

# Qi Zheng

## *Education:*

- 1988 - 1993: Department of Statistics, Texas A&M University, Ph.D.
- 1978 - 1982: Department of Mathematics, Zhejiang University, Hangzhou, China. B.S.

## *Experience:*

- 2018 - , professor, Department of Epidemiology and Biostatistics, Texas A&M School of Public Health.
- 2003 - 2018, associate professor, Department of Epidemiology and Biostatistics, Texas A&M School of Public Health.
- 2002 - 2003, research assistant professor, Texas A&M University.
- 1996 - 2002, staff fellow, National Center for Toxicological Research.
- 1994 - 1996: Post-doc fellow, National Center for Toxicological Research.
- 1982 - 1988: Computer programmer, Zhejiang Academy of Agricultural Sciences, Hangzhou, China.

## *Recognition:*

- 1995 & 1997: Recipient of the 1995-96 and 1997-98 *Mathematica* Visiting Scholar Grant Programs sponsored by Wolfram Research Inc.
- 1995: Achievement Award by National Center for Toxicological Research.
- 1996: On-the-Spot Award by the US Food and Drug Administration.
- 1997: The US Food and Drug Administration's Commendable Service Award.
- 2010: Best Poster Award by The Society for Modeling & Simulation International, for a poster by Q. Zheng and D.M. Gorman.
- 2016: Best Faculty Paper Award by Texas A&M School of Public Health.
- A paper (publication #60) was featured in the 2017 annual Spotlight of Genetics Society of America.
- Friday Letter, August 24, 2017: Texas A&M Research on How Often Cells Develop Mutations Important in Biology of Infectious Disease to Cancer.
- Friday Letter, February 1, 2018: Texas A&M Faculty Develops New Software Package That Provides Better Bacterial Mutation Analysis.

- Friday Letter, June 15, 2018: Texas A&M Researcher’s Cautionary Note on the Mutation Frequency in Microbial Research.
- HSC VitalRecord, April 7, 2020: A learning experience: Study of methods for teaching biostatistics in public health.
- PHLEx Faculty Teaching and Professional Development Scholarship, 2020.
- KRHD25, Texas A&M professor developing new web tool to fight against antibacterial resistance, June 14, 2021.
- Florida News Times (2021), New web tools fight antibacterial resistance, <https://floridanewstimes.com/new-web-tools-fight-antibacterial-resistance/286365/>

*Service:*

- 2004: Review panel member of “Integrative Cancer Biology Program” for NCI/NIH.
- 2006: Review panel member of “Advanced Proteomic Platforms and Computational Sciences” for NCI/NIH.
- 2009: Review panel member of “Integration of Mouse Models into Human Cancer Research” for NCI/NIH.
- 2009: Review panel member of “Integrative Cancer Biology Program and Center for Cancer Systems Biology” for NCI/NIH.
- 2007: Contributor to the CPH Study Guide (Certified in Public Health), sponsored by the Association of Schools of Public Health.
- 2009: Member CEPH Evaluation and Planning Committee (SRPH).
- 2010 - 2011 & 2012 - 2013: Member, school-wide APT Committee.
- 2009: Chair for Session 80 at ENAR 2009 Spring Meetings: Contributed papers: Infectious diseases.
- 2011: General co-chair for SpringSim’11 poster & work-in-progress track, sponsored by the Society for Modeling & Simulation International.
- 2012: General co-chair for SpringSim’12 poster & work-in-progress track, sponsored by the Society for Modeling & Simulation International.
- 2013: Technical program committee member for Poster Symposium, SpringSim’13 sponsored by the Society for Modeling & Simulation International.
- 2014: Technical program committee member for Poster Symposium, SpringSim’14 sponsored by the Society for Modeling & Simulation International.
- 2015: Chair of the Departmental Committee for an emeritus position.

