

**CURRICULUM VITAE**  
**Marco Cassone, MD, PhD**

**CURRENT POSITION**

Associate Professor  
Scientific disciplinary sector MED/07  
Saint Camillus International University of Health Sciences, Rome

**EDUCATION AND OTHER ACADEMIC AND EXTRA-ACADEMIC POSITIONS**

**1997** MD cum laude, University of Rome “La Sapienza”, Italy

**1994-1997:** Intern, III<sup>a</sup> Clinical Medica, Policlinico Umberto I, Università degli Studi di Roma “la Sapienza”, Director: Prof. Pietro Serra. Supervisors: Prof. Pietro Serra, Prof. Camillo Brandimarte, Dr. Mario Venditti.

**1997-2002:** Specialization, Internal Medicine, III<sup>a</sup> Clinical Medica, Policlinico Umberto I, Università degli Studi di Roma “la Sapienza”, Director: Prof. Pietro Serra. Supervisors: Prof. Pietro Serra, Prof. Camillo Brandimarte, Dr. Mario Venditti, Dr. Paolo Palange, Dr. Claudio Santini.

**2003-2005:** PhD Fellowship in Biotechnologies, Policlinico Universitario “Le Scotte”, University of Siena. Advisors: Prof. Gianni Pozzi, Prof. Marco Oggioni.

**2006-2010:** Post-Doctoral Fellow, Temple University, Philadelphia, PA. Supervisor: Prof. Laszlo Otvos.

**2010-2012:** Post-Doctoral Fellow, University of Pennsylvania, and The Children’s Hospital of Philadelphia, Philadelphia, PA. Supervisor: Prof. Michael Sebert.

**2012** National certification as Associate Professor (ASN – MIUR MED07)

**2014-2016:** Research Associate, Division of Geriatrics and Palliative Care Medicine, Department of Internal Medicine, Michigan Medicine. University of Michigan, Ann Arbor, MI. Supervisor: Prof. Lona Mody.

**2016-2020:** Research Investigator, Division of Geriatrics and Palliative Care Medicine, Department of Internal Medicine, Michigan Medicine. University of Michigan, Ann Arbor, MI.

**2020** National certification as Full Professor (ASN – MIUR MED07, Clinical Microbiology)

**2020-present:** Research Assistant Professor, Division of Geriatrics and Palliative Care Medicine, Department of Internal Medicine, Michigan Medicine. University of Michigan, Ann Arbor, MI.

**2025-present:** Research Projects external referee, National Institutes of Health, Anti-Infective Resistance and Targets (AIRT) Study Section.

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**RESEARCH FUNDING last five years**

HUM00243293 University of Michigan.

Evaluation of Quality-of-Life Improvements Using UroShield Device.

PI: Mody

2024 – 2025

NIH P30 AG024824: Claude D. Pepper Older Americans Independence Center

PI: Yung

2020 – 2025

Department of Veterans Affairs CSR&D VA Merit CSRD EPID-001-19S: Patient Movement and Impact in Multi-Drug Resistant Organism (MDRO) Transmission.

PI: Mody

2021 - 2025

University of Michigan Office of Research OVPF Pandemic Relief Funding Award

PI: Cassone

2022 - 2024

CDC F068230: Safety and Healthcare Epidemiology Prevention Research Development (SHEPherD): Nursing Home Public Health Response Network

PI: Mody

2022 – 2024

AHRQ R01 HS025451: Enhancing Patient Safety by Preventing Urinary Tract Infection in Post-Acute Care.

PI: Mody

08/2017-05/2022

University of Michigan Older Americans Independence Center (OAIC): Research Education Core (REC) Scholarship

PI: Cassone

2018 - 2020

**SCIENTIFIC ACTIVITY**

- Synthesis, structure–activity relationships studies and preclinical development of derivatives of proline-rich natural antimicrobial peptides. Characterization of their safety, efficacy against clinically important pathogens and therapeutic index alone and in synergic combinations with traditional antibiotics *in vitro* and *in vivo*.
- Research to uncover the regulation of competence in *Streptococcus pneumoniae*, and discovery of its role in maintaining virulence and fitness in response to the cell's mutational burden, as well as the role of membrane-associated proteases in the inhibition of competence once the cell's mutational burden is low.
- Research on Infection prevention, surveillance screening and epidemiology of microorganisms of high clinical importance in traditional and non-traditional healthcare settings.

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- Interventional and longitudinal observational studies on persistence and transmission of multi-drug-resistant organisms in Nursing Homes patients and in their surrounding environment.
- Development of DNA microarrays for multiplex detection and discovery of antimicrobial resistance genes and for characterization of their transcriptional profiles in host organisms, including their accessory gene operons.
- Investigations on the technique, site selection, and suitability of patient and environmental microbiological sampling for the assessment of patient colonization and adverse clinical outcomes risk. Development of related Institutional and Professional Societies infection surveillance and prevention guidelines.
- Next generation whole-genome sequencing of endemic methicillin-resistant *Staphylococcus aureus* and vancomycin-resistant *Enterococcus* strains, and determination of their prevalence and spread in new geographical areas.
- High throughput molecular typing for clinical investigations of local (*Saccharomyces boulardii*) and regional (methicillin-resistant *S. aureus*) outbreaks, and discovery of novel clones.
- Studies on antibiotic heteroresistance and biofilm formation and visualization in clinical samples.
- Pre-clinical development of leptin-analog glycopeptides for metabolic regulation, weight loss and fertility studies in animal models.
- Clinical research on off-label, *ad-hoc* antimicrobial treatment strategies for unique clinical presentations of infections by antimicrobial-resistant organisms, and development of laboratory techniques to predict and evaluate their efficacy.

