



## II. WORK EXPERIENCE

### *Summary:*

- Thirteen years of research and teaching experience as a Professor or Post Doctoral Researcher in multiple American universities. Prior to this, eight years of research experience as a Research Assistant
- Worked as a consultant in multiple National and International institutions

Associate Professor	Environmental Health Graduate School of Public Health San Diego State University San Diego, CA, USA	Aug 2012 to Present
Independent Contractor	Center for Investigative Reporting Berkeley, CA 94704	Mar 2012 to Jan 2013
Assistant Professor	Environmental Health Graduate School of Public Health San Diego State University San Diego, CA, USA	Aug 2007 to Jul 2012
Assistant Professor	Joint Doctoral Program in Global Health Graduate School of Public Health San Diego State University San Diego, CA, USA	June 2008 to Present
Adjunct Professor	Environmental Health Graduate School of Public Health San Diego State University San Diego, CA, USA	Apr 2007 to Aug 2008
Consultant	Health Effects Institute Boston, MA, USA	Sep 2007 to May 2009
Lecturer	Environmental Health Sciences School of Public Health University of California at Berkeley Berkeley, CA, USA	Jan 2007 to May 2007
Post-Doctoral Researcher	Environmental Health Sciences School of Public Health University of California at Berkeley Berkeley, CA, USA	June 2004 to Aug 2007

Graduate Research Assistant	School of Earth & Atmospheric Sciences Georgia Institute of Technology Atlanta, GA, USA	Aug 2000 to Jun 2004
Consultant	The World Bank/Dept. of Environment Dhaka, Bangladesh	Dec 2002 to Jan 2003
Graduate Research Assistant	Environmental Engineering & Sciences California Institute of Technology, Pasadena, CA, USA	Sep 1997 to Aug 2000
Undergraduate Teaching & Research Assistant	Environmental Engineering Montana Tech of the Univ. of Montana Butte, MT, USA	Sep 1995 to Jun 1997

### III. PROFESSIONAL GROWTH

#### Published Articles in Refereed Journals

21. Matt, Georg E.; Quintana, Penelope J.E.; Hoh, Eunha; Zakarian, Joy M.; **Chowdhury, Zohir**; Hovell, Melbourne F.; Jacob, Peyton; Watanabe, Kayo; Theweny, Teaba S.; Flores, Victoria; Nguyen, Anh; Dhaliwal, Narinder; Hayward, Gary (2018). "A casino goes smoke free: a longitudinal study of secondhand and thirdhand smoke pollution and exposure", *Tobacco Control*, Published Online First: 08 February 2018. <http://dx.doi.org/10.1136/tobaccocontrol-2017-054052>
20. Pillarisetti, Ajay; Allen, Tracy; Ruiz-Mercado, Ilse; Edwards, Rufus; **Chowdhury, Zohir**; Garland, Charity; Hill, Drew; Johnson, Michael; Litton, Charles; Lam, Nicholas; Pennise, David; Smith, Kirk R. (2017). "Small, smart, fast, and cheap: Microchip-based sensors to estimate air pollution exposures in rural households," *Sensors*, 17(8), 1879. <https://doi.org/10.3390/s17081879>
19. Houston, Douglas; Dang, Andy; Wu, Jun; **Chowdhury, Zohir**; Edwards, Rufus (2016). "The cost of convenience; air pollution and noise on freeway and arterial light rail station platforms in Los Angeles", *Transportation Research Part D*, 49, 127-137. <http://dx.doi.org/10.1016/j.trd.2016.09.011>
18. Joseph, Abba; Unnikrishnan, Seema; Kumar, Rakesh; **Chowdhury, Zohir**; Sawant, Shiwaji (2016). Source identification and quantification of PM<sub>2.5</sub> aerosol in Mumbai using receptor techniques. *J. of Environ. Science & Engineering*, Vol 58, No 1, pg 27-48.
17. Antonel, Jessica and **Chowdhury, Zohir** (2014). "Measuring ambient particulate matter in three cities in Cameroon, Africa." *Atmospheric Environment*, 95, 344-354, DOI:10.1016/j.atmosenv.2014.06.053
16. Quintana PJE., Dumbauld J.J., Garnica L., **Chowdhury M.Z.**, Tran C., Velascosoltero J., Mota-Raigoza A., Flores D., Rodríguez E., Panagon N., Gamble J., Irby J., Elder J., Galaviz V.E., Hoffman L., Zavala M., Molina L.T. (2014). "Traffic-related air pollution in the community of San Ysidro, CA, in relation to northbound vehicle wait times at the US-Mexico Border Port of Entry." *Atmospheric Environment*, 88, 353-361.

