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CURRICULUM VITAE

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Present position Director,
Department of Communicable Diseases Control and Prevention,
Eastern Mediterranean Regional Office,
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Date of birth February 6, 1964

Place of birth Lebanon

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WHO/EMRO
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Education

1981-1984	B.S. (Biology), American University of Beirut, Beirut, Lebanon
1984-1988	M. D., American University of Beirut, Beirut, Lebanon
1993-1995	Epidemiology Intelligence Service (EIS), CDC (EIS is a two year public health field training program in epidemiology, with a diploma from CDC)
1991	American Board of Internal Medicine
1995	American Board of Infectious Diseases (and recertified in 2005)
2004	Certificate in Tropical Medicine and Hygiene, American Society for Tropical Medicine and Hygiene

Languages

Fully proficient (writing, speaking) in Arabic, French and English; fair knowledge of Spanish (speaking and reading)

Professional Post Graduate training

1988-1989	Intern, Internal Medicine, Emory University Hospitals, Atlanta, GA

1989-1991	Resident, Internal Medicine, Emory University Hospitals, Atlanta, GA
1991-1993	Fellow, Infectious Diseases, Emory University Hospitals, Atlanta, GA
1993-1995	Epidemiology Intelligence Service (EIS) Officer, Emerging Bacterial and Mycotic Diseases Branch, DBMD, NCID, CDC

Professional appointments

2008- June 2016	Director, Division of Bacterial Diseases, National Center for Immunizations and Respiratory Diseases, CDC, Atlanta, GA
2005-2009	Director, the GAVI Hib Initiative, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD (www.HibAction.org)
2003-2005	Head, Disease Surveillance Program, Navy Medical Research Unit 3, Cairo, Egypt (NAMRU-3) (CDC overseas assignment)
1999-2003	Epidemiology Section Chief, Mycotic Diseases Branch, DBMD, NCID
1995- 1999	Medical Epidemiologist, Mycotic Diseases Branch, DBMD, NCID
1998- 2001	Clinical Assistant Professor of Medicine, Emory University School of Medicine
2001-	Clinical Associate Professor of Medicine, Emory University School of Medicine
2005-	Visiting Professor, Department of International Health, Johns Hopkins Bloomberg School of Public Health
2010-	Clinical Professor of Medicine, Emory University School of Medicine
2011-	Visiting Professor, School of Public Health, Emory University

Certification

2004	Certificate in Tropical Medicine and Hygiene, American Society for Tropical Medicine and Hygiene
2005	American Board of Infectious Diseases-Recertification
1995	American Board of Infectious Diseases
1991	American Board of Internal Medicine

Licensure (s)

1988	Educational Commission of Foreign Medicine Graduates Certificate
1989- Ongoing	Georgia (License #034992)

Membership of professional societies

American Society of Microbiology

Infectious Diseases Society of America, Fellow (served on IDSA Public Health committee 2012-13)
International Society for Infectious Diseases (Executive Committee- Secretary and Chair of research subcommittee)
Infectious Diseases Society of Georgia
International Society for Human and Animal Mycology (ISHAM)
American Society of Tropical Medicine and Hygiene
American Epidemiological Society

Awards and honors

1982-1984	Faculty of Arts and Sciences Dean's Honor List. American University of Beirut
1986-1987	Medical School Dean's Honor List. American University of Beirut
1995	NCID Group Award, Operational research. NCID. CDC
1996	NCID Group Honor Award. International Health. NCID. CDC
2001	CDC Group Award for participation in post 9/11/01 emergency response
2005	US Navy Meritorius Civilian Service Medal
2007	James Nakano citation for the paper "Population-based surveillance for cryptococcosis in Gauteng province, South Africa".
2009	CDC Group Award for Global Health Achievement."the Hib Initiative"
2011	CDC Group award for Global Health Response – Cholera in Haiti
2012	CDC Center for Global Health Award for Hardship and difficult circumstances. for the SURVAC (surveillance in Central Africa) project.
2012	CDC NCIRD award for outstanding commitment to enhance the capacity of global laboratories for diagnosis and prevention of bacterial diseases
2014	**Federal Employee of the Year, Samuel Heyman Service to America Medal (Sammies)**

Consultancies (selected)

1996-2016	Temporary Advisor. WHO
2001- 2005	FDA consultant - Advisory committee for new biological products
2001	NIH consultant - HIV/AIDS Therapeutics Working Group
2001	CDC, Epidemiology Program office; Short term assignment as a resident advisor to the Jordanian Field Epidemiology Training Program (Amman. Jordan)
2009	Saudi Arabia – Consultation re: preparedness for H1N1 prior to the Hajj
2014- 2016	Represents CDC at the IOM forum "Investing in young children globally"

International experience/projects

1996-2016	As a WHO advisor, participated in multiple consultancies and training activities: in Burkina Faso (assisted the MOH, in disease control activities, during the meningococcal meningitis epidemic 1996), Republic of Congo (multi-country workshop for bacterial meningitis, 1996), Bahrain (evaluation of Hib disease burden 1998, which resulted in introduction of Hib vaccines shortly after), Yemen (training for preparedness for epidemics, 1999), Syria (evaluation of Hib disease burden 1998, assessment prior to introduction of Hib vaccines, 2000), Tunisia (assessment of bacterial meningitis surveillance, following introduction of Hib vaccines, 2002)]
1996	Assessment of risk factors for lymphocutaneous sporotrichosis, Abancay, Peru (in collaboration with the Instituto Nacional de Salud)
1999	Assessment of cost-effectiveness of Hib vaccines in Egypt (in collaboration with the MOHP and NAMRU-3)
2001-2002	Evaluation of burden of fungal opportunistic infections in Thailand, and cost-effectiveness of antifungal prophylaxis in persons with AIDS (in collaboration with the MOH and GAP program)
2002	Evaluation of capacity for diagnosis and management of opportunistic fungal infections in Vietnam (in collaboration with the MOH and GAP program)
2002-2004	Implementing population-based surveillance for cryptococcosis in Gauteng province (Johannesburg), South Africa (in collaboration with the National Institute of Health)
2004-2007	Implementing a network for bacterial meningitis surveillance in the eastern Mediterranean region (in collaboration with WHO/EMRO and the countries MOH: the program started in Jan. 2004, and so far surveillance has been implemented in 4 countries: Sudan, Yemen, Syria and Pakistan, in addition to Egypt. The process involved initial assessment of each country's surveillance situation, followed by training, then follow-up visits and evaluation)
2005- 2009	As part of the Hib Initiative activities, was responsible to accelerate decisions for Hib vaccine uptake in 72 developing countries in Africa, Asia, Europe, the Pacific Islands, and the Middle East. As a result, between July 2005 and June 2009, conducted over 150 international trips to more than 30 countries, either for direct country assessments and consultation, meetings with country officials, often including ministers of

