CURRICULUM VITAE

STATUS: Monday, January 14, 2019

NAME: Stephan K. Schwander MD PhD

PRESENT TITLE: Associate Professor

Departments of Urban-Global Public Health & Environmental and Occupational Health

Director, Urban-Global Public Health Concentration

Rutgers School of Public Health

OFFICE ADDRESS: Rutgers - School of Public Health

Department of Urban-Global Public Health & Environmental and Occupational Health

1 Riverfront Plaza, Suite 1008

Newark, NJ 01702

Phone: 732-235-5405 (office) Phone: 732-713-8959 (work cell)

Fax: 732-235-4004

E-MAIL ADDRESS: schwansk@sph.rutgers.edu

CITIZENSHIP: German & US

EDUCATION: (chronological order)

Undergraduate

1967 - 1975 Johann Wolfgang Goethe High School, Frankfurt Germany

Graduate and Professional

1976 - 1982 Studies of Human Medicine: Johann Wolfgang Goethe University,

Frankfurt/Main/Germany, License to Practice Medicine

1979/80 Medical elective periods at the Hospital Dos de Mayo in Lima/Peru and the Hospital

Regional in Pucallpa/Peru

1983 - 1984 Residency in Pediatrics at the Altona Children's Hospital from 1859, Hamburg, Germany

1985 Diploma: Tropical Medicine and Medical Parasitology, Bernhard Nocht Institute for

Tropical Medicine, Hamburg/Germany

1985-1986 Residency in Pediatrics at the *Heidberg General Hospital, Hamburg, Germany*

1987 Finalization of Ph.D. in Medical Sciences from *University Hamburg Eppendorf / Germany*

4/1987-7/1992 Residency and fellowship in Medicine and Tropical Medicine, Bernhard Nocht Institute for

Tropical Medicine, Hamburg, Germany. Specialization in tropical medicine. Clinical research in the field of HIV/AIDS (Head: Professor Manfred Dietrich). Lecturer in the course of 'Tropical Medicine and Medical Parasitology' at the Bernhard Nocht Institute for Tropical Medicine,

Hamburg/Germany.

POST DOCTORAL or ADDITIONAL TRAINING:

1/1994-1998 Research Associate, Department of Medicine, Divisions of Pulmonary Medicine and Infectious

Diseases at Case Western Reserve University, Cleveland, OH. Research field: immunopathogenesis

of pulmonary tuberculosis. Conducted research on immunopathogenesis of pulmonary tuberculosis with/without HIV-1 infection within Case Western Reserve University/Makerere University Collaborative Projects in Kampala/Uganda. On site translational biomedical research work in the Department of Microbiology at the National Institute for Respiratory Diseases (INER) in Mexico City, Mexico

EMPLOYMENT/WORK EXPERIENCE: (chronological order)

8/1992-7/1993

Principal investigator of a comparative randomized antituberculous treatment study with Rifabutin and Rifampicin in patients with HIV-1 associated pulmonary tuberculosis at the Joint Clinical Research Centre in Kampala/Uganda (collaboration between the Bernhard Nocht Institute for Tropical Medicine in Hamburg/Germany and the Joint Clinical Research Centre in *Kampala/Uganda*)

8/1993-11/1993 Assistant Professor and interim director of HIV/AIDS-related projects (STDs, HIV-1 diagnostics, cryptococcosis) of the University of California San Francisco at Makerere University in Kampala/Uganda

1998-2001

Instructor Department of Medicine, Divisions of Infectious Diseases and Pulmonary and Critical Care, Case Western Reserve University. Conducted laboratory research on pulmonary immune responses during tuberculosis and in household contacts with Drs. E. Sada and J. Ellner (PI) at the Department of Microbiology at the National Institute for Respiratory Diseases (INER) in Mexico City/Mexico. Member of the tuberculosis research unit (TBRU) at Case Western Reserve University.

Principal Investigator study entitled 'Role of M. africanum in human tuberculosis in Uganda'

2001

Adjunct faculty member in the Facultad de Ciencias of the Autonomous University of Mexico City (UNAM)

March 2002present

Member of the Graduate School of Biomedical Sciences (GSBS) at UMDNJ/Rutgers

January 2001 – June 2008

Assistant Professor, Department of Medicine, Division of infectious Diseases and Ruy V. Lourenco Center for the Study of Emerging and Reemerging Pathogens, University of Medicine & Dentistry of New Jersey - New Jersey Medical School (UMDNJ-NJMS), Newark NJ. Established and supervised a wet laboratory with postdoctoral fellows, research assistants. Mexican graduate student and summer students. Performed academic activities including supervision of scientific projects, analysis of data, manuscript and grant preparation, thesis supervision, graduate course teaching, resident and fellow teaching, seminars, medical student interviewing, student advising.

February 2007-

Member of the Cardiopulmonary Disease Core (CPDC) at the Environmental and Occupational Health Sciences Institute (EOHSI, a joint institute of UMDNJ-Robert Wood Johnson Medical School and Rutgers, the State University of New Jersey)

Member of the NIEHS Center for Environmental Exposures and Disease (CEED) at EOHSI.

July 2008-

Adjunct Associate Professor UMDNJ - School of Public Health, Department of ENOH

July 2009

Establishment and ongoing supervision of a research wet laboratory at SPH, Department of ENOH. The laboratory is equipped for culture of human cells and cell lines, in vitro bacterial infections, detection of proteins, RNA and DNA determination, particle exposure studies, and microscopy.

July 2008-Present

Adjunct Assistant Professor, New Jersey Medical School, UMDNJ/Newark Adjunct Assistant Professor EOHSI, RWJ-UMDNJ/Piscataway Member of the NIEHS Center of Excellence UMDNJ/Piscataway

July 7, 2008-

Senior Scientific Advisor/Senior Fellow at Aeras- Global Tuberculosis Vaccine

CV Stephan Schwander

June 30, 2009	Foundation, Rockville MD. Involved in development of novel lung immunity based vaccine efficacy assays and co-supervised studies of novel tuberculosis vaccine candidates (AERAS 402, X05) for inhalative administration. Collaborative work with nonhuman primate, clinical and immunological study groups at AERAS and the vaccine research centers at NIH, UC Davis and Tulane. Participation in senior staff meetings, clinical oversight committee and animal committees and planning groups at AERAS.
July 1, 2009- Associate Professor, <i>UMDNJ- School of Public Health, Department of ENOH</i> 2013 (RU merger)	
2013-ongoing	Associate Professor, Rutgers School of Public Health, Department of ENOH
July 1, 2009- ongoing	Establishment and supervisor of a 1000 square foot wet laboratory at <i>UMDNJ/Rutgers School of Public Health in the Department of ENOH</i> . PI, scientific direction, supervisor, administration and Budget.
Oct. 25, 2010- June 19, 2013	Appointment interim Chair Department of Environmental and Occupational Health & Director Center for Global Public Health at UMDNJ School of Public Health
June 19, 2013- June 31, 2015	Chair Department of Environmental and Occupational Health
June 19, 2013- August 2017	Appointment Director Center for Global Public Health at Rutgers School of Public Health
August 1 2017 July 31, 2018	Assistant Dean, Office of Global Public Health Affairs
July 31, 2018-	Associate Professor, Rutgers School of Public Health, Departments of Urban – Global Public Health & Environmental and Occupational Health. Director, Global Public Health concentration.
MILITARY:	NA
ACADEMIC APPOINTMENTS (also see above):	
8-11, 1993	Assistant Professor and interim director of HIV/AIDS-related projects of the <i>University</i> of California San Francisco at Makerere University in Kampala/Uganda
1998-2001	Instructor Department of Medicine, Division of Infectious Diseases, Case Western Reserve University, Cleveland, OH.
January 2001- June 2008	Assistant Professor, Department of Medicine, Division of Infectious Diseases & Ruy V. Lourenco Center for the Study of Emerging and Reemerging Pathogens
July 1, 2009	Associate Professor, Department of Environmental and Occupational Health – Global Public Health Center, UMDNJ- School of Public Health
March 2011	Member of the Environmental and Occupational Health Sciences Institute (EOHSI)
July 2011	Member of the Rutgers University Graduate School, New Brunswick, NJ
June 2012	Member of the Joint Graduate Program in Toxicology of Rutgers University
July 31, 2012	Member of the Joint Graduate Program in Microbiology and Molecular Genetics of Rutgers University and UMDNJ

February 2015 Member of Rutgers Physiology and Integrative Biology Graduate Program

HOSPITAL APPOINTMENTS:

N.A.

LICENSURE:

To practice medicine as a physician (Germany/Europe only).

CERTIFICATION:

NA

DRUG LICENSURE:

NA

HONORS AND AWARDS:

2nd prize at 2nd International Congress on drug therapy in HIV-infection, Glasgow

2005 Member Sigma Xi Society

06/2007 Clinical Infectious Diseases Award for Outstanding Review

October 29-20, Invited panelist/discussant in the Human Health and Urban Environments panel during

the international conference on the Urban Environment and Urban Sustainability, titled Urban

Biosphere & Society: Partnership of Cities, New York Academy of Sciences

February 2007 Member of the Cardiopulmonary Research Core of the NIEHS (National Institute of Environmental

Health Sciences) Center of Environmental and Occupational Health Sciences Institute (EOHSI, a

joint institute of UMDNJ-Robert Wood Johnson Medical School and Rutgers University).

May 23, 2007 Chairman of American Thoracic Society (ATS) Symposium entitled 'The Host Defense Against

Mycobacterial Infection' at the ATS International Meeting in San Francisco.

October 2009 Founding Member of the Center for Global Public Health at the UMDNJ-SPH.

Sept 8-9, 2011 Invited panelist at the National Institutes for Environmental Sciences (NIEHS) Workshop to

Examine the Interactions between Environmental Exposures and Infectious Agents in the Etiology

of Human Disease'. NIEHS, Research Triangle Park, NC.

April 20, 2012 Invited panelist at the Environmental and Occupational Health Science Institute's symposium

celebrating its 25th Anniversary of Research Education and Service. Panel title: 'Nano-Technology

Potential Risks associated with the benefits: an EOHSI Perspective'.

May 5, 2012 Chairman of Symposium entitled 'Macrophages and Monocytes' at the 99th Annual Meeting of The

American Association of Immunologists (AAI) May 4-8, 2012, Boston MA.

May 21, 2012 UMDNJ Excellence in Research Award for the Academic Year 2011-2012. Foundation of the

University of Medicine and Dentistry of New Jersey

September 2012 Awarded a \$2.9 million grant by the National Institute for Environmental Health Sciences, NIEHS

based on a 1st percentile ranking from the NIH Review Group

May 14, 2013 Award of tenure at UMDNJ School of Public Health

June 19, 2013 Appointment Chair Department of Environmental and Occupational Health, Rutgers School of

Public Health

September 2013- Member of and SPH representative to the International Advisory Committee (IAC) of the Rutgers

ongoing Center for Global Advancement and International Affairs (GAIA).

March-July 2014 Co-Chair of Rutgers Global Health Strategic Planning Working Group (RBHS Chancellor)

May 18, 2014 Chairman 'TB Genomics' mini-symposium (9 presentations, 8:15-10:45 a.m.) at *The American*

Thoracic Society (ATS) Annual Meeting. San Diego, May 16-21, 2014.

May 18, 2015 Chairman 'Inhaled Smoke and Lung Immunity to Tuberculosis and Other Infections' mini-

symposium at The American Thoracic Society (ATS) Annual Meeting. Denver, CO, May 15-May

20, 2015.

Feb- Sept 2015 Member of RBHS Chancellor Search Committee for Henry Rutgers Chair in Global Health

Nov – Jan 2016 Member of RBHS Chancellor Search Committee for Director of EOHSI and Dept. Chair of ENOH

at RU SPH

February 2016 Member of RBHS Chancellor Search Committee for Dean of RU SPH.

June 2018 Fully funded invitee to Health in All Policies Workshop: The Case of Air Pollution, Urban Health,

and Sustainability, sponsored by WHO, ASPPH and NEHA. June 18 - 20, 2018 in Washington DC

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

MEMBERSHIPS:

- Sigma XI (2005 ongoing)
- World Association of Sarcoidosis and Other Granulomatous Disorders (WASOG) (2005-2010)
- AAAS (Oct 2004-ongoing)
- The American Thoracic Society, ATS (Jan 2004- ongoing)
- New York Academy of Sciences (Oct. 2003-ongoing)
- The American Association of Immunologists (Oct. 2000- ongoing)
- American Society for Microbiology (Dec. 2002 ongoing)
- Paul Ehrlich Society (1990- ongoing)
- German Society for Tropical Medicine (ongoing)
- German Society for Internal Medicine (1990 ongoing)
- International Union against Tuberculosis and Lung Disease (1998 2011, 2017, ongoing)
- German AIDS Society (1989 2000)
- International Society for Urban Health (ISUH) (2017 fwd).

OFFICES AND COMMITTEE ASSIGNMENTS:

Member of the American Thoracic Society (ATS) Assembly on Microbiology, Tuberculosis and Pulmonary Infections (MTPI) Program Committee in the years 2005, 2006, 2007, 2014, 2015 and 2016. Activities: (1) reviews of abstracts for the 2006 ATS Conference in San Diego- (2) facilitator for Poster Session B114 entitled 'The host response to infection with MTB' (May 2006) - (3) submission of a symposium proposals for ATS meeting 2007 and 2008, (4) review of symposia and course proposals for the 2007 ATS Conference in San Francisco, 2015 ATS Conference in Denver, CO.

