**Curriculum Vitae**

***Sadeep Shrestha PhD, MHS, MS***

***Professor of Epidemiology***

# *Quetelet Endowed Professorship in Public Health*

**Office Address:** University of Alabama at Birmingham

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**E-mail:** [sshrestha@uab.edu](mailto:sshrestha@uab.edu)

**Web:** https://scholars.uab.edu/display/sshresth

**Education:**

2005 PhD, Human Genetic/Infectious Disease Epidemiology, Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD

**Dissertation:** *Genetic and molecular epidemiology studies of HIV susceptibility and needle sharing among injection drug users in Baltimore*

**Advisor:** Steffanie Strathdee, PhD

2001 MHS, Genetic/Human Genetic Epidemiology, Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD

**Thesis:** *The use of genotypic short tandem repeat methodology for identification of single- versus multi-person syringe use*

2000 MS, Biotechnology, Johns Hopkins University, Krieger School of Arts and Sciences, Baltimore, MD

1993 BS, Biology, Luther College, Decorah, IA

**Senior Paper:** *The role of B-raf oncogene in the signal transduction pathway*

**Other relevant PROFESSIONAL Training:**

National Institute of Health Graduate Partnership Program (1999-04) NIH, Bethesda, MD

**Brief Chronology of Employment and Appointments:**

# *2021-*

# Director,UAB School of Public Health - Molecular Epidemiology Core Laboratory

2021-

**Director**, Program in Epidemiology of Inflammation, Infection and Immunity (PEII)

# *2020-*

**Professor**, Department of Epidemiology, School of Public Health, University of Alabama at Birmingham, AL

# *2019-*

**Director,** Nepal Health Initiative, University of Alabama at Birmingham, AL

# *2018-*

# *Quetelet Endowed Professorship in Public Health*

2018-present

***SOPH Representative***, Council of Post-doc Education

Oct 2014-2017

***PhD Program Director***, Department of Epidemiology, School of Public Health, University of Alabama at Birmingham, AL

Oct 2011-present

***Associate Professor (tenured****)*, Department of Epidemiology, School of Public Health, University of Alabama at Birmingham, AL

Sept 2005-2011

***Assistant Professor,*** Department of Epidemiology, School of Public Health, University of Alabama at Birmingham, AL

Sept 2004-August 2005

***Post-doc Fellow***, Laboratory of Genomic Diversity, NCI-Frederick, NIH, Frederick, MD

2000-2004

***Research Fellow/Doctoral Student***, SAIC - Basic Research Program, Genetic Epidemiology, Laboratory of Genomic Diversity, NCI-Frederick, Frederick, MD

1994-2000

***Research Assistant/Associate***, Human Genetic Analysis Laboratory, NCI-Frederick Cancer Research Development Center, Frederick, MD

**Additional Professional Appointments:**

*Senior Scientist,* Precision Medicine Institute, UAB (2018 -)

*Senior Scientist,* Informatics Institute, UAB (2018 -)

*Secondary Faculty,* Department ofGenetics, UAB (2010 -)

*Secondary Faculty*, Cell, Molecular, and Developmental Biology, UAB (2009 -)

*Advisory Board/Mentor*, Cancer Prevention and Control Training Program (2009 -)

*Member*: The Geneticist-Educator Network of Alliances (GENA) Project, American Society of Human Genetics, 2008-09

*Faculty Member:* Center for AIDS Research, UAB, Birmingham, AL, (2007 -)

*Associate Scientist:* Minority Health Research Center,UAB, AL (2007 -)

*Faculty Member:* Interdisciplinary Genetics Graduate Program, UAB, Birmingham, AL, (2007 -)

*Associate Scientist:* Comprehensive Cancer Center, Cancer Control & Population Sciences Program, UAB, AL (2006 -)

*Faculty Member:* Program in Epidemiology of Infection and Immunity (PEII), School of Public Health, UAB, AL (2005 -)

*Global Health Scholar*: Sparkman Center for Global Health, University of Alabama at Birmingham (2013-)

**Awards and Recognitions:**

# *Nominated for Faculty Appreciation, Green and Golden Globe, UAB Student-Athlete Advisory Committee (SAAC) (2021)*

# *Nominated as finalist for the* President's Award for Excellence in Teaching from the School of Public Health, 2019

# *Quetelet Endowed Professorship in Public Health (2018)*

# *Graduate Dean's Excellence in Mentorship Award (recipient for 2013,* UAB)

# *Nominated as finalist for the* President's Award for Excellence in Teaching from the School of Public Health, 2011

# *Department of Epidemiology Collaborative Award, UAB, 2011*

# *Back of the Envelope Innovative Award,* Dean’s Office, School of Public Health, UAB, 2008

*Cervical Cancer Spore Career Development Award*: Johns Hopkins University, 2008-10

*Project Recognition Award*: SAIC-Frederick, May 2004

*Specific Outstanding Performance Award*: SAIC-Frederick, Dec, 2000 & Sept, 2002

*Department Education Award*: Epidemiology Department, JHSPH, 2001-04

*Doctoral Educational Assistance*: NCI-SAIC at Frederick, NIH, 1999-04

*Regent’s Scholarship*: Luther College, Decorah, IA, 1992-93

*Presidential Scholarship*: Luther College, Decorah, IA, 1992-93

*American Nepal Education Foundation Award*: Portland, OR, 1992-93

**Professional society memberships:**

American Society of Preventative Oncology, ASPO (2017-present)

International Papillomavirus Society, IPS (2007-present)

American Society of Human Genetics, ASHG (2002-present)

American Public Health Association, APHA (2002-present)

International Genetic Epidemiology Society, IGES (2002-present)

American Association of Advancement of Science, AAAS (2001-present)

American Heart Association (2009-present)

**PROFESSIONAL WORKING GROUP:**

*Subclinical atherosclerosis Working Group -* Multi-Ethnic Study of Atherosclerosis (MESA), 2010-

*HPV Working Group -* Women's Interagency HIV Study *(*WIHS), 2012-

*Genetics Working Group & Concept Review Committee -* Women's Interagency HIV Study *(*WIHS), 2012-

*Functional Genomics and Translational Biology (FGTB) Strategy Task Force* – American Heart Association (AHA), 2013-

**PROFESSIONAL Advisory Boards:**

*Faculty Development Advisory Board:* Kathmandu University, Nepal 2017-

*Advisory Board*: Community Members Interested, non-profit organization, 2006 - (www.cminepal.org)

*Advisory Committee*: Asian College of Higher Studies, Kupondole, Kathmandu, Nepal, 2004 - 2006

*Advisory Committee*: Maitri School, Kathmandu, Nepal, 2004 - ([www.maitrischool.edu.np](http://www.maitrischool.edu.np))

*Senior Advisory Member*: Nepal Fertility Care Center, Lalitpur, Nepal 2012- ([www.nfcc.org.np](http://www.nfcc.org.np))

## The Geneticist-Educator Network of Alliances (GENA) Project

GENA project funded by Math Science Partnership program at the National Science Foundation, the Geneticist-Educator Network of Alliances (GENA) Project (grant #0634296) is developing a national network of 70 master Geneticist-Educator alliances that is designing and implementing teaching plans related to state standards and misconceptions in genetics.

**Project Participant/Geneticist:** Partnered with Lisa Howerton, a high school teacher at Hueytown High School, Hueytown, AL.

**Project Report:** Howerton L, **Shrestha S**. Does Genotype Always Predict Phenotype? Geneticist-Educator Network of Alliances (GENA) Project Report 2008-09 (http://gena.mspnet.org/index.cfm/18004).

**Major Research Interests**

***HPV related outcomes and cancers***

* Immunogenetics of HPV persistence/clearance - association studies in REACH, HERS, ALTS, WIHS & HIM cohorts
* Molecular Epidemiology and Biomarker Research of HPV-related pre-cancer and cancer progression - gene expression, genetic and “omics” association
* Epidemiology and co-morbidities in HPV-related cancer patients (cervical, head & neck, anal) using hospital-based electronic medical records
* Epidemiology of HPV and cervical cancer in Nepal - <http://www.nfcc.org.np/hpv.html>

***Outcomes and complications in HIV-1 patients***

* Acceleration and accentuation of atherosclerosis - genetic associations in HIV cohorts (MACS, ALIVE, WIHS, MHCS, HERS, FRAM and REACH)
* Coinfections and comorbidities related to HIV infection and HAART, especially in the context of host genetics
* Atherosclerosis and aging in HIV – Epidemiology and genetic associations
* Human genetics of HIV acquisition and early viral control in discordant couples in Zambia and Rwanda

**Kawasaki disease**

* KD Immunogenetic Consortium in collaborations with Seattle Children's Hospital and affiliated pediatric clinics in northwest US
  + Susceptibility to KD (Trio-based family study)
  + Differential response to IVIG treatment
  + Development of aneurysms and coronary artery disease
* Development of KD and aneurysm cohort among African Americans in Alabama

**Other Research Interests**

* Infectogenomics (HIV & HBV susceptibility and disease progression),
* Vaccinogenomics (Flu, HBV, and anthrax vaccine response),
* Pharmacogenetics (disease treatment response),
* Immunogenetics (innate and adaptive immunity),
* Big Data and Electronic Medical Record based Precision Public Health Research (HPV-associated cancers)

**Teaching:**

**Course-Master**

EPI 605, Epidemiology of Infectious Disease Remote & Online, *Course Master* (Spring, 2021)

PUH Grant Writing (Spring, 2020, 2021)

EPI 703, Grant Writing, *Course Master* (Fall, 2018)

EPI 695/795 Epidemiology Seminar: Course Master (Spring & Fall 2016, 2017, 2018, 2019, 2020, Spring 2021)

EPI 731, Genetic Epidemiology: *Course Master* (Spring, 2008, 2009, 2011, 2014, Fall 2017)

EPI 635, Genetics in Public Health: *Course Master* (Spring, 2010, 2012, 2015)

