Stanford



Niaz Banaei

Professor of Pathology and of Medicine (Infectious Diseases)

CLINICAL OFFICE (PRIMARY)

- **Stanford Healthcare Clinical Microbiology Laboratory**
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ACADEMIC CONTACT INFORMATION

- **Alternate Contact**
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Bio

BIO

Niaz Banaei received his medical education from Stanford University. During medical school he developed a passion for infectious diseases diagnostics while conducting diagnostic research on Mycobacterium tuberculosis in Mexico and in South Africa. After medical school he completed residency training in Clinical Pathology in the department of Laboratory Medicine at the University of California, San Francisco. He then completed a postdoctoral fellowship in tuberculosis pathogenesis at the New York University. He then moved back to Stanford University to join the department of Pathology and serve as Medical Director of the Clinical Microbiology Laboratory at Stanford Health Care. He is currently a Professor of Pathology and Medicine (Division of Infectious Diseases & Geographic Medicine) at Stanford University and is the Director of Stanford Clinical Microbiology Fellowship and Stanford Global Health Diagnostics Fellowship. He is also the associate program director for Clinical Pathology training program. He was the recipient of several teaching awards. He has authored over 200 scientific articles and holds a number of invention patents.

Banaei reserach lab is interested in leveraging advances in basic sciences and immunology to develop, implement, and assess novel infectious diseases diagnostics for pathogens causing disease in immunocompromise as well as immunocompetent patients.

Active areas of research:

1. Developing and implementing nucleic acid amplification assays for targeted detection of primary pathogens using plasma cell-free DNA to enable noninvasive diagnosis of invasive bacterial, fungal and parasitic infections.
2. Conducting post implementation studies to better understand the accuracy, clinical impact, and prognostic value of novel diagnostic assays.
3. Understanding the added diagnostic value of conventional noninvasive biomarkers in addition to cell-free DNA PCR.
4. Conducting post implementation studies to define diagnostic stewardship rules to improve the quality of results and reduce unnecessary utilization of diagnostics.
5. Deciphering the mechanism of antibiotic resistance to novel antibiotics. Phenotypic and genotypic characterization of bacterial isolates before and after development of resistance is performed to identify the exact mechanism to novel antibiotics.

CLINICAL FOCUS

- Infectious Diseases Diagnostics
- Clinical Laboratory Techniques
- Anatomic and Clinical Pathology

ACADEMIC APPOINTMENTS

- Professor-Univ Med Line, Pathology
- Professor-Univ Med Line, Medicine - Infectious Diseases
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Director, Pathology Global Health Diagnostic Fellowship, Stanford University, (2012- present)
- Associate Program Director, Clinical Pathology Residency Training, Stanford University (2016 - Present), (2016- present)
- Medical Director, Clinical Microbiology Laboratory, Stanford University (2007 - Present), (2007- present)
- Director, Medical Microbiology Fellowship, Stanford University, (2016- present)

PROFESSIONAL EDUCATION

- Medical Education: Stanford University School of Medicine (2001) CA
- Residency: UCSF Pathology Residency (2003) CA
- Board Certification: Clinical Pathology, American Board of Pathology (2004)
- MD, Stanford University , Medicine (2001)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Active areas of research:

1. Developing and implementing PCR assays for targeted detection of primary pathogens using plasma cell-free DNA to enable noninvasive diagnosis of invasive bacterial, fungal and parasitic infections.

2. Conducting post implementation studies to better understand the accuracy, clinical impact, and prognostic value of novel diagnostic assays.

3. Understanding the added diagnostic value of conventional noninvasive biomarkers in addition to cell-free DNA PCR.

4. Conducting post implementation studies to define diagnostic stewardship rules to improve the quality of results and reduce unnecessary utilization of diagnostics.

5. Deciphering the mechanism of antibiotic resistance to novel antibiotics. Phenotypic and genotypic characterization of bacterial isolates before and after development of resistance is performed to identify the exact mechanism to novel antibiotics.

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Sunanda Baidya

Publications

PUBLICATIONS

- **Assessment of BioFire Gastrointestinal Panel unconfirmed positive results for enteropathogenic bacteria and Norovirus and accuracy of a post-analytical algorithm to mitigate unconfirmed results.** *Journal of clinical microbiology*
  Lalljie, A., Budvytiene, I., Banaei, N.
  2026: e0124926

- **Accuracy of plasma cell-free DNA PCR versus mNGS for non-invasive diagnosis of invasive mold disease.** *Journal of clinical microbiology*
  Pusz-Bochenska, K., Murugesan, K., Senchyna, F., Lalljie, A., Budvytiene, I., Banaei, N.
  2026: e0117526

- **Xpert MTB/RIF Ultra on nasopharyngeal swabs has lower sensitivity for pulmonary tuberculosis than tongue swabs: a nested case-control study in South African primary care.** *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*
  Nakawunde, R., Achar, J., Allwood, B., Moodley, S., Rockman, L., Nwamba, W. V., Okunola, A., Naidoo, D., Banaei, N., Marsh, C. C., Theron, G.
  2026: 109161

- **Smaller Genomes and Shorter Prophage Sequences Differentiate Clinical from Environmental Isolates of Pseudomonas aeruginosa.** *bioRxiv : the preprint server for biology*
  Targ, R. W., Blankenberg, P., Flamholz, Z., Pourtois, J. D., Banaei, N., Burgener, E. B., Milla, C. E., Bollyky, P. L.
  2026

- **Larger Blood Volume Increases Detection of Fastidious Mycobacteria and Fungi in Blood Culture.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Chang-Graham, A., Ghafghaichi, L., Banaei, N.
  2026

- **Xpert Ultra on nasopharyngeal swabs detects one-third of pulmonary tuberculosis: a nested case-control study in South African primary care.** *Research square*
  Nakawunde, R., Achar, J., Allwood, B., Moodley, S., Rockman, L., Okunola, A., Naidoo, D., Banaei, N., Marsh, C. C., Theron, G.
  2026

- **Impact of stopping contact precautions on vanA plasmid transmission, Northern California, 2021-2023.** *Antimicrobial stewardship & healthcare epidemiology : ASHE*
  Rodriguez-Nava, G., Grieshop, M. P., Zulli, A., Behr, A. A., Miranti, E., Tariq, W., Viana-Cardenas, E. P., Pincus, N., Banaei, N., Sampson, M., Bhatt, A. S., Salinas, J. L.
  2026; 6 (1): e140

- **Accuracy of Plasma Cell-Free DNA PCR for Diagnosis of Coccidioidomycosis.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Lalljie, A., Budvytiene, I., Wheat, J. L., Theel, E. S., Banaei, N.
  2026

- **Transposable elements are driving rapid adaptation of Enterococcus faecium.** *Nature*
  Grieshop, M. P., Behr, A. A., Bowden, S., Lin, J. D., Molari, M., Reynolds, G. Z., Brooks, E. F., Doyle, B., Moore, A. A., Rodriguez-Nava, G., Salinas, J. L., Banaei, N., Bhatt, et al
  2026

- **Cultryx: Precision Diagnostic Stewardship for Blood Cultures Using Machine Learning.** *medRxiv : the preprint server for health sciences*
  Marshall, N. P., Chen, W., Amrollahi, F., Haredasht, F. N., Maddali, M. V., Ma, S. P., Zahedivash, A., Black, K. C., Chang, A., Deresinski, S. C., Goldstein, M. K., Asch, S. M., Banaei, et al

2026

- **Mycobacteriophage Functionalized Magnetic Nanocrystal Clusters for Highly Sensitive and Rapid Detection of Mycobacterium tuberculosis.** *JACS Au*
  Xiao, Z., Yen, C., Wang, T., Ibrahim, J., Fu, Q., Dai, S. Y., Hajfathalian, M., Murugesan, K., Banaei, N., Bogyo, M., Rao, J.
  2025; 5 (12): 6100-6111

- **Accuracy of VIDAS® TB-IGRA in TB patients and individuals with different thresholds of exposure.** *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*
  Goletti, D., Banaei, N., Batra, R., Berger, A. E., Blazevic, A., Botelho-Nevers, E., Breen, R., Bruiners, N., Cambau, E., Carbonnelle, E., Daley, C. L., Descotes-Genon, C., Gennaro, et al
  2025: 108318

- **Curated cases from the TB expert network: Unplugged! Series: Use of plasma microbial cell-free DNA metagenomic sequencing to diagnose Mycobacterium tuberculosis.** *Journal of clinical tuberculosis and other mycobacterial diseases*
  Cohodes, M., Fernandez, A., Ashkin, D., Reed, C., Park, S., Banaei, N., Fung, M., Jacobson, K., Goswami, N. D.
  2025; 41: 100563

- **Mycobacteriophage Functionalized Magnetic Nanocrystal Clusters for Highly Sensitive and Rapid Detection of Mycobacterium tuberculosis** *JACS AU*
  Xiao, Z., Yen, C., Wang, T., Ibrahim, J., Fu, Q., Dai, S., Hajfathalian, M., Murugesan, K., Banaei, N., Bogyo, M., Rao, J.
  2025

- **Curated cases from the TB expert network: Unplugged! Series: Use of plasma microbial cell-free DNA metagenomic sequencing to diagnose Mycobacterium tuberculosis** *JOURNAL OF CLINICAL TUBERCULOSIS AND OTHER MYCOBACTERIAL DISEASES*
  Cohodes, M., Fernandez, A., Ashkin, D., Reed, C., Park, S., Banaei, N., Fung, M., Jacobson, K., Goswami, N. D.
  2025; 41

- **Stress-driven emergence of heritable non-genetic drug resistance.** *Research square*
  Xie, J. L., Yin, S., Yang, T. S., Chandrasekher, K., Hanson, L., Kim, S. H., Esqueda, L., Hogan, C. A., Banaei, N., Round, J. L., Ost, K. S., Berman, J., Jarosz, et al
  2025

- **Accuracy and actionability of mold PCR on bronchoalveolar lavage fluid for diagnosis of invasive mold disease.** *Journal of clinical microbiology*
  Demir, K. K., Anderson, G., Budvytiene, I., Banaei, N.
  2025: e0114525

- **Non-invasive diagnosis of invasive fungal disease with cell-free DNA PCR.** *Journal of clinical microbiology*
  Mah, J. K., Lieu, A., Banaei, N.
  2025: e0123624

- **Circulating Bacteriophage DNA Distinguishes Staphylococcal Infection from Commensal Colonization.** *The Journal of arthroplasty*
  Manasherob, R., Furukawa, D., Haddock, N. L., Chang, T. H., Hargil, A., Arora, P., Banaei, N., Maloney, W. J., Bollyky, P. L., Amanatullah, D. F.
  2025

- **Diagnostic stewardship applied to targeted fungal sequencing.** *Journal of clinical microbiology*
  Hudson, J., Budvytiene, I., Banaei, N.
  2025: e0089625

- **Antibiotic Resistance Microbiology Dataset (ARMD): A Resource for Antimicrobial Resistance from EHRs.** *Scientific data*
  Nateghi Haredasht, F., Amrollahi, F., Maddali, M. V., Marshall, N., Ma, S. P., Cooper, L. N., Johnson, A. O., Wei, Z., Medford, R. J., Kanjilal, S., Banaei, N., Deresinski, S., Goldstein, et al
  2025; 12 (1): 1299

- **Antibiotic Resistance Microbiology Dataset (ARMD): A Resource for Antimicrobial Resistance from EHRs.** *ArXiv*
  Haredasht, F. N., Amrollahi, F., Maddali, M. V., Marshall, N., Ma, S. P., Cooper, L. N., Johnson, A. O., Wei, Z., Medford, R. J., Kanjilal, S., Banaei, N., Deresinski, S., Goldstein, et al
  2025

- **Antibiotic Resistance Microbiology Dataset (ARMD): A Resource for Antimicrobial Resistance from EHRs.** *ArXiv*

Haredasht, F. N., Amrollahi, F., Maddali, M. V., Marshall, N., Ma, S. P., Cooper, L. N., Johnson, A. O., Wei, Z., Medford, R. J., Kanjilal, S., Banaei, N., Deresinski, S., Goldstein, et al
2025

- **Accuracy of plasma cell-free DNA PCR for non-invasive diagnosis of mucormycosis.** *Journal of clinical microbiology*
  Mah, J., Lieu, A., Nicholas, V., Moreno, A., Murugesan, K., Budvytiene, I., Banaei, N.
  2025: e0079625

