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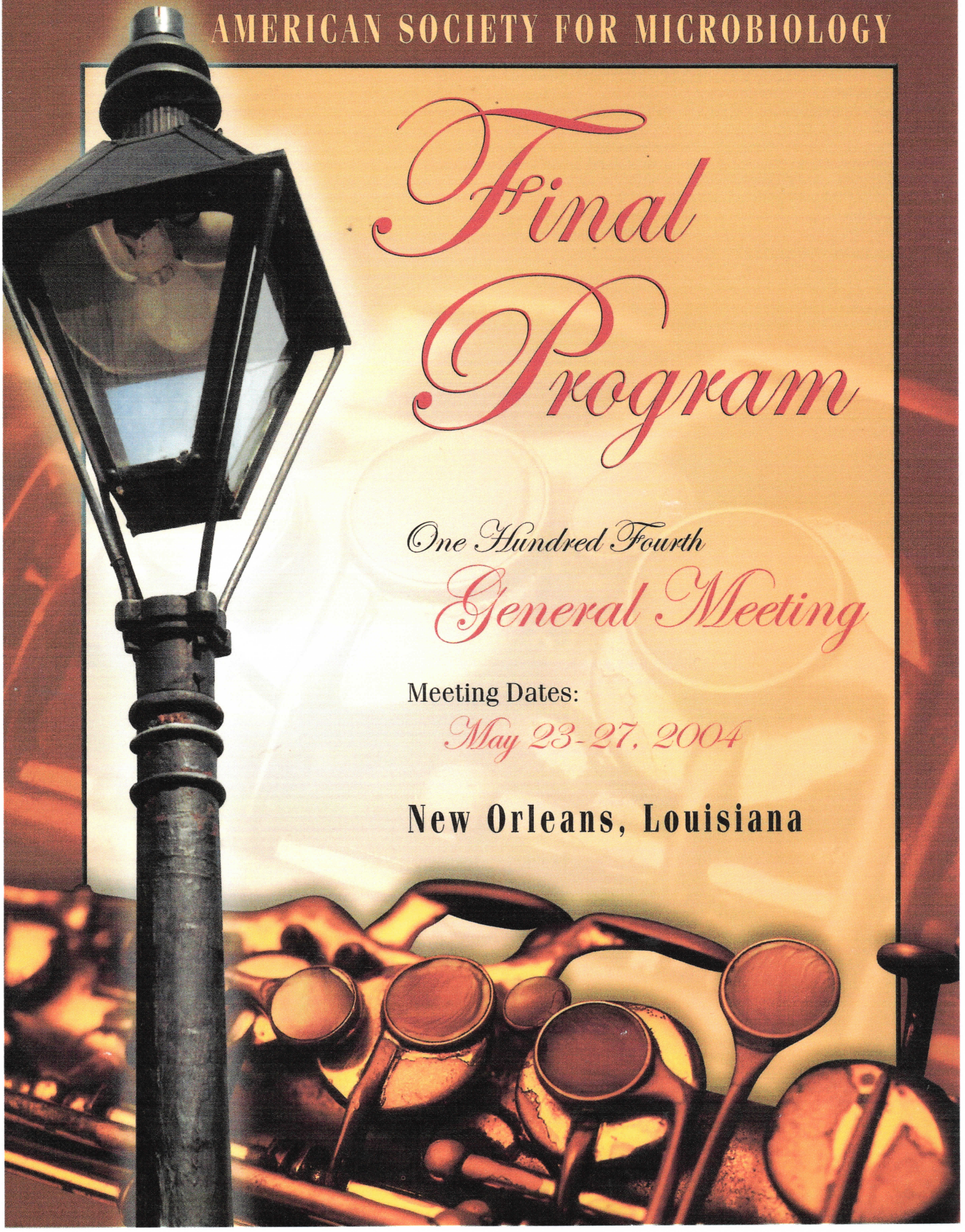

Final Program

One Hundred Fourth

General Meeting

Meeting Dates:

May 23-27, 2004

New Orleans, Louisiana

One Hundred Fourth

General Meeting

New Orleans, Louisiana • May 23-27, 2004

Final Program

American Society for Microbiology, Washington, DC

ISBN: 1-555-81-313-5

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Washington, DC 20036-2904
Phone: 202-737-3600
World Wide Web: http://www.asm.org

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[1]Universidad Autónoma de San Luis Potosí, San Luis Potosí, MEXICO, [2]Instituto Potosino de Investigación Científica y Tecnológica, San Luis Potosi, MEXICO

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[1]DuPont Central Research and Development, Newark, DE, [2]DuPont Chemical Solutions Enterprise, Wilmington, DE, [3]DuPont Haskell Laboratory for Health and Environmental Sciences, Newark, DE

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[1]SRI Intl., Menlo Park, CA, [2]CIFN, National Autonomous Univ. of Mexico, Cuernavaca, Morelos, MEXICO, [3]The Institute for Genomic Research, Rockville, MD, [4]Univ. of California, Davis, Davis, CA, [5]Univ. of California, San Diego, La Jolla, CA

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[1]Univ. of Tennessee Health Science Ctr., Memphis, TN, [2]Univ. of Massachusetts, Amherst, MA, [3]The Institute for Genomic Research, Rockville, MD

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X. Wan[1], D. Xu[1], J. Zhou[2];
[1]Digital Biology Laboratory, Department of Computer Science, Univ. of Missouri, Columbia, Columbia, MO, [2]Department of Environmental Sciences, Oak Ridge National Laboratory, Oak Ridge, TN