- 2015: Chair of the Departmental Committee for recruiting a faculty member.
- 2015 - 2019: SPH Award Committee member.
- 2017 - 2019: Member on the Dean's Lecture Series workshop committee.
- Member of the Editorial Board of *Open Health*.
- 2020: participation in the University-wide NSF proposal: MRI: Acquisition of FASTER - Fostering Accelerated Sciences Transformation Education and Research.
- Member of school APT committee since 2020.
- Faculty Council representative for the Epi and Biostats department since 2020.
- Member of the technical committee of the 5th International Conference on Distance Education and Learning, Beijing, May 2020.
- Publicity co-chair, the 6th International Conference on Distance Education and Learning, May 21-24, 2021, Shanghai, China.
- School Committee for University Distinguished Professor (UDP) Selection Criteria, 2021
- School Committee of Qualifying Exam member, 2021
- Served as ad hoc chair for departmental A&P committee, 2021.
- Publicity chair, the 7th International Conference on Distance Education and Learning, May 2022, Beijing, China.
- Guest editor of a special issue of *Axioms* — "Mathematics, Statistics, and Computation Inspired by the Fluctuation Test: In Celebration of the 80th Anniversary of the Luria-Delbrück Experiment"
- Judge for a lightning talk session at 17th TAMUS Pathways Student Research Symposium, March 2022.
- Judge for a poster session at 6th Annual Postdoctoral Research Symposium, September 2022.
- Associate editor for *Open Health*
- Ad hoc reviewers for ▷Risk Analysis ▷Mathematical Biosciences ▷Communications in Statistics ▷Statistics and Probability Letters ▷Genetics ▷PLoS ONE ▷Cancers ▷PLoS Computational Biology ▷Computational and Mathematical Methods in Medicine ▷Mutation Research ▷Molecular Biology and Evolution ▷Journal of Theoretical Biology ▷Journal of Antimicrobial Chemotherapy ▷Scientific Reports ▷F1000Research ▷Advances in Continuous and Discrete Models

*Invited presentations:*

- ★ Q Zheng (1995) Combining symbolic and numerical computing in carcinogenesis modeling, Tenth International Conference on Mathematical and Computer Modeling and Scientific Computing, July 5-8, Boston, MA.
- ★ Q Zheng (2002) Computer algebra as a routine tool for research, the SSRGG 2002s Conference, (Scuola Superiore G. Reiss Romoli) July 29-August 4, L'Aquila, Italy.
- ★ Q Zheng (2008) An overview of the Luria-Delbrück distribution, invited departmental seminar, Department of Statistics at the University of Kentucky, March 21, Lexington, KY.
- ★ Q Zheng (2017) Improving analysis of fluctuation assay data, Second International Caparica Conference in Antibiotic Resistance, June 11 - 15, Caparica, Portugal.

*Other Recent Presentations:*

1. Q Zheng (2000) Fluctuation analysis: the past, the present, and the future, poster presentation, joint meeting of the Genetics Society of Canada and the Genetics Society of America, June 14-17, Vancouver, Canada.
2. Q Zheng (2001) Interval estimation of mutation rates using data from fluctuation experiments, poster presentation, annual meeting of the Society for Mathematical Biology joint with Japanese Association for Mathematical Biology, July 16-19, Hilo, Hawaii.
3. Q Zheng (2001) On a property of some nucleotide substitution models, Joint Statistical Meetings, August 5-9, Atlanta, GA.
4. Q Zheng (2007) Maximum likelihood estimation of mutation rates under the Haldane model, 39th Symposium on the Interface: Computing Science and Statistics, May 23-26, Philadelphia, PA.
5. Q Zheng (2007) Tackling Bartlett's formulation of Luria and Delbrück's mutation model, joint annual meetings of the Society for Mathematical Biology and the Japanese Society of Mathematical Biology, July 31 - August 3, San Jose, CA.
6. Q Zheng (2008) Logical issues arising from the directed mutation controversy, Genetic analysis: Model organisms to human biology (Genetics Society of America), January 5-8, San Diego, CA.
7. Q Zheng (2008) A new discrete distribution induced by the Luria-Delbrück mutation model, annual meeting of the Society for Mathematical Biology, July 30 - August 2, Toronto, Canada.
8. Q Zheng (2009) Comparing Bayesian and Frequentist approaches to estimating mutation rates, ENAR Spring Meetings, March 15-18, San Antonio, TX.
9. Q Zheng (2009) Accounting for plating efficiency in fluctuation experiments, Joint Conference of the Society for Mathematical Biology and the Chinese Society for Mathematical Biology, June 14-17, Hangzhou, China.

