

Curriculum Vitae

Hana El Sahly, MD

I. GENERAL BIOGRAPHICAL INFORMATION

A. Personal

1. **Name:** Hana El Sahly, MD
2. **Citizenship:** USA

B. Education

1. **Undergraduate education**
American University of Beirut, Bachelor of Science, 1987-1990
2. **Medical education**
American University of Beirut, School of Medicine, Doctor of Medicine, 1990-1994
3. **Postgraduate training**
Internal Medicine Residency Program, University of Connecticut, 1995-1998
Infectious Diseases Fellowship Program, Baylor College of Medicine, 1998-2001

C. Academic Appointments

1. **Faculty position(s) at BCM**
Assistant Professor, Department of Pathology, 2001-2004
Assistant Professor, Departments of Molecular Virology and Microbiology and Medicine, 2004-2015 (tenure track since 2010)
Associate Professor, Department of Molecular Virology and Microbiology and Medicine, 2015-Present
2. **Other BCM appointments**
Faculty member, Translational Biology and Molecular Medicine Program, 2011-Present
Faculty member, National School of Tropical Medicine, 2012-Present
3. **Previous faculty position(s) at other institutions:** None
4. **Faculty appointment(s) at other institutions while at BCM:** None

D. Other advanced training/experience

1. **Formal sabbatical leave:** None
2. **Other specialized training following academic appointment:** None

E. Other information

1. **Honors or Awards**
Graduated with Distinction in Biology (B.S., 1990)
Graduated with Distinction in Medical School (M.D., 1994)
Offered Chief Resident position at the University of Connecticut
Second prize winner, Baylor Housestaff Research Symposium, 1999
Certificate of Excellence in Reviewing, Elsevier Publishing, 2013
First prize winner, Baylor Housestaff Research Symposium, 2014

Outstanding Contribution in Reviewing, from the Editors of Journal of Infection, March 2015

Fellow of the Infectious Diseases Society of America, 2016

2. Board Eligibility/Certification

Board Certified in Internal Medicine, 1998

Board Certified in Infectious Diseases, 2001, 2012

3. Other non-academic positions: None

II. RESEARCH INFORMATION

A. Research Support

Current

Vaccine and Treatment Evaluation Units

Contract: National Institutes of Health, contract # HHSN2722013000151

Role: Principal Investigator

Effort: 0.6 calendar months

Dates: 09/16/2013-09/18/2023

Maximum Total Direct Costs: \$619,069,746

Evaluation of control measures against diseases other than AIDS

Contract: National Institutes of Health, N01-AI-80002

Role: Co-Investigator (Contract PI: W. Keitel)

Effort: 0.6 calendar month

Dates: 11/01/2007-08/27/2015

Total Direct Costs: \$20,976,559

HVTN505: Evaluation of the efficacy of a new HIV vaccine regimen (Sub-award)

Grant: National Institutes of Health, UM1 AI068614

Role: Sub-award PI (Grant PI: L. Corey)

Effort: 0.8 calendar months

Dates: 06/01/2010-11/30/2015

Total Direct Costs: \$634,657

Previous

RSV-E-301: A study to evaluate an RSV-F vaccine in older adults

Grant: Novavax, Inc.

Role: PI

Effort: 1.1 calendar months

Dates: October 2015-October 2016

Anthrax vaccine adsorbed (AVA), human reactogenicity and immunogenicity trial to address a change in route of administration and dose reduction

Grant: Centers for Disease Control and Prevention, CDC-200-2000-10063

Role: Co-Investigator (Grant PI: W. Keitel)

Dates: 2001-2010

Total Direct Costs: \$2,944,139

Comparison of the immunogenicity, safety and reactogenicity of Flublok™, trivalent recombinant baculovirus-expressed hemagglutinin influenza vaccine, to a licensed egg-grown influenza vaccine in ambulatory elderly adults

Grant: Protein Sciences Corporation, PSC03

Role: PI

Dates: 2006-2007

Total Direct Costs: \$288,649

Evaluation of the immunogenicity, safety, reactogenicity, efficacy, effectiveness and lot consistency of FluBlØk™ trivalent recombinant baculovirus-expressed hemagglutinin influenza vaccine in healthy adults aged 18 to 49