#### CURRENT BIBLIOMETRIC PARAMETERS

H Index (Scopus): 25  
Citations: (Scopus): 2131

H Index (Web of Science): 23  
Citations: (Web of Science): 1747

#### EDITORIAL BOARD POSITIONS AND PUBLICATIONS PEER-REVIEW SERVICE

##### Editorial board membership

**2020-present:** Frontiers in Public Health  
**2020-present:** Frontiers in Medicine  
**2010-2015:** Infection and drug resistance

##### Manuscript reviewer service

- American Journal of Infection Control
- Antimicrobial Resistance and Infection Control
- Biochimica et Biophysica Acta

**CURRICULUM VITAE**  
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- Bioessays
- BMC Genomics
- BMC Microbiology
- Cancer
- Cancer Letters
- Cancer Research
- Clinical Microbiology and Infection
- Clinical Microbiology Reviews
- Clinical Infectious Diseases
- Comparative Biochemistry and Physiology
- Current Signal Transduction Therapy
- Epidemiology and Infection
- Expert Review of Anti-Infective Therapy
- Gut Pathogens
- Heliyon (Cell Press)
- Infection Control and Hospital Epidemiology
- Infection and drug resistance
- International Journal of Cancer
- JAMA Network Open
- Journal of Cellular Physiology
- Journal of Infection
- Journal of Medicinal Chemistry
- Journal of Peptide Science
- Lancet Oncology
- Lancet Microbe
- Lancet Regional Health – Europe
- Medical Microbiology and immunology
- Microbiology Spectrum
- Molecular Cancer Therapeutics
- Molecular Microbiology
- mSphere
- PLOS One
- Protein and Peptide Letters
- Scientific Reports

**MEMBERSHIPS IN SCIENTIFIC AND PROFESSIONAL SOCIETIES**

Board of Physicians of Rome, Italy.

American Society of Microbiology.

European Society of Clinical Microbiology and Infectious Diseases.

American Chemical Society

Society of Healthcare Epidemiology of America

**INTERNATIONAL RESEARCH COLLABORATIONS**

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**Switzerland**

Professor Hugo Sax and Dr. Aline Wolfsberger, University of Zurich Medical School, Zurich, Switzerland.

Wolfsberger A, Mang N, Cassone M, Gontjes K, Gibson K, Sax H, Mody L. Short-term environmental contamination with MRSA explained by in-room activity of MRSA-colonised patients. ECCMID 2020, Paris, France. Final results published in Infect Control Hosp Epidemiol (2022). 43(9):1147-54.

**Hungary**

Professor Ferencz Rozgonyi, Semmelweis University, Budapest, Hungary.

**M. Cassone, F. Rozgonyi, D. Szabo, B. Kocsis, P. Vogiatzi, L. Otvos, Jr.** Study of in vivo Efficacy and Resistance Induction Potential of the Proline-rich Antimicrobial Peptide Dimer A3-APO and its Single Chain Metabolite. 109<sup>TH</sup> ASM Meeting, 2009, Philadelphia, PA. Final results published in multiple journals (see bibliography)

**Australia**

Professor John D. Wade, The Florey Institute, Parkville, Victoria, Australia.

**Cassone M, Vogiatzi P, Wade JD, Rozgonyi F, Szabo D, Kocsis B, Otvos L Jr.** The Proline-Rich antimicrobial peptide dimer A3-APO and its single chain in vivo metabolite represent a new paradigm in microbiology, pharmacology and drug development. 30<sup>th</sup> European Peptide Symposium (EPS), 2008, Helsinki, Finland. Final results published in multiple journals (see bibliography)

**Germany**

Professor Ralf Hoffmann and Dr. Daniel Knappe, University of Leipzig, Germany.

Knappe, D., Cassone, M., Nollmann, F.I., Otvos Jr., L., Hoffmann, R. Hydroxyproline substitutions stabilize non-glycosylated drosocin against serum proteases without challenging its antibacterial activity. Protein and Peptide Letters (2014). 21 (4), pp. 321-329.

**Hong Kong, China**

Professor Vincent C Cheng, The University of Hong Kong, Hong Kong, China.

**Cassone, M., Mantey, J., Perri, MB., Gibson, KE., Lansing, BJ., McNamara, SE., Patel, PK., Cheng, VCC., Walters, MS., Stone, ND., Zervos, M., Mody, L.** Environmental panels as a proxy for nursing facility patients with MRSA and VRE colonization. Clinical Infectious Diseases (2018). 67 (6), pp 861-8.

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**TEACHING EXPERIENCE AND TRAINING**

- 2002** Assistant Lecturer, Infectious Diseases (Prof. Pietro Serra). “Campus Biomedico” School of Medicine, Rome, Italy.
- 2003-2004** Instructor, Anatomy, Physiology and Pathology. Regional Physical Therapist and Shiatsu Certification School, Siena, Italy.
- 2007-2008** Adjunct Assistant Professor. BIO 317 General Microbiology, Temple University, Philadelphia, PA.
- 2011** Selected for and completed the competitive “Course in College Teaching”, Fall Semester, University of Pennsylvania Center for Teaching and Learning (Teacher: Catherine Turner)
- 2023** External Lecturer, Master in Antibiotic Stewardship, “Agostino Gemelli” Hospital, Università Cattolica del Sacro Cuore, Rome, Italy

**Students and Trainees (last 10 years):**

Brett Slajus

University of Michigan School of Public Health, 2017 and 2018. Epidemiology and Prevention of MDRO Infections in nursing home residents. MPH 2018. Moved on to Loyola University Medical School, Chicago, IL

Ayesha Khanam

Laboratory identification and geographic distribution of antimicrobial resistant pathogens in Nursing Homes. Undergraduate Research opportunity Program (UROP), Class of 2019

Isaac Kim

University of Michigan School of Public Health, 2017. Epidemiology and Prevention of MDRO Infections in Nursing Homes Residents. MPH 2018. Moved on to SUNY Syracuse Medical School, NY.

