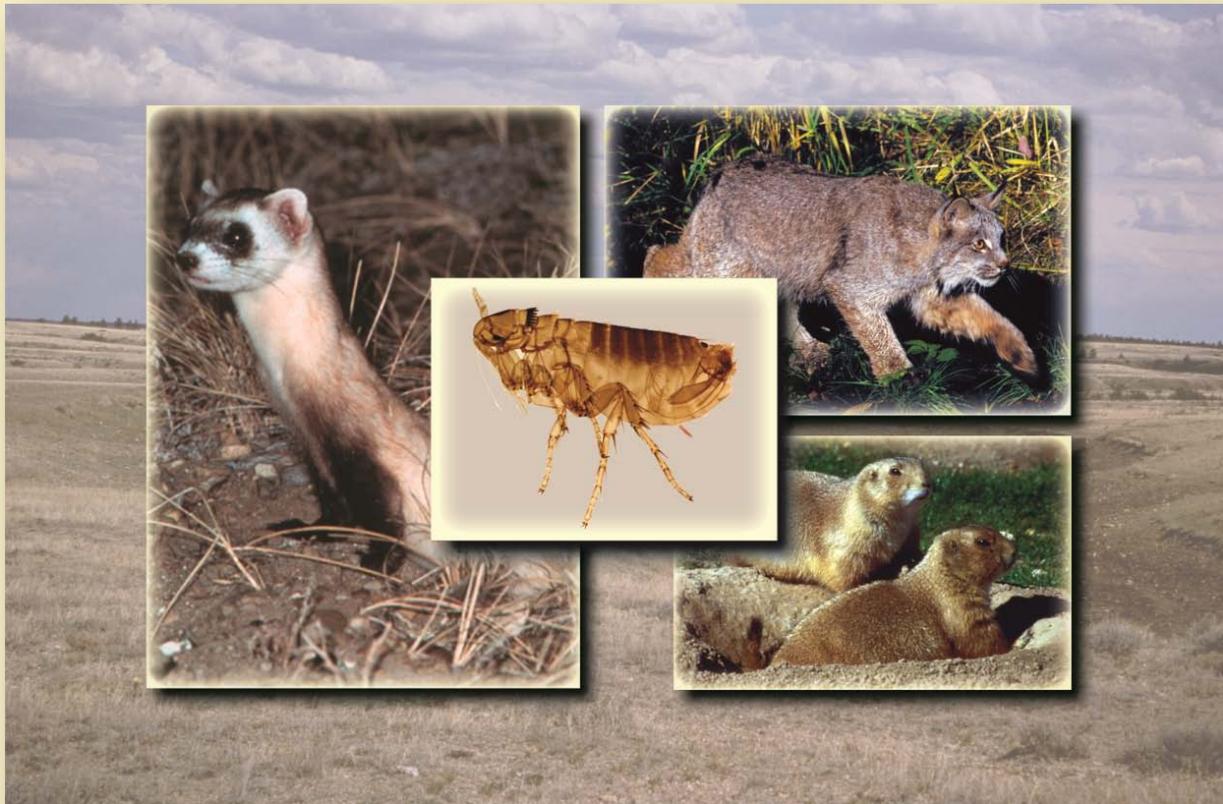


Prepared in cooperation with the National Park Service

Bibliography of Literature Pertaining to Plague (*Yersinia pestis*)

By Laura E. Ellison and Megan K. Eberhardt Frank



Open-File Report 2011–1293

U.S. Department of the Interior
U.S. Geological Survey

Bibliography of Literature Pertaining to Plague (*Yersinia pestis*)

By Laura E. Ellison and Megan K. Eberhardt Frank

Open-File Report 2011–1293

U.S. Department of the Interior
U.S. Geological Survey

U.S. Department of the Interior
KEN SALAZAR, Secretary

U.S. Geological Survey
Marcia K. McNutt, Director

U.S. Geological Survey, Reston, Virginia: 2011

For product and ordering information:
World Wide Web: <http://www.usgs.gov/pubprod>
Telephone: 1-888-ASK-USGS

For more information on the USGS—the Federal source for science about the Earth,
its natural and living resources, natural hazards, and the environment:
World Wide Web: <http://www.usgs.gov>
Telephone: 1-888-ASK-USGS

Suggested citation:
Ellison, L.E., and Eberhardt Frank, M.K., 2011, A bibliography of literature pertaining to plague (*Yersinia pestis*):
U.S. Geological Survey Open-File Report 2011-1293, 43 p.