15. Gevaart-Durkin, Ashley R.; Swart, Dehran; **Chowdhury, Zohir** (2014). "A study of energy-related injuries from hospital admissions among children and adults in South Africa," *Burns*, DOI: 10.1016/j.burns.2013.12.014
14. Klepeis, Neil E.; Hughes, Suzanne C., Edwards, Rufus D., Allen, Tracy; Johnson, Michael Johnson, **Chowdhury, Zohir**; Smith, Kirk R.; Boman-Davis, Marie; Bellettiere, John; and Hovell, Melbourne F. (2013). "Promoting Smoke-Free Homes: A Novel Behavioral Intervention Using Real-Time Audio-Visual Feedback on Airborne Particle Levels," *PLOS ONE*. DOI: 10.1371/journal.pone.0073251
13. **Chowdhury, Zohir**; Campanella, Luke; Gray, Christen; Masud, Abdullah A.; Marter-Kenyon, Jessica; Pennise, David; Charron, Dana; Zuzhang, Xia (2013). "Measurement and modeling of indoor air pollution in rural households with multiple stove interventions in Yunnan, China", *Atmospheric Environment*, Vol. 67, pp 161-169.
12. **Chowdhury, Zohir**; Le, Leah T.; Masud, Abdullah A.; Chang, Karen C.; Alauddin, Mohammad; Hossain, Mahmood; Zakaria, ABM; Hopke, Philip K. (2012) "Quantification of indoor air pollution from using cookstoves and estimating its health effects in Northwest Bangladesh", *J. of Aerosol and Air Quality Research*, Vol 12, No. 4, pp 463-475.
11. Abba, Elizabeth J.; Unnikrishnan, Seema; Kumar, Rakesh; Yeole, Balkrishna; **Chowdhury, Zohir** (2012). Fine Aerosol and PAH Carcinogenicity Estimation in Outdoor Environment of Mumbai City, *International Journal of Environmental Health Research*, Vol 22, pp 134-149.
10. Begum, Bilkis A.; Hossain, Anwar; Saroar, Golam; Biswas, Swapan K.; Nasiruddin, Md.; Nahar, Nurun; **Chowdhury, Zohir**; Hokpe, Philip K. (2011). "Sources of carbonaceous materials in the airborne particulate matter of Dhaka, *Asian Journal of Atmospheric Environment*, Vol 5-4, pp 237-246.
9. Ryhl-Svendsen, Morten; Clausen, Geo; **Chowdhury, Zohir**; Smith, Kirk R. (2010). "Fine particles and carbon monoxide from wood burning in 17<sup>th</sup>-19<sup>th</sup> century Danish kitchens: measurements at two reconstructed farm houses at the Lejre Historical-Archaeological Experimental Center." *Atmospheric Environment*, 44, 6, 735-744, doi: 10.1016/j.atmosenv.2009.11.045
8. Norcross, Amanda; McCracken, John; **Chowdhury, Zohir**, Canuz, Eduardo; Smith, Kirk R. (2010) "Estimating Personal PM<sub>2.5</sub> Exposures using CO Measurements in Guatemalan Households Cooking with Woodfuel", *Journal of Environmental Monitoring*, 12, 873-878, doi: 10.1039/B916068J
7. Woodcock, James; Edwards, Phil; Tonne, Cathryn; Armstrong, Ben; Ashiru, Olu; Banister, David; Beevers, Sean; Chalabi, Zaid; **Chowdhury, Zohir**; Cohen, Aaron; Franco, Oscar H.; Haines, Andy; Hickman, Robin; Lindsay, Graeme; Mittal, Ishaan; Mohan, Dinesh; Tiwari, Geetam; Woodward, Alistair A.; Roberts, Ian (2009). "Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport," *The Lancet*, 374, 1930-1943
6. **Chowdhury, Zohir**; Zheng, Mei; Schauer, James J.; Sheesley, Rebecca J.; Salmon, Lynn G.; Cass, Glen R.; Russell, Armistead G.(2007). "Speciation of ambient fine organic carbon particles and source apportionment of PM<sub>2.5</sub> in Indian cities," *Journal of Geophysical Research-Atmospheres*, 112, D15303, doi:10.1029/2007JD008386.

5. **Chowdhury, Zohir**; Edwards, Rufus; Johnson, Michael; Shields, Kyra N.; Allen, Tracy; Canuz, Eduardo; and Smith, Kirk R. (2007). “An inexpensive light-scattering particle monitor: chamber and field validations with woodsmoke”, *Journal of Environmental Monitoring*, 9, 1099-1106, doi: 39/b709329m.
4. Sheesley, Rebecca J.; Schauer, James J.; **Chowdhury, Zohir**; and Cass, Glen R.(2003) “Characterization of Organic Aerosols Emitted from the Combustion of Biomass Indigenous to the Indian Subcontinent,” *Journal of Geophysical Research*, **108**, No. **D9**, AAC 8-1 to AAC 8-15.
3. Eldering, Annmarie; Ogren, J. A., **Chowdhury, Zohir**; Hughes, Lara S.; Cass, Glen R.. (2002) “Aerosol optical properties during INDOEX based on measured aerosol particle size and composition”, *Journal of Geophysical Research-Atmospheres*, **107**.
2. **Chowdhury, Zohir**; Hughes, Lara S.; Salmon, Lynn G.; and Cass, Glen R. (2001) “Atmospheric Particle Size and Composition Measurements to Support Light Extinction Calculations over the Indian Ocean,” *Journal of Geophysical Research*, **106** 28,597-28,605.
1. Cantrell, Will; Shaw, Glenn; Cass, Glen R.; **Chowdhury, Zohir**; Hughes, Lara S.; Prather, Kimberly A.; Guazotti, Sergio A.; and Coffee, Keith R. (2001) “Closure Between Aerosol Particles and Cloud Condensation Nuclei at Kaashidhoo Climate Observatory,” *Journal of Geophysical Research*, **106** 28,711-28,718.

#### Articles in Refereed Proceedings

- Chowdhury, Zohir**; Anousheh, Ramtin; Broadwin, Rachael; Malig, Brian; Ostro, Bart (2008). “Time series study of PM<sub>2.5</sub> source apportionment for use in health assessment in several California counties from 2001-2005.” *Peer-reviewed A&WMA Conference Proceeding Paper* Paper Number: 580, June 23-27, Portland, Oregon.
- Chowdhury, Zohir**; Zheng, Mei; Russell, Armisted G.; Cass, Glen R.; Salmon, Lynn G.; Sheesley, Rebecca J.; Schauer, James J. (2004) “Source apportionment and chemical characterization of the ambient fine particle aerosol in Delhi.” *Peer-reviewed A&WMA Conference Proceeding Paper*, April 19-22, Cary, North Carolina.

#### Unpublished, Refereed Papers Before Professional Conferences

##### *Presented in Conferences as a Speaker*

“The Sage Project—teaching sustainability in classrooms,” Sustainability Summit, Energy, Peace, and Global Governance, Xavier School of Sustainability, Xavier University, Bhubaneswar, India. August 11-13, 2016, (Invited Talk)

“Longitudinal fine and ultrafine air pollution measurements in a large casino taken before and after a

smoking ban”, The International Society of Exposure Science, Henderson, NV, USA, October 18-22, 2015.

“Estimating contribution of household air pollution in ambient air pollution,” Global Alliance for Clean Cookstoves, July 15-16, 2015, Washington, DC, USA (Invited Talk)

“Fine particulate matter air pollution in South Asia”, Forum on Energy and Climate Justice, April 11, 2013, San Diego, CA, USA (Invited Talk)

“An overview and summary of current Asian particulate matter source apportionment studies,” Better Air Quality (BAQ) Bi-Annual Conference, November 8-11, 2010, Singapore (International Conference)

“Particulate Matter Source Apportionment: An Overview and Summary of Current Asian Studies”, ISES-ISEE 2010 Joint Conference, August 8-September 1, 2010, Seoul, South Korea. (International Conference)

“Fine particulate matter concentrations in kitchens, bedrooms, and outdoors in highland Guatemala—methods and results”, World Health Organization (WHO) and German Technical Cooperation (GTZ) Joint Conference in Indoor Air Pollution, June 15-17, 2009, Dhaka, Bangladesh. (International Conference)

“Current Source Apportionment Studies in Asia: An Overview”, Better Air Quality 2008, Bangkok, Thailand, November 12-14, 2008. (International Conference)

“Indoor PM<sub>2.5</sub> and CO Concentrations Reduction from Improved Stoves Installation in Rural Northwest Yunnan Province, China”, Sub-plenary talk, Better Air Quality 2008, Bangkok, Thailand, November 12-14, 2008. (International Conference)

“Monitoring and Evaluations of Household Energy Projects”, PCIA Pre-event, Better Air Quality 2008, Bangkok, Thailand, November 11, 2008. (International Conference)

“Integrated & Real-time PM<sub>2.5</sub> Concentrations in Kitchens, Bedrooms, and Outdoors in Highland Guatemala Using both Gravimetric and UCB Particle Monitor”, American Association of Aerosol Research, Orlando, FL, October 20-24, 2008.