10. Q Zheng, DG Gorman (2010) An agent-based model of social interactions between drinkers and abstainers, poster presentation, Summer Computer Simulation Conference (Summer-Sim'10), July 11-14, Ottawa, Canada.
11. Q Zheng (2016) How many cultures are needed? 6th ASM Conference on Beneficial Microbes, September 9-12, Seattle, WA.
12. Q Zheng (2016) The mutation frequency may mislead, Texas Branch Fall Meeting of the American Society for Microbiology, November 10-12, Richardson, TX.
13. Q. Zheng (2017) R in research on microbial mutation rates, useR! 2017, July 4 – July 7, Brussels, Belgium.
14. Q. Zheng (2018) High performance computing enriches understanding of chromosome segregation, Second Annual Texas A&M Research Computing Symposium, June 14, College Station, TX.
15. Q. Zheng (2018) A novel way to teach biostatistics to public health students, 10th International Conference on Teaching Statistics, July 8 - July 13, Kyoto, Japan.
16. Q. Zheng (2018) Shedding new light on random chromosome segregation, 11th European Conference on Mathematical and Theoretical Biology, July 23 - July 27, Lisbon, Portugal.
17. Q. Zheng, Let Master of Public Health Students Experience Statistical Reasoning, 22nd Annual International Conference on Education, Virtual presentation, May 18-21, 2020, Athens, Greece.
18. Q. Zheng, Improving the Teaching of Biostatistics in An Online Master Degree Program in Epidemiology, The 5th International Conference on Distance Education and Learning, virtual presentation, May 22-25, 2020, Beijing, China.
19. Q. Zheng, Weaving computational thinking into biostatistics education of public health students, 2021 Transformational Teaching and Learning Conference (TAMU), April 30, 2021.
20. Q. Zheng, Let computational thinking permeate biostatistics education of public health students, 6th International Conference on Distance Education and Learning, Shanghai, May 23, 2021.
21. Q. Zheng, Make better use of fluctuation assay data, iPoster, World Microbe Forum, 20-24 June, 2021.
22. Q. Zheng, Let students see all facets of the Luria-Delbrück Experiment, poster presentation, Microbe 2022, Washington DC, June 12, 2022.
23. Q. Zheng, The Role of the Zone of Proximal Development in Biostatistics Teaching, Texas Conference on Student Success, poster presentation, 4:00-6:00pm, October 20, 2022, College Station, TX.

24. James Hose, Hollis Howe, Nathaniel Sharp, Qi Zheng, Audrey P. Gasch, The relationship between aneuploidy and chromosome instability in wild yeast, Poster presentation, the Yeast Genetics Meeting 2022, August 17th - 21st in Los Angeles, CA.
25. Q Zheng, A three-stage approach for teaching biostatistics and computing to public health students, 2023 Transformational Teaching & Learning Conference, May 4, 2023
26. Q Zheng, A practical algorithm for an important class of the Luria-Delbruck distribution, Poster presentation, Society for Mathematical Biology Annual Meeting, Columbus, Ohio, July 16 - July 21, 2023 (poster presentation).
27. Q. Zheng, Inject personalized interaction into an online biostatistics course. 2023 Texas Conference on Student Success, poster presentation, October 4, 2023, Cellege Station, TX.
28. Q. Zheng, Bringing Conceptual Knowledge of Biostatistics into the Zone of Proximal Development via Integrated Computing Exercisesr, virtual presentation at the Learning Ideas Conference 2024, June 14, 2024, New York time 3:15-3:45.
29. Q. Zheng, Weaving the R language into biostatistics for public health students, Poster presentation at the 2024 Texas Conference on Student Success, October 2, 2024.

*Peer-reviewed journal articles:*

The symbol \* indicates that the author is a graduate students on whose degree committee I sat.