	health or their deputies, or to attend regional meetings for WHO, UNICEF, GAVI or other major immunizations meetings. The objectives of these meetings were to increase awareness about issues related to Hib disease and pneumonia prevention in general, and Hib vaccine in particular, and to meet with EPI managers and other country and regional representatives. In addition, I was invited to multiple international meetings to report on the progress of the Hib Initiative, and lessons learned during the implementation of the project.
2005-2007	As part of the Hib Initiative, participated in a large pilot study conducted in 3 states in India (Tamil Nadu, Chandigarh, Kolkatta) to assess feasibility of conducting population-based study for bacterial pneumonia and meningitis. Visited all sites involved and attended 3 meetings of the study steering committee and investigators in New Delhi.
2008-2016	Member, the WHO EMRO Immunizations Regional Technical Advisory Group
2009- 2014	Co-investigator in SURVAC, Surveillance in Central Africa, a project to build public health capacity with a focus on surveillance for vaccine preventable diseases in three Central African countries (Cameroun, DRC and CAR).
2009- 2011	Member, Advisory board. "Accelerating decisions for vaccine introduction in low middle income countries", a project supported by WHO and the BMGF
2012-2016	Led a team from CDC to support investigation of the first case of novel Coronavirus in Kingdom of Saudi Arabia, October 2012, then participated in multiple missions as CDC team lead to Jeddah EOC (June 2014) and high level mission to review MERS situation (Jan 2016)
2013	Co-chaired the Global Health day meeting at CDC, March 2013
2014-16	Serves on the DSEMB of Optimunize, a study looking at the impact of an early dose of measles vaccine on child mortality in Guinea Bissau and Burkina Faso
2015-	Member, ADVAC (Merieux Foundation Vaccinology course) Organizing Committee
2014-2015	Multiple deployments for **Ebola response** in W Africa: October 2015: Assessment of Mali's preparedness and led the CDC team that responded to the first Ebola case in **Mali**. December 2014: led the CDC STRIVE (Ebola vaccine) team in **Sierra Leone** and helped set up infrastructure for the vaccine trial; March-April 2015: led the CDC response team in

Guinee, coordinating all elements of the response with country's MOH and EOC, including surveillance. contact tracing. infection control. borders health, EOC management and communications

Management responsibilities

July 2016- As director of the department of communicable diseases at WHO/EMRO. I provide leadership and strategic guidance for communicable diseases in the middle east region, including the regional office and EMR 22 countries (units in the department include Immunization. Malaria and other vector borne diseases, HIV/AIDS, Tuberculosis, Public health laboratories and Blood transfusion services. Neglected Tropical Diseases. Antimicrobial surveillance and infection control. and Integrated Surveillance), and provide technical assistance and advice to the emergency department re: infectious diseases outbreaks. We are responsible for setting up regional policies and guidelines for all these Communicable Diseases areas. and support countries technically to implement various interventions to control and prevent these diseases, working closely with various ministries of health, planning, and partners and donors. I often represent EMRO at various high level global meetings relevant to Communicable Diseases and Regional Health. In addition. I am part of the senior management team for WHO/EMRO which includes directors of other departments (non communicable diseases. health promotion. health systems. information systems and research) which provides full engagement in key issues facing countries, and various global health priorities (with a focus on SDGs. Universal health coverage, and strengthening health systems).

2008- 2016 As director of the division of bacterial diseases. I provided leadership and strategic guidance for the division and manage about 180 staff including scientists (physicians, laboratorians and other public health professionals) and administrative support staff.

2005-2013 As director of the Hib Initiative, I managed a domestic and international team of professional staff (including epidemiologists. economists and communications specialists) and support staff. about 50 individuals. located at four institutions (CDC, WHO. LSHTM. JHSPH) in the US, Geneva and London. I worked directly with high level decision makers in ministries of health in many GAVI eligible countries. and many international organizations. including UN. NGOs and civil societies.

2003-2005 Job in Egypt involved management of a large group of scientists and administrative staff (around 100 persons). as well as various projects in Egypt and other countries in the Eastern Mediterranean region. Projects in Egypt were in collaboration with the Ministry of Health. and focused on development of a national infection control program. implementation of a

national electronic disease surveillance program throughout the country, and establishing surveillance networks for meningitis, pneumonia and febrile illness. Also developed multiple collaborations with other MOHs in the region, and with WHO EMR office.

1998-2002 Chief of the Epidemiology Unit, MDB, and responsible for day to day management of a group that includes epidemiologists (staff and in training), a statistician, a surveillance coordinator and administrative assistants.

1995-2002 Primary manager (Project Officer) of various epidemiologic projects in the U.S. and internationally (examples include: Surveillance for invasive fungal infections in transplant recipients- 25 US hospitals/in collaboration with the Univ. of Al, Birmingham and the Mycoses Study Group, NIH; Surveillance for cryptococcosis- South Africa/in collaboration with the South African Institute of Medical Research. Evaluation of surveillance for opportunistic infections- Thailand/ in collaboration with the Ministry of Health).

Editorial reviewer

Archives of Internal Medicine
Clinical Infectious Diseases
Emerging Infectious Diseases Journal
Epidemiologic Reviews
European Journal of Epidemiology
Journal of Infectious Diseases
Medical Mycology
Antimicrobial Agents and Chemotherapy
Lebanese Medical Journal
Eastern Mediterranean Health Journal
Vaccine
Journal of Infection and Public Health
International J of Public Health
Health policy and planning

Editorial board member – International Journal of Infectious Diseases

Principal editor - Special supplement for J Pediatr. 2013 Jul;163(1 Suppl): dedicated to studies supported by the Hib Initiative.

Journal articles (Over 150 peer reviewed publications and book chapters)

Invited Speaker (at many International and National scientific and public health meetings)

Journal articles

1. Swartley JS, McAllister CF, **Hajjeh RA**, Heinrich DW. Stephens DS. Deletions of Tn916-like transposons are implicated in tetM mediated resistance in pathogenic Neisseria. Molec. Microbiol. 1993; 10: 361-9.

2. **Hajjeh RA**, Blumberg HM. *Trichosporon beigelii* blood stream infection in a burn patient: case report and review of therapy. Clin. Infect. Dis. 1995: 20: 913-16.

3. Stephens DS, **Hajjeh RA**, Baughman WS, Harvey C, Wenger JD, Farley MM. Sporadic meningococcal disease in adults: results of a 5-year population-based study. Ann. Intern. Med. 1995; 123: 937-40.