GBS 721, Genetic Epidemiology: Genetic Module of UAB Graduate Biomedical Sciences, *Course Master* (Spring, 2011, 2012, 2013)

MGE 709, Human Genetics: *Quantitative Genetics Module Leader* (Spring, 2009 & 2010), *Quantitative Genetics Module Lecturer* (Spring, 2008)

EPI 730, Introduction to Human Population Genetics Theory: *Co-course Master* (Fall 2006 & 2007)

Basic Research in Infectious Diseases and Genetic Epidemiology (BRIDGE): Co-director (2009-present) (https://www.soph.uab.edu/epibridge)

**Guest Lectures**

EPI 602 The Epidemiology of Chronic Disease, *HPV and Cervical Cancer Screening* (Fall 2016)

EPI 602 The Epidemiology of Chronic Disease, *Genetic Causes of Chronic Diseases* (Fall 2015)

GC 600 Advanced Clinical Skills in Genetic Counseling, *Genetic Epidemiology and Public Health* (Fall 2013)

GC 602, Advanced Topics in Genetic Counseling, *Introduction to Genetics in Public Health* (Spring 2012)

EPI 600, Introduction to Epidemiology, *Introduction to Genetic Epidemiology* (Fall, 2007 & Spring, Fall 2008, Fall 2009)

EPI 601, Vaccinology, *Human Papillomavirus Vaccine* (Fall 2007 & 08)

EPI 612/712, **Nutritional Epidemiology, *Gene-Nutrition Interaction* (Fall 2008)**

Principles of Epidemiology, Department of Epidemiology, Bloomberg School of Public Health, John Hopkins University: *Assistant Instructor* (Fall 2004)

Public Health Impact of HIV Infection and AIDS, Department of Infectious Disease, Bloomberg School of Public Health, John Hopkins University, *Teaching Assistant*: (Fall & Winter 2001)

**Students have officially registered for over 410 credit hours for internships, research projects, dissertation research and doctoral directed research.**

**EDUCATIONAL ACTIVITES:**

**Faculty Mentor**

Henna Budhwani – Associate Professor, Department of Health Care Organization and Policy (UAB Promotion and Tenure Faculty Mentor, **2021-** )

Madhav Bhatta – Assistant Professor, College of Public Health, Kent State University, Kent, OH **(2009 - 2014)**

Akinyemi I Ojesina – Assistant Professor, Department of Epidemiology (Departmental mentor and also 3U54CA118948-Career Development Supplement, mentor committee) **(2018 - present)**

Luz A Padilla – Assistant Professor, Department of Epidemiology (Departmental Mentor) **(2018 – present)**

Faith Fletcher – Assistant Professor, Department of Health Behavior (External Project Co-mentor) **(2019 -)**

Ehsan Abdalla – Assistant Professor, Tuskegee University (Project Co-mentor) **(2019 - )**

**Post Doctoral co-mentor**

Yann Klimentidis – Project: Population-specific natural selection at genetic regions associated with HIV-1 viral load set-point control (currently assistant professor, Epidemiology and Biostatistics, University of Arizona)

Robert Makowsky – Project: Relation between autosome, Y-chromosome and mitochondrial markers from GWAS: PCA and phylogenetic analyses (currently Biostatistician, Gore)

Marguerite M D Irvin – Project: Genomic Association of Subcutaneous Leg and Trunk Fat in HIV-1-positive men on HAART (currently associate professor, Department of Epidemiology, University of Alabama at Birmingham)

**Doctoral Thesis Advisor and Committee Chair**

2009-12 Mawuli Nyaku (DrPh) – *Association between CC Chemokine Ligand 3-Like-1 (CCL3L1) Gene Copy Number and Rheumatoid Arthritis in African Americans* (currently Public Health Officer - Centers for Disease Control - Atlanta)

2010-13 Staci Sudenga (PhD) – *Host genetic factors associated with cervical HPV clearance* (currently assistant professor, Vanderbilt University) (supported by Cancer Prevention and Control Training Program (CPCTP NCI-T32)

2008-14 Kathryn E Royse (PhD) – *Molecular Profiling in Cervical Carcinogenesis and Progression* (currently Instructor, Section of Health Services Research Baylor College of Medicine) (supported by CPCTP NCI-T32)

2011-15 Derek Johnson (PhD) (Research Advisor) - *Prevalence and Determinants of High Risk Human Papillomavirus (HPV) Among Wives of Migrant Workers – A Study in Achham District of Nepal* (currently Epidemiologist, Doctors Without Borders, Myanmar) (supported by CPCTP NCI-T32)

2011-16 Aditi Shendre (PhD) – *Admixture mapping of common carotid artery intima-media thickness (cIMT) among African Americans (*currently post-doctoral fellow, Ohio State University*)*

2014-18 Michael P Behring (PhD) - *Genome-wide breast cancer epidemiology: metastasis, aging, and immune response* (currently Post-doc at Dr. Upender Manne’s lab)

2013-19 Yuanfan Ye (PhD) – *HPV and HSV associated clinical conditions among people living with HIV-1 infection* (currently Post-doc UAB Ob/Gyn)

**Current (Advisor and Committee Chair)**

2016- Adeniyi J Idigo (PhD 5th year)

Thesis: “*Drug resistance, treatment adverse events, and poor prognosis among patients hospitalized with community-acquired pneumonia*”

2016- Amrita Mukherjee (PhD 5th year) – AHA pre-doctoral fellowship awarded (2019)

Thesis: “*Cardiovascular Disease Risk in Head Neck Squamous Cell Carcinoma patients: Using Electronic Medical Records data*”

2018- Anna Junkins (PhD 3rd year) – Previously supported by Blazer Fellowship and currently supported by CPCTP NCI-T32

Thesis: “*A Mixed Methods Study Examining Early Onset Anal Cancer and Current Screening Practices, Attitudes, and Perceived Risk Among People Living with HIV in the Deep South*”

2018- Kristina Tymes-Wilbekin (MD/PhD 3rd year) – F31 Awarded from Eunice Kennedy Shriver National Institute of Child Health and Human Development (2020)

Thesis: “*Perceptions of Multipurpose Prevention Technologies Among African-American Women in the Deep South*”

2020- Nora AM Balas (PhD 1st year)

**Doctoral Thesis Committee Member**

2018-20 Sanjeev Acharya (PhD), Department of Sociology, UAB *Nutrition Transition and SES as a Fundamental Cause: An Integrative Approach to Examine Weight Status in Nepal*

2015-16 Yogasudha Veturi (PhD), Department of Biostatistics, UAB *Contributions to Variance Component Estimation in Whole Genome Regression Based Studies*

2012-13 Guodong Wu (PhD), Department of Biostatistics, UAB *Statistical Analysis in Genomic Studies*

2008-12 Liangyuan Hu (PhD), Department of Genetics, UAB *C-C-motif Chemokine Receptor/ligand Gene Variants and their Associations with HIV-1 Transmission and Pathogenesis*

2009-11 Nathan E Wineinger (PhD), Department of Biostatistics, UAB *Statistical Methods in the Analysis of Copy Number Variation Data*

2010-11 Thomas Birkner (PhD), Department of Biostatistics, UAB *Hierarchical and Bayesian Approaches for Estimating Prevalence Based on Pool Screening*

* 1. Aleksandr Lazaryan (PhD), Department of Epidemiology, UAB *Human Leukocyte Antigen Supertypes in Relation to Human Immunodeficiency Virus Infection among Populations of African Ancestry* UAB

**Master’s Thesis Committee**

2018-19 Calvin L. Colvin (MSPH) *HPV-High Risk Behaviors and HPV Vaccine Initiation among College-Enrolled Men Who Have Sex with Men (MSM)* Department of Epidemiology, UAB

2016-17 Evgenia R Nokovich (MSPH) *Screening of Hepatitis C Infection and Health Care Utilization* Department of Epidemiology, UAB (**Chair**)

2016-17 Demetria M Hubbard (MSPH) *Completion and Effectiveness of HPV Vaccination Among Adolescents and Young Adults, U.S. 2011-2014* Department of Epidemiology, UAB

2011-12 Heather Hawthorne (MSPH) *Treatment-associated Complications Among Adolescent and Young Adults with Cancer* Department of Epidemiology, UAB

2008-10 Tara D Davis (MSPH), *Prevalence of Serum Creatinine in HIV-positive Adolescents* Department of Epidemiology, UAB (**Chair**),

2008-10 Amelia Boehme (MSPH), *Qualitative and Quantitative Assessment of Antiretroviral Therapy Adherence in HIV+ Postpartum Women* Department of Epidemiology, UAB

2008-09 Erica Johnson (MSPH), *The Effect of Supportive Social Interventions on Parental Stress Levels in Mothers Living with HIV* Department of Epidemiology, UAB

2006-08 Hari Garapati (MSPH), *Prognosis of Sepsis and Oliguric acute renal failure (ARF) in  critically  ill patients  treated with continuous veno-venous hemodiafiltration (CVVHDF).* Department of Epidemiology, UAB (**Chair**)

2005-07 Newton Wahome (MSPH), *CCL5/RANTES co-expression analysis of perinatal HIV transmission*, Department of Epidemiology, UAB (**Chair**)

**Non-thesis Advisor**

**Current**

2018- Lieza Flores (MPH Online)

2018- 19 Astha Berwala (MPH)

2018- 19 Phuong Quach (INTO-MPH)

2018- Gaurav Barot (MPH)

2017- 19 Siddharth B Patel (INTO-MPH)

2017- Meghan D Radman (MPH)

2017- 19 Abdullah A Alsarrani (INTO-MPH)

2016- Havovi Patel (MPH)

**Past**

2015-17 Bigyan Mainali (MPH)

2014-17 Chapelle Ayres (MPH-Fast Track 5th Year)

2013- 15 Matthew F Honkanen (MPH)

2012-13 Austin Law (MPH)

2011- 13 Kristen Nash (MPH)

2011-12 Maya Mukundan (MPH)

2007-11 Jaisen Bell (MPH-IHGS)

2009-11 Benny Taylor II (MPH)

2007-10 Gautam Agrawal (MPH)

2007-08 Harini Bathulapalli (MPH)

2007-08 Venus Roper (MPH)

2007-09 Ugochukwu Ezeugo (MPH)

2006-08 Shardul Nagre (MPH)

2005-07 Manoj Kumar (MPH)

1998-00 *Peer Advisor*: Students, Interns, and Fellows. SAIC-Frederick, MD

**Sparkman Center International Public Health Summer Institute:** Between 2001-2010, the Sparkman Center invited qualified public health professionals from developing countries and offered Summer Institute course to enhance their public health skills.

