

January 8, 2018

Dear sir/madam,

My experience as an infectious disease physician and epidemiologist aligns well with the qualifications you are seeking for the M.D. epidemiologist position at the Lake County Health Department. I am certain I would make a valuable addition to your organization and appreciate your consideration.

My infectious disease training was a rigorous fellowship focused primarily on the clinical care of patients. I gained 17 months of clinical wards experience at 3 different sites: Stanford Hospital & Clinics, VA Palo Alto, and the Santa Clara Valley (county) medical center. My training also included caring for patients in the outpatient general infectious disease, TB, and HIV clinics. Additionally, I was trained by leading experts to identify and treat tropical diseases while attending the Gorgas Tropical Medicine course hosted in Lima, Peru. By treating a diverse set of disease processes in patients of varying socioeconomic backgrounds, I learned to advocate for patients and find the optimal means for their treatment.

With the applied epidemiology training I received as an Epidemic Intelligence Service (EIS) officer at the Centers for Disease Control and Prevention, I am adept at evaluating and suggesting measures to improve surveillance programs and at leading outbreak investigations to identify sources and transmission factors. My experiences have afforded me a well-rounded skillset including measuring national and international disease burden (of invasive pneumococcal disease) to determine impact of the 13-valent pneumococcal conjugate vaccine, working and coordinating with stakeholders at different government levels, and recommending prevention and control efforts. I believe with these skills I will be a strong candidate for this job.

I have enclosed my resume with references and a copy of my certificates/licenses. I appreciate you taking the time to review my credentials.

Thank you.

Sincerely,

Sana S Ahmed, MD

SANA SHIREEN AHMED, MD

Country of Citizenship United States of America
Availability Job type: Permanent, Temporary
Work schedule: Full-time or Part-time
Desired Locations US-IL-Chicago, neighboring counties of Chicago

MEDICAL LICENSURE

Illinois state medical license (active)

Illinois controlled substance license (active)

2012–current

California state medical license (retired)

2012–2015

EDUCATION AND PROFESSIONAL TRAINING

Centers for Disease Control and Prevention, Atlanta, GA

Division of Bacterial Disease, Respiratory Diseases Branch

Epidemic Intelligence Service Officer

July 2015–current

Selected accomplishments and impacts:

- Led an investigation and conducted a matched case-control study to determine risk factors for Group A *Streptococcal* infections among residents in a 228-bed post-acute rehabilitation facility, Chicago, IL. Improved infection control practices and facility surveillance halted transmission among residents and healthcare workers.
- Led an investigation of legionellosis among veterans at a long-term care facility to identify potential exposure sources and to reduce and mitigate *Legionella* growth and transmission in Quincy, IL. Identification of the potable water system and cooling tower as potential *Legionella* sources (through clinical and environmental isolate molecular typing) lead to extensive remediation, formation of a multidisciplinary water management team with local and state stakeholders, and development of a water management program per industry standards.
- Led an investigation of legionellosis among visitors at a hotel in Hannibal, MO. Identification of potential sources of *Legionella* amplification and transmission led to remediation.
- Trained Missouri local and state health officials on environmental evaluation and water sampling for legionellosis outbreak investigations. These officials plan to train staff at other county departments and create a state-wide *Legionella* outbreak response plan.
- Evaluated sentinel (pneumonia with pleural effusions) and population-based (demographic) surveillance systems in the following international settings: Santo Domingo, Dominican Republic and Mirzapur, Bangladesh. Surveillance case report forms were shortened and case definition modified to facilitate timely collection of information in the Dominican Republic. Compared the Mirzapur demographic surveillance system with other systems in Bangladesh identifying areas for improvement including generating routine surveillance reports.
- Analyzed data on impact of 13-valent pneumococcal conjugate vaccine (PCV13) among adults aged 19-64 years with chronic medical conditions and risk factors, such as heart disease, lung disease, diabetes, chronic liver disease, malignancies, tobacco use, and alcoholism. These data will be contributing evidence for the 2018 Advisory Committee of Immunization Practice's review of recommendations for PCV13 in U.S. adults.
- Analyzed pneumonia with pleural effusions surveillance data and calculated incidence of *Streptococcus pneumoniae* pneumonia with pleural effusions among children 2 years after PCV13 recommendation and noted increase in particular serotype-specific disease due to low 3rd vaccine dose coverage. Ten million

dollars was approved by the Pan-American Health Organization rotatory fund to help the Ministry of Health increase 3rd vaccine dose coverage in Dominican children.