4. Keller DW, **Hajjeh RA**, DeMaria A, Fields BS, Pruckler JM, Benson RS, Kludt PE, Lett SM, Mermel LA, Giorgio C. Community outbreak of Legionnaire's disease: an investigation confirming the potential for cooling towers to transmit Legionella. Clin. Infect. Dis. 1996;22: 257-61.

5. Brandt ME, Pfaller MA, **Hajjeh RA**, Graviss EA, Rees J, Spitzer ED. Pinner RA. Mayer LW, and the Cryptococcal Disease Active Surveillance Group. Molecular subtypes and antifungal susceptibilities of serial *Cryptococcus neoformans* isolates in human immunodeficiency virus-associated cryptococcosis. J. Infect. Dis. 1996: 174:812- 20.

6. Schneider E, **Hajjeh RA**, McNeil M, Hutwagner L, Gunn R, Reef S, Spiegel R, Pinner R, Kaufman L, Feldman G, Kaufman L, Pappagianis D, Werner SB. An outbreak of coccidioidomycosis in Ventura County, California, following the Northridge earthquake. JAMA 1997; 277: 904-8.

7. **Hajjeh R**, McDonnell S, Reef S, Hankins M, Toth B, Padhye A, Kaufman L, Hutwagner L, Hopkins R, McNeil M. An outbreak of sporotrichosis among tree nursery workers. J. Infect. Dis. 1997; 176: 499-504.

8. Rees JR, Pinner RW, **Hajjeh RA**, Brandt ME, Reingold AL. The epidemiologic features of invasive mycotic infections in the San Francisco Bay Area 1992-1993: results of population-based laboratory active surveillance. Clin. Infect. Dis. 1998: 27: 1138-47.

9. Ampel NA, Mosley DG, England BE, Vertz DP, Komatsu K, **Hajjeh RA.** Coccidioidomycosis in Arizona: increase in incidence from 1990-95. Clin. Infect. Dis.1998; 27: 1528-30.

10. Pfaller MA, Messer SA, Hollis RJ, Jones RN, Doern GV, Brandt ME, **Hajjeh RA.** In vitro susceptibilities of Candida bloodstream isolates to the new triazole antifungal agents BMS-207147, Sch 56592, and voriconazole. Antimicrob. Agents Chemother. 1998; 42: 3242- 4.

11. **Hajjeh RA**, Conn LA, Stephens DS, Baughman W, Hamill R, Graviss E, Pappas PG, Thomas C, Reingold A, Rothrock G, Hutwagner LC, Schuchat A, Brandt ME, Pinner RW, and the Cryptococcal Active Surveillance Group. Cryptococcosis in the United States: population-based multistate active surveillance and risk factors in HIV-infected persons. J. Infect. Dis. 1999; 179: 449-54.

12. Pfaller MA, Messer SA, Hollis RJ, Jones RN, Doern GV, Brandt ME, **Hajjeh RA**. Trends in species distribution and susceptibility to fluconazole among blood stream isolates of *Candida* species in the United States. Diagn. Microbiol. Infect. Dis. 1999; 33: 217-22.

13. Pizzini CV, Zancope-Oliveira RM, Reiss E, **Hajjeh R**, Kaufman L, Peralta JM. Evaluation of a western blot test in an outbreak of acute pulmonary histoplasmosis. Clin. Diagn. Lab. Immunol. 1999; 6: 20-3.

14. Pfaller MA, Zhang J, Messer SA, Brandt ME, **Hajjeh RA**, Jessup CJ, Tumberland M, Mbidde EK, Ghannoum MA. In vitro activities of voriconazole, fluconazole, and Itraconazole against 566 clinical isolates of *Cryptococcus neoformans* from the United States and Africa. Antimicrob. Agents Chemother. 1999; 43: 169-71.

15. Kao AS, Brandt ME, Pruitt WR, Conn LA, Perkins BA, Stephens DA, Baughman WS, Reingold AL, Rothrock GA, Pfaller MA, Pinner RW, **Hajjeh RA**. The epidemiology of candidemia in 2 U.S. cities: results of a population-based active surveillance. Clin. Infect. Dis. 1999; 29: 1164-70.

16. Louie L, Ng S, **Hajjeh R**, Werner B, Vugia D, Talbot R, Reingold A, Klitz W. Influence of host genetics in the severity of coccidioidomycosis . Emerg. Infect. Dis. 1999; 5: 672-680.

17. Ashford D, Hajjeh RA, Kelley M, Kaufman L. Hutwagner L. McNeil M. Outbreak of histoplasmosis among cavers attending the national speleological society annual convention, Texas, 1994. Am. J. Trop. Med. Hyg. 1999; 60: 899-903.

18. Hajjeh RA, Reingold A, Weil A, Shutt K, Schuchat A. Perkins BA. Toxic shock syndrome in the United States: surveillance update, 1979-1996. Emerg. Infect. Dis. 1999; 5: 807-10.

19. Woods CW, McRill C, Plikaytis BD. Rosenstein N. Mosley D. Boyd D. England B, Perkins BA, Ampel NM. Hajjeh RA. Coccidioidomycosis in HIV-infected persons in Arizona, 1994-1997: incidence, risk factors. and prevention. J. Infect. Dis. 2000; 181: 1428-34.

20. Leake JAD, Mosley DG, England B, Graham JV, Plikaytis BD, Perkins BA, Ampel NM,Hajjeh RA. Risk factors for acute symptomatic coccidioidomycosis among elderly persons in Arizona, 1996-1997. J. Infect. Dis. 2000; 181: 1435-40.

21. Brandt ME. Harrison LH, Sofair A. Li R-K. Morrison CJ. Warnock DW. Hajjeh RA for the CDC Candidemia Surveillance Group. Candida dubliniensis fungemia: report of the first four North American cases. Emerg Infect Dis. 2000; 6: 46-9.

22. Cairns L, Blythe D, Kao A, Pappagianis D, Kaufman L. Kobayashi J, Hajjeh RA. An outbreak of coccidioidomycosis in Washington State residents returning from Mexico. Clin. Infect. Dis. 2000; 30: 61-4.

23. Wheat LJ. Chetchotisakd P. Williams B. Connolly P. Shutt K. Hajjeh RA. Predictors of severity in histoplasmosis in AIDS. Clin. Infect. Dis. 2000; 30: 877-81.

