

## Curriculum Vitae

### **M. Michele Manos, PhD, MPH, DVM**

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#### **EDUCATION**

- 2005 D.V.M. University of California, Davis, concentration: population medicine  
California Veterinary Medical Board Licensure #15929
- 1994 M.P.H. Johns Hopkins School of Hygiene and Public Health, (international health, epidemiology)
- 1984 Ph.D. Basic Health Sciences (Microbiology), SUNY-Stony Brook/Cold Spring Harbor Laboratory
- 1978 B.S. Cell and Developmental Biology, University of Arizona
- 1978 – 1981 Ph.D. coursework and qualifying exams, Biochemistry, University of Arizona Health Sciences Center
- 1985 – 1992 Organizational psychology, management, and epidemiology courses, UC-Berkeley and UCSF
- 2002 Wildlife Capture and Restraint Certification, California Department of Fish and Game

#### **PROFESSIONAL EXPERIENCE**

##### **Public Health Consultant: Research and Strategy**

- 1992 – Present Serving public health entities, non-profits, academia, government, and industry. Topics include diagnostic development/evaluation, postmarket antiviral studies, adaptation to health impacts of climate change.

##### **Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD**

- 2010 – Present Adjunct Professor - Department of Epidemiology
- 1993 – 1995 Visiting Scholar - Department of Molecular Microbiology and Immunology

##### **Kaiser Permanente Division of Research, Oakland, CA**

- 1995 – 2016 Senior Research Scientist

##### **University of California, San Francisco, School of Medicine**

- 1996 – 2005 Associate Adjunct Professor - Department of Epidemiology and Biostatistics

##### **Cetus Corporation, Emeryville, CA**

- 1990 – 1991 Associate Director, Senior Scientist - Department of Infectious Diseases
- 1984 – 1989 Scientist and Project Leader

#### **SELECTED SCIENTIFIC APPOINTMENTS**

- 2008 – 2013 California Viral Hepatitis Coordinating Committee
- 2005 – 2013 Kaiser Permanente Northern California Viral Hepatitis Registry, Director
- 1995 – 2005 National Cancer Institute, ALTS Clinical Trial, Steering Committee
- 1993 – 1995 Greater Baltimore HIV Health Services Planning Council
- 1991 – 1995 Advisory Council, National Institute of Allergy and Infectious Diseases, NIH
- 1991 – 1994 Public Relations Committee, American Society for Microbiology

#### **SELECTED AWARDS**

- 2013 Journal of Managed Care Pharmacy – Award for Excellence
- 1994 White House Fellowship, Regional Finalist
- 1993 – 1994 National Institutes of Health (NIAID), Senior Fellowship
- 1993 – 1994 American Association of University Women, Career Development Grant

## SELECTED INVITED LECTURES AND SYMPOSIA

### United States

- Arizona Pharmacy Association Annual Convention, Chandler, AZ, 2016
- Pima County Energy and Water Summit, Tucson, AZ, 2015
- Digestive Disease Week, Orlando, FL, 2013
- National Summit on HIV and Viral Hepatitis, Washington, DC, 2012
- University of Michigan, Department of Gastroenterology, Ann Arbor, MI, 2010
- Transforming our Domestic Response to Hepatitis B and C, Washington, DC, 2009
- Department of Epidemiology, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, 2009
- Amer Assoc of Veterinary Laboratory Diagnosticians, Annual Conference, Hershey, PA, 2005
- AMA Media Briefing on Cancer, The National Press Club, Washington, DC, 1999
- Planned Parenthood Federation of America, National Medical Committee, 1996, 1997, and 1998
- American Association for Cancer Research, Annual Meeting, New Orleans, LA, 1998
- Indian Health Service, California Region, Annual Clinicians' Meeting, 1997
- The Population Council, New York, NY, 1995
- The World Bank, Washington, DC, 1994

### International

- Abbot Molecular Diagnostics Symposium, Nyborg, Denmark, 2000
- International Conference on HPV and Cervical Cancer, Montreal, Quebec, Canada, 1998
- International Symposium on Cervical Cancer and HPV, Santiago, Chile, 1997
- Third EUROGIN Conference: Lower Genital Tract Infections and Neoplasia, Paris, France, 1997
- Eighth International Conference on Cervical Cancer and Premalignancies, Mexico City, Mexico, 1996
- The Population Council, Mexico City, Mexico, 1995
- University of Indonesia, Faculty of Medicine, Jakarta, 1995
- Catholic University Medical School, Seoul, Korea, 1995
- Women's Health Education Network, Chiang Mai, Thailand, 1994

## PUBLICATIONS

(Where I am not first author, \* denotes my trainee/assistant is first author and/or I am corresponding author/PI.