Ziwei Zhu

University of Michigan School of Public Health, 2018. Epidemiology and Prevention of MDRO Infections in nursing homes residents. MPH 2018. Moved on to Statistician Intermediate, Department of Urology, University of Michigan

Clare Shanahan

University of Michigan School of Public Health, 2018. Impact of indwelling devices on MDRO colonization rates in nursing homes residents. MPH 2019. Moved on to Infection Prevention Specialist at Henry Ford Health System, Detroit, MI.

Kyle Gontjes

University of Michigan School of Public Health, 2018 and 2019. Multidrug-Resistant Organism Burden on Common Area and Rehabilitation Equipment Surfaces in Skilled Nursing Facilities. MPH 2019. Currently PhD student, Department of Microbiology and Immunology, University of Michigan Medical School.

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Meghan Linder

University of Michigan School of Public Health, 2019. Clinical and Hospital Epidemiology Internship. Impact of roommate colonization towards MDRO acquisition in nursing home residents. MPH 2020. Moved on to CSTE Applied Epidemiology Fellow, Oregon Health Authority, Eugene, OR.

Cheon Jee Shin

University of Michigan Master in Microbiology and Immunology, 2019. Patient and environmental longitudinal screening of MDROs in Skilled Nursing Facility Residents. Currently, PhD Student, University of Louisville, KY.

Madison Nightingale

University of Michigan School of Public Health, 2021. Clinical and Hospital Epidemiology Internship. Analysis of healthcare workers facemask contamination burden in the SNF environment. MPH 2022. Currently Medical Student, Michigan State College of Human Medicine.

Manali Mody

University of Pittsburg, 2022. Summer Internship in Clinical and Laboratory screening of multidrug-resistant organisms in alternative care settings. Analysis of healthcare workers facemask contamination burden in the SNF environment. Class of 2026

Stephen Vear

University of Michigan School of Public Health, 2022. Research assistant. MPH 2023.

Trent Behunin

University of Michigan School of Public Health, 2022. Clinical and Hospital Epidemiology Internship. Physical disabilities and independence challenges as risk factors for MDRO colonization and adverse health outcomes. MPH 2023. Currently Infection Preventionist, Ascension Health, Grosse Pointe, MI.

Morgan Harris

University of Michigan School of Public Health, 2022. Clinical and Hospital Epidemiology Internship. Epidemiology of antimicrobial resistance in methicillin-resistant staphylococci isolated from nursing home residents and their immediate environment. MPH 2023. Currently Director, Health Insurance Analytics, New Hampshire State Department of Health.

Lana Kouatli

Michigan State University, 2023. Summer Internship in Clinical and Laboratory screening of multidrug-resistant organisms in alternative care settings. Class of 2026

Thirak Buch

Northville High School, Northville, MI, 2023. Summer Internship in Clinical and Laboratory screening of multidrug-resistant organisms in alternative care settings. Class of 2024.

Alison Naif

University of Michigan School of Public Health, 2023. Clinical and Hospital Epidemiology Internship. Epidemiology and differential facility distribution of vancomycin-resistant *Enterococcus faecium* and *faecalis* in Southeast Michigan and Northeast Ohio VA Community Living Centers. MPH 2024. Currently Infection Preventionist, Detroit Medical Center, Detroit, MI.

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**BIBLIOGRAPHY**

*Peer-Reviewed Publications*

1. Carfagna, P., Cattaneo, M., **Cassone, M.**, Serra, P. Peripheral embolic events from myocardial thrombosis in a young man with hyperhomocysteinemia [Embolie periferiche da trombosi endocardica in un giovane con iperomocisteinemia]. (1997) *Annali Italiani di Medicina Interna*, 12 (3), pp. 173-175.
2. Venditti, M., Brandimarte, C., Capone, A., **Cassone, M.**, Galie, M., Tarasi, A., Tarasi, D. Endocarditis caused by *Enterococcus faecalis* with high-level resistance to aminoglycosides: Failure of ampicillin and ceftriaxone combined therapy. (1997) *Clinical Microbiology and Infection*, 3 (5), pp. 577-580.
3. Galie, M., **Cassone, M.**, Ausiello, C., Serra, P. Idiopathic CD4+ T lymphocytopenia: Clinical evolution of a case [Deficit idiopatico di linfociti T CD4+: Evoluzione clinica di un caso]. (1997) *Annali Italiani di Medicina Interna*, 12 (4), pp. 233-237.
4. Baiocchi, P., Galiè, M., Santini, C., Carfagna, P., **Cassone, M.**, Tarasi, D., Venditti, M. In vitro susceptibility of *Staphylococcus aureus* isolated from blood to currently used antistaphylococcal drugs. (1998) *Journal of Chemotherapy*, 10 (1), pp. 25-28.
5. Capone, A., **Cassone, M.**, Tarasi, D., Brandimarte, C., Tarasi, A., Galiè, M., Venditti, M. Fatal suppurative mesenteric thrombophlebitis caused by an *Enterococcus faecalis* highly resistant to aminoglycosides: Case report. (1998) *Journal of Chemotherapy*, 10 (2), pp. 128-131.
6. Tarasi, A., Capone, A., Tarasi, D., **Cassone, M.**, Bianco, G., Venditti, M. Comparative in-vitro activity of moxifloxacin, penicillin, ceftriaxone and ciprofloxacin against pneumococci isolated from meningitis. (1999) *Journal of Antimicrobial Chemotherapy*, 43 (6), pp. 833-835.
7. Carfagna, P., Tarasi, A., **Cassone, M.**, Del Grosso, M.F., Bianco, G., Venditti, M. Prosthetic biologic valve endocarditis caused by a vancomycin-resistant (*vanA*) *Enterococcus faecalis*: Case report. (2000) *Journal of Chemotherapy*, 12 (5), pp. 416-420.
8. Venditti, M., **Cassone, M.**, Falcone, M., Pavoni, G., Pistella, E., Paris, A. Role of piperacillin-tazobactam in the treatment of nosocomial infections [Piperacillina-tazobactam nel trattamento delle infezioni gravi nosocomiali]. (2002) *Recenti Progressi in Medicina*, 93 (3), pp. 200-211.
9. Claudio, S., Berton, E., Galiè, M., **Cassone, M.**, Vitelli, C., Serra, P., Venditti, M. Tuberculous lymphadenitis at the hepatic hilum with portal thrombosis in an immunocompetent patient. (2002) *Infectious Diseases in Clinical Practice*, 11 (4), pp. 214-218.