“Integrated PM<sub>2.5</sub> Concentrations in three household microenvironments in Highland Guatemala”, International Society of Exposure Assessment, Pasadena, CA, October 12-16, 2008.

“Time series study of PM<sub>2.5</sub> source apportionment for use in health assessment in several California counties from 2001-2005.” Air and Waste Management Association, June 23-27, 2008, Portland, Oregon.

“Field validation of the UCB particle monitor”, ETHOS Conference, Kirkland, WA, January 27-29, 2006.

“Kitchen PM<sub>2.5</sub> concentrations measured with an inexpensive monitor in Highland Guatemala”, International Society of Exposure Assessment, Conference, Tucson, AZ, October 31-November 5, 2005.

“State of Bangladesh’s environment and BEN’s initiative and their outcomes,” American Association of Bangladeshi Engineers and Architects, Santa Clara, CA, November 20, 2004.

“Size distribution and chemical composition of fine particles in Kaashidhoo during INDOEX”, Tropical Environmental Problems Workshop in the Light of The INDOEX Program”, Palampur, Himachal Pradesh, India, October 9-13, 2000.

*Presented in Conferences as a Poster*

“Measurements of particulate matter air pollution in food courts in San Diego’s shopping malls. The International Society of Exposure Science, Henderson, NV, USA, October 18-22, 2015.

“Seasonal ultrafine and fine particulate matter monitoring in Dhaka, Bangladesh,” Integrated Conference of BAQ2014 and Intergovernmental 8<sup>th</sup> Regional EST Forum in Asia, November 19-21, 2014, Sri Lanka (International Conference).

“Winter season ambient fine and ultrafine particulate measurement in various locations of Mumbai, India”, Integrated Conference of BAQ2014 and Intergovernmental 8<sup>th</sup> Regional EST Forum in Asia, November 19-21, 2014, Sri Lanka (International Conference).

“Characterization of indoor particulate matter and carbon monoxide concentrations from using improved cook stoves in Northwest Bangladesh Better Air Quality (BAQ) Bi-Annual Conference, November 8-11, 2010, Singapore (International Conference)

“Size distributed chemical composition of fine particles emitted from burning South Asian biofuels and coals,” Better Air Quality (BAQ) Bi-Annual Conference, November 8-11, 2010, Singapore (International Conference)

Time Series Study Of Fine Particulate Matter Source Apportionment For Use In Health Assessment In Seven California Counties From 2001-2005, American Association of Aerosol Research, Minneapolis, MN, USA

“Size Distributed Chemical Composition of Fine Particles Emitted from Burning Coals from India, China, and Bangladesh”, Better Air Quality 2008, Bangkok, Thailand, November 12-14, 2008. (International Conference—Poster Presentation)

“Size Distributed Chemical Composition of Fine Particles Emitted from Burning Asian Coals”, American Association of Aerosol Research, Orlando, FL, October 20-24, 2008. (Poster Presentation)

“Concentrations of wintertime atmospheric PM<sub>2.5</sub> and CO in San Lorenzo, Guatemala”, ISEA Conference, Tucson, AZ, October 31-November 5, 2005. (Poster Presentation)

“Source Apportionment and Characterization of Ambient Fine Particles in Delhi, Mumbai, Kolkata, and Chandigarh”. Better Air Quality 2004 (BAQ2004), Agra, India. December 6-8, 2004. (Poster Presentation)

“Chemical Characterization of the Ambient Fine Particle Aerosol in Delhi, Mumbai, and Kolkata.” American Association of Aerosol Research, AAAR-PM Conference, Pittsburgh, PA, USA. March 30-April 4, 2003. (Poster Presentation)

“Atmospheric Particle Size and Composition Measurements to Support Light Extinction Calculations over the Indian Ocean”, American Geophysical Union, San Francisco, CA, USA, December 1999. (Poster Presentation)

*Invited Guest Lectures at SDSU:*

“Global health challenges in air pollution,” Invited guest lecture at SDSU, PH780, Global Health I, November 7, 2018

“Global health challenges in Indoor and Outdoor air pollution,” Invited guest lecture at SDSU, PH780, Global Health I, November 8, 2017

“Health impacts from Climate Change,” Invited guest lecture at SDSU, PH781, Global Health II, March 24, 2015

“Indoor air pollution and biomass burning,” Invited guest lecture at SDSU, PH784, Global Environmental Health, April 7, 2014

“Introduction to climate change,” Invited guest lecture at SDSU, Fall 2013: PH101, Intro to Public Health, November 2013.

“Introduction to climate change,” Invited guest lecture at SDSU, Summer 2013: PH101, Intro to Public Health, June 2013.

“Introduction to climate change,” Invited guest lecture at SDSU, Spring 2013: PH101, Intro to Public Health, March 22, 2013.

“Indoor air pollution and biomass burning,” Invited guest lecture at SDSU, PH784, Global Environmental Health, February 7, 2013

“The evidence and science behind climate change,” Invited guest lecture at SDSU, PH604, Environmental Determinants of Human Health, November 20 and 21, 2012. (Two sections of PH604)

“Introduction to climate change,” Invited guest lecture at SDSU, PH101, Intro to Public Health, November 16, 2012.

“The evidence and science behind climate change,” Invited guest lecture at SDSU, PH604, Environmental Determinants of Human Health, September 21, 2011.

“Climate change: evidence, science, and mitigation,” Invited guest lecture at SDSU, PH362, International Health, June 22, 2011.



“Introduction to climate change,” Invited guest lecture at SDSU, PH101, Intro to Public Health, June 7, 2011.

“Climate change: evidence, science, and mitigation,” Invited guest lecture at SDSU, PH362, International Health, April, 2011

“Indoor air pollution and biomass burning,” Invited guest lecture at SDSU, PH784, Global Environmental Health, February 10, 2011.

“Exposure assessment of air pollutants,” Invited guest lecture at SDSU, PH630, Environmental Health Risk Assessment, April 29, 2010

“Climate change: evidence, science, and mitigation,” Invited guest lecture at SDSU, PH362, International Health, Section-2, October 12, 2009.

“Climate change: evidence, science, and mitigation,” Invited guest lecture at SDSU, PH 362, International Health, Section-1, October 11, 2009.

“Newest Methods in Air Toxics Research”, Invited guest lecture at SDSU, PH 738: Topics in Toxicology, Apr 6, 2009.