Grant: Protein Sciences Corporation, PSC04

Role: PI

Dates: 2007-2008

Total Direct Costs: \$200,058

Susceptibility of *Mycobacterium tuberculosis* clinical isolates to Moxifloxacin

Grant: National Institutes of Health, R03 AI074647

Role: PI

Dates: 09/01/2007-08/31/2009

Total Direct Costs: \$100,000

A randomized, observer-blind, active-controlled Phase III study to demonstrate the superior efficacy of GSK biologicals' adjuvanted influenza candidate vaccine [GSK2186877A], administered intramuscularly in elderly aged 65 years or above, as compared to Fluarix™

Grant: GlaxoSmithKline Biologics, 106372 FLU NG-006

Role: PI

Dates: 2008-2010

Total Direct Costs: \$110,029

Phase II clinical trial to evaluate the safety and immunogenicity of Panblok™ at three dose levels adjuvanted with a stable oil-in-water-emulsion

Grant: Protein Sciences Corporation, PSC25

Role: PI

Dates: 2012-2013

Total Direct Costs: \$201,336

B. National Scientific Participation

1. Editorial activities

Ad hoc reviewer for the *American Journal of Tropical Medicine and Hygiene*, *Clinical Infectious Diseases*, *Clinical Therapeutics*, *Expert Reviews in Infectious Diseases*, *Infection and Drug Resistance*, *International Journal of Tuberculosis and Lung Diseases*, *Journal of Infection*, *Tuberculosis Research and Treatment*, *Vaccine*, *Open Forum Infectious Diseases* and *NPG Vaccines*.

2. Review Panels, Committees

Member, Safety Monitoring Committee, National Institutes of Health-sponsored vaccine clinical trial 05-0011; 2006
Reviewer, Loan Repayment Program, National Institute of Allergy and Infectious Diseases, National Institutes of Health; 2008
Member, Safety Monitoring Committee, National Institutes of Health-sponsored vaccine clinical trial 08-0009; 2009
Reviewer, Scientific Review Program, National Institute of Allergy and Infectious Diseases; 2010
Member, Data Safety Monitoring Board, Protein Sciences Corporation vaccine clinical trial PSC-22; 2010
Member, Safety Monitoring Committee, National Institutes of Health-sponsored study DMID 10-0043; 2011
Member, Safety Monitoring Committee, National Institutes of Health-sponsored study DMID 11-0007; 2011
Reviewer, Scientific Review Program, National Institutes of Health, P01 application "Towards A Universal Influenza Vaccine"; 2012
Member, Safety Monitoring Committee, National Institutes of Health sponsored study DMID 13-0087; 2014
Member, Publications Committee, Infectious Diseases Society of America; 2014-2017
Member, Safety Monitoring Committee, Mercia Pharma Inc-sponsored study NOVA MAS-1; 2015
Member of the Food and Drug Administration Vaccine and Related Biological Advisory Committee; 2016-
Reviewer, Influenza pre-applications, US Army Medical Research and Materiel Command-Congressionally Directed Medical Research Programs, 2016
Member, ID week program planning committee, 2017-2019

3. Professional Memberships

Member, Infectious Diseases Society of America, 2008-Present
Member, Baylor–UTHouston Center for AIDS Research, 2010-Present

4. Invited presentations and CME lectures

"Tularemia: Pathogenesis and vaccine development," Internal Medicine Grand Rounds, Baylor College of Medicine, CME accredited lecture, 2006
"Tularemia: Pathogenesis and vaccine development," Molecular Virology and Microbiology Seminar, Baylor College of Medicine, 2006
"Vaccines for adult patients infected with HIV," Thomas Street Health Center, Houston, 2007
"HIV vaccines," Thomas Street Health Center, Houston, 2010
"Human Vaccine Trial Network 505 HIV Vaccine Study", Baylor–UTHouston Center for AIDS Research Seminar, February 2012
"Varicella zoster virus: treatment and prevention", Northwest Medical Center, Medical Education Speakers Network, CME accredited lecture, Houston, July 2014
"Tuberculosis: Old and new," Infectious Diseases Guest Speaker, American University of Beirut, August 2014
"HIV vaccine development", Molecular Virology and Microbiology Seminar, Baylor College of Medicine, September 2014