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10. Falcone, M., Carfagna, P., **Cassone, M.**, Pistella, E., Pavoni, G., Nofroni, I., Serra, P., Venditti, M. Staphylococcus aureus sepsis in hospitalized non neutropenic patients: retrospective clinical and microbiological analysis [Sepsi da Staphylococcus aureus in pazienti ospedalizzati non neutropenici: analisi retrospettiva clinica e microbiologica.]. (2002) *Annali Italiani di Medicina Interna*, 17 (3), pp. 166-172.
11. Pavoni, G.L., Falcone, M., Baiocchi, P., Tarasi, A., **Cassone, M.**, Serra, P., Venditti, M. Conservative medical therapy of infections following osteosynthesis: A retrospective analysis of a six-year experience. (2002) *Journal of Chemotherapy*, 14 (4), pp. 378-383.
12. Tarasi, A., **Cassone, M.**, Monaco, M., Tarasi, D., Pompeo, M.E., Venditti, M. Activity of moxifloxacin in combination with vancomycin or teicoplanin against Staphylococcus aureus isolated from device-associated infections unresponsive to glycopeptide therapy. (2003) *Journal of Chemotherapy*, 15 (3), pp. 239-243.
13. **Cassone, M.**, Serra, P., Mondello, F., Girolamo, A., Scafetti, S., Pistella, E., Venditti, M. Outbreak of Saccharomyces cerevisiae Subtype boulardii Fungemia in Patients Neighboring Those Treated with a Probiotic Preparation of the Organism. (2003) *Journal of Clinical Microbiology*, 41 (11), pp. 5340-5343.
14. **Cassone, M.**, Campanile, F., Pantosti, A., Venditti, M., Stefani, S. Identification of a Variant "Rome Clone" of Methicillin-Resistant Staphylococcus aureus with Decreased Susceptibility to Vancomycin, Responsible for an Outbreak in an Intensive Care Unit. (2004) *Microbial Drug Resistance*, 10 (1), pp. 43-49.
15. **Cassone, M.**, D'Andrea, M.M., Iannelli, F., Oggioni, M.R., Rossolini, G.M., Pozzi, G. DNA microarray for detection of macrolide resistance genes. (2006) *Antimicrobial Agents and Chemotherapy*, 50 (6), pp. 2038-2041.
16. Oggioni, M.R., Trappetti, C., Kadioglu, A., **Cassone, M.**, Iannelli, F., Ricci, S., Andrew, P.W., Pozzi, G. Switch from planktonic to sessile life: A major event in pneumococcal pathogenesis.(2006) *Molecular Microbiology*, 61 (5), pp. 1196-1210.
17. Trani, D., Lucchetti, C., **Cassone, M.**, D'Agostino, L., Caputi, M., Giordano, A. Analysis of cell-cycle regulation following exposure of lung-derived cells to  $\gamma$ -rays. (2007) *Advances in Space Research*, 39 (6), pp. 1026-1033.
18. **Cassone, M.**, Del Grosso, M., Pantosti, A., Giordano, A., Pozzi, G. Detection of genetic elements carrying glycopeptide resistance clusters in Enterococcus by DNA microarrays. (2008) *Molecular and Cellular Probes*, 22 (3), pp. 162-167.

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19. Noto, P.B., Abbadessa, G., **Cassone, M.**, Mateo, G.D., Agelan, A., Wade, J.D., Szabo, D., Kocsis, B., Nagy, K., Rozgonyi, F., Otvos Jr., L. Alternative stabilities of a proline-rich antibacterial peptide in vitro and in vivo. (2008) *Protein Science*, 17 (7), pp. 1249-1255.
20. Otvos Jr., L., Terrasi, M., Cascio, S., **Cassone, M.**, Abbadessa, G., De Pascali, F., Scolaro, L., Knappe, D., Stawikowski, M., Cudic, P., Wade, J.D., Hoffmann, R., Surmacz, E. Development of a pharmacologically improved peptide agonist of the leptin receptor. (2008) *Biochimica et Biophysica Acta - Molecular Cell Research*, 1783 (10), pp. 1745-1754.
21. **Cassone, M.**, Vogiatzi, P., La Montagna, R., De Olivier Inacio, V., Cudic, P., Wade, J.D., Otvos Jr., L. Scope and limitations of the designer proline-rich antibacterial peptide dimer, A3-APO, alone or in synergy with conventional antibiotics. (2008) *Peptides*, 29 (11), pp. 1878-1886.
22. **Cassone, M.**, Frith, N., Vogiatzi, P., Wade, J.D., Otvos Jr., L. Induced resistance to the designer proline-rich antimicrobial peptide A3-APO does not involve changes in the intracellular target DnaK. (2009) *International Journal of Peptide Research and Therapeutics*, 15 (2), pp. 121-128.
23. Otvos Jr., L., **Cassone, M.**, Inacio, V.O., Noto, P., Rux, J.J., Wade, J.D., Cudic, P. Synergy between a lead proline-rich antibacterial peptide derivative and small molecule antibiotics. (2009) *Advances in experimental medicine and biology*, 611, pp. 375-378.
24. Otvos Jr., L., **Cassone, M.**, Terrasi, M., Cascio, S., Mateo, G.D., Knappe, D., Hoffmann, R., Cudic, P., Wade, J.D., Surmacz, E. Agonists and partial antagonists acting on the leptin--leptin receptor interface. (2009) *Advances in experimental medicine and biology*, 611, pp. 497-498.
25. Rozgonyi, F., Szabo, D., Kocsis, B., Ostorházi, E., Abbadessa, G., **Cassone, M.**, Wade, J.D., Otvos Jr., L. The antibacterial effect of the proline-rich antibacterial peptide A3-APO. (2009) *Current Medicinal Chemistry*, 16 (30), pp. 3996-4002.
26. Szabo, D., Ostorhazi, E., Binas, A., Rozgonyi, F., Kocsis, B., **Cassone, M.**, Wade, J.D., Nolte, O., Otvos Jr., L. The designer proline-rich antibacterial peptide A3-APO is effective against systemic *Escherichia coli* infections in different mouse models. (2010) *International Journal of Antimicrobial Agents*, 35 (4), pp. 357-361.
27. Kovalszky, I., Surmacz, E., Scolaro, L., **Cassone, M.**, Ferla, R., Sztodola, A., Olah, J., Hatfield, M.P.D., Lovas, S., Otvos, L. Leptin-based glycopeptide induces weight loss and simultaneously restores fertility in animal models. (2010) *Diabetes, Obesity and Metabolism*, 12 (5), pp. 393-402.
28. Ostorhazi, E., Rozgonyi, F., Sztodola, A., Harnos, F., Kovalszky, I., Szabo, D., Knappe, D., Hoffmann, R., **Cassone, M.**, Wade, J.D., Bonomo, R.A., Otvos Jr., L. Preclinical advantages of intramuscularly