\*\* denotes shared first authorship.)

1. Ling, L.E., **Manos, M.M.**, and Gluzman, Y. (1982). Sequence of the junction in adenovirus 2-SV40 hybrids: examples of illegitimate recombination. *Nucleic Acids Res* 10, 8099-8112.
2. Kurtz, D.T., McCullough, L., Bishop, D.K., and **Manos, M.M.** (1983). DNA sequences required for hormonal induction of rat alpha 2u-globulin genes. *Cold Spring Harb Symp Quant Biol* 47 Pt 2, 985-988.
3. **Manos, M.M.**, Munroe, S.D., Przybytkowska, E., and McReynolds, L.A. (1983). Transfer of a mutant viral thymidine kinase gene results in temperature-sensitive mouse cells. *Mol Cell Biol* 3, 490-494.
4. **Manos, M.M.**, and Gluzman, Y. (1984). Simian virus 40 large T-antigen point mutants that are defective in viral DNA replication but competent in oncogenic transformation. *Mol Cell Biol* 4, 1125-1133.
5. **Manos, M.M.**, and Gluzman, Y. (1985). Genetic and biochemical analysis of transformation-competent, replication-defective simian virus 40 large T antigen mutants. *J Virol* 53, 120-127.
6. Horn, G.T., Bugawan, T.L., Long, C.M., **Manos, M.M.**, and Erlich, H.A. (1988). Sequence analysis of HLA class II genes from insulin-dependent diabetic individuals. *Hum Immunol* 21, 249-263.
7. **Manos, M.M.** (1988). Expression and processing of a recombinant human macrophage colony-stimulating factor in mouse cells. *Mol Cell Biol* 8, 5035-5039.
8. Weaver, J.F., McCormick, F., and **Manos, M.M.** (1988). Production of recombinant human CSF-1 in an inducible mammalian expression system. *Bio/Technology* 6, 287-290.