- “HIV vaccine development,” Infectious Diseases Guest Presentation, The University of Texas Medical Branch at Galveston, November 2014
- “Ebola virus: clinical manifestations and infection control”, Northwest Medical Center, Medical Education Speakers Network, CME accredited lecture, Houston, November 2014
- “HIV and tuberculosis”, Center for AIDS Research Guest Speaker, University of Rochester, December 2014
- “If it flu (sic) like a bird...”, Internal Medicine Grand Rounds, Baylor College of Medicine, June 2015
- “Influenza: strain selection, impact of vaccination, and immunization schedules”, Internal Medicine Grand Rounds, St. Luke’s Episcopal Hospital, October 2015
- “Ebola virus: clinical manifestations and vaccine development”, Internal Medicine Grand Rounds, St. Luke’s Episcopal Hospital, October 2016

C. International Scientific Participation

- Reviewer, Tuberculosis Research, South African Medical Research Council; 2011
- Reviewer, evaluation of applications sent in response to the Italian Ministry of Health Call for Grants; 2013
- Scientific Reviewer, World Health Organization, Phase I Clinical Trial of H7N9 inactivated influenza vaccine; 2014
- Reviewer, World Health Organization, Protocol: “A phase I, double-blinded, randomized, placebo-controlled, study to examine the safety and immunogenicity of a seasonal trivalent inactivated split virion influenza vaccine (IVACFLU-S) produced by IVAC in healthy adult volunteers in Vietnam”, 2015
- Reviewer, abstract submission to the 46th Union World Conference on Lung Health, Cape Town, South Africa, 2015
- Scientific Grant Reviewer, Wellcome Trust DBT, Biomedical Research Fellowship Program for India, 2016
- Co-Chair, Tuberculosis Workshop, Infectious Diseases Society of America, ID week October 2016
- Co-moderator, MERS-coV infections and vaccine development, ID week, October 2016
- Reviewer, abstract submission to the 47th Union World Conference on Lung Health, Liverpool, United Kingdom, 2016
- Reviewer, abstract submissions, ID week, Infectious Diseases Society of America, October 2016
- Reviewer, abstract submission to the 48th Union World Conference on Lung Health, Guadalajara, Mexico, 2017

D. Publications

1. Full Papers

a. Published in peer-review journals

- (1) **El Sahly HM**, Atmar RL, Glezen WP, Greenberg SB. Spectrum of clinical illness in hospitalized patients with “common cold” virus infections. *Clin Infect Dis.* 2000;31:96-100.
- (2) Ramaswamy SV, Amin AG, Göksel S, Stager CE, Dou SJ, **El Sahly H**, Moghazeh SL, Kreiswirth BN, Musser JM. Molecular genetic analysis of

nucleotide polymorphisms associated with Ethambutol resistance in human isolates of *Mycobacterium tuberculosis*. *Antimicrob Agents Chemother*. 2000; 44:326-36.