- **Vitamin C potentiates the killing of Mycobacterium tuberculosis by bedaquiline through metabolic disruption.** *mBio*
  Vilchèze, C., Rajagopalan, S., Kalluru, R. S., Banaei, N., Jacobs, W. R.
  2025: e0148425

- **Red Blood Cell-Bound Cell-Free DNA Is an Insensitive Marker for Diagnosis of Bacterial Infections.** *Clinical chemistry*
  Murugesan, K., Anderson, G. R., Banaei, N.
  2025

- **Replicative selfish genetic elements are driving rapid pathogenic adaptation of Enterococcus faecium.** *bioRxiv : the preprint server for biology*
  Grieshop, M. P., Behr, A. A., Bowden, S., Lin, J. D., Molari, M., Reynolds, G. Z., Brooks, E. F., Doyle, B., Rodriguez-Nava, G., Salinas, J. L., Banaei, N., Bhatt, A. S.
  2025

- **Aztreonam-ceftazidime-avibactam may not be enough.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Banaei, N., Deresinski, S. C.
  2025

- **A novel framework for the automated characterization of Gram-stained blood culture slides using a large-scale vision transformer.** *Journal of clinical microbiology*
  McMahon, J., Tomita, N., Tatishev, E. S., Workman, A. A., Costales, C. R., Banaei, N., Martin, I. W., Hassanpour, S.
  2025: e0151424

- **Prophages are infrequently associated with antibiotic resistance in Pseudomonas aeruginosa clinical isolates.** *mSphere*
  Chang, T. H., Pourtois, J. D., Haddock, N. L., Furukawa, D., Kelly, K. E., Amanatullah, D. F., Burgener, E., Milla, C., Banaei, N., Bollyky, P. L.
  2025: e0090424

- **Pleural Paragonimiasis.** *The New England journal of medicine*
  Wang, L., Banaei, N.
  2025

- **Impact of an analytical intervention to assure the accuracy of LIAISON QuantiFERON-TB Gold Plus results.** *Journal of clinical microbiology*
  Pusz-Bochenska, K., Banaei, N.
  2025: e0187924

- **Effective mitigation of blood culture bottle shortage with diagnostic stewardship interventions.** *Journal of clinical microbiology*
  Hudson, J., Rodriguez Nava, G., Sampson, M. M., Chang, A., Dussaq, A. M., Salinas, J. L., Serbest, A., Pham, T., Banaei, N.
  2025: e0170124

- **Concordance of non-invasive plasma cell-free DNA with invasive diagnostics for diagnosis of invasive fungal disease.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Lieu, A., Zimmet, A. N., Pozdol, J., Kushner, L. E., Ho, D., Banaei, N.
  2025

- **Pilot study evaluation of the eQUANT™ system for accelerated antimicrobial susceptibility testing of gram-negative organisms directly from positive blood cultures.** *Diagnostic microbiology and infectious disease*
  Abdelhamed, A. M., Alkins, B. R., Deak, E., Rajan, N., Good, C. E., Hoyos-Urias, A., Kimball, S. R., Putney, S., Moreno, A., Knopfmacher, O., Banaei, N., Herget, M., Granato, et al
  2024; 111 (3): 116665

- **Follow-up Fungal PCR Testing on Plasma and BAL is Low Yield.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*

Banaei, N.
2024

- **Photo Quiz: PAS- and GMS-positive filamentous branching organisms in an immunocompromised patient.** *Journal of clinical microbiology*
  Nicholas, V. V., Miller, I., Mah, J., Rieger, K. E., Budvytiene, I., Banaei, N.
  2024; 62 (12): e0038724
- **A blueprint for broadly effective bacteriophage-antibiotic cocktails against bacterial infections.** *Nature communications*
  Kim, M. K., Chen, Q., Echterhof, A., Pennetzdorfer, N., McBride, R. C., Banaei, N., Burgener, E. B., Milla, C. E., Bollyky, P. L.
  2024; 15 (1): 9987
- **Yield of solid AFB culture in addition to automated liquid culture for diagnosis of mycobacterial infections.** *Journal of clinical microbiology*
  Han, D., Banaei, N.
  2024: e0155124
- **"Keeping us on our toes": a review of what clinicians need to know about vancomycin-variable Enterococcus** *ANTIMICROBIAL STEWARDSHIP & HEALTHCARE EPIDEMIOLOGY*
  Hawkins, M. R., Medvedeva, N., Wang, H., Banaei, N., Holubar, M. K.
  2024; 4 (1)
- **"Keeping us on our toes": a review of what clinicians need to know about vancomycin-variable Enterococcus.** *Antimicrobial stewardship & healthcare epidemiology : ASHE*
  Hawkins, M. R., Medvedeva, N., Wang, H., Banaei, N., Holubar, M. K.
  2024; 4 (1): e200
- **High-resolution 3D spatial distribution of complex microbial colonies revealed by mass spectrometry imaging.** *Journal of advanced research*
  Shen, Y., Wang, Y., Wang, J., Xie, P., Xie, C., Chen, Y., Banaei, N., Ren, K., Cai, Z.
  2024
- **Application of Diagnostic Stewardship to Fungal Polymerase Chain Reaction: Low Yield of Follow-up Testing on Plasma and Bronchoalveolar Lavage After a Negative Result.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Wang, T., Park, B., Anderson, G., Shaller, B., Budvytiene, I., Banaei, N.
  2024
- **Rapid, antibiotic incubation-free determination of tuberculosis drug resistance using machine learning and Raman spectroscopy.** *Proceedings of the National Academy of Sciences of the United States of America*
  Ogunlade, B., Tadesse, L. F., Li, H., Vu, N., Banaei, N., Barczak, A. K., Saleh, A. A., Prakash, M., Dionne, J. A.
  2024; 121 (25): e2315670121
- **A Multi-Phase Analysis of Blood Culture Stewardship: Machine Learning Prediction, Expert Recommendation Assessment, and LLM Automation.** *AMIA ... Annual Symposium proceedings. AMIA Symposium*
  Amrollahi, F., Marshall, N., Haredasht, F. N., Black, K. C., Zahedivash, A., Maddali, M. V., Ma, S. P., Chang, A., Deresinski, S. C., Goldstein, M. K., Asch, S. M., Banaei, N., Chen, et al
  2024; 2024: 147-156
- **Machine Learning-Based Prediction of Antimicrobial Susceptibility: A Step Towards Precision Antimicrobial Stewardship.** *AMIA ... Annual Symposium proceedings. AMIA Symposium*
  Amrollahi, F., Haredasht, F. N., Vansomphone, A., Marshall, N., Maddali, M. V., Ma, S. P., Chang, A., Deresinski, S. C., Goldstein, M. K., Kanjilal, S., Medford, R. J., Cooper, L. N., Asch, et al
  2024; 2024: 138-146
- **Dynamics and prognostic value of plasma cell-free DNA PCR in patients with invasive aspergillosis and mucormycosis.** *Journal of clinical microbiology*
  Moreno, A., Mah, J., Budvytiene, I., Ho, D. Y., Schwenk, H. T., Banaei, N.
  2024: e0039424
- **A retrospective longitudinal study of adenovirus group F, norovirus GI and GII, rotavirus, and enterovirus nucleic acids in wastewater solids at two wastewater treatment plants: solid-liquid partitioning and relation to clinical testing data.** *mSphere*
  Boehm, A. B., Shelden, B., Duong, D., Banaei, N., White, B. J., Wolfe, M. K.
  2024: e0073623

- **A rationally designed antimicrobial peptide from structural and functional insights of Clostridioides difficile translation initiation factor 1.** *Microbiology spectrum*
  Alanis, E., Aguilar, F., Banaei, N., Dean, F. B., Villarreal, A., Alanis, M., Lozano, K., Bullard, J. M., Zhang, Y.
  2024: e0277323
- **Neuroinvasive Francisella tularensis Infection: Report of 2 Cases and Review of the Literature.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Cash-Goldwasser, S., Beeson, A., Marzec, N., Ho, D. Y., Hogan, C. A., Budvytiene, I., Banaei, N., Born, D. E., Gephart, M. H., Patel, J., Dietrich, E. A., Nelson, C. A.
  2024; 78 (Supplement_1): S55-S63
- **Sequential Treatment Failure With Aztreonam-Ceftazidime-Avibactam Followed by Cefiderocol Due to Preexisting and Acquired Mechanisms in a New Delhi Metallo-β-lactamase-Producing Escherichia coli Causing Fatal Bloodstream Infection.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Senchyna, F., Murugesan, K., Rotunno, W., Nadimpalli, S. S., Deresinski, S., Banaei, N.
  2024
- **Effective Approaches to Diagnostic Stewardship of Syndromic Molecular Panels.** *The journal of applied laboratory medicine*
  Hitchcock, M. M., Gomez, C. A., Pozdol, J., Banaei, N.
  2024; 9 (1): 104-115
- **Enhancing Antibiotic Stewardship: A Machine Learning Approach to Predicting Antibiotic Resistance in Inpatient Care.** *AMIA ... Annual Symposium proceedings. AMIA Symposium*
  Haredasht, F. N., Maddali, M. V., Ma, S. P., Chang, A., Kim, G. Y., Banaei, N., Deresinski, S., Goldstein, M. K., Asch, S. M., Chen, J. H.
  2024; 2024: 857-864
- **Erratum for Buron and Banaei, "Inflated Gamma Interferon Response with QuantiFERON-TB Gold Plus Using the Automated Liaison XL Analyzer: a Testing Algorithm To Mitigate False-Positive Results in Low-Incidence Settings".** *Journal of clinical microbiology*
  Buron, V., Banaei, N.
  2023: e0106723
- **Accuracy of QuantiFERON in active tuberculosis suspects with comorbidities and nontuberculous mycobacterial infection in Northern California.** *Journal of clinical microbiology*
  Lu, J., Murugesan, K., Senchyna, F., Budvytiene, I., Banaei, N.
  2023: e0077523
- **Investigation of discordant positive Sona lateral flow assay results for detection ofCoccidioidesantibodies.** *Journal of clinical microbiology*
  Lu, J., Banaei, N.
  2023: e0062323
- **Case Report: Relapsing Leptospirosis in an Immunocompromised Host.** *The American journal of tropical medicine and hygiene*
  Prasad, R., Narsana, N. K., Ajayi, A. A., Wang, H., Patel, J., Ho, D. Y., Banaei, N., Blackburn, B. G.
  2023
- **Human norovirus (HuNoV) GII RNA in wastewater solids at 145 United States wastewater treatment plants: comparison to positivity rates of clinical specimens and modeled estimates of HuNoV GII shedders.** *Journal of exposure science & environmental epidemiology*
  Boehm, A. B., Wolfe, M. K., White, B. J., Hughes, B., Duong, D., Banaei, N., Bidwell, A.
  2023
- **Culture-Independent Multiplexed Detection of Drug-Resistant Bacteria Using Surface-Enhanced Raman Scattering.** *ACS sensors*
  Dai, T., Xiao, Z., Shan, D., Moreno, A., Li, H., Prakash, M., Banaei, N., Rao, J.
  2023
- **Postpandemic Effects of COVID-19 Shelter-in-Place Orders on the Gastrointestinal Pathogen Landscape.** *Journal of clinical microbiology*
  Bulterys, P. L., Leung, N. Y., Saleem, A., Budvytiene, I., Pinsky, B. A., Banaei, N.
  2023: e0038523
- **Superior accuracy of Aspergillus plasma cell-free DNA PCR over serum galactomannan for the diagnosis of invasive aspergillosis.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Mah, J., Nicholas, V., Tayyar, R., Moreno, A., Murugesan, K., Budvytiene, I., Banaei, N.
  2023