Review and grading of Abstracts for poster and oral presentations for ATS meeting 2007 (Nov 07-2006)

BOARDS OF DIRECTORS/TRUSTEES POSITIONS:

NA

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

- 1. August 2001 Individual National Research Service Award Application Internal for Dr. Viswanath Venketaraman, Dept. Microbiology and Molecular Genetics, UMDNJ.
- 2. April 2006- The Wellcome Trust-Intermediate Clinical Fellowship Application
- 3. UMDNJ Foundation: Reviewer of Faculty Research Grant (May 81 2007)
- 4. Medical Research Council (MRC, UK) Training Fellowship Application (December 2009)
- 5. NIAID Ancillary Studies in Immunomodulation Clinical Trials ZAI-PA-I-(Ml) (January 2010)
- 6. Reviewer 1 and 3 on two Academic Research Enhancement Awards (AREA) applications, respectively.
- 7. NIH study section ZRG1 IDM-S (81) (July 17 and 18, 2013)
- 8. Veterans Administration Grants (tuberculosis, smoking, mucosal immunity, n=2), Office of Research and Development Infectious Disease B (INFB), November 2013
- 9. GAIA Centers review of international research and education grant applications (n=13), February 2014
- 10. CNIHR (creative and novel ideas in HIV Research Award program), (HIV-tuberculosis, lung, n=1), April 2014
- 11. Veterans Administration Grants (tuberculosis, smoking, mucosal immunity (n=3), Office of Research and Development Infectious Disease B (INFB), November 2014
- 12. Wellcome Trust DBT India Alliance, February 2015 (n=1)
- 13. NIH NIH-Infectious, Reproductive, Asthma and Pulmonary Conditions Study Section [IRAP] RO1 (n=4), R21 (n=5) grants (2016)
- 14. National Heart Lung and Blood (NHLBI) UM1 grant (n=1) (2016)
- 15. MRC
- 16. World Bank Group grant review (South Africa) (n=1) (2016)

17. NIH-Infectious, Reproductive, Asthma and Pulmonary Conditions Study Section [IRAP] Council ZRG1 PSE-NO7S and Council ZRG1 PSE-V90S (R21 n=3, RO3 n=2) (March 3, 2017)

SERVICE ON JOURNALS/PUBLICATIONS:

Editorial Boards

Guest Editor, Clinical and Developmental Immunology - Special Issues on HIV-associated Tuberculosis, 2009-2012

AdHoc Reviewer

- American J. Respir. Crit. Care Med (since 1999)
- Journal of Infectious Diseases
- Clinical Immunology (2000)
- Clinical and Developmental Immunology
- Microbes and Infection (2001)
- Clinical Infectious Diseases (since 2002)
- Environmental Pollution (2018)
- Experimental Lung Research (2015)
- FEBS Letters (2017)
- Genes & Immunity (2005, 2006)
- Immunological Reviews (2005)
- Am J Mol Cell Biol (2005)
- International Journal of Tuberculosis and Lung Disease 2006-2010
- Int. J Environmental and Public Health (2017)
- Int. J. Hygiene and Environmental Health BMC (2015)
- J. Env. and Public Health 2017
- J. Immunology (since 2006)
- J. Infect Diseases (since 2000)
- J IUATLD
- J Trop Med Hygiene (2017)
- Particle and Fibre Toxicology (2016)
- Pathogens and Disease 2017
- PloS One (2008/2009, 2012)
- PloS Pathogens (2015, 2016)
- Pharmaceuticals (2010)
- Scientific Reports 2018
- Thorax 2009
- Toxicol. Sciences (2015)
- Tubercle and Lung Disease (since 1998)
- Tuberculosis (since 2006)

SERVICE ON INSTITUTIONAL & SCHOOL COMMITTEES (UMDNJ/Rutgers):

- Organizer and co-organizer of Virology Seminar Series, Infectious Disease Research Conferences,
 UMDNJ/PHRI TB Club and Junior Faculty Mentoring Program Advisory Group
- Member International Study Grant Committee Member of NJMS Alumni Association
- Manager of Department of Medicine laboratory core facility 2002 to 2007 (supervisor and coordinator of the operations and maintenance of the NJMS laboratory core facility)
- Laboratory safety Officer for the Department of Medicine Laboratories 2006 to 2008
- International Study Grant Committee Member of Alumni Association of New Jersey Medical School Review and grading of Mini Grant Applications for International Travel (2006-2007) (Grading of 10 student's travel applications) Committee meeting May 11, 2007. Review and Grading of 8 student's travel applications Committee meeting April4, 2008.

- Member of the UMDNJ Virology Seminar Series Committee (Fa112004 through June 2007), UMDNJ-NJMS
- UMDNJ School of Public Health External Advisory Committee. The Formation of a Global Public Health Center (GPHC) at the UMDNJ-SPH, December 16, 2009
- Chair, interim, Department of ENOH student advising faculty performance evaluation supervision of staff Department administration
- Member of the Executive Council at SPH, 2010 ongoing monthly
- Member of the Executive Committee at SPH, 2010 ongoing monthly
- Member of the Research Committee at SPH, 2010– ongoing irregular
- Member of the Campus and School-wide Curriculum Committee at SPH, 2011 ongoing
- Member of the Doctoral and academic Progression Committee, 2012 ongoing
- Chair Department Equity Advisory Committee
- Member and SPH delegate, International Advisory Committee (IAC) at the Rutgers Centers for Global
- Advancement and International Affairs (GAIA). Sept 2013 ongoing
- Member of the IAC (International research) subcommittee at the Rutgers Centers for Global Advancement and International Affairs (GAIA). January 2015
- Member of the SPH Academic Progression committee. January 2015 ongoing

UMDNJ - SERVICE ON DEPARTMENT/PROGRAM COMMITTEES:

- Infectious Disease Research Committee Member 2005, 2006 (Review of research protocols)
- Infectious Disease Research Conference Committee 2005, 2006 (Organizer/planer of biweekly research conferences for ID and other faculty and fellows of the ID division).
- UMDNJ/PHRI TB Club Planer and Organizer 2004-2007 (Organizer of monthly research conferences
- Member of the *M.tuberculosis* Growth arrest working group at the Public Health Research Institute (PHRI)in Newark NJ (2004-2007)
- Junior Faculty Mentoring Program Advisory Group (Dr. Bill Gause chair) Oct. 2005- Feb. 2006

RUTGERS - SERVICE AS ASSISTANT DEAN OF GLOBAL PUBLIC HEALTH AFFAIRS

November 2017

Visit and MoU signing at the University of Dodoma in Tanzania Visit of the National Research center in Dar EsSalaam

March 9-March 17, 2018

Visit and MoU signing at the National School of Public Health, Athens/Greece Visit at the Harakopio University, Athens/Greece Visit and collaborative discussions at University of Athens, Athens/Greece

UMDNJ DEPARTMENT AND SCHOOL INTERVIEW ACTIVITY

Internal Medicine Residency Program Recruitment

Department of Medicine Residency Training Program. December 11, 13 and 17, 2001 and January 15 and 22, 2002.

November 11, 12 and 13, 2002 (4 candidates), December 3, 2002 (1 candidate), January 14, 2002 (1 candidate), 2004: January 4 candidates

NJMS ID Fellowship Program Recruitment

Two candidates (Drs. Solari and Rapose) on Feb. 06, 2004, two (Dr. Nicole Alexander, Dr. Win Myat) on Feb. 13, 2004.

Feb. 11, 2005: Karin Ingrid Hjalmerson, Feb 18, 2005: Saher Jaliawala, Feb 24-2005: Maher I Madhoun. Feb. 10, 2006: Jean Gustave Shoumou and Roxana Radu-Bodlin

Feb 17, 2006: Aleksandr Kats and Giselle Halphen

New Jersey Medical School Admission Applicant Interviews

November 23, 2004 (2 candidates)

December 21, 2004 (2 candidates)

December 27, 2004 (2 candidates)

January 12, 2005 (2 candidates)

October 20, 2005 (2 candidates)

November 03, 2005 (2 candidates)

October 23, 2006 (1 candidate)

December 5, 2007 (1 candidate)

Faculty Member Recruitment Interviews

Pulmonary Division: Dr. Jenny H Kim MD, Jan 31-2007, Dr. Eisen, Dr. Adam Morgenthau April 23, 2007, Dr.

Howard Saft, May 03, 2007 and June 4 2007 (+lunch), Dr. Gisela Banauch, June 27, 2007, Dr.

Juan Pablo Wisnivesky, M.D., July 30, 2007

Endocrinology Division: Dr. Sawsan Youssef PhD Sept 8, 2007

Invited Speaker at Rutgers Student Undergraduate Student Fund Raising Dinner at the screening of the MSF film "Starved for attention". Rutgers University, December 2, 2010

SERVICE TO THE COMMUNITY:

Community Outreach and Education Core Center for Environmental Exposures and Disease. Informal research discussion session to disseminate CEED research to community members. February 09, 2011, Topic: Environmental Exposures. Participation with talk on *Immunity research and effects of Diesel Exhaust Particles*. Franklin Township Public Library

Establishment of Community Outreach and Education Core Center activities with Environmental Sciences core at Columbia High School in Maplewoord, NJ.

Field Trip, New Brunswick Health Sciences Technology High School, Community Outreach and Education Core, Center for Environmental Exposures and Disease, May 12-2014.

Talked with High school students in Rutgers Toxicology, Health and Environmental Disease High School Program on 7/22/2014 and 7/30/2014 at EOHSI

SPONSORSHIP OF STUDENTS FOR UNDERGRADUATE RESEARCH:

CWRU, medical student (primary care track) Sabrina Felson. Period June - December 1999. Project title: Evaluation of the prevalence of drug-resistant *Mycobacterium tuberculosis* at the National Institute of Respiratory Diseases (INER) in Mexico City between 1997 and 1998.

GSBS Undergraduate Summer Research Program Summer 2003

Student #1: Shevali Trivedi

Project title: 'A role in latency of M. tuberculosis infection? Human mesenchymal and stromal bone marrow cells

as reservoirs for avirulent *M.tuberculosis* (H37Ra)'.

Student #2: Jose Sosa

Project title: 'Cytotoxicity and Inhibition of Granzyme B in Mycobacterium tuberculosis Infection'

Undergraduate student Ibraheem Khan acquired techniques for the culturing of anaerobic and aerobic bacteria (in the context of Dr. Schwander's Sarcoidosis R21 grant work) from September 2005 until May 2006. A 20-page paper summarized his learning experience and accomplishments.

Summer 2006 (Six weeks- August 11-2006)
Pre-Med: Ned Okarter - Class of 2009

Project title: 'Pathogen specific immunity in Sarcoidosis'

GSBS project supported by extramural funds from the Heart, Lung and Blood Minority Student Research Training Program (NHLBI) - Short-term training program for minority students (generation of a research project - teaching of experimental design, preparation of a power point talk, a poster and a written project summary).

LAB VOLUNTEERS/INTERNS

Dr. Ismail S. Penukonda, International Medical Graduate from Anantapur, India, started to volunteer in the Schwander lab in July 2006- ended February 2007.

Rutgers Biological Sciences Lab internship: Sunjay Kumar 2013 Shardul Rathod 2016 Christina 2016-2017 Laura Jones (cand MPH in GPH) July 2017-2018

SPONSORSHIP of MASTER'S THESIS/PROJECTS:

CO-SUPERVISOR (NJMS)

Project Title: Effects of Mycobacterial Infection on Macrophage Phenotype and Function and Macrophage dependent Antimycobacterial T Cell Functions

Student 1 Bonnie Cooper- Project start Feb 14-2007 - ongoing

Student 2 Kamilah Muhammad - Project start Feb 14-2007 project end April 2007

External Reviewer of MPH thesis from Claudia Carranza, Oct. 2000 - 2006 for Universidad Autonoma Metropolitana de Mexico (UNAM)

External reviewer of MSc thesis at University of Cape Town- October 30, 2010 (Final evaluation) Candidate LML

Dissertation Utility of Newer and Novel Technologies for the Diagnosis and Treatment-monitoring of Tuberculosis using different biological fluids

External reviewer of MSc thesis (LML) in Clinical Science and Immunology entitled 'Utility of Newer Technologies for the Diagnosis and Treatment-monitoring of Tuberculosis using different biological fluids' at the University of Cape Town, SA.