9. Irmiere, A.F., **Manos, M.M.**, Jacobson, J.G., Gibbs, J.S., and Coen, D.M. (1989). Effect of an amber mutation in the herpes simplex virus thymidine kinase gene on polypeptide synthesis and stability. *Virology* 168, 210-220.
10. **Manos, M.M.**, Ting, Y., Wright, D.K., Lewis, A.J., Broker, T.R., and Wolinsky, S.M. (1989). Use of polymerase chain reaction amplification for the detection of genital human papillomaviruses. *Molecular Diagnostics of Human Cancer, Cancer Cells* 7, 209-214.
11. Brandsma, J.L., Lewis, A.J., Abramson, A., and **Manos, M.M.\*** (1990). Detection and typing of papillomavirus DNA in formaldehyde-fixed paraffin-embedded tissue. *Arch Otolaryngol Head Neck Surg* 116, 844-848.
12. Manos, M., Lee, K., Greer, C., Waldman, J., Kiviat, N., Holmes, K., and Wheeler, C. (1990). Looking for human papillomavirus type 16 by PCR. *Lancet* 335, 734.
13. Resnick, R.M., Cornelissen, M.T., Wright, D.K., Eichinger, G.H., Fox, H.S., ter Schegget, J., and **Manos, M.M.\***. (1990). Detection and typing of human papillomavirus in archival cervical cancer specimens by DNA amplification with consensus primers. *J Natl Cancer Inst* 82, 1477-1484.
14. Smith, K.T., Long, C.M., Bowman, B., and **Manos, M.M.\*** (1990). Using cosolvents to enhance PCR amplification. *Amplifications* 5, 16-17.
15. Bauer, H.M., Ting, Y., Greer, C.E., Chambers, J.C., Tashiro, C.J., Chimera, J., Reingold, A., and **Manos, M.M.\***. (1991). Genital human papillomavirus infection in female university students as determined by a PCR-based method. *JAMA* 265, 472-477.
16. Greer, C.E., Lund, J.K., and **Manos, M.M.\*** (1991). PCR amplification from paraffin-embedded tissues: recommendations on fixatives for long-term storage and prospective studies. *PCR Methods Appl* 1, 46-50.
17. Greer, C.E., Peterson, S.L., Kiviat, N.B., and **Manos, M.M.\***. (1991). PCR amplification from paraffin-embedded tissues. Effects of fixative and fixation time. *Am J Clin Pathol* 95, 117-124.
18. Ley, C., Bauer, H.M., Reingold, A., Schiffman, M.H., Chambers, J.C., Tashiro, C.J., and **Manos, M.M.\***. (1991). Determinants of genital human papillomavirus infection in young women. *J Natl Cancer Inst* 83, 997-1003.
19. Schiffman, M.H., Bauer, H.M., Lorincz, A.T., **Manos, M.M.**, Byrne, J.C., Glass, A.G., Cadell, D.M., and Howley, P.M. (1991). Comparison of Southern blot hybridization and polymerase chain reaction methods for the detection of human papillomavirus DNA. *J Clin Microbiol* 29, 573-577.
20. Shroyer, K.R., Kim, J.G., **Manos, M.M.**, Greer, C.E., Pearlman, N.W., and Franklin, W.A. (1992). Papillomavirus found in anorectal squamous carcinoma, not in colon adenocarcinoma. *Arch Surg* 127, 741-744.
21. Bauer, H.M., Hildesheim, A., Schiffman, M.H., Glass, A.G., Rush, B.B., Scott, D.R., Cadell, D.M., Kurman, R.J., and **Manos, M.M.\*** (1993). Determinants of genital human papillomavirus infection in low-risk women in Portland, Oregon. *Sex Transm Dis* 20, 274-278.
22. Gravitt, P.E., and **Manos, M.M.\*** (1993). Nucleic acid hybridization methods to detect microorganisms. *Lab Anim Sci* 43, 5-10.
23. Hildesheim, A., Gravitt, P., Schiffman, M., Kurman, R., Barnes, W., Jones, S., Tchabo, J., Brinton, L., Copeland, C., Epp, J., and **Manos, M.M.\*** (1993). Determinants of genital HPV infection in low income women in Washington, DC. *Sex Transm Dis* 20, 279-285.
24. Kuypers, J.M., Critchlow, C.W., Gravitt, P.E., Vernon, D.A., Sayer, J.B., **Manos, M.M.**, and Kiviat, N.B. (1993). Comparison of dot filter hybridization, Southern transfer hybridization, and polymerase chain reaction amplification for diagnosis of anal human papillomavirus infection. *J Clin Microbiol* 31, 1003-1006.

