Mark Stibich, MHS PhD FIDSA

518 Old Santa Fe Trail, Suite 1 #503; Santa Fe, NM 87505 713.874.1237; stibich@gmail.com

Education

Doctor of Philosophy Degree

July 2004

Johns Hopkins University Bloomberg School of Public Health

Department of Health Policy and Management; Division of Social and Behavioral Sciences Behavior Change, Health Education and Health Communications

Master of Health Science Degree

May 2000

Johns Hopkins School of Hygiene and Public Health

Department of International Health; Social Science and Public Health

Bachelor of Arts Degree

May 1995

Yale University

Religious Studies

Professional Experience

Infectious Diseases Society of American

Washington, DC

Fellow

2019-Present

Earned fellowship through recommendations and demonstration of national/international contributions to the field of infectious diseases.

Xenex Disinfection Services

San Antonio, TX

Founder and Chief Scientific Officer

June 2009-Present

Responsible for publications, patents, design of scientific protocols for infection control interventions. Participates in strategic business activities, fundraising and management. Xenex has over 600 U.S. hospitals customers and has deployed over 1000 disinfection robots with the goal of reducing the risk of hospital acquired infections. Xenex has raised over \$100 million in investment and employs 140 people.

University of Texas, MD Anderson Cancer Center

Houston, TX

Visiting Scientist

September 2016-September 2019

Responsible for publications, research design and laboratory protocols for a number of early stage clinical and diagnostic investigations.

Lacuna Projects, LLC

Houston, TX

Chief Scientific Officer

Provide expertise for the commercialization of new technology.

June 2009-Present

Xenex Technologies, Inc.

Houston, TX

Founder

June 2007-Present

Took company from conception to investment of over \$40 million with a revenue run rate over \$50 million based on pulsed xenon ultraviolet disinfection in 4 years.

Columbia University

New York, NY

Research Consultant

June 2007-August 2012

Consult on various epidemiological and public health studies.

About.com/New York Times

New York, NY

Guide to Longevity

January 2007-June 2011

Write articles for the general reader about longevity for website: longevity.about.com.

Vitality Skills, LLC

Houston, Texas

Director

March 2006-June 2009

Individual and Corporate Wellness

University of California, San Diego

San Diego, California

Asst. Project Scientist

January 2006-June 2008

Conduct and manage research projects in international health.

Ministry of Health, Division of HIV/AIDS

Moscow, Russia

M&E and Surveillance Consultant

April 2005-June 2005

Advise in the establishment of a separate surveillance unit in the MoH as well as assist in providing indicators for UNGASS and other reporting.

AIDS infoshare

Moscow, Russia

Director of Special Projects

May 2003-July 2006

Includes fundraising, planning and implementation of the following projects and related activities: effective health interventions for sex workers in Russia; palliative care for people with AIDS (PWAs); human rights and anti-stigma advocacy; needs assessment of PWAs in Russia, including prisoners and children; media advocacy training for NGOs; anti-stigma media campaign design and Moscow pilot launch; training in rapid research methods.

Pact International

Ulaanbaatar, Mongolia

Program Consultant

August 2003

Designed, managed and piloted nation-wide program for rapid participatory research in the information sector.

Johns Hopkins Bloomberg School of Public Health

Baltimore, MD

Research Assistant

May-August 2001

Pact International

Ulaanbaatar, Mongolia

Business and Economic Information Consultant

April-July 2000

Led a team of Mongolian journalists in the Gobi Region and developed model for conducting rural journalism with practical applications for Gobi citizens.

Pact International

Ulaanbaatar, Mongolia

Information Systems Consultant

September-December 1999

Led an in-depth regional assessment of information systems in the Gobi region including participatory survey (n=2483), organizational interviews (n=80), and community discussions (n=23).

Selected Reviewed Publications

Jinadatha C, Villamaria FC, Coppin JD, Dale CR, Williams MD, Whitworth R, **Stibich M.** Interaction of healthcare worker hands and portable medical equipment: a sequence analysis to show potential transmission opportunities. BMC Infect Dis. 2017 Dec 28;17(1):800.