SPH FIELD WORK SITE PRECEPTOR AND SUPERVISOR

- Advisor/Site preceptor SPH Field work Project entitled The Effects of Diesel Exhaust Particles on Phagocytosis
 of Mycobacterium tuberculosis in THP-1 cells and Human Blood Cells by Megan Rockafellow (May 2011)
- Advisor/Site preceptor SPH Field work Project entitled *Air Pollution Particle Effects on Antimycobacterial Immunity of Respiratory Epithelial Cells* by Pasquale Cantarella (October 2013)
- Advisor/Site preceptor SPH Field work Project entitled Indoor Air Pollution Effects on Human Immunity: Assessment of an Air Pollution Monitoring Equipment Platform for Community Studies. Sabrina Hassan (Spring 2015)
- Advisor/Site preceptor SPH Field work Project entitled *Study Examining the Relationship Between Rates of Death and Levels of Air Pollution in Areas of Northwestern New Jersey*. Eileen Mussara (Spring 2015)
- Advisor/Site preceptor SPH Field work Project entitled The Impact of Ambient and Indoor Air Pollution Exposure
 on Human Immunity against Mycobacterium tuberculosis: a systematic review and meta-analysis. Beatriz
 Escobar (Spring 2015)
- Advisor/Site preceptor SPH Field work for Ghimja Berhanu (cand. MPH in ENOH 2015-2016)
- Advisor/Site preceptor SPH Field work for Beatriz Escobar (cand. MPH in ENOH 2015-2016)
- Advisor SPH field work/practicum for Medina Azzizi (cand. MPH in GPH, 2016-2017)
- Advisor SPH field work/practicum for Nina Eizigwe (cand. MPH in ENOH 2016-2017)
- Advisor SPH field work/practicum for Elsabeth Andemicael (cand. MPH in GPH 2016-2017)
- Advisor SPH field work/practicum for Rachel Niemoyer (cand. MPH in GPH 2017-2018)
- Advisor SPH field work/practicum for Amanda Sizer (cand. MPH in GPH 2016-2018)
- Advisor SPH field work/practicum for Minna Sabahi (cand. MPH in GPH 2017-2019)
- Advisor SPH field work/practicum for Mariam Kapadnaze (cand. MPH in GPH 2017-2019)
- Advisor SPH field work/practicum for Jennifer Ngandu (cand. MPH in GPH 2017-2019)

- Advisor SPH field work/practicum for Lady Kovacs (cand. MPH in GPH 2017-2019)
- Advisor SPH field work/practicum for Melanie Miranda (cand. MPH in GPH 2017-2019)
- Advisor SPH field work/practicum for Bushra Siddiqi (cand. MPH in GPH 2017-2019)

SPONSORSHIP OF POSTDOCTORAL FELLOWSHIP PROJECTS:

Cesar Enrique Rivas Santiago PhD [PhD obtained from the Universidad Autonoma de Mexico (UNAM)]. Begin of postdoctoral fellowship in Dr. Schwander's lab on May 1, 2012. October 2014 – August 19, 2016

DISSERTATION CHAIR, COMMITTEE MEMBER, REVIEWER:

External Reviewer of PhD thesis from Maria Teresa Herrera, 2001 - 2008 for Universidad Autonoma Metropolitana de Mexico (UNAM)

Thesis committee member for NJMS Graduate School of Biomedical Sciences (GSBS) for Marcia Klein MD, PhD candidate. May 2002 - 2005

Member of Qualifying Committee for MD PhD student applicant in W. Gause Lab: Tim Kreider. August 16, 2007.

Member of qualifying examination committee for Weijia Zhu, November 11, 2004.

Thesis reader: Kumar Dayaram PhD candidate August 29, 2006 (PhD thesis supervisor Nancy Connell)

RUTGERS SCHOOL OF PUBLIC HEALTH PHD AND CAND PHD THESIS COMMITTEE MEMBER AND/OR ADVISOR

Megan Rockafellow MPH, passed qualifying exam October 2012. In preparation of thesis proposal and putting together of a thesis committee. Terminated prior to final thesis proposal (January 2014).

Danielle Botelho (School of Pharmacy, PhD Advisor Andrew Gow, PhD) PhD thesis committee member. Graduated 2015

Huajun Zhen (Graduate Program in Environmental Sciences, PhD Advisor Gedi Mainelis, PhD) PhD Thesis committee member. PhD thesis presentation January 2015. Graduated 2015

Yeongkwon Son PhD, co advisor with Q. Meng PhD on his 2nd PhD at SPH. Passed qualifying exam. Passed thesis proposal 2016. Finalized PhD research phase. Thesis defense October 2017.

Funmi Ibironke cand. PhD. PhD thesis advisor. Start February 2015 in Schwander lab and passed thesis proposal. In PhD research phase. Thesis defense (pass) and graduation in July 2018.

Denise Dietz, MPH, Chair of PhD thesis committee, passed qualifying exam January 2014. Finalized thesis proposal. In PhD research phase.

RUTGERS SPH FACULTY MENTORING COMMITTEE MEMBER

Koshy Koshy PhD, Assistant Professor Department of Environmental and Occupational Health (ENOH)

Jaime Madrigano PhD, Assistant Professor Department of Environmental and Occupational Health (ENOH)

Qingyu Meng PhD, Assistant Professor Department of Environmental and Occupational Health (ENOH)

TEACHING RESPONSIBILITIES AT SPH:

PROGRAM AND COURSE DIRECTOR AND LECTURER

1. 'Public Health Biology & Physiology'. Spring 2010. Spring 2015. Spring 2016. Course Number: ENOH 0560.

2. 'Introduction to Global Public Health'. Fall 2010. Fall 2011. Fall 2012. Fall 2013. Fall 2014. Fall 2015. Fall 2016. CRN# 18316, ENOH 0600.

CERTIFICATE DIRECTOR - Global Health CERTIFICATE (consisting of five 3-credit courses)

- Introduction to Global Public Health (Director: S. Schwander)
- Theories of Development and Global Public Health (Director: B. West) 2.
- 3. Epidemiology of Infectious Disease (Director: R. Morgan)
- Principles of Epidemiology (EPI Core Course) (Director: S. Marcella) 4.
- Global Noncommunicable Disease and Environmental Risk Factors (Director: Q. Meng) 5.

PROGRAM DIRECTOR MASTERS IN PUBLIC HEALTH WITH CONCENTRATION IN GLOBAL PUBLIC HEALTH. Start semester: Fall 2016.

GUEST LECTURER

Dr. Robert Morgan's course on Infectious Disease Epidemiology, topic 'Tuberculosis' January 31, 2011

Dr. Derek Shendell's PhD summer course, topic 'Tuberculosis and Air pollution research' 2011

UNDERGRADUATE TRAINING

Middle level pharmacy students at Rutgers School of Pharmacy. 1-hour lecture in *Introduction to Research* class on March 2, 2012 (Course Director Andrew Gow).

CLINICAL RESPONSIBILITIES:

NA

GRANT SUPPORT: (chronological order)

1. Principal Investigator S. Schwander

NIH SBIR grant (Co-PI P. Lehmann, CTL)

Title: Development of a TB diagnostic kit

9/2000-8/2001

This project examined the feasibility of an ELISPOT assay-based Diagnostic tool for M. tuberculosis infection, infection with MOTT, and post BCG vaccination immunity.

NHLBI 1R21 HL077462-01 (RFA: HL-04-009 Granulomatous Lung Inflammation in Sarcoidosis). 07/2004-2006 (No cost extension 2007)

\$275,000.- direct

Pathogen Specific Immunity in Sarcoidosis. The major goal of this project is to assess pulmonary antigen specific immunity and host gene expression in bronchoalveolar cells in response to M.tuberculosis and P.acnes.

NIEHS Ctr. for Environmental Health Sciences- Pilot Grant 04/2006-03/31/2007

\$35,000.- direct

Title: Effects of Diesel Exhaust Particles on Human Antimycobacterial Immunity. The major goal of this project was to examine the effects of in vitro and in vivo diesel exhaust particle exposure on the capacity of human blood monocytes and T cells to control growth of mycobacteria in vitro.

National Institutes of Environmental Health Sciences (NIEHS) 9/1/2008-8/31/2011 1R21ES016928-01

\$ 275,000 total direct

Title: Diesel Exhaust Particle Effects on Human Immunity to Mycobacterium tuberculosis. The major goal of this project is to assess the effect of DEP on Mycobacterium tuberculosis-induced cytokine production, and on growth control of mycobacteria in human blood cells. Molecular mechanisms of DEP-induced immune suppression will be explored.

NIEHS Summer Student Supplement 5/24/2010-8/15/2010 NOT-OD-09-060-ARRA \$6,167.- direct

RD83469301 As SPH Subcontract PI 07/01/2010-06/30/2014 US Environmental Protection Agency (EPA)

\$871,860.- total direct

\$598,710.- Schwander component direct

Title: Risk Assessment for Manufactured Nanoparticles Used in Consumer Products (RAMNUC). The major goal of this consortium project is to examine changes in physiochemical and toxicological properties during the course of the life cycle of several manufactured nanoparticles used in common consumer products. The project will produce data to feed into a risk modeling system particularly tailored for nanoparticle-containing consumer products. Overall PI: Dr J. Zhang

1U19ES019536 - 01 As SPH Subcontract PI 09/30/2010 - 09/29/2015

National Institutes of Environmental Health Sciences (NIEHS)\$428,740.- total direct

\$226,530.- Schwander component direct

Title: Respiratory Effects of Silver and Carbon Nanomaterials (RESAC). The major goal of this center project is to examine the link between physiochemical properties of engineered nanomaterials (ENMs) and biological effects. Nano-silver and carbon nanotubes will be used as model ENMs. The theme of the Center is ENMs' respiratory effects and their interaction with lung surfactants. The Center project contains a R01 project using in vitro approaches, a R01 project using in vivo animal approaches, and a R21 project using computational approaches to estimate the health risk. These projects are integrated through an administrative core and a science core as well as a center advisory board. Overall PI: Dr J. Zhang

S. Schwander

01/21/2014 - 12/31/2015

Global Affairs & Centers for Global Advancement and International Affairs (Rutgers GAIA Centers)

Title: Internationalization of Curriculum Grant

\$15,000.00

S. Schwander (Co-PI Q. Meng)

06/01/2014 - 06/01/2016

Cancer Institute of New Jersev

CPC 2013-2014 Research Development Pilot Awards

\$ 50,000.00

Title: Vapor Particles Generated from E-Cigarettes: Size Distribution, Dosimetry, and Immunotoxicity

S. Schwander (Co-PI Q. Meng)

2015-2017

New Jersey Health Foundation

\$59,500

(\$35,000 from NJHF and \$24,500 matched by Rutgers School of Public Health)

Title: *E-Cigarettes Vapor and Immunotoxicity*

S. Schwander (Co-PI Q. Meng)

2015

NIEHS Center for Environmental Exposures and Disease (CEED)

\$4,850

Title: Vapor Particles Generated from E-Cigarette: Physicochemical Properties and Immunotoxicity

S. Schwander (Co-PI C. Weisel)

09/07/2014 - 09/01/2016

3-R01-ES020382-04S1 NIEHS supplemental award

\$ 172,541.00

Metabolomic Analysis: Air Particulate Effects on Human Antimycobacterial Immunity

S. Schwander PI, \$14,988.

01/14-12/15

GAIA-Internationalizing the Curriculum Grant. Internationalizing of the Master of Public Health Degree, Global Public Health Concentration

S. Schwander (Co-PI G. Mainelis)

07/01/2015-03/31/2016

NIEHS CEED Pilot Grant. Title: Assessment of Microbial Communities in Real-world Urban Air pollution Particulate Matter. \$15,000.

S. Schwander (Co-PI Q. Meng)

2015-2017

GAIA \$8,000. Title: Air pollution campaign in Uganda. 03-04-15-12-31-2016

S. Schwander (Co-PI Q. Meng)

2015-2017

GAIA \$5,000. Title: "Air Quality Assessment and the Perception of Health Risk from Air Pollution in Tanzania – A *Pilot Study*". 05/19/2015 – 09/01/2016

1RO1 ES020382-01A1

09/01/2012 - 06/30/2017

National Institutes of Environmental Health Sciences (NIEHS) \$2,965,074.-

Title: Air Pollution Particle Effects on Human Antimycobacterial Immunity. This project is expected to generate mechanistic models by studying real-world air pollution effects on human antimycobacterial lung immunity. Findings from this study are expected to have significant scientific and societal impact due to global distribution of TB (in particular to populations in poor socioeconomic conditions) and the worldwide increase in urban air pollution with mixed particulate matter. (This grant received a 1st percentile ranking by the NIH Review Group.)

3R01ES020382-05S1 (Funmi Ibironke advisee, Lab Advisor S. Schwander) 12/04/2015 – 05/31/2018

National Institutes of Environmental Health Sciences (NIEHS) \$83.000.-

NIEHS minority training supplemental grant.

Title: Air Pollution Particle Effects on Human Antimycobacterial Immunity.

S. Schwander (Co-PI Q. Meng)

May 10, 2017-2019

Rutgers Global Health Institute 2017 Global Health seed grant

Title: The effect of air pollution on M.tb transmission in Kampala, Uganda (\$ 10,000)

Co-Investigator

ROI from NHLBI. Rich EA (PI)

1993 - 2000

Expression of tuberculosis in the lung. This project examines the pulmonary immunity in TB patients; healthy controls and household contacts.

5R01-HL51630 Ellner (PI)

NIH-NHLBI

6/30/2000 - 7/01/2007

Title: *Expression of tuberculosis in the lung*. The major goal of this project was to examine the immunology in the lung of TB patients and healthy controls.

1-R01 AI054478-02 Natelson (PI)

7/01/04 - 6/30/2008

NIH-NIAID

Title: Sleep and Cytokines In Chronic Fatigue Syndrome. This project looked at the role of cytokines in producing restful sleep by assessing sleep-disrupting and sleep-producing cytokines in patients with Chronic Fatigue Syndrome (with normal or dysfunctional sleep) and healthy controls before and after exercise to assess what affect exercise has on the cytokine sleep network.