25. McGrae, J.D., Jr., Greer, C.E., and **Manos, M.M.** (1993). Multiple Bowen's disease of the fingers associated with human papilloma virus type 16. *Int J Dermatol* 32, 104-107.
26. Schiffman, M.H., Bauer, H.M., Hoover, R.N., Glass, A.G., Cadell, D.M., Rush, B.B., Scott, D.R., Sherman, M.E., Kurman, R.J., Wacholder, S., Stanton, C., and **Manos, M.M.** (1993). Epidemiologic evidence showing that human papillomavirus infection causes most cervical intraepithelial neoplasia. *J Natl Cancer Inst* 85, 958-964.
27. Wheeler, C.M., Parmenter, C.A., Hunt, W.C., Becker, T.M., Greer, C.E., Hildesheim, A., and **Manos, M.M.\*** (1993). Determinants of genital human papillomavirus infection among cytologically normal women attending the University of New Mexico student health center. *Sex Transm Dis* 20, 286-289.
28. Apple, R.J., Erlich, H.A., Klitz, W., **Manos, M.M.**, Becker, T.M., and Wheeler, C.M. (1994). HLA DR-DQ associations with cervical carcinoma show papillomavirus-type specificity. *Nat Genet* 6, 157-162.
29. Bernard, H.U., Chan, S.Y., **Manos, M.M.\***, Ong, C.K., Villa, L.L., Delius, H., Peyton, C.L., Bauer, H.M., and Wheeler, C.M. (1994). Identification and assessment of known and novel human papillomaviruses by polymerase chain reaction amplification, restriction fragment length polymorphisms, nucleotide sequence, and phylogenetic algorithms. *J Infect Dis* 170, 1077-1085.
30. Greer, C.E., Wheeler, C.M., and **Manos, M.M.\*** (1994). Sample preparation and PCR amplification from paraffin-embedded tissues. *PCR Methods Appl* 3, S113-122.
31. **Manos, M.M.**, Waldman, J., Zhang, T.Y., Greer, C.E., Eichinger, G., Schiffman, M.H., and Wheeler, C.M. (1994). Epidemiology and partial nucleotide sequence of four novel genital human papillomaviruses. *J Infect Dis* 170, 1096-1099.
32. Peyton, C.L., Jansen, A.M., Wheeler, C.M., Peto, J., Bosch, X.F., Munoz, N., Teyssie, A.R., Torroella, M., Wabinga, H.R., Sarjadi, Ngelangel, C., and **Manos, M.M.** (1994). A novel human papillomavirus sequence from an international cervical cancer study. *J Infect Dis* 170, 1093-1095.
33. Sherman, M.E., Schiffman, M.H., Lorincz, A.T., **Manos, M.M.**, Scott, D.R., Kuman, R.J., Kiviat, N.B., Stoler, M., Glass, A.G., and Rush, B.B. (1994). Toward objective quality assurance in cervical cytopathology. Correlation of cytopathologic diagnoses with detection of high-risk human papillomavirus types. *Am J Clin Pathol* 102, 182-187.
34. Strickler, H.D., Dillner, J., Schiffman, M.H., Eklund, C., Glass, A.G., Greer, C., Scott, D.R., Sherman, M.E., Kurman, R.J., and **Manos, M.M.** (1994). A seroepidemiologic study of HPV infection and incident cervical squamous intraepithelial lesions. *Viral Immunol* 7, 169-177.
35. Bosch, F.X., **Manos, M.M.\*\*** Munoz, N., Sherman, M., Jansen, A.M., Peto, J., Schiffman, M.H., Moreno, V., Kurman, R., and Shah, K.V. (1995). Prevalence of human papillomavirus in cervical cancer: a worldwide perspective. International biological study on cervical cancer (IBSCC) Study Group. *J Natl Cancer Inst* 87, 796-802.
36. Liaw, K.L., Hsing, A.W., Chen, C.J., Schiffman, M.H., Zhang, T.Y., Hsieh, C.Y., Greer, C.E., You, S.L., Huang, T.W., Wu, T.C., O'Leary, T.J., Seidman, J., Blot, W.J., Meinert, C.L., and **Manos, M.M.\*** (1995). Human papillomavirus and cervical neoplasia: a case-control study in Taiwan. *Int J Cancer* 62, 565-571.
37. Schiffman, M.H., Kiviat, N.B., Burk, R.D., Shah, K.V., Daniel, R.W., Lewis, R., Kuypers, J., **Manos, M.M.**, Scott, D.R., Sherman, M.E., and et al. (1995). Accuracy and interlaboratory reliability of human papillomavirus DNA testing by hybrid capture. *J Clin Microbiol* 33, 545-550.
38. Wideroff, L., Schiffman, M.H., Nonnenmacher, B., Hubbert, N., Kirnbauer, R., Greer, C.E., Lowy, D., Lorincz, A.T., **Manos, M.M.**, Glass, A.G., and et al. (1995). Evaluation of seroreactivity to human papillomavirus type 16 virus-like particles in an incident case-control study of cervical neoplasia. *J Infect Dis* 172, 1425-1430.
39. Hsing, A.W., Burk, R.D., Liaw, K.L., Chen, C.J., Zhang, T., Schiffman, M., Greer, C.E., You, S.L., Hsieh, C.Y., Huang, T.W., Wu, T.C., O'Leary, T.J., Seidman, J.D., and **Manos, M.M.** (1996). Interlaboratory agreement in a polymerase chain reaction-based human papillomavirus DNA assay. *Cancer Epidemiol Biomarkers Prev* 5, 483-484.