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- administered peptide A3-APO over existing therapies in *Acinetobacter baumannii* wound infections. (2010) *Journal of Antimicrobial Chemotherapy*, 65 (11), pp. 2416-2422.
29. Ostorhazi, E., Rozgonyi, F., Szabo, D., Binas, A., **Cassone, M.**, Wade, J.D., Nolte, O., Bethel, C.R., Bonomo, R.A., Otvos Jr., L. Intramuscularly administered peptide A3-APO is effective against carbapenem-resistant *Acinetobacter baumannii* in mouse models of systemic infections. (2011) *Biopolymers*, 96 (2), pp. 126-129.
30. Otvos Jr., L., Kovalszky, I., Scolaro, L., Sztodola, A., Olah, J., **Cassone, M.**, Knappe, D., Hoffmann, R., Lovas, S., Hatfield, M.P.D., Beko, G., Zhang, S., Wade, J.D., Surmacz, E. Peptide-based leptin receptor antagonists for cancer treatment and appetite regulation. (2011) *Biopolymers*, 96 (2), pp. 117-125.
31. Ostorhazi, E., Holub, M.C., Rozgonyi, F., Harnos, F., **Cassone, M.**, Wade, J.D., Otvos Jr., L. Broad-spectrum antimicrobial efficacy of peptide A3-APO in mouse models of multidrug-resistant wound and lung infections cannot be explained by in vitro activity against the pathogens involved. (2011) *International Journal of Antimicrobial Agents*, 37 (5), pp. 480-484.
32. Otvos, L., Haspinger, E., LaRussa, F., Maspero, F., Graziano, P., Kovalszky, I., Lovas, S., Nama, K., Hoffmann, R., Knappe, D., **Cassone, M.**, Wade, J., Surmacz, E. Design and Development of a Peptide-based Adiponectin Receptor Agonist for Cancer Treatment. (2011) *BMC Biotechnology*, 11, 90.
33. **Cassone, M.**, Gagne, A.L., Spruce, L.A., Seeholzer, S.H., Sebert, M.E. The HtrA protease from *Streptococcus pneumoniae* digests both denatured proteins and the competence-stimulating peptide. (2012) *Journal of Biological Chemistry*, 287 (46), pp. 38449-38459.
34. Gagne, A.L., Stevens, K.E., **Cassone, M.**, Pujari, A., Abiola, O.E., Chang, D.J., Sebert, M.E. Competence in *Streptococcus pneumoniae* Is a Response to an Increasing Mutational Burden. (2013) *PLoS ONE*, 8 (8), art. no. e7261
35. Knappe, D., **Cassone, M.**, Nollmann, F.I., Otvos Jr., L., Hoffmann, R. Hydroxyproline substitutions stabilize non-glycosylated drosocin against serum proteases without challenging its antibacterial activity. (2014) *Protein and Peptide Letters*, 21 (4), pp. 321-329.
36. Gibson, K.E., McNamara, S.E., **Cassone, M.**, Perri, M.B., Zervos, M., Mody, L. Methicillin-resistant *Staphylococcus aureus*: site of acquisition and strain variation in high-risk nursing home residents with indwelling devices. (2014) *Infect Control Hosp Epidemiol*, 35 (12), pp. 1458-65.
37. **Cassone, M.**, McNamara, S.E., Perri, M.B., Zervos, M., Mody, L. Impact of intervention measures on MRSA clonal type and carriage site prevalence. (2016) *mBio*, 7 (2), p. e00218.