NIEHS Center for Environmental Health Sciences - Pilot Grant

Laumbach R. (PI)

04/2010-04/2011

\$25,000.- direct

Cytokine Profiles in Human Exhaled Breath Condensates after Controlled Exposure to Diesel Exhaust. The goal of this project is to assess if inhalation of diluted diesel exhaust will induce inflammatory cytokines and a shift in cytokine profile away from T helper 1 (T_h1) towards T helper 2 (T_h2) in the respiratory tract as measured by analysis of exhaled breath condensate.

ES0052 (Zarbl) 04/1/07 – 03/31/14

NIH/NIEHS \$1,687,674

Research Center in Environmental Health Science

Pilot Project (Weisel, Ohmann-Strickland and Schwander) \$23,500 0.36 calendar In-kind

Optimizing Metabolomics Protocols to Characterize Exposure to Air Pollution Effects on Human Antimycobacterial Immunity. This pilot study will evaluate if metabolite profiles in urine samples and bronchoalveolar lavage (BAL) fluid measured using GC/MS metabolic techniques will improve the exposure characterization and therefore the strength of the statistical association that can be identified between exposure to air pollutants and effects on human antimycobacterial immunity in a Mexico City cohort.

ES0052 (Zarbl) 04/1/07 - 03/31/14

NIH/NIEHS \$1,687,674

Research Center in Environmental Health Science

Pilot Project Title: The WTC Follow Up Cohort, Dose

Reconstruction, and Mechanistic Studies (Kipen) \$160,000

Substudy (Schwander)

\$33,925 0.60 calendar In-kind

In vitro cellular and epigenetic responses to WTC dust. This pilot study will assess if in vitro exposure of human peripheral blood mononuclear cells (PBMC) to World Trade Center (WTC) particulate matter (PM) modifies proinflammatory cytokine and mRNA expression profile and responsiveness to antigen and global stimuli. It will further determine if PBMC from WTCPM-exposed persons with respiratory disease, will upon in vitro exposure to WTCPM, show an increased proinflammatory response with increased responsiveness to antigen-specific recall stimulation, compared to WTCPM-unexposed healthy persons.

Co-investigator (in kind)

Principal Investigator: Kevin Fennelly, MD, M-271-2001

Title: Host Determinants of Infectiousness in Tuberculosis: Cough-Generated Aerosols of Mycobacterium

tuberculosis.

Co-Investigators: Drs. L. Reichman, B. Mangura, and S. Schwander

Principal Investigator: Pranela Rameshwar, PhD, IRB# 0120030071

Title: The Biology of Mesenchymal Cells.

Co-Investigators: Jonathan Harrison; Stephan Schwander and Jerrold Ellner

OTHER SCHOLARSHIP/RESEARCH PUBLICATIONS:

Peer-Reviewed Publications (Refereed Original Article in Journal)

- 1. Reisinger E, Dettke T, Plettenberg A, Ernst M, **Schwander S**, Dörlemann A, Winzer M, Kern P, Meigel W, Dietrich M. Prognostische Bedeutung der oralen Haarleukoplakie (HL) und therapeutische Konsequenzen. Erkenntnisse im Rahmen einer prospektiven HIV-Therapiestudie. *Mitt.Österr'*. *Ges.Tropenmed. Parasitol* 1989; 11:359-364. RESEARCH
- 2. v. Laer D, Hufert FT, Fenner TE, **Schwander S**, Dietrich M, Schmitz H, Kern P. CD34+ hematopoietic progenitor cells are not a major reservoir of the human immunodeficiency virus. *Blood* 1990; 76:1281-1286. RESEARCH
- 3. Hufert FT, v. Laer D, Fenner FE, **Schwander S**, Kern P, and Schmitz H. Progression of HIV-1 Infection. Monitoring of proviral DNA in peripheral blood mononuclear cells by using the polymerase chain reaction. *Arch Virol* 1991; 120:233-240. RESEARCH
- 4. Hubner L, Ernst M, v. Laer DM, **Schwander S**, Flad HD. Enhancement of Monocyte Antimycobacterial activity by Diethyldithiocarbamate (DTC). *Int J Immunopharmacol* 1991; 13:1067-1072. RESEARCH
- 5. Meyer A, Arasteh K, Dörlemann A, L'Age M, Höffken G, Lode H, **Schwander S**, Stellbrink HJ, Schrappe-Bächer M, Dietrich M. Therapie der leichten und mittelschweren HIV-assoziierten Pneumocystis carinii-Pneumonie (PcP) durch Pentamidin-Inhalation. medwelt 1991;42:316-21. RESEARCH
- 6. Listemann H, **Schwander S**, Burchard GD, Meigel W. Trichophyton soudanense als Erreger einer Dermatophytia capitis. *Akt. Dennatol* 1991; 17:289-290. RESEARCH
- Schwander S, Braun RW, Kühn JE, Hufert FT, Kern P, Dietrich M and Wieland U. Prevalence of Antibodies to Recombinant Virion Infectivity Factor in the Sera of Prospectively Studied Patients with HJV-1 Infection. J Med Virol 1992; 36:142-146. RESEARCH
- 8. **Schwander S.** und Kern P. Ulcer of the tongue in a patient with Azidothymidine-induced neutropenia- rapid increase in neutrophil count and healing of the ulcer on treatment with recombinant granulocyte colony stimulation factor. (Zungenulkus unter Azidothymdin-induzierter Neutropenie: Rascher Anstieg der Neutrophilen und Abheilung des Ulkus unter Substitution von rekombinantem humanen Granulozyten-Kolonie Stimulationsfaktor (rhG-CSF). *Med. Klinik* 1993; 88: 60-62. RESEARCH
- 9. Lundgren JD, Phillips AN, Pedersen C, Clumeck N, Gatell JM, Johnson AM, Ledergerber B, Vella S, Dewit S, Sommereins B, Nielsen T, Jensen G, Skinhoj, P, Bentsen K, Gerstoft J, Melbye M, Ranki A, Valle SL, Katlama C, Berlureau P, Dietrich M, **Schwander S**. et al. Comparison of patients with AIDS treated and not treated with Zidovudine. *JAMA*, 1994,271:1088-1092. RESEARCH
- 10. Lundgren JD, Pedersen C, Clumeck N, Gatell JM, Johnson AM, Ledergerber B, Vella S, Phillips AN, Nielsen JO, Dewit S, Sommereijns B, Nielsen T, Jensen G, Skinhoj P, Bentsen K Gerstoft J, Melbye M, Ranki A, Valle SL, Katlama C, Berlureau P, Dietrich M, **Schwander S.** et al Survival Differences in European Patients with AIDS, 1979-89. *Brit Med J.* 1994; 308: 1068-1073. RESEARCH

- 11. **Schwander S**, Opravil M, Luthy R, Hanson DG, Schindler J, Dawson A, Letwin B, Dietrich M. Phase I/IIVaccination study of Recombinant Peptide F46 Corresponding to The HIV-1 GP41 Transmembrane Protein Coupled to 2,4 dinitrophenyl (DNP) Ficoll. *Infection* 1994; 22:86-91. RESEARCH
- 12. Jablonowski H, Arasteh K, Staszewski S, Ruf B, Stellbrink HJ, Schrappe M, Stoehr A, Haase W, Schomaker U, Rothe BV, Thomis J, Stille W, Lage M, Pohle HD, Albrecht H, fatkenheuer G, Diehl V, Plettenberg A, Schuster D, Knechten H, Ruhuke M, Alexander M, **Schwander S** et al. A Dose Comparison of Didanosine in patients with very Advanced HIV-Infection who are intolerant to or clinically deteriorate on Zidovudine. *AIDS*, 1995; 9:463-469. RESEARCH
- 13. **Schwander S**, Ruesch-Gerdes S, Mateega A, Lutalo T, Tugume S, Kityo C, Rubaramira R, Mugyenyi P, Okwera A, Mugerwa R, Aisu T, Moser R, Ochen K, M'Bonye B, Dietrich M. A pilot study of antituberculous combinations comparing Rifabutin with Rifampicin in the treatment of HIV-1 associated tuberculosis. A single blinded randomized evaluation in Ugandan patients with HIV-1 infection and pulmonary tuberculosis. *Tuber Lung Dis* 1995; 76:210-218.RESEARCH
- 14. Balaji KN, **Schwander SK**, Rich EA, and Boom WH. Alveolar Macrophages as accessory cells for human γα T cells activated by *Mycobacterium tuberculosis*. *J Immunology* 1995; 154:5959-5968. RESEARCH
- 15. Lundgren JD, Barton SE, Lazzarin A, Danner S, Goebel FD, Pehrson P, Mulcahy F, Kosmidis J, Pedersen C, Phillips AN, Clumeck N, Dewit S, Sommereijns B, Nielsen JO, Jundgren J, Nielsen T, Jensen G, Skinhoj P, Bentsen K, Gerstoft J, Melbye M, Ranki A, Valle SL, Katlama C, Berlureau P, Dietrich M, **Schwander S**. et al. Factors associated with the development of Penumocystis-Carinii Pneumonia in 5,025 European Patients with AIDS. *Clin Infect Dis* 1995; 21:106-113. RESEARCH
- 16. **Schwander SK**, Sada E, Torres M, Escobedo D, Sierra JG, Alt S, and Rich EA. T lymphocytic and Immature Macrophage Alveolitis in Active Pulmonary Tuberculosis. *J Infect Dis.* 1996; 173: 1267-1272. RESEARCH
- 17. Chiesi A, Vella S, Dally LG, Pedersen C, Danner S, Johnson AM, **Schwander S**, Goebel FD, Glauser M, Antunes F, Lundgren JD. Epidemiology of AIDS Dementia Complex in Europe. *J Acquir Immune Defic Syndr*. 1996; 11:39-44. RESEARCH
- 18. Sudre P, Hirschel BJ, Gatell JM, **Schwander S**, Vella S, Katlama C, Ledergerber B, Monforte AA, Goebel F-D, Pehrson PO, Pedersen C, Lundgren JD. Tuberculosis among European patients with the Acquired Immunodeficiency Syndrome. *Tuber Lung Dis.* 1996, 77:322-328. RESEARCH
- Pedersen C, Danner S, Lazzarin A, Glauser MP, Weber R, Katlama C, Barton SE, Lundgren JD, Clumeck N, DeWit S, Sommereijns B, Neilsen JO, Nielsen T, Jensen G, Skinhoj P, Bentsen K, Gerstoft J, Melbye M, Ranki A, Valle SL, Berlureau P, Dietrich M, Schwander S. et al. Epidemiology of Cryptosporidiosis among European AIDS Patients. Genitourinary Medicine. 1996; 72:128-131. RESEARCH
- 20. Wieland U, Seelhoff A, Kuehn JE, Hofinann A, Eggers JE, Mugyenyi P and **Schwander S**. Diversity of the vif gene of Human Immunodeficiency Virus Type 1 in Uganda. *J Gen Virol*. 1997, 78:393-400. RESEARCH
- 21. Tan JS, Canaday DH, Boom WH, Balaji KN, **Schwander SK** and Rich EA. Human Alveolar T Lymphocyte Responses to *Mycobacterium tuberculosis* Antigens. Role for CD4+ and CDS+ Cytotoxic T Cells and Relative Resistance of Alveolar Macrophages to Lysis. *J Immunology*. 1997, 159:290-297. RESEARCH
- 22. **Schwander SK,** Dietrich M, Mugyenyi P, Okwera A, Johnson J, Nsubuga P, Kityo P, Tugume S, Rusch-Gerdes S, Mugerwa R, Whalen C. Clinical Course of Human Immunodeficiency Virus Type 1 Associated Pulmonary Tuberculosis During Short-Course Therapy. *East African Medical Journal*. 1997; 74:543-548. RESEARCH
- 23. Sadek MI, Sada E, Toossi Z, **Schwander SK** and Rich EA. Chemokines Induced by Infection of Mononuclear Phagocytes with Mycobacteria and Present in Lung Alveoli During Active Pulmonary Tuberculosis. *Am J Resp Cell Mol Biol.* 1998; 19:513-521. RESEARCH
- 24. Vanham G, Toossi Z, Hirsch CS, Wallis RS, **Schwander SK**, Rich EA, Ellner JJ. Examining a paradox in the Pathogenesis of Human Pulmonary Tuberculosis: Immune Activation and Suppression/Anergy. *Tuber Lung Dis*. 1997; 78:145-158. RESEARCH
- 25. **Schwander SK**, Torres M, Sada E, Carranza C, RamosE, Tary-Lehmann M, Wallis RS, Sierra J and Rich EA. Enhanced responses to *Mycobacterium tuberculosis* Antigens by Alveolar Lymphocytes during Active Pulmonary Tuberculosis. *J Infect Dis.* 1998; 178:1434-45. RESEARCH
- Hirsch CS, Toossi Z, Othieno C, Johnson JL, Schwander SK, Robertson S, Wallis RS, Edmonds K, Okwera A, Mugerwa R, Peters P, Ellner JJ. Depressed T-cell Interferon-y Responses in Pulmonary Tuberculosis: Analysis of Underlying Mechanisms and Modulation with Therapy. *J Infect Dis.* 1999; 180:2069-73. RESEARCH
- 27. Stephan K. Schwander, Martha Torres, Claudia Carranza, Dante Escobedo, Magdalena Tary- Lehmann, Peter Andersen, Zahra Toossi, Jerrold J. Ellner, Elizabeth A. Rich, Eduardo Sada. Pulmonary Mononuclear Cell Responses to Antigens of *Mycobacterium tuberculosis* in Healthy Household Contacts of Patients with Active Tuberculosis and Healthy Controls from the Community. *J Immunol.* 2000, 165:1479-1485. RESEARCH