40. Stewart, A.C., Eriksson, A.M., **Manos, M.M.**, Munoz, N., Bosch, F.X., Peto, J., and Wheeler, C.M. (1996). Intratype variation in 12 human papillomavirus types: a worldwide perspective. *J Virol* 70, 3127-3136.
41. Wheeler, C.M., Greer, C.E., Becker, T.M., Hunt, W.C., Anderson, S.M., and **Manos, M.M.** (1996). Short-term fluctuations in the detection of cervical human papillomavirus DNA. *Obstet Gynecol* 88, 261-268.
42. Wideroff, L., Schiffman, M., Hubbert, N., Kirnbauer, R., Schiller, J., Greer, C., **Manos, M.M.**, Dawsey, S.M., Li, J.Y., and Brinton, L. (1996). Serum antibodies to HPV 16 virus-like particles are not associated with penile cancer in Chinese males. *Viral Immunol* 9, 23-25.
43. Wideroff, L., Schiffman, M.H., Hoover, R., Tarone, R.E., Nonnenmacher, B., Hubbert, N., Kirnbauer, R., Greer, C.E., Lorincz, A.T., **Manos, M.M.**, Glass, A.G., Scott, D.R., Sherman, M.E., Buckland, J., Lowy, D., and Schiller, J. (1996). Epidemiologic determinants of seroreactivity to human papillomavirus (HPV) type 16 virus-like particles in cervical HPV-16 DNA-positive and-negative women. *J Infect Dis* 174, 937-943.
44. Cope, J.U., Hildesheim, A., Schiffman, M.H., **Manos, M.M.**, Lorincz, A.T., Burk, R.D., Glass, A.G., Greer, C., Buckland, J., Helgesen, K., Scott, D.R., Sherman, M.E., Kurman, R.J., and Liaw, K.L. (1997). Comparison of the hybrid capture tube test and PCR for detection of human papillomavirus DNA in cervical specimens. *J Clin Microbiol* 35, 2262-2265.
45. Strickler, H.D., Schiffman, M.H., Eklund, C., Glass, A.G., Scott, D.R., Sherman, M.E., Wacholder, S., Kurman, R.J., **Manos, M.M.**, Schiller, J.T., and Dillner, J. (1997). Evidence for at least two distinct groups of humoral immune reactions to papillomavirus antigens in women with squamous intraepithelial lesions. *Cancer Epidemiol Biomarkers Prev* 6, 183-188.
46. Yamada, T., **Manos, M.M.**, Peto, J., Greer, C.E., Munoz, N., Bosch, F.X., and Wheeler, C.M. (1997). Human papillomavirus type 16 sequence variation in cervical cancers: a worldwide perspective. *J Virol* 71, 2463-2472.
47. Hildesheim, A., Schiffman, M., Scott, D.R., Marti, D., Kissner, T., Sherman, M.E., Glass, A.G., **Manos, M.M.**, Lorincz, A.T., Kurman, R.J., Buckland, J., Rush, B.B., and Carrington, M. (1998). Human leukocyte antigen class I/II alleles and development of human papillomavirus-related cervical neoplasia: results from a case-control study conducted in the United States. *Cancer Epidemiol Biomarkers Prev* 7, 1035-1041.
48. Kinney, W.K., **Manos, M.M.**,\* Hurley, L.B., and Ransley, J.E. (1998). Where's the high-grade cervical neoplasia? The importance of minimally abnormal Papanicolaou diagnoses. *Obstet Gynecol* 91, 973-976.
49. Rasekh, Z., Bauer, H.M., **Manos, M.M.**, and Iacopino, V. (1998). Women's health and human rights in Afghanistan. *JAMA* 280, 449-455.
50. Wideroff, L., Potischman, N., Glass, A.G., Greer, C.E., **Manos, M.M.**, Scott, D.R., Burk, R.D., Sherman, M.E., Wacholder, S., and Schiffman, M. (1998). A nested case-control study of dietary factors and the risk of incident cytological abnormalities of the cervix. *Nutr Cancer* 30, 130-136.
51. Liaw, K.L., Glass, A.G., **Manos, M.M.**, Greer, C.E., Scott, D.R., Sherman, M., Burk, R.D., Kurman, R.J., Wacholder, S., Rush, B.B., Cadell, D.M., Lawler, P., Tabor, D., and Schiffman, M. (1999). Detection of human papillomavirus DNA in cytologically normal women and subsequent cervical squamous intraepithelial lesions. *J Natl Cancer Inst* 91, 954-960.
52. **Manos, M.M.**, Kinney, W.K., Hurley, L.B., Sherman, M.E., Shieh-Ngai, J., Kurman, R.J., Ransley, J.E., Fetterman, B.J., Hartinger, J.S., McIntosh, K.M., Pawlick, G.F., and Hiatt, R.A. (1999). Identifying women with cervical neoplasia: using human papillomavirus DNA testing for equivocal Papanicolaou results. *JAMA* 281, 1605-1610.
53. Ronnett, B.M., **Manos, M.M.**,\* Ransley, J.E., Fetterman, B.J., Kinney, W.K., Hurley, L.B., Ngai, J.S., Kurman, R.J., and Sherman, M.E. (1999). Atypical glandular cells of undetermined significance (AGUS): cytopathologic features, histopathologic results, and human papillomavirus DNA detection. *Hum Pathol* 30, 816-825.
54. Sherman, M.E., Tabbara, S.O., Scott, D.R., Kurman, R.J., Glass, A.G., **Manos, M.M.**, Burk, R.D., Rush, B.B., and Schiffman, M. (1999). "ASCUS, rule out HSIL": cytologic features, histologic correlates, and human papillomavirus detection. *Mod Pathol* 12, 335-342.

