sustainable Discovery and Development of Antibiotics Is a Nonprofit Approach the Future? *The New England Journal of Medicine*. 2019 Aug 8;381(6):503-505.
  PMID: 31216396; PMCID PMC6697094; DOI 10.1056/NEJMp1905589.
- 15. Luna B, Yan J, Reyna Z, Moon E, **Nielsen T**, Reza H, Lu P, Bonomo R, Louie A, Drusano G, Bulitta J, She R, Spellberg B. Natural history of *Acinetobacter baumannii* infection in mice. *PLOS One*. 2019;14(7):e0219824. PMID 31318907; PMCID PMC6638954; DOI 10.1371/journal.pone.0219824.
- 14. Luna B, **Nielsen T**, Cheng B, Pantapalangkoor P, Yan J, Shaohui Yin, Zhao F, Boyle-Vavra S, Bruhn K, Montgomery C, Spellberg B, Daum R. Vaccines targeting *Staphylococcus aureus* skin and bloodstream infections require different composition. *PLOS One*. 2019;14(6):e0217439.
  - PMID 31181086; PMCID PMC6557488; DOI 10.1371/journal.pone.0217439.
- 13. Ambrose P G, VanScoy B D, Luna B M, Yan J, Ulhaq A, Nielsen T, Rudin S, Huger K,

Bonomo, Actis L, Skaar E, Spellberg B. Apotransferrin in Combination with Ciprofloxacin Slows Bacterial Replication, Prevents Resistance Amplification, and Increases Antimicrobial Regimen Effect. *Antimicrobial Agents & Chemotherapy*. 2019 May;63(5). PMID 30782989; PMCID PMC6496049; DOI 10.1128/AAC.00112-19.