- 28. Niemann S., Rüesch-Gerdes S., Wafula W., Joloba M., Whalen C.C., Guwatudde D., Ellner J.J., Eisenach K., Fumokong N., Johnson J. Aisu T. Mugerwa R., Okwera A. and **Schwander S.K**. *Mycobacterium africanum* Subtype II is Associated with two Distinct Genotypes and is a Major Cause of Human Tuberculosis in Kampala, Uganda. *J. Clin. Microbiol.* 2002, 40: 3398-3405. RESEARCH
- 29. Niemann S., Ruesch-Gerdes S., and **Schwander S.K.** Is *Mycobacterium africanum* Subtype II (Uganda I and II) a Genetically Well-defined Subspecies of the *Mycobacterium tuberculosis* Complex? *J Clin Microbiol.* 2003, 41: 1345-1348. RESEARCH
- 30. Guerkov R.E.M., Targoni O.S., Kreher C.R., Boehm B.O., Herrera M.T., Tary-Lehrnann M., Lehmann P.V. and **Schwander S.K.** Detection of low frequency antigen-specific IL-10-producing CD4⁺ T cells via ELISPOT in PBMC: cognate vs. nonspecific production of the cytokine. *J. Immunol. Methods*. 2003, 279:111-121. RESEARCH
- 31. Niemann S, Kubica T, Bange FC, Adjei O, Browne EN, Chinbuah MA, Diel R, Gyapong J, Horstmann RD, Joloba ML, Meyer CG, Mugerwa RD, Okwera A, Osei I, Owusu-Darbo E, **Schwander SK**, Ruesch-Gerdes S. The Species *Mycobacterium africanum* in the Light of New Molecular Markers. *J Clin Microbiol*. 2004; 42:3958-62. RESEARCH
- 32. Mansour A, McCarthy B, Schwander S.K., Chang V., Donepudi S., Lee J., Raveche E. By decreasing IL-10, genistein induces G2 arrest in Malignant B cells. *Cell Cycle*. 2004, 3: 90-98. RESEARCH
- 33. E. Janulionis, C. Sofer, **S.K. Schwander**, D. Simmons, B. Kreiswirth, E. Shashkina, and R.S. Wallis. Survival and replication of clinical *Mycobacterium tuberculosis* isolates in the context of human innate immunity. *Infect Immun*. 2005, 73: 2595-2601. RESEARCH
- 34. Bruno Rivas-Santiago, **Stephan K. Schwander**, Carmen Sarabia, Gill Diamond, Marcia Klein Patel, Rogelio Hernandez Pando, Jerrold J. Ellner, and Eduardo Sada. Human {beta}-Defensin 2 Is Expressed and Associated with *Mycobacterium tuberculosis* during Infection of Human Alveolar Epithelial Cells. *Infect Immun*. 2005; 73:4505-11. RESEARCH
- 36. Saliu OY, Sofer C, Stein DS, **Schwander SK** and Wallis RS. Tumor-necrosis-factor blockers: differential effects on mycobacterial immunity. *J Infect Dis*. 2006;194:486-92. RESEARCH
- 37. Oluwabumni Y. Saliu, Catina Crismale, **Stephan K. Schwander**, and Robert S. Wallis. Bactericidal activity of OPC-67683 against drug tolerant *Mycobacterium tuberculosis*. *J Antimicrob Chemother*. 2007 Nov;60(5):994-8. RESEARCH
- 38. Katherine C. Tang, Katarzyna A. Trzaska, Sergei Kotenko, **Stephan K. Schwander**, Jerrold J. Ellner, Pranela Rameshwar. Down regulation of MHC-II in mesenchymal stem cells at high IFNγ can be partly explained by cytoplasmic retention of CIITA. *J Immunol*. 2008,180:1826-1833. RESEARCH
- 39. Maria Teresa Herrera, Martha Torres, Denarra Nevels, Enrique Nufiez, Jerrold Ellner, Eduardo Sada Diaz and **Stephan K. Schwander**. Compartmentalized Bronchoalveolar IFN-γ and IL-12 Response In Human Pulmonary Tuberculosis. *Tuberculosis*. 2009 Jan;89(1):38-47. RESEARCH
- 40. Esmeralda Juarez, Carlos Nuñez, Eduardo Sada, Jerrold J Ellner, **Stephan K Schwander***, and Martha Torres*. Differential Expression of Toll Like Receptors on Human Alveolar Macrophages and Autologous Peripheral Monocytes. *Respiratory Research*. 2010; 11: 2. Published online 2010 January 5. doi: 10.1186/1465-9921-11-2. *shared senior authorship, *corresponding author. RESEARCH
- 41. Keertan Dheda; **Stephan K Schwander**; Binddong Zhu; Richard van Zyl Smit; Ying Zhang. The Immunology of Tuberculosis: From bench to bedside. *Respirology* 2010, 15:433-450 RESEARCH
- 42. Torn Nakamura, Stephan K. Schwander, Robert Donnelly, Felix Ortega, Fumiharu Togo, Gordon Broderick, Yoshiharu Yamamoto, Neil S. Cherniack, David Rapoport and Benjamin H. Natelson Cytokines across the night in chronic fatigue syndrome with and without Fibromyalgia. Clin Vaccine Immunol. 2010, 17:582-7. RESEARCH
- 43. **Stephan K. Schwander** and Keertan Dheda. Pulmonary Perspective. Human Lung immunity against *Mycobacterium tuberculosis* Insights into Pathogenesis and Protection. *Am. J Respir. Crit. Care Med.* 2011; 183:696-707. REVIEW
- 44. Katalin A Wilkinson, **Stephan Schwander**, M. Estee Torok, Graeme Meintjes. Editorial. HIV-Associated Tuberculosis. *Clin Dev. Immunol.* 2011;2011:513967. Epub 2011 Dec 19.
- 45. Srijata Sarkar, Youngmia Song, Somak Sarkar, Howard M. Kipen, Robert J. Laumbach, Junfeng (Jim) Zhang, Pamela A. Ohman Strickland, Carol R. Gardner, and Stephan Schwander. Suppression of the NF-κB Pathway by Diesel Exhaust Particles Impairs Human Antimycobacterial Immunity. *J Immunol*. 2012 Mar 15;188(6):2778-93. Epub 2012 Feb 15. RESEARCH

- 46. Wilkinson KA, Torok ME, **Schwander S**, Meintjes G. HIV-associated tuberculosis 2012. *Clin Dev Immunol*. 2012; 2012:950964. doi: 10.1155/2012/950964. Epub 2012 Oct PubMed PMID: 23091556; PubMed Central PMCID: PMC3471434
- 47. Nakamura T, **Schwander S**, Donnelly R, Cook DB, Ortega F, Togo F, Yamamoto Y, Cherniack NS, Klapholz M, Rapoport D, Natelson BH. Cytokines do not change after exercise or sleep deprivation in chronic fatigue syndrome. *Clin Vaccine Immunol*. 2013 Sep 11. [Epub ahead of print] PubMed PMID: 24027260. RESEARCH
- 48. Leo BF, Chen S, Kyo Y, Herpoldt KL, Terrill NJ, Dunlop IE, McPhail DS, Shaffer MS, **Schwander S**, Gow A, Zhang J, Chung KF, Tetley TD, Porter AE, Ryan MP. The stability of silver nanoparticles in a model of pulmonary surfactant. *Environ Sci Technol*. 2013;47:11232-40. doi: 10.1021/es403377p. Epub 2013 Sep 18. PubMed PMID: 23988335. RESEARCH
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- 50. Chen S, Theodorou IG, Goode AE, Gow A, **Schwander S**, Zhang JJ, Chung KF, Tetley TD, Shaffer MS, Ryan MP, Porter AE. High-resolution analytical electron microscopy reveals cell culture media-induced changes to the chemistry of silver nanowires. *Environ Sci Technol*. 2013 Dec 3;47(23):13813-21. doi: 10.1021/es403264d. Epub 2013 Nov 20. PMID: 24160871 RESEARCH
- 51. Zhang J, Nazarenko Y, Zhang L, Calderon L, Lee KB, Garfunkel E, **Schwander S**, Tetley T, Chung KF, Porter AE, Ryan MP, Kipen H, Lioy PJ, Mainelis G. Impacts of a Nanosized Ceria Additive on Diesel Engine Emissions of Particulate and Gaseous Pollutants. *Environ Sci Technol.* 2013 Nov 19;47(22):13077-85. doi: 10.1021/es402140u. Epub 2013 Nov 7. PMID: 24144266 RESEARCH
- 52. **Schwander S.**, Okello C.D., Freers J., Chow J, Watson J, Corry M., Meng Q. Ambient Particulate Matter Air Pollution in Mpererwe District, Kampala, Uganda A Pilot Study. *J Environ Public Health*. 2014;2014:763934. doi: 10.1155/2014/763934. Epub 2014 Feb 17. PMID: 24693293 RESEARCH
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- 54. Sarkar S, Zhang L, Subramaniam P, Lee KB, Garfunkel E, Strickland PA, Mainelis G, Lioy PJ, Tetley TD, Chung KF, Zhang J, Ryan M, Porter A, Schwander S.Variability in bioreactivity linked to changes in size and zeta potential of diesel exhaust particles in human immune cells. *PLoS One*. 2014 May 13;9(5):e97304. doi: 10.1371/journal.pone.0097304. eCollection 2014. PubMed PMID:24825358; PubMed Central PMCID: PMC4019517. RESEARCH
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- 96. **Stephan Schwander**, Junfeng (Jim) Zhang, Teresa D. Tetley, Andrew Gow, Kian Fan Chung, Mary Ryan, Alexandra Porter, Srijata Sarkar. Silver nanoparticles impair human antimicrobial immune responses. AAI Annual meeting, Pittsburg, PA, May 2-6, 2014
- 97. **Stephan Schwander**, Pasquale Cantarella, Srijata Sarkar, Megan Rockafellow, César E. Rivas-Santiago. Respiratory epithelial cell innate immunity against Mycobacterium tuberculosis is deregulated by air pollution particulate matter (PM). AAI Annual meeting, Pittsburg, PA, May 2-6, 2014
- 98. C.E. Rivas, P. Cantarella, S. Sarkar, M. Rockafellow, A.R. Osornio Vargas, M. Torres, R. Quintana, S. Schwander. Particulate Air Pollution Matter (PM) Modifies Innate Immunity Of Type II Pneumocytes (A549) Against Mycobacterium Tuberculosis. Am J Respir Crit Care Med 189;2014:A2489. ATS 2014. Annual Meeting. San Diego, May 16-21, 2014
- 99. ATS 2016
- 100.AAI 2016
- 101. Olufunmilola Ibironke, Claudia Carranza and **Stephan Schwander.** *Air Pollution Particulate Matter Effects on Adaptive Antimycobacterial Immunity*. Society for Advancement of Chicanos and Native Americans in Science (SACNAS), October 14, 2016, Long beach, CA.
- 102.O. Ibironke, C. Carranza, S. Sarkar, S. Schwander. Effects of Air Pollution Particulate Matter on Adaptive Antimycobacterial Immunity (A2072, P369). American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017.
- 103.Y. Son, A.R. Osornio Vargas, M. O'Neill, J.L. Texcalac-Sangrador, P.A. Ohman-Strickland, Q. Meng, M. Torres, S. Schwander. A Novel Land Use Regression Model to Assess Air Pollution exposure for Tuberculosis Research in Mexico City Using Finer Spatial and Temporal Input Parameters. (A3908, P69). American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017
- 104.S. Sarkar, Y. Gonzalez, C. Carranza, M. Torres, J. Zhang, S. Schwander. *Air Pollution Particulate Matter Alters Human Alveolar Macrophage Responses to Mycobacterium Tuberculosis.* (A2073, P370). American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017.