Simmons S, Dale C, Holt J, Velasquez K, **Stibich M.** Role of Ultraviolet Disinfection in the Prevention of Surgical Site Infections. Adv Exp Med Biol. 2017;996:255-266.

El Haddad L, Ghantoji SS, **Stibich M**, Fleming JB, Segal C, Ware KM, Chemaly RF. Evaluation of a pulsed xenon ultraviolet disinfection system to decrease bacterial contamination in operating rooms. BMC Infect Dis. 2017 Oct 10;17(1):672.

Stibich M, Stachowiak J. The microbiological impact of pulsed xenon ultraviolet disinfection on resistant bacteria, bacterial spore and fungi and viruses. *South Afr J Infect Dis. Vol 31*, *No 1 (2016) 2312-0053*

Catalanotti A, Abbe D, Simmons S, **Stibich M**. Influence of pulsed-xenon ultraviolet light-based environmental disinfection on surgical site infections. Am J Infect Control. 2016 Feb 5.

Pedro G. Vianna, Charles R. Dale Jr, Sarah Simmons, **Mark Stibich**, Carmelo M. Licitra. Impact of pulsed xenon ultraviolet light on hospital-acquired infection rates in a community hospital. Am J Infect Control. 2015 Dec 9.

Fornwalt L, Ennis D, **Stibich M**. Influence of a total joint infection control bundle on surgical site infection rates. Am J Infect Control. 2015 Oct 30

Miller R, Simmons S, Dale C, Stachowiak J, **Stibich M**. Utilization and impact of a pulsed-xenon ultraviolet room disinfection system and multidisciplinary care team on Clostridium difficile in a long-term acute care facility. Am J Infect Control. 2015 Sep 9.

Chemaly RF, Ghantoji SS, Huber T, Raad II, Jinadatha C, **Stibich M**. Innovative Analysis of the Sequenced Patterns of Vancomycin-Resistant Enterococci Strains to Determine Clonal Transmission in a Hospital Setting. Infect Control Hosp Epidemiol. 2015 Dec;36(12):1461-3.

Jinadatha C, Simmons S, Dale C, Ganachari-Mallappa N, Villamaria FC, Goulding N, Tanner B, Stachowiak J, **Stibich M**. Disinfecting personal protective equipment with pulsed xenon ultraviolet as a risk mitigation strategy for health care workers. Am J Infect Control. 2015 Apr 1;43(4):412-4

Ghantoji SS, **Stibich** M, Stachowiak J, Cantu S, Adachi JA, Raad II, Chemaly R. Non-inferiority of pulsed xenon ultraviolet light versus bleach versus for reducing environmental Clostridium difficile contamination on high-touch surfaces in Clostridium difficile isolation rooms. J Med Microbiol. 2015 Jan 13.

Chemaly RF, Simmons S, Dale C Jr, Ghantoji SS, Rodriguez M, Gubb J, Stachowiak J, **Stibich** M. The role of the healthcare environment in the spread of multidrug-resistant organisms: update on current best practices for containment. Ther Adv Infect Dis. 2014 Jun;2(3-4):79-90.

Sarah Simmons, Melissa Morgan, Teresa Hopkins, Kim Helsabeck, Julie Stachowiak, and **Mark Stibich**. Impact of a multi-hospital intervention utilising screening, hand hygiene education and pulsed xenon ultraviolet (PX-UV) on the rate of hospital associated meticillin resistant *Staphylococcus aureus* infection. Journal of Infection Prevention, first published on June 5, 2013

Novel intervention for eliminating VRE from the environment. Chemaly RF, Ghantoji SS, **Stibich M**. Arch Intern Med. 2011 Oct 10;171(18):1684-5.

Stibich M, Stachowiak J, Tanner B, Berkheiser M, Moore L, Raad I, Chemaly RF. Evaluation of a pulsed-xenon

ultraviolet room disinfection device for impact on hospital operations and microbial reduction. Infect Control Hosp Epidemiol. 2011 Mar;32(3):286-8.

Todd CS, **Stibich** MA, Laher F, Malta MS, Bastos FI, Imbuki K, Shaffer DN, Sinei SK, Gray GE. Influence of culture on contraceptive utilization among HIV-positive women in Brazil, Kenya, and South Africa. AIDS Behav. 2011 Feb;15(2):454-68.