- (3) **El Sahly HM**, Adams GJ, Soini H, Teeter L, Musser JM, Graviss EA. Epidemiologic differences between United States- and foreign-born tuberculosis patients in Houston, Texas. *J Infect Dis*. 2001;183:461-8.
- (4) Ma X, Dou S, Wright JA, Reich RA, Teeter LD, **El Sahly HM**, Awe RJ, Musser JM, Graviss EA. 5' dinucleotide repeat polymorphism of *NRAMP1* and susceptibility to tuberculosis among Caucasian patients in Houston, Texas. *Int J Tuberc Lung Dis*. 2002;6:818-23.
- (5) **El Sahly HM**, Septimus E, Soini H, Septimus J, Wallace RJ, Pan X, Williams-Bouyer N, Musser JM, Graviss EA. *Mycobacterium simiae* pseudo-outbreak resulting from a contaminated hospital water supply in Houston, Texas. *Clin Infect Dis*. 2002;35:802-7.
- (6) **El Sahly HM**, Wright JA, Soini H, Bui TT, Williams-Bouyer N, Escalante P, Musser JM, Graviss EA. Recurrent tuberculosis in Houston, Texas: a population-based study. *Int J Tuberc Lung Dis*. 2004;8:333-40.
- (7) **El Sahly HM**. Development of abacavir hypersensitivity reaction after rechallenge in a previously asymptomatic patient. *AIDS*. 2004;18:359-60.
- (8) **El Sahly HM**, Reich RA, Dou SJ, Musser JM, Graviss EA. The effect of mannose binding lectin gene polymorphisms on susceptibility to tuberculosis in different ethnic groups. *Scand J Infect Dis*. 2004;36:106-8.
- (9) Oxman MN, Levin MJ, Johnson GR, Schmader KE, Straus SE, Gelb LD, Arbeit RD, Simberkoff MS, Gershon AA, Davis LE, Weinberg A, Boardman KD, Williams HM, Zhang JH, Peduzzi PN, Beisel CE, Morrison VA, Guatelli JC, Brooks PA, Kauffman CA, Pachucki CT, Neuzil KM, Betts RF, Wright PF, Griffin MR, Brunell P, Soto NE, Marques AR, Keay SK, Goodman RP, Cotton DJ, Gnann JW Jr, Loutit J, Holodniy M, Keitel WA, Crawford GE, Yeh SS, Lobo Z, Toney JF, Greenberg RN, Keller PM, Harbecke R, Hayward AR, Irwin MR, Kyriakides TC, Chan CY, Chan ISF, Wang WWB, Annunziato PW, Silber JL; Shingles Prevention Study Group (**El Sahly H** is a member of the study group). A vaccine to prevent herpes zoster and postherpetic neuralgia in older adults. *N Engl J Med*. 2005;352:2271-84.
- (10) **El Sahly HM**, Teeter LD, Pawlak RR, Musser JM, Graviss EA. Drug-resistant tuberculosis: A disease of target populations in Houston, Texas. *J Infect*. 2006;53:5-11.
- (11) **El Sahly HM**, Teeter L, Zerai T, Andrade RA, Munoz C, Nnabuife C, Hunter R. Serum creatinine changes in HIV-seropositive patients receiving tenofovir. *AIDS*. 2006;20:786-7.
- (12) Atmar RL, Keitel WA, Patel SM, Katz JM, She D, **El Sahly H**, Pompey J, Cate TR, Couch RB. Safety and immunogenicity of nonadjuvanted and MF59-adjuvanted influenza A/H9N2 vaccine preparations. *Clin Infect Dis*. 2006;43:1135-42.
- (13) **El Sahly HM**, Teeter LD, Pan X, Musser JM, Graviss EA. Mortality associated with central nervous system tuberculosis. *J Infect*. 2007;55:502-9.