- **Answer to June 2023 Photo Quiz.** *Journal of clinical microbiology*
  Zimmet, A. N., Mah, J. K., Budvytiene, I., Banaei, N., Salinas, J.
  2023; 61 (6): e0175422
- **Photo Quiz: A 50-Year Old Man with Fever and Headache.** *Journal of clinical microbiology*
  Zimmet, A. N., Mah, J. K., Budvytiene, I., Banaei, N., Salinas, J. L.
  2023; 61 (6): e0172522
- **Predicting tuberculosis drug resistance with machine learning-assisted Raman spectroscopy.** *ArXiv*
  Ogunlade, B., Tadesse, L. F., Li, H., Vu, N., Banaei, N., Barczak, A. K., Saleh, A. A., Prakash, M., Dionne, J. A.
  2023
- **Mycobacterium marinum Infection after Iguana Bite in Costa Rica.** *Emerging infectious diseases*
  Mah, J., Walding, K., Liang, B., Rinsky, L., Mathew, R., Budvytiene, I., Banaei, N.
  2023; 29 (6): 1278-1280
- **Inflated Gamma Interferon Response with QuantiFERON-TB Gold Plus Using the Automated Liaison XL Analyzer: a Testing Algorithm To Mitigate False-Positive Results in Low-Incidence Settings.** *Journal of clinical microbiology*
  Buron, V., Banaei, N.
  2023: e0029523
- **Bioluminogenic Probe for Rapid, Ultrasensitive Detection of β-Lactam-Resistant Bacteria.** *Analytical chemistry*
  Dai, T., Xie, J., Buonomo, J. A., Moreno, A., Banaei, N., Bertozzi, C. R., Rao, J.
  2023
- **An Electronic Health Record Intervention to Limit Viral Testing of Cerebrospinal Fluid.** *The Neurohospitalist*
  Lyman, K. A., Madill, E., Thatikunta, P., Threlkeld, Z. D., Banaei, N., Gold, C. A.
  2023; 13 (2): 173-177
- **Genome-wide tiled detection of circulating Mycobacterium tuberculosis cell-free DNA using Cas13.** *Nature communications*
  Thakku, S. G., Lirette, J., Murugesan, K., Chen, J., Theron, G., Banaei, N., Blainey, P. C., Gomez, J., Wong, S. Y., Hung, D. T.
  2023; 14 (1): 1803
- **Piperacillin/tazobactam versus cefepime or carbapenems for cefoxitin-non-susceptible Enterobacter cloacae, Klebsiella aerogenes, Citrobacter freundii, Serratia marcescens and Morganella morganii bacteraemia in immunocompromised patients.** *The Journal of antimicrobial chemotherapy*
  Lu, B., Wong, M., Ha, D., Bounthavong, M., Banaei, N., Deresinski, S., Diep, C.
  2023
- **Combining Acoustic Bioprinting with AI-Assisted Raman Spectroscopy for High-Throughput Identification of Bacteria in Blood.** *Nano letters*
  Safir, F., Vu, N., Tadesse, L. F., Firouzi, K., Banaei, N., Jeffrey, S. S., Saleh, A. A., Khuri-Yakub, B. P., Dionne, J. A.
  2023
- **Fusarium and Lomentospora co-infection in a pediatric patient with acute myelogenous leukemia: When Occam's razor may not always apply.** *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*
  Mah, J., Orkusyan, R., Joerger, T., Banaei, N.
  2022
- **Erratum for Hogan et al., "Clinical Outcomes of Treated and Untreated C. difficile PCR-Positive/Toxin-Negative Adult Hospitalized Patients: a Quasi-Experimental Noninferiority Study".** *Journal of clinical microbiology*
  Hogan, C. A., Hitchcock, M. M., Frost, S., Kapphahn, K., Holubar, M., Tompkins, L. S., Banaei, N.
  2022: e0151822
- **Using the Digital Phenotype of Disease in Human Plasma for Simplified and Accurate Prediction of Tuberculosis and HIV Infection**
  Gupta, C., Murugesan, K., Jia, Z., Fischer, S., Hui, J., Quevy, E., Theron, G., Banaei, N.
  ELSEVIER SCIENCE INC.2022: S74
- **Evaluation of MetaSystems Automated Fluorescent Microscopy System for the Machine-Assisted Detection of Acid-Fast Bacilli in Clinical Samples.** *Journal of clinical microbiology*
  Tomasello, G., Foroughi, F., Padron, D., Moreno, A., Banaei, N.

2022: e0113122

- **Pediatric Solid Organ Transplant Recipients Demonstrate Robust Cell-Mediated and Humoral Responses to 3 Doses of mRNA SARS-CoV-2 Vaccine.** *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons*
  Bratic, J. S., Gans, H. A., Chen, S. F., Banaei, N., Johnston, E. M., Sear, K., Samreth, S., Nadimpalli, S. S.
  2022
- **Near-fatal Legionella pneumonia in a neonate linked to home humidifier by metagenomic next generation sequencing.** *Med (New York, N.Y.)*
  West, P. T., Brooks, E. F., Costales, C., Moreno, A., Jensen, T. D., Budvytiene, I., Khan, A., Pham, T. H., Schwenk, H. T., Bhatt, A. S., Banaei, N.
  2022
- **Filamentous bacteriophage delays healing of Pseudomonas-infected wounds.** *Cell reports. Medicine*
  Bach, M. S., de Vries, C. R., Khosravi, A., Sweere, J. M., Popescu, M. C., Chen, Q., Demirdjian, S., Hargil, A., Van Belleghem, J. D., Kaber, G., Hajfathalian, M., Burgener, E. B., Liu, et al
  2022; 3 (6): 100656
- **Cellular and humoral immune response to SARS-CoV-2 vaccination and booster dose in immunosuppressed patients: An observational cohort study.** *Journal of clinical virology : the official publication of the Pan American Society for Clinical Virology*
  Yang, L. M., Costales, C., Ramanathan, M., Bulterys, P. L., Murugesan, K., Schroers-Martin, J., Alizadeh, A. A., Boyd, S. D., Brown, J. M., Nadeau, K. C., Nadimpalli, S. S., Wang, A. X., Busque, et al
  2022; 153: 105217
- **Clinical Outcomes of Treated and Untreated C. difficile PCR-Positive/Toxin-Negative Adult Hospitalized Patients: a Quasi-Experimental Noninferiority Study.** *Journal of clinical microbiology*
  Hogan, C. A., Hitchcock, M. M., Frost, S., Kapphahn, K., Holubar, M., Tompkins, L. S., Banaei, N.
  2022: e0218721
- **Balamuthia mandrillaris brain infection: a rare cause of a ring-enhancing central nervous system lesion. Illustrative case.** *Journal of neurosurgery. Case lessons*
  Levinson, S., Kumar, K. K., Wang, H., Tayyar, R., Dunning, M., Toland, A., Budvytiene, I., Vogel, H., Chang, A., Banaei, N., Shuer, L.
  2022; 3 (15)
- **Accuracy of Pneumocystis jirovecii Plasma Cell-Free DNA PCR for Noninvasive Diagnosis of Pneumocystis Pneumonia.** *Journal of clinical microbiology*
  Moreno, A., Epstein, D., Budvytiene, I., Banaei, N.
  2022: e0010122
- **A modular and reconfigurable open-channel gated device for the electrokinetic extraction of cell-free DNA assays.** *Analytica chimica acta*
  Futai, N., Fukazawa, Y., Kashiwagi, T., Tamaki, S., Sakai, R., Hogan, C. A., Murugesan, K., Ramachandran, A., Banaei, N., Santiago, J. G.
  2022; 1200: 339435
- **Clinical accuracy of malaria loop-mediated isothermal amplification assay as a stand-alone screening tool at a non-endemic Northern California regional health system.** *Diagnostic microbiology and infectious disease*
  Costales, C., Broadhurst, M. J., Budvytiene, I., Banaei, N.
  2022; 103 (2): 115680
- **Author Correction: The immunoregulatory landscape of human tuberculosis granulomas.** *Nature immunology*
  McCaffrey, E. F., Donato, M., Keren, L., Chen, Z., Delmastro, A., Fitzpatrick, M. B., Gupta, S., Greenwald, N. F., Baranski, A., Graf, W., Kumar, R., Bosse, M., Fullaway, et al
  2022
- **Microbiota dynamics in a randomized trial of gut decontamination during allogeneic hematopoietic cell transplantation.** *JCI insight*
  Severyn, C. J., Siranosian, B. A., Kong, S. T., Moreno, A., Li, M. M., Chen, N., Duncan, C. N., Margossian, S. P., Lehmann, L. E., Sun, S., Andermann, T. M., Birbrayer, O., Silverstein, et al
  2022
- **Filamentous Bacteriophage Delay Healing Of Pseudomonas-Infected Wounds**
  Khosravi, A., Bach, M. S., de Vries, C. R., Sweere, J. M., Popescu, M., Chen, Q., Hargil, A., Van Belleghem, J. D., Kaber, G., Burgener, E. B., Liu, D., Quynh-Lam Tran, Dharmaraj, T., et al
  WILEY.2022: A27

- **Rare transmission of commensal and pathogenic bacteria in the gut microbiome of hospitalized adults.** *Nature communications*
  Siranosian, B. A., Brooks, E. F., Andermann, T., Rezvani, A. R., Banaei, N., Tang, H., Bhatt, A. S.
  1800; 13 (1): 586
- **Immunogenicity of a Third COVID-19 mRNA Vaccine Dose in PID Patients with Functional B-cell Defects.** *The journal of allergy and clinical immunology. In practice*
  Gernez, Y., Murugesan, K., Cortales, C. R., Banaei, N., Hoyte, L., Pinsky, B. A., Lewis, D. B., Pham, M.
  2022
- **Microbiota dynamics in a randomized trial of gut decontamination during allogeneic hematopoietic cell transplantation** *JCI Insight*
  Severyn, C. J., et al
  2022
- **Long Term Accuracy of SARS-CoV-2 Interferon-γ Release Assay and its Application in Household Investigation.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Murugesan, K., Jagannathan, P., Altamirano, J., Maldonado, Y. A., Bonilla, H. F., Jacobson, K. B., Parsonnet, J., Andrews, J. R., Shi, R. Z., Boyd, S., Pinsky, B. A., Singh, U., Banaei, et al
  2022
- **The immunoregulatory landscape of human tuberculosis granulomas.** *Nature immunology*
  McCaffrey, E. F., Donato, M., Keren, L., Chen, Z., Delmastro, A., Fitzpatrick, M. B., Gupta, S., Greenwald, N. F., Baranski, A., Graf, W., Kumar, R., Bosse, M., Fullaway, et al
  2022
- **Immunogenicity and Tolerability of COVID-19 mRNA Vaccines in PID patients with functional B-cell defects.** *The Journal of allergy and clinical immunology*
  Pham, M. N., Murugesan, K., Banaei, N., Pinsky, B. A., Tang, M., Hoyte, E., Lewis, D. B., Gernez, Y.
  1800
- **Effect of rapid methicillin-resistant Staphylococcus aureus nasal polymerase chain reaction screening on vancomycin use in the intensive care unit.** *American journal of health-system pharmacy : AJHP : official journal of the American Society of Health-System Pharmacists*
  Diep, C., Meng, L., Pourali, S., Hitchcock, M. M., Alegria, W., Swayngim, R., Ran, R., Banaei, N., Deresinski, S., Holubar, M.
  2021
- **"Barcode" cell sensor microfluidic system: Rapid and sample-to-answer antimicrobial susceptibility testing applicable in resource-limited conditions.** *Biosensors & bioelectronics*
  Chan, C., Sun, H., Wang, Y., Zhao, Z., O'Neill, R., Siu, S., Chu, X., Banaei, N., Ren, K.
  2021; 192: 113516
- **Novel electronic biosensor for automated inoculum preparation to accelerate antimicrobial susceptibility testing.** *Scientific reports*
  Putney, S., Theiss, A. H., Rajan, N. K., Deak, E., Buie, C., Ngo, Y., Shah, H., Yuan, V., Botbol-Ponte, E., Hoyos-Urias, A., Knopfmacher, O., Hogan, C. A., Banaei, et al
  2021; 11 (1): 11360
- **Impact of COVID-19 shelter-in-place order on transmission of gastrointestinal pathogens in Northern California.** *Journal of clinical microbiology*
  Bulterys, P. L., Leung, N. Y., Saleem, A., Budvytiene, I., Banaei, N.
  2021
- **Discontinuation Patterns and Cost Avoidance of a Pharmacist-Driven Methicillin-Resistant Staphylococcus aureus Nasal Polymerase Chain Reaction Testing Protocol for De-escalation of Empiric Vancomycin for Suspected Pneumonia.** *Open forum infectious diseases*
  Meng, L., Pourali, S., Hitchcock, M. M., Ha, D. R., Mui, E., Alegria, W., Fox, E., Diep, C., Swayngim, R., Chang, A., Banaei, N., Deresinski, S., Holubar, et al
  2021; 8 (4): ofab099
- **Discontinuation Patterns and Cost Avoidance of a Pharmacist-Driven Methicillin-Resistant Staphylococcus aureus Nasal Polymerase Chain Reaction Testing Protocol for De-escalation of Empiric Vancomycin for Suspected Pneumonia** *OPEN FORUM INFECTIOUS DISEASES*
  Meng, L., Pourali, S., Hitchcock, M. M., Ha, D. R., Mui, E., Alegria, W., Fox, E., Diep, C., Swayngim, R., Chang, A., Banaei, N., Deresinski, S., Holubar, et al
  2021; 8 (4)