24. Popovic T, Sacchi CT, Reeves MW, Whitney AM. Mayer LW. Noble C, Ajello GW, Mostashari F, Bendana F, Lingappa J, Hajjeh R. Rosenstein NE. Neisseria meningitidis serogroup W135 isolates associated with the ET-37 complex. Emerg. Infect. Dis. 2000; 6:

25. Ghannoum MA. Hajjeh RA. Scher R. Konnikov N. Gupta AK. Summerbell R. et al. A large scale North American study of fungal isolates from nails: the frequency of onychomycosis, fungal distribution, and antifungal susceptibility patterns. J. Am. Acad.
Dermatol. 2000; 43: 641-48.

26. Rosenstein NE. Emery KW, Werner SB. Kao A. Johnson R. Rogers D. Vugia D. Reingold A, Talbot R. Plikaytis BD. Perkins BA. Hajjeh RA. Risk factors for severe pulmonary and disseminated coccidioidomycosis. Kern County. CA 1995-1996. Clin. Infect. Dis. 2001;32:708-15.

27. Hajjeh RA, Pappas PG, Henderson H, Lancaster D. Bamberger DM. Skahan KJ. Phelan MA, Cloud G, Holloway M, Kauffman CA. Wheat LJ. and the NIAID Mycoses Study Group. Multicenter, case-control study of risk factors for histoplasmosis in HIV-infected persons. Clin. Infect. Dis. 2001: 32:1215-20.

28. Hannah EL, Bailey AM, Hajjeh RA. Gershman K. Lindsley MD. Hoffman RE. Blastomycosis in Colorado: public health response to two clinical cases. Clin. Infect. Dis. 2001;32:E151-3.

29. McNeil MM, Nash SL, Hajjeh RA, Phelan MA. Conn LA. Plikaytis BD. Warnock DW. Trends in Mortality Due to Invasive Mycotic Diseases in the United States 1980-1997. Clin Infect Dis. 2001;33:641-647.

30. Lyon GM, Smilack JD, Komatsu KK, Pasha TM, Leighton JA. Guarner J. Colby TV, Lindsley MD. Phelan M. Warnock DW. Hajjeh RA. Gastrointestinal Basidiobolomycosis in Arizona: Clinical and Epidemiologic Characteristics and Review of the Literature. Clin Infect Dis 2001;32:1448-5

31. Hajjeh RA, Warnock DW. Invasive Aspergillosis and the Environment: rethinking our approach to prevention. Clin Infect Dis 2001;33:1549-52.

32. Miller LG, Hajjeh RA, Edwards JE. Estimating the cost of nosocomial candidemia in the United States (letter). Clin. Infect. Dis. 2001: 32: 1110.

33. Price NO, Hacker JK. Silvers JH. Crawford-Miksza L. Hendry RM. Flood J. Hajjeh RA,Reingold AL, Passaro DJ. Adenovirus Type 3 Viremia in an Adult with Toxic Shock-Like Syndrome. Clin Infect Dis 2001;33:260-2.

34. Brandt ME, Pfaller MA, Hajjeh RA, Hamill RJ. Pappas PG. . Trends in Antifungal Drug Susceptibility of Cryptococcus neoformans Isolates from the United States: 1992-94 and 1996-98. Antimicrob Agents Chemother. 2001;45:3065-9

35. Hajjeh RA, Relman D. Cieslak PR. et al. Surveillance for Unexplained Deaths and Critical Illnesses Due to Possibly Infectious Causes. U.S.A.. 1995-98. Emerg Infect Dis J 2002; 8:145-53.

36. Warnock DW, Hajjeh RA, Lasker BA. Epidemiology and Prevention of Invasive Aspergillosis. Curr Infect Dis Rep 2001:3:507-516

37. Hajjeh RA. Tinea capitis: a public health perspective. Contemporary Pediatrics: 2001; September suppl. p 12.

38. Anil A. Panackal AA, M'ikanatha NM. Tsui F, McMahon J. Wagner MM. Dixon BW, Zubieta J, Phelan M, Mirza S, Morgan J. Jernigan D. Pasculle AW. Rankin

JT, Jr., Hajjeh RA, Harrison LH. Automatic Electronic Laboratory-Based Reporting of Notifiable Infectious Diseases at a Large Health System. Emeg. Infect. Dis. 2002;8:685-91.

39. Arthington-Skaggs BA, Lee-Yang W, Ciblak MA. Frade JP. Brandt ME. Hajjeh RA, Harrison LH, Sofair AN, Warnock AD. Comparison of Visual and Spectrophotometric Methods of Broth Microdilution MIC End Point Determination and Evaluation of a Sterol Quantitation Method for In Vitro Susceptibility Testing of Fluconazole and Itraconazole against Trailing and Nontrailing Candida Isolates. Antimicrob Agents Chemother 2002;46:2477-2481

40. Trick WE, Fridkin SK, Edwards JR, Hajjeh RA, et al. Epidemiology of hospital-acquired candidemia among intensive care unit patients in the United States during 1989-1999. Clin Infect. Dis. 2002; 35:627-30.

41. Karimi K, Wheat LJ, Connolly PA, Cloud G, Hajjeh RA, Wheat E. et al. Differences between histoplasmosis in patients with AIDS in the United States and Brazil. J. Infect. Dis. J Infect Dis. 2002;186:1655-60.

42. Puneet K. Dewan. Alicia M. Fry, ...Ali S. Khan, Rana A. Hajjeh. Anne Schuchat, and members of the Washington, D.C. Anthrax Response Team. An Outbreak of Inhalational Anthrax Among Postal Workers at the Washington. D.C. Processing and Distribution Center, 2001. Emerg Infect Dis 2002;8: 1066-72.

43. Vincent P. Hsu, Susan L. Lukacs,.... Gregory Martin. MD, John Eisold. Anne Schuchat, Rana A. Hajjeh, MD . The Public Health Response and Epidemiologic Investigation on Capitol Hill related to the opening of a Bacillus anthracis-containing Envelope. Emerg Infect Dis 2002; 8: 1039-43.

44. GM Lyon, S Zurita, J Casquero, W Holgado, J Guevara. ME Brandt. S Douglas, K Shutt, DW Warnock, RA Hajjeh for the Sporotrichosis in Peru Investigation Team Population-based Surveillance and a Case-control Study of Risk Factors for Endemic Lymphocutaneous Sporotrichosis in Peru. Clin Infect Dis 2003; 36:34-9.

45. Ghannoum M, Isham N, Hajjeh R et al. Tinea capitis in Cleveland: survey of elementary
school students. J Am Acad Dermatol 2003;48:189-93.

46. Amornkul P, Hu DJ, Tansuphasawadikul S. Lee S, Eampokalap O. Likanonsakul S, Nelson R, Young NL, Hajjeh RA, Limpakarnjanarat K. Mastro TD . Human immunodeficiency virus type 1 (HIV-1) subtype and other factors associated with extrapulmonary cryptococcosis among patients with AIDS in Thailand. AIDS Research and Human Retroviruses 2003;19: 85-90.