- (14) **El Sahly HM**, Keitel WA. Pandemic H5N1 influenza vaccine development: an update. *Expert Rev Vaccines*. 2008;7:241-7.
- (15) **El Sahly HM**, Keitel WA. Clinical data on Fluarix[®]: an inactivated split seasonal influenza vaccine. *Expert Rev Vaccines*. 2008;7:713-9.
- (16) Marano N, Plikaytis BD, Martin SW, Rose C, Semenova VA, Martin SK, Freeman AE, Li H, Mulligan MJ, Parker SD, Babcock J, Keitel W, **El Sahly H**, Poland GA, Jacobson RM, Keyserling HL, Soroka SD, Fox SP, Stamper JL, McNeil MM, Perkins BA, Messonnier N, Quinn CP, Anthrax Vaccine Research Program Working Group. Effects of a reduced dose schedule and intramuscular administration of anthrax vaccine adsorbed on immunogenicity and safety at 7 months: a randomized trial. *JAMA* 2008;300:1532-43.
- (17) Keitel WA, Treanor JJ, **El Sahly HM**, Evans TG, Kopper S, Whitlow V, Selinsky C, Kaslow DC, Rolland A, Smith LR, Lalor PA. Evaluation of a plasmid DNA-based anthrax vaccine in rabbits, nonhuman primates and healthy adults. *Hum Vaccines*. 2009;5:536-44.
- (18) **El Sahly HM**, Atmar RL, Patel SM, Wells JM, Cate T, Ho M, Guo K, Pasetti MF, Lewis DE, Sztejn MB, Keitel WA. Safety, reactogenicity and immunogenicity of *Francisella tularensis* live vaccine strain in humans. *Vaccine*. 2009;27:4905-11.
- (19) Keitel WA, Treanor JJ, **El Sahly HM**, Gilbert A, Meyer AL, Patriarca PA, Cox MM. Comparative immunogenicity of recombinant influenza hemagglutinin (rHA) and trivalent inactivated vaccine (TIV) among persons ≥ 65 years old. *Vaccine*. 2010;28:379-85.
- (20) Patel SM, Atmar RL, **El Sahly HM**, Cate TR, Keitel WA. A phase I evaluation of inactivated influenza A/H5N1 vaccine administered by the intradermal or the intramuscular route. *Vaccine*. 2010;28:3025-9.
- (21) **El Sahly HM**, Patel SM, Atmar RL, Lanford TA, Dube T, Thompson D, Sim BKL, Long C, Keitel WA. Safety and immunogenicity of a recombinant nonglycosylated erythrocyte binding antigen 175 region II malaria vaccine in healthy adults living in an area where malaria is not endemic. *Clin Vaccine Immunol*. 2010;17:1552-9.
- (22) **El Sahly H**. MF59[™] as a vaccine adjuvant: a review of safety and immunogenicity. *Expert Rev Vaccines*. 2010;9:1135-41.
- (23) **El Sahly HM**, Teeter LD, Jost KC Jr, Dunbar D, Lew J, Graviss EA. Incidence of moxifloxacin resistance in clinical *Mycobacterium tuberculosis* isolates in Houston, Texas. *J Clin Microbiol*. 2011;49:2942-5.
- (24) Bernstein DI, **El Sahly HM**, Keitel WA, Wolff M, Simone G, Segawa C, Wong S, Shelly D, Young NS, Dempsey W. Safety and immunogenicity of a candidate parvovirus B19 vaccine. *Vaccine* 2011;29:7357-63.
- (25) Treanor JJ, **El Sahly H**, King J, Graham I, Izikson R, Kohberger R, Patriarca P, Cox M. Protective efficacy of a trivalent recombinant hemagglutinin protein vaccine (FluBlok[®]) against influenza in healthy adults: a randomized, placebo-controlled trial. *Vaccine*. 2011;29:7733-9.
- (26) **El Sahly HM**, Davis C, Kotloff K, Meier J, Winokur PL, Wald A, Johnston C, George SL, Brady RC, Lehmann C, Stokes-Riner A, Keitel WA. Higher antigen