- Choi Y J, Kim S, Choi Y, Nielsen T, Yan J, Lu A, Ruan J, Lee H R, Wu H, Spellberg B, Jung J. Publisher Correction: SERPINB1-mediated checkpoint of inflammatory caspase activation. *Nature Immunology*. 2019 May;20(5):664.
   PMID 30846880: PMCID PMC9045526: DOI 10.1038/s41590-019-0361-x.
- 11. Choi Y J, Kim S, Choi Y, **Nielsen T**, Yan J, Lu A, Ruan J, Lee H R, Wu H, Spellberg B, Jung J. SERPINB1-mediated checkpoint of inflammatory caspase activation. *Nature Immunology*. 2019 Mar;20(3):276-287.
  - PMID 30692621; PMCID PMC6450391; DOI 10.1038/s41590-018-0303-z.
- 10. **Nielsen T**, Yan J, Luna B, Spellberg B. Murine Oropharyngeal Aspiration Model of Ventilator-associated and Hospital-acquired Bacterial Pneumonia. *Journal of Visualized Experiments*. 2018 Jun 28;(136).
  - PMID 30010650; PMCID PMC6102004; DOI 10.3791/57672.
- 9. **Nielsen** T, Pantapalangkoor P, Yan J, Luna B, Dekitani K, Bruhn K, Tan B, Junus J, Bonomo R, Schmidt A, Everson M, Duncanson F, Doherty T, Lin L, Spellberg B. Diabetes Exacerbates Infection via Hyperinflammation by Signaling through TLR4 and RAGE. *mBio*. 2017 Aug 22;8(4).
  - PMID 28830942; PMCID PMC5565964; DOI 10.1128/mBio.00818-17.
- 8. **Nielsen** T, Pantapalangkoor P, Luna B, Bruhn K, Yan J, Dekitani K, Hsieh S, Yeshoua B, Pascual B, Hujer K, Domitrovic T, Bonomo R, Russo T, Lesczcyniecka M, Schneider T, Spellberg B. Monoclonal Antibody Protects against Acinetobacter baumannii Infection by Enhancing Bacterial Clearance and Evading Sepsis. *The Journal of Infectious Diseases*. 2017 Aug 15;216(4):489-501.
  - PMID <u>28931235</u>; PMCID <u>PMC5853763</u>; DOI <u>10.1093/infdis/jix315</u>.
- 7. Cheng B, **Nielsen T**, Pantapalangkoor P, Zhao F, Lee J, Montgomery C, Luna B, Spellberg B, Daum R. Evaluation of serotypes 5 and 8 capsular polysaccharides in protection against Staphylococcus aureus in murine models of infection. *Human Vaccines & Immunothertherapeutics*. 2017 Jul 3;13(7):1609-1614. PMID 28422567; PMCID PMC5512765; DOI 10.1080/21645515.2017.1304334.
- 6. Luna B, Ulhaq A, Yan J, Pantapalangkoor P, **Nielsen T**, Davies B, Actis L, Spellberg B. Selectable Markers for Use in Genetic Manipulation of Extensively Drug-Resistant (XDR) Acinetobacter baumannii HUMC1. *mSphere*. 2017 Mar-Apr;2(2). PMID 28497114; PMCID PMC5422034; DOI 10.1128/mSphere.00140-17.
- 5. Wong D, **Nielsen T**, Bonomo R, Pantapalangkoor P, Luna B, Spellberg B. Clinical and Pathophysiological Overview of *Acinetobacter* Infections: A Century of Challenges. *Clinical Microbiology Reviews*. 2017 Jan;30(1):409-447. PMID 27974412; PMCID PMC5217799; DOI 10.1128/CMR.00058-16.
- 4. Bruhn K, Dekitani K, **Nielsen T**, Pantapalangkoor P, Spellberg B. Ly6G-mediated depletion of neutrophils is dependent on macrophages. *Results in Immunology*. 2016;6:5-7. PMID 26870635; PMCID PMC4711394; DOI 10.1016/j.rinim.2015.12.001.
- 3. **Nielsen** T, Bruhn K, Pantapalangkoor P, Junus J, Spellberg B. Cryopreservation of virulent *Acinetobacter baumannii* to reduce variability of in vivo studies. *BMC Microbiology*. 2015 Nov 2;15:252.
  - PMID: 26526621; PMCID PMC4630970; DOI 10.1186/s12866-015-0580-8.
- 2. Bruhn K, Pantapalangkoor P, Nielsen T, Tan B, Junus J, Hujer K, Wright M, Bonomo R,

Adams M, Chen W, Spellberg B. Host fate is rapidly determined by innate effector-microbial interactions during Acinetobacter baumannii bacteremia. *The Journal of Infectious Diseases*. 2015 Apr 15;211(8):1296-305.

PMID 25378635; PMCID PMC4447835; DOI 10.1093/infdis/jiu593.

1. Lin L, Pantapalangkoor P, Tan B, Bruhn K, Ho T, **Nielsen T**, Skaar E, Zhang Y, Bai R, Wang A, Doherty T, Spellberg B. Transferrin iron starvation therapy for lethal bacterial and fungal infections. *The Journal of Infectious Diseases*. 2014 Jul 15;210(2):254-64. PMID: 24446527; PMCID PMC4092247; DOI 10.1093/infdis/jiu049.