47. Mirza SA, Phelan M, Rimland D, Graviss E, Hamill R. Brandt ME. Gardner T. Sattah M, Ponce de Leon G, Baughman W. Hajjeh RA. The changing epidemiology of cryptococcosis: an update from population-based active surveillance in two large metropolitan areas, 1992-2000. Clin Infect Dis. 2003 ;36:789-94.

48. Panackal AA, Dahlman A, Keil KT, Peterson CL, Mascola L. Mirza S. Phelan M, Lasker BA, Brandt ME, Carpenter J. Bell M. Warnock DW. Hajjeh RA. Morgan J. Outbreak of invasive aspergillosis among renal transplant recipients. Transplantation. 2003;75:1050-3.

49. Cano MV, Ponce-de-Leon GF, Tippen S, Lindsley M. Warwick M. Hajjeh RA. Blastomycosis in Missouri: Epidemiology and Risk Factors for Endemic Disease. Epidemiology and Infection 2003; 131: 907-14.

50. Lingappa JR, Al-Rabeah AM, Hajjeh R, Mustafa T, Fatani A, Al-Bassam T, Badukhan A, Turkistani A, Al-Hamdan N. Al-Jeffri M. Al Mazrou Y. Perkins BA, Popovic T. Mayer LW. Rosenstein NE. Serogroup W-135 Meningococcal Disease during the Hajj, 2000. Emerg Infect Dis. 2003;9:665-71

51. Petersen L, Marshall S, Barton C, Hajjeh R, Lindsley M, Warnock D, Panackal A, Shaffer J, Haddad M, Fisher F, Dennis D, Morgan J. Coccidioidomycosis outbreak among workers at an archeological site; evidence of a new endemic focus in Northeastern Utah. Emerg. Infect. Dis. 2004:10:637-42.

52. Weinberg M, Weeks J, Lance-Parker S, Traeger M. Wiersma S. Phan Q. Dennison D. MacDonald P, Lindsley M, Guarner J. Connolly P. Cetron M. and **Hajjeh R**. Severe Histoplasmosis in Travelers to Nicaragua. Emerg Infect Dis 2003; 9: 1322- 1325.

53. Ashford DA, Savage HM, **Hajjeh RA,** McReady J. Bartholomew DM, Spiegel RA, Vorndam V, Clark GG, Gubler DG. Outbreak of dengue fever in Palau. Western Pacific: risk factors for infection. Am J Trop Med Hyg. 2003:69:135-40.

54. Morgan J, Cano MV, Feikin DR. Phelan M. Monroy OV. Morales PK. Carpenter J, Weltman A, Spitzer PG, Liu HH, Mirza SA, Bronstein DE. Morgan DJ. Kirkman LA, Brandt ME, Iqbal N, Lindsley MD, Warnock DW. **Hajjeh RA**; Acapulco Histoplasmosis Working Group. A large outbreak of histoplasmosis among American travelers associated with a hotel in Acapulco. Mexico. spring 2001. Am J Trop Med Hyg. 2003;69:663-9.

55. **Hajjeh RA**, Sofair AN, Harrison LH. Lyon GM. Arthington-Skaggs BA. Mirza SA, Phelan M. Morgan J, Lee-Yang W. Ciblak MA. Benjamin LE. Thomson Sanza L, Huie S, Yeo SF, Brandt ME. and Warnock DW. Population-Based Active Surveillance of Bloodstream infections due to Candida species: Incidence

and In Vitro Susceptibilities of Isolates, 1998 to 2000. J. Clin. Microbiol. 2004; 42:1519-27.

56. Kuhn DM, Mukherjee PK, Clark TA, Pujol C, Chandra J, **Hajjeh RA**, Warnock DW, Soll DR, Ghannoum GA. *Candida parapsilosis* Characterization in an Outbreak Setting. Emerg Infect Dis 2004; 10: 1074-81

57. Chamany S, Mirza SA, Fleming JW, Howell JF, Lenhart SW, Mortimer VD, Phelan M, Lindsley MD, Iqbal NJ, Wheat LJ, Brandt ME, Warnock DW, **Hajjeh RA.** A Large Histoplasmosis Outbreak among High School Students in Indiana, 2001. Pediatr. Infect. Dis. J. 2004;23:909-14.

58. Tablan OC, Anderson LJ, Besser R, Bridges C, **Hajjeh R**: CDC: Healthcare Infection Control Practices Advisory Committee. Guidelines for preventing health-care--associated pneumonia, 2003: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee. MMWR Recomm Rep. 2004 Mar 26;53(RR-3):1-36

59. Clark TA, Slavinski SA, Morgan J, Lott T, Arthington-Skaggs BA, Brandt ME, Webb RM, Currier M, Flowers RH, Fridkin SK, **Hajjeh RA**. Epidemiologic and molecular characterization of an outbreak of Candida parapsilosis bloodstream infections in a community hospital. J Clin Microbiol. 2004 :42:4468-72.

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Invited review articles

1- **Hajjeh RA,** Brandt ME, Pinner RW. The emergence of cryptococcal disease: epidemiologic perspectives 100 years after its discovery. Epidemiol.Rev. 1996: 17: 303-20.

2- **Hajjeh RA,** Ampel NM. Histoplasmosis and coccidioidomycosis in persons with HIV infection: management and prospects for prevention. Infect. Dis. Clin. Prac. 1996; 5: 126-29.

3- **Hajjeh RA.** Disseminated histoplasmosis in persons infected with HIV. Clin. Infect. Dis. 1995; 21 (suppl 1): S108-110.

4- Pinner RW, **Hajjeh RA,** Powderly W. Prospects for prevention of cryptococcosis in persons with HIV infection. Clin. Infect. Dis. 1995; 21 (suppl 1): S103-107.

5- Warnock DW, **Hajjeh RA**, Lasker BA. Epidemiology and prevention of invasive aspergillosis. Curr Infect Dis Rep 2001;3:507-516.

6- **Hajjeh RA,** Lyon GM. The Epidemiology of Candida Infections in Intensive Care Units. Fungal Infections in the Intensive Care Units. Warnock D and Barnes R, eds, Kluwer Academics, 2002.

7- Panackal A, **Hajjeh RA,** Cetron M, Warnock DW. Travel Medicine: Fungal Infections Among Returning Travelers. Clin. Infect. Dis. 2002; 35:1088-95.

8- Kauffman CA, **Hajjeh RA,** Chapman SW. for the Mycoses Study Group. Practice guidelines for the management of patients with sporotrichosis. Clin. Infect. Dis. 2000; 30:684-87.