55. Walboomers, J.M., Jacobs, M.V., **Manos, M.M.**, Bosch, F.X., Kummer, J.A., Shah, K.V., Snijders, P.J., Peto, J., Meijer, C.J., and Munoz, N. (1999). Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *J Pathol* 189, 12-19.
56. Wideroff, L., Schiffman, M., Haderer, P., Armstrong, A., Greer, C.E., **Manos, M.M.**, Burk, R.D., Scott, D.R., Sherman, M.E., Schiller, J.T., Hoover, R.N., Tarone, R.E., and Kirnbauer, R. (1999). Seroreactivity to human papillomavirus types 16, 18, 31, and 45 virus-like particles in a case-control study of cervical squamous intraepithelial lesions. *J Infect Dis* 180, 1424-1428.
57. The Atypical Squamous Cells of Undetermined Significance/Low-Grade Squamous Intraepithelial Lesions Triage Study (ALTS) Group. (2000). Human papillomavirus testing for triage of women with cytologic evidence of low-grade squamous intraepithelial lesions: baseline data from a randomized trial.. *J Natl Cancer Inst* 92, 397-402.
58. Schiffman, M., and Adrianza, M.E. for The ALTS Group. (2000). ASCUS-LSIL Triage Study. Design, methods and characteristics of trial participants. *Acta Cytol* 44, 726-742.
59. Liaw, K.L., Hildesheim, A., Burk, R.D., Gravitt, P., Wacholder, S., **Manos, M.M.**, Scott, D.R., Sherman, M.E., Kurman, R.J., Glass, A.G., Anderson, S.M., and Schiffman, M. (2001). A prospective study of human papillomavirus (HPV) type 16 DNA detection by polymerase chain reaction and its association with acquisition and persistence of other HPV types. *J Infect Dis* 183, 8-15.
60. **Manos, M.M.**, Leyden, W.A., Resendez, C.I., Klein, E.G., Wilson, T.L., and Bauer, H.M. (2001). A community-based collaboration to assess and improve medical insurance status and access to health care of Latino children. *Public Health Rep* 116, 575-584.
61. Solomon, D., Schiffman, M., Tarone, R., and The ALTS Group. (2001). Comparison of three management strategies for patients with atypical squamous cells of undetermined significance: baseline results from a randomized trial. *J Natl Cancer Inst* 93, 293-299.
62. Castle, P.E., Shields, T., Kirnbauer, R., **Manos, M.M.**, Burk, R.D., Glass, A.G., Scott, D.R., Sherman, M.E., and Schiffman, M. (2002). Sexual behavior, human papillomavirus type 16 (HPV 16) infection, and HPV 16 seropositivity. *Sex Transm Dis* 29, 182-187.
63. Lee, K.R., Darragh, T.M., Joste, N.E., Krane, J.F., Sherman, M.E., Hurley, L.B., Allred, E.M., and **Manos, M.M.**\* (2002). Atypical glandular cells of undetermined significance (AGUS): Interobserver reproducibility in cervical smears and corresponding thin-layer preparations. *Am J Clin Pathol* 117, 96-102.
64. Scott, D.R., Hagmar, B., Maddox, P., Hjerpe, A., Dillner, J., Cuzick, J., Sherman, M.E., Stoler, M.H., Kurman, R.J., Kiviat, N.B., **Manos, M.M.**, and Schiffman, M. (2002). Use of human papillomavirus DNA testing to compare equivocal cervical cytologic interpretations in the United States, Scandinavia, and the United Kingdom. *Cancer* 96, 14-20.
65. Wilson, S.R., Brown, N.L., Leyden, W.A., **Manos, M.M.**, Chin, V., Levin, D., Braverman, P., Shapiro, S., and Lavori, P.W. (2002). Healthcare utilization by women in a comprehensive managed care population subsequent to diagnosis of a sexually transmitted disease. *Sex Transm Dis* 29, 678-688.
66. Castle, P.E., Lorincz, A.T., Scott, D.R., Sherman, M.E., Glass, A.G., Rush, B.B., Wacholder, S., Burk, R.D., **Manos, M.M.**, Schussler, J.E., Macomber, P., and Schiffman, M. (2003). Comparison between prototype hybrid capture 3 and hybrid capture 2 human papillomavirus DNA assays for detection of high-grade cervical intraepithelial neoplasia and cancer. *J Clin Microbiol* 41, 4022-4030.
67. Zapka, J.G., Taplin, S.H., Solberg, L.I., and **Manos, M.M.** (2003). A framework for improving the quality of cancer care: the case of breast and cervical cancer screening. *Cancer Epidemiol Biomarkers Prev* 12, 4-13.
68. Taplin, S.H., Ichikawa, L., Yood, M.U., **Manos, M.M.**, Geiger, A.M., Weinmann, S., Gilbert, J., Mouchawar, J., Leyden, W.A., Altaras, R., Beverly, R.K., Casso, D., Westbrook, E.O., Bischoff, K., Zapka, J.G., and Barlow, W.E. (2004). Reason for