#### **PRESENTATIONS**

National M	leetings	
Poster	American Public Health Association Annual Meeting 2022 Boston, MA Helping High Schoolers "LEAP" into the Field of Public Health with a Pre-Prepared Program Plan Stuck A, Nielsen T	07 Nov 2022
Poster	American Society for Microbiology Microbe 2022 Washington, D.C.  Efficacy of Boronic Acid Transition State Analogs S02030 and MB_076 as Potent Inhibitors of KPC-2 β-Lactamases: Microbiological and Efficacy Analyses Rojas L*, Nielsen T*, Yan J, Taracila M, Papp-Wallace K, Mojica M, Hujer A, Introvigne M, Prati F, Caselli E, Luna B, Spellberg B, Rather P, Bonomo R.	13 Jun 2022
Poster	Infectious Diseases Society of America IDWeek 2020 Virtual Event Implementing an Antimicrobial Stewardship Program in the Outpatient Setting Nielsen T, Santarossa M, Probst B, Labuszewski L, Lopez J, Barsanti-Sekhar M, Albarillo F	21 Oct 2020
Oral	Infectious Diseases Society of America IDWeek 2019 Washington D.C. Inflammation and Innate Effectors in Passive Immunization for A. baumannii Infections Nielsen T, Yan J, Luna B, Talyansky Y, Bonomo R, Spellberg B	04 Oct 2019
Oral	American Society for Microbiology Microbe 2019 San Francisco, CA Sustainable Model for Antibiotic Development Nielsen T, Spellberg B, Gilbert D, Bartlett J, Brass E	23 Jun 2019
Poster	American Society for Microbiology Microbe 2019 San Francisco, CA Sustainable Model for Antibiotic Development Nielsen T, Spellberg B, Gilbert D, Bartlett J, Brass E	23 Jun 2019

Poster	American Society for Microbiology Microbe 2019 San Francisco, CA	24 Jun 2019
	Optimization of an Adjuvant-Only Vaccine as a Horizontal	
	Infection-Prevention Strategy	
	Yan J, <b>Nielsen T</b> , Luna B, Spellberg B	
Poster	American Society for Microbiology Microbe 2019	24 Jun 2019
1 05001	San Francisco, CA	2100112019
	Disruption of the Capsule Locus Gene gtr6 in <i>Acinetobacter</i>	
	baumannii Enhances Virulence	
	Talyansky Y, Yan J, Nielsen T, Carlino-Macdonald U, Luna	
	B, Russo T, Spellberg B	
Poster	American Society for Microbiology Microbe 2019	24 Jun 2019
	San Francisco, CA	
	Natural History of Acinetobacter baumannii Infections in	
	Mice	
	Reyna Z, Yan J, Moon E, Nielsen T, Reza H, Lu P, Bonomo	
	R, Louie A, Drusano G, Bulitta J, She R, Spellberg B, Luna B	
Poster	American Society for Microbiology Microbe 2018	09 Jun 2018
	Atlanta, GA	
	Polyvalent Adjuvant Combination to Prevent Hospital-	
	Acquired Infections	
	Nielsen T, Luna B, Yan J, Pantapalangkoor P, Spellberg B	
Poster	American Society for Microbiology Microbe 2017	03 Jun 2017
	New Orleans, LA	
	Cefepime and S02030—A Novel Boronic Acid Transition-	
	State Inhibitor (BATSI)—Protects against Bacteremia by	
	KPC-Producing Klebsiella pneumoniae	
	Rojas L, Nielsen T, Pantapalangkoor P, Taracila M, Van Den	
	Akker F, Papp-Wallace K, Prati F, Caselli E, Spellberg B,	
	Bonomo R	
Poster	American Society for Microbiology Conference on	12 Dec 2016
	Antibacterial Development	
	Washington, D.C.	
	Monoclonal Antibody Protects Against A. baumannii Infection	
	by Enhancing Bacterial Clearance and Evading Sepsis	
	Nielsen T, Pantapalangkoor P, Luna B, Bruhn K, Yan J,	
	Dekitani K, Hsieh S, Hujer K, Domitrovic T, Bonomo R,	
	Russo T, Spellberg B	
Poster	American Society for Microbiology Conference on	12 Dec 2016
	Antibacterial Development	
	Washington, D.C.	
	Recombinant Human Transferrin (rh-transferrin) Suppresses	
	the Emergence of Antibiotic Resistance as an Adjunct to	
	Ciprofloxacin Against Gram-Negative Pathogens	
	Luna B, Ershova K, Hsieh S, Pantapalangkoor P, Yan J, Ulhaq	
	A, Nielsen T, Actis L, Bonomo R, VanScoy B, Ambrose P,	
	Spellberg B	