9- Thomas A. Clark and **Rana A. Hajjeh**. Epidemiology of invasive mycoses. Recent trends in the epidemiology of invasive mycoses. Current Opinion in Infectious Diseases 2002; 15: 569-74

10- Cano M, **Hajjeh RA.** The epidemiology of histoplasmosis. a review. Seminars in Respiratory Infections 2001;16:109-118.

Book chapters

1. **Hajjeh RA,** Saag MS, Pinner RW, Dismukes WE. Histoplasmosis. In: Hurst JW, ed. Medicine for the practicing physician. 4th edition. Connecticut: Appleton & Lange; 1995.

2. **Hajjeh RA,** Saag MS, Pinner RW, Dismukes WE. Coccidioidomycosis. In: Hurst JW, ed. Medicine for the practicing physician. 4th edition. Connecticut: Appleton & Lange; 1995.

3. Pinner RW, Saag MS, **Hajjeh RA**, Dismukes WE. Cryptoccocosis. In: Hurst JW, ed. Medicine for the practicing physician. 4th edition. Connecticut: Appleton & Lange; 1995.

4. **Hajjeh RA**, Warnock DW. *Aspergillus* species. In: Long SS. Pickering L. Prober CG. eds. Principles and Practice of Pediatric Infectious Diseases. 2nd ed. Orlando: Harcourt, 2002:1213-20.

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Prober CG, eds. Principles and Practice of Pediatric Infectious Diseases. 2nd ed. Orlando: Harcourt, 2002:1222-5.

6. **Hajjeh RA**, Warnock DW. *Malassezia* species. In: Long SS. Pickering L. Prober CG, eds. Principles and Practice of Pediatric Infectious Diseases. 2nd ed. Orlando: Harcourt, 2002:1225-7.

7. **Hajjeh RA**, Warnock DW. *Sporothrix schenckii*. In: Long SS. Pickering L. Prober CG, eds. Principles and Practice of Pediatric Infectious Diseases. 2nd ed. Orlando: Harcourt, 2002:1227-9.

8. **Hajjeh RA**, Warnock DW. *Cryptococcus neoformans*. In: Long SS. Pickering L. Prober CG. eds. Principles and Practice of Pediatric Infectious Diseases. 2nd ed. Orlando: Harcourt, 2002:1229-33.

9. **Hajjeh RA** and Warnock DW. Introduction to the epidemiology of fungal diseases. Clinical Mycology, Oxford Univ. Press publications. 2004.

10. Levy BS, **and Hajjeh RA.** Histoplasmosis. Preventing Occupational disease and injury. 2005, second edition. American Public Health Association. Washington, DC, USA.

11. A regular contributor to the Red Book and the "Control of communicable diseases in man" book.

12. Mahoney F, **Hajjeh R**, Talaat M, Jones G, Abdel-Ghaffar A. Electronic surveillance systems for infectious diseases in countries with limited resources-Egypt (in Press). Infectious Disease Surveillance Blackwell, London. United Kingdom, 2006. (Eds N M'ikanatha, R Lynfield, C Van Beneden & H de Valk)

13. **Hajjeh R,** Jumaan A, Talaat M. Infectious Diseases in the Arab World: A focus on social determinants. Public Health and Social Determinants in the Arab World. Cambridge Univ. Press, London, United Kingdom. 2012. (Eds Jabbour, Nuwayhid, Giacaman and Khawaja).

Conference proceedings

1- **Hajjeh RA,** Reef SE, RW Pinner, MM McNeil. A cluster of coccidioidomycosis in the Massachusetts National Guard Unit. In: Proceedings of the 5th International Coccidioidomycosis conference. Stanford University. California.. Washington. D.C.: National Foundation for Infectious Diseases; 1996. Pp.408-9.

2- Ellis D, Marriott D, **Hajjeh RA**, Warnock D, Meyer W, Barton R Epidemiology: surveillance of fungal infections. Med Mycol 2000; 38 Suppl 1:173-82.

3- Marano N, Smith TL, **Hajjeh RA,** McDonald M, Bridges CB, Martin SA, Chorba T. International Conference on Emerging Infectious Diseases. 2010. Emerg Infect Dis. 2010 Nov;16(11):e1

Guidelines

1. Lenhart SW, Schafer MP, Singal M, Hajjeh RA. Histoplasmosis: protecting workers at risk. DHHS (NIOSH) publication no. 97-146. Cincinnati, Ohio: National Institute for Occupational Safety and Health; 1997.

2. Centers for Disease Control and Prevention. Guidelines for the prevention of opportunistic infections in persons infected with human immunodeficiency virus: U.S. Public Health Service (USPHS) and Infectious Diseases Society of America (IDSA). MMWR 1999; 48 (no. RR-10).

3. Centers for Disease Control and Prevention. Guidelines for the preventing opportunistic infections among hematopoietic stem cell transplant recipients: recommendations of CDC, the Infectious Diseases Society of America, and the American Society of Blood and Marrow Transplantation. MMWR 2000; 49 (no. RR-10).

4. Centers for Disease Control and Prevention. Guidelines for Preventing Health-Care--Associated Pneumonia. 2003. Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (Prepared by: Ofelia C. Tablan. Larry J. Anderson, Richard Besser. Carolyn Bridges. Rana Hajjeh). MMWR 2004; 53 (RR03): 1-36.

MMWR articles

1. Coccidioidomycosis following the Northridge earthquake - California. 1994. MMWR 1994; 43: 194-5.
2. Update: coccidioidomycosis - California. 1991-93. MMWR 1994: 43: 421-3.
3. Respiratory illness associated with inhalation of mushroom spores - Wisconsin. 1994. MMWR 1994; 43: 525-6.
4. Histoplasmosis - Kentucky, 1995. MMWR 1995;44: 701-3.
5. Blastomycosis - Wisconsin, 1986-95. MMWR 1996: 45: 601-3.
6. Coccidioidomycosis - Arizona. 1990-95. MMWR 1996: 45: 1069-73.
7. Blastomycosis acquired occupationally during prairie dog relocation. MMWR 1999; 48: 98-100.
8. Gastrointestinal basidiobolomycosis - Arizona. 1994-1999. MMWR 1999: 48: 710-13.
9. Coccidioidomycosis in travelers returning from Mexico - Pennsylvania. 2000. MMWR 2000; 49: 1004-6.
10. Coccidioidomycosis in Workers at an Archeologic Site---Dinosaur National Monument, Utah, June--July 2001. MMWR 2001; 50(45):1005-8
11. Increase in Coccidioidomycosis---Arizona. 1998-2001. MMWR 2003: 52 (6): 109-112.
11. Murray J, Agócs M, Serhan F, Singh S, Deloria-Knoll M, O'Brien K, Mwenda JM, Mihigo R, Oliveira L, Teleb N, Ahmed H, Wasley A, Videbaek D, Wijesinghe P, Thapa AB, Fox K, Paladin FJ, **Hajjeh** R, Schwartz S, Beneden CV, Hyde T, Broome C, Cherian T. Global invasive bacterial vaccine-preventable diseases surveillance - 2008-2014. MMWR Morb Mortal Wkly Rep. 2014; 63:1159-62.