- late-stage breast cancer: absence of screening or detection, or breakdown in follow-up? *J Natl Cancer Inst* 96, 1518-1527.
69. Zapka, J.G., Puleo, E., Taplin, S.H., Goins, K.V., Ulcickas Yood, M., Mouchawar, J., Somkin, C., and **Manos, M.M.** (2004). Processes of care in cervical and breast cancer screening and follow-up--the importance of communication. *Prev Med* 39, 81-90.
70. Leyden, W.A., **Manos, M.M.**\*, Geiger, A.M., Weinmann, S., Mouchawar, J., Bischoff, K., Yood, M.U., Gilbert, J., and Taplin, S.H. (2005). Cervical cancer in women with comprehensive health care access: attributable factors in the screening process. *J Natl Cancer Inst* 97, 675-683.
71. Mouchawar, J., Taplin, S., Ichikawa, L., Barlow, W.E., Geiger, A.M., Weinmann, S., Gilbert, J., **Manos, M.M.**, and Ulcickas Yood, M. (2005). Late-stage breast cancer among women with recent negative screening mammography: do clinical encounters offer opportunity for earlier detection? *J Natl Cancer Inst Monogr*, 39-46.
72. Puleo, E., Zapka, J.G., Goins, K.V., Yood, M.U., Mouchawar, J., Manos, M., Somkin, C., and Taplin, S. (2005). Recommendations for care related to follow-up of abnormal cancer screening tests: accuracy of patient report. *Eval Health Prof* 28, 310-327.
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Letters

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Editorials, Reviews, Chapters, Reports, and Guidelines

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Bauer, HM, C Emerson, **MM Manos\***, and T Wilson, 1999. The Canal Community Alliance Women's Health Survey: report and recommendations. Canal Community Alliance, San Rafael, CA.

**Manos MM**. 2001. HPV testing for clarifying borderline cervical smear results: recent conflicting results highlight the dilemmas of progress. *BMJ* 322:878-879.

Health and Safety Information for Marine Mammal Workers. 2004. UC Davis Wildlife Health Center, US Marine Mammal Commission, National Marine Fisheries Service. Website and brochure at [www.vetmed.ucdavis.edu/whc/mmz](http://www.vetmed.ucdavis.edu/whc/mmz).