	Infectious Diseases Society of America IDWeek 2016 New Orleans, LA A Change in Paradigm: Diabetes Exacerbates Infection by Hyperinflammation, Not Immunosuppression Nielsen T, Pantapalangkoor P, Luna B, Dekitani K, Bruhn K, Tan B, Junus J, Bonomo R, Schmidt A, Doherty T, Lin L, Spellberg B and Local Conferences	30 Oct 2016
Oral	Loyola University Chicago Department of Public Health Sciences Grand Rounds	27 Mar 2022
	Chicago, IL  L.E.A.P - Loyola Educating About Public Health  Nielsen T, Stuck A	
Poster	Loyola University Chicago St. Albert's Day	04 Nov 2021
	Maywood, IL  Antimicrobial Stewardship in the Outpatient Setting  Nielsen T, Santarossa M, Probst B, Labuszewski L, Lopez J,  Barsanti-Sekhar M, Albarillo F	
Poster	Illinois Department of Public Health Illinois Summit on Antimicrobial Stewardship Virtual Event Introducing Antimicrobial Stewardship to the Outpatient	13 Jul 2021
	Setting Nielsen T, Santarossa M, Probst B, Labuszewski L, Lopez J, Barsanti-Sekhar M, Albarillo F	
Oral	Loyola University Chicago Department of Microbiology & Immunology Work in-Progress Seminar Maywood, IL <i>Anti-</i> A. baumannii <i>MAbs</i> <b>Nielsen T</b>	21 May 2021
Oral	Loyola University Health System Antibiotic Stewardship Bimonthly Meeting Virtual Event Outpatient Expansion of Antimicrobial Stewardship Nielsen T, Albarillo F	18 Nov 2020
Oral	Loyola University Chicago Department of Microbiology & Immunology Work in-Progress Seminar Maywood, IL  Sustainable Model for Antibiotic Development  Nielsen T	12 Jul 2019
Oral	University of Southern California Department of Microbiology & Immunology Work in-Progress Seminar Los Angeles, CA Diabetes Exacerbates Infections via Hyperinflammation Nielsen T	08 Nov 2017

Poster	American Chemical Society Southern California Research	29 Apr 2017
	Conference	
	Los Angeles, CA	
	Combining Antibacterial Antibodies to Enhance	
	Opsonophagocytosis of Acinetobacter baumannii	
	Yeshoua B, Nielsen T, Pascual B, Spellberg B	
Oral	University of Southern California Protein Chemistry Research	09 Mar 2017
	Symposium	
	Los Angeles, CA	
	Mutations Outside the Complementarity-Determining Regions	
	of Antibodies	
	Nielsen T, Ganesan S	
Poster	Great Minds in STEM	08 Oct 2016
	Anaheim, CA	
	Murine IgG1 Antibody Enhances Opsonophagocytosis Better	
	than IgG3 Isotype	
	Pascual B, Nielsen T	
Oral	TrojanVision (USC Student TV)	19 Sep 2016
	Los Angeles, CA	
	Televised interview about the state of infectious disease	
	research at USC	
	Spellberg B, Nielsen T, Yeshoua B	
Oral	University of Southern California Microbiology at the Host	24 May 2016
	and Microbe Interface	
	Los Angeles, CA	
	Paradigm Shift: Diabetes & Infection	
	Nielsen T	
<b>PATENTS</b>		
Compositions	s and methods for a multi-adjuvant only approach to immunoprophy	laxis May 2023
Spellberg	B, Nielsen T, Luna B, Yan J; US Patent Application # 18/142,21	
Bispecific an	tibody targeting clinical isolates of <i>Acinetobacter baumannii</i>	Jun 2022
	B, Nielsen T, Luna B, Yan J; US Patent Application #63/347,685	5 di 1 2 0 2 2
1 0	•	N. 2020
-	& methods of multi-adjuvant prophylaxis for preventing infections	Nov 2020
Spellberg	B, Nielsen T, Luna B; Int'l. Patent App. #PCT/US2018/058045	
Multi-adjuva	nt only approach to prophylaxis for preventing infections	Oct 2017
Spellberg	B, Nielsen T, Luna B; US Patent Application #62/578,848	
Antibody bin	ding of agents that bind A. baumannii and uses thereof	Jul 2015
-	B, Bruhn K, <b>Nielsen T</b> ; US Patent Application #62/192,029	0412013
1 0		NI 2012
	be compositions and methods of treating A. baumannii infections	Nov 2013
Spellberg	B, Bruhn K, Nielsen T; US Patent Application #61/902,080	