Selected Invited lectures (Speaker at many International and National scientific and public health meetings)

1997	Focus on Fungal Infections meeting, San Antonio, TX: "The epidemiology of fungal diseases, a long way to go".
1997	European Conference on Toxic Shock Syndrome, London: "TSS surveillance in the U.S., 1986-96"
1998	Medical Mycological Society of the Americas, Atlanta, GA: "Epidemiologic perspective on fungal diseases".
1999	Focus on Fungal Infections meeting, San Diego, CA: "An update from CDC: epidemiology of fungal infections".
1999	New York State Department of Health, Albany, NY: "Epidemiologic update on fungal diseases: CDC"
2000	British Society for Medical Mycology, Stratford upon Avon, U.K.: "Epidemiology of fungal diseases: an approach for the new millennium".
2000	Fourteenth Congress of the International Society for Human and Animal Mycology, Buenos Aires, Argentina: "Surveillance for fungal diseases: challenges and opportunities"
2000	Infectious Diseases Grand Rounds, MD Anderson Hospital, Houston, TX: "Epidemiology of fungal diseases: why is it important to understand?"
2000	NIAID Workshop on the epidemiology of fungal diseases, Duke University, Durham, NC. " Population-based surveillance for fungal diseases".
2001	Arab Congress Meeting, Beirut, Lebanon. "General Approach to Infection Control", "Nosocomial Fungal Infections", "Outbreak Management and Control"
2001	American Thoracic Society meeting, San Francisco, CA. Respiratory Mycoses and The role of Molecular epidemiology.
2002	International Candida meeting, Tampa, Florida. "The changing epidemiology of candidemia", and chair of session (Jan. 2002)
2002	International Conference on *Cryptococcus neoformans*. (March 2002)

2002	Interscience Conference on Antimicrobial Agents and Chemotherapy 42nd annual meeting. "Endemic Mycoses - An Emerging Public Health Concern Among Travelers and Others" (Sept. 2002)
2002	Infectious Diseases Society of America 40th annual meeting. 'Recent Outbreaks of Endemic Mycoses' (Oct. 2002)
2003	ISHAM, San Antonio, TX, May 2003. Convener of a symposium on "Epidemiology of Mycotic Diseases" and speaker.
2003	Lebanese Infectious Diseases Society. Beirut. Lebanon. October 2003: "Burden of Infectious Diseases in the Middle East"
2004	WHO/EMRO, Jan 2004. Workshop for bacterial meningitis in the EMR, Cairo, Egypt: "Surveillance for bacterisl meningitis in Egypt, 1998-2003".
2004	WHO/EMRO, April 2004, Intercountry meeting on Emerging Infectious Diseases in the EMR. Beirut. Lebanon: "Typhoid and brucellosis in Egypt".
2004	WHO/EMRO, June 2004, International Health Regulations meeting, Sidnaya, Syria: "The role of NAMRU-3 as a collaborating center in developing surveillance networks in the EMR".
2004	WHO/EMRO, Dec 2004, Workshop for pneumococcal disease in the EMR : "Sentinel surveillance for bacterial meningitis in Egypt: a focus on *S. pneumoniae*".
2005	IDSA, San Francisco, Oct. 2005: "Brucellosis in the developing World and what physicians everywhere else should know about it."
2005	ASTMH. Washington DC, Dec. 05: "Surveillance in the developing countries: opportunities and Challenges"
2005-2009	Was invited to multiple meetings to report on issues related to Hib disease and Hib vaccine, and to report on progress of the Hib Initiative and lessons learned. This is a list of some of the major meetings to which I was invited: Eastern European Vaccine Advisory group. Moscow. Oct. 2005 WHO SAGE meeting, Nov. 2005 GAVI Board meeting, New Delhi. India. Dec. 2005

Global Immunizations meetings. Geneva June 2005. New York Feb 2006
New and underutilized Vaccine Introduction meetings. Geneva June 2005 and 2006
EPI managers meetings for the European region (EURO). Dubrovnic, April 2006
EPI managers meetings for the African region (AFRO) in Brazzaville, Congo, Dec. 06
EPI managers meetings for the Eastern Mediterranean region (EMRO), Tunisia, May 2006
National Consultation for Hib disease and vaccine. Hanoi. Vietnam, Sep. 2006
National Consultation for Hib disease and vaccine. Dhaka, Bangladesh, June 2006
Global Vaccine Research Vaccine Forum. Bangkok. Thailand. Dec. 2006
Hib and pneumococcal investigators meeting. Dhaka. Bangladesh. March 2006
Hib and pneumococcal investigators meeting. Bangkok. Thailand, March 2007
National Immunizations Conference, Kansas City, Missouri, March 2007
Global Action for pneumonia plan (GAPP). WHO. Geneva. Feb. 2007
New Vaccines For the Arab World. Amman. Jordan. Dec. 2007
Task Force on Immunizations for AFRO. Antananarivo. Madagascar, Dec. 2007
Johns Hopkins School of Public Health Dept of Health Systems Seminar, Feb. 06 and Oct. 07
CDC NCIRD Seminar, March 2007
WHO Global Vaccine Research Forum (GVRF). Paris. France. "An update from the Hib Initiative and lessons learned". July 08

Oct. 2007 — Keynote speaker, Lebanese Infectious Diseases Society annual meeting, "Infectious diseases in the Middle East". and "New Vaccine Issues"

Nov. 2007 — Keynote Speaker. International Society for Epidemiology. Eastern Mediterranean Branch, "Epidemiology of Infectious Diseases in the Middle East: Opportunities and Challenges". Riyadh. Saudi Arabia

June 2008 — ISSPD-6, Rekyavik, Iceland; "Lessons learned from the Hib Initiative"

Nov 2009 GAVI partners meeting. Hanoi, Vietnam. Participated in a panel re: "Future challenges for GAVI"

Nov 2010 The Royal Society 350th Anniversary. "Vaccines introduction in developing countries: challenges for decision making and introduction". London. U.K.