- content improves the immune response to 2009 H1N1 influenza vaccine in HIV-infected adults: a randomized clinical trial. *J Infect Dis.* 2012;205:703-12.
- (27) Patel SM, Atmar RL, **El Sahly HM**, Guo K, Hill H, Keitel WA. Direct comparison of an inactivated subvirion influenza A virus subtype H5N1 vaccine administered by the intradermal and intramuscular routes. *J Infect Dis.* 2012;206:1069-77.
- (28) Keitel WA, Piedra PA, Atmar RL, Demmler G, **El Sahly HM**, Barrett J, Halpin RA, Lagos R, Fisher-Hoch S, Munoz F. Rapid research response to the 2009 A(H1N1) pdm09 influenza pandemic (Revised). *BMC Res Notes.* 2013;6:177.
- (29) McElhaney JE, Beran J, Devaster JM, Esen M, Launay O, Leroux-Roels G, Ruiz-Palacios GM, van Essen GA, Caplanusi A, Claeys C, Durand C, Duval X, El Idrissi M, Falsey AR, Feldman G, Frey SE, Galtier F, Hwang SJ, Innis BL, Kovac M, Kremsner P, McNeil S, Nowakowski A, Richardus JH, Trofa A, Oostvogels L; for the Influence65 study group (**El Sahly H** is a member of the study group). AS03-adjuvanted versus non-adjuvanted inactivated trivalent influenza vaccine against seasonal influenza in elderly people: a phase 3 randomised trial. *Lancet Infect Dis.* 2013;13:485-96.
- (30) Hammer SM, Sobieszczyk ME, Janes H, Karuna ST, Mulligan MJ, Grove D, Koblin BA, Buchbinder SP, Keefer MC, Tomaras GD, Frahm N, Hural J, Anude C, Graham BS, Enama ME, Adams E, DeJesus E, Novak RM, Frank I, Bentley C, Ramirez S, Fu R, Koup RA, Mascola JR, Nabel GJ, Montefiori DC, Kublin J, McElrath MJ, Corey L, Gilbert PB; HVTN 505 Study Team (**El Sahly H** is a member of the study team). Efficacy trial of a DNA/rAd5 HIV-1 preventive vaccine. *N Engl J Med.* 2013;369:2083-92.
- (31) **El Sahly HM**, Teeter LD, Musser JM, Graviss EA. *Mycobacterium tuberculosis* bacteraemia: experience from a non-endemic urban centre. *Clin Microbiol Infect.* 2014;20:263-8.
- (32) Wright JG, Plikaytis BD, Rose CE, Parker SD, Babcock J, Keitel W, **El Sahly H**, Poland GA, Jacobson RM, Keyserling HL, Semenova VA, Li H, Schiffer J, Dababneh H, Martin SK, Martin SW, Marano N, Messonnier NE, Quinn CP. Effect of reduced dose schedules and intramuscular injection of anthrax vaccine adsorbed on immunological response and safety profile: A randomized trial. *Vaccine.* 2014;32:1019-28.
- (33) Callahan ST, Wolff M, Hill HR, Edwards KM, on behalf of the NIAID Vaccine and Treatment Evaluation Unit (VTEU) Pandemic H1N1 Vaccine Study Group (**El Sahly H** is a member of the study group). Impact of body mass index on immunogenicity of pandemic H1N1 vaccine in children and adults. *J Infect Dis.* 2014;210:1270-1274
- (34) Bernstein DI, Jackson L, Patel SM, **El Sahly HM**, Spearman P, Roupheal N, Rudge TL Jr, Hill H, Goll JB. Immunogenicity and safety of four different dosing regimens of anthrax vaccine adsorbed for post-exposure prophylaxis for anthrax in adults. *Vaccine.* 2014;32:6284-93
- (35) Frey SE, Bernstein DI, Brady RC, Keitel WA, **El Sahly H**, Roupheal NG, Mulligan MJ, Noah DL, Hill H, Wolff M, Belshe RB, 2009 Pandemic Vaccine Group. Phase II trial in adults of concurrent or sequential 2009 pandemic H1N1

- and 2009-2010 seasonal trivalent influenza vaccinations. *Vaccine* 2015;33:163-73
- (36) Arasaratnam R, **El Sahly, HM**. The value of repeating CSF-VDRL during penicillin therapy to confirm the diagnosis of neurosyphilis: Four cases and a review of the literature. *Infect Dis Clin Practice* 2015;23:333-335
- (37) Keitel WA, Jackson LA, Edupuganti S, Winokur PL, Mulligan MJ, Thornburg NJ, Patel SM, Roupheal NG, Lai L, Bangaru S, McNeal MM, Bellamy AR, Hill HR, for the VTEU H3N2v Vaccine Study Work Group (**El Sahly H** is a member of the Vaccine Study Group). Safety and immunogenicity of a subvirion monovalent unadjuvanted inactivated influenza A/H3N2 Variant (H3N2v) vaccine in healthy persons \geq 18 years old. *J Infect Dis* 2015;212:552-61
- (38) El Chaer F, Harris N, **El Sahly H**, Hemmige V, Martinez Blanco E, Woc-Colburn L. Mycobacterium avium complex associated cholecystitis in AIDS patient: a case description and review of literature. *Int J STD AIDS* 2016;27:1218-1222
- (39) Frey SE, Wald A, Edupuganti S, Jackson LA, Stapleton JT, **El Sahly H**, El-Kamary SS, Edwards K, Keyserling H, Winokur P, Keitel W, Hill H, Goll JB, Chaplin P, Belshe RB. Comparison of lyophilized versus liquid modified vaccinia Ankara (MVA) formulations and the subcutaneous versus intradermal routes of administration in healthy vaccinia-naïve subjects. *Vaccine* 2015;33:5225-34
- (40) Jackson LA, Campbell JD, Frey SE, Edwards KM, Keitel WA, Kotloff KL, Berry AA, Graham I, Atmar RL, Creech B, Thomsen IP, Patel SM, Gutierrez AF, Anderson EL, **El Sahly HM**, Hill H, Noah DL, Bellamy AR. Serologic Responses to varying dosages of a monovalent H7N9 influenza vaccine given with and without AS03 and MF59 adjuvants. *JAMA* 2015;314:237-46
- (41) Gutierrez A, **El Sahly H**. Recombinant Hemagglutinin protein vaccine: a new option in immunization against influenza. *Future Virology*: DOI:10.2217/fvl.15.75
- (42) Conrad P, Quinn, Carol L, Sabourin, Jarad M, Schiffer, Nancy A, Niemuth, Vera A, Semenova, Han Li, Thomas L, Rudge, April M, Brys, Robert S, Mittle, Chris C, Ibegbu, Jens Wrammert, Rafi Ahmed, Scott D, Parker, Janiine Babcock, Wendy Keitel, Gregory A, Poland, Harry L, Keyserling, **Hana El Sahly**, Robert M. Jacobson, Nina Marano, Brian D. Plikaytis, and Jennifer G. Wright. Humoral and Cell Mediated Immune Responses to Alternate Booster Schedules of Anthrax Vaccine Adsorbed in Humans. *Clin Vaccine Immunol* (in press)
- (43) Sen A, Katz M, Goodman JC, Gopinath SP, Woc-Colburn L, **El Sahly H**. Images in ID: persistent altered mental status in a patient with HIV. *Infectious Diseases in Clinical Practice* 2015;23:327-329
- (44) Nicolas Cortes-Penfield, Anjali Kohli, Jill Weatherhead, **Hana El Sahly**. Arcanobacterium haemolyticum CNS abscess and bacteremia following head trauma: a case report and literature review. *Infectious Diseases in Clinical Practice*. In press
- (45) John J Treanor, Laurence Chu, Brandon Essink, **Hana M El Sahly**, Ruvim Izikson, Karen Goldenthal, Peter Patriarca, Lisa M Dunkle. Stable Emulsion (SE)