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38. Iannelli F, Santoro F, Santagati M, Docquier JD, Lazzeri E, Pastore G, **Cassone M**, Oggioni MR, Rossolini GM, Stefani S, Pozzi G. Type M Resistance to Macrolides is Due to a Two-Gene Efflux Transport System of the ATP-Binding Cassette (ABC) Superfamily. (2018) *Front Microbiol*, 31 (9), pp e1670.
39. Mody, L., Foxman, B., Bradley, S., McNamara, SE., Lansing, BJ., Gibson, KE., **Cassone, M.**, Armbruster, C., Mantey, J., Min, L. Longitudinal assessment of multidrug-resistant organisms (MDROs) in newly-admitted nursing facility patients: implications for an evolving population. (2018) *Clin Infect Dis*, 67 (6), pp 837-44.
40. **Cassone, M.**, Mantey, J., Perri, MB., Gibson, KE., Lansing, BJ., McNamara, SE., Patel, PK., Cheng, VCC., Walters, MS., Stone, ND., Zervos, M., Mody, L. Environmental panels as a proxy for nursing facility patients with MRSA and VRE colonization. (2018) *Clin Infect Dis*, 67 (6), pp 861-8.
41. Heinze K, Kabeto M, Toth Martin E, **Cassone M**, Hicks L, Mody L. Predictors of methicillin-resistant *Staphylococcus aureus* and vancomycin-resistant enterococci co-colonization among nursing facility patients. (2019) *Am J Infect Control*, 47(4), pp 415-20
42. Mantey J, Min L, **Cassone M**, Gibson KE, Mody L. Changing dynamics of colonization in nursing facility patients over time: reduction in MRSA offset by increase in VRE prevalence. (2019) *Infect Control Hosp Epidemiol*, 40(9), pp 1069-70
43. Mills JP, Zhu Z, Mantey J, Hatt S, Patel P, Kaye KS, Gibson KE, **Cassone M**, Lansing BJ, Mody L. The devil is in the details: factors influencing hand hygiene adherence and contamination with antimicrobial-resistant organisms among healthcare providers in nursing facilities. (2019) *Infect Control Hosp Epidemiol*, 40(12), pp 1394-99
44. Libertucci J, Bassis CM, **Cassone M**, Gibson KE, Lansing BJ, Mody L, Young VB, Meddings J. Bacteria detected in both urine and open wounds in nursing home residents: a pilot study. (2019) *mSphere* 4(4). pii: e00463-19
45. Mody L, Washer LL, Kaye KS, Gibson K, Saint S, Reyes K, **Cassone M**, Mantey J, Cao J, Altamimi S, Perri M, Sax H, Chopra V, Zervos M. Multidrug-resistant organisms in hospitals: what is on patient hands and in their rooms? (2019) *Clin Infect Dis*, 69(11), pp 1837-44
46. **Cassone M**, Zhu Z, Mantey J, Gibson KE, Lansing BJ, Perri MB, Zervos MJ, Snitkin ES, Foxman B, Mody L. Interplay Between Patient Colonization and Environmental Contamination with Vancomycin-Resistant Enterococci, and Their Association with Patient Health Outcomes in Post-Acute Care. (2019) *Open Forum Inf Dis* 7(1), pp ofz519
47. Gontjes K, Gibson KE, Lansing BJ, **Cassone M**, Mody L. Contamination of Common Area and Rehabilitation Gym Environment with Multidrug-Resistant Organisms. (2020) *JAGS* 68(3), pp 478-85

**CURRICULUM VITAE**  
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48. Davis E, Hicks L, Ali I, Salzmann E, Wang J, Snitkin ES, Gibson KE, **Cassone M**, Mody L, Foxman B. Epidemiology of vancomycin-resistant *Enterococcus faecium* and *Enterococcus faecalis* colonization in nursing facilities. (2020) Open Forum Inf Dis 7(1), pp ofz553
49. Wang J, **Cassone M**, Gibson K, Lansing B, Mody L, Snitkin ES, Rao K. Gut Microbiota Features on Nursing Home Admission Are Associated With Subsequent Acquisition of Antibiotic-resistant Organism Colonization. (2020) Clin Infect Dis. Dec 15;71(12):3244-3247
50. Gontjes KJ, Gibson KE, Lansing BJ, Mody L, **Cassone M**. Assessment of Race and Sex as Risk Factors for Colonization with Multidrug-Resistant Organisms in Six Nursing Homes. (2020) Infect Control Hosp Epidemiol. Oct;41(10):1222-1224
51. Mody L, Gontjes KJ, **Cassone M**, Gibson KE, Lansing BJ, Mantey J, Kabeto M, Galecki A, Min L. Effectiveness of a Multicomponent Intervention to Reduce Multidrug-Resistant Organisms in Nursing Homes: A Cluster Randomized Clinical Trial. JAMA Netw Open. 2021;4(7):e2116555.
52. **Cassone M**, Mody L. Measuring the outsized impact of COVID-19 in the evolving setting of aged care facilities. (2021) EClinicalMedicine. Apr;34:100825.
53. **Cassone M**, Mantey J, Gontjes KJ, Lansing B, Gibson KE, Wang J, Mody L. Seasonal Patterns in Incidence and Antimicrobial Resistance of Common Bacterial Pathogens in Nursing Home Patients and Their Rooms. (2021) Front Public Health. 9: 959.
54. **Cassone M**, Linder M, Shin CJ, Mantey J, Gibson K, Lansing B, Mody L. Not too close! impact of roommate status on MRSA and VRE colonization and contamination in Nursing Homes. (2021) Antimicrob Resist Infect Control. Jul 5;10(1):104.
55. **Cassone M**, Mody L. To each villain its plot: the case of *Candida auris*. (2021) Annals Int Med Sep 7. doi: 10.7326/M21-3456.
56. Gibson KE, Mills JP, Mantey JA, Lansing BJ, **Cassone M**, Mody L. Multidrug-resistant organism (MDRO) contamination of privacy curtains in nursing homes. (2022) Infect Control Hosp Epidemiol. 43(5):666-68.
57. Gontjes KJ, Gibson KE, Lansing B, **Cassone M**, Mody L. Can alternative anatomical sites and environmental surveillance replace perianal screening for multidrug-resistant organisms in nursing homes? (2022) Infect Control Hosp Epidemiol. 43(8):1063-66.
58. Wolfensberger A, Mang N, Gibson KE, Gontjes K, **Cassone M**, Brugger SD, Mody L, Sax H. Understanding short-term transmission dynamics of methicillin-resistant *Staphylococcus aureus* in the patient room. (2022). Infect Control Hosp Epidemiol, 43(9):1147-54.