Any use of trade, product, or firm names is for descriptive purposes only and does not imply
endorsement by the U.S. Government.

Although this report is in the public domain, permission must be secured from the individual
copyright owners to reproduce any copyrighted material contained within this report.

Contents

Introduction.....	1
Acknowledgments	1
Bibliography.....	2

A Bibliography of Literature Pertaining to Plague (*Yersinia pestis*)

By Laura E. Ellison and Megan K. Eberhardt-Frank

Introduction

Plague is an acute and often fatal zoonotic disease caused by the bacterium *Yersinia pestis*. *Y. pestis* mainly cycles between small mammals and their fleas; however, it has the potential to infect humans and frequently causes fatalities if left untreated. It is often considered a disease of the past; however, since the late 1800s, plague's geographic range has expanded greatly, posing new threats in previously unaffected regions of the world, including the Western United States.

As part of an interagency agreement between the U.S. Geological Survey (USGS) and the National Park Service (NPS), the Biological Resource Management Division of the NPS requested assistance with a detailed literature search on plague. We conducted this literature search using Internet resources and databases. The keywords chosen for the searches included plague, *Yersinia pestis*, management, control, wildlife, prairie dogs, fleas, NPS, North America, and mammals. Keywords were used alone or in combination with the other terms. Although this search pertains mostly to North America, we include citations from the international research community, as well. Databases and search engines used included Google (<http://www.google.com>), Google Scholar (<http://scholar.google.com>), SciVerse Scopus (<http://www.scopus.com>), ISI Web of Knowledge (<http://apps.isiknowledge.com>), and the USGS Library's Digital Desktop (<http://library.usgs.gov>). The literature-cited sections of manuscripts obtained from keyword searches were cross-referenced to identify additional citations or gray literature that were missed by the Internet search engines.

This Open-File Report is intended to be an Internet-accessible bibliography, and we hope to periodically update it with new citations or older references that we may have missed during this compilation. Hence, the authors would be grateful to receive notice of any new or old papers that the audience (users) think need to be included.

Acknowledgments

The work on which this Open-File Report is based was performed with a cooperative agreement between the National Park Service and the U.S. Geological Survey. Jennifer Shoemaker provided assistance with the formatting of the final report.

