

CV of JUDITH E. ZEH

Name
Judith E. Zeh

Position title
Research Professor

Education/training

INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
University of Washington, Seattle	BA	1962	Philosophy
University of Washington, Seattle	BS	1965	Math, Numerical Analysis
University of Washington, Seattle	MS	1969	Mathematical Statistics
University of Washington, Seattle	PhD	1979	Biomathematics

Positions

1963-74 Programmer/Mathematician, Applied Physics Laboratory, University of Washington
1979-80 Lecturer, Electrical Engineering, University of Washington
1979-81 Senior Statistical Analyst, Mathematical Sciences Northwest, Inc.
1982-84 Postdoctoral Research Associate, Statistics, University of Washington
1984-89 Research Associate and Lecturer, Statistics, University of Washington
1989-91 Senior Research Associate and Lecturer, Statistics, University of Washington
1991-2000 Research Associate Professor, Statistics, University of Washington
1991-pres Quantitative Ecology and Resource Management faculty member, University of Washington
1992-2003 PI, Statistical Core, NIH Program Project on Epidemiology/Pathogenesis of Asymptomatic HSV
1999-2000 Adjunct Research Associate Professor, Laboratory Medicine, University of Washington
1999-2002 Leader of Biostatistical Core, Chronic Fatigue Syndrome Cooperative Research Center
2000-2004 Adjunct Research Professor, Laboratory Medicine, University of Washington (till June 2004)
2000-pres Research Professor, Statistics, University of Washington

Honors

1961 Phi Beta Kappa Centennial Senior Scholar
1978 Presentation Award, Joint Statistical Meetings
1995 Appointed to Committee of Scientific Advisors, U.S. Marine Mammal Commission
1996 Elected Vice-Chair, International Whaling Commission Scientific Committee
1996 Award for Outstanding Statistical Application, ASA (with Raftery and Givens)
1998 Elected Fellow of the American Statistical Association
1999 Elected Chair, International Whaling Commission Scientific Committee
2005 Invited plenary lecturer, IX International Mammalogical Congress, Sapporo, Japan

Organizations

American Statistical Association (ASA)
Biometric Society
International Whaling Commission Scientific Committee

Selected peer-reviewed publications, published or in press, in chronological order

Zeh JE, Ko D, Krogman BD, Sonntag R. A multinomial model for estimating the size of a whale population from incomplete census data. *Biometrics* 1986; 42:1-14.

Ko D, Zeh JE. Detection of migration using sound location. *Biometrics* 1988; 44:751-63.

Zeh JE, George JC, Raftery AE, Carroll GM. Rate of increase, 1978-1988, of bowhead whales, *Balaena mysticetus*, estimated from ice-based census data. *Marine Mammal Science* 1991; 7:105-22.