“Global climate change,” Invited guest lecture at SDSU, PH 781, Global Health II, Apr 10, 2008.

“Source apportionment of fine particle air pollution: example from India,” Invited guest lecture at SDSU, PH 800: Seminar in Qualitative Methods, March 13, 2008.

#### Technical Reports to Agencies

- Josephina Villavicencio, Alexandra Benitez, and **Zohir Chowdhury** (2017). [Final Report submitted to the Sage Project at SDSU and Lemon Grove, California].
- Keagan Heights, Victoria Lawless, Christi Yip, and **Zohir Chowdhury** (2017). “Mitigation and Adaptation Strategies for Climate Change in Lemon Grove, CA, USA,” [Final Report submitted to the United Nations Habitat Programme, Nairobi.
- Ava Barekat and **Zohir Chowdhury** (2015). “Air Quality in National City,” [Final Report submitted to the Sage Project at SDSU and City of National City, California].
- Jeremy McKinstry and **Zohir Chowdhury** (2015). “Mitigation Strategies for a Changing Climate in National City, CA,” [Final Report submitted to the Sage Project at SDSU and City of National City, California].
- **Chowdhury, Zohir**; Al Masud, Abdullah; and Sandhu, Loveleen (2012). “Source apportionment of PM2.5 in Imperial County,” [Progress Report I (submitted June 1, 2012), Progress Report II (submitted October 1, 2012), and Progress Report III (submitted February 1, 2013)]

- **Chowdhury, Zohir** and Le, Leah T. (2011). “Characterization of indoor particulate matter and carbon monoxide concentrations from using cook stoves in Northwest Bangladesh,” Final Report, February 2011, Concern Worldwide in Bangladesh, Saidpur, Bangladesh.
- **Chowdhury, Zohir**; Hossain, Mir T.; Kulkarni, Ganesh (2008). “Projecting fine Particulate Matter (PM<sub>2.5</sub>) concentrations for San Diego County for the years 2025 and 2050”, Final Report, June 2008, San Diego Foundation, San Diego, CA
- **Chowdhury, Zohir** (2006). “Source Apportionment of Ambient Fine Particulate Matter in Seven California Counties from 2001 to 2004” Final Report. May 2006. Office of Environmental Health Hazard Assessment (OEHHA), California Environmental Protection Agency.
- Naeher, Luke N.; Smith, Kirk R.; Brauer, Michael; **Chowdhury, Zohir**; Simpson, Chris; Koenig, Jane Q.; Lipsett, Michael; Zelikoff, Judith T. (2005). “Critical Review of the Health Effects of Woodsmoke,” Final Report, March 2005, Health Canada, Ottawa, Canada.
- Karsten, Baumann; Zheng, Mei; Chang, Michael; Russell, Armistead; Bergin, Michael, **Chowdhury, Zohir** (2005). “Study of Air Quality Impacts Resulting from Prescribed Burning— Focus on Sub-Regional PM<sub>2.5</sub> and Source Apportionment,” Final Report #3506C05/C22, March 31, 2005, Engineering and Environment, Inc. Virginia Beach, VA.
- **Chowdhury, Zohir**; Zheng, Mei; Russell, Armistead G. (2004). “Source Apportionment and Characterization of Ambient Fine Particles in Delhi, Mumbai, Kolkata, and Chandigarh” Final Report. January 2004. The World Bank.

#### Scholarly Awards

- Leadership and Excellence Award (2018), Science Olympiad, Black Mountain Middle School, San Diego, CA
- Leadership and Excellence Award (2017), Science Olympiad, Black Mountain Middle School, San Diego, CA
- Volunteer Coaching Award (2016), Science Olympiad, Black Mountain Middle School, San Diego, CA
- Outstanding Faculty Award (2016), Graduate School of Public Health, San Diego State University, San Diego, CA
- Outstanding Faculty Award (2014), Graduate School of Public Health, San Diego State University, San Diego, CA
- Outstanding Faculty Award (2012), Graduate School of Public Health, San Diego State University, San Diego, CA

- Certificate of Recognition (2009), Partnership of Clean Indoor Air (PCIA), United States Environmental Protection Agency (USEPA)
- Outstanding Service Recognition Award (2007), School of Public Health , UC Berkeley, CA
- Best Poster Award (2004), Better Air Quality Conference (BAQ2004), Agra, India. December 6-8, 2004
- Recipient, Caltech Lee Powell Fellowship (1997), California Institute of Technology, Pasadena, CA
- National Champion Award, Las Cruces, New Mexico, 1997. Conducted a year-long research work with a team of 10 students to win National Champion Award (\$10,000) in the international collegiate contest. Research Task: “Remediation of HEPA Filters Contaminated with Plutonium and Nitric Acid.”
- Member, Delta Omega, Public Health Honor Society, San Diego State University, San Diego, CA, USA
- Member, Tau Beta Pi, Engineering Honor Society, Montana Tech of the University of Montana, Butte, MT, USA

## Research Grants

### Funded:

PIs: Penelope J. E. Quintana, **Zohir Chowdhury**  
 Period: 3/1/2017 to 2/28/2018  
 Title: Improving the CalEnviroScreen score at the US-Mexico border  
 Agency: State of California Air Resources Board  
 Amount: \$150,000

PIs: Penelope J. E. Quintana, **Zohir Chowdhury**  
 Period: 9/1/2016 to 12/31/2017  
 Title: Black carbon and particulate matter in the US-Mexico border community of San Ysidro  
 Agency: State of California OEHHA  
 Amount: \$32,949

PI: Penelope J. E. Quintana  
 CO-PI: **Zohir Chowdhury** (SDSU)  
 Period: 7/1/2015 to 4/30/2018  
 Title: Community Air Sensing to Promote Community Health at the US-Mexico Border  
 Agency: The University of Washington  
 Amount: 42,576

PI: **Zohir Chowdhury**

Period: 06/2014 to 08/2014  
Title: Air Pollution Sampling in National City using Citisense  
Agency: University of California, San Diego  
Amount: \$7,882

PI: **Zohir Chowdhury** and Ally Lu  
Period: 05/2014 to 08/2014  
Title: Measurements of Particulate Matter Air Pollution in Food Courts in San Diego's Shopping Malls  
Agency: University of California, San Diego  
Amount: \$2,700

PI: **Zohir Chowdhury**  
Period: 01/2014 to 06/2015  
Title: Air Quality Monitoring in National City  
Agency: San Diego State University SAGE Project  
Amount: \$4,000