# VOLUNTEER EXPERIENCE

Peer Reviewing, Ad Hoc (link to Publons profile)

• ACS Infectious Diseases

Journal of Clinical Medicine	since Apr 2022
BMC Microbiology	since Aug 2021
<ul> <li>AHRQ (Agency for Healthcare Research and Quality)</li> </ul>	since Jun 2021
Infection and Drug Resistance	since Nov 2020
Journal of Clinical Epidemiology	since Aug 2020
<ul> <li>Journal of Infectious Diseases</li> </ul>	since Jul 2019
• PLoS One	since Nov 2018
Clinical Microbiology Reviews	since Apr 2018
Antimicrobial Stewardship Program (Loyola University Medical Center)	2021 - 2023
<ul> <li>First student to serve as a Committee Member</li> </ul>	
Loyola University Public Health Association (Loyola)	2018 - 2023

- Founder & Past President
- Graduate student organization established at Loyola University Chicago in 2018 to help bring a sense of community to the graduate students in the Parkinson School of Health Sciences and Public Health
- BSPH-MPH Mentoring Program (undergraduate students from Loyola University Chicago who are interested in public health are paired with a graduate student mentor from Loyola's Master of Public Health program for academic and career guidance)
- Outbreak! (LUPHA members simulate an outbreak with local high schoolers to educate them about how public health can prevent the spread of epidemics)
- Girls Learning About Microbiology (GLAM)
- Immigration simulation
- Stop the Bleed!

### Graduate Student Advisory Council (Loyola)

2018 - 2020

- Service Chair (Academic Year 2019-2020)
  - o Canned food drives for St. Ignatius Church
  - o n2n (Neighbor-to-Neighbor) community involvement initiative in Rogers Park with Northwestern University
  - o Coordinate financial and food donations to the Chicago Food Bank
  - o Host social events for students across disciplines at the Health Sciences Campus
  - o Promote interests of MPH students
- Treasurer (Academic Year 2018-2020):
  - o Help create opt-in dental and vision insurance plans
  - o Host annual symposium for students to showcase research

#### Ignatian Service Immersion (Loyola)

Mar 2020

- Participant
- El Salvador encounter through CRISPAZ
- Educational immersion experience in which participants learn from the Salvadoran people about their lives, histories, and hopes for the future community

## Health Science Mentors (USC)

2016 - 2019

- Founder
- President

- Mentor
- Alumnus adviser

Consortium on Resistance against Carbapenems in K. pneumoniae (CRACKLE II) 2016 – 2018

- Site coordinator
- CRE isolate handling

Young Researcher Program (USC)

2016 - 2017

• Mentor to high school student

School of Medicine Graduate Student Association (USC)

2015 - 2018

- Treasurer (elected)
- Senator (appointed)
- Alumnus adviser

LAC+USC Department of Emergency Medicine Research Division

2014 - 2015

- Research assistant
- What drives interest in PrEP (pre-exposure prophylaxis)
- How well patients understand discharge orders