- Raftery AE, Zeh JE. Estimation of bowhead whale, *Balaena mysticetus*, population size (with discussion). Pp. 163-240. In: Gatsonis C, Hodges JS, Kass RE, Singpurwalla ND (eds) Case Studies in Bayesian Statistics. Lecture Notes in Statistics 83, Springer-Verlag, New York, 1993.
- Zeh JE, Clark CW, George JC, Withrow D, Carroll GM, Koski WR. Current population size and dynamics. Chapter 11 (pp. 409-89). In: Burns JJ, Montague JJ, Cowles CJ (eds) The Bowhead Whale. Special Publication Number 2, The Society for Marine Mammalogy, Allen Press, Inc., Lawrence, Kansas, 1993.
- Raftery AE, Givens GH, Zeh JE. Inference from a deterministic population dynamics model for bowhead whales. J Amer Statist Assoc 1995; 90:402-30.
- Wald A, Zeh J, Selke S, Ashley R, Corey L. Virologic characteristics of subclinical and symptomatic genital herpes infections. N Engl J Med 1995; 333:770-75.
- Wald A, Zeh J, Barnum G, Davis LG, Corey L. Suppression of subclinical shedding of herpes simplex virus type 2 with acyclovir. Ann Intern Med 1996; 124:8-15.
- Brown ZA, Selke S, Zeh J, Kopelman J, Maslow A, Ashley RL, Watts DH, Berry S, Herd M, Corey L. The acquisition of herpes simplex virus during pregnancy. N Engl J Med 1997; 337:509-15.
- Raftery AE, Zeh JE. Estimating bowhead whale population size and rate of increase from the 1993 census. J Amer Statist Assoc 1998; 93:451-63.
- Rugh DJ, Zeh JE, Koski WR, Baraff LS, Miller GW, Shelden KEW. An improved system for scoring photo quality and whale identifiability in aerial photographs of bowhead whales. Rep Int Whal Commn 1998; 48:501-12.
- Benedetti JK, Zeh J, Corey L. Clinical reactivation of genital herpes simplex virus infection decreases in frequency over time. Ann Intern Med 1999; 131:14-20.
- George JC, Bada J, Zeh J, Scott L, Brown SE, O'Hara T, Suydam R. Age and growth estimates of bowhead whales (*Balaena mysticetus*) via aspartic acid racemization. Can J Zool 1999; 77:571-80.
- Speck CE, Coombs RW, Koutsky LA, Zeh J, Ross SO, Hooton TM, Collier AC, Corey L, Cent A, Dragavon J, Lee W, Johnson EJ, Sampoleo RR, Krieger JN. Risk factors for HIV-1 shedding in semen. Amer J Epi 1999; 150:622-31.
- Zeh JE. Correcting for missed observations in a shore-based count of whales. Pp. 127-36. In: Garner *et al.* (Eds) Marine Mammal Survey and Assessment Methods. Balkema, Rotterdam, 1999.
- da Silva CQ, Zeh J, Madigan D, Laake J, Rugh D, Baraff L, Koski W, Miller G. Capture-recapture estimation of bowhead whale population size using photo-identification data. J Cetacean Res Manage 2000; 2:45-61.
- Wald A, Zeh J, Selke S, Warren T, Ryncarz AJ, Ashley R, Krieger JN, Corey L. Reactivation of genital herpes simplex virus type 2 infection in asymptomatic seropositive persons. N Engl J Med 2000; 342:844-50.
- Zeh JE. Comment on Estimation of Fetal Growth and Gestation in Bowhead Whales. J Amer Statist Assoc 2001; 96:933-5.
- Koelle DM, Barcy S, Huang M-L, Ashley RL, Corey L, Zeh J, Ashton S, Buchwald D. Markers of viral infection in monozygotic twins discordant for chronic fatigue syndrome. Clin Infect Dis 2002; 35:518-25.
- Sabath DE, Barcy S, Koelle DM, Zeh J, Ashton S, Buchwald D. Cellular immunity in monozygotic twins discordant for chronic fatigue syndrome. J Infect Dis 2002; 185:828-32.
- Schacker T, Zeh J, Hu H, Shaughnessy M, Corey L. Changes in plasma human immunodeficiency virus type 1 RNA associated with herpes simplex virus reactivation and suppression. J Infect Dis 2002; 186:1718-25.
- Wald A, Carrell D, Remington M, Kexel E, Zeh J, Corey L. Two-day regimen of acyclovir for treatment of recurrent genital herpes simplex virus type 2 infection. Clin Infect Dis 2002; 34:944-8.
- Wald A, Zeh J, Selke S, Warren T, Ashley R, Corey L. Genital shedding of herpes simplex virus among men. J Infect Dis 2002; 186 (Suppl 1):S34-9.
- Zeh J, Poole D, Miller G, Koski W, Baraff L, Rugh D. Survival of bowhead whales, *Balaena mysticetus*, estimated from 1981-1998 photoidentification data. Biometrics 2002; 58:832-40.
- Brown ZA, Wald A, Morrow RA, Selke S, Zeh J, Corey L. Effect of serologic status and cesarean delivery on transmission rates of herpes simplex virus from mother to infant. J Am Med Assoc 2003; 289:203-9.

George JC, Zeh J, Suydam R, Clark C. Abundance and population trend (1978-2001) of western Arctic bowhead whales surveyed near Barrow, Alaska. *Marine Mammal Science* 2004; 20(4):755-73.

Gardella C, Brown Z, Wald A, Selke S, Zeh J, Morrow RA, Corey L. Risk factors for herpes simplex virus transmission to pregnant women: A couples study. *American Journal of Obstetrics & Gynecology* 2005; 193:1891-9.

Zeh JE, Punt AE. Updated 1978-2001 abundance estimates and their correlations for the Bering-Chukchi-Beaufort Seas stock of bowhead whales. *J Cetacean Res Manage* 2005; 7(2):169-75.

Koski WR, Rugh DJ, Punt AE, Zeh JE. An approach to minimize bias in estimation of the length-frequency distribution of bowhead whales (*Balaena mysticetus*) from aerial photogrammetric data. *J Cetacean Res Manage* 2006; 8(1):45-54.

Research support

Judith E. Zeh was or is the PI for the following research awards since 2002:

DATES	SPONSOR	\$ AMOUNT	TITLE
April 1998 – March 2003	National Institutes of Health	?	Statistical and data management core of NIH Program Project (PI Corey) on clinical epidemiology and pathogenesis of asymptomatic HSV
October 2000 – June 2003	Department of Wildlife Management, North Slope Borough, Alaska	46,784	Improving estimates of bowhead whale abundance, survival rate, ages and feeding activity
November 2001 – June 2003	Department of Wildlife Management, North Slope Borough, Alaska	30,400	Estimating bowhead whale abundance from 2001 census data and continuing work on other projects
November 2002 – June 2004	Department of Wildlife Management, North Slope Borough, Alaska	49,652	Obtaining final bowhead whale abundance estimates from 2001 census data and continuing work on other projects
November 2003 – June 2005	Department of Wildlife Management, North Slope Borough, Alaska	72,079	Preparing data for the 2004 bowhead whale assessment and continuing work on other projects
September 2004 – May 2006	Department of Wildlife Management, North Slope Borough, Alaska	41,963	Estimating bowhead abundance, checking and archiving data, and continuing work on other projects
September 2005 – June 2007	Department of Wildlife Management, North Slope Borough, Alaska	86,686	New work on bowhead abundance estimates from Russian counts and photographic data
May 2007 – September 2007	National Oceanic and Atmospheric Administration	7,894	Examination of computer matching program for bowheads
October 2006 – June 2008	Department of Wildlife Management, North Slope Borough, Alaska	82,542	Statistical and data management work for the 2007 bowhead implementation review