Imbuki K, Todd CS, **Stibich** MA, Shaffer DN, Sinei SK. Factors influencing contraceptive choice and discontinuation among HIV-positive women in Kericho, Kenya. Afr J Reprod Health. 2010 Dec;14(4 Spec no.):98-109.

Malta M, Todd CS, **Stibich** MA, Garcia T, Pacheco D, Bastos FI. Patient-provider communication and reproductive health among HIV-positive women in Rio de Janeiro, Brazil. Patient Educ Couns. 2010 Dec;81(3):476-82.

Laher F, Todd CS, **Stibich** MA, Phofa R, Behane X, Mohapi L, Martinson N, Gray G. Role of menstruation in contraceptive choice among HIV-infected women in Soweto, South Africa. Contraception. 2010 Jun;81(6):547-51.

Baral S, Kizub D, Masenior NF, Peryskina A, Stachowiak J, **Stibich** M, Moguilny V, Beyrer C. Male sex workers in Moscow, Russia: a pilot study of demographics, substance use patterns, and prevalence of HIV-1 and sexually transmitted infections. AIDS Care. 2010 Jan;22(1):112-8.

Beyrer C, Patel Z, Stachowiak JA, Tishkova FK, **Stibich** MA, Eyzaguirre LM, Carr JK, Mogilnii V, Peryshkina A, Latypov A, Strathdee SA. Characterization of the emerging HIV type 1 and HCV epidemics among injecting drug users in Dushanbe, Tajikistan. AIDS Res Hum Retroviruses. 2009 Sep;25(9):853-60.

Laher F, Todd CS, **Stibich MA**, Phofa R, Behane X, Mohapi L, Gray G. A qualitative assessment of decisions affecting contraceptive utilization and fertility intentions among HIV-positive women in Soweto, South Africa. AIDS Behav. 2009 Jun;13 Suppl 1:47-54.

Todd CS, **Stibich MA**, Stanekzai MR, Rasuli MZ, Bayan S, Wardak SR, Strathdee SA. A qualitative assessment of injection drug use and harm reduction programmes in Kabul, Afghanistan: 2006-2007. Int J Drug Policy. 2008 Jan 18

Stachowiak, JA; Tishkova, FK; Strathdee, SA; **Stibich, MA**; Molilniid, V; Beyrer, C; Marked ethnic differences in HIV prevalence and risk behaviors among injecting drug users in Dushanbe, Tajikistan, 2004; Drug and Alcohol Dependence; Spring 2006.

Stibich, MA; Stachowiak JA, Peryshkina AN, Konakova A, Beyrer C; Client requests of street commercial sex workers in Moscow, Russia; Krugli Stol, Spring 2006.

Stibich, MA; Wissow, LS; Meaning Shift: Findings from Wellness Acupuncture; Alternative Therapies in Health and Medicine; Spring 2006.

Stachowiak JA, **Stibich MA**, Svistova T, Peryshkina A and Pchelin I. Experiences and needs of Russian people living with HIV/AIDS. Krugli stol. Spring 2005

Stibich, MA; Croft, L; Radio and Development in Mongolia: An audio paper; Mongolia Society Conference Proceedings; March 2003.

Bernstein, JA; **Stibich, MA**; LeBaron, S; <u>Frequent Use of Traditional Medicine by Members of a Mongolian Population</u>; Complement Ther Med 2002 Mar;10(1):42-5

Selected Patents Published (over 110 patents granted worldwide)

US-2012313014-A1 Ultraviolet Discharge Lamp Apparatuses with One or More Reflectors

US-2013330235-A1 Systems which Determine Operating Parameters and Disinfection Schedules for Germicidal Devices and Germicidal Lamp Apparatuses Including Lens Systems

US-2014158917-A1 Lamp and Reflector Arrangements for Apparatuses with Multiple Germicidal Lamps

WO-2013106076-A1 Ultraviolet discharge lamp apparatuses having optical filters which attenuate visible light

US-2013002445-A1 Door Movement Sensors and Use Thereof by Apparatuses

US-2013224086-A1 Germicidal Systems and Apparatuses having Hollow Tumbling Chambers

WO-2015054389-A2 Containment curtains as well as systems and apparatuses including same