- **Impact of T-Cell Xtend on T-SPOT.TB Assay in High-Risk Individuals after Delayed Blood Sample Processing.** *Journal of clinical microbiology*
  Feng, P. J., Wu, Y. n., Ho, C. S., Chinna, L. n., Whelen, A. C., Largen, A. n., Brostrom, R. n., Reves, R. n., Belknap, R. n., Cattamanchi, A. n., Banaei, N. n.
  2021
- **Comparative genomics of Enterobacter cloacae complex before and after acquired clinical resistance to Ceftazidime-Avibactam.** *Diagnostic microbiology and infectious disease*
  Senchyna, F., Tamburini, F. B., Murugesan, K., Watz, N., Bhatt, A. S., Banaei, N.
  2021; 101 (4): 115511
- **Nocardiosis in Immunocompromised Patients on Alternative Pneumocystis Prophylaxis.** *Emerging infectious diseases*
  Puing, A. G., Epstein, D. J., Banaei, N., Subramanian, A. K., Liu, A. Y.
  2021; 27 (10): 2734-2736
- **A dual-caged resorufin probe for rapid screening of infections resistant to lactam antibiotics** *Chemical Science*
  Xie, J., Mu, R., Fang, M., Cheng, Y., Senchyna, F., Moreno, A., Banaei, N., Rao, J.
  2021
- **Interferon-gamma release assay testing to assess COVID-19 vaccination response in a SARS-CoV-2 seronegative patient on rituximab: a case report.** *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*
  Ferguson, J., Murugesan, K., Banaei, N., Liu, A.
  2021
- **Reactivation of Chagas Disease in a Patient With an Autoimmune Rheumatic Disease: Case Report and Review of the Literature.** *Open forum infectious diseases*
  Czech, M. M., Nayak, A. K., Subramanian, K. n., Suarez, J. F., Ferguson, J. n., Jacobson, K. B., Montgomery, S. P., Chang, M. n., Bae, G. H., Raghavan, S. S., Wang, H. n., Miranti, E. n., Budvytiene, et al
  2021; 8 (2): ofaa642
- **SARS-CoV-2 infection and COVID-19 severity in individuals with prior seasonal coronavirus infection.** *Diagnostic microbiology and infectious disease*
  Gombar, S. n., Bergquist, T. n., Pejaver, V. n., Hammarlund, N. E., Murugesan, K. n., Mooney, S. n., Shah, N. n., Pinsky, B. A., Banaei, N. n.
  2021; 100 (2): 115338
- **Clinical Accuracy and Impact of Plasma Cell-Free DNA Fungal PCR Panel for Non-Invasive Diagnosis of Fungal Infection.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Senchyna, F. n., Hogan, C. A., Murugesan, K. n., Moreno, A. n., Ho, D. Y., Subramanian, A. n., Schwenk, H. T., Budvytiene, I. n., Costa, H. A., Gombar, S. n., Banaei, N. n.
  2021
- **Concurrent Trypanosoma cruzi and Cytomegalovirus Reactivation in an Immunosuppressed Patient With Limited Cutaneous Systemic Sclerosis.** *The American Journal of dermatopathology*
  Chang, M. S., Bae, G. H., Almazan, T., Raghavan, S. S., Wang, J. Y., Czech, M. M., Wang, H., Banaei, N., Blackburn, B. G., Novoa, R. A., Rieger, K. E.
  2020
- **Electric field-driven microfluidics for rapid CRISPR-based diagnostics and its application to detection of SARS-CoV-2.** *Proceedings of the National Academy of Sciences of the United States of America*
  Ramachandran, A., Huyke, D. A., Sharma, E., Sahoo, M. K., Huang, C., Banaei, N., Pinsky, B. A., Santiago, J. G.
  2020
- **Significance of bacterial and viral genotypes as a risk factor in driving cancer (Review).** *Molecular and clinical oncology*
  Jangam, D., Butzmann, A., Sridhar, K., Deresinski, S., Banaei, N., Shigeo Ohgami, R.
  2020; 13 (1): 3–12
- **Impact of Rapid Antimicrobial Susceptibility Testing in Gram-negative Rod Bacteremia: A Quasi-Experimental Study.** *Journal of clinical microbiology*
  Hogan, C. A., Ebunji, B., Watz, N., Kapphahn, K., Rigdon, J., Mui, E., Meng, L., Alegria, W., Holubar, M., Deresinski, S., Banaei, N.
  2020
- **Clinical Impact of Clostridium difficile PCR Cycle Threshold-Predicted Toxin Reporting in Pediatric Patients** *JOURNAL OF THE PEDIATRIC INFECTIOUS DISEASES SOCIETY*

Schwenk, H. T., Bio, L. L., Kruger, J. F., Banaei, N.
2020; 9 (1): 44–50

- **Plasmonic and Electrostatic Interactions Enable Uniformly Enhanced Liquid Bacterial Surface-Enhanced Raman Scattering (SERS).** *Nano letters*
  Tadesse, L. F., Ho, C. S., Chen, D. H., Arami, H. n., Banaei, N. n., Gambhir, S. S., Jeffrey, S. S., Saleh, A. A., Dionne, J. n.
  2020
- **Reply to Muller and Chaudhury.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Hogan, C. A., Pinsky, B. A., Banaei, N. n.
  2020
- **A predictive tool for identification of SARS-CoV-2 PCR-negative emergency department patients using routine test results.** *Journal of clinical virology : the official publication of the Pan American Society for Clinical Virology*
  Joshi, R. P., Pejaver, V. n., Hammarlund, N. E., Sung, H. n., Lee, S. K., Furmanchuk, A. n., Lee, H. Y., Scott, G. n., Gombar, S. n., Shah, N. n., Shen, S. n., Nassiri, A. n., Schneider, et al
  2020; 129: 104502
- **Simultaneous Coccidioidomycosis and Phaeohyphomycosis in a Kidney Transplant Recipient: A Case Report and Literature Review.** *Transplant infectious disease : an official journal of the Transplantation Society*
  Puing, A. G., Couture-Cossette, A. n., Wang, A. X., Zygourakis, C. C., Cheng, X. n., Stevens, B. A., Banaei, N. n., Novoa, R. A., Ho, D. Y., Subramanian, A. n.
  2020: e13365
- **Recurrent Multifocal Mycoplasma orale Infection in an Immunocompromised Patient: A Case Report and Review.** *Case reports in infectious diseases*
  Ketchersid, J., Scott, J., Lew, T., Banaei, N., Kappagoda, S.
  2020; 2020: 8852115
- **Fourth generation QuantiFERON-TB Gold-Plus: What is the evidence?** *Journal of clinical microbiology*
  Shafeque, A. n., Bigio, J. n., Hogan, C. A., Pai, M. n., Banaei, N. n.
  2020
- **Utilization, yield, and accuracy of the FilmArray Meningitis/Encephalitis panel with diagnostic stewardship and testing algorithm.** *Journal of clinical microbiology*
  Broadhurst, M. J., Dujari, S. n., Budvytiene, I. n., Pinsky, B. A., Gold, C. A., Banaei, N. n.
  2020
- **Upregulation of CD47 Is a Host Checkpoint Response to Pathogen Recognition.** *mBio*
  Tal, M. C., Torrez Dulgeroff, L. B., Myers, L. n., Cham, L. B., Mayer-Barber, K. D., Bohrer, A. C., Castro, E. n., Yiu, Y. Y., Lopez Angel, C. n., Pham, E. n., Carmody, A. B., Messer, R. J., Gars, et al
  2020; 11 (3)
- **Novel Assays/Applications for Patients Suspected of Mycobacterial Diseases.** *Clinics in laboratory medicine*
  Banaei, N. n., Musser, K. A., Salfinger, M. n., Somoskovi, A. n., Zelazny, A. M.
  2020; 40 (4): 535–52
- **Interferon-gamma release assay for accurate detection of SARS-CoV-2 T cell response.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Murugesan, K. n., Jagannathan, P. n., Pham, T. D., Pandey, S. n., Bonilla, H. F., Jacobson, K. n., Parsonnet, J. n., Andrews, J. R., Weiskopf, D. n., Sette, A. n., Pinsky, B. A., Singh, U. n., Banaei, et al
  2020
- **Clinical Impact of Metagenomic Next-Generation Sequencing of Plasma Cell-Free DNA for the Diagnosis of Infectious Diseases: A Multicenter Retrospective Cohort Study.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Hogan, C. A., Yang, S. n., Garner, O. B., Green, D. A., Gomez, C. A., Dien Bard, J. n., Pinsky, B. A., Banaei, N. n.
  2020
- **Simple Processing of Formalin-Fixed Paraffin-Embedded Tissue for Accurate Testing with the Xpert MTB/RIF assay.** *Journal of clinical microbiology*
  Budvytiene, I., Banaei, N.

2019

- **Intestinal microbiota domination under extreme selective pressures characterized by metagenomic read cloud sequencing and assembly.** *BMC bioinformatics*
  Kang, J. B., Siranosian, B. A., Moss, E. L., Banaei, N., Andermann, T. M., Bhatt, A. S.
  2019; 20 (Suppl 16): 585

- **Eremothecium coryli bloodstream infection in a patient with acute myeloid leukemia: first case report of human infection** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Multani, A., Rustagi, A., Epstein, D. J., Gomez, C. A., Budvytiene, I., Banaei, N., Brown, J. M., Liu, A. Y.
  2019; 95 (1): 77–79

- **Reproducibility of positive results for rare pathogens on the FilmArray GI Panel** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Hitchcock, M. M., Hogan, C. A., Budvytiene, I., Banaei, N.
  2019; 95 (1): 10–14

- **Comparing QuantiFERON-TB Gold Plus with other tests to diagnose Mycobacterium tuberculosis infection.** *Journal of clinical microbiology*
  Venkatappa, T. K., Punnoose, R., Katz, D. J., Higgins, M. P., Banaei, N., Graviss, E. A., Belknap, R. W., Ho, C. S., Tuberculosis Epidemiologic Studies Consortium
  2019

- **Rapid antimicrobial susceptibility testing by VITEK (R) 2 directly from blood cultures in patients with Gram-negative rod bacteremia** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Hogan, C. A., Watz, N., Budvytiene, I., Banaei, N.
  2019; 94 (2): 116–21

- **H-1, C-13 and N-15 resonance assignments and structure prediction of translation initiation factor 1 from Clostridium difficile** *BIOMOLECULAR NMR ASSIGNMENTS*
  Aguilar, F., Banaei, N., Zhang, Y.
  2019; 13 (1): 91–95

- **Diversity of resistance mechanisms in carbapenem-resistant Enterobacteriaceae at a health care system in Northern California, from 2013 to 2016** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Senchyna, F., Gaur, R. L., Sandlund, J., Truong, C., Tremintin, G., Kutz, D., Gomez, C. A., Tamburini, F. B., Andermann, T., Bhatt, A., Tickler, I., Watz, N., Budvytiene, et al
  2019; 93 (3): 250–57

- **Rapid antimicrobial susceptibility testing by VITEK2 directly from blood cultures in patients with Gram-negative rod bacteremia.** *Diagnostic microbiology and infectious disease*
  Hogan, C. A., Watz, N., Budvytiene, I., Banaei, N.
  2019

- **Higher Positivity Rate with Fourth-Generation QuantiFERON-TB Gold Plus Assay in Low-Risk US Health Care Workers** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Hogan, C. A., Tien, S., Pai, M., Banaei, N.
  2019; 57 (1)

- **Investigation of preanalytical variables impacting pathogen cell-free DNA in blood and urine.** *Journal of clinical microbiology*
  Murugesan, K. n., Hogan, C. A., Palmer, Z. n., Reeve, B. n., Theron, G. n., Andama, A. n., Somoskovi, A. n., Steadman, A. n., Madan, D. n., Andrews, J. n., Croda, J. n., Sahoo, M. K., Cattamanchi, et al
  2019