**CURRICULUM VITAE**  
**Marco Cassone, MD, PhD**

59. Gontjes, K. J., Gibson, K. E., Lansing, B. J., Mantey, J., Jones, K. M., **Cassone, M.**, Wang, J., Mills, J. P., Mody, L., & Patel, P. K. (2022). Association of Exposure to High-risk Antibiotics in Acute Care Hospitals With Multidrug-Resistant Organism Burden in Nursing Homes. *JAMA network open*, *5*(2), e2144959.
60. Mody, L., Gibson, K. E., Mantey, J., Bautista, L., Montoya, A., Neeb, K., Jenq, G., Mills, J. P., Min, L., Kabeto, M., Galecki, A., **Cassone, M.**, & Martin, E. T. (2022). Environmental contamination with SARS-CoV-2 in nursing homes. *Journal of the American Geriatrics Society*, *70*(1), 29–39.
61. Mills JP, Mantey J, **Cassone M**, Kaye KS, Mody L. (2023). Epidemiology of resistant gram-negative bacteria in nursing homes. *Infect Control Hosp Epidemiol*. 14(3), 1-6.
62. Nightingale M, Mody M, Rickard AH, **Cassone M**. (2023). Bacterial Contamination on Used Face Masks in Nursing Home Healthcare Personnel. *Antimicrob Steward Healthc Epidemiol*, *3*(1), e54.
63. **Cassone M**, Wang J, Lansing BJ, Mantey J, Gibson KE, Gontjes KJ, Mody L. (2023). Diversity and Persistence of MRSA and VRE in Skilled Nursing Facilities: Environmental Screening, Whole Genome Sequencing, Development of a Dispersion Index. *The Journal of Hospital Infection*, S0195-6701(23)00140-8.
64. Wang J, Foxman B, Rao K, **Cassone M**, Gibson K, Mody L, Snitkin ES. Association of patient clinical and gut microbiota features with vancomycin-resistant enterococci environmental contamination in nursing homes: a retrospective observational study. *Lancet Healthy Longev*. 2023 Nov;4(11):e600-e607.
65. **Cassone M**, Ameling J, Mody L, Patel S, Muyanja N, Meddings J. Impact of External Female Urinary Catheter Use on Urine Chemistry Test Results. *Am J Infect*. 2024 May 10; 1-6 *online ahead of print*
66. Behunin T, Vijayasiri G, Gibson KE, Mody L, **Cassone M**. (2024) Functional Dependence as a Contributing Factor for Patient Hand Contamination by Multi-Drug Resistant Organisms (MDROs) in Acute Care. *Infect Control Hosp Epidemiol*. 2024; 27:S0196-6553(24)00134-2 *online ahead of print*
67. Mody L, Gibson KE, **Cassone M**, Vijayasiri G, Snitkin ES, Saint S, Krein S, Janevic MJ, Thiel J, Ridenour J, Nguyen A, Hicks O, Bej T, El Chakhtoura N, Min L, Galecki A, Greene T, Roghmann MC, Chigurupati L, Perez F, Jump RL (2025). Epidemiology of Multidrug-Resistant Organisms (MDROs) Across Three VA Nursing Homes and MDRO Transmission During Interactive Visits. *Nature communications*. 2025; *in press*

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Book Chapters

Montoya, A., **Cassone, M.**, Mody, L. Infections in Nursing Homes: Epidemiology and Prevention Programs. (2016) Clin Geriatr Med, 32 (3), pp. 585-607.

Sturm L, Flood M, Montoya A, Mody L, **Cassone M.** Updates on Infection control in alternative care settings. (2021) Infect Dis Clin North Am. Sep;35(3):803-825. doi: 10.1016/j.idc.2021.04.013.

*Selected Conference Abstracts*

Gibson KE, Vijayasiri G, **Cassone M**, Mody L. Comparing the predictive value of environmental surfaces screening for assessment of patient colonisation: VA-community living centres vs non-VA nursing homes. ECCMID 2024, Barcelona, Spain

Naif A, Gibson KE, Mody L, **Cassone M.** Variation in Vancomycin Resistant *Enterococcus faecalis* and *faecium* prevalence and ratio in VA Community Living Centers. AGS 2024.

Saab M, Hua H, Vijayasiri G, **Cassone M.** Predictors of Multidrug-Resistant Organisms (MDRO) contamination in nursing homes: focus on sex and diabetes mellitus. AGS 2024.

Behunin T, Mantey J, **Cassone M**, Mody L. Functional Dependence as a Contributing Factor for Patient Hand Contamination by Multi-Drug Resistant Organisms in Acute Care. SHEA Spring 2023, Seattle, WA

Harris M, Gibson KE, **Cassone M.** Antibiotic Resistance Profiles of Methicillin-Resistant *Staphylococcus aureus* (MRSA) Isolates Recovered in Post-acute Care Screening of Patients and Environmental Surfaces. AGS 2023, Long Beach, CA

**Cassone M**, Lansing B, Mantey J, Gibson KE, Gontjes KJ, Mody L. Diversity and Persistence of MRSA and VRE in Nursing Homes: Environmental Screening and Whole Genome Sequencing. Oral Abstract 166. SHEA Spring 2022, Colorado Springs, CO

Nightingale M, Mody M, Rickard A, **Cassone M.** Bacterial Contamination on Used Face Masks in Healthcare Personnel. Oral Abstract 172. SHEA Spring 2022, Colorado Spring, CO

**Cassone M**, Lansing B, Mantey J, Gibson KE, Gontjes KJ, Mody L. Impact of Hand Hygiene Assistance and Room Occupancy Changes in Persistence of Multidrug-Resistant Organisms in Nursing Homes. AGS 2022, Orlando, FL

**Cassone M**, Ameling J, Mody L, Meddings J. Impact of External Female Urinary Catheter Use on Routine Urine Test Results. AGS 2022, Orlando, FL

Linder M, Shin CJ, Gibson K, Lansing B, Mody L, **Cassone M.** Not too close! Impact of Roommate Status on MRSA and VRE Colonization and Contamination in Skilled Nursing Facilities. Abstract 5757. ASM Microbe 2020, Chicago, IL.