Bibliography

- Abu Khweek, A., Fetherson, J.D., and Perry, R.D., 2010, Analysis of HmsH and its role in plague biofilm formation: *Microbiology*, v. 156, p. 1424–1438.
- Achtman, M., Zurth, K., Morelli, G., Torrea, G., Guiyoule, A., and Carniel, E., 1999, *Yersinia pestis*, the cause of plague, is a recently emerged clone of *Yersinia pseudotuberculosis*: *Proceedings of the National Academy of Sciences*, v. 96, p. 14043–14048.
- Achtman, M., Morelli, G., Zhu, P., Wirth, T., Diehl, I., Kusecek, B., Vogler, A.J., Wagner, D.M., Allender, C.J., Easterday, W.R., Chenal-Francisque, V., Worsham, P., Thomson, N.R., Parkhill, J., Lindler, L.E., Carniel, E., and Keim, P., 2004, Microevolution and history of the plague bacillus, *Yersinia pestis*: *Proceedings of the National Academy of Sciences*, v. 101, p. 17837–17842.
- Adair, D.M., Worsham, P.L., Hill, K.K., Klevytska, A.M., Jackson, P.J., Friedlander, A.M., and Keim, P., 2000, Diversity in a variable-number tandem repeat from *Yersinia pestis*: *Journal of Clinical Microbiology*, v. 38, p. 1516–1519.
- Addink, E.A., De Jong, S.M., Davis, S.A., Dubyanskiy, V., Burdelov, L.A., and Leirs, H., 2010, The use of high-resolution remote sensing for plague surveillance in Kazakhstan: *Remote Sensing of Environment*, v. 114, p. 674–681.
- Adjemian, J.C.Z., Girvetz, E.H., Beckett, L., and Foley, J.E., 2006, Analysis of genetic algorithm for rule-set production (GARP) modeling approach for predicting distributions of fleas implicated as vectors of plague, *Yersinia pestis*, in California: *Journal of Medical Entomology*, v. 43, p. 93–103.
- Adjemian, J.Z., Foley, P., Gage, K.L., and Foley, J.E., 2007, Initiation and spread of traveling waves of plague, *Yersinia pestis*, in the Western United States: *American Journal of Tropical Medicine and Hygiene*, v. 76, p. 365–375.
- Adjemian, J.Z., Adjemian, M.K., Foley, P., Chomel, B.B., Kasten, R.W., and Foley, J.E., 2008, Evidence of multiple zoonotic agents in a wild rodent community in the eastern Sierra Nevada: *Journal of Wildlife Diseases*, v. 44, p. 737–742.
- Agar, S.L., Sha, J., Baze, W.B., Erova, T.E., Foltz, S.M., Suarez, G., Wang, S.F., and Chopra, A.K., 2009, Deletion of braun lipoprotein gene (*lpp*) and curing of plasmid pPCP1 dramatically alter the virulence of *Yersinia pestis* CO92 in a mouse model of pneumonic plague: *Microbiology-SGM*, v. 155, p. 3247–3259.
- Agar, S.L., Sha, J., Foltz, S.M., Erova, T.E., Walberg, K.G., Baze, W.B., Suarez, B., Peterson, J.W., and Chopra, A.K., 2009, Characterization of the rat pneumonic plague model: infection kinetics following aerosolization of *Yersinia pestis* CO92: *Microbes and Infection*, v. 11, p. 205–214.
- Agnew, W., Uresk, D.W., and Hansen, R.M., 1986, Flora and fauna associated with prairie dog colonies and adjacent ungrazed mixed-grass prairie in western South Dakota: *Journal of Range Management*, v. 39, p. 135–139.
- Aguirre, A.A., and Starkey, E.E., 1994, Wildlife disease in U.S. national parks: Historical and coevolutionary perspectives: *Conservation Biology*, v. 8, p. 654–661.
- Aguirre, A.A., Hansen, D.E., and Starkey, E.E., 1993, Special initiative project: Animal disease issues in the national park system: U.S. Department of Interior, National Park Service, Pacific Northwest Region, Cooperative Park Studies Unit Technical Report NPS/PNROSU/NRTR-93/16, 126 p.
- Aguirre, A.A., Hansen, D.E., and Starkey, E.E., 1994, Animal disease issues in the national park system clarified by nationwide survey: *Park Science*, v. 14, p. 14–15.
- Aguirre, A.A., Starkey, E.E., and Hansen, D.E., 1995, Wildlife diseases in national park ecosystems: *Wildlife Society Bulletin*, v. 23, p. 415–419.