May 2009- 2017 Speaker/ Facilitator at ADVAC (Advanced Vaccinology Course), Merieux foundation, Annecy

September 2011 Speaker at the first India ADVAC (Advanced Vaccinology Course). Guragon, India

April 2014 represented CDC as a panelist at the C3 US-Arab Health Summit. New York City

April 2017 ECCMID speaker

October 2017 GCCMID speaker

2010-2017 Regular speaker at the Lebanese ID society annual meetings

Standard form - Proposal for nomination of the Regional Director of the Eastern Mediterranean Region of the World Health Organization

Rana A. Hajjeh, M.D., Lebanon

1) **A strong technical and public health background and extensive experience in international health:**

I bring to this position extensive international health experience, at the scientific, programmatic, policy, partnership and managerial levels. I have an experience of 25 years in public health, and am globally known as a global health expert. I have worked at the U.S. Centers for Disease Prevention and Control for 23 years, with a strong focus on global health, and at WHO for the last two years, and worked closely with many renowned public health academic institutions. I have also worked in many countries all over the world, gaining strong experience in applied epidemiology and public health, in addition to program management. I have extensive experience working in the Middle East and Africa. In 2003, I was assigned to the US NAMRU-3 in Cairo, Egypt where I worked closely with WHO/EMRO, and assisted in establishing major surveillance regional networks. While at CDC, I was involved in multiple major global outbreak responses, including meningococcal meningitis in Africa and Saudi Arabia, SARS, Cholera in Haiti, MERS in Saudi Arabia and Ebola in West Africa. Between 2005 and 2009, I was the director of the GAVI Hib vaccine initiative that supported Hib vaccine introduction in all GAVI countries and facilitated introduction of many new vaccines, allowing me to work in all regions. The Hib Initiative is known to be one of GAVI's main success stories. I have worked with WHO for over 15 years (both HQ and various regional offices) on various projects, but in 2016, I took a position at WHO/EMRO as director of the Communicable Diseases department. In this role, I worked with all countries in the region, on various areas of public health importance, and focused on building systems in countries for surveillance, laboratory, building technical capacity, as well as preparedness and response. Though I worked on various communicable diseases and health issues (HIV, epidemic diseases, vaccine preventable diseases (VPDs), child survival), my focus has never been to be an expert in one disease but rather to achieve public health outcomes and maximize impact. I fully understand and recognize the increasing importance of many non-communicable conditions and the urgent need of public health interventions to control them.

2) **Competency in organizational management**

I have long experience in organizational management, having led and managed increasingly complex programs for the last 25 years, with more staff, larger budgets and more partners. Over the years, I have learned how to best plan, organize and monitor resources of the various programs I managed in order to achieve our public health objectives. I benefited from various management courses offered at CDC to learn better organizational management, but I mainly gained the experience on the job. In order to better manage, I always set strategic guidance and vision for the programs, focusing on transparency and accountability, engagement and team building, and close monitoring of priorities. I am very familiar with the importance of strong human resources management, as staff are always the best asset of any organization, and throughout my career, I was able to recruit highly qualified staff and overall had strong staff job satisfaction. I have experience managing large and complex budgets both at CDC and WHO. At CDC, I built the Division of Bacterial Diseases (with almost 200 staff) and brought funds to support our global activities. Similarly, at EMRO, I led the Division of Communicable Diseases, in a difficult environment with many transitions and emergencies, recruited many staff to fill key vacant positions, and guided the development of a strategic plan for the division (15 years after the last one), and helped bringing additional resources from various partners. I have a strong experience in resource mobilization, working closely and successfully with multiple donors (BMGF, DoD, GAVI, Global

Fund,…), and many national and international health agencies and partners. all over the world (NIH, FDA, DoD, USAID, WHO, UNICEF,GAVI, academic institutions) and many developing countries.

3) **Proven historical evidence for public health leadership**

I served in many leadership roles at CDC, as division director, and also as CDC team leader for many emergency responses (led the epidemiology team for the anthrax response in Washington DC, 2001;led the CDC MERS team in Jeddah, KSA, 2014; led the CDC Ebola response team in Guinea, 2015,…). I was the director of the surveillance division at U.S. NAMRU-3, Cairo that managed various projects in Egypt and the region. I was the director of the GAVI Hib vaccine initiative, a project that was a consortium of four institutions (CDC, Johns Hopkins, LSHTM and WHO) and required major leadership skills to coordinate activities in all GAVI eligible countries and multiple partners. As director of communicable diseases prevention and control at EMRO, I lead a large team responsible to provide technical support to all members states in the region on various communicable diseases of public health importance, and strategically led activities with various ministries of health, partners and major donors (Global Fund, GAVI, BMGF, USAID, others).

4) **Sensitivity to cultural, social and political differences**

I grew up in Lebanon, mostly during the civil war, which gave me very early in my life a keen understanding and real life appreciation of the importance of being aware and sensitive to cultural, social, religious and political differences. I lived in the US for almost 30 years, and during that time, worked in many countries in all regions of the world. This has exposed me to various cultures over the last 25 years of my career. I needed to understand and assimilate the subtle differences between these cultures, the political and social contexts, in order to effectively achieve my public health goals. I am an avid reader and keenly interested in the various political and social conditions in the countries I work with. I am fully fluent in three languages (Arabic, English, French) and have a fair knowledge of Spanish, which has also helped me better understand the cultures of the countries and better communicate (e.g. French is critical to my work in West and North Africa, Spanish for Latin America, Arabic in most of the Middle East,…). Over the years, and because of my sensitivity to all these issues, political and cultural awareness, and communications skills, I was assigned to work in emergency responses in many countries. I have also built many strong professional and personal relationships in many of the countries I worked with, also an important indication of my sensitivity to all these differences. I have a deep appreciation of the importance of public health diplomacy and partnerships, and strong communications skills, critical to generate political will at all levels.

5) **A strong commitment to the work of WHO**

I am fully committed to public health and to the work of WHO. Through my global health work over the years, I came to realize the importance of WHO as the single organization that can coordinate and facilitate public health activities in countries, whether it is to build systems during normal times, or to help countries better be prepared and respond to emergencies. Because of my belief in WHO's work and mission, I made the decision two years ago to leave CDC, even though I had a good position, and come to the regional office at WHO, because I am fully committed to this mission and think this is where my skills would be best used. My career at CDC has prepared me very well to take a leadership role at WHO. My colleagues and friends always comment on "my passion" for public health and positive attitude, even in challenging situations. More than 18 months after being at WHO and working directly with our countries, many of them are experiencing complex emergencies. I am even more convinced now that I made the right decision, and in the role of WHO as the lead world health agency.

6) **The good physical condition required of all staff members of the Organization**

I am in excellent physical condition, as confirmed by my last medical examination. I am known to have high level energy and strong endurance. This has helped me tolerate extensive travel and long work hours.