- **Dual reporting of Clostridioides difficile PCR and predicted toxin result based on PCR cycle threshold reduces treatment of toxin-negative patients without increases in adverse outcomes.** *Journal of clinical microbiology*
  Hitchcock, M. M., Holubar, M. n., Hogan, C. A., Tompkins, L. S., Banaei, N. n.
  2019

- **Rapid identification of pathogenic bacteria using Raman spectroscopy and deep learning.** *Nature communications*
  Ho, C. S., Jean, N. n., Hogan, C. A., Blackmon, L. n., Jeffrey, S. S., Holodniy, M. n., Banaei, N. n., Saleh, A. A., Ermon, S. n., Dionne, J. n.
  2019; 10 (1): 4927

- **Reproducibility of positive results for rare pathogens on the FilmArray GI Panel.** *Diagnostic microbiology and infectious disease*
  Hitchcock, M. M., Hogan, C. A., Budvytiene, I. n., Banaei, N. n.
  2019
- **Eremothecium coryli bloodstream infection in a patient with acute myeloid leukemia: first case report of human infection.** *Diagnostic microbiology and infectious disease*
  Multani, A. n., Rustagi, A. n., Epstein, D. J., Gomez, C. A., Budvytiene, I. n., Banaei, N. n., Brown, J. M., Liu, A. Y.
  2019
- **Precision identification of diverse bloodstream pathogens in the gut microbiome** *NATURE MEDICINE*
  Tamburini, F. B., Andermann, T. M., Tkachenko, E., Senchyna, F., Banaei, N., Bhatt, A. S.
  2018; 24 (12): 1809-+
- **Development of colorimetric sensor array for diagnosis of tuberculosis through detection of urinary volatile organic compounds** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Sandlund, J., Lim, S., Queralto, N., Huang, R., Yun, J., Taba, B., Song, R., Odero, R., Ouma, G., Sitati, R., Murithi, W., Cain, K. P., Banaei, et al
  2018; 92 (4): 299-304
- **Diverse Bloodstream Pathogens Are Identified in the Gut Microbiome Prior to Infection in Hematopoietic Stem Cell Transplantation Recipients**
  Andermann, T. M., Tamburini, F., Tkachenko, E., Senchyna, F., Banaei, N., Bhatt, A. S.
  AMER SOC HEMATOLOGY.2018
- **Clinical Impact of Clostridium difficile PCR Cycle Threshold-Predicted Toxin Reporting in Pediatric Patients.** *Journal of the Pediatric Infectious Diseases Society*
  Schwenk, H. T., Bio, L. L., Kruger, J. F., Banaei, N.
  2018
- **Towards the development of a cfDNA-based in-vitro diagnostic test for infectious diseases: A review of evidence for tuberculosis.** *Journal of clinical microbiology*
  Fernandez-Carballo, B. L., Broger, T., Wyss, R., Banaei, N., Denkinger, C. M.
  2018
- **Liquid biopsy for infectious diseases: sequencing of cell-free plasma to detect pathogen DNA in patients with invasive fungal disease** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Hong, D. K., Blauwkamp, T. A., Kertesz, M., Bercovici, S., Truong, C., Banaei, N.
  2018; 92 (3): 210–13
- **Ultrasensitive Detection of Clostridioides difficile Toxins A and B by Use of Automated Single-Molecule Counting Technology** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Sandlund, J., Bartolome, A., Almazan, A., Tam, S., Biscocho, S., Abusali, S., Bishop, J. J., Nolan, N., Estis, J., Todd, J., Young, S., Senchyna, F., Banaei, et al
  2018; 56 (11)
- **1H, 13C and 15N resonance assignments and structure prediction of translation initiation factor 1 from Clostridium difficile.** *Biomolecular NMR assignments*
  Aguilar, F., Banaei, N., Zhang, Y.
  2018
- **Higher positivity rate with 4th generation QuantiFERON-TB Gold Plus assay in low-risk U.S. healthcare workers.** *Journal of clinical microbiology*
  Hogan, C., Tien, S., Pai, M., Banaei, N.
  2018
- **Precision identification of diverse bloodstream pathogens in the gut microbiome.** *Nature medicine*
  Tamburini, F. B., Andermann, T. M., Tkachenko, E., Senchyna, F., Banaei, N., Bhatt, A. S.
  2018
- **Diversity of resistance mechanisms in carbapenem-resistant Enterobacteriaceae at a health care system in Northern California, from 2013 to 2016.** *Diagnostic microbiology and infectious disease*

Senchyna, F., Gaur, R. L., Sandlund, J., Truong, C., Tremintin, G., Kultz, D., Gomez, C. A., Tamburini, F. B., Andermann, T., Bhatt, A., Tickler, I., Watz, N., Budvytiene, et al
2018

- **Spiking of intravenous bags does not cause time-dependent microbial contamination: a preliminary report** *INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY*
  Brock-Utne, J. G., Smith, S. C., Banaei, N., Chang, S., Alejandro-Harper, D., Jaffe, R. A.
  2018; 39 (9): 1129–30
- **Rapid and specific labeling of single live Mycobacterium tuberculosis with a dual-targeting fluorogenic probe** *SCIENCE TRANSLATIONAL MEDICINE*
  Cheng, Y., Xie, J., Lee, K., Gaur, R. L., Song, A., Dai, T., Ren, H., Wu, J., Sun, Z., Banaei, N., Akin, D., Rao, J.
  2018; 10 (454)
- **Spiking of intravenous bags does not cause time-dependent microbial contamination: a preliminary report.** *Infection control and hospital epidemiology*
  Brock-Utne, J. G., Smith, S. C., Banaei, N., Chang, S., Alejandro-Harper, D., Jaffe, R. A.
  2018: 1–2
- **Development of colorimetric sensor array for diagnosis of tuberculosis through detection of urinary volatile organic compounds.** *Diagnostic microbiology and infectious disease*
  Sandlund, J., Lim, S., Queralto, N., Huang, R., Yun, J., Taba, B., Song, R., Odero, R., Ouma, G., Sitati, R., Murithi, W., Cain, K. P., Banaei, et al
  2018
- **Evaluation of the Xpert MTB/RIF Performance on Tissues: Potential Impact on Airborne Infection Isolation at a Tertiary Cancer Care Center** *INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY*
  McMillen, T., Usiak, S. C., Chen, L., Gomez, L., Ntiamoah, P., Hameed, M. R., Budvytiene, I., Banaei, N., Kamboj, M., Babady, N.
  2018; 39 (4): 462–66
- **Answer to the letter to the editor of MN Capoor et al. concerning "Ribosomal PCR assay of excised intervertebral discs from patients undergoing single-level primary lumbar microdiscectomy" by Alamin TF, Munoz M, Zagel A, et al.: Eur Spine J; 2017** *EUROPEAN SPINE JOURNAL*
  Alamin, T., Munoz, M., Zagel, A., Budvytiene, I., Banaei, N.
  2018; 27 (2): 518–19
- **Trypanosoma cruzi Reactivation in the Brain.** *The New England journal of medicine*
  Gomez, C. A., Banaei, N. n.
  2018; 378 (19): 1824
- **Low Yield of FilmArray GI Panel in Hospitalized Patients with Diarrhea: an Opportunity for Diagnostic Stewardship Intervention.** *Journal of clinical microbiology*
  Hitchcock, M. M., Gomez, C. A., Banaei, N. n.
  2018; 56 (3)
- **Microfluidics for Combating Antimicrobial Resistance** *TRENDS IN BIOTECHNOLOGY*
  Liu, Z., Banaei, N., Ren, K.
  2017; 35 (12): 1129–39
- **Performance of Targeted Fungal Sequencing for Culture-Independent Diagnosis of Invasive Fungal Disease.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Gomez, C. A., Budvytiene, I., Zemek, A. J., Banaei, N.
  2017; 65 (12): 2035-2041
- **Intramolecular substitution uncages fluorogenic probes for detection of metallo-carbapenemase-expressing bacteria.** *Chemical science*
  Song, A., Cheng, Y., Xie, J., Banaei, N., Rao, J.
  2017; 8 (11): 7669-7674
- **Clostridium difficile PCR Cycle Threshold Predicts Free Toxin** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Senchyna, F., Gaur, R. L., Gombar, S., Truong, C. Y., Schroeder, L. F., Banaei, N.
  2017; 55 (9): 2651–60

- **Detecting New Mycobacterium tuberculosis Infection Time for a More Nuanced Interpretation of QuantiFERON Conversions** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*
  Banaei, N., Pai, M.
  2017; 196 (5): 546–47
- **Evaluation of QuantiFERON-TB Gold-Plus in Health Care Workers in a Low-Incidence Setting.** *Journal of clinical microbiology*
  Moon, H., Gaur, R. L., Tien, S. S., Spangler, M., Pai, M., Banaei, N.
  2017; 55 (6): 1650-1657
- **Malaria and Chikungunya Detected Using Molecular Diagnostics Among Febrile Kenyan Children** *OPEN FORUM INFECTIOUS DISEASES*
  Waggoner, J., Brichard, J., Mutuku, F., Ndenga, B., Heath, C., Mohamed-Hadley, A., Sahoo, M. K., Vulule, J., Lefterova, M., BanaeiA, N., Mukoko, D., Pinsky, B. A., LaBeaud, et al
  2017; 4 (3): ofx110
- **Metagenomic DNA Sequencing for the Diagnosis of Intraocular Infections.** *Ophthalmology*
  Doan, T., Acharya, N. R., Pinsky, B. A., Sahoo, M. K., Chow, E. D., Banaei, N., Budvytiene, I., Cevallos, V., Zhong, L., Zhou, Z., Lietman, T. M., DeRisi, J. L.
  2017
- **Susceptibility of Candida albicans from Cystic Fibrosis Patients.** *Mycopathologia*
  Sabino, R., Carolino, E., Moss, R. B., Banaei, N., Verissimo, C., Stevens, D. A.
  2017
- **Are Cystic Fibrosis Aspergillus fumigatus Isolates Different? Intermicrobial Interactions with Pseudomonas** *MYCOPATHOLOGIA*
  Nazik, H., Moss, R. B., Karna, V., Clemons, K. V., Banaei, N., Cohen, K., Choudhary, V., Stevens, D. A.
  2017; 182 (3-4): 315-318
- **Integrated Biosensor Assay for Rapid Uropathogen Identification and Phenotypic Antimicrobial Susceptibility Testing** *EUROPEAN UROLOGY FOCUS*
  Altobelli, E., Mohan, R., Mach, K. E., Sin, M., Anikst, V., Buscarini, M., Wong, P., Gau, V., Banaei, N., Liao, J. C.
  2017; 3 (2-3): 293–99
- **Integrated Biosensor Assay for Rapid Uropathogen Identification and Phenotypic Antimicrobial Susceptibility Testing.** *European urology focus*
  Altobelli, E., Mohan, R., Mach, K. E., Sin, M. L., Anikst, V., Buscarini, M., Wong, P. K., Gau, V., Banaei, N., Liao, J. C.
  2017; 3 (2-3): 293–99
- **Clostridium difficile rates in asymptomatic and symptomatic hospitalized patients using nucleic acid testing.** *Diagnostic microbiology and infectious disease*
  Truong, C., Schroeder, L. F., Gaur, R., Anikst, V. E., Komo, I., Watters, C., McCalley, E., Kulik, C., Pickham, D., Lee, N. J., Banaei, N.
  2017; 87 (4): 365-370
- **New and developing diagnostic technologies for urinary tract infections.** *Nature reviews. Urology*
  Davenport, M., Mach, K. E., Shortliffe, L. M., Banaei, N., Wang, T., Liao, J. C.
  2017
- **Infection Rates.** *Journal of clinical microbiology*
  Truong, C. Y., Gombar, S., Wilson, R., Sundararajan, G., Tekic, N., Holubar, M., Shepard, J., Madison, A., Tompkins, L., Shah, N., Deresinski, S., Schroeder, L. F., Banaei, et al
  2017
- **Fatal Emmonsia sp Infection and Fungemia after Orthotopic Liver Transplantation** *EMERGING INFECTIOUS DISEASES*
  Kappagoda, S., Adams, J. Y., Luo, R., Banaei, N., Concepcion, W., Ho, D. Y.
  2017; 23 (2): 346–49
- **Is Follow-up Testing with FilmArray Gastrointestinal Multiplex PCR Panel Necessary?** *Journal of clinical microbiology*
  Park, S., Hitchcock, M. M., Gomez, C. A., Banaei, N.
  2017
- **Determining the cause of recurrent Clostridium difficile infection using whole genome sequencing** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*