# **SOCIETY ACTIVITES**

Memberships (Current):	
American Association for the Advancement of Science (AAAS)	2022 - Present
American Physician Scientist Association (APSA)	2022 – Present
American College of Physicians (ACP)	2022 – Present
American Medical Association (AMA)	2020 – Present
American Society for Microbiology (ASM)	2012 – Present
Infectious Diseases Society of America (IDSA)	2015 – Present
Memberships (Lapsed):	
Illinois Society for Microbiology (ISM)	2017 - 2023
Southern California Branch of American Society for Microbiology (SCASM)	2017 - 2019
American Association of Immunologists (AAI)	2014 - 2016
Graduate Student Advisory Council (Loyola)	2018 - 2020
Treasurer; Chair of Service Committee	
US Young Ambassador of Science, American Society for Microbiology	2018 - 2020
Illinois State Representative	
Joint Education Project Fellow (USC)	2017 - 2018
World Anti-Microbial Resistance Congress	Sep 2017
Delegate	
Biomedical Advanced Research and Development Authority (BARDA)	Mar 2016
Invited Participant, Emerging Leaders in Biosecurity Initiative	
National Academy of Science, Institute of Medicine	Mar 2016
Invited Participant, Antibiotic Resistance in Agriculture	

#### **HONORS**

Honors in Research (Stritch School of Medicine)

- The Research Honors Program distinguishes medical student graduates who complete a program of advanced education and experience in research are required
- Recipients are required to complete the STAR Program (Student Training in Approaches to Research); attend monthly Research Honors Seminars, research-related seminars, and

journal clubs; pursue a research project throughout the last three years of medical school under the guidance of a selected research mentor; complete a research elective during the third or fourth year of medical school; and submit an original research manuscript.

## Albert Schweitzer Fellowship (Chicago Chapter)

- Selected for the development of a program to help students from local high schools interested in public health actively learn about the discipline from MPH students while gaining hands-on experience helping a local primary care clinic that caters to the underserved Latino population of Chicago's southwest side.
- Founded in 1940, The Albert Schweitzer Fellowship immerses a diverse group of graduate students in a mentored experiential learning and leadership development program designed to increase their skills and commitment to address the health needs of underserved people.

## AΣN Member (Loyola University Chicago)

- Selection to Alpha Sigma Nu is one of the highest honors that can be given on a Jesuit campus.
- Alpha Sigma Nu is the international honor society of Jesuit institutions of higher education founded in 1915 to honor a select number of students each year on the basis of scholarship, loyalty, and service.

## Public Health Scholar (Loyola University Chicago)

• Merit-based scholarship from the dean of the Stritch School of Medicine covering 50% tuition for the dual-degree MD/MPH program.

## Outstanding Abstract (American Society for Microbiology)

- Received for the abstract entitled "Poor Sales of Recent Antibiotics Indicate Need for a New, Sustainable Model for Antibiotic Development".
- This award highlights outstanding abstracts presented by students, residents, or medical/clinical fellows.
- Only 40 abstracts of >10,000 are selected for this honor.

## The Order of Arêté (University of Southern California)

- Received for work with the graduate student organization Health Science Mentors
- Represents the highest honor accorded graduate students upon completion of their academic programs.

#### First Place for Poster Presentation (Great Minds in STEM Conference)

- Received first place for best presentation in summer 2016 for our poster, entitled "Murine IgG1 Antibody Enhances Opsonophagocytosis Better than IgG3 Isotype".
- Under-represented minority high school students mentored by graduate students present on research performed in academic research laboratories.

#### Dean's Honors List (University of California, Riverside)

• Students who complete a minimum of twelve units per term for letter grades, with no grade below a "B" and no grade of "No Credit" or "Incomplete", averaging 3.5 GPA or better.