- Amatre, G., Babi, N., Ensore, R.E., Ogen-Odoi, A., Atiku, L.A., Akol, A., Gage, K.L., and Eisen, R.J., 2009, Flea diversity and infestation prevalence of rodents in a plague-endemic region of Uganda: *American Journal of Tropical Medicine and Hygiene*, v. 81, p. 718–724.
- Amoako, K.K., Goji, N., MacMillan, T., Said, K.B., Druhan, S., Tanaka, E., and Thomas, E.G., 2010, Development of multitarget real-time PCR for the rapid, specific, and sensitive detection of *Yersinia pestis* in milk and ground beef: *Journal of Food Protection*, v. 73, p. 18–25.
- Andeltdt, W.F., White, G.C., Schnurr, P.M., and Navo, K.W., 2009, Occupancy of random plots by white-tailed and Gunnison’s prairie dogs: *Journal of Wildlife Management*, v. 73, p. 35–44.
- Anderson, D.M., Ciletti, N.A., Lee-Lewis, H., Elli, D., Segal, J., DeBord, K.L., Overheim, K.A., Tretiakova, M., Brubaker, R.R., and Schneewind, O., 2009, Pneumonic plague pathogenesis and immunity in brown Norway rats: *American Journal of Pathology*, v. 174, p. 910–921.
- Anderson, S.H., and Williams, E.S., 1997, Plague in a complex of white-tailed prairie dogs and associated small mammals in Wyoming: *Journal of Wildlife Diseases*, v. 33, p. 720–732.
- Andrews, G.P., Vernati, G., Ulrich, R., Rocke, T.E., Edwards, W.H., and Adamovicz, J.J., 2010, Identification of in vivo-induced conserved sequences from *Yersinia pestis* during experimental plague infection in the rabbit: *Vector-borne and Zoonotic Diseases*, v. 10, p. 749–756.
- Anisimov, A.P., 2002, Factors of *Yersinia pestis* providing for circulation and persistence of the plague pathogen in ecosystems of natural foci. Communication 2: Molecular Genetics, Microbiology and Virology, v. 5, p. 1–14.
- Antolin, M.F., Savage, L.T., and Eisen, R.J., 2006, Landscape features influence genetic structure of black-tailed prairie dogs (*Cynomys ludovicianus*): *Landscape Ecology*, v. 21, p. 867–875.
- Antolin, M.F., Gober, P., Luce, B., Biggins, D.E., Van Pelt, W.E., Seery, D.B., Lockhart, M., and Ball, M., 2002, The influence of sylvatic plague on North American wildlife at the landscape level, with special emphasis on black-footed ferret and prairie dog conservation: *Transactions of the North American Wildlife and Natural Resources Conference*, v. 67, p. 104–127.
- Antolin, M.F., Biggins, D.E., and Gober, P., 2010, Symposium on the ecology of plague and its effects on wildlife: A model for translational research: *Vector-borne and Zoonotic Diseases*, v. 10, p. 3–5.
- Apa, A.D., Uresk, D.W., and Linder, R.L., 1990, Black-tailed prairie dog populations one year after treatment with rodenticides: *Great Basin Naturalist*, v. 50, p. 107–113.
- Apa, A.D., Uresk, D.W., and Linder, R.L., 1991, Impacts of black-tailed prairie dog rodenticides on nontarget passerines: *Great Basin Naturalist*, v. 51, p. 301–309.
- Aragao, A.I., Pinheiro, K.M.D., Seoane, A.C.M., Tavares, C., and de Almeida, A.M.P., 2009, Prevalence of antibodies against *Yersinia pestis* in domestic carnivores, in plague foci in the state of Ceara: *Revista Da Sociedade Brasileira de Medicina Tropical*, v. 42, p. 711–715.
- Archer, S., Garrett, M.G., and Detling, J.K., 1987, Rates of vegetation change associated with prairie dog (*Cynomys ludovicianus*) grazing in North American mixed-grass prairie: *Vegetatio*, v. 72, p. 159–166.
- Ari, T.B., Gershunov, A., Tristan, R., Cazelles, B., Gage, K., and Stenseth, N.C., 2010, Interannual variability of human plague occurrence in the Western United States explained by tropical and North Pacific Ocean climate variability: *American Journal of Tropical Medicine and Hygiene*, v. 83, p. 624–632.
- Arjo, W.M., Gese, E.M., Bromley, C., Kozlowski, A., and Williams, E.S., 2003, Serologic survey for diseases in free-ranging coyotes (*Canis latrans*) from two ecologically distinct areas of Utah: *Journal of Wildlife Diseases*, v. 39, p. 449–455.