1. T Mou, Q Zheng (1984) Correlation and path analysis of factors affecting yield of rape, *Chinese Journal of Oil Crop Sciences*, 3: 59-63.
2. Q Zheng, JH Matis (1993) Some applications, properties and conjectures for higher order cumulants of a Markovian stepping-stone model. *Communications in Statistics - Theory and Methods*, 22:3305-3319.
3. Q Zheng, JH Matis (1993) Approximating discrete multivariate distributions from known moments. *Communications in Statistics - Theory and Methods*, 22:3553-3567.
4. Q Zheng, JH Matis (1994) Correlation coefficient revisited, *The American Statistician*, 48:240-241.
5. Q Zheng (1994) On the exact hazard and survival functions of the MVK stochastic carcinogenesis model. *Risk Analysis*, 14:1081-1084.
6. JH Matis, Q Zheng, TR Kiffe (1995) Describing the spread of biological populations using stochastic compartmental models with births. *Mathematical Biosciences*, 126:215-247.
7. Q Zheng (1995) On a compartmental analysis result, *Mathematical Biosciences*, 130:203-206.
8. Q Zheng (1995) On the MVK stochastic carcinogenesis model with Erlang distributed cell life lengths. *Risk Analysis*, 15:495-502.

9. Q Zheng (1995) A note on an approximation to Neyman type A distributions. *Communications in Statistics – Simulation and Computation*, 24:889-895.
10. DW Gaylor, Q Zheng (1996) Risk assessment of nongenotoxic carcinogens based upon cell proliferation/death rates in rodents, *Risk Analysis*, 16:221-225.
11. DW Gaylor, Q Zheng (1997) A note on the relationship between lifetime tumor risk and expected time to tumor, *Risk Analysis*, 17:5-7.
12. Q Zheng, WK Lutz, DW Gaylor (1997) A carcinogenesis model describing mutational events at the DNA adduct level, *Mathematical Biosciences*, 144:23-44.
13. Q Zheng (1997) A unified approach to a class of stochastic carcinogenesis models, *Risk Analysis*, 17:617-624.
14. Q Zheng (1997) On a birth-and-death process induced distribution, *Biometrical Journal*, 39:699-705.
15. Q Zheng (1997) Remarks on a model of labeling indices, *Carcinogenesis*, 18:2461-2462.
16. Q Zheng (1997) Exploring physiologically based pharmacokinetic models, *Mathematica in Education and Research*, 6(2):22-28.
17. Q Zheng (1998) To use or not to use? Backward equations in stochastic carcinogenesis models, *Biometrics*, 54:384-388.
18. Q Zheng (1998) On a trinity role of the survival and hazard functions of the two-stage carcinogenesis models, *Communications in Statistics — Simulation and Computation*, 27:137-145.
19. Q Zheng (1998) Note on the nonhomogeneous Prendiville process, *Mathematical Biosciences*, 148:1-5.
20. Q Zheng (1998) A stochastic two-phase growth model, *Bulletin of Mathematical Biology*, 60:151-161.
21. Q Zheng (1998) Computer algebra is indispensable in some problems of mathematical biology, *Mathematical Biosciences*, 151:219-225.
22. JB LaBorde, KS Wall, B Bolon, TS Kumpe, R Patton, Q Zheng, R Kodell, JF Young (1999) Haematology and serum chemistry parameters of the pregnant rat, *Laboratory Animals*, 33:275-287.
23. Q Zheng (1999) Comments on the hazard functions of a two-stage carcinogenesis model, *Radiation Research*, 151:120.
24. Q Zheng (1999) Solution to the hazard function of some two-stage carcinogenesis models when normal cell growth is piecewise linear, *Communications in Statistics, Theory and Methods*, 28(8):1921-1929.