Pet Safety Guide for Parents and Children. 2006. Kaiser Permanente Medical Care Program, Northern California.

Annual Reports: Kaiser Permanente Viral Hepatitis Registry. 2007-2013. The Permanente Medical Group.

The Heat is On: Recognizing and Preventing Heat-Related Illness Among the Most Vulnerable. 2016. A narrated seasonal training for first responders in Pima County, AZ. (Commissioned by the Tucson Fire Department.)

Hot Weather and Psychiatric Medications: Be Aware. Take Care. 2016. Pima County Health Department and Office of Behavioral Health.

**SELECTED PATENT (of 9 issued)**

**Manos** et al. 1994. Compositions for and detection of HPV by specific oligonucleotide polymerase primers using the polymerase chain reaction. U.S Patent Number 5,283,171.

## **RECENT RESEARCH SUPPORT**

“Climate Change and Health Learning Cooperative” 2016-2017; Public Health Institute/Kresge Foundation  
“Rates of Congenital Toxoplasmosis in a Managed Care Setting” 2012-2013; CDC  
“HCV Treatment in the DAA Era: Practice and Outcomes in Managed Care” 2011-2013; Vertex Pharmaceuticals, Inc.  
“Characteristics of Chronic Hepatitis B Patients in a Managed Care Setting.” 2011; Gilead Sciences, Inc.  
“Bay Area Hepatitis C Cooperative Research Center - Clinical Epidemiology Core.” 2010-2015; NIAID.  
“Quality and Efficiency of Hepatocellular Carcinoma Reporting to Cancer Registries.” 2009-2010; NCI (through NCCC)  
“Feasibility and Potential Impact of Birth-Cohort-Based Hepatitis C Screening.” 2009-2010; CDC.  
“Health Care Utilization and Costs of Antiviral Treatment for Hepatitis C.” 2009-10; Vertex Pharmaceuticals, Inc.  
“A Cross-sectional Study of Hepatitis C Patients in a Managed Care Setting.” 2009-2012; Merck, Inc.

## **RECENT PEER REVIEW ACTIVITIES**

Hepatology (Editorial Board)	Journal of the National Cancer Institute
Progress in Community Health Partnerships	Journal of Infectious Diseases
JAMA Internal Medicine	Journal of Health Psychology

## **SELECTED UNIVERSITY TEACHING**

1996 - 2014 **University of California, San Francisco, School of Medicine**  
Introduction to Epidemiology and Biostatistics (for medical students)  
Training in Clinical Research (TICR), lecturer and section leader  
Individual research project mentoring: medical students, residents, and fellows

1993 – 1995 **John Hopkins University, School of Hygiene and Public Health**  
Biological Basis of Public Health and Virology, guest lecturer  
Giving Effective Scientific Presentations, course leader

## **TRAINEES (since 1998)**

2016	Tanzida Zaman, MPH Student, University of Arizona
2015	Erika Barrett - MPH Student, University of Arizona
2013 – 2014	Jennifer Price, MD – Assistant Professor, UCSF School of Medicine
2013	Varun Saxena, MD – Gastroenterology Fellow, UCSF School of Medicine
2011 – 2012	Monika Sarkar, MD – Hepatology Fellow, UCSF School of Medicine
2011 – 2012	Chanda Ho, MD – Hepatology Fellow, UCSF School of Medicine
2009 – 2011	Jennifer Lai, MD, MBA – Hepatology Fellow, UCSF School of Medicine
2003 – 2005	Lee Zane, MD – Dermatology Resident, UCSF School of Medicine
1999 – 2000	Cynthia Resendez - Medical Student Researcher, UCSF School of Medicine
2000 – 2002	Elizabeth Klein - MPH Student, UC Berkeley
1999 – 2000	Quy Ton - MPH Student, UC Berkeley
1998 – 1999	Cicily Emerson - MPH Student, UC Berkeley

## **SELECTED COMMUNITY SERVICE**

2012 - Present **Canal Alliance, San Rafael, CA** - Board of Directors; Chair, Governance Committee  
Canal Alliance helps low-income, Spanish-speaking immigrants acquire the tools they need to thrive.