- Arnold, T., Hensel, A., Hagen, R., Aleksic, S., Neubauer, H., and Scholz, H.C., 2001, A highly specific one-step PCR assay for the rapid discrimination of enteropathogenic *Yersinia enterocolitica* from pathogenic *Yersinia pseudotuberculosis* and *Yersinia pestis*: *Systematic and Applied Microbiology*, v. 24, p. 285–289.
- Attila, B., Anna, P., and Kata, K., 2010, Important zoonotic diseases transmitted by pet small mammals 1. Bacterial diseases. Literature review: *Magyar Allatorvosok Lapja*, v. 132, p. 651–658.
- Auerbach, R.K., Tuanyok, A., Probert, W.S., Kenefic, L., Vogler, A.J., Bruce, D.C., Munk, C., Brettin, T.S., Eppinger, M., Ravel, J., Wagner, D.M., and Keim, P., 2007, *Yersinia pestis* evolution on a small timescale: Comparison of whole genome sequences from North America: *PLoS ONE*, v. 2, e770, p. 1–6.
- Augustine, D.J., Matchett, M.R., Toombs, T.P., Cully, J.F., Johnson, T.L., and Sidle, J.G., 2008a, Spatiotemporal dynamics of black-tailed prairie dog colonies affected by plague: *Landscape Ecology*, v. 23, p. 255–267.
- Augustine, D.J., Dinsmore, S.J., Wunder, M.B., Dreitz, V.J., and Knopf, F.L., 2008b, Response of mountain plovers to plague-driven dynamics of black-tailed prairie dog colonies: *Landscape Ecology*, v. 23, p. 689–697.
- Ayyadurai, S., Houhamdi, L., Lepidi, H., Nappez, C., Raoult, D., and Drancourt, M., 2008, Long-term persistence of virulent *Yersinia pestis* in soil: *Microbiology*, v. 154, p. 2865–2871.
- Ayyadurai, S., Lepidi, H., Nappez, C., Raoult, D., and Drancourt, M., 2010, Lovastatin protects against experimental plague in mice: *PLoS ONE*, v. 5, p. 1–5.
- Baca-Estrada, M.E., Foldvari, M., Snider, M., Harding, K., Kournikakis, B., Babiuk, L.A., and Griebel, P., 2000, Intranasal immunization with liposome-formulated *Yersinia pestis* vaccine enhances mucosal immune responses: *Vaccine*, v. 18, p. 2203–2211.
- Bach, S., de Almeida, A., and Carniel, E., 2000, The *Yersinia* high-pathogenicity island is present in different members of the family Enterobacteriaceae: *FEMS Microbiology Letters*, v. 183, p. 289–294.
- Bahmanyar, M., and Cavanaugh, D.C., 1976, *Plague manual*: World Health Organization, Geneva, 76 p.
- Bai, G., Golubov, A., Smith, E.A., and McDonough, K.A., 2010, The importance of the small RNA chaperone Hfq for growth of epidemic *Yersinia pestis*, but not *Yersinia pseudotuberculosis*, with implications for plague biology: *Journal of Bacteriology*, v. 192, p. 4239–4245.
- Baker, B.W., Stanley, T.R., and Sedgwick, J.A., 1999, Predation of artificial ground nests on white-tailed prairie dog colonies: *Journal of Wildlife Management*, v. 63, p. 270–277.
- Bangert, R.K., and Slobodchikoff, C.N., 2000, The Gunnison’s prairie dog structures a high desert grassland landscape as a keystone engineer: *Journal of Arid Environments*, v. 46, p. 357–369.
- Bangert, R.K., and Slobodchikoff, C.N., 2006, Conservation of prairie dog ecosystem engineering may support arthropod beta and gamma diversity: *Journal of Arid Environments*, v. 67, p. 100–115.
- Barko, V.A., Shaw, J.H., and Leslie, D.M., Jr., 1999, Birds associated with black-tailed prairie dog colonies in southern shortgrass prairie: *Southwestern Naturalist*, v. 44, p. 484–489.
- Barnes, A.M., 1982, Surveillance and control of bubonic plague in the United States: *Symposium of the Zoological Society London*, v. 50, p. 237–270.
- Barnes, A.M., 1993, A review of plague and its relevance to prairie dog populations and the black-footed ferret, in Oldemeyer, J.L., Biggins, D.E., Miller, B.J., and Crete, R., eds., *Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret*: U.S. Fish and Wildlife Service Biological Report, v. 13, p. 28–37.
- Barnes, A.M., and Kartman, L., 1960, Control of plague vectors on diurnal rodents in the Sierra Nevada of California by the use of insecticide bait-boxes: *Journal of Hygiene*, v. 58, p. 347–355.