PI: Georg E. Matt  
CO-PIs: Penelope J. E. Quintana, Eunha Hoh, **Zohir Chowdhury**  
Period: 07/2013 to 06/2016  
Title: Toward Smoke-free Casinos: The Win-River Experience  
Agency: Tobacco-Related Disease Research Program (TRDRP)  
Amount: \$269,209

PI: **Zohir Chowdhury**  
Period: 06/2013 to 12/2014  
Title: Development of forecasting and diagnostic tools in support of air quality management and public policy  
Agency: Universidad Andres Bello, Santiago, Chile  
Amount: \$16,000

PI: **Zohir Chowdhury**  
Period: 03/2012 to 12/2012  
Title: Source apportionment of ambient fine particle in Imperial Valley  
Agency: Center for Investigative Reporting, Berkeley, CA  
Amount: \$12,690

PI: **Zohir Chowdhury**  
Period: 01/2009 to 06/2010  
Title: Source apportionment & chemical speciation of ambient fine organic carbon  
Agency: SDSU UGP  
Amount: \$9,994

PI: **Zohir Chowdhury**  
Period: 5/2008 to 2/2009  
Title: Projecting fine Particulate Matter (PM<sub>2.5</sub>) concentrations for San Diego County for the years 2025 and 2050 to support SD Focus 2050 Study  
Agency: San Diego Foundation  
Amount: \$13,098

PI: Neil Klepeis (SDSU)  
CO-PI: Suzanne Hughes (SDSU), Rufus Edwards (University of California Irvine), Tracy Allen (EME Systems), Melbourne Hovell (SDSU), Kirk Smith (University of California Berkeley), **Zohir Chowdhury** (SDSU)  
Period: 7/1/2008 to 12/31/2009  
Title: Instant SHS Feedback as a Catalyst for Smoke-Free Homes  
Agency: The Tobacco-Related Disease Research Program (TRDRP IDEA Award Cycle 17)  
Amount: 129,917

PI: **Zohir Chowdhury**  
Period: 09/2007 to 5/2009  
Title: HEI Special Report: Outdoor Air Pollution and Health in Developing Countries of Asia  
Agency: Health Effects Institute  
Amount: \$4,000

PI: **Zohir Chowdhury**  
Period: 8/2007 to 6/2008  
Title: Seasonal Source Apportionment of PM<sub>2.5</sub> in 6 California counties using Chemical Mass Balance modeling  
Agency: University of California, Berkeley.  
Amount: \$32,709

PI: Kirk R. Smith  
CO-PI: **Zohir Chowdhury**  
Period: 8/2007 to 6/2008  
Title: Seasonal Source Apportionment of PM<sub>2.5</sub> in 6 California counties using Chemical Mass Balance modeling  
Agency: California State OEHHA  
Amount: \$64,699

PI: Kirk R. Smith  
CO-PIs: **Zohir Chowdhury**, Rufus Edwards, and Tracy Allen  
Period: 9/2007 to 9/2009  
Title: Development of the UCB-L Particle Monitor for California Applications in Environmental Justice  
Agency: California Air Resources Board  
Amount: \$213,088

PI: **Zohir Chowdhury**  
Period: 2005  
Title: Conducting seasonal source apportionment for PM<sub>2.5</sub> in 7 California counties for the year 2000-2004  
Amount: Seed funding for \$4,950

PI: Armistead G. Russell  
CO-PI: **Zohir Chowdhury** and Mei Zheng  
Period: 2002-2004

Title: Source apportionment of fine particles in Delhi, Mumbai, and Kolkata.  
Agency: The World Bank  
Amount: \$35,000

Submitted but Not Funded:

PIs: Trent Biggs, Penelope Quintana, **Zohir Chowdhury**, Fernando De Sales, Gregory Okin  
Title: Community engagement in ecosystem services to support air quality, human health and wildlife habitat in Salton Sea region.  
Agency: United States Environmental Protection Agency (US EPA)  
Amount: \$600,000 (submitted 2016 cycle, Application # G16A112149696)

PIs: Bruce Appleyard, Sherry Ryan, Piotr Jankowski, **Zohir Chowdhury**, David Carruthers  
Title: Action Institute for Sustainability, Livability, and Equity (AISLE)  
Agency: San Diego State University (Area of Excellence)  
Amount: N/A (submitted 2015 cycle)

PI: Luisa T. Molina  
CO-PIs: P. Jenny E. Quintana, Eunha Hoh, Lynn Russell, **Zohir Chowdhury**, Josiah Heyman, Renyi Zhang, Bill Hargrove, Jose Guillermo Rodriguez, Wen-Whai Li  
Period: 2015-2020  
Title: Border Region Air, Climate and Energy (BRACE) Center  
Agency: United States Environmental Protection Agency (RFA on Air, Climate, and Energy (ACE) Centers)  
Amount: \$10,000,000

PI: **Zohir Chowdhury**  
CO-PI: P. Jenny E. Quintana  
Period: 2011-2012  
Title: Understanding Sources or Particulate Matter Air Pollution in the San Ysidro Community  
Agency: San Diego Foundation (Environment Community Grant)  
Amount: \$50,000

PI: **Zohir Chowdhury**  
CO-PI: Matthew Lauer  
Period: 2011-2013  
Title: New Methods for Measuring Exposure to Indoor Smoke in Tropical Environments  
Agency: National Institute of Health (NIH) RO3 Grant  
Amount: \$149,500

PI: **Zohir Chowdhury**  
CO-PI: Mohammed Alauddin, Golam Rabbani, Hector Lemus  
Period: 2010-2012  
Title: Health Effects Assessment of Infants from Stove Intervention in Rural Bangladesh  
Agency: National Institute of Health (NIH) Challenge Grant  
Amount: \$1,000,000

PI: **Zohir Chowdhury**  
CO-PI: PJE (Jenny) Quintana  
Period: 2009-2010  
Title: Projecting fine Particulate Matter (PM2.5) and Ozone (O3) concentrations and PM2.5 health effects for San Diego County for the years 2025 and 2050  
Agency: San Diego Foundation  
Amount: \$74,999

PI: Paul Ganster  
CO-PI: **Zohir Chowdhury**, PJE (Jenny) Quintana, Alan Sweedler, Kimberley Collins, Temesgen Garoma  
Period: 2008-2012  
Title: SDSU US-Mexico Border Air Quality Environmental Education Program  
Agency: US EPA  
Amount: \$1,249,981