Sim, J. H., Truong, C., Minot, S. S., Greenfield, N., Budvytiene, I., Lohith, A., Anikst, V., Pourmand, N., Banaei, N.
2017; 87 (1): 11-16

- **Susceptibility of Candida albicans from Cystic Fibrosis Patients** *Mycopathologica*
  Sabino, R., Carolino, E., Moss, R. B., Banaei, N., Verissimo, C., Stevens, D. A.
  2017
- **Delayed Diagnosis of Tuberculous Meningitis Misdiagnosed as Herpes Simplex Virus-1 Encephalitis With the FilmArray Syndromic Polymerase Chain Reaction Panel.** *Open forum infectious diseases*
  Gomez, C. A., Pinsky, B. A., Liu, A., Banaei, N.
  2017; 4 (1): ofw245-?
- **Small Colony Variants of Pseudomonas aeruginosa Display Heterogeneity in Inhibiting Aspergillus fumigatus Biofilm.** *Mycopathologia*
  Anand, R. n., Moss, R. B., Sass, G. n., Banaei, N. n., Clemons, K. V., Martinez, M. n., Stevens, D. A.
  2017
- **Intramolecular substitution uncages fluorogenic probes for detection of metallo-carbapenemase-expressing bacteria** *Chemical Science*
  Song, A., Cheng, Y., Xie, J., Banaei, N., Rao, J.
  2017; 8 (11): 7669-7674
- **Performance of Targeted Fungal Sequencing for Culture-Independent Diagnosis of Invasive Fungal Disease** *Clinical Infectious Diseases*
  Gomez, C. A., Budvytiene, I., Zemek, A., Banaei, N.
  2017: 2035–41
- **Uropathogens and antibiotic resistance temporal trends among pregnant women: updated assessment and comparison from 2005-2014**
  Suharwardy, S., O'Malley, K., Lee, H., Banaei, N., Aziz, N.
  MOSBY-ELSEVIER.2016: 834
- **Are Cystic Fibrosis Aspergillus fumigatus Isolates Different? Intermicrobial Interactions with Pseudomonas.** *Mycopathologia*
  Nazik, H., Moss, R. B., Karna, V., Clemons, K. V., Banaei, N., Cohen, K., Choudhary, V., Stevens, D. A.
  2016: -?
- **Adenosine triphosphate bioluminescence for bacteriological surveillance and reprocessing strategies for minimizing risk of infection transmission by duodenoscopes.** *Gastrointestinal endoscopy*
  Sethi, S., Huang, R. J., Barakat, M. T., Banaei, N., Friedland, S., Banerjee, S.
  2016
- **Infectious rash after riding elephants.** *Journal of the American Academy of Dermatology*
  Zemek, A., Khodosh, R., Banaei, N.
  2016; 75 (5): e175-e176
- **Determining the cause of recurrent Clostridium difficile infection using whole genome sequencing.** *Diagnostic microbiology and infectious disease*
  Sim, J. H., Truong, C., Minot, S. S., Greenfield, N., Budvytiene, I., Lohith, A., Anikst, V., Pourmand, N., Banaei, N.
  2016
- **Serial testing for latent tuberculosis using QuantiFERON-TB Gold In-Tube: A Markov model** *SCIENTIFIC REPORTS*
  Moses, M. W., Zwerling, A., Cattamanchi, A., Denkinger, C. M., Banaei, N., Kik, S. V., Metcalfe, J., Pai, M., Dowdy, D.
  2016; 6
- **Rapid Diagnosis of Tuberculosis from Analysis of Urine Volatile Organic Compounds.** *ACS sensors*
  Lim, S. H., Martino, R., Anikst, V., Xu, Z., Mix, S., Benjamin, R., Schub, H., Eiden, M., Rhodes, P. A., Banaei, N.
  2016; 1 (7): 852-856
- **Rapid Diagnosis of Tuberculosis from Analysis of Urine Volatile Organic Compounds** *ACS SENSORS*
  Lim, S. H., Martino, R., Anikst, V., Xu, Z., Mix, S., Benjamin, R., Schub, H., Eiden, M., Rhodes, P. A., Banaei, N.
  2016; 1 (7): 852-856
- **Organism burden, toxin concentration, and lactoferrin concentration do not distinguish between clinically significant and nonsignificant diarrhea in patients with Clostridium difficile** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Anikst, V. E., Gaur, R. L., Schroeder, L. F., Banaei, N.

2016; 84 (4): 343-346

- **Interferon Gamma Release Assays for Latent Tuberculosis: What Are the Sources of Variability?** *Journal of clinical microbiology*
  Banaei, N., Gaur, R. L., Pai, M.
  2016; 54 (4): 845-850

- **Toxin Immunoassays and Clostridium difficile Infection.** *JAMA internal medicine*
  Banaei, N., Schroeder, L. F.
  2016; 176 (3): 413

- **Bacterial culture detection and identification in blood agar plates with an optoelectronic nose.** *Analyst*
  Lim, S. H., Mix, S., Anikst, V., Budvytiene, I., Eiden, M., Churi, Y., Queralto, N., Berliner, A., Martino, R. A., Rhodes, P. A., Banaei, N.
  2016; 141 (3): 918-925

- **Delayed Diagnosis of Tuberculous Meningitis Misdiagnosed as Herpes Simplex Virus-1 Encephalitis With the FilmArray Syndromic Polymerase Chain Reaction Panel** *Open Forum Infectious Diseases*
  Gomez, C. A., Pinsky, B. A., Liu, A., Banaei, N.
  2016: ofw245

- **Uropathogens and antibiotic resistance temporal trends among pregnant women: updated assessment and comparison from 2005-2014**
  Suharwardy, S., O'Malley, K., Lee, H., Banaei, N., Aziz, N.
  MOSBY-ELSEVIER.2016: S338–S339

- **First case of infectious endocarditis caused by Parvimonas micra.** *Anaerobe*
  Gomez, C. A., Gerber, D. A., Zambrano, E., Banaei, N., Deresinski, S., Blackburn, B. G.
  2015; 36: 53-55

- **Organism burden, toxin concentration, and lactoferrin concentration do not distinguish between clinically significant and nonsignificant diarrhea in patients with Clostridium difficile.** *Diagnostic microbiology and infectious disease*
  Anikst, V. E., Gaur, R. L., Schroeder, L. F., Banaei, N.
  2015

- **Next-Generation Sequencing for Infectious Disease Diagnosis and Management A Report of the Association for Molecular Pathology** *JOURNAL OF MOLECULAR DIAGNOSTICS*
  Lefterova, M. I., Suarez, C. J., Banaei, N., Pinsky, B. A.
  2015; 17 (6): 623-634

- **Molecular Testing for Plasmodium falciparum by Use of Serum or Plasma and Comparison with Microscopy and Rapid Diagnostic Testing in Febrile Nigerian Patients.** *Journal of clinical microbiology*
  Waggoner, J. J., Okangba, C., Mohamed-Hadley, A., Lefterova, M. I., Banaei, N., Oyibo, W., Pinsky, B. A.
  2015; 53 (11): 3596-3600

- **First case of mesh infection due to Coccidioides spp. and literature review of fungal mesh infections after hernia repair.** *Mycoses*
  Forrester, J. D., Gomez, C. A., Forrester, J. A., Nguyen, M., Gregg, D., Deresinski, S., Banaei, N., Weiser, T. G.
  2015; 58 (10): 582-587

- **A small-molecule antivirulence agent for treating Clostridium difficile infection.** *Science translational medicine*
  Bender, K. O., Garland, M., Ferreyra, J. A., Hryckowian, A. J., Child, M. A., Puri, A. W., Solow-Cordero, D. E., Higginbottom, S. K., Segal, E., Banaei, N., Shen, A., Sonnenburg, J. L., Bogyo, et al
  2015; 7 (306): 306ra148-?

- **A small-molecule antivirulence agent for treating Clostridium difficile infection** *SCIENCE TRANSLATIONAL MEDICINE*
  Bender, K. O., Garland, M., Ferreyra, J. A., Hryckowian, A. J., Child, M. A., Puri, A. W., Solow-Cordero, D. E., Higginbottom, S. K., Segal, E., Banaei, N., Shen, A., Sonnenburg, J. L., Bogyo, et al
  2015; 7 (306)

- **In vitro immunomodulation for enhancing T cell-based diagnosis of Mycobacterium tuberculosis infection** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Slater, M., Minh-Chi Tran, M. C., Platt, L., Luu, L. T., Phan, H. T., Pham, P. T., Do, T. B., Nguyen, H. T., Gaur, R. L., Parsonnet, J., Cattamanchi, A., Luo, R., Nahid, et al
  2015; 83 (1): 41-45

- **Inhibition of Aspergillus fumigatus and Its Biofilm by Pseudomonas aeruginosa Is Dependent on the Source, Phenotype and Growth Conditions of the Bacterium** *PLOS ONE*
  Ferreira, J. A., Penner, J. C., Moss, R. B., Haagensen, J. A., Clemons, K. V., Spormann, A. M., Nazik, H., Cohen, K., Banaei, N., Carolino, E., Stevens, D. A.
  2015; 10 (8)
- **Fatal West Nile Virus Encephalitis in a Heart Transplant Recipient** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Gomez, A. J., Waggoner, J. J., Itoh, M., Hollander, S. A., Gutierrez, K. M., Budvytiene, I., Banaei, N., Pinsky, B. A.
  2015; 53 (8): 2749-2752
- **Ribosomal RNA gene sequencing for early diagnosis of Blastomyces dermatitidis infection.** *International journal of infectious diseases : IJID : official publication of the International Society for Infectious Diseases*
  Morjaria, S., Otto, C., Moreira, A., Chung, R., Hatzoglou, V., Pillai, M., Banaei, N., Tang, Y. W., Figueroa, C. J.
  2015; 37: 122-4
- **Optimized Protocol for Simple Extraction of High-Quality Genomic DNA from Clostridium difficile for Whole-Genome Sequencing** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Sim, J. H., Anikst, V., Lohith, A., Pourmand, N., Banaei, N.
  2015; 53 (7): 2329-2331
- **Molecular epidemiology of Aspergillus collected from cystic fibrosis patients.** *Journal of cystic fibrosis*
  Sabino, R., Ferreira, J. A., Moss, R. B., Valente, J., Veríssimo, C., Carolino, E., Clemons, K. V., Everson, C., Banaei, N., Penner, J., Stevens, D. A.
  2015; 14 (4): 474-481
- **Rapid Detection of Acquired and Inducible Clarithromycin Resistance in Mycobacterium abscessus Group by a Simple Real-Time PCR Assay.** *Journal of clinical microbiology*
  Luo, R. F., Curry, C., Taylor, N., Budvytiene, I., Banaei, N.
  2015; 53 (7): 2337-9
- **Optimized Protocol for Simple Extraction of High-Quality Genomic DNA from Clostridium difficile for Whole-Genome Sequencing.** *Journal of clinical microbiology*
  Sim, J. H., Anikst, V., Lohith, A., Pourmand, N., Banaei, N.
  2015; 53 (7): 2329-31
- **Simple Real-Time PCR and Amplicon Sequencing Method for Identification of Plasmodium Species in Human Whole Blood.** *Journal of clinical microbiology*
  Lefterova, M. I., Budvytiene, I., Sandlund, J., Färnert, A., Banaei, N.
  2015; 53 (7): 2251-7
- **Molecular epidemiology of Aspergillus collected from cystic fibrosis patients** *JOURNAL OF CYSTIC FIBROSIS*
  Sabino, R., Ferreira, J. A., Moss, R. B., Valente, J., Verissimo, C., Carolino, E., Clemons, K. V., Everson, C., Banaei, N., Penner, J., Stevens, D. A.
  2015; 14 (4): 474-481
- **Simple Real-Time PCR and Amplicon Sequencing Method for Identification of Plasmodium Species in Human Whole Blood** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Lefterova, M. I., Budvytiene, I., Sandlund, J., Faernert, A., Banaei, N.
  2015; 53 (7): 2251-2257
- **Rapid Detection of Acquired and Inducible Clarithromycin Resistance in Mycobacterium abscessus Group by a Simple Real-Time PCR Assay** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Luo, R. F., Curry, C., Taylor, N., Budvytiene, I., Banaei, N.
  2015; 53 (7): 2337-2339
- **Burden of Clostridium difficile infection in the United States.** *New England journal of medicine*
  Banaei, N., Anikst, V., Schroeder, L. F.
  2015; 372 (24): 2368-2369
- **Fatal West Nile Virus Encephalitis in a Heart Transplant Recipient.** *Journal of clinical microbiology*
  Gomez, A. J., Waggoner, J. J., Itoh, M., Hollander, S. A., Gutierrez, K. M., Budvytiene, I., Banaei, N., Pinsky, B. A.
  2015