- Alone is an Effective Adjuvant for a Recombinant, Baculovirus-Expressed H5 Influenza Vaccine in Healthy Adults: A Phase 2 Trial. *Vaccine*. 2017;35:923-928
- (46) Jackson A, Frey SE, **El Sahly HM**, Mulligan MJ, Winokur PL, Kotloff KL, Campbell JD, Atmar RL, Graham I, Anderson EJ, Anderson EL, Patel SM, Fields C, Keitel W, Roupael N, Hill H, Goll JB. Safety and immunogenicity of a modified Vaccinia Ankara vaccine using three immunization schedules and two modes of delivery: a randomized clinical non-inferiority trial. *Vaccine* 2017;35:1675-1682

2. Other full papers

a. Published without review by peer group

- (1) **El Sahly HM**, Soini H, Graviss EA. Drug resistant tuberculosis- review article. *BioMedicina*. 2000;3:137-42.
- (2) Weatherhead J, **El Sahly H**. Coccidioidomycosis as a cause of small bowel perforation: a case report. *J Clin Gastroenterology* 2015;49:628-629.

b. Submitted or in preparation

- (1) **El Sahly HM**, Teeter LD, Musser JM, Graviss EA. The association of tobacco smoking with indicators of tuberculosis transmissibility. In preparation.
- (2) Julie E. Ledgerwood, Abbie R. Bellamy, Robert Belshe, David Bernstein, Srilatha Edupuganti, Shital M. Patel, Phyllis Renehan, Thad Zajdowicz, Richard Schwartz, Richard Koup, Robert Bailer, Galina V. Yamshchikov, Mary E. Enama, Uzma Sarwar, Brenda Larkin, Barney S. Graham, and the VRC 701 study team (**El Sahly H** is a member of the study team). DNA Priming for Seasonal Influenza Vaccine: A phase 1b double-blind randomized clinical trial. In Preparation.