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Y. He, R. Lathigra, R. Vines, A. Dickerman, J. D. Eckart, B. W. S. Sobral;
Virginia Bioinformatics Institute, Blacksburg, VA

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AMERICAN SOCIETY FOR MICROBIOLOGY

Control/Tracking Number : 04-GM-A-4562-ASM
Activity : Abstract
Current Date/Time : 12/10/2003 3:40:20 PM

Environmental Strains of *Vibrio cholera* of San Luis Potosi, Mexico, Do Not Contain Functional *ctxAB* Genes but Express Multiple Antibiotic Resistance Traits

R. Quezada-Calvillo[1], E. Villegas-Tobias[2], V. Recio[2], J. Tovar-Oviedo[2], R. López-Revilla[3]; [1]Universidad Autónoma de San Luis Potosí, San Luis Potosí, MEXICO, [2]Universidad Autonoma de San Luis Potosi, San Luis Potosi, MEXICO, [3]Instituto Potosino de Investigación Científica y Tecnológica, San Luis Potosi, MEXICO.

Background: The main pathogenic factor of *Vibrio cholerae* O1 and O139 serotypes, causative agents of cholera, is the production of cholera toxin (CTX) encoded by the phage CTXphi. Other plasmids or integrons capable of horizontal transmission and encoding antimicrobial resistence are frequently found in O1/O139 and environmental non-O1/O139 strains. The last have are belived to constitute reservoirs for pathogenic determinants responsible of the cyclic cholera outbreaks. To identify probable reservoirs of transmissible pathogenicity determinants, we analyzed the presence of *ctxAB* genes and the patterns of antibiotic resistance in environmental isolates of *V. cholerae* obtained in the state of San Luis Potosi, Mexico. **Methods and Results:** The main sources of *V. cholerae* were local urban sewage waters (36.4%) and fresh waters together with derived edible products (34.4%). More than 40 different serotypes were identified, but none corresponded to the O1 or O139. Fourteen biochemical patterns were found clustered into four closely related groups. By PCR analysis two isolates obtained from marine products showed the presence of *ctxAB* amplification bands about 52 bp smaller than those obtained with O1 reference strains. No CTX production was detected in these two environmental strains suggesting the existence of a deletion involving the *ctxA* gene. A high frequence of resistance was observed against amoxicillin / clavulanic acid (73.7%), and erythromycin (30.9%); an intermediate frequence was observed against cefazolin (12.6%), cefapime (13.7%), tetracycline (8.3%) and trimethoprim / sulfamethoxazol (7.4%). Nine isolates displayed strong resistance against four to seven different antibiotics indicating the presence of chromosomal and extrachomosomal determinats of antibiotic resistance. **Conclusion:** Environmental *V. cholerae* in San Luis Potosi do not contain functional *ctxAB* genes; however, transmissible elements containing antibiotic multiresistance determinants are relatively frequent.

Topic (Complete): Q21 General Environmental Microbiology
Keyword (Complete): Vibrio cholerae ; environment ; pathogenicity
Membership and Grant Information (Complete):
ASM Member (or who has submitted an application): : Roberto Quezada-Calvillo
I am an ASM Member and I am the presenting author. : True

Status: Complete

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27 February 2004

Roberto Quezada-Calvillo
Universidad Autónoma de San Luis Potosí
Av. Manuel Nava 6
Zona Universitaria
San Luis Potosi, 78210
Mexico

Re: Abstract number - 4562

Dear Dr. Quezada-Calvillo

I am pleased to inform you that your abstract has been accepted for a **poster** presentation at the 104th General Meeting, which will be held at the Ernest N. Morial Convention Center, from May 23 through May 27, 2004 in New Orleans, LA.

Following is information pertaining to the above abstract:

Abstract Title: Environmental strains of Vibrio cholera from San Luis Potosi, Mexico, do not contain functional ctxAB genes but express multiple antibiotic resistance traits
Session No.: 286
Room/Day/Time: Poster Hall/May 26, 2004 1:00 PM
Presentation Number (to be included in your poster title): Q-449

Poster Placement: **The size of the posterboard is 4 feet tall by 8 feet wide (1.2 m x 2.4 m).**

Two poster sessions are scheduled each day (except Thursday). The morning session is from 9:00 a.m. to 12:00 p.m. and the presenter must stand at the poster from 10:30 a.m. until 12:00 p.m. The afternoon session is from 1:00 p.m. to 4:00 p.m. and the presenter must stand at the poster from 1:00 p.m. until 2:30 p.m. The period between 12:00 and 1:00 p.m. is reserved for removing the morning posters and placing the afternoon posters. The poster area of the Exhibit Hall is only open to the public from 9:00 a.m. to 4:00 p.m. **Therefore, you must bring this letter with you and show it to Security in order to place your poster between 7:30 and 9:00 a.m. for the morning session or to remove it between 4:00 and 5:30 p.m. for the afternoon session. On Thursday, admittance will be until 12:30 p.m. for poster removal/retrieval.**

Please recall that you agreed to present your poster as scheduled. If you fail to do so, you will be prohibited from submitting abstracts to ASM-sponsored meetings for 3 years. If unable to present your poster, notify ASM before March 5, 2004, so that your abstract will not be published.

Please check our website at http://www.asm.org/Meetings/index.asp?bid=697 for information regarding presentation hints. Select " Poster Guidelines" from the sidebar. While you are at the website, do not forget to register for the General Meeting. The link to the registration company can be found under "Registration and Housing" at the URL listed above.

Please note that for those who submitted a request for a student travel grant, confirmation notices will be sent under separate cover March 10.

We look forward to your participation and to seeing you in New Orleans.

Sincerely,