- Barnes, A.M., Ogden, L.J., Archibald, W.S., and Campos, E., 1974, Control of plague vectors on *Peromyscus maniculatus* by use of 2% carbaryl dust in bait stations: *Journal of Medical Entomology*, v. 11, p. 83–87.
- Bartz, S.E., Drickamer, L.C., and Kearsley, M.J.C., 2007, Response of plant and rodent communities to removal of prairie dogs (*Cynomys gunnisoni*) in Arizona: *Journal of Arid Environments*, v. 68, p. 422–437.
- Beard, M.L., Rose, S.T., Barnes, A.M., and Montenieri, J.A., 1992, Control of *Oropsylla hirsuta*, a plague vector, by treatment of prairie dog burrows with 0.5% permethrin dust: *Journal of Medical Entomology*, v. 29, p. 25–29.
- Bearden, S.W., Sexton, C., Pare, J., Fowler, J.M., Arvidson, C.G., Yerman, L., Viola, R.E., and Brubaker, R.R., 2009, Attenuated enzootic (pestoides) isolates of *Yersinia pestis* express active aspartase: *Microbiology-SGM*, v. 155, p. 198–209.
- Beck, E.W., 1994, The effect of resource availability on the activity of white-tailed prairie dogs: Logan, Utah State University, unpublished M.S. thesis, 47 p.
- Begon, M., Klassovskiy, N., Ageyev, V., Suleimenov, B., Atshabar, B., and Bennett, M., 2006, Epizootiologic parameters for plague in Kazakhstan: *Emerging Infectious Diseases*, v. 12, p. 268–273.
- Bell, H.B., and Dimmick, R.W., 1975, Hazards to predators feeding on prairie voles killed with zinc phosphide: *Journal of Wildlife Management*, v. 39, p. 816–819.
- Ben, N.K., and Moulin, A.M., 2010, The North African plague and Charles Nicolle's theory of infectious disease: *Gesnurur*, v. 67, p. 30–56.
- Ben-Gurion, R., and Shafferman, A., 1981, Essential virulence determinants of different *Yersinia* species are carried on a common plasmid: *Plasmid*, v. 5, p. 183–187.
- Bergsbaken, T., and Cookson, B.T., 2009, Innate immune response during *Yersinia* infection: Critical modulation of cell death mechanisms through phagocyte activation: *Journal of Leukocyte Biology*, v. 86, p. 1153–1158.
- Bi, Y.J., Du, Z.M., Han, Y.P., Guo, Z.B., Tan, Y.F., Zhu, Z.W., and Yang, R.F., 2009, *Yersinia pestis* and host macrophages: Immunodeficiency of mouse macrophages induced by YscW: *Immunology*, v. 128, p. e406–e417.
- Biek, R., Zarnke, R.L., Gillin, C., Wild, M., Squires, J.R., and Poss, M., 2002, Serologic survey for viral and bacterial infections in western populations of Canada lynx (*Lynx canadensis*): *Journal of Wildlife Diseases*, v. 38, p. 840–845.
- Biek, R., Ruth, T.K., Murphy, K.M., Anderson, C.R., Johnson, M., DeSimone, R., Gray, R., Hornocker, M.G., Gillin, C.M., and Poss, M., 2006, Factors associated with pathogen seroprevalence and infection in Rocky Mountain cougars: *Journal of Wildlife Diseases*, v. 42, p. 606–615.
- Biggins, D.E., and Godbey, J.L., 2003, Challenges to reestablishment of free-ranging populations of black-footed ferrets: *Comptes Rendus Biologies (Supplement 1)*, v. 326, p. 104–111.
- Biggins, D.E., and Kosoy, M.Y., 2001a, Influences of introduced plague on North American mammals: Implications from ecology of plague in Asia: *Journal of Mammalogy*, v. 82, p. 906–916.
- Biggins, D.E., and Kosoy, M.Y., 2001b, Disruptions of ecosystems in western North America due to invasion by plague: *Journal of the Idaho Academy of Science*, v. 37, p. 62–65.
- Biggins, D.E., Lockhart, J.M., and Godbey, J.L., 2006, Evaluating habitat for black-footed ferrets: Revision of an existing model, in Roelle, J.E., Miller, B.J., Godbey, J.L., and Biggins, D.E., eds., *Recovery of the black-footed ferret—Progress and continuing challenges*: U.S. Geological Survey Scientific Investigations Report 2005-5293, p. 143–150.