- 105.Tim Ellis, Andres Garcia Trenco, Maryam Al-Ejji, Srijata Sarkar, Milo Schaffer, **Stephan Schwander**, Mary Ryan, and Alexandra Porter. *Multi-metallic Microparticles: A novel pulmonary delivery system that increases the potency of Rifampicin against intracellular M.tuberculosis.* 8th International Nanomedicine Conference Sydney, Coogee Beach, Australia, July 3-5, 2017.
- 106.Olufunmilola Ibironke, Claudia Carranza, Srijata Sarkar and **Stephan Schwander**. *Urban Air Pollution and Tuberculosis Inhalable Particulate Matter Suppresses Human Immunity to Mycobacterium tuberculosis*. Consortium of Universities in Global Health, CUGH 9th Annual Conference, March 2018, NYC, (#1368)
- 107. Qingyu Meng, Bruce Kirenga and **Stephan Schwander**. *Air Pollution Assessments in Kampala, Uganda* CUGH 9th Annual Conference, March 2018, NYC, (#).
- 108. Yolanda Gonzalez, Claudia Carranza, Marco Iñiguez, Martha Torres, Raul Quintana, Alvaro Osornio, Carol Gardner, Srijata Sarkar, **Stephan Schwander**. Effect of inhaled air pollution particulate matter in alveolar macrophages on local pro-inflammatory cytokine and peripheral interferon γ production in response to Mycobacterium tuberculosis. Lancet Global Health, 2018; 6: Special Issue S29

UMDNJ- RESEARCH DAY Presentations/Posters May 19, 2005

- 1. Robert S Wallis, Oluwabunmi Y Saliu, Carolina Sofer, Dana S Stein and **Stephan K Schwander**. Differential Effects Of Tumor Necrosis Factor Blockers On Mycobacterial Immunity In Vitro
- 2. Maria T. Herrera, Martha Torres, Denarra Simmons, Jerrold J, Ellner, Eduardo Sada, and **Stephan K. Schwander**. Production, Regulation and Source of IFN-r at the Site of Disease in Active Human Pulmonary Tuberculosis (TB)
- 3. Felix M. Ortega, B. Natelson, C. Guiller and **S.K. Schwander**. Preparatory Laboratory Studies for the Assessment of Nocturnal Cytokine Secretion Patterns in Patients with Chronic Fatigue Syndrome
- 4. Mikhail Keniya, Denarra Nevels, Mathew Marin and **Stephan K. Schwander**. Preparatory Studies to Assess the Etiopathogenic Role of *Propionibacterium acnes* and *Mycobacterium tuberculosis* in Sarcoidosis

D. Reports

PRESENTIONS: (chronological order)

Oral presentations at Scientific Meetings (selected from submitted Abstracts)

- 1. **S. Schwander**, R W Braun, P Kern, M Dietrich, U Wieland. *Prevalence of antibodies to recombinant vif-protein in sera of HIV 1 infected patients in a cohort study*. 2nd European Conference on clinical aspects of HIV-Infection, Brussels, Belgium March 8-9, 1990.
- 2. **S. Schwander**. Gegenwärtiger Stand der Verbreitung der HIV-Infektionen. 3. Deutscher AIDS- Kongress Hamburg, November 24.-27., 1990.
- 3. **S. Schwander**, RW Braun, JE Kuhn, FT Hufert, P Kern, M Dietrich und U Wieland. Prävalenz von Antikörpern gegen rekombinanten *Virion Infectivity Factor (vif) in Seren prospektiv untersuchter Patienten mit HIV-1 Infektion*. 4. Deutscher AIDS Kongress Wiesbaden, March 25.-28., 1992.
- 4. **S. Schwander**. *Tuberculosis and HIV-1 infection in Uganda*. International Conference on Infection Control in the Immunocompromised Host, Cologne November 5-6, 1993.
- 5. Schwander S, Dietrich M, Mugyenyi P, Okwera A, Ruesch-Gerdes S, Johnsen J, Mugerwa R, Whalen C. Clinical Course of Human Immunodeficiency Virus Type 1 associated pulmonary tuberculosis during antituberculous short-course therapy in Uganda. IXth International Conference on AIDS and STDs in Africa (ICASA), Kampala, Uganda December 10-14, 1995. WeB258.
- 6. **S.K. Schwander**, M Torres, E Sada, C Carranza, E Ramos, M Tary-Lehmann, JG Sierra, and EA Rich. *Enhanced Responses to Mycobacterium tuberculosis antigens by alveolar lymphocytes during active Pulmonary Tuberculosis*. 32nd US.-Japan Conference on Tuberculosis and Leprosy, July 21-23, 1997, Cleveland, OH.
- 7. S.K. Schwander, M Torres, E Sada, C Carranza, M Tary-Lehmann, E Ramos, JG Sierra, and EA Rich. Increased Frequency of purified Protein derivative induced IFNγ-Production and augmented Mycobacterial Antigen-Specific DNA synthesis at the site of Disease During Active Human Pulmonary Tuberculosis. 49. Jahreskongress der Deutschen Gesellschaft füer Hygiene und Mikrobiologie (DGHM). Friedrich Schiller Universitäet Jena/Germany, October 5.-9., 1997. V39.
- 8. **S.K. Schwander** *Increased Frequency of IFNγ-producing bronchoalveolar cells in pulmonary Tuberculosis.* 1998 International Conference American Thoracic Society, Chicago, April 24. 29.1998.

- 9. B. Rivas Santiago, **S. Schwander**, M. Klein Patel, G. Diamond, and E. Sada. *Expression of Beta Defensin-2 (HBD-2) in Human Alveolar Epithelial Cells (A549) during Mycobacterium tuberculosis infection*. 12th International Congress of Immunology and 4111 Annual Conference of FOCIS, Montreal, Quebec, July 18-23, 2004. (Oral HRM 13.6).
- 10. RS Wallis, O Saliu, C Sofer, D Stein, A Brooks, and **SK Schwander**. Differential Effects of TNF Blockers on Mycobacterial Immunity in vitro. ACR meeting Nov 2005
- Srijata Sarkar and Stephan Schwander. Suppression of the NF-κB Pathway by Diesel Exhaust Particles Impairs
 Human Antimycobacterial Immunity. Immunology 2012. 99th Annual Meeting The American Association of
 Immunologists. May 4-8, 2012, Hynes Center, Boston, MA
- 12. **S. Schwander**, S. Sarkar, J. Zhang, L. Zhang, W. Baker, Diesel Exhaust Particle (DEP) and DEPenvirox Effects on Protein and mRNA Expression in Stimulated THP-1 and Primary Human Peripheral Blood Mononuclear Cells and Bioreactivity with Human Alveolar Lung Cells. J. Society of Environmental Toxicology and Chemistry (SETAC) Conference, Long Beach CA November 11-13, 2012.
- 13. Q. Meng, R. Laumbach, S. Schwander. Evaluation and Application of Real-time Personal O3 and NO2 Monitors for Personal Exposure Assessment. Mo-S-D4-03. 24th Annual Meeting of *The International Society of Exposure Science* (ISES). October 12 16, 2014. Cincinnati, Ohio
- 14. J. Zhang, L. Zhang, J. Gong, G. Mainelis, W. Baker, T. Tetley, S. Sarkar, S. Schwander, J. Seifert, R. Smith, P. Subraniam, K. Lee, E. Garfunkel, S. Chen, M. Ryan, A. Porter, H. Kipen, P. J. Lioy, P. Georgopoulos, K. Chung. The Impact of a Nano-Ceria Diesel Additive on Physicochemical and Toxicological Properties of Diesel Exhaust Particles. We-S-D1-01. 24th Annual Meeting of *The International Society of Exposure Science* (ISES). October 12 16, 2014. Cincinnati, Ohio
- 15. Schwander, T.D. Tetley, J. Zhang, K-F Chung Y. Nazarenko, L. Calderon, P. Subramaniam, K. Lee, E. Garfunkel, P.J. Lioy, S. Sarkar, W. Baker, J. Seiffert, R. Smith, A.J. Thorley, H. Kipen, S. Chen, M. Ryan, A. Porter, M. Duarte, J. Gong, G. Mainelis, X. Cui, J. Osterberg, R. Di Giulio, Z. Mi, T. Cai, P. Georgopoulos. Potential Toxicity of Nanosilver- and Nanozinc-Containing Consumer Products to the Lung. We-S-D1-03. 24th Annual Meeting of *The International Society of Exposure Science* (ISES). October 12 16, 2014. Cincinnati, Ohio
- 16. Stephan Schwander, Srijata Sarkar, César Rivas Santiago, Alvaro R. Osornio-Vargas, Claudia Carranza, Yolanda Gonzalez, Funmi Ibironke, Jim (Junfeng) Zhang, Pamela A. Ohman Strickland, Qingyu Meng, Kathleen Black, Clifford P. Weisel, Marie S. O'Neill, Bruce J. Kirenga, Martha Torres. "Environmental Exposures Obstacles to Global Tuberculosis Control". 2015 Global Health Research Symposium. June 30, 2015, Rutgers RWJMS, Piscataway, NJ.
- 17. Q. Meng, B. Kirenga, J. C. Chow, J. G. Watson, S. Schwander. Pioneer Air Pollution Assessments in Kampala/Uganda. Mo-O-E1-04. 25th Annual Meeting of the International Society of Exposure Science (ISES), Hendersen, NV October 18-22, 2015
- 18. M. Elsaid, E. Musarra, S. Schwander, J. Madrigano, Q. Meng. The Impact of Power Plant Derived Sulfur Dioxide Emissions on Mortality in Rural Areas of Northwestern New Jersey. We-P-08, 25th Annual Meeting of the International Society of Exposure Science (ISES), Hendersen, NV October 18-22, 2015
- 19. Q. Meng, Y. Son, C. Rivas-Santiago, L. Calderon, G. Mainelis, C. Delnevo, **S. Schwander**. Electronic Cigarette Vapor: Smoking Pattern, Lung Deposition, and Biological Effects. We-P-15. Presented at 25th Annual Meeting of the International Society of Exposure Science (ISES), Hendersen, NV October 18-22, 2015
- 20. **S. Schwander**, Y. Gonzalez, C. Carranza, M. Iniguez, M. Torres, R. Quintana, A.R. Osornio-Vargas, C. Gardner, S. Sarkar. *Inhaled Air Pollution Particulate Matter in Alveolar Macrophages Alters Local Pro-inflammatory Cytokine and Peripheral IFN-γ Production in response to Mycobacterium Tuberculosis.* (A2901). Presented at American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017.
- 21. Meng, Q.Y, Son, Y.K, Kipen, H., Laskin, D., **Schwander, S.**, Delnevo, C. *Particles released from primary E-cigarette vaping: Particle size distribution and particle deposition in the human respiratory tract.* Presented at American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017.
- 22. Yolanda González, Claudia Carranza, Marco Iñiguez, Martha Torres, Raul Quintana, Alvaro Osornio, Carol Gardner, Srijata Sarkar, **Stephan Schwander.** *Inhaled Air Pollution Particulate Matter in Alveolar Macrophages Alters local pro-inflammatory Cytokine and peripheral IFN-y Production in Response to Mycobacterium tuberculosis.* Consortium of Universities in Global Health, CUGH 9th Annual Conference, March 2018, NYC, (#1738)

Invited Speaker (Scientific - Original research)

- 1. Compartmentalized immune response in the lung during active human pulmonary tuberculosis. Institute Pasteur, Paris/France, September 30, 1997.
- 2. *Immunregulation in der Lunge waehrend aktiver pulmonaler Tuberkulose*. Forschungszentrum Borste1, Borstel/Germany, October 15, 1997.
- 3. Immunregulation in der Lunge waehrend aktiver pulmonaler Tuberkulose. University of Heidelberg/Germany, October 28, 1997.
- 4. *New antimycobacterial drugs*. XXII Congreso Annual de la Asociación Mexicana de Infectologia y Microbiologia Clinica, A.C. Oaxaca/Mexico, November 13, 1997.
- 5. *Multidrug resistant Tuberculosis*, 451 Aniversary Hospital de Infectologia "*Dr. Daniel Mendez Hernandez*. Symposium: Enfermedades emergentes y reemergentes e infecciones nosocomiales. Mexico City/Mexico, March 4, 1998.
- 6. Human Pulmonary Immune Responses in Tuberculosis. Max Planck Institut fuer Infektionsbiologie, Berlin/Germany, January 18, 1999
- 7. Pulmonary Immune Responses in Human Tuberculosis. Centro de Investigación y Estudios Avanzados del I.P.N. Mexico City/Mexico, June 22, 1999
- 8. Respuesta Pulmonar en Tuberculosis humana. Instituto Nacional de Enfermedades Respiratorias, Mexico City/Mexico, June, 1999
- 9. Resumen de Cinco Anos de Colaboración en Estudios de la Respuesta Pulmonal en Tuberculosis Humana. Instituto Nacional de Enfermedades Respiratorias, Mexico City/Mexico, February 21,2001
- 10. Immune Responses to *M. tuberculosis*. Joint CDC/NIH Tuberculosis Diagnosis Meeting, June 14 and 15, 2001, Decatur, Georgia (30' talk to policy makers and national and international experts in the field, international conference) (audience about 150).
- 11. Respuesta Immune en Tuberculosis Pulmonar. Infectious Disease Department, Instituto Nacional de Enfermedades Respiratorias, Mexico City/Mexico, February 22, 2002
- 12. Medical Management of TB in the person living with HIV The global perspective. Organizer: National Tuberculosis Center, and NJ AIDS Education and Training Center, UMDNJ-Center for Continuing Education (Audience 50 primary care physicians). Marriott Hotel Newark, October 16, 2002.
- 13. *La Respuesta Immune en la Tuberculosis*. XXVII Congreso Annual de la Asociación Mexicana de Infectologia y Microbiologia Clinica (XXVII Annual Congress of the Mexican Association for Infectious Diseases and Clinical Microbiology), Veracruz, Ver. Mexico, August 27-30, 2003.
- 14. *Human Lung Immune Responses to M. tuberculosis* '. Infectious Diseases Grand Rounds. University of Cape Town, South Africa, October 10, 2007
- 15. *Transmission and Pathogenesis of M. tuberculosis infection in Humans*. TB Intensive Workshop Oct 23-24, 2007. NJMS, Global Tuberculosis Institute.
- 16. *The lung A unique Immunological Compartment during TB*. 4th Symposium on the Cutting Edge of Knowledge in Tuberculosis and other Mycobacterioses. Fifth Reunion of SLAMTB Sociedad Latinoamericana de Tuberculosis y otras Micobacteriosis, Zacatecas, Zacatecas, Mexico August 23-25, 2010
- 17. Human Antimycobacterial Lung Immunity Disruptive Effects by Particulate Air Pollutants? UMDNJ Research Symposium: Inflammation, Immunity & Infectious Disease. Newark, NJ, September 27- 28, 2010.
- 18. Particulate Matter Effects on Human Antimicrobial Immunity, EOHSI/NIEHS Seminar Series. February 14, 2013
- 19. *Modulation of Antimicrobial Immunity by Air Pollution Particulate Matter*, Desert Research Institute, Reno, NV, September 15, 2014
- 20. World Bank *Air Pollution Exposure in Uganda. An Obstacle to Tuberculosis and HIV/AIDS Control?* World Bank Group, Washington D.C. Jan 14, 2016 10:00 a.m. 1:00 p.m.
- 21. 2016 World TB Day Symposium Current Concepts in Clinical Care and Translational Sciences. *Exploring the Relationship between Air Pollution & Tuberculosis*. March 22, 2016. Rutgers New Jersey Medical School, GTBI, Newark, NJ.
- 22. World TB Day 2016 Air Pollution and Nano Particle Effects on Antimycobacterial Immunity March 31, 2016. Rutgers University, PHRI, Newark, NJ
- 23. UNAI START: Our Environment & Our Health: Science and Solutions. United Nations Academic Impact. "Air pollution and Tuberculosis" talk at United Nations Department of Public Information: Symposium. United Nations, New York City, June 6, 2016
- 24. Pearl of Africa Lecture at Makerere University, School of Engineering, Kampala/Uganda, August 17, 2016. Exploring relationships between Air Pollution, Nanoparticles and Tuberculosis
- 25. Day of the Lung Lecture at Makerere University, Lung Institute, Kampala/Uganda, August 17, 2016. *Tuberculosis and Air Pollution Exposure Epidemiological and Mechanistic Evidence*.