#### IV. STUDENT RESEARCH & MENTORING

##### Membership in Theses as Chair

1. MS Thesis, Vincent Michael Hundley (2008). "Validation of the UCB Particle Monitor Using Different Combustion Sources"
2. MPH Thesis, Nathan Daley (2010). "The Impact of Personal Health on Climate Change: a Health Oriented Mitigation Strategy"
3. MPH Thesis, Brittany Finnegan (2010). "Risk Assessment for Consumption of Pesticides, PCB's and Mercury from Fish Caught off the Imperial Beach Pier"
4. MPH Thesis, Suzanne Barzee (2010). "Greenhouse Gas Emissions of Idling Vehicles at the San Diego-Mexico Border Crossings"
5. MPH Thesis, Christy Shwayhat (2011). "Source Apportionment of Ambient Fine Particulate Matter in Seven California Counties from 2001 to 2009"
6. MPH Thesis, Arturo Mota (2011). "Characterizing fine and ultrafine particulate matter in the community of San Ysidro"
7. MPH Thesis, Jacqueline Devera (2012). "Seasonal Differences in Fine Particulate Air Pollution in a Residential and in a Hotspot Area in Dhaka, Bangladesh"
8. MPH Thesis, Kiet Tuan Nguyen (2014). "Elevated Fine Particle Matter and Back Carbon Concentrations in Santiago, Chile during the Winter Season"
9. MPH Thesis, Kathryn Paras (2018). "Measurements of PM2.5, PM1.0, and Black Carbon in Cooking and Non-Cooking Environments Inside California Shopping Malls"
10. MPH Thesis, Kaltoum Kerdi (2018). "Seasonal Variation in Chemical Composition of PM2.5 in Four Sites in San Ysidro, California"
11. MPH Thesis, Gerald Biando (2018). "An Analysis of Restaurant Food Safety Practices Within Full-Service Restaurants During Peak Business Hours in San Diego County, California"
12. MPH Thesis, Richard Davis (in progress)

13. MPH Thesis, Asmim Faria (in progress)
14. MPH Thesis, Madison McLaughlin (in progress).
15. MPH Thesis, Matin Nazari (in progress).
16. MPH Thesis, Sero Kassabian (in progress).

*Membership in Theses as Second Member*

1. MPH Thesis, Andrew S. Kowalewsky (2008). “Comparison of Nanoparticle Surface Area Monitor with p-Trak for Evaluation of UF PM Near Major Highway”
2. MPH Thesis, Lynelle Garnica (2010). “Spatial Distribution of Traffic Related Air Pollutants in the Community of San Ysidro”
3. MPH Thesis, Denise Parker (2010). “Ultrafine Particulate Matter Concentration from Traffic Pollution in Solano Beach”
4. MPH Thesis, Shannon Barceloux (2010). “Biomarkers of Kidney and Liver Toxicity in Male Sprague-Dawley Rats Following Fourteen Day Oral Exposure to Methyl Tertiary-Butyl Ether”
5. MPH Thesis, Christopher Michael Carey (2010). “Agricultural Burning: Air Monitoring with Real-time Aerosol Monitors of PM<sub>2.5</sub>, PM<sub>10</sub>, and Aerosol Black Carbon, in Imperial County, California”
6. MPH Thesis, Jill Dumbauld (2011). “Traffic-related Air Pollution in the Community of San Ysidro, California, in Relation to Northbound Delays at the US-Mexico Border”
7. MPH Thesis, Edgar Rodriguez (2011). “Roadside Air Pollution Measurements and Traffic Volume in a US-Mexico Border City: Tijuana, B.C.”
8. MPH Thesis, Jamison Gordon Gamble (2013). “Spatial Measurements of Traffic Related Air Pollutants in San Ysidro, California, Using Citisense: A Novel Mobile Air Quality Sensing System”
9. MPH Thesis, Kathrina Devera Buan (2014). “Particulate Matter Concentrations at Children and Adult Breathing Heights in Residential Thirdhand Smoke Environments”
10. MPH Thesis, Eileen S. Natuzzi (2015). “Defining population health vulnerability following an extreme weather event in an urban Pacific Island environment: Honiara, Solomon Islands.”
11. MPH Thesis, Priyansi Patel (2016). “Characterization of nanoparticle emissions from 3D printers in different environments.”
12. MPH Thesis, Jeremy McKinstry (completed 2016). “Bikeshare and transit in National City, CA: implications for climate change, the economy and public policy”
13. MPH Thesis, Rina Eisenberg (2018). “Influence of wind speed and direction on particulate air pollution (PM<sub>2.5</sub>) levels of an air monitoring station near the US/Mexico border port of entry in Otay-Mesa, California”
14. MPH Thesis, Paul Luat (2018). “Spatial distribution of Black Carbon in air samples from the U.S.-Mexico international border community of San Ysidro, California”
15. MPH Thesis, Naomi Walski (in progress).



Membership in Theses as Third Member

1. MS Thesis in Biology, Sonya Epel Levy (2007). “Interference with the Src Homology Domains of ITK as a Means of ITK Inhibition”
2. MS Thesis in Environmental Engineering, Jonathan P. Kocher (2009). “Investigation of Surfactant Modified Activated Carbon for Recycled Water”
3. MS Thesis in Environmental Engineering, Shinsyn A. Matsumoto (2009). “Ozonation and Ozone/Hydrogen Peroxide Treatment of Bisphenol A.”
4. MS Thesis in Computer Science, Sunee Waleetorncheepsawat (2010). “The study of development of web applications and native applications on iPhone”
5. MS Thesis in Environmental Engineering, Lacy Skidmore (2011). “The Influence of Ethanol on the Adsorption Capacity and Desorption Rate of BTEX Compounds to Soil”
6. MS Thesis in Environmental Engineering, Carissa Lee Williams (2012). “Methane Production from Anaerobic Co-digestion of Chlorella Vulgaris and Wastewater Sludge”
7. MS Thesis in Geography (2017 in progress). Michael Orialla

Independent Special Studies Supervised:

<i>Semester and Year</i>	<i>Institution</i>	<i>Undergraduate Students</i>	<i>Graduate Students</i>
Spring 2007	UC Berkeley	Tamanna Rahman	David Dauphine
Spring 2009	SDSU	Kathryn Cummings	Suzanne Barzee Nathan Daley Brittany Finnegan Richard Hunt Beth Wittry Lynelle Garnica Edgar Rodriguez Brienne Smith Almira Van Shannon Barceloux Sarah Meyer
Fall 2009	SDSU	Aaron Brueseke Paula Dione Jerlin Irish	Nathan Daley Brittany Finnegan Almira Van Arturo Mota Jill Dumbauld
Spring 2010	SDSU	Jacqueline Devera Kaltoum Hassan Vannah Nguyen	Jessica Antonel Nichole Quick Tiffany Bucher Yang Jiao Richard Davis Michael Manese Monica Netherly Luke Campanella Arturo Mota-Raigoza Christopher Zeier Jill Dumbauld Elli Slaughter Jarrod Becasen
Fall 2010	SDSU	Travis Irby	Nichole Quick
Spring 2011	SDSU	Juan Gurrola	Juan Betancourt Jamison Gamble Grace Farinas Melissa Ta Jacqueline Devera Jose Velascosoltero Jacqueline Devera