25. Q Zheng (1999) Progress of a half century in the study of the Luria-Delbrück distribution, *Mathematical Biosciences* 162:1-32.
26. RL Kodell, JF Young, RR Delongchamp, A Turturro, JJ Chen, DW Gaylor, PC Howard, Q Zheng (2001) A mechanistic approach to modeling the risk of liver tumors in mice exposed to fumonisin B1 in the diet, *Food Additives and Contaminants*, 18:237-253.
27. Q Zheng (2001) On the dispersion index of a Markovian molecular clock, *Mathematical Biosciences*, 172:115-128.
28. Q Zheng (2002) Statistical and algorithmic methods for fluctuation analysis with SALVADOR as an implementation, *Mathematical Biosciences*, 176:237-252.
29. Q Zheng (2002) Computing relations between moments and cumulants, *Computational Statistics*, 17:507-515.
30. Q Zheng (2003) Mathematical issues arising from the directed mutation controversy, *Genetics*, 164:373-379.
31. Q Zheng (2005) New algorithms for Luria-Delbrück fluctuation analysis, *Mathematical Biosciences*, 196:198-214.
32. Q Zheng (2005) Update on estimation of mutation rates using data from fluctuation experiments, *Genetics*, 171:861-864.
33. P Singh, B Camazine, Y Jadhav, R Gupta, P Mukhopadhyay, A Khan, R Reddy, Q Zheng, D Smith, R Khode, B Bhatt, S Bhat, Y Yaqub, RS Shah, A Sharma, P Sikka, RA Erickson (2007) Endoscopy ultrasound as a first test for diagnosis and staging of lung cancer: a prospective study, *American Journal of Respiratory and Critical Care Medicine*, 175:345-354.
34. Q Zheng (2007) On Haldane's formulation of Luria and Delbrück's mutation model, *Mathematical Biosciences*, 209:500-513.
35. Q Zheng (2008) On Bartlett's formulation of the Luria-Delbrück mutation model, *Mathematical Biosciences*, 215:48-54.
36. Q Zheng (2008) A note on plating efficiency in fluctuation experiments, *Mathematical Biosciences*, 216:150-153.
37. Q Zheng (2009) On a logical difficulty in the directed mutation debate, *Genetics Research*, 91:5-7.
38. Q Zheng (2009) Remarks on the asymptotics of the Luria-Delbrück and related distributions, Letter to the Editor, *Journal of Applied Probability*, 46:1221-1224.
39. Q Zheng (2010) A new discrete distribution induced by the Luria-Delbrück mutation model, *Statistics*, 44(5):529-540.

40. Q Zheng (2010) The Luria-Delbrück distribution: Early statistical thinking about evolution, *CHANCE*, 23(2):15-18.
41. Q Zheng (2011) A Bayesian approach for correcting for partial plating in fluctuation experiments, *Genetics Research*, 93:351-356.
42. RW Hutchison, DA Govathoti, K Fehlis, Q Zheng, JH Cottrell, N Franklin, GM Montgomery (2011) Improving severe sepsis outcomes: Cost and time to first antibiotic dose, *Dimensions of Critical Care Nursing*, 3(5):277-282.
43. JD Brender, MM Werler, KE Kelley, AM Vuong, MU Shinde\*, Q Zheng, JC Huber Jr., JR Sharkey, JS Griesenback, PA Romitti, PH Langlois, L Suarez, MA Canfield, the National Birth Defects Prevention Study (2011) Nitrosatable drug exposure during early pregnancy and neural tube defects in offspring, *American Journal of Epidemiology*, 174(11):1286-1295.
44. Q Zheng (2011) A Bayesian two-level model for fluctuation assay, *Genetica*, 139:1409-1416.
45. K Miller\*, M Benden, A Pickens, E Shipp, Q Zheng (2012) Ergonomics principles associated with laparoscopic surgeon injury/illness, *Human Factors*, 54(6):1087-1092.
46. JC Huber, JD Brender, Q Zheng, JR Sharkey, AM Vuong, MU Shinde\*, JS Griesenbeck, L Suarez, PH Langlois, MA Canfield, PA Romitti, PJ Weyer, (2013) Maternal dietary intake of nitrates, nitrites and nitrosamine and selected birth defects in offspring: a case-control study, *Nutrition Journal* 12:34, doi: 10.1186/1475-2891-12-34.
47. MU Shinde\*, AM Vuong, JD Brender, MM Werler, KE Kelley, JC Huber Jr., JR Sharkey, Q Zheng, L Suarez, PH Langlois, M A Canfield, PA Romitti, S Malik, the National Birth Defects Prevention Study (2013) Prenatal exposure to nitrosatable drugs, vitamin C, and risk of selected birth defects, *Birth Defects Research (Part A): Clinical and Molecular Teratology*, 97:515-531.
48. JD Brender, PJ Weyer, PA Romitti, BP Mohanty, MU Shinde\*, AM Vuong, JR Sharkey, D Dwivedi, SA Horel, J Kantamnen, JC Huber Jr., Q Zheng, MM Werler, KE Kelley, JS Griesenback, FB Zhan, PH Langlois, L Suarez, MA Canfield, the National Birth Defects Prevention Study (2013) Prenatal nitrate intake from drinking water and selected birth defects in offspring of participants in the National Birth Defects Prevention study. *Environmental Health Perspectives*, 121(9):1083-1089.
49. AM Vuong, MU Shinde\*, JD Brender, EM Shipp, JC Jr Huber, Q Zheng, TJ McDonald, JR Sharkey, AT Hoyt, MM Werler, KE Kelley, PH Langlois, MA Canfield, National Birth Defects Prevention Study (2015) Nitrosatable drug exposure during pregnancy and preterm and small-for-gestational-age births, *Paediatric and Perinatal Epidemiology*, 29:60-71.
50. Q Zheng (2015) Methods for comparing mutation rates using fluctuation assay data, *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 777:20-22.
51. Q Zheng (2015) A new practical guide to the Luria-Delbrück protocol, *Mutation Research /Fundamental and Molecular Mechanisms of Mutagenesis*, 781:7-13.

