

Final Program

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Q-487 Characterization of Single-Bacterial Species Biofilms Formed under Controlled Conditions on Membranes used for Wastewater Treatment.

C. Andrade Molinar¹, M. Flores², B. E. Rivera-Chavira¹, F. J. Solis³, M. L. Ballinas-Casarrubias¹, G. Cuevas-Rodríguez⁴, G. V. Nevárez-Moorillón¹;

¹Universidad Autónoma de Chihuahua, Chihuahua, MEXICO, ²CIMAV, Chihuahua, MEXICO, ³Universidad Autónoma de Chihuahua, Chihuahua, Chih, MEXICO, ⁴Universidad Autónoma de Guanajuato, Guanajuato, MEXICO.

Q-488 Utilization of Self-Assembled Monolayers to Inhibit *Staphylococcus epidermidis* Adhesion and Viability.

J. Strauss, S. Kavrakis, Y. Liu, E. Milkani, G. McGimpsey, T. Camesano;

Worcester Polytechnic Institute, Worcester, MA.

Q-489 Molecular Characterization of Microbial Communities and Quantification of *Mycobacterium immunogenum* in Metalworking Fluids and its Associated Biofilms.

J. Wu, A. Franzblau, C. Xi;

Univ. of Michigan School of Public Health, Ann Arbor, MI.

Q-490 Analysis of Biofilm Forming Communities Participating in Electricity Generation in Activated-Sludge-Seeded Microbial Fuel Cells.

D. Ki¹, J. Lee¹, K. Yoo², S-H. Kim³, J. Park¹;

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Q-491 Relationships between B2 and D Pathogenic Genotypes and Quorum Sensing Genes in a Diverse Set of Human and Rumen Gut Isolates of *Escherichia coli*.

J. Hernandez, D. Krause;

Univ. of Manitoba, Winnipeg, MB, CANADA.

Q-492 C-di-GMP Pathway in the Extremophile Bacterium *Acidithiobacillus ferrooxidans*.

L. Ruiz, C. A. Jerez, N. Guiliani;

Univ. of Chile Faculty of Sciences, Institute for Cell Dynamics and Biotechnology, Santiago, CHILE.

Q-493 Impact of Microbial Community Structure on Membrane Fouling in an Anaerobic Membrane Bioreactor.

D-W. Gao^{1,2}, T. Zhang^{1,3}, C-Y. Tang¹, W-M. Wu¹, P. Wong¹, Y-H. Lee¹, D. Yeh⁴, C. S. Criddle¹;

¹Stanford Univ., Stanford, CA, ²Northeast Forestry Univ., Harbin, CHINA, ³Hong Kong Univ., Hong Kong, CHINA, ⁴Univ. of South Florida, Tampa, FL.

Q-494 Induction of Biofilm Dispersion in Multiple Bacterial Species in Response to a Common Inducer.

C. N. H. Marques, J. M. Silverman, Y. Okkotsu, D. G. Davies;

Binghamton Univ., Binghamton, NY.

Q-495 Physico-Chemical Factors Affecting the Bacterial Re-Growth in Drinking Water Supply and Distribution Systems.

H-J. Jang, Sr¹, Y-J. Choi¹, J-O. Ka²;

¹Waterworks Research Institute Seoul Metropolitan Government, Seoul, REPUBLIC OF KOREA, ²School of Agricultural Biotechnology, Seoul National Univ., Seoul, REPUBLIC OF KOREA.

Q-496 *Legionella pneumophila* Is an Abundant and Chlorine Tolerant Autochthonous Member of Potable Water Biofilms.

S. A. Wilks¹, M. S. Gao^{1,2}, M. J. Vieira², C. W. Keevil¹;

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Q-497 Techniques for Electrochemical Characterization of Electricity-Producing Bacteria.

E. Marsili¹, D. B. Baron¹, D. R. Bond^{1,2};

¹Biotechnology Institute, St. Paul, MN, ²Univ. of Minnesota, Minneapolis, MN.

Q-498 Microbial Diversity of Marine Electroactive Biofilms.

I. Vandecastelaere¹, O. Nercissian², E. Segaut¹, S. Conrod², W. Achouak², P. De Vos¹, P. Vandamme¹;

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Q-499 Structural Role for Flagella in Biofilm Formation in *Desulfovibrio vulgaris* Hildenborough.

M. E. Clark^{1,2}, M. L. Duley¹, G. Zane³, R. E. Edelman¹, D. A. Elias¹, J. D. Wall³, M. W. Fields²;

¹Miami Univ., Oxford, OH, ²Montana State Univ., Bozeman, MT, ³Univ. of Missouri, Columbia, MO.

Q-500 Two PAS Domain Protein Mutants Suggest that both Oxygen Sensing and Metabolism Are Important for Biofilm Formation in *Shewanella oneidensis* MR-1.

A. Sundararajan¹, L. Creighton², T. Yan³, D. M. Klingman³, J. Zhou⁴, M. W. Fields¹;

¹Montana State Univ., Bozeman, MT, ²Miami Univ., Oxford, OH, ³Oak Ridge National Laboratory, Oak Ridge, TN, ⁴Univ. of Oklahoma, Norman, OK.

Q-501 Using a Novel Selective Growth Medium and the BOX- and REP-PCR Methods to Study Biofouling and Clinical *Sphingomonas* Isolates.

M-S. Yim^{1,2}, J. Sheldon¹, K. T. Leung¹, H. Schraft¹, Y. Yau^{3,4}, A. Matlow^{3,4}, J. So²;

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Q-502 Genetic Diversity among Biofilm Populations of *Streptococcus pneumoniae* Serotypes.

M. Allegrucci, K. Sauer;

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Q-503 Carbon Channelling in Biofilms.

M. Kroukamp¹, G. M. Wolfaardt¹, E. Bester²;

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Q-504 Biofilm Inactivation by Gas Discharge Plasma: A New Solution To an Old Problem?

G. Brelles-Mariño, J. C. Joaquin, C. Kwan, K. Vandervoort, N. Abramzon;

California State Polytechnic Univ., Pomona, CA.

Q-505 Investigation of Fate of Manure Based Pathogens in Agricultural Tile Drainage Systems.

A. Dias Samarajeewa;

Univ. of Guelph, Guelph, ON, CANADA.

Q-506 Characterizing Biofilms: A New Technique for Measuring Biofilm Thicknesses.

E. Paramonova, E. D. de Jong, B. P. Krom, H. C. van der Mei, H. J. Busscher, P. K. Sharma;

Univ. Medical Center Groningen and Univ. of Groningen, Groningen, THE NETHERLANDS.

Q-507 Characteristics of Planktonic and Biofilm Cultures of *Pseudomonas fluorescens* Grown on 2-Fluorobenzoate.

B. Heffernan, U. Bryan, C. Murphy, E. Casey;

Univ. College, Dublin, IRELAND.

Q-508 A Novel Method for 3D Visualization and Quantification of the Biofilm Slime Matrix Reveals Complex Tertiary Structures.

L. Hall-Stoodley, A. Mehta, A. Mehta, L. Nistico, D. Nguyen, G. D. Ehrlich, P. Stoodley;

Center for Genomic Sciences, Pittsburgh, PA.

Q-509 Real-Time Monitoring of Biofilm Formation in Glass-Beads Packed Microfluidic Device.

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