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| --- | --- | --- |
| **Year** | **Invitee** | **Institute** |
| 2006 | **Michael Talledo, PhD** | Institute of Tropical Medicine Alexander von Humboldt, Lima, Peru |
| 2007 | **Sunil Kumar Joshi, MD**  *Professor* | Kathmandu Medical College, Kathmandu, Nepal |
| 2007 | **Jayjeev Hada, MA**  *Director* | Community Members Interested, Kathmandu Nepal |
| 2006 | **Asis De, MD**  *Professor* | Community Medicine, Manipal College of Medical sciences |
| 2007 | **Suraj Gurung, DMD** |  |
| 2008 | **Biraj Karmacharya, PhD MBBS**  *Department Chief* | Department of Community Programmes, Kathmandu University, Dhulikhel, Nepal |
| 2009 | **Rajendra Koju, MD**  *Dean* | Kathmandu University School of Medical Sciences, Dhulikhel, Nepal |

2019- Grace Kwak (Sparkman Fellow)

**Research Internship Mentor**

**1. Project:** [**HPV-Related Cancers: An Analysis of Electronic Medical Record from UAB Hospital**](https://www.soph.uab.edu/sites/edu.cares/files/projectdetails.php?sid=711)

*Intern:* Evgenia Rayelle Nokovich (Alabama College of Osteopathic Medicine (ACOM)), **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2018

**2. Project:** [**Epidemiology and trend over time of HPV-related Cancers**](https://www.soph.uab.edu/sites/edu.cares/files/projectdetails.php?sid=748)

*Intern:* Alexandra Gubbels (SOM-UAB), **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2018

**3. Project: Awareness and understanding of human papillomavirus and its association with cancer risk among medical and nursing students and professionals in Nepal**

*Interns:*

a) Akilia Semoy (Georgetown University), **Minority Health International Research Training Program**, UAB 2018

b) Fatima Ajose (Tufts University), **Minority Health International Research Training Program**, UAB 2018

**4. Project: Cultural and Social Perception of Menstruation and Menstrual Hygiene Practices in Nepal**

*Interns:*

a) Khawla Suhaila (SOPH-UAB), **Minority Health International Research Training Program**, UAB 2018

b) Regina Brecker (University of Pittsburgh), UAB 2018

**5. Project: Health Disparities in Anal Cancer Among Men in an HIV/AIDS Clinic Cohort**

*Intern:* Rebecca Pearlman (Springhill College), **P**artnership **R**esearch **S**tudent **T**raining **P**rogram (PRSTP), UAB 2018

**6. Project:** **Racial & Gender Disparities in Patients Diagnosed With Nasal Cavity or Nasopharynx Cancer**

*Intern:* Charles Brown (Miles College), **P**artnership **R**esearch **S**tudent **T**raining **P**rogram (PRSTP), UAB 2018

**7. Project:** **Antibiotic Usage and Susceptibility Over Time**

*Intern:* Abigail Adams (Georgia University), UAB 2018

**8. Project: Genetic Determinant of HPV-related Cervical Precancer**

*Intern:* Chapelle Ayres, **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2017

**9. Project:** **HPV-related Cancers: An analysis of Electronic Medical Record from UAB Hospital**

*Intern:* Demetria Hubbard (SOPH-UAB), **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2017

**10. Project:** [**Genetic epidemiology of HPV infection and related outcomes**](http://www.soph.uab.edu/sites/edu.cares/files/projectdetails.php?sid=20)

*Intern*: Bigyan B Mainali (SOM-UAB) **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2016

**11. Project:** [**“Omic”**](http://www.soph.uab.edu/sites/edu.cares/files/projectdetails.php?sid=20) **Studies of HPV-related Cancers**

*Intern*: Lauren B Camp (SOPH-UAB) **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2016

**12. Project: Epidemiology and distributions of Human Papillomavirus (HPV) and Cervical Cancer in Nepal** (*http://www.soph.uab.edu/cares/projectdetails.php?sid=460*)

*Interns*:

a) Elaine McGlaughlin (SOPH-UAB), **Cancer Research Experiences for Students** (**CaRES**) program, UAB/Nepal Fertility Cancer Center-Nepal 2015

b) Jessica Siddhu, HCOP MPH Internship, UAB 2015

c) Bellamy Hawkins & Stephanie Tison (SOPH-UAB), **Cancer Research Experiences for Students** (**CaRES**) program, UAB 2014

**Service Activities:**

**Departmental & SOPH:**

2020- SOPH Tenure and Promotion Task Force

2020- SOPH COVID-19 “Omics” Working Group Chair

2019- Sparkman Center Strategic Plan Committee

2016- Faculty Governance Committee

2015- School of Public Health Scholarship Committee

2013-17 SOPH Educational Policy Committee (EPC)

2011- Department of Epidemiology PhD committee

2011- Departmental Faculty Affairs Committee

2007-08 Member, Junior Faculty Development Committee

2007-11 Department of Epidemiology MSPH/MPH Admissions Committee

* 1. Department of Epidemiology DrPh Admissions Committee
  2. Department of Epidemiology PhD qualification Exam Committee

**University:**

2020- UAB COVID-19 Biospecimen Governance Committee

2018/19 Mentor, UAB Global Health Case competition, Sparkman Center and Global Health

2018- UAB Council of Postdoctoral Education (COPE)

2015- Pilot Project Development Team, Clinical and Translational Science (CCTS)

2014 Judge, UAB Comprehensive Cancer Center Annual Research Retreat and Research Competition

2012-15 Member, University Wide Grievance Panel

2010 School of Public Health Research Application Committee

2010-14 Genetics and Genomic Science Curriculum Committee

2009 Judge, UAB Summer Research Expo

2009- Mentor, Cancer Prevention and Control Training Program

2009- Committee Member, Section on Statistical Genetics Certificate Curriculum

2008-09 UAB Faculty Senate Elect

2008 Judge, Annual Graduate Student Research Day

2008 - Member, UAB HIV Junior Investigator Networking Group

2008 UAB School of Public Health Global Health Award Selection Committee

Summer 2007 Sparkman Center Summer Institute Mentor: Michael Talledo, Institute of Tropical Medicine Alexander von Humboldt, Lima Peru

Summer 2007 Sparkman Center Scientific Writing Expert Panel, International Public Health Summer Institute, UAB

**Faculty Search Committee:**

2018- Chair, Department of Epidemiology Faculty Search Committee, School of Public Health, UAB

2018-19 Member, Department of Health Care Organization and Policy, Faculty Search Committee, School of Public Health, UAB

2018-19 Member, Department of Environmental Health Sciences Faculty Search Committee, School of Public Health, UAB

2015-17 Member, Department of Epidemiology Chair Search Committee, School of Public Health, UAB

2007-09 Member, Molecular Epidemiologist/Chair Search Committee, UAB Comprehensive Cancer Center

2008-09 Member, Infectious Disease Epidemiology Faculty Search Committee, Department of Epidemiology

**Scientific Journal Activities:**

**Editorial Board**

Guest Editor, *Cancers*, Special Edition Title: Successes and Barriers of HPV Vaccination and Cervical Screening on Cervical Cancer Elimination (2020 - )

Associate Editor, *BMC Infectious Diseases* (2017 - present)

Editorial Board, *Human Immunology* (2014 - 16)

Editorial Board, *Genes and Immunity* (2012 - present)

Associate Editor, *American Journal of Epidemiology* (2010 - 13)

Editorial Board, *Journal of Sexually Transmitted Diseases* (2012 - present)

International Associate Editor, *Kathmandu University Medical Journal* (2010 - present)

Review Editor, *Frontiers in Statistical Genetics and Methodology* (2011- present)

***Ad hoc* Peer Review**

Advances in Virus Research, AIDS, American Journal of Epidemiology, American Journal of Human Biology, Annals of Human Genetics, Circulation Research, Current HIV Research, Current Pharmaceutical Design, Epidemiology and Infection, Gastroenterology, Genes and Immunity, Human Genetics, Human Immunology, International Journal of Cancer, International Journal of Immunogenetics, JAIDS, Journal of AIDS and HIV Research, Journal of Infectious Diseases, Nature Medicine (with primary), New England Journal of Medicine, Pharmacogenomics, Public Health Genomics, PLoS Genetics, PLoS ONE, Scientific Reports, The Journal of Clinical Rheumatology and Musculoskeletal Medicine, Vaccine, JAMA

**Study Section / Review of Proposals:**

NIH Cancer, Heart, and Sleep Epidemiology Study Section B (CHSB) 2019, 2020

ZRG1 IMM-K (50)R NIH U.S.-Brazil Collaborative Biomedical Research Program Study section 07/10/2019

NIH Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) Study section 06/27-06/28, 2019

NIH/NIAID, Population and Public Health Approaches to HIV/AIDS (PPAH) Study section, Nov 8th- 9th, 2018

NIH/NIDA, ZDA1 HXO-H (10) Identification of Biomarkers of HIV-1 Pathogenesis and Substance Abuse Comorbidity (R01), June 6, 2018

NIH/ NIDA, ZDA1 HXO-H (15) Pharmacogenomics of Anti-retroviral Therapy in People Who Inject Drugs (R01), Feb 15, 2018