Fall 2011	SDSU	Megan Mirmak	Luke Campanella Monica Netherly Cuong Tran Andy Dang
Spring 2012	SDSU	Jeremy Arceo Kathy Datuin Abigail Erasquin Nathan Figueroa Vannessatee Malong Leah Prijoles Erica Teran	Michael Manese Andy Dang Jacqueline Devera Monica Netherly
Fall 2012	SDSU	Jasen Koerner Darwin Pornel Calvin Wong	
Spring 2013	SDSU		Jayson Arceo Veronica Arteaga Kathrina Buan Leah Canada Andy Dang Kathy Datuin Mario Muniz Kiet Nguyen Rosa Ojeda Cher Vue Anika Ahmed Laura Buehning Ashley Gevaart-Durkin
Fall 2013	SDSU	Abigail Crotz Ahmed Hashi Lauren Oolie Kathryn Paras Fred Rueger Jenna Bergmark Arnie Elicerio Krysta Fernandez Nicole Harris Ally Lu Kelsey Mac Donald Regina Pamintuan Aileen Samaco Monica Tapawan Veronica Ward Dustin White	

Spring 2014	SDSU	Abigail Crotz Ahmed Hashi Kathryn Paras Fred Rueger	Andy Dang Kiet Nguyen
Fall 2014	SDSU	Salem Bortcosh Ally Lu Dustin White Naomi Munroe-Davidson Katherine Schmarje Lauren Wells	Anh Vu Nguyen Fred Rueger Matin Nazari Jeremy Mckinstry Jennifer Cossaboon Keiko Kamata Priyansi Patel
Spring 2015	SDSU	Salem Bortcosh Ally Lu Dustin White Jaynish Hazari	Abigail Crotz Fred Rueger Seyedeh Ava Barekat Chelsea Basirico Ebony Miller Jeremy Mckinstry Melissa-Ann Vales Hung-Hsu Wei
Spring 2016	SDSU	Alnino Guarino Sureena Basra Chaminie Dhayalan Kelly Jones Paul Luat Amanda Pham	Alicia Sammons Laura Markman Kathryn Paras Priyansi Patel Lorren Azure Victoria Flores Gloria Jimenez Maria Kander Jenna Krichling Abigail Crotz Fred Rueger
Fall 2016	SDSU	Jorge Bravo Warda Haq Lynn Hoang Christina Juarez Victoria Lawless Louielyn Lirio Melanie Maron Shannon Martensen Cheri Morgan Danica Mae Pascua Madison Pribyl Niko Skoblar Johanna Toomey	

		Rusty Wilson Caitlin Mckey Denisse Ponce Angela Zetouna Keagan Haight Isela Renteria Bryan Salinas Taylor Tran Paula Trusewicz	
Winter Interession 2016- 2017	SDSU	Lindsay Brown Yvonne Bustamante Jenna Linehan Claire Norberg Bryan Salinas Susana Sanchez Estrada Niko Skoblar	
Spring 2017	SDSU	Angela Zetouna Victoria Lawless Christiana Yip Dalia Rojas	Brittany Akins Ryan Alexander Patricia Avalos Christine Batikian Gerald Biando Edward Dominguez Rina Eisenberg Farhang Farnaz Asmim Faria Antonio Harper Kaltoum Kerdi Ally Lu Paul Luat Karla Necochea Vian Orah Matthew Rorro Josefina Villavicencio Naomi Walski
Fall 2017	SDSU	Victoria Lawless Christiana Yip Rachelle De Ocampo	Matthew Rorro
Winter Interession 2017- 2018	SDSU	Kimberly Kolenic Vanessa Lim Ashlynn McCool Jaliza Ramirez Perez Jacqueline Villarreal	
Spring 2018	SDSU	Felix Castillo Ahira Medalla Aldo Munoz	Alexandra Benitez Josefina Villavicencio Gerald Biando Julie Nguyen Dianne Pelley

			Amanda Pham Rabia Riaz Jade Wong
Fall 2018	SDSU	Christian Aviles Alondra Avitia Lara Aziz Shadi Aziz Zarrea Brown Chisato Cincilus Sarah Jameel Annelle Lunes Leeza Matti Nathaly Miraval Padmashree Muralidharan Elizabeth Pineda Ailed Robles Sierra Smith Salvador Torres	

*Mentored Students' Awards and Honors*

- Elizabeth Joseph Abba (2009). Fulbright Scholar
- Jacqueline Devera (2012). Best Presentation at the SDSU Student Research Symposium
- Jacqueline Devera (2012). Hanlon Award
- Abigail Crotz (2013). Research Scholarship
- Jessica Antonel (2013). Fulbright Scholarship
- Kathryn Paras (2014). Best Scoring Research at the SDSU Student Research Symposium
- Kiet Tuan Nguyen (2014). Hanlon Award
- Ally Lu (2014). HCOP Scholarship
- Kathryn Paras, Ally Lu, and Dustin White (2015). Best oral presentation at the SDSU Student Research Symposium.
- Ally Lu (2016). GSPH Outstanding Student Award at the SDSU Student Research Symposium
- Victoria Lawless and Christiana Yip (2018). SDSU University Sustainability Award at the SDSU Student Research Symposium

Dozen other students have received Scholarships or Fellowships for Ph.D. studies in prestigious universities, such as Yale University, New York University, University of California at Berkeley, University of California at Los Angeles.

**V. COURSES TAUGHT**

*Summary*

- Online and Onsite teaching expertise in graduate and undergraduate courses

- Excellent student quantitative and written evaluations of teaching
- Capable of teaching large classes (100+ students per course)
- Teaching method provides ample stimulation for all types of learners: visual, auditory, read-write, and kinesthetic.