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**Cassone M**, Mantey J, Gontjes K, Lansing B, Gibson K, Mody L. Seasonal patterns in the burden of common bacterial pathogens in south-east Michigan post-acute care facilities. Abstract 7629. ECCMID 2020, Paris, France.

Wolfsberger A, Mang N, **Cassone M**, Gontjes K, Gibson K, Sax H, Mody L. Short-term environmental contamination with MRSA explained by in-room activity of MRSA-colonised patients. Abstract 2441. ECCMID 2020, Paris, France.

Wang J, **Cassone M**, Gibson KE, Lansing BJ, Mody L, Snitkin ES, Rao K. Antibiotic-Resistant Organism Acquisition in Nursing Facility Patients. ATCS Meeting 2020, Washington, DC.

**Cassone M**, Ziwei Zhu, Kristen E Gibson, Bonnie J Lansing, Jie Cao, Lona Mody. *Acinetobacter baumannii* in the post-acute care setting: prevalence and resistance rates in patients, health care personnel and the environment. IDWeek 2018, San Francisco, CA.

**Cassone M**, Mantey J, Gibson KE, Zhu Z, Mody L. A safe place for grandma? Environmental contamination as a risk factor for MRSA and VRE colonization and adverse health outcomes in long-term care. ECCMID 2018, Madrid, Spain. Oral presentation

Davis E, Hicks L, Ali I, Salzman E, Wang J, Snitkin E, **Cassone M**, Mody L, Foxman B. Vancomycin resistant enterococcus (VRE) prevalence, incidence, and duration of carriage among nursing home residents. American College of Epidemiology 2018 Meeting, Cincinnati, OH

**Cassone M**, Armbruster C, Snitkin E, Gibson K, Mantey J, Reyes K, Altamimi S, Perri MB, Zervos M, Mody L. Relatedness of MRSA and VRE strains isolated from post-acute care patients and their environment: a longitudinal assessment. IDWeek 2017, San Diego, CA.

**Cassone M**, Mantey J, McNamara S, Gibson K, Lansing B, Mody L. Predictive value of environmental sites panels as a proxy for Nursing Home resident MRSA and VRE colonization. Society of Healthcare epidemiology of America (SHEA) symposium 2017, St. Louis, MO. Best poster award

Cao J, McNamara S, Lansing B, Gibson K, Koo E, **Cassone M**, Mody L. MDROs on resident hands: should we refrain from shaking hands? Presidential Award Poster Session. American Geriatrics Society (AGS) Meeting, 2015, National Harbor, MD.

Gibson KE, McNamara SE, **Cassone M**, Perri MB, Zervos M, Mody L. Methicillin-resistant *Staphylococcus aureus*: site of acquisition and strain variation in high-risk nursing home residents. American Geriatrics Society (AGS) Meeting, 2014, Orlando, FL

**Cassone M**, Sebert ME. Degradation of the pneumococcal competence-stimulating peptide by the bacterial HtrA protease. 112<sup>TH</sup> American Society of Microbiology (ASM) Meeting, 2012, San Francisco, CA.

**Cassone M**, Rozgonyi F, Szabo D, Kocsis B, Vogiatzi P, Otvos L, Jr. Study of in vivo Efficacy and Resistance Induction Potential of the Proline-rich Antimicrobial Peptide Dimer A3-APO and its Single Chain Metabolite. 109<sup>TH</sup> American Society of Microbiology (ASM) Meeting, 2009, Philadelphia, PA.

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**Cassone M**, Vogiatzi P, Wade JD, Rozgonyi F, Szabo D, Kocsis B, Otvos L Jr. The Proline-Rich antimicrobial peptide dimer A3-APO and its single chain in vivo metabolite represent a new paradigm in microbiology, pharmacology and drug development.

30<sup>th</sup> European Peptide Symposium (EPS), 2008, Helsinki, Finland. Oral presentation

**Otvos L Jr**, **Cassone M**, Noto P, Abbadessa G, Vogiatzi P, Wade JD, Cudic P, Inacio VDO, Szabo D, Kocsis B and Rozgonyi F. The long and winding road to antibacterial peptides effective in systemic infection models. PUG 2008, Melbourne, Australia

**Otvos L Jr**, **Cassone M**, Inacio VDO, Noto P, Rux JJ, Wade JD, Cudic P. Synergy between a lead proline-rich antibacterial peptide derivative and small molecule antibiotics.

20<sup>th</sup> American Peptide Society (APS) Symposium, 2007, Montreal, Canada

**Cassone M**, D'Andrea MM, Iannelli F, Oggioni MR, Rossolini GM, Pozzi G. Development of DNA Microarrays to detect macrolide resistance genes.

ECCMID 2004, Praha, Czech Republic. Oral presentation

**Iannelli F**, Santagati M, Docquier JD, **Cassone M**, Oggioni MR, Rossolini GM, Stefani S, Pozzi G. Type M Resistance to Macrolides in Streptococci is not due to the *mef(A)* gene, but to *mat(A)* encoding an ATP-dependent efflux pump. ICAAC 2004, Washington, DC.

**Oggioni MR**, Iannelli F, Ricci S, Chiavolini D, Parigi R, **Cassone M**, Claverys J, Pozzi G. Antibacterial activity of the Competence Stimulating Peptide in experimental sepsis by *Streptococcus pneumoniae*. ICAAC 2004, Washington, DC.

**Cassone M**, Scafetti S, Mondello F, Pavoni G, Venditti M. *S. boulardii* fungemia in three Intensive Care Unit patients not receiving *S. boulardii* therapy. ECCMID 2002, Milan, Italy