- **Inhibition of Aspergillus fumigatus and Its Biofilm by Pseudomonas aeruginosa Is Dependent on the Source, Phenotype and Growth Conditions of the Bacterium.** *PloS one*
  Ferreira, J. A., Penner, J. C., Moss, R. B., Haagensen, J. A., Clemons, K. V., Spormann, A. M., Nazik, H., Cohen, K., Banaei, N., Carolino, E., Stevens, D. A.
  2015; 10 (8)

- **Reproducibility of interferon gamma (IFN-?) release Assays. A systematic review.** *Annals of the American Thoracic Society*
  Tagmouti, S., Slater, M., Benedetti, A., Kik, S. V., Banaei, N., Cattamanchi, A., Metcalfe, J., Dowdy, D., van Zyl Smit, R., Dendukuri, N., Pai, M., Denkinger, C.
  2014; 11 (8): 1267-1276

- **Environmental sampling for Clostridium difficile on alcohol-based hand rub dispensers in an academic medical center.** *Surgical infections*
  Forrester, J. D., Banaei, N., Buchner, P., Spain, D. A., Staudenmayer, K. L.
  2014; 15 (5): 581-584

- **Inoculation of QuantiFERON-TB tubes with skin microbiota causes false-positive results.** *American journal of respiratory and critical care medicine*
  Gaur, R. L., Banaei, N.
  2014; 190 (7): 834-7

- **Environmental Sampling for Clostridium difficile on Alcohol-Based Hand Rub Dispensers in an Academic Medical Center** *SURGICAL INFECTIONS*
  Forrester, J. D., Banaei, N., Buchner, P., Spain, D. A., Staudenmayer, K. L.
  2014; 15 (5): 581-584

- **Using cerebrospinal fluid for the diagnosis of tuberculous meningitis with GeneXpert.** *European respiratory journal*
  Luo, R. F., Gaur, R. L., Banaei, N.
  2014; 44 (4): 1094-1095

- **Mycobacterium tuberculosis Lipoprotein LprG Binds Lipoarabinomannan and Determines Its Cell Envelope Localization to Control Phagolysosomal Fusion** *PLOS PATHOGENS*
  Shukla, S., Richardson, E. T., Athman, J. J., Shi, L., Wearsch, P. A., McDonald, D., Banaei, N., Boom, W. H., Jackson, M., Harding, C. V.
  2014; 10 (10)

- **LprG-Mediated Surface Expression of Lipoarabinomannan Is Essential for Virulence of Mycobacterium tuberculosis** *PLOS PATHOGENS*
  Gaur, R. L., Ren, K., Blumenthal, A., Bhamidi, S., Gibbs, S., Jackson, M., Zare, R. N., Ehrt, S., Ernst, J. D., Banaei, N.
  2014; 10 (9)

- **LprG-mediated surface expression of lipoarabinomannan is essential for virulence of Mycobacterium tuberculosis.** *PLoS pathogens*
  Gaur, R. L., Ren, K., Blumenthal, A., Bhamidi, S., González-Nilo, F. D., Jackson, M., Zare, R. N., Ehrt, S., Ernst, J. D., Banaei, N.
  2014; 10 (9)

- **Engineering the stereochemistry of cephalosporin for specific detection of pathogenic carbapenemase-expressing bacteria.** *Angewandte Chemie (International ed. in English)*
  Shi, H., Cheng, Y., Lee, K. H., Luo, R. F., Banaei, N., Rao, J.
  2014; 53 (31): 8113-8116

- **Multiplex nucleic Acid amplification test for diagnosis of dengue Fever, malaria, and leptospirosis.** *Journal of clinical microbiology*
  Waggoner, J. J., Abeynayake, J., Balassiano, I., Lefterova, M., Sahoo, M. K., Liu, Y., Vital-Brazil, J. M., Gresh, L., Balmaseda, A., Harris, E., Banaei, N., Pinsky, B. A.
  2014; 52 (6): 2011-2018

- **Mycobacterium tuberculosis lipoprotein LprG binds lipoarabinomannan and determines its localization in the cell wall envelope and affects phagolysosomal fusion**
  Shukla, S., Richardson, E., Athman, J., Shi, L., Wearsch, P., McDonald, D., Banaei, N., Boom, W., Jackson, M., Harding, C.
  AMER ASSOC IMMUNOLOGISTS.2014

- **Adult and Pediatric Intra-Institutional Trends of Ciprofloxacin Susceptibility in E. coli Positive Urinary Cultures.** *Antibiotics (Basel, Switzerland)*
  Owumi, W., Banaei, N., Shortliffe, L. D.
  2014; 3 (2): 163-173

- **Occupational Screening for Tuberculosis. A Testing Time for Interferon-? Release Assays.** *Annals of the American Thoracic Society*
  Pai, M., Kik, S. V., Banaei, N.
  2014; 11 (3): 399-401
- **Colorimetric Sensor Array Allows Fast Detection and Simultaneous Identification of Sepsis-Causing Bacteria in Spiked Blood Culture** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Lim, S. H., Mix, S., Xu, Z., Taba, B., Budvytiene, I., Berliner, A. N., Queralto, N., Churi, Y. S., Huang, R. S., Eiden, M., Martino, R. A., Rhodes, P., Banaei, et al
  2014; 52 (2): 592-598
- **Economic Evaluation of Laboratory Testing Strategies for Hospital-Associated Clostridium difficile Infection.** *Journal of clinical microbiology*
  Schroeder, L. F., Robilotti, E., Peterson, L. R., Banaei, N., Dowdy, D. W.
  2014; 52 (2): 489-496
- **Sorting Bacterium Cells Using Cell-Imprinted Polymer Thin Films: From Concept to Applications**
  Ren, K., Banaei, N., Zare, R. N.
  CELL PRESS.2014: 245A
- **Gamma Interferon Release Assays for Detection of Mycobacterium tuberculosis Infection** *CLINICAL MICROBIOLOGY REVIEWS*
  Pai, M., Denkinger, C. M., Kik, S. V., Rangaka, M. X., Zwerling, A., Oxlade, O., Metcalfe, J. Z., Cattamanchi, A., Dowdy, D. W., Dheda, K., Banaei, N.
  2014; 27 (1): 3-20
- **Reproducibility Of Quantiferon-Tb Gold In-Tube Essay: A Systematic Review**
  Tagmouti, S., Slater, M., Kik, S., Banaei, N., Cattamanchi, A., Metcalfe, J., Dowdy, D., van Zyl-Smit, R. N., Dendukuri, N., Pai, M., Denkinger, C.
  AMER THORACIC SOC.2014
- **Traveler's encounter with nymphs in a hotel bed.** *IDCases*
  Sandlund, J., Banaei, N.
  2014; 1 (2): 24-25
- **False-Positive Quantiferon Results at a Large Healthcare Institution.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Slater, M. n., Dubose, A. n., Banaei, N. n.
  2014
- **Pretreatment of sinus aspirates with dithiothreitol improves yield of fungal cultures in patients with chronic sinusitis** *INTERNATIONAL FORUM OF ALLERGY & RHINOLOGY*
  Chisholm, K. M., Getsinger, D., Vaughan, W., Hwang, P. H., Banaei, N.
  2013; 3 (12): 992-996
- **A Pediatric Case of New Delhi Metallo-ß-Lactamase-1-Producing Enterobacteriaceae in The United States.** *Pediatric infectious disease journal*
  Green, D. A., Srinivas, N., Watz, N., Tenover, F. C., Amieva, M., Banaei, N.
  2013; 32 (11): 1291-1294
- **A Combined Real-Time PCR and Sequencing Method for Detection of the Five Plasmodium Species Infecting Humans from Whole Blood**
  Lefterova, M. I., Budvytiene, I., Buchner, P., Banaei, N.
  ELSEVIER SCIENCE INC.2013: 874
- **Impact of Blood Volume, Tube Shaking, and Incubation Time on Reproducibility of QuantiFERON-TB Gold In-Tube Assay.** *Journal of clinical microbiology*
  Gaur, R. L., Pai, M., Banaei, N.
  2013; 51 (11): 3521-3526
- **Alerting Physicians during Electronic Order Entry Effectively Reduces Unnecessary Repeat PCR Testing for Clostridium difficile.** *Journal of clinical microbiology*
  Luo, R. F., Spradley, S., Banaei, N.
  2013; 51 (11): 3872-3874
- **Challenges with QuantiFERON-TB Gold Assay for Large-Scale, Routine Screening of U.S. Healthcare Workers** *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*

Slater, M. L., Welland, G., Pai, M., Parsonnet, J., Banaei, N.
2013; 188 (8): 1005-1010

- **Interferon γ-Release Assays for Diagnosis of Latent Tuberculosis in Healthcare Workers in Low-Incidence Settings: Pros and Cons.** *Clinical chemistry*
  Pollock, N. R., McAdam, A. J., Pai, M., Nardell, E. A., Bernardo, J., Banaei, N., Mobo, J.
  2013
- **Occupational screening of health care workers for tuberculosis infection: tuberculin skin testing or interferon-gamma release assays?** *OCCUPATIONAL MEDICINE-OXFORD*
  Pai, M., Banaei, N.
  2013; 63 (7): 458-460
- **A Sensitive Multiplex, Real-Time PCR Assay for Prospective Detection of Shiga Toxin-Producing Escherichia coli from Stool Samples Reveals Similar Incidences but Variable Severities of Non-O157 and O157 Infections in Northern California.** *Journal of clinical microbiology*
  Lefterova, M. I., Slater, K. A., Budvytiene, I., Dadone, P. A., Banaei, N.
  2013; 51 (9): 3000-3005
- **Molecular Approaches and Biomarkers for Detection of Mycobacterium tuberculosis.** *Clinics in laboratory medicine*
  Luo, R. F., Banaei, N.
  2013; 33 (3): 553-566
- **Utility of DNA Sequencing for Direct Identification of Invasive Fungi From Fresh and Formalin-Fixed Specimens** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*
  Moncada, P. A., Budvytiene, I., Ho, D. Y., Deresinski, S. C., Montoya, J. G., Banaei, N.
  2013; 140 (2): 203-208
- **Sorting Inactivated Cells Using Cell-Imprinted Polymer Thin Films** *ACS NANO*
  Ren, K., Banaei, N., Zare, R. N.
  2013; 7 (7): 6031-6036
- **ADULT AND PEDIATRIC INTRA-INSTITUTIONAL TRENDS OF CIPROFLOXACIN SUSCEPTIBILITY IN E. COLI URINARY CULTURES.**
  Adams, W., Banaei, N., Shortliffe, L.
  ELSEVIER SCIENCE INC.2013: E268-E269
- **Images in clinical medicine. Strongyloides stercoralis embryonated ova in the lung.** *New England journal of medicine*
  Schroeder, L., Banaei, N.
  2013; 368 (12)
- **Use of Whole Genome Sequencing to Determine the Microevolution of Mycobacterium tuberculosis during an Outbreak** *PLOS ONE*
  Kato-Maeda, M., Ho, C., Passarelli, B., Banaei, N., Grinsdale, J., Flores, L., Anderson, J., Murray, M., Rose, G., Kawamura, L. M., Pourmand, N., Tariq, M. A., Gagneux, et al
  2013; 8 (3)
- **Trends in incidence and susceptibility among methicillin-resistant Staphylococcus aureus isolated from intranasal cultures associated with rhinosinusitis.** *American journal of rhinology & allergy*
  Rujanavej, V., Soudry, E., Banaei, N., Baron, E. J., Hwang, P. H., Nayak, J. V.
  2013; 27 (2): 134-137
- **In Vitro Immunomodulation of a Whole Blood IFN-gamma Release Assay Enhances T Cell Responses in Subjects with Latent Tuberculosis Infection** *PLOS ONE*
  Gaur, R. L., Suhosk, M. M., Banaei, N.
  2012; 7 (10)
- **Investigation of False-Positive Results Given by the QuantiFERON-TB Gold In-Tube Assay** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Slater, M., Parsonnet, J., Banaei, N.
  2012; 50 (9): 3105-3107
- **Performance of BinaxNOW for Diagnosis of Malaria in a US Hospital** *JOURNAL OF CLINICAL MICROBIOLOGY*
  DiMaio, M. A., Pereira, I. T., George, T. I., Banaei, N.
  2012; 50 (9): 2877-2880