- Assisted in a post pneumonia outbreak *S. pneumoniae* oropharyngeal colonization survey among unaccompanied children crossing the U.S.-Mexico border, Texas. Decrease in the outbreak serotype (*S. pneumoniae* serotype 5) among children led to discontinuation of enhanced immunization recommendations instituted during outbreak that required PCV13 vaccination of all unaccompanied minors.
- Collaborated with the local health department and the long-term care facility to assess the public health cost of a legionellosis outbreak within the local community in Quincy, IL.
- Conducted a literature review to determine appropriate hospitalization codes to use for selection criteria in the analysis of trends in all-cause and pneumococcal pneumonia hospitalization in the U.S.

Gorgas Course in Tropical Medicine, University of Alabama at Birmingham, Lima, Peru

Jan 2015–Mar 2015

- Trained by infectious disease experts at the Universidad Peruana Cayetano Heredia (UPCH) Tropical Medicine Institute
- Attended daily bedside infectious disease rounds and weekly case conferences and diagnostic labs

Infectious disease fellowship, Stanford Hospital & Clinics, Palo Alto, CA

July 2012–June 2014

- Authorized or provided alternative options for program-restricted antibiotics as a part of the antibiotic stewardship programs at three hospitals: Stanford, VA Palo Alto, Santa Clara Valley hospitals.
- Received 17 months of clinical wards experience with a 6-month focus on the infectious diseases in immunocompromised persons.
- Managed/treated and facilitated comprehensive care for HIV-infected patients, Santa Clara, CA.
- Attended 6-week global health elective at Stanford Hospital, CA
- In collaboration with faculty, developed a flipped classroom model with interactive video modules and interactive weekly sessions to enhance infectious diseases curricula for internal medicine residents and improve in-service and American Board of Internal Medicine Exam scores.

Internal medicine residency, Advocate Lutheran General Hospital, Park Ridge, IL

June 2009–June 2012

- Conducted carriage survey among hospitalized patients to assess prevalence and risk factors for *Klebsiella pneumoniae* Carbapenemase-Producing (KPC) *Enterobacteriaceae*.
- Trained 2nd year medical students on patient history and physical examination skills. Essentials of Clinical Reasoning, Preceptor for Rosalind Franklin medical school and University of Illinois at Chicago

Doctor of Medicine, University of Illinois College of Medicine, Chicago, IL

May 2009

Bachelor of Science, Biology with Spanish concentration, University of Illinois at Chicago, Chicago, IL

May 2004

- Evaluated the use of cultural competency in culturally-based hospital. Reviewed taped interviews, designed maps, and drafted a report, San Francisco Chinese Hospital, California

HONORS & AWARDS

IDWeek Trainee Travel Grant

Oct 2016

Advocate Lutheran General Hospital Research Award

Advocate Lutheran General Hospital Ambulatory Clinic Award

May 2012

Advocate Lutheran General Hospital Intern of the Year

June 2010

Sarah Madonna Kabbes Award for Research, University of Illinois at Chicago
Aug 2002

Phi Eta Sigma Honors Society, University of Illinois at Chicago
June 2002

University Scholar Award Scholarship, University of Illinois at Chicago, merit-based scholarship
Aug 2001–May 2004