NIH AIDS and AIDS Related Research study section, ZRG1 AARR-G (02) M, 2017

Centers for Disease Control and Prevention (CDC), Center for Global Health, Special Emphasis Peer Review Panel, 2016

NIH Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) study section 02/18-02/20, 2015

NIH Study section **ZAI1 RB-A (S1)** – **NIAID Special Emphasis Panel Limited Competition Women’s Interagency HIV Study (WIHS-V)**, 2012

Medical Research Council (MRC), Imperial College London, United Kingdom 2012 &2014

NIH Study section ZAI1 SM-M (M1)– NIAID Special Emphasis Panel, 2012

Creative and Novel Ideas in HIV Research (CINHR) Award Program, International AIDS Society & Center for AIDS Research/National Institute of Health, 2010

Uganda National Council for Science and Technology, Uganda Millennium Science Initiative (MSI) Project, World Bank, 2007 & 08

**UAB Grant Proposal Review**

Pilot Project, CFAR/CCTS, University of Alabama at Birmingham, 2020

Pilot Project, Kaul Pediatric Research Institute, Children’s of Alabama Funds Research Initiatives, 2016

Pilot Project, Center for Healthy African American Men through Partnerships (CHAAMPS), UAB, 2016

American Cancer Center Faculty Development Grant - UAB Comprehensive Cancer Center, 2014

2011 Back of the Envelope Award, Dean’s Office, School of Public Health, University of Alabama at Birmingham

**Review of Conference Abstracts:**

Scientific Program Committee Member, The **16th Annual MidSouth Conference on Computational Biology and Bioinformatics (MCBIOS ’19)**

Annual American Public Health Association (APHA), Academic Public Health Caucus program (2007-13)

International AIDS Conference (AIDS 2010-present)

Translational Science 2013 Meeting: Improving Health Through Research and Training (2013)

**Book/Book Chapter:**

**Shrestha S** & Arnett DK. Research Methods for Genetic Studies. *In* Essentials of Clinical Research (1st edition 2008). Glasser, SP (ed), Springer, NY. ISBN# 9781402084850 (2nd edition, Springer International Publishing Switzerland 2014 DOI 10.1007/978-3-319-05470-4\_11)

**Shrestha S.** Mendelian Genetics. *In* Cardiovascular Genetics and Genomics in Clinical Practice (2015). Arnett, DA & Shah, SJ (eds), Demos Medical Publishing. ISBN# 9781620700143

**Shrestha S**, Genetic and molecular epidemiology studies of HIV susceptibility and needle sharing among injection drug users in Baltimore (2006). Proquest Publications: ISBN# 0496164880.

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3) Smith MW, Lautenberger JA, Shin HD, Chreiten JP, **Shrestha S**, Gilbert DA, O’Brien SJ Markers for mapping by admixture linkage disequilibrium in African American and Hispanic Populations 2001 *American Journal of Human Genetics*, 69, 1080-94.

2) **Shrestha S**, Strathdee SA, Brahmbhatt H, Farzadegan H, Vlahov D, Smith MW Short tandem repeat methodology for genotypic identification of single-person versus multi-person use of syringes 2000 *AIDS*, 14, 1507-13.

# 1) Sithanandam G, Latif F, Bernal R, Shrestha S, Smola U, Wixler V, Zabarovasky E, Dean M, Lerman M, Rapp U, Klein G, Minna J, Alikmets R 3pK, a new mitogen-activated protein kinase-activated protein kinase located in the small cell lung cancer tumor suppressor gene region 1994 *Molecular and Cellular Biology*, 16, 868-76.

**Non-Peer Reviewed Publication:**

Bhatta MP, Vermund SH, **Shrestha S**, Jin G, Broker TR, Hoesley CJ, Chapter 3: Prevalence and Incidence of Human Papillomavirus Infection in HIV-infected women in Alabama. In Doctoral thesis: Madhav Bhatta, *Impact of immunosuppression on the incidence and clearance of Human Papillomavirus in HIV-Infected Women in Alabama*, University of Alabama at Birmingham, Birmingham AL (2007).

Bhatta MP, **Shrestha S**, Vermund SH, Jin G, Broker TR, Hoesley CJ, Chapter 4: Time-to-clearance of Human Papillomavirus infection in HIV-infected Women in Alabama. In Doctoral thesis: Madhav Bhatta, *Impact of immunosuppression on the incidence and clearance of Human Papillomavirus in HIV-Infected Women in Alabama*, University of Alabama at Birmingham, Birmingham AL (2007).

Petersen DC, **Shrestha S**, Bergeron J, Gold B, Hayes VM, Dean M, Chapter 2.1: The effect of *CCR5, CCR2, CX3CR1* and *CCL5 (RANTES)* SNPs on susceptibility to HIV-1 infection in an African population. In Doctoral Thesis: Desiree C. Petersen, *Genetic aspects of HIV-1 risk in an African setting.* Faculty of Health Sciences, University of Stellenbosch, South Africa (2006).

Petersen DC, Tindall EA, **Shrestha S**, Laten A, Rensburg EJV, Hayes VM.  Chapter 3.2: The influence of IL4 and IL10 promoter SNPs and haplotypes on HIV-1 infection risk in Sub-Saharan Africans. In Doctoral Thesis: Desiree C. Petersen, *Genetic aspects of HIV-1 risk in an African setting.* Faculty of Health Sciences, University of Stellenbosch, South Africa (2006).

**Press and News**

# (2020) Texas Nepalese Medical Association (TNMA) Health Update Episode # 3 Epidemiology & Treatment of COVID-19 Panelist - <https://www.facebook.com/TNMAUSA/videos/health-update-episode-3/524633344820930/>

# (2020) Dil Bhusan Pathak TOUGH talk from Home Nepali-International Doctors and Scientists on COVID-19 <https://www.youtube.com/watch?v=azyfcoITP3A>

# (2019) Hospitalization Outcomes and Racial Disparities in Cervical Cancer Patients: An Analysis of National Inpatient Sample Data <https://www.aspph.org/uab-hospitalization-outcomes-and-racial-disparities-in-cervical-cancer-patients-an-analysis-of-national-inpatient-sample-data/>

## (2019) 35,000 miles, $100,000 and 5 paths to global change <https://www.uab.edu/reporter/outreach/global-actions/item/8873-35-000-miles-100-000-and-five-paths-to-global-change>

# Variants in Immune-related Genes and Genital HPV 16 Persistence in Men <https://www.aspph.org/uab-variants-in-immune-related-genes-and-genital-hpv-16-persistence-in-men/>

# *AHAScienceNews-* 11th International Kawasaki Disease Symposium (IKDS 2015) - Immunology of KD *(*[*https://www.youtube.com/watch?v=CPNpKA\_w4L8*](https://www.youtube.com/watch?v=CPNpKA_w4L8)*)*

The Communication Initiative Network (Knowledge and Awareness of Human Papillomavirus (HPV), Cervical Cancer and HPV Vaccine among Women in Two Distinct Nepali Communities ([*http://www.comminit.com/global/content/knowledge-and-awareness-human-papillomavirus-hpv-cervical-cancer-and-hpv-vaccine-among-w*](http://www.comminit.com/global/content/knowledge-and-awareness-human-papillomavirus-hpv-cervical-cancer-and-hpv-vaccine-among-w)

*Mitochondrial DNA Variation and HIV Outcomes in African Americans Studied by UAB,* ASPPH, August 21, 2014 *(*[*http://www.aspph.org/mitochondrial-dna-variation-and-hiv-outcomes-in-african-americans-studied-by-uab/*](http://www.aspph.org/mitochondrial-dna-variation-and-hiv-outcomes-in-african-americans-studied-by-uab/)*)*

*UAB Assesses HPV in Women in Nepal,* ASPPH, July 22, 2014 (<http://www.aspph.org/uab-assesses-hpv-in-women-in-nepal/>)

*Study Finds method of HPV screening can be effective in developing countries* by Nicole Wyatt, UAB News Release, June 30, 2014 (<http://www.uab.edu/news/innovation/item/4911-study-finds-method-of-hpv-screening-can-be-effective-in-developing-countries>)

*UAB Examines Host Genetic Factors of HPV Clearance among HIV-positive Women* ASPPH, June 26, 2014 (<http://www.aspph.org/uab-examines-host-genetic-factors-of-hpv-clearance-among-hiv-positive-women/>)

*WIHS Findings Studied by UAB to Evaluate Sequence Variants in RYR3 Gene* ASPPH, April 4, 2014 (<http://www.aspph.org/wihs-findings-studied-by-uab-to-evaluate-sequence-variants-in-ryr3-gene/>)

*UAB Researches Genes influence on Treatment Response for Kawasaki Disease* ASPPH, November 15, 2013 (<http://www.aspph.org/uab-researches-genes-influence-on-treatment-response-for-kawasaki-disease/>)

**PUBLIC HEALTH Emergency Response (2015 Earthquake in Nepal)**

In 2015, Nepal was hit by a major earthquake that rocked the nation, killing 8,898 people, injuring 22,309 individuals and displacing 3.5 million from their homes while 5.6 million in total were affected by food, water, electricity crisis. During this time, as a public health person with personal and professional ties in the country, I was involved in three major emergency response tasks:

1. Through UAB School of Public Health, with Dean Max Michael’s approval, we initiated (I served as the primary contact) an online campaign (<https://www.soph.uab.edu/news/help-nepal-earthquake-relief-efforts>) to provide public health help that raised over $21,000 that was sent to Nepal and the report of the activities conducted by the team is available on the SOPH website: http://www.soph.uab.edu/files/images/NEPAL%20EARTHQUAKE.pdf
2. In collaboration with the Nepal student organization at UAB and the Nepalese community in Birmingham, we organized a special fund-raising program at *The Edge of Chaos (*[*http://www.uab.edu/news/campus/item/6031-uab-s-nepalese-students-and-faculty-raising-funds-for-earthquake-relief*](http://www.uab.edu/news/campus/item/6031-uab-s-nepalese-students-and-faculty-raising-funds-for-earthquake-relief)*) that* raised more than $10,000. The fund helped restore several schools that were damaged by the earthquake. (I served as the student advisor and community liaison)
3. In partnership with several public health professionals from Nepal in US, we developed and assessed effects at health/medical camps in four districts in Nepal. The finding of the assessment entitled “Rapid Health Assessment to Determine the Public Health Needs of the Villages/Municipality that are mostly affected by the Earthquake in Nepal” was released and presented to the government of Nepal. (**Senior advisor** of this assessment report).