US-9517284-B1 Germicidal apparatuses with configurations to selectively conduct different disinfection modes interior and exterior to the apparatus

WO-2016044759-A1 Room and area disinfection utilizing pulsed light with modulated power flux and light systems with visible light compensation between pulses

US-9867894-B2 Germicidal apparatuses with configurations to selectively conduct different disinfection modes interior and exterior to the apparatus

US-2017216472-A1 Pre-Doffing Disinfection Systems And Methods

US-2017360977-A1 Systems, Cabinets And Methods For Disinfecting Objects

US-2017224858-A1 Support Structures, Cabinets And Methods For Disinfecting Objects

WO-2017152163-A1 Smoke detectors with light shields and alarm systems including such

WO-2017127438-A1 Smoke detector shields and related methods

GB-2527964-A Ultraviolet discharge lamp apparatuses with multi-paneled optical filters

WO-2017004238-A1 Germicidal apparatuses with configurations to selectively conduct different disinfection modes interior and exterior to the apparatus

Additional patents published and filed.

Selected Funding

National Institutes of Health, Institute for Nursing Research

2018 start

Improving Patient Outcomes through Tracking and Displaying the Disinfection Status of Equipment and Area, 2R44NR016638-02 (**PI: Stibich**) Award amount: ~\$970,000

National Institutes of Health, Institute for Nursing Research

2016 start

Improving Patient Outcomes through Tracking and Displaying the Disinfection Status of Equipment and Area, 2R44NR016638-01 (**PI: Stibich**) Award amount: ~\$150,000

Xenex Disinfection Services, LLC

2009 start

Commercialize pulsed xenex ultraviolet disinfection technology for the reduction of hospital acquired infections

Investment amount raised: over \$100,000,000

RUSaid - Russian Ministry of Finance/AIDS infoshare

2013 start

Implement project proving HIV prevention to migrants and vulnerable populations in Central Asia and Armenia.

Award amount: \$13,000,000

USAID REACH Program

2006-2008

Implement project proving treatment information to People Living with HIV/AIDS Award amount: \$150,000

Global Fund to Fight AIDS, Tuberculosis, and Malaria

2004-2010

Russia NGO coalition proposal; assisted with AIDS infoshare components. Award amount: \$120,000,000, AIDS infoshare amount: ~\$30,000,000

Ford Foundation 2003 -2005

Needs Assessment of People Living with HIV/AIDS in Russia Award amount: \$135,000.

GTZ 2004-2005

Global Fund Backup Initiative Award amount: \$150,000.

Schweitzer Community Health Fellow

Project Title: Community Radio in Baltimore, MD.

National Institutes of Health

2000-04 award

2003-04 award

Pre-doctoral National Research Service Award; National Center for Complementary and Alternative Medicine

Award amount: ~\$80,000

Open Society Institute

2001, 2002, 2003, 2004 awards

Youth Media Initiatives award for Uniquely Spoken–Baltimore Youth Radio Award amount (4 year total): \$120,000.

Other Experience

Research Collaboration, Xenex Disinfection Services, LLC

2010-present

Collaborated with investigators and awarded funding for research projects relating to nosocomial infections and environmental hygiene. Research sites include VISN-17 (PI: Jinadatha); MD Anderson Cancer Center (PI: Chemaly) each for more than \$250,000.

Media appearances, various

Local, regional and national media (radio, television and print) including CNN (Anderson Cooper), National Public Radio, TEDx BeaconStreet, Voice of America and the Doctors.

Scientific presentations, various

President of the Board, Mikey's Place, Inc.; Houston, TX; 2006-present.

Founding president of a 501(c)(3) organization dedicated to providing information and resources to families with special needs children.

Founder and Project Manager; Uniquely Spoken Youth Radio; Baltimore, MD; 2000-2004. Established a youth-led radio project entitled Uniquely Spoken to allow youth a voice in the media and to train youth in viable skills.

Peace Corps Health Trainer; Ulaanbaatar, Mongolia; June 1999-September 1999.

Peace Corps Health Volunteer; Darkhan Medical College, Mongolia; 1996-1998.

Journal Reviewer, various journals.

Updated May 9, 2016