- 26. Lecture at University of Dodoma, Tanzania, August 19, 2016. *Tuberculosis and Air Pollution Exposure Epidemiological and Mechanistic Evidence*.
- 27. Stephan Schwander. Tuberculosis and the Public's Health or Why is an Ancient Disease still Killing Millions? Harakopio University, Athens, Greece, March 13, 2018
- 28. Stephan Schwander. *TB and Particulate Matter Air Pollution Exposure*. 2018 TB Conference of the International Union against tuberculosis and Lung Disease (IUATLD), North America, February 28 March 3, 2018, Chicago, II.

RUTGERS Inter School Presentations

Nano-Bio Focus Meeting, Oct 11, 2012. Rutgers, McLaren Center for Ceramic Research Building. Title: *Nanoparticles and Effects on Human Immune Responses*.

Nano-Bio Focus meeting Thursday, September 25, 2014

Stephan Schwander: Particulate Matter Air Pollution and Human Immune Responses to M.tb, Rutgers I3D Faculty Retreat October 25, 2017, Newark, NJ

Qingyu Meng, Bruce Kirenga, Stephan Schwander: Presentation: *Air Pollution Campaign in Uganda*. Rutgers Global Grants Symposium, New Brunswick, NJ, November 16, 2017

RUTGERS Departmental Presentations

Stephan Schwander Presented 1-hr seminar entitled: *Lung Immunity Research* at RBJUH on Feb 14, 2014 (fellows and faculty attending) Pulmonary Research Conference Seminar Series

Stephan Schwander: Global Public Health American Medical Student Association (AMSA), New Brunswick, NJ February 20, 2018

Stephan Schwander: How we got do to what we do? Robert Wood Johnson Medical School Round Table Discussion. New Brunswick, NJ, April 26, 2018

Stephan Schwander: Department of Urban-Global Public Health: Global Activities, Rutgers Global, International Advisory Committee, New Brunswick, NJ, May 4, 2018

Stephan Schwander: TB and Particulate Matter Air Pollution Exposure. ENOH Faculty meeting, Piscataway, NJ, May 28, 2018

NEW JERSEY MEDICAL SCHOOL

University Seminar Speaker

- 1. Title: *Immune responses to M. tuberculosis in the human lung*. Case Western Reserve University, Infectious Disease Research Institute. Microbial Pathogenesis and Host Defense Seminar Series. Cleveland, OH, January 8, 1998.
- 2. Title: *Immunology and mycobacterial disease*. Grand Rounds. Division of Pulmonary and Critical Care Medicine, Department of Medicine, Case Western Reserve University, Cleveland, OH. February 6, 1998.
- 3. Title: *Research Conference*, Division of Pediatric Pulmonology. Case Western Reserve University, Cleveland, OH. May 8, 1998.
- 4. Title: *Tuberculosis in the World*. Special Grand Rounds, Division of Pulmonary and Critical Care Medicine, Department of Medicine, Case Western Reserve University, Cleveland, OH. May 21, 1998.
- 5. Title: Ethics of clinical research in developing countries: An open discussion. Lecture in Microbial Pathogenesis and Host Defense for the '98-'99 academic year. Case Western Reserve University, Cleveland, OH. September 25, 1998 (S.K. Schwander, JS Madero, C Whalen).
- 6. Title: *T-cell reactivity to Mycobacterium tuberculosis*, Lecture in CWRU Immunology Seminar Series and Infectious Disease Research Institute Series. January 12, 1999.

7. Title: Delayed type hypersensitivity responses in the detection of M. tuberculosis infection. Role of Th2 type cytokines and substitutes. Immunology Journal Club and Discussion group. November 04, 1999

UMDNJ Grand Rounds

- 1. National TB Center, UMDNJ: Expression of TB in the Lung. Pulmonary Immune Responses, May 16,2001
- 2. Department of Pathology, UMDNJ: *Human Pulmonary Immune Responses in M. tuberculosis infection. Summary of research findings since 1994*, UMDNJ, June 21,2001
- 3. Department of Pathology, UMDNJ: *Human Lung Immune Responses to Mycobacterium tuberculosis*. UMDNJ, January 31, 2008, 12:00 noon- 1:00 p.m. with Discussion: (audience about 40 attendees, faculty, students, researchers).

<u>UMDNJ Pulmonary Division Grand Rounds</u>- Lecture Series (faculty, fellows, attendings).

- 1. Human Pulmonary Immune Responses in M.tuberculosis infection, July 17, 2001
- 2. Principles of Cellular and Humoral Immunity, February 24,2003
- 3. *Airways and pulmonary immunity*, March 17, 2003
- 4. Pulmonary and Compartmentalized Immune Responses, March 31, 2003
- 5. Immunological Methods and Assays, April 28, 2003
- 6. Pathogen specific Immunity in Sarcoidosis, October 26, 2005
- 7. Lung Immunity Research, November 15,2006

UMDNJ Allergy & Immunology Division Grand Rounds

- 8. 'Advances in Sarcoidosis'. February 24, 2005
- 9. Immunology Lab Rounds. January 18,2007
- 10. Laboratory immunology series 'TB Immunology' February 15, 2007
- 11. Laboratory immunology series 'Immunity to M. tuberculosis and Interferon Gamma Release Assays' August 9, 2007
- 12. 'ELISPOT Assay Technology- Research and Diagnostic Applications', Dec 13, 2007

Mount Sinai Hospital New York

13. Pulmonary, Critical Care and Sleep Medicine. Title: 'Lung Immune Responses in patients with active tuberculosis and *M.tuberculosis*-Exposed Healthy Household Contacts'. July 22, 2005

New York University (NYD)

14. Pulmonary, Critical Care and Sleep Medicine. Title: 'Lung immunity in Patients with TB and Healthy M.tb exposed Contacts', New York University September 14, 2005

Internal Medicine Resident Noon conference series

Monday, December 4, 2006, noon - one-hour lecture entitled 'Tuberculosis' for residents at UMDNJ, Hackensack and the EOVA (audience approx. 60, Location UH I-121).

Monday, November 26, 2007, noon- one-hour lecture entitled 'TB and other mycobacterial infections' for residents at UMDNJ, Hackensack and the EOVA (audience approx. 60, Location UH I-121).

UMDNJ Research Seminar Speaker

Update-Human Lung Immunity to Mycobacterium tuberculosis. Division of Infectious Diseases, UMDNJ, November 9, 2004

Unraveling the Etiology of Sarcoidosis - Pathogen Specific Lung Immunity. Division of Infectious Diseases, UMDNJ, September 6, 2005

Ongoing Studies in the Schwander laboratory. Cellular Technology Ltd, Cleveland OH, June 30, 2006.

Effects of Diesel Exhaust Particulates on Human Antimycobacterial Immunity & Updates, Division of infectious Diseases Research Conference, May 31, 2007

Updates and open Questions - Antimycobacterial Immunity in the Human Model. Division of Infectious Diseases Research Conference, February 13, 2008

UMDNJ Laboratory Seminar Speaker

- 1. Update on new developments in the field of TB immunology from the KEYSTONE meeting on Molecular and cellular aspects of Tuberculosis Research in the Post Genome Era, Taos NM (Jan 25-30, 2001). Feb. 27, 2001.
- 2. Outline of future research directions of Schwander laboratory. May 1, 2001.
- 3. Sputum sampling for the microbiological and immunological study of M. tuberculosis infection Aug-21 2002.
- 4. *Identification of an Endogenous Reference gene for blood and lung cells by Quantitative Real Time PCR*, September 6, 2002
- 5. Work in progress in Mexico, after returning from Sept 9- Oct 5, 2002 work period. October 10, 2002.
- 6. Report from Cairo TB vaccine meeting October 21-23, 2002. October 30, 2002

UMDNJ Infectious Disease Fellowship Didactic Lecturer

Didactic Lecture: 'Basics of Immunology', September 26, 2003

Didactic Lecture: 'The Acquired Immunodeficiency Syndrome (AIDS) - HIV-1', July 15 and 29, 2004

Didactic Lecture: 'Immunological Therapeutics' March 11, 2005

Didactic Lecture: 'Basics of Immunology' August 26, 2005

Didactic Lecture: 'TB and TB Immunology' December 21, 2007

Didactic Lecture: 'TB and TB Immunology' December 18, 2009

Didactic Lecture: 'Human Antimycobacterial Lung Immunity - Disruptive Effects by Particulate Air

Pollutants?' January 7, 2011

Global TB Center- UMDNJ/PHRI

Lecturer in TB Intensive Workshop from October 21-23, 2008. Title: Transmission and Pathogenesis of Tuberculosis (Oct. 21: 10:15-11:15 a.m.)

UMDNJ/Public Health Research Institute TB-Club Speaker

February 3, 2002.

June 23, 2003: 'Human pulmonary immunity in tuberculosis- ongoing projects'.

February 14, 2005: 'Human Lung Immunity to Mycobacterium tuberculosis' (audience about 25 faculty, fellows, students and researchers)

July 2, 2007: 'Studies on Human Immunity to M. tuberculosis'

UMDNJ-NJMS Graduate School of Biomedical Science Lecturer

- 1. Lecture course #5120 Stem cell biology and Applications in Molecular Medicine, 3-credit course. Course Director: P. Rameshwar (Lecture title: Infectious Diseases, Tuberculosis and Stem Cells). 6:00-7:15p.m. December 6, 2001
- 2. Lecture course #5120 Stem cell biology and Applications in Molecular Medicine 3-credit course. Course Director: P. Rameshwar (Lecture title: Stem Cells, Lungs and Infectious Agents). 6:45-7:45p.m. December 3, 2002
- 3. Lecture course# PATH N-5210 *Molecular & Cellular Immunology* 3-credit course. Course Director: P. Bocarsly (Lecture title: *Acquired Immunodeficiency Syndrome-HIV*). 2:30-4:00pm, April30, 2003
- 4. Lecture course # PATH N-5210 *Molecular & Cellular Immunology* 3-credit course. Course Director: E. Raveche (Lecture title: *Acquired Immunodeficiency Syndrome-HIV*). 2:30-4:00pm, May 22, 2003
- 5. Lecture course PATH N-5210/N5211 *Molecular & Cellular Immunology* 3-credit course. Course Director: E. Raveche (Lecture title: *Acquired Immunodeficiency Syndrome (AIDS)-HIV*). 5:00-6:00pm, May 26,2004
- 6. Lecture course# PATH N-5210 *Molecular & Cellular Immunology* 3-credit course. Course Director: P. Bocarsly (Lecture title: *Acquired Immunodeficiency Syndrome-HIV*). 5:00-6:30pm, May 9, 2005
- 7. Lecture in course# PATH N-5210-N5211 *Molecular & Cellular Immunology* 3-credit course. Course Director: Drs. E. Raveche/ P. Bocarsly (Lecture title: *The Acquired Immunodeficiency Syndrome* (AIDS)- HIV-1. 5:00-

- 6:30pm, May 17,2006 (Preparation time for annual lecture updates and improvements of the lecture slides (12 hours) participation in exam review hour (1 hour) grading of 39 exams (6 hours)
- 8. Lecture in course # PATH N-5210-N5211 *Molecular & Cellular Immunology* 3-credit course. Course Director: Drs. E. Raveche/ P.Bocarsly (Lecture title: *HIV-1 and the Immune System*, May 16, 2007, 5:00-6:30pm Preparation time for annual lecture updates and improvements of the lecture slides (12 hours) grading of 25 exams (6 hours)
- 9. Lecture in course # PATH N-5210-N5211 *Molecular & Cellular Immunology* 3-credit course. Course Director: Drs. E. Raveche/P.Bocarsly (Lecture title: *HIV-1 and the Immune System*, May 7, 2008, 5:00-6:30pm Preparation time for annual lecture updates and improvements of the lecture slides (12 hours)- grading of 35 exams (10 hours)

UMDNJ Medical Immunology Class Lecturer (2"d year MD students)

October 21, 2003, 2 hours, Case Study: 'AIDS in mother and child' (Course Director: Marion Cohen, PhD.) Immunity, inflammation and repair 2nd year MD student course, clinical case discussion on HIV-1 infection and AIDS, Monday, October 18, 2004 at 9:00a.m. - 10:00 a.m. and 10:00 a.m. 11:00 a.m. (2 hours)

GSBS: Biomedical Sciences Seminar for BMS students Lecturer, October 05, 2005 (1 hour, 20 attendees, J. Patrick O'Connor, Ph.D., Director). Title: 'Lung immunity in Patients with Tuberculosis, Sarcoidosis and Healthy Control Persons'.