**Conference Presentations**

**Session Chair/Moderator**

# Organizer/Moderator, Academic Successes, Challenges and Barriers in Public Health – The US and Nepal Nepal Academics in America 2021 Inaugural Conference (April 16th -17th, 2021)

**Oral Presentations (\* presenter)**

*“State of Cervical Cancer Prevention in Western vs Resource-limiting countries”*. Michigan State University department of Epidemiology and Biostatistics seminar series, April 16th, 2020

“*HPV-related Cancer Screening*” Nepal Cancer Hospital and Research Center, Nepal (June, 2019)

## Shrestha S\* “Cervical Cancer Screening in Nepal: Challenges of Incorporating HPV and Genomics-Driven Screening” International Issues in Cancer Special Interest Group, American Society of Preventative Oncology, Seattle (March 11-14, 2017)

## Shrestha S\* “Immunogenetic Architecture of Kawasaki Disease” International Kawasaki Disease Symposium (invitation) Honolulu, Hawaii (Feb 3-6, 2015)

**Shrestha S\*** “Strategies to introduce HPV screening in the diverse population of Nepal” Indigenous HPV Symposium (Satellite session – Invited speaker) - International Papillomavirus Conference IPV, Seattle, August 21-25, 2014

Royse KE, Zhi D, Conner MC, Clodfelder-Miller B, DeAngelis T, Srinivasasainagendra V, Vaughan LK, Levy SE, **Shrestha S\*** Trancriptomic Profiling of Cervical Precancer Progression in Coexisting Lesions. International Papillomavirus Conference IPV 2014, Seattle August 21-25.

Sudenga SL**\***, Wiener HW, King CC, Cu-Uvin S, Klein RS, Shah KV, Sobel JD, Jamieson DJ, **Shrestha S**. Immunogenetics of HPV clearance among HIV-positive women in the

HIV Epidemiology Research Study (HERS). 28th International Papillomavirus Conference, Puerto Rico, Nov 30th – Dec 6th 2012.

Sudenga SL**\***, Kravchenko J, Akushevich I, Vaughan LK, Wilson CM, Tang J, **Shrestha S.** Immune-related Genes Influence Clearance of HPV 16 and Genetically Related Types in HIV Co-infected Adolescents. 28th International Papillomavirus Conference, Puerto Rico, Nov 30th – Dec 6th 2012.

Boehme AK, Ogwaro KM, Wiener HW, **Shrestha S**, Kaslow RA, Aissani B**\***. The MHC determinants of AIDS-related Kaposi’s sarcoma. 11th International Conference on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, New Orleans (oral). Oct 30-Nov 2, 2012.

Aissani B**\***, Zhang K, Wiener H, Wu J, Boehme AK, Ogwaro KM, **Shrestha S**, Kaslow RA. A novel approach to identify host susceptibility genes in virally-induced cancer: Application to HIV-related Kaposi’s sarcoma. 11th International Conference on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases, New Orleans. Oct 30-Nov 2, 2012.

Portman M, Wiener H, **Shrestha S\***. FCγ3B Polymorphism (NA1/NA2) Strongly Influences IVIG Response in KD: A Family Based Study. 10th International Kawasaki Disease Symposium, Kyoto, Japan. Feb 7-10, 2012.

**Shrestha S\***, JohnsonD, PorterDC, ReidE, PalchinskyJ, NapravnikS, MathewsWC, EronJ, SaagMS. HIV prevalence among cancer patients in three urban oncology clinics (themed oral discussion).19th Conference on Retroviruses and Opportunistic Infections, Seattle Mar 5-8 2012.

Aaron KJ**\***, Kempf MC, Muntner P, Christenson RH, Wilson CM, **Shrestha S**. Renal dysfunction markers among HIV-infected adolescents (themed oral discussion). 19th Conference on Retroviruses and Opportunistic Infections, Seattle Mar 5-8 2012. (reviewed by DocGuide - http://www.docguide.com/markers-renal-dysfunction-noted-hiv-positive-adolescents)

## Shrestha S\* “Genetics of Kawasaki Disease” Kawasaki Disease Foundation (<http://www.kdfoundation.org>) 1st Kawasaki Disease Parent Symposium in San Jose, CA, August 25, 2012

**Shrestha S\*** *“HIV Prevalence among Cancer Patients in 3 Urban Oncology Clinics*” Themed Discussion: HIV-associated Malignancies: Emerging Themes in Epidemiology, 19th Conference on Retroviruses and Opportunistic Infections, Seattle March 8, 2012

**Shrestha S\*** *“Anthrax Vaccine CNV Analysis: 3P Progress, Promises & Pitfalls”* Population Genetics Analysis Program Annual Meeting, Division of Allergy, Immunology and Transplantation, NIAID, NIH, University of Washington, Seattle November 17, 2011

**Shrestha S\*** *“A Polymorphism In Activating Fcgr2a Associates With Kawasaki Disease (KD) Susceptibility, IVIG Response, and Coronary Artery Inflammation”*American Heart Association. Outcomes of Repair and Epidemiology of Acquired Disease Session, November 14, 2011

**Shrestha S\*** “*Racial Differences in Polymorphisms of Genes for FCγR in Kawasaki Disease (KD): Influence on Susceptibility and IVIG treatment Response*” American Heart Association. Vascular Mechanisms and Cardiac Phenotype in Pediatric Heart Disease Session, (Nov 13-17, 2010)

**Shrestha S\*** *“HIV Malignancy Surveillance – Part II: HIV in Cancer Patients”,* 2009/2010 Annual Meeting, CFAR-Network of Integrated Clinical Systems, Nashville, TN (Nov, 2009)

**Shrestha S\*** *“Genetics in Public Health”,* Hueytown High School, Hueytown, AL (May 2009).

**Shrestha S\****“CNV and FCGR genes in Kawasaki Disease”,* International Kawasaki Disease Genetics Consortium (IKDGC), Singapore (February, 2009).

**Shrestha S\*** “*Behavioral Risk Exposure and Host Genetics of Susceptibility to HIV-1 infection*”, Department of Epidemiology, Tulane University, New Orleans, LA (2005).

**Shrestha S\*** “*Genetic and Molecular epidemiology of HIV infection*”, Department of Preventative Medicine and Community Health, School of Medicine Virginia Commonwealth University, Richmond, VA (2004).

**Poster presentation**

Ye Y, **Shrestha** S, Burkholder G, Bansal A, Erdmann N, Tang J. Statin use is a major risk factor for type 2 diabetes mellitus in PLWH. The 10th International Workshop on HIV & Aging, New York City, New York, USA, October 2019.

Idigo AJ, Lee RA, Brown ML, Allen B, Wiener HW, Griffin R, **Shrestha S**. 2019. Impact of Fluoroquinolone Pre-authorization on Ceftriaxone Use and Resistance in a Large Academic Hospital in South East USA- accepted for presentation at the International Conference on Pharmacoepidemiology & Therapeutic Risk Management in Philadelphia, August 2019.

Ye Y, Burkholder G, Wiener HW, Mukherjee A, Gubbels A, **Shrestha S**. Anal cancer and precursor lesions in HIV-infected persons: a clinical cohort study. STI & HIV 2019 World Congress (Joint Meeting of the 23rd ISSTDR and 20th IUSTI, Vancouver, BC, Canada, July, 2019.

Ye Y, Burkholder G, Wiener HW, **Shrestha S**. The burden of HPV and HSV-related Anogenital Diseases in a Southeastern US Urban HIV Clinic. STI & HIV 2019 World Congress (Joint Meeting of the 23rd ISSTDR and 20th IUSTI, Vancouver, BC, Canada, July, 2019.

Mukherjee A, Idigo A, Wiener HW, **Shrestha S**. Racial and gender disparities in Oro-pharyngeal cancer Diagnosis in Alabama APHA's 2018 Annual Meeting & Expo San Diego, CA Nov. 10 - Nov. 14.

Hubbard D, Wiener HW, Mukherjee A, Idigo A, **Shrestha S**. Racial and Geographical Differences of Age at Diagnosis for HPV-Associated Cancers. APHA's 2018 Annual Meeting & Expo San Diego, CA Nov. 10 - Nov. 14.

Hubbard D, **Shrestha S**, Levitan E, Yun H, Completion and Effectiveness of HPV Vaccination Among Adolescents and Young Adults, U.S. 2011-2014. APHA's 2018 Annual Meeting & Expo San Diego, CA Nov. 10 - Nov. 14.

**Shrestha S**, Wiener HW, Burk RD, Kuniholm MH, Minkoff H, Liu C, Aouizerat BE, Massad LS, Ojesina AI, Xie X, D’Souza A, Rahangdale L, Butler K, Palefsky J, Strickler HD. Polymorhpisms in Candidate Genes Putatively Associated With Cervical Pre-cancer. International Papillomavirus Conference IPV 2017, Cape Town February 28 – March 4.

**Shrestha S**, Schabath MB, Wiener HW, Sudenga SL, Villa LL, Giuliano AR. Genetic Epidemiology of Genital HPV16 Persistence in Men. International Papillomavirus Conference IPV 2017, Cape Town February 28 – March 4.

Johnson DC, Lhaki P, Lama M, Ghimire S, Bhatta MP, **Shrestha S**. A Pilot Study Enhancing Cervical Cancer Screening by Using a Mobile Health Platform in Kailali District, Nepal. International Papillomavirus Conference IPV 2017, Cape Town February 28 – March 4.