3. Abstracts given during the last 3 years

- (1) Saliccioli KB, Rajagopal S, **El Sahly H**. The four year itch: recrudescence malaria in a patient with sarcoidosis. Poster Presentation at the Society of Hospital Medicine National Meeting, San Diego, CA, March 2016
- (2) Vashti Irani, Annie Mo, **Hana El Sahly**, Wendy Keitel, Ivo Mueller, Peter Siba, Paul Ramsland, Jack Richards, James Beeson. Phase I vaccine trial for EBA-175 RII induces high levels of binding inhibitory antibodies that target key functional epitopes. Poster Presentation at the American Society of Tropical Medicine and Hygiene Annual Meeting, Atlanta, GA, November 2016

4. Books: None

5. Other work communicating research results to scientific colleagues

- (1) Monthly Contributor, *Practical Reviews in Infectious Diseases*; 2009-2012
- (2) **El Sahly HM**. Performance of Xpert MTB/RIF in induced sputum samples at detecting *Mycobacterium Tuberculosis*. (Letter to the Editor). *Clin Infect Dis*. 2014;59:911-2.

6. Other works communicating research results to the general public

- (1) **El Sahly, H.** “The challenge remains: a way to prevent AIDS.” Opinion article in The Houston Chronicle, 01 December 2010
- (2) **El Sahly, H.** Health on Campus and Sexually Transmitted Diseases. Lecture to International Students at Aramco, Houston, Texas. February 2007
- (3) **El Sahly, H.** “Can HVTN505 vaccine prevent HIV infection?” From Research to the Real World: Sharing Science Symposium, sponsored by the Baylor–UT Houston Center for AIDS Research and the Houston Department of Health and Human Services, 2014
- (4) Numerous interviews with local and national media outlets regarding influenza and HIV infection.
- (5) “Unite to End TB: What it means for me in 2016”, Houston Exxon Mobile Awareness campaign, panel member

III. TEACHING INFORMATION

A. Didactic course work

1. Courses taught at BCM within the primary department

Lecturer, Microbial Pathogenesis course, every other year, 1 hour (2009-Present)

2. Courses taught at BCM external to primary department

Lecturer, Medical Students Infectious Diseases Module, annual, 6 hours (2007-Present)

Lecturer, Fellows Core Curriculum, annual, 1 hour (2007-Present)

Lecturer, Intensive Course in Travel and Tropical Medicine, annual, 3 hours (2008-2011)

Lecturer, Diploma in Tropical Medicine, twice a year, 3 hours each (2012-Present)

Lecturer, AIDS Readings, once a year, 1 hour (2015-Present)

Co-Coordinator, Journal Club in Vaccine Development, Translational Biology and Molecular Medicine Program (2008)

Co-director, Infectious Diseases Module for BCM medical students, BCM (2014-Present)

B. Courses taught at other institutions while at BCM: N/A

C. Curriculum development work: N/A

D. Non-didactic teaching while at BCM

1. Resident and fellow clinical training: Dr. El Sahly is attending physician at Ben Taub General Hospital and Thomas Street Health Center, which occupies 36% of her time. Infectious Diseases fellows and Internal Medicine residents are always present in these locations and Dr. El Sahly supervises the trainees and performs clinical education responsibilities.
2. Medical Content Expert, Eisenberg Center: “Interventions to Improve Appropriate Antibiotic Use for Acute Respiratory Tract Infection” (2015)
3. Thesis Advisory Committee:
 - a. Ben Hornstein (2014-)
 - b. Shubhranshu Gupta (2015-)
4. Clinical Mentor: Translational Biology and Molecular Medicine Program
 - a. Shubhranshu Gupta (2015-)

E. Lectures: NA

F. Visiting professorships: None

IV. MEDICAL AND SERVICE INFORMATION

A. Patient care responsibilities at BCM and/or its Affiliated Institutions

1. Attending Physician at Thomas Street Health Center and Ben Taub General Hospital, Section of Infectious diseases, 2001-Present

B. Clinical laboratory responsibilities at BCM: None

C. National education or voluntary health organization participation: N/A

D. Administrative assignments at BCM

1. Departmental committees

- a. Judge, Annual House Staff Research Symposium, Department of Medicine, 2010-Present
- b. Judge, MVM Department Annual Research Retreat, Baylor College of Medicine, 2013, 2014
- c. Judge, Graduate Student Research Symposium, 2011
- d. Judge, Medical Students Research Symposium, 2014, 2016
- e. Member, Faculty Appointments and Promotions Committee, Department of Medicine 2017-2019

2. College committees

- a. Member, Medical School Admissions Committee, 2009-2014
- b. Member, Institutional Review Board at Baylor College of Medicine, 2007-Present
- c. Member, Infectious Diseases Section Chief Search Committee, 2017