UMDNJ Journal Club Presentations

NJMS Infectious Diseases Division Journal Club (David Alland)

January 7, 2003. Xiao-Li Huang, Zheng Fan, Lian Zheng, Luann Borowski, Hongyi Li, Elaine K. Thomas, William H. Hildebrand, Xiao-Qing Zhao, and Charles R. Rinaldo, Jr. Priming of Human Immunodeficiency Virus Type 1 (HIV-1) Specific CD8⁺ T Cell Responses by Dendritic Cells Loaded with HIV-1 Proteins. *J Infect Dis* 2003; 187:315-319.

UMDNJ NJMS Immunology Journal Club (William Gause)

- 1. March 10, 2006: Morgan Huse, Bjorn F Lillemeier, MichaelS Kuhns, Daniel S Chen & Mark M Davis. T cells use two directionally distinct pathways for cytokine secretion. *Nature Immunology* 7, 247-255 (2006).
- 2. July 28, 2006: Kenji Takabayshi, Maripat Corr, Tomoko Hayashi, Vanessa Redecke, Lucinda Beck, Donald Guiney, Dean Sheppard and Eyal Raz. Induction of a Homeostatic Circuit in Lung Tissue by Microbial Compounds. *Immunity*, 2006;24: 475-487.
- 3. April19, 2007. Khader SA, Bell GK, Pearl JE, Fountain JJ, Rangel-Moreno J, Cilley GE, Shen F, Eaton. SM, Gaffen SL, Swain SL, Locksley RM, Haynes L, Randall TD, Cooper AM. IL-23 and IL-17 in the establishment of protective pulmonary CD4(+) T cell responses after vaccination and during *Mycobacterium tuberculosis* challenge. *Nat Immunol.* 2007; 8:369-77.
- 4. March 7, 2008. Jackson G. Egen, Antonio Gigliotti Rothfuchs, Cad G. Feng, Nathalie Winter, Alan Sher, and Ronald N. Germain. Macrophage and T Cell Dynamics during the Development and Disintegration of Mycobacterial Granulomas. *Immunity*, Volume 28 pages 146-148 and pages 271-284

T Cell Club Speaker

Friday, January 7, 2000: Ting et al. J Immun. 1999; 163:3898. *Mycobacterium tuberculosis* inhibits IFN-γ transcriptional responses without inhibiting activation of STAT1.

Friday, May 19, 2000: D. B. Moody. S. A. Porcelli. *Nature* 2000; 404; 884-888. CDlc-mediated T-cell recognition of isoprenoid glycolipids in *Mycobacterium tuberculosis* infection

Friday July 21, 2000: D. K. Dalton. S. Wittmer. *J Exp Med.* 2000; 192:117-122. Interferon gamma eliminates responding CD4 T cells during mycobacterial infection by inducing apoptosis of activated CD4 T cells.

Scientific (Basic Science) and Original Research: UMDNJ-SPH

- 1. NIEHS Center, Piscataway. Pilot project presentation: 'Effects of Diesel Exhaust Particles on Human Antimycobacterial Immunity' (2006-2007). December 7, 2007.
- 2. EOHSI Clinical Research and Occupational Medicine Grand Rounds. 'Tuberculosis Immunology Clinical Implications- Role for Environmental Pollutants', December 22, 2009.
- 3. School of Public Health Faculty Research Presentation. 'Is there a Role for Particulate Matter in altering Human Antimycobacterial Immunity?' May 7, 2010
- 4. School of Public Health Office of Public Health Practice (OPHP). 'Environmental Influences on Human Immunity', May 19, 2010
- 5. DEOM Faculty Meeting. 'Effects of Particulate Matter on Antimycobacterial Immunity'. Nov 24, 2010

Professional Education

Conference / Workshop Attendance 2001- present

- Keystone Symposia. Molecular and Cellular Aspects of Tuberculosis Research in the Post Genome Era. Taos, Jan 25-30, 2001
- 2. Neuroimmunology Symposium. *Mind-Body Interactions: An Exploration of the Relationship between Stress Hormones and Immune Function*. Rockefeller University, New York, April17, 2001.
- 3. Joint CDC/NIH Tuberculosis Diagnosis Meeting June 14 and 15,2001, Decatur, Georgia
- 4. Symposium on Fungal Infections December 7, 2001 at NJPAC, Newark NJ sponsored by UMDNJ Department of Medicine, Division of Infectious Diseases.
- 5. Fourth World Congress on Tuberculosis, Washington DC, June 3-5, 2002
- 6. Fifth International Conference on the Pathogenesis of Mycobacterial Infections, Saltsjöbaden, Stockholm, Sweden, June 27-30, 2002.
- 7. Workshop: 'The Development of a New Tuberculosis-Vaccine', Sharm e1 Sheik, Egypt, October 21-24,2002.
- 8. American Association of immunologists, 90th Anniversary Annual Meeting, Denver, May 6-10, 2003.
- 9. Thirty-Eighth Tuberculosis and Leprosy Research Conference. Newark, New Jersey, July 21-22, 2003
- 10. 12th International Congress of Immunology and 4th Annual Conference of FOCIS, Montreal, Quebec, July 18-23, 2004
- 11. ATS 2005 International Conference, San Diego, CA, May 20-25, 2005.
- 12. 8th Congress of the World Association of Sarcoidosis and other Granulomatous Disorders (WASOG). Denver CO. June 12-15, 2005.
- 13. Keystone meeting. Tuberculosis: Integrating Host and Pathogen Biology. Whistler, Canada. April2-7, 2005.
- 14. Control of Breathing in Health and Disease, A symposium honoring the contributions of Neil S. Cherniack MD, UMDNJ-NJMS, April 1, 2006.
- 15. Symposium Immunology of Infectious Diseases April 11-12, 2006, UMDNJ-NJMS, Newark NJ.
- 16. The Second International Conference on TB Vaccines for the World Vienna Austria, 19-21 April 2006.
- 17. American Thoracic Society International Conference, San Diego, May 19-24, 2006
- 18. Keystone meeting 'Regulatory T cells', Vancouver February 1-6, 2007
- 19. Keystone meeting- 'Tuberculosis- From lab research to field trials', Vancouver March 20-25, 2007
- 20. ATS 2007- International Conference, San Francisco, May 18-23, 2007
- 21. Immunodiagnosis of Tuberculosis- New questions, new tools, Virginia Beach, September 21-23, 2008.
- 22. CBER/NIAID Adjuvant Workshop, December 2-3, 2008, Bethesda, MD.
- 23. Investigator Workshop for RAMNUC collaborative study, Imperial College London, UK, September 23-24,2010
- 24. UMDNJ Research Symposium: Inflammation, Immunity & Infectious Disease. Newark, NJ, September 27 28, 2010.
- 25. NIEHS Centers for Nanotechnology Health Implications Research (NCNHIR) Consortium Meeting. Research Triangle Park, NC 27709, November 15-16,2010
- 26. Keystone meeting. Tuberculosis: Immunology, Cell Biology and Novel Vaccination Strategies. Vancouver BC, January 15-20, 2011.
- Innovative Research Technologies to Bridge Bench to Bedside. 3rd Annual UMDNJ Inter-School Technology Symposium, UMDNJ Piscataway, April12, 2011
- 28. NIEHS Workshop to Examine the Interactions between Environmental Exposures and Infectious Agents in the Etiology of Human Disease. NIEHS, Research Triangle Park, NC, September 8-9, 2011
- 29. Greening NJ Communities from the Ground Up. Rutgers University, October 28, 2011

- 30. 5th Annual TB Medical Consultants Meeting, November 9-10, 2011, Global Tuberculosis Institute (GTBI), Newark, NJ.
- 31. NIEHS Centers for Nanotechnology Health Implications Research (NCNHIR) Consortium Meeting. January 26-27, 2012. NIEHS, Research Triangle Park, NC
- 32. 99th Annual Meeting of the American Association of Immunologists (AAI) IMMUNOLOGY 2012[™], Boston, MA, May 5, 2012, Boston MA.
- 33. Cancer Symposium May 24, 2012 RWJMS, Piscataway, NJ.
- 34. NIEHS Centers for Nanotechnology Health Implications Research (NCNHIR) Consortium Meeting. July 31-August 1, 2012, Portland, OR.
- 35. Nano-Bio Focus Meeting, Oct 11, 2012. Rutgers, McLaren Center for Ceramic Research Building.
- 36. NIEHS NCNHIR Face to Face Meeting, Phoenix AZ, 3/21-3/22/2014
- 37. AAI Annual meeting, Pittsburg, PA, May 2-6, 2014
- 38. ATS 2014. Annual Meeting. San Diego, May 16-21, 2014
- 39. International Society of Exposure Science (ISES). Cincinnati, Ohio October 12 16, 2014.
- 40. NCNHIR/ NIEHS Face-to-Face scientific meeting (RTP, North Carolina May 6 and 7, 2015)
- 41. Joint NIEHS, ATS and ERS scientific workshop: Household Air Pollution from Solid Fuel Combustion Smoke and Global Health Equality A Scientific Workshop. May 15 and 16, 2015, at Denver Colorado.
- 42. American Thoracic Society (ATS) Annual Meeting. Denver, CO, May 15-20, 2015.
- 43. American Thoracic Society (ATS) Annual Meeting, San Francisco, May 2016.
- 44. American Thoracic Society (ATS), International Conference, Washington DC, May 19-24, 2017.

Organizer of Scientific MeetingS

Investigator Meeting (MexAir RO1 grant). Meeting of MexAir Investigators with site visits and scientific seminar with 10 presentations in Mexico City, July 18-21, 2012

Investigator Meeting (MexAir RO1 grant). Meeting of MexAir Investigators with site visits and scientific seminar with 10 presentations, Piscataway, New Jersey, February 26-27, 2015

Investigator Meeting (MexAir RO1 grant). Meeting of MexAir Investigators with site visits and scientific discussions, analysis, planning, Mexico City, July 16-21, 2015

RUTGERS SPH Center for Global Health (CGPH) (S. Schwander, Director)

Education

Global Public Health Seminars at the RU SPH CGPH

Álvaro Osornio Vargas, MD, MMSc, PhD. Department of Paediatrics, Children's Environmental Health, University of Alberta, Canada. Title: *Urban Air Pollution Particulate Matter: A Mixture with Various Toxic Drivers*. December 9, 2013

Bruce Kirenga, MBChB, MMed, School of Medicine Makerere University, Kampala, Uganda. Title: *Air Quality Changes in Urban Sub Saharan Africa*. September 2, 2014

Donald W. Light, PhD, Professor of Comparative Health at Rowan University School of Osteopathic Medicine; Guest Researcher, Center for Migration and Development at Princeton University; Guest, Division of Medical Ethics at New York University. Title: Global Health Justice and the Search for Better Medicines: From Bad Pharma to Good Pharma (March 7, 2016)

Hasanat Alamgir, MBA, PhD, Associate Professor and Chair of Health Policy and Management, School of Health Sciences and Practice, New York Medical College, Valhalla, New York. Title: Worker Health & Safety in Developing Countries: Recent Developments (June 10, 2016)

MPH with Concentration in Global Public Health Program Development

CV Stephan Schwander

Obtained GAIA Internationalization of the Curriculum grant for development of MPH with Concentration in Global Public Health. Development of course topics and syllabi in discussions with SPH faculty and wider Rutgers community faculty.

MPH with concentration in Global Public Health approved by RU Curriculum Committee; February 2016

USAID Global Fellowship Grant Development – support for SPH students

Attracted Fulbright Chair in Global Health from Brazil to SPH (Jan 2015-April 2015)

RUTGERS CGPH Faculty and Staff

Recruited Virginia Allread, MPH, as Course Instructor to the CGPH

Management Workshop Attendance

- 1. Managing at UMDNJ. New Brunswick, NJ Sept. 15-17, 2011. Organized by the Dept. of HR and Office of Training and Organizational Development.
- 2. Essentials of Management. New Brunswick, NJ Dec. 11 and 13, 2012. Organized by the Dept. of HR and Office of Training and Organizational Development.

RUTGERS Leadership Committees

Office of Human Research Protection (OHSP) meeting on Tuesday, September 9th, 1:30 PM – 2:30 PM, at 335 George Street, Liberty Plaza, 3rd Floor, Conference Room 3620.

ORED-RBHS Faculty Advisory Committee meeting on Wed, Sept 10th, 2014

- A. Community Services
- B. Other

Other Educational Activities

United Nations Faculty Seminar, UN, NYC, November 1, 2013

PATENTS HELD None

UNIVERSITY CURRICULUM VITAE FORMAT

(Times Roman font, 10 pt., Category headings: bold/CAPS, Margins: L=1.5", R=l.O", T=1", B=.5)