Ojesina AI, Srinivasasainagendra V, Sundaresan A, Tiwari H. **Shrestha S**. Somatic Mutations Associated with HPV-Negative Cervical Cancer. International Papillomavirus Conference IPV 2017, Cape Town February 28 – March 4.

Robbins HA, Massad LS, Pierce CB, Flowers L, Darragh TM, Minkoff H, Rahangdale L, Keller MJ, Milam J, Fischi M, **Shrestha S**, Colie C, Strickler H, D’Souza G. Optimizing cervical cancer screening for HIV-infected women. American Association for Cancer Research 2016, New Orleans, LA, April 16-20.

Robbins HA, Massad LS, Pierce CB, Flowers L, Darragh TM, Minkoff H, Rahangdale L, Keller MJ, Milam J, Fischi M, **Shrestha S**, Colie C, Strickler H, D’Souza G. Screening Interval After Normal Cervical Cytology Among HIV-infected Women: A Risk-Based Approach. 15th International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies 2015 Bethesda October 26-27.

Zhang K, Royse KE, Conner MC, Srinivasasainagendra V, Levy SE, Zhi D, **Shrestha S**. Integration of common HR-HPV genome during cervical pre-cancer progression using RNA-seq. International Papillomavirus Conference IPV 2015, Lisbon August 17-21.

Bhatta M, Johnson DC, Aryal S, Regmi K, Lhaki P**, Shrestha S**. Human Papillomavirus Infection and Abnormal Cervical Cytology among Nepali and Nepali-Bhutanese Refugee women in Eastern Nepal. International Papillomavirus Conference IPV 2015, Lisbon August 17-21.

Lhaki P, Bhatta M, Pradhan K, Regmi K, Johnson DC, Aryal S, **Shrestha S**. Adherence Challenges Associated with Recommended Follow-up Testing and Care after a Positive High Risk Human Papillomavirus Screening Test in Nepal. International Papillomavirus Conference IPV 2015, Lisbon August 17-21.

**Shrestha S**,Wiener HW, Bhatta MP, Cullen M, Johnson DC, Zhang X, Perry RT, Boland JF, Aryal A, Yeager M, Lhaki P, Broker TR. Genomic Diversity and phylogenetic relationships of human papillomavirus 16 (HPV16) in Nepal. International Papillomavirus Conference IPV 2015, Lisbon August 17-21.

Johnson DC, Bhatta MP, Aryal S, Smith JS, Kempf MC, Broker T, Vermund S, Chamot E, Lhaki P, **Shrestha S**. The Distribution of High-Risk Human Papillomavirus Virus (HR-HPV) and Sexually Transmitted Infections (STIs) in a Rural Far Western Region in Nepal. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Johnson DC, Lhaki P, Bhatta MP, Kempf MC, Vermund S, Aryal S, Chamot E, Smith JS, **Shrestha S**. Assessment of self-collected sampling for HPV screening in a rural setting in Far Western region in Nepal. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Johnson DC, Bhatta MP, Aryal S, Smith JS, Kempf MC, Broker T, Vermund S, Chamot E, Lhaki P, **Shrestha S**. Risk Factors Associated with Testing Positive for High-risk HPV and Increasing Cervical Cytology Severity. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Johnson DC, Lhaki P, Bhatta MP, Steban M, Aryal S, **Shrestha S.** Knowledge of HPV, Cervical Cancer, and HPV Vaccine Among Women in Two Distinct Nepali Sub-populations. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Royse KE, Crossman DK, Sudenga SL, Brown EE, Vaughan LK, **Shrestha S**. Systematic Review and Network Analysis of Genome Markers for Progression of Cervical Pre-cancer. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Degui Z, Royse KE, Conner MC, Clodfelder-Miller B, Srinivasasainagendra V, Levy SE, Shrestha S. RNA-seq Analysis of Pre-cervical Cancer Lesions Identifies HPV Transcription and Host-integration Sites. International Papillomavirus Conference IPV 2014, Seattle, August 21-25.

Lhaki P, Chamot E, Johnson D, Steben M, Broker TR, **Shrestha S\***. Evidence of a Hidden Epidemic of Sexually Transmitted Diseases and Unknown Risk Factors among Married Women in Kathmandu, Nepal. 28th International Papillomavirus Conference, Puerto Rico, Nov 30th – Dec 6th 2012.

Sudenga SL, **Shrestha S**, Macaluso M, Partridge EE, Piyathilake CJ. Functional variants in xenobiotic metabolism genes are associated with clearance of cervical HPV infection. 28th International Papillomavirus Conference, Puerto Rico, Nov 30th – Dec 6th 2012.

Portman M, Wiener H, Olson AK**, Shrestha S\***. C-type lectin CD209 (DC-SIGN) Polymorphisms Influence Racial and Ethnic KD Susceptibility, IVIG Response, and Coronary Artery Disease. Kyoto, Japan. Feb 7-10, 2012.

**Shrestha S\***, Yan Q, Joseph G, Arnett DK, Martinson JJ, Kingsley LA. Consistent association of *RYR3* gene polymorphism with cIMT among HIV-positive Caucasians. 19th Conference on Retroviruses and Opportunistic Infections, Seattle Mar 5-8 2012.

Aissani S, Makowsky R, Wiener HW, Kurundkar A, **Shrestha S**, Tang S, Kaslow RA, Levitan E, Wilson CM. Mitochondrial DNA Haplogroups and HIV Progression in African Americans: The REACH Study. 19th Conference on Retroviruses and Opportunistic Infections, Seattle Mar 5-8 2012.

**Shrestha S**, Wiener H, Shendre A, Portman M. The Influence of Polymorphisms in DC-SIGN With Kawasaki Disease (KD) Susceptibility and Treatment Outcomes in Hispanics. American Heart Association, Orlando, FL, Nov 12-16, 2011.

Sudenga SL, Kravchenko J, Akushevich I, Vaughn, LK, Wilson CM. Tang J, **Shrestha S**. Immune Response Genes and Pathways Influence HPV 18/18-like Infection Outcomes. 27th International Papillomavirus Conference, Berlin, Germany, Sept 17-22, 2011.

Hu L, Song W, Brill I, Mulenga J, Allen S, Hunter E, **Shrestha S**, Tang J, Kaslow RA. Genetic Variations and Heterosexual HIV-1 Infection: Analysis of Clustered Genes Encoding C-C Chemokine Ligands. 18th Conference on Retroviruses and Opportunistic Infections, Boston Feb 27-Mar 2011.

Klimentidis YC, Aissani B, Shriver MD, Allison DB, **Shrestha S.** Population-specific natural selection at genetic regions associated with HIV-1 viral load set-point. American Journal of Physical Anthropology. 144: 188-9.

**Shrestha S**, Wiener H, Olson AK, Wu J, Shendre A, Lee MB, Kaslow RA, Edberg JE, Portman M**. Functional Polymorphisms in the Inhibitory FCGR2B Associate with Efficacy of IVIG Treatment Response among Patients with Kawasaki Disease. American College of Rheumatology**, Atlanta, GA, November 6 -11, 2010 (Genetics, Genomics and Proteomics in the Rheumatic Diseases Session)

Klimentidis YC, Aissani B, **Shrestha S.** Evidence of natural selection at genetic regions associated with HIV-1 control is geographically restricted. American Society of Human Genetics 60th Annual Meeting, Washington DC, November 2-6, 2010.

Shendre A, Wiener H, Kempf MC, Song W, Johnson D, Wilson CM, Tang J, **Shrestha S.** Genetic variations in the interleukin-7 gene (*IL7*) associated with clearance of HPV infection in HIV-1-infected individuals. 26th International Papillomavirus Conference & Clinical and Public Health Workshops, Montreal Canada July 3-8, 2010.

Geisler WM, Jiang B, Song W, **Shrestha S**, Tang J. Immune Response Gene Variants as Correlates of  Genital Chlamydia in Adolescents. Twelfth International Symposium on Human Chlamydial Infections, Salzburg Austria, June 20-25, 2010.

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Boehme AK, Davies S, Moneyham L, **Shrestha S,** Schumacher J, Kempf MC. ART non-adherence in HIV+ postpartum women: Barriers and Facilitators. International Association of Physicians in AIDS Care (IAPAC), Miami May 23-25, 2010.

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**Shrestha S**, WienerHW, Song W, Shendre A, Wilson CM, Kaslow RA, Aissani B, Tang J. Variants in the Regional Paralogs and Receptors of *IL10* Gene and HIV-1 Susceptibility in African American Adolescents. American Society of Human Genetics 59th Annual Meeting, Honolulu, Hawaii, October 20-24, 2009.

Nyaku M, **Shrestha S.** Variable gene copy number determination of *CCL3L1* related gene family cluster. American Society of Human Genetics 59th Annual Meeting, Honolulu, Hawaii, October 20-24, 2009.

Aissani B, Zhang K, Malhotra R, Ogwaro K, Tang J, **Shrestha S**, Martinez-Maza O, Jacobson L, Detels R, Phair J, Rinaldo C, Margolick J, Kaslow RA. Joint Haplotype Structure of the Tumor Necrosis Factor and HLA Class I Blocks in European Americans: Implications for Disease Association Studies. American Society of Human Genetics 59th Annual Meeting, Honolulu, Hawaii, October 20-24, 2009.

**Shrestha S,** Wiener HW, Shendre A, Olson AK, Lee MB, Portman M. Copy Number variation of the *CCL3*-related chemokine gene cluster and Kawasaki Disease Susceptibility. International Genetic Epidemiology Society Meeting, Hawaii, October 18-20, 2009.

Kaslow RA, Pajewski N, Parker S, McKinney B, Tang J, Edberg, JC, Cutter G, Zhang K, **Shrestha S**, Kimberly RP. Genetic Factors and Immune Response to Anthrax Vaccine (AVA). PopGen Meeting, NIH, Bethesda, September 10, 2009.