PUBLICATIONS

1. **Ahmed S**, et al. Pneumonia with Pleural Effusion among Children Three Years After 13-valent Pneumococcal Conjugate Vaccine Introduction — Dominican Republic 2014–2016. *In preparation*.
2. **Ahmed SS**, Winslow DL. (2018). Endemic Treponematoses. In G. M. Mandell, J.E. Bennet, and D. Raphael Mandell, Douglas, and Bennette's Principles and Practice of Infectious Disease, Ninth Edition. (pp.2710–2713). Philadelphia: Churchill Livingstone. *In preparation*.
3. **Ahmed S** et al. Impact of 13-valent Pneumococcal Conjugate Vaccine Use on Invasive Pneumococcal Disease among Adults with Chronic Conditions—United States. *In preparation*.
4. **Ahmed S** et al. Legionnaires' Disease in a Hotel—Missouri, 2015: Importance of Environmental Health Expertise in Understanding Water Systems. *In preparation*.
5. **Ahmed S** et al. The role of wounds in a group A streptococcal outbreak in a Chicago skilled nursing facility, 2015–2016. *In preparation*.
6. Kobayashi M, Misegade L, Fleming-Dutra K, **Ahmed S**, et al. Pneumococcal Serotype 5 Colonization Prevalence Among Newly Arrived Unaccompanied Children One Year After an Outbreak — Texas, 2015. *Pediatr Infect Dis J*, *In press*.
7. Prabaker K, Lin MY, McNally M, **Ahmed S**, et al. Transfer from a Long-Term Care Facility (LTCF) is a Major Risk factor for Carriage of *Klebsiella pneumoniae* Carbapenemase-Producing *Enterobacteriaceae* (KPC) among Hospitalized Patients. *Infect Control Hosp Epidemiol*. 2012 Dec; 33(12):1193-9.

PUBLISHED ABSTRACTS

1. **Ahmed S**, et al. Pneumonia with Pleural Effusion among Children Three Years After 13-valent Pneumococcal Conjugate Vaccine Introduction — Dominican Republic 2014–2016. [ISPPD 2018 abstract], *accepted as oral presentation Jan 2018*.
2. **Ahmed S**, et al. Careful of the Wound: Group A *Streptococcus* Outbreak in a Skilled Nursing Facility — Chicago, 2015–2016. [EIS 2017 abstract], *accepted as oral presentation Feb 2017*.
3. **Ahmed S**, et al. Impact of 13-valent Pneumococcal Conjugate Vaccine (PCV13) Use on Invasive Pneumococcal Disease (IPD) among Adults with Chronic Conditions — United States. [IDweek 2017 abstract 58547], *accepted as oral presentation May 2016*.
4. **Ahmed S**, et al. Pneumonia with Pleural Effusion among Children Two Years After 13-valent Pneumococcal Conjugate Vaccine Introduction — Santo Domingo, Dominican Republic, June 2014–July 2015. [EIS 2016 abstract], *accepted as oral presentation Dec 2015*.
5. **Ahmed S**, Stewart N. A Very Rare Cause of Neutropenic Fevers. American College of Physician Conference [ACP abstract], *accepted as poster October 2011*.

INVITED PRESENTATIONS

1. **Epidemic Intelligence Service Conference**, Atlanta, GA, April 2017
Careful of the Wound: Group A *Streptococcus* Outbreak in a Skilled Nursing Facility — Chicago, 2015–2016.
2. **IDWeek 2016 Conference**, New Orleans, LA, Oct 2016
Ahmed S, et al. Impact of 13-valent Pneumococcal Conjugate Vaccine (PCV13) Use on Invasive Pneumococcal Disease (IPD) among Adults with Chronic Conditions — United States. May 2016.
3. **Advisory Committee on Immunization Practices meeting**, Atlanta, GA, Oct 2016
Direct and Indirect PCV13 effects in Adults with Chronic Condition
4. **CDC Tuesday Morning Seminar**, Atlanta, GA, June 2016
Prevention of Pneumococcal Disease among Adults with Chronic Conditions: Gathering Evidence to Inform Vaccine Policy
5. **Epidemic Intelligence Service Conference**, Atlanta, GA, May 2016
Ahmed S, et al. Pneumonia with Pleural Effusion among Children Two Years After 13-valent Pneumococcal Conjugate Vaccine Introduction—Santo Domingo, Dominican Republic, June 2014–July 2015.
6. **Epidemiology section meeting**, Respiratory Diseases Branch, Atlanta, GA, Jan 2016
Legionnaires' disease Epi-Aid — Missouri, 2015.

MEMBERSHIP

Infectious Disease Society of America, member
American College of Physicians, member

LANGUAGES

English	Native language; fluent		
Spanish	Spoken: Intermediate	Written: Intermediate	Read: Advanced
Urdu/Hindi	Spoken: Intermediate	Read: Basic	
Arabic	Spoken: Basic	Read: Basic	