At San Diego State University (Graduate and Undergraduate Courses):

Graduate Course: PH604: Environmental Determinants of Health (*class size: 25-80 students*, 6 times)  
 Onsite: Fall 2013, Fall 2014, Fall 2016, Fall 2017, Fall 2018  
 Online: May-July 2018

Graduate Course: PH632: Air Quality (class size: 12-20 students, 11 times)  
 Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014,  
 Spring 2015, Spring 2016, Spring 2017, Spring 2018

Undergraduate Course: PH304: Environment and Public Health (class size: **60-170 students**, 12 times)  
 Fall 2008, Spring 2009, Fall 2009, Spring 2010, Spring 2011, Spring 2012, Spring 2013,  
 Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018

Undergraduate Course: PH496: Special Topics: Climate Change and Health (5 times)  
 Fall 2010, Summer 2011, Fall 2011, Fall 2012, Fall 2013

Undergraduate Course: PH452: Health Impacts from Climate Change (class size: **39-54 students**, 2 times)  
 Fall 2016, Fall 2018

At San Diego State University (Study Abroad Programs):

Students were recruited, supervised, and led to India through the College of Extended Studies Faculty-Led Study Abroad mechanism. Students took courses, such as, **PH499 and GEN S 450** to meet their study abroad requirements

- Travel Dates: 12/28/2016—1/17/2017: 11 students to India
- Travel Dates: 1/1/2018—1/15/2018: 17 students to India
- Proposed Travel Dates: 12/29/2018—1/15/2019: currently open for enrollment

In addition, individual students were enrolled in PH499, PH750D, PH797 and sent to India, Bangladesh, Chile, Benin, Belize, and Cameroon to meet research, internships, and study abroad requirements as follows:

- India: 7 students
- Bangladesh: 1 student
- Belize: 1 student
- Cameroon: 1 student

- Benin: 1 student
- Chile: 1 student

At San Diego State University (special studies, independent research, thesis research for Graduate and Undergraduate students):

Graduate Course: PH650D: Graduate Practical Training (20 times)

Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018

Graduate Course: PH700D: Graduate Seminar: Global Warming (class size: 6 to 15 students, 7 times)

Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2012, Fall 2014, Fall 2017

Graduate Course: PH797: Independent Research (21 times)

Fall 2007, Spring 2008, Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018

Graduate Course: PH798: Special Studies in Air Pollution Instrumentation (15 times)

Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018

Graduate Course: PH799: Master's Dissertation (18 times)

Spring 2008, Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Spring 2014, Fall 2014, Spring 2015, Spring 2016, Fall 2017, Spring 2018, Fall 2018

Undergraduate Course: PH499: Undergraduate Research (19 times)

Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018

At University of California, Berkeley

Graduate Course: PH298: Air Pollution Sampling Techniques

Spring 2007

Graduate Course: PH299: Independent Studies

Spring 2007



## V. SERVICE

### Service to San Diego State University

- Curriculum committee, College Level, College of Health & Human Services (2017-Present)
- Evaluation Committee, School of Public Health (2017—Present)
- Core faculty member, The Sage Project (08/2014—Present)
- Voting Member, Student Research Symposium (SRS) (08/2014-Present)
- Member, Graduate Student Travel Fund Subcommittee (12/2014-Present)
- Member, Inamori Subcommittee (11/2014-Present)
- Chair, Laboratory Resources Committee (05/2011-Present)
- Search Committee for Dean of College of Extended Studies (2017-2018)
- Search Committee for Faculty in the Blue Gold Area of Excellence (2016-2018)
- Member, Academic Senate (08/2012-5/2017)
- Alternate Member, Institutional Review Board (IRB) (08/2012-5/2017)
- Member, Student Affairs and Alumni Committee (08/2007-08/2014)
- Member, Environmental Health & Safety Committee (06/2008-01/2014)
- Member, Laboratory Resources Committee (08/2009-05/2011)

### Service to the Community:

- Science Olympiad San Diego Regional Event Supervisor (High School Division C and Middle School Division B), San Diego, CA
- Science Olympiad Teaching, Ecology (developed and taught course in ecological principles for students in grades 6-8), Science Olympiad (Division B), Black Mountain Middle School. (August 2017-April 2018, cumulative hours tracked 80 hrs+)
- Science Olympiad Teaching, Ecology (developed and taught course in ecological principles for students in grades 6-8), Science Olympiad (Division B), Black Mountain Middle School. (August 2016-April 2017, cumulative hours tracked 80 hrs+)
- Science Olympiad Teaching, Green Generation (developed and taught course in Environmental Science for students in grades 6-8), Science Olympiad (Division B), Black Mountain Middle School. (August 2015-April 2016, cumulative hours tracked 120 hrs+)
- Volunteer Proctor, Science Olympiad Competition, Black Mountain Middle School. (November 6, 2015)
- Chair, ad-hoc Board of Trustee (set vision for the school), San Diego Bangla School. (August 2012-Present)
- School of Health and Human Services, National University: designed two online courses COH400 and COH608 between September 2012 and June 2013.

- Supervisor, Graduate Research Experience for Vilayphone A. Sisouphanthong, National University (2011).
- Sustainable San Diego: participated in several meetings between March-May 2010 in their Public Health Forum.
- “Climate change and implications on health”, Pomerado Hospital, San Diego, CA, USA (Invited Talk, Apr 24, 2009)
- Supervisor, Undergraduate Research Internship Experience, Mesa Community College (Mar 2008 to June 2008)
- Round Table discussion: San Diego Foundation (2008)
- Seminar participation: UCSD, SD Focus 2050 (2008)

#### Service in International Organizations

- Moderator, Plenary IV: Innovation in Responsible Consumption and Production, Workshop on Celebrating Innovation in Health and Sustainable Development, January 4-5, 2017
- Attendee, The Gobeshona Conference for Research on Climate Change in Bangladesh (January 08 to 11, 2016)
- Subject expert, Transport Emission Mapping and Monitoring Capacity Building in 5 selected African cities, Environmental Solutions and Consultancy, Dubai, UAE (2015).

#### Participation in Professional Associations

- Member, Air and Waste Management Association
- Member, American Association for Aerosol Research
- Member, International Society of Exposure Analysis
- Member, Partnership for Clean Indoor Air
- Member, Bangladesh Environment Network

#### Reviewer Work for Textbook

1. George Luber and Jay Lemery. “The Health Consequences of a Changing Climate: Public Health and Clinical Perspectives”

#### Reviewer Work for Research Proposal

1. AAAS Research Competitiveness Program, King Abdulaziz City for Science and Technology (KACST) Proposal Review, 2015.
2. Superior Council of the National Fund for Scientific & Technological Development (FONDECYT), National Research Funding Competition, Comisión Nacional de Investigación Científica y Tecnológica (CONICYT), Chile, 2013.
3. Ministry of Science and Innovation, Wellington, New Zealand, Proposal Review, 2012.
4. AAAS Research Competitiveness Program, King Abdulaziz City for Science and Technology

(KACST) Proposal Review, 2012.

Reviewer Work for Technical Journals

1. Reviewer, Atmospheric Environment: 2013, 2014, 2015
2. Reviewer, Environmental Science & Technology: 2004, 2005, 2006, 2008, 2009, 2011
3. Reviewer, Aerosol and Air Quality Research: 2010, 2011
4. Reviewer, Indoor Air: 2008, 2010
5. Reviewer, Science of the Total Environment: 2007, 2009
6. Reviewer, Biomass & Bioenergy: 2007