Johnson D, Kempf MC, Wilson CM, **Shrestha S.** The Effects of Hormone Contraceptive Use on Immune Reconstitution in HIV Positive Women on Antiviral Medication. 25th Anniversary International Conference on Pharmacoepidemiology and Therapeutic Risk Management Providence, Rhode Island, August 16-19, 2009.

### Shrestha S, Song W, Bathulapalli H, Wilson C, Tang J. Association of polymorphisms in the *IL10* gene family with HIV-1 pathogenesis in African Americans. HIV Immunobiology: From Infection to Immune Control. Keystone Symposia. March 22nd-27th 2009.

Geisler WM, Song W, **Shrestha S**, and Tang J. A pilot study of genetic variations associated with genital Chlamydia trachomatis infection resolution. CBRS 2009: 4th Biennial Meeting of the Chlamydia Basic Research Society. March 20th-23rd 2009 (Oral Presentation)

Aissani B, Ogwaro KM, **Shrestha S**, Tang J, Jacobson L, Breen E, Martinez-Maza O, Kaslow RA. Association of the Caucasian haplotype 8.1 with AIDS-related Non-Hodgkin’s Lymphoma. American Society of Human Genetics, Phildelphia, November 10-16, 2008.

**Shrestha S**, Bachmann LH, Wilson CM, Kempf MC. Pre- and Post- HAART prevalence, incidence, and type-specific persistence of HPV among HIV-positive adolescents. 24th International Conference on Pharmacoepidemiology & Therapeutic Risk Management Copenhagen, Denmark August 17-20, 2008. Pharmacoepidemiology and Drug Safety 17: S210 (Oral Presentation).

**Shrestha S,** Aissani B, Wiener H. Theoretical Methods of Multi-allelic Gene Copy Numbers in Family-based Association Studies. XX International Congress of Genetics, Berlin, Germany, July 12 - 17, 2008.

**Shrestha S**, Wang C, Aissani B, Wilson CM, Tang J, Kaslow RA. Polymorphisms in *IL10* Gene and Clearance of Human Papillomavirus in Immunosuppressed Adolescents. 14th Conference of Retroviruses and Opportunistic Infections, Los Angeles, CA Feb 25-28, 2007.

Petersen D, **Shrestha S**, Tindall E, Gold B, Janse van Rensburg E, Glashoff R, Dean M, Hayes V. Genetic aspects of HIV-1 risk in an African Setting. Abstract – 11th International Congress of Human Genetics, Brisbane, Australia, Aug 6-10, 2006.

Lobashevsky E, Wang C, **ShresthaS**, Aissani B, LazaryanA, OgwaroK, WilsonCM, TangJ, KaslowRA. Single Nucleotide Polymorphisms in the Heat Shock Protein 70 Gene Cluster and Their Relationships to Classical Human Leukocyte Antigen Variants. American Society for Histocompatibility and Immunogenetics, San Diego, CA 2006. Human Immunology 67: S113.

Wang C, **Shrestha S**, Wilson CM, Tang J, Kaslow RA. Host factors associated with Persistent Human Papillomavirus Infection in African American Adolescents. American Congress of Epidemiology, Seattle, WA 2006. American Journal of Epidemiology 163: S196.

Roberts M, **Shrestha S**, Truelove AL, SivtsevaTM, DanilovaAP, OsakovskyVL, GoldfarbLG, O’Brien SJ, SmithMW, OleksykTK. Genetic Association Between Interferon Gamma and Viliuisk Encephalomyelitis. Abstract- Genetical aspects of human pathology. Problems of preservation of the endemic people of the Arctic North.  Yakutsk, Sakha Republic, Russia May 10-11, 2005.

**Shrestha S**, Strathdee SA, Galai N, Thomas D, Vlahov D, O’Brien SJ, Smith MW. *CCR5* pathway candidate genes susceptible to HIV-infection. Abstract- 53rd American Society of Human Genetics Meeting. Los Angeles, CA 2003. American Journal of Human Genetics, 73; 1259.

Oleksyk TK, **Shrestha S**, O’Brien SJ, Goldfarb LG, and Smith MW. Associations of the inflammatory gene polymorphisms and the Viliuisk Encephalomyelitis Syndrome. Abstract- Annual Meeting of the American Society for Epidemiological Research, Atlanta, GA 2003. The American Journal of Epidemiology. S42-166.

**Shrestha S**, Strathdee SA, Beaty TH, Smith MW. Likelihood measures and methodology for distinguishing single vs. multiple DNAs using STRs in samples for epidemiologic studies. Abstract- 52nd American Society of Human Genetics Meeting. Baltimore, MD 2002. American Journal of Human Genetics, 71; 2394.

**Institutional Lectures/Oral Presentations**

“*Cervical Cancer Prevention – From Molecular Epidemiology to Community-based Screening*”, Cancer Control and Population Sciences Program Seminar Series, December 13th, 2017.

*“Opportunities and Challenges to Implement Population-based Cervical Cancer Screening within the Public Health Landscape in Nepal”*, Lunch Lecture - UAB Sparkman Center for Global Health, January 31st, 2017.

*“GWAS and candidate gene analysis of genetic risk factors affecting HPV natural history and risk of cervical disease”* World AIDS Day, CFAR symposium, UAB (Dec, 2015)

*“Human Papillomavirus from Bench to Bedside and Challenges in Care Delivery to the foothills of Nepal”* Department of Epidemiology Seminar Series, School of Public Health, UAB (Nov, 2013)

*“Epidemiology of Kawasaki Disease – Overview of a cohort for genetic and pharmacogenetic studies”*, Department of Epidemiology Seminar Series, School of Public Health, UAB (Feb, 2011)

*“Host Genetics of HPV infection outcomes in the context of HIV/AIDS*”, Section on Statistical Genetics, Department of Biostatistics, School of Public Health, UAB (Jan, 2010)

*“Counting multiple copies of CCL3L1 gene – The other layer of the genome”,* Back of the Envelope Award Luncheon, SOPH, UAB (Oct, 2009).

*“IL10 Gene Family in HIV and HPV Infection Outcome*”, UAB Center For AIDS Research, Birmingham, AL (2008).

“*Host Genetics and HPV pathogenesis*”, Molecular Epidemiology Program. UAB Comprehensive Cancer Center, (2007).

“*Individual SNP and haplotype association study of polymorphisms in candidate genes with susceptibility to HIV infection*”, Department of Epidemiology, University of Alabama, Birmingham, AL (2004).

“*Association of host gene polymorphisms with susceptibility to HIV infection*”, ALIVE cohort Meeting, Johns Hopkins University, Baltimore, MD (2003).

**Language**

Fluent in Nepali, Newari, and English

**Grants and Fundings:**

**Current**

[**1R01HL146130-01**](https://public.era.nih.gov/grantfolder/viewCommonsStatus.era?encryptedParam=(v2)ETMsDgAAAWNF5fPEABRBRVMvQ0JDL1BLQ1M1UGFkZGluZwCAABAAEBOmum-p95SHCMtqCkDBZEsAAAAQco7PalPawn5L_14ZmcRjMgAUsAuz2EnsKB6XWYjrhbXjUGQU3yQ.) **(Shrestha/Portman multi-PI)** 12/15/18-12/14/22

NIH/NHLBI $ 3,476,931

“*Genetic Prediction for Treatment Resistance in Kawasaki Disease*”

Kawasaki Disease (KD) is an inflammatory disease, which attacks the coronary arteries of young children. We propose identifying biomarkers to predict treatment response using a genetic approach.

**U01 AI103401 (Saag/Kempf)**  09/01/14 – 12/31/23

NIH/NIAID - “*UAB-MISS WIHS Cohort*”

The major goal of the project is to recruit and retain a cohort of 300 women, half of whom are HIV seropositive and half well-matched HIV-negative controls, who are strategically selected to enable the conduct of the research projects proposed above while simultaneously meeting the needs of the WIHS cohort.

**Role: Co –Investigator**

**UAB Sparkman Center Pilot Grant** **(Shrestha)** 06/01/19– 05/31/20

“A Pilot Study in the Epidemiology of Head and Neck Cancer in Kathmandu based Hospital”

The goal of this pilot research initiative is to establish a cohort of head and neck cancer patients with banked specimen in Nepal to a) identify risk factors, b) determine the prevalence and type of human papillomavirus in the region and assess their associations with disease and treatment outcomes.

**AHA Pre-doctoral Fellowship** (**Mukherje**e) 12/01/19-11/30/21

“Cardiovascular Disease Risk In Head Neck Squamous Cell CarcinomaPatients Using Electronic Medical Records Data”

The goal the fellowship is to support the dissertation thesis of the students, Amrita Mukherjee, examining risk factors of CVD outcomes among Head and Neck Cancer patients.

**Role: Advisor/mentor and Dissertation Chair**

**UAB CFAR Research Study Award** **(Ye)** 03/01/19-12/31/20

The goal of the poster research award (Yuanfan Ye – student) was to support a pilot project to examine HPV types and immunological factors of anal cancer among HIV patients.

**Role: Primary Advisor**

**F31HD104355** (**Tymes-wilbekin**) 10/01/20-09/30/24

“Perceptions of Multipurpose Prevention Technologies Aimed at HIV/STI/unintended pregnancy among African-American Women in the Deep South”

The goal of the pre-doctoral award is to examine perceptions of MPT use and HIV/STI/unintended pregnancy among African and African American women.

**Role: Advisor/mentor and Dissertation Chair**

**Pending Grants (Submitted/Resubmitted and Under Review)**

**R03 (PI)** 07/01/21-06/30/23

NIH

“Impact of the COVID-19 pandemic on the implementation of life skills training programs for adolescent girls and its effect on early marriage rates in Nepal”

The goal of the study is to measure and evaluate the impact by this change on the implementation of the program during the pandemic.