- **Sensitivity of QuantiFERON-TB GOLD In-Tube for diagnosis of recent versus remote M.tuberculosis infection** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Bautista, J., Banaei, N.
  2012; 73 (3): 257-259
- **Can a Simple Flotation Method Lower the Limit of Detection of Mycobacterium tuberculosis in Extrapulmonary Samples Analyzed by the GeneXpert MTB/RIF Assay?** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Taylor, N., Gaur, R. L., Baron, E. J., Banaei, N.
  2012; 50 (7): 2272-2276
- **First Isolation of Cryptococcus uzbekistanensis from an Immunocompromised Patient with Lymphoma** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Powel, M. S., Alizadeh, A. A., Budvytiene, I., Schaenman, J. M., Banaei, N.
  2012; 50 (3): 1125-1127
- **IMP-Producing Carbapenem-Resistant Klebsiella pneumoniae in the United States** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Limbago, B. M., Rasheed, J. K., Anderson, K. F., Zhu, W., Kitchel, B., Watz, N., Munro, S., Gans, H., Banaei, N., Kallen, A. J.
  2011; 49 (12): 4239-4245
- **Preanalytical Delay Reduces Sensitivity of QuantiFERON-TB Gold In-Tube Assay for Detection of Latent Tuberculosis Infection** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Doberne, D., Gaur, R. L., Banaei, N.
  2011; 49 (8): 3061-3064
- **Suboptimal Activation of Antigen-Specific CD4(+) Effector Cells Enables Persistence of M. tuberculosis In Vivo** *PLOS PATHOGENS*
  Bold, T. D., Banaei, N., Wolf, A. J., Ernst, J. D.
  2011; 7 (5)
- **Clinical Application and Limitations of Interferon-gamma Release Assays for the Diagnosis of Latent Tuberculosis Infection** *CLINICAL INFECTIOUS DISEASES*
  Herrera, V., Perry, S., Parsonnet, J., Banaei, N.
  2011; 52 (8): 1031-1037
- **Brain Abscess Caused by Phaeoacremonium parasiticum in an Immunocompromised Patient** *JOURNAL OF CLINICAL MICROBIOLOGY*
  McNeil, C. J., Luo, R. F., Vogel, H., Banaei, N., Ho, D. Y.
  2011; 49 (3): 1171-1174
- **Fluorescent DNA chemosensors: identification of bacterial species by their volatile metabolites** *CHEMICAL COMMUNICATIONS*
  Koo, C., Wang, S., Gaur, R. L., Samain, F., Banaei, N., Kool, E. T.
  2011; 47 (41): 11435-11437
- **Molecular Diagnosis of Gastrointestinal Infections** *MOLECULAR MICROBIOLOGY: DIAGNOSTIC PRINCIPLES AND PRACTICE, SECOND EDITION*
  Pinsky, B. A., Banaei, N.
  edited by Persing, D. H., Tenover, F. C., Tang, Y. W., Nolte, F. S., Hayden, R. T., VanBelkum, A.
  2011: 729–50
- **Is Repeat PCR Needed for Diagnosis of Clostridium difficile Infection?** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Luo, R. F., Banaei, N.
  2010; 48 (10): 3738-3741
- **Immediate Incubation Reduces Indeterminate Results for QuantiFERON-TB Gold In-Tube Assay** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Herrera, V., Yeh, E., Murphy, K., Parsonnet, J., Banaei, N.
  2010; 48 (8): 2672-2676
- **Comparison of real-time polymerase chain reaction and conventional biochemical methods for identification of Mycobacterium chelonae-Mycobacterium abscessus group to the species level** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Guarin, N., Budvytiene, I., Ghafghaichi, L., Banaei, N.
  2010; 67 (4): 333-336

- **Comparison of Single-Copy and Multicopy Real-Time PCR Targets for Detection of Mycobacterium tuberculosis in Paraffin-Embedded Tissue** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Luo, R. F., Scahill, M. D., Banaei, N.
  2010; 48 (7): 2569-2570
- **Mixed infection involving Actinomyces, Aggregatibacter, and Fusobacterium species presenting as perispinal tumor** *ANAEROBE*
  Ghafghaichi, L., Troy, S., Budvytiene, I., Banaei, N., Baron, E. J.
  2010; 16 (2): 174-178
- **Real-Time PCR Testing for mecA Reduces Vancomycin Usage and Length of Hospitalization for Patients Infected with Methicillin-Sensitive Staphylococci** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Nguyen, D. T., Yeh, E., Perry, S., Luo, R. F., Pinsky, B. A., Lee, B. P., Sisodiya, D., Baron, E. J., Banaei, N.
  2010; 48 (3): 785-790
- **Preferential Lower Respiratory Tract Infection in Swine-Origin 2009 A(H1N1) Influenza** *CLINICAL INFECTIOUS DISEASES*
  Yeh, E., Luo, R. F., Dyner, L., Hong, D. K., Banaei, N., Baron, E. J., Pinsky, B. A.
  2010; 50 (3): 391-394
- **First documentation of isoniazid reversion in Mycobacterium tuberculosis** *INTERNATIONAL JOURNAL OF TUBERCULOSIS AND LUNG DISEASE*
  Richardson, E. T., Lin, S. G., Pinsky, B. A., Desmond, E., Banaei, N.
  2009; 13 (11): 1347-1354
- **Comparison of Real-Time PCR and Conventional Biochemical Methods for Identification of Staphylococcus lugdunensis** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Pinsky, B. A., Samson, D., Ghafghaichi, L., Baron, E. J., Banaei, N.
  2009; 47 (11): 3472-3477
- **Lipoprotein Processing Is Essential for Resistance of Mycobacterium tuberculosis to Malachite Green** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*
  Banaei, N., Kincaid, E. Z., Lin, S. G., Desmond, E., Jacobs, W. R., Ernst, J. D.
  2009; 53 (9): 3799-3802
- **Nontuberculous Mycobacteria Infections in Immunocompromised Patients Single Institution Experience** *JOURNAL OF PEDIATRIC HEMATOLOGY ONCOLOGY*
  Wei, M. C., Banaei, N., Yakrus, M. A., Stoll, T., Gutierrez, K. M., Agarwal, R.
  2009; 31 (8): 556-560
- **Hair Sheep Blood, Citrated or Defibrinated, Fulfills All Requirements of Blood Agar for Diagnostic Microbiology Laboratory Tests** *PLOS ONE*
  Yeh, E., Pinsky, B. A., Banaei, N., Baron, E. J.
  2009; 4 (7)
- **Bartholin's abscess caused by hypermucoviscous Klebsiella pneumoniae** *JOURNAL OF MEDICAL MICROBIOLOGY*
  Pinsky, B. A., Baron, E. J., Janda, J. M., Banaei, N.
  2009; 58 (5): 671-673
- **Rapid Identification of Mycobacterium tuberculosis and Nontuberculous Mycobacteria by Multiplex, Real-Time PCR** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Richardson, E. T., Samson, D., Banaei, N.
  2009; 47 (5): 1497-1502
- **Challenges and Pitfalls of Morphologic Identification of Fungal Infections in Histologic and Cytologic Specimens A Ten-Year Retrospective Review at a Single Institution** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*
  Sangoi, A. R., Rogers, W. M., Longacre, T. A., Montoya, J. G., Baron, E. J., Banaei, N.
  2009; 131 (3): 364-375
- **RP105 Facilitates Macrophage Activation by Mycobacterium tuberculosis Lipoproteins** *CELL HOST & MICROBE*
  Blumenthal, A., Kobayashi, T., Pierini, L. M., Banaei, N., Ernst, J. D., Miyake, K., Ehrt, S.
  2009; 5 (1): 35-46

- **Multiplex real-time PCR assay for rapid identification of Mycobacterium tuberculosis complex members to the species level** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Pinsky, B. A., Banaei, N.
  2008; 46 (7): 2241-2246

- **Syphilis screening using automated immunoassays detecting both IgM and IgG anti-treponemal antibodies**
  Faix, J., Banaei, N., Johal, S.
  AMER ASSOC CLINICAL CHEMISTRY.2008: A64

- **Initiation of the adaptive immune response to Mycobacterium tuberculosis depends on antigen production in the local lymph node, not the lungs** *JOURNAL OF EXPERIMENTAL MEDICINE*
  Wolf, A. J., Desvignes, L., Linas, B., Banaiee, N., Tamura, T., Takatsu, K., Ernst, J. D.
  2008; 205 (1): 105-115

- **Evaluation of a semi-automated reporter phage assay for susceptibility testing Myobacterium tuberculosis isolates in South Africa** *TUBERCULOSIS*
  Banaiee, N., January, V., Barthus, C., Lambrick, M., Roditi, D., Behr, M. A., Jacobs, W. R., Steyn, L. M.
  2008; 88 (1): 64-68

- **LspA-independent action of globomycin on Mycobacterium tuberculosis** *JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY*
  Banaiee, N., Jacobs, W. R., Ernst, J. D.
  2007; 60 (2): 414-416

- **Genornics and the evolution, pathogenesis, and diagnosis of tuberculosis** *JOURNAL OF CLINICAL INVESTIGATION*
  Ernst, J. D., Trevejo-Nunez, G., Banaiee, N.
  2007; 117 (7): 1738-1745

- **Regulation of Mycobacterium tuberculosis whiB3 in the mouse lung and macrophages** *INFECTION AND IMMUNITY*
  Banaiee, N., Jacobs, W. R., Ernst, J. D.
  2006; 74 (11): 6449-6457

- **Potent inhibition of macrophage responses to IFN-gamma by live virulent Mycobacterium tuberculosis is independent of mature mycobacterial lipoproteins but dependent on TLR2** *JOURNAL OF IMMUNOLOGY*
  Banaiee, N., Kincaid, E. Z., Buchwald, U., Jacobs, W. R., Ernst, J. D.
  2006; 176 (5): 3019-3027

- **alpha-Defensin expression during myelopoiesis: identification of cis and trans elements that regulate expression of NP-3 in rat promyelocytes** *JOURNAL OF LEUKOCYTE BIOLOGY*
  Yamamoto, C. M., Banaiee, N., Yount, N. Y., Patel, B., Selsted, M. E.
  2004; 75 (2): 332-341

- **Rapid identification and susceptibility testing of Mycobacterium tuberculosis from MGIT cultures with luciferase reporter mycobacteriophages** *JOURNAL OF MEDICAL MICROBIOLOGY*
  Banaiee, N., Bobadilla-del-Valle, M., Riska, P. F., Bardarov, S., Small, P. M., Ponce-de-Leon, A., Jacobs, W. R., Hatfull, G. F., Sifuentes-Osornio, J.
  2003; 52 (7): 557-561

- **Detection and drug-susceptibility testing of M-tuberculosis from sputum samples using luciferase reporter phage: comparison with the Mycobacteria Growth Indicator Tube (MGIT) system** *DIAGNOSTIC MICROBIOLOGY AND INFECTIOUS DISEASE*
  Bardarov, S., Dou, H., Eisenach, K., Banaiee, N., Ya, S., Chan, J., Jacobs, W. R., Riska, P. F.
  2003; 45 (1): 53-61

- **Luciferase reporter mycobacteriophages for detection, identification, and antibiotic susceptibility testing of Mycobacterium tuberculosis in Mexico** *JOURNAL OF CLINICAL MICROBIOLOGY*
  Banaiee, N., Bodadilla-del-Valle, M., Bardarov, S., Riska, P. F., Small, P. M., Ponce-de-Leon, A., Jacobs, W. R., Hatfull, G. F., Sifuentes-Osornio, J.
  2001; 39 (11): 3883-3888

- **RAT NEUTROPHIL DEFENSINS - PRECURSOR STRUCTURES AND EXPRESSION DURING NEUTROPHILIC MYELOPOIESIS** *JOURNAL OF IMMUNOLOGY*
  Yount, N. Y., WANG, M. S., Yuan, J., Banaiee, N., Ouellette, A. J., Selsted, M. E.
  1995; 155 (9): 4476-4484