#### **AWARDS**

\$ 500	American Public Health Association	Jun 2022
\$ 15,000	The Shaulis Scholarship	Jun 2022
\$ 2,750	Albert Schweitzer Fellowship	May 2022
\$ 700	HEERF III Grant	Apr 2022
\$ 2,600	Patricia E. Doyle Scholarship	Dec 2021

\$	2,600	Patricia E. Doyle Scholarship	Jun 2	2021
\$	600	HEERF II Grant	Dec 2	2020
\$	1,100	HEERF I Grant	Sep 2	2020
\$	4,000	Infectious Disease Society of America 2020 G.E.R.M. Awardee	Apr 2	
\$		T35 AI125220 Student Training in Approaches to Research Program	Mar 2	
\$		Institutional Scholarship for MD at LUC Stritch School of Medicine	Dec 2	2019
\$		R41 AI145759 (Co-I Corporate Applicant)	Nov 2	
\$		New England Journal of Medicine Honorarium	Aug 2	
\$		Institutional Scholarship for MD at LUC Stritch School of Medicine	Jul 2	
\$		LUC Department of Public Health Sciences Travel Award	Jul 2	
\$		<u> </u>	May 2	
\$		ASM Travel Grant	Mar 2	
\$	19,728	Dean's Scholarship for MPH at LUC Stritch School of Medicine	Aug 2	
\$		ExBaq-Related Travel Grant	Jun 2	
\$		ASM Travel Grant	Jun 2	
\$	,	Good Neighbors Grant for Mentoring Kids in Juvenile Hall	Jun 2	
\$		ASM US Young Ambassadorship	Jan 2	
\$		USC Learning Community on Engaged Graduate Education Fellowship		
\$		USC Graduate Student Government Student Organization Allowance	Aug 2	
\$		USC Graduate Affairs Fall & Spring Research Assistantship Award	Aug 2	
\$		1 5	May 2	
\$	20,000	<u>.</u>	Apr 2	
\$		ASM Travel Grant	Dec 2	
\$		BioAIM-Related Research Techniques Travel Grant	Aug 2	
\$		USC Graduate Student Government Student Organization Allowance	Aug 2	
\$		USC Keck/Graduate School Fellowship	Aug 2	
\$		•	May 2	
\$		R42 AI106375 (Co-I Corporate Applicant)	Jul 2	
\$		AAI Introductory Course Stipend	Jul 2	
	ERTIFICA			
Se		ce and Sexual Harassment Prevention for Supervisors	Jul 2	2025
~	=	of California San Diego		
C.	yber Securit		May 2	2025
~	•	of California San Diego		
Sı	ipervisor Sa	·	Apr 2	2025
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C	ontrolled Su		Apr 2	2025
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K		and Synthetic Nucleic Acids	Apr 2	2025
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La	aboratory Ha		Apr 2	2025
University of California San Diego				
			Apr 2	2025
University of California San Diego				
<u> </u>			Apr 2	2025
University of California San Diego				

Laboratory Safety	Apr 2025
University of California San Diego	
IHI Open School Basic Certificate in Quality and Safety	Jan 2022
Institute for Healthcare Improvement	
Qualified Bilingual Staff – Spanish	Nov 2021
ALTA Language Services	
IDWeek Mentorship Program	Nov 2021
Infectious Diseases Society of America	
Surgical Fire Safety	Oct 2021
Loyola University Health System	
Introduction to Peer Review	Oct 2021
Clarivate Web of Science Academy	
Basic Life Support	Jul 2021
American Heart Association	
Microsoft Teams Essential Training	Jan 2021
LinkedIn Learning	
Harassment Prevention	Nov 2020
EVERFI	
Learning Zoom	Apr 2020
LinkedIn Learning	
Basic Life Support	Aug 2019
American Heart Association	
Mental Health First Aid	Aug 2019
National Council for Behavioral Health	
Sexual Assault Prevention	Jul 2019
EVERFI	
Grants Management Training for Faculty	Oct 2015
USC Contracts & Grants	
Introductory Course in Immunology	Jul 2014
American Association of Immunologists	

### **HOBBIES & INTERESTS**

dollar-bill origami, Labrador Retrievers, numismatics, classic literature, mineral collecting, website development, loose-leaf tea, classic cars, ballroom dancing, classical music, ballet, opera, *The Economist* 

# LANGUAGE PROFICIENCY

English – native speaker

Spanish – advanced; certified medical interpreter

French – fair Italian – basic