**COVID supplement to** [**1R01HL146130-01**](https://public.era.nih.gov/grantfolder/viewCommonsStatus.era?encryptedParam=(v2)ETMsDgAAAWNF5fPEABRBRVMvQ0JDL1BLQ1M1UGFkZGluZwCAABAAEBOmum-p95SHCMtqCkDBZEsAAAAQco7PalPawn5L_14ZmcRjMgAUsAuz2EnsKB6XWYjrhbXjUGQU3yQ.) **(Shrestha/Portman multi-PI)**

NIH/NHLBI (submitted in March, 2020)

“*Genetic Prediction for Treatment Resistance in Kawasaki Disease*”

Substudy assessing SARS-cov-2 antibody among Kawasaki Disease patients

**R21 (PI)** 07/01/21-06/30/26

NIDCR/NIH

“Multi-Omics Architecture of Head and Neck Cancer”

The goal of the study is to use publicly available “omic” data to assess the association and pathway in host with head and neck cancer susceptibility, treatment refractory, and disease recurrence

[**1R01CA258069-01**](https://public.era.nih.gov/grantfolder/viewCommonsStatus.era?applId=10176820&urlsignature=v1$26701361$eracert168_ks$MT8B3mvef1dwe0bHkZzMVluIUcM0js-srzZXfiv_hnDZTHa2M8QSvCSyLI5eaAH_xu2Evpzh4yNt1i6JXZXLq7IVLmhWAYIWbaEZcMATQSMgLzcDmYlMOQemGMZvVXRECvDaAlyNWHogZWs5cFtZCSD5vPGWYGYW3uL7_xA7hh0w0CBe_6hbejJWx4EbvLmnI-QDL8Orjh39_WWo8wW96wWhIEvA6vWbrZHxU9XiIwnqHQrOZRjd1rNL3uZsgrPf36p5b2bYTKr4fxaqScQg1ow2DTyCBIlhZHq1KbrtxfUJKCKBZbBGQT8WiBKMDTI34M0w1dulvId9VHooaKmK7A..) **(PI)**  04/01/21-03/31/26

NCI/NIH

“Clinical Cohort Study of Early-onset HPV-associated Cancers”

The major goal of the proposed study is to examine etiological and risk factors of early-onset HPV-associated cancers (primary - anal, cervical and oropharyngeal cancers; secondary – vaginal, vulvar and penile cancers) using cancer registries in two southern states (Alabama and Tennessee) and hospital-based electronic medical records from two well-established academic institutions in those states. (**Score: 50, Resubmission** **planned**)

**R61 HD105611-01 (M-PI)** 11/01/20-10/31/24

“Genomics of Pediatric Inflammatory Syndromes”

The goal of the study is to develop a diagnostic genomic markers for MIS-C and to differentiate from Kawasaki Disease

**R01 (UAB subcontract PI)** 4/1/21-3/31/26

“[Accelerated Aging and Anal Cancer Risk among People Living with HIV](https://go.uab.edu/fa5zr)”

The goal of the study is to identify aging biomarkers for Anal cancer among HIV-positive individuals. (**Resubmission in November**)

### AHA Disparities in Cardio-Oncology SFRN (Project 3 PI)

### UAB/Colorado University

“Real world data analysis of CV risk in a diverse cohort of patients receiving contemporary cancer therapies”

**Completed**

**R21 AI134282-02 (Tang)** 07/01/18 – 06/30/20

NIH/NIAID

“Immunologic Health in Aging PLWH”

The major goal of this project is to study impairment of immunologic health in a Southeast US cohort of persons living with HIV-1 infection (PLWH), using herpes zoster as a sentinel disease of premature/accelerated aging.

**Role: Co-Investigator**

**R21 AG051309 (Tang)** 09/01/17 – 09/31/20

NIAID

“Multidisciplinary Evaluation of Accelerated Aging in HIV-1 Infection”

The major goal of this project is to examine immunogenetic profiles and immunologic indices of accelerated/premature aging in youth and adults living with chronic HIV-1 infection.

**Role: Co –Investigator**

**2R01AI064060 (Hunter)**  07/01/15 – 12/31/20

NIH/NIAID

“CTL & HIV Polymorphisms in Heterosexual Transmission”

The major goal of this project is to understand the role that cytotoxic T lymphocyte (CTL) escape plays in HIV transmission and disease pathogenesis.

**Role: Co –Investigator**

**Foundation Nicole Niquille (FNN)** 11/03/16-12/31/18

Switzerland

“Cervical Cancer and HPV Screening in Lukla Hospital, Nepal”

The major goal of this project is to screen women between the ages of 30-60 years in the seven VDCs of Solukhumbu district for cervical pre-cancer and cancer and provide treatment as needed.

**Role: Co-PI**

**International Innovation Grant (Ghimire, Nepal Fertility Care Center)** 01/01/16 – 12/31/17

Conquer Cancer Foundation of the American Society of Clinical Oncology

“*Using mHealth Technologies to Ensure Continuum of Care in Cervical Cancer Screening in Kailali District of Nepal*”

The major goal of this study is to use mHealth methodology to register, make referrals and follow-up on referral visits of cervical cancer screening in a district of Nepal.

**Role: Advisor/key personnel**

**1R56HL125061**(**Shrestha**)          09/01/15 – 08/31/17

NIH/NHLBI

“Genetic Variants in Calcium Channel and Binding Proteins Underlying cIMT in HIV”

The major objective of this study is to conduct deep-sequencing and examine genetic variants in 9 genes encoding Ca2+ channels (*RYR1, RYR2, RYR3, IP3R*) and other related proteins (*GADD153, CALM1, CALM2, CALM3, CAMKII*) in HIV patients that exhibit extreme Carotid Intima-Media Thickness (cIMT) measurements (high/low).

**U01 AI103401 (Saag)**

NIH/NIAID (**Shrestha, Project PI – funding through UAB-MISS WIHS)** 03/01/16 – 12/31/16

**“***Genetic Epidemiology of Carotid Artery Intima-Media Thickness among HIV-positive Women*”

The major goal of the project is to examine the influence of single-nucleotide polymorphisms (SNPs), individually and aggregate at gene level with carotid artery atherosclerosis among HIV-infected patients

**R03 AI103438-01** (**Shrestha**) 08/12/13 – 07/31/15

NIH/NIAID

“*Genetic Epidemiology of HPV Infection Outcome in Men*”

**Hologic Gen-Probe Inc., San Diego, CA (Shrestha)** 07/01/13 – 06/30/16

*contributed kits/ reagents and test services*

The Risk Factors and Distribution of Human Papillomavirus (HPV) and Sexually Transmitted Infections (STIs) in Nepal

**U01 AI103401 (Saag)** 09/01/14 – 02/28/15NIH/NIAID

**“***GWAS and candidate gene analysis of genetic risk factors affecting HPV natural history and risk of cervical disease*”

**Role:** (**Project PI – funding through UAB-MISS WIHS)**

**5R24-AI067039 (Saag)** 07/01/09 – 12/31/14

NIH/NIAID

“*CFAR – Network of Integrated Clinical Sciences (CNICS)*”

**Role: Co-investigator**

**UAB ACS-IRG Junior Faculty Development Grant (Vazquez)** 11/01/14-10/31/15

*“Genomic Risk Prediction of Nodal Metastasis with Omic-based Markers in Ductal Breast”*

**Role: Co-Investigator**

**5P30AI027767-23 (Saag)** 06/01/11 – 12/31/14

*NIAID/UAB CFAR*

“*RYR3 Gene Variants in Early Carotid Atherosclerosis among HIV Patients on HAART*”

**Role: Supplement PI**

**R01-AI071906 (Tang)** 05/01/08 – 08/30/13 NIH/NIAID

“*Host Genetic Epidemiology in HIV-1-Discordant African Couples and Other Cohorts*”

**Role: Co-Investigator**

**Department of Epidemiology, SOPH, UAB (Shrestha)** 12/01/11-12/31/13

“*Prevalence of HPV, STI and abnormal cervical cytology among women in Nepal*”

**Award #02826-1 (Portman)** **Role: PI of UAB subcontract** 01/1/08 – 07/30/12 Thrasher Foundation/Seattle Children’s Research Institute

“*Role of Fcgamma Receptor Polymorphisms in Determining IVIG Response in Kawasaki Disease*”

**American Heart Association (PI)** 07/01/10 – 07/30/12

**“***Copy Numbers of CCL3L and FCGR Related Genes in Kawasaki Disease*”

NIH/NIAMS **R21-HL90558** **(Portman)** **Role: PI of UAB subcontract**  06/01/07 – 05/31/10 “*FcR Mutations in Kawasaki Disease”*

**NIH/NIAID N01-AI40068 (Arnett/Kaslow) Role: Co-Investigator** 08/01/10 – 12/31/12 “*Population Genetics Analysis Program: Immunity to Vaccines/Infections II*”

**P50 CA98252 (Wu)** 09/01/09 – 08/31/11 NCI/Johns Hopkins University **Role: Project PI**

“*Cervical Cancer SPORE Career Development Award*”

**(Shrestha - PI)** 02/01/10 – 06/30/11 UAB Comprehensive Cancer Center/Center for AIDS Research

“*Host Genes Involved in HIV/AIDS Pathogenesis and HPV Infection Outcomes*”

**(Shrestha – PI of Project)**

Adolescent Medicine Trials Network /NIH03/01/10 – 04/30/11 “*Prevalence of Abnormal Renal Disease Markers in HIV-positive Adolescents*”

**(Shrestha - PI)** 02/01/08 – 01/31/09

UAB Center for AIDS Research

“*IL10 Gene Family in HIV and HPV Infection Outcome*”

**(Shrestha - PI)** 11/01/08 – 10/31/10

UAB Center for Emerging Infections & Emergency Preparedness (CEIEP)

“*Identification and characterization of human genes that determine differential hemagglutination inhibition (HI) antibody response to influenza vaccination*”

NIH/NIAID **R01-AI41951 (Kaslow)** **Role: Investigator** 05/15/02 – 04/30/07 “*Genetic Factors in the Epidemiology of HIV-1 Infection*”