52. Q Zheng (2015) The Luria-Delbrück protocol is still the most practical, *Journal of Theoretical Biology*, 386:188-190.
53. AE Shortz\*, A Pickens, Q Zheng and RK Mehta (2015) The effect of cognitive fatigue on prefrontal cortex correlates of neuromuscular fatigue in older women, *Journal of Neuro-Engineering and Rehabilitation*, 12:115 DOI 10.1186/s12984-015-0108-3.
54. Q Zheng (2016) A second look at the final number of cells in a fluctuation experiment, *Journal of Theoretical Biology*, 401:54-63.
55. Q Zheng (2016) Comparing mutation rates under the Luria-Delbrück protocol, *Genetica*, 144:351-359.
56. AC Marsalia\*, TK Ferris, ME Benden, Q Zheng (2016) Evaluation of vibrotactile warning systems for supporting hazard awareness and safety of distracted pedestrians, *IIE Transactions on Occupational Ergonomics and Human Factors*, 4:222-235.
57. Q Zheng (2017) Sample size determination for the fluctuation experiment, *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 795:10-14.
58. Q Zheng (2017) Toward a unique definition of the mutation rate, *Bulletin of Mathematical Biology*, 79:683-692.
59. AW Pickens, LD Robertson, ML Smith, Q Zheng, S Song (2017) Headphone evaluation for app-based automated mobile hearing screening, *International Archives of Otorhinolaryngology*, DOI: 10.1055/s-0037-1607438.
60. Q Zheng (2017) rSalvador: an R package for the fluctuation experiment, *G3:Gene|Genome|Genetics*, Volume 7, 3849–3856.
61. DM Gorman, WR Ponicki, Q Zheng, D Han, PJ Gruenewald, AJ Gaidus (2018) Violent crime redistribution in a city following a substantial increase in the number of off-sale alcohol outlets: A Bayesian analysis, *Drug and Alcohol Review*, 37:348-355.
62. Q Zheng (2018) A cautionary note on the mutation frequency in microbial research, *Mutation Research – Fundamental and Molecular Mechanisms of Mutagenesis*, 809:51-55.
63. Q Zheng, J Werngren (2018) An unbiased attitude is vital to exploring the Beijing genotype of *Mycobacterium tuberculosis*, *Tuberculosis*, 111:193-197.
64. AE Shortz, RK Mehta, S Camille Peres, M Benden, Q Zheng, Development of the Fatigue Risk Assessment and Management in high-risk Environments (FRAME) survey: A Participatory Approach, *International Journal of Environmental Research and Public Health* 2019, 16 (4), 522.
65. Q Zheng, Let master of public health students experience statistical reasoning, *Athens Journal of Health and Medical Sciences*, Volume 7, Issue 1, 47-62 (2020).

66. Q Zheng, Improving the teaching of biostatistics in an online master degree program in epidemiology, Proceedings of 2020 the 5th International Conference on Distance Education and Learning, pp. 89-93 (2020). DOI:<https://doi.org/10.1145/3402569.3402582>
67. Q Zheng, New approaches to mutation rate fold change in Luria-Delbrück fluctuation experiments, *Mathematical Biosciences*, 335 (2021) 108572.
68. Q Zheng, 2021. webSalvador: A Web tool for the Luria-Delbrück experiment, *Microbiology Resource Announcements*, 10:e00314-21. <https://doi.org/10.1128/MRA00314-21>.
69. Cason Schmit, Theodoros Giannouchos, Mahin Ramezani, Qi Zheng, Michael Morrissey, Hye-Chung Kum, US Privacy Laws Go Against Public Preferences and Impede Public Health and Research: Survey Study, *Journal of Medical Internet Research*, 23(7):e25266, 2021. doi: 10.2196/25266
70. S Park, H-C Kum, MA Morrissey, Q Zheng, M Lawley, Adherence to telemonitoring therapy for Medicaid patients with hypertension: A Case Study, *Journal of Medical Internet Research* 2021:23(9):e29018, doi: 10.2196/29018.
71. Q Zheng, 2021, Let Computational Thinking Permeate Biostatistics Education of Public Health Students, the 6th International Conference on Distance Education and Learning, May 2021 Pages 283–288, <https://doi.org/10.1145/3474995.3475043>
72. Q Zheng, 2022, Estimation of rates of non-neutral mutations when bacteria are exposed to subinhibitory levels of antibiotic, *Bulletin of Mathematical Biology*, 84:131.
73. Q Zheng, 2022, Integrating computational thinking into a longitudinal data analysis course for public health students, *Discover Education* (2022) 1:15.
74. Q Zheng, 2022, A fresh approach to a special type of the Luria–Delbrück distribution, *Axioms* 2022, 11, 730. <https://doi.org/10.3390/axioms11120730>
75. S Park, H-C Kum, Q Zheng, MA Lawley, Real-world adherence and effectiveness of remote patient monitoring among Medicaid patients with diabetes:Retrospective Cohort Study, *Journal of Medical Internet Research* 2023;25:e45033, doi: 10.2196/45033.
76. Q Zheng, 2023, Methods for two nonstandard problems arising from the Luria-Delbrück experiment, *Genetica*, 10.1007/s10709-023-00200-1
77. Q Zheng, 2024, What are we missing in teaching the Luria-Delbrück experiment? *Journal of Microbiology and Biology Education*, DOI: 10.1128/jmbe.00161-23
78. CD Schmit, BV Larson, T Tanabe, M Ramezani, Q Zheng, H-C Kum, 2024, Changing US support for public health data use through pandemic and political turmoil, *The Milbank Quarterly*, vol. 102, No. 2, pp. 463-520. <http://doi.org/10.1111/1468-0009.12700>,
79. Q Zheng, Bringing Conceptual Knowledge of Biostatistics into the Zone of Proximal Development via Integrated Computing Exercises, D. Guralnick et al. (Eds.): *TLIC 2024, LNNS 1166*, pp. 283–293, 2024. [https://doi.org/10.1007/978-3-031-73427-4\\_29](https://doi.org/10.1007/978-3-031-73427-4_29)

80. James Hose, Qi Zheng, Nathaniel P Sharp, Audrey P Gasch (2024) On the rate of aneuploidy reversion in a wild yeast model, *Genetics*, 229(2), iyae196, <https://doi.org/10.1093/genetics/iyae196>

*Book chapters:*

- ★ Q Zheng, (2008, Stochastic multistage cancer models: A fresh look at an old approach, in *Handbook of Cancer Models with Applications* , W.-Y. Tan and L. Hanin (eds), pp.25-44, World Scientific, New Jersey.
- ★ Q Zheng, 2023, Estimation of microbial mutation rates in tuberculosis research, N. Rezaei (ed.) *Tuberculosis, Integrated Science* 11, Chapter 43, pp. 883 - 904, Springer Nature Switzerland AG

*Proceedings articles:*

- ★ Q Zheng (1999) Automating the computation of cumulants of stochastic population processes, *Computing Science and Statistics*, 31: 328-333.