- Biggins, D.E., Godbey, J.L., Gage, K.L., Carter, L.G., and Montenieri, J.A., 2010, Vector control improves survival of three species of prairie dogs (*Cynomys*) in areas considered enzootic for plague: *Vector-Borne and Zoonotic Diseases*, v. 10, p. 17–26.
- Bitam, I., Ayyadurai, S., Kernif, T., Chetta, M., Boulaghman, N., Raoult, D., and Drancourt, M., 2010, New rural focus of plague, Algeria: *Emerging Infectious Diseases*, v. 16, p. 1639–1640.
- Bitam, I., Dittmar, K., Parola, P., Whiting, M.F., and Raoult, D., 2010, Fleas and flea-borne diseases: *International Journal of Infectious Diseases*, v. 14, p. e667–e676.
- Bliska, J.B., and Casadevall, A., 2009, Intracellular pathogenic bacteria and fungi—A case of convergent evolution?: *Nature Reviews Microbiology*, v. 7, p. 165–171.
- Bly-Honess, K., Truett, J.C., and Long, D.H., 2004, Influence of social bonds on post-release survival of translocated black-tailed prairie dogs (*Cynomys ludovicianus*): *Ecological Restoration*, v. 22, p. 204–209.
- Bobrov, A.G., Kirillina, O., and Perry, R.D., 2005, The phosphodiesterase activity of the HmsP EAL domain is required for negative regulation of biofilm formation in *Yersinia pestis*: *FEMS Microbiology Letters*, v. 247, p. 123–130.
- Bobrov, A.G., Kirillina, O., Ryjenkov, D.A., Waters, C.M., Price, P.A., Fetherston, J.D., Mack, D., Goldman, W.E., Gomelsky, M., and Perry, R.D., 2011, Systematic analysis of cyclic di-GMP signaling enzymes and their role in biofilm formation and virulence in *Yersinia pestis*: *Molecular Microbiology*, v. 79, p. 533–551.
- Boisier, P., Rahalison, L., Rasolomaharo, M., Ratsitorahina, M., Mahafaly, M., Razafimahefa, M., Duplantier, J., Rasifasoamanana, L., and Chanteau, S., 2002, Epidemiologic features of four successive annual outbreaks of bubonic plague in Mahajanga, Madagascar: *Emerging Infectious Diseases*, v. 8, p. 311–316.
- Bonham, C.D., and Lerwick, A., 1976, Vegetation changes induced by prairie dogs on shortgrass range: *Journal of Range Management*, v. 29, p. 221–225.
- Bonser, W., 1944, Epidemics during the Anglo-Saxon period: *Journal of the British Archaeological Association*, v. 9, p. 48–71.
- Boone, A., Kraft, J.P., and Stapp, P., 2009, Scavenging by mammalian carnivores on prairie dog colonies: Implications for the spread of plague: *Vector-Borne and Zoonotic Diseases*, v. 9, p. 185–189.
- Borchert, J.N., 2004, Epizootology and response to the bioweapon use of the plague organism, *Yersinia pestis*, in commensal rodents: *Proceedings of the Vertebrate Pest Conference*, v. 21, p. 209–216.
- Borchert, J.N., Ensore, R.E., Eisen, R.J., Atiku, L.A., Owor, N., Acayo, S., Babi, N., Montenieri, J.A., and Gage, K.L., 2010, Evaluation of rodent bait containing imidacloprid for the control of fleas on commensal rodents in a plague-endemic region of northwest Uganda: *Journal of Medical Entomology*, v. 47, p. 842–850.
- Bos, K.I., Schuenemann, V.J., Golding, G.B., Burbano, H.A., Waglechner, Nicholas, Coombes, B.K., McPhee, J.B., DeWitte, S.N., Meyer, Matthias, Schmedes, Sarah, Wood, James, Earn, D.J.D., Herring, D.A., Bauer, Peter, Poinar, H.N., and Krause, Johannes, 2011, A draft genome of *Yersinia pestis* from victims of the Black Death: *Nature*, doi:10.1038/nature10549, accessed October 13, 2011, at <http://www.nature.com/nature/journal/vaop/ncurrent/full/nature10549.html>.
- Bosch, S.A., Leong, K., Musgrave, K., Powers, J., and Wong, D., 2010, Zoonotic disease risk perception and use of personal protective measures among wildlife biologists: An application of the Health Belief Model: *Human Dimensions of Wildlife*, v. 15, p. 221–228.

- Bosio, C.F., Jarrett, C.O., and Hinnebusch, B.J., 2008, Early innate immune events in the skin after transmission of *Yersinia pestis* by fleas: *American Journal of Tropical Medicine and Hygiene*, v. 79, p. 782.
- Bosio, C.F., Jarrett, C.O., and Hinnebusch, B.J., 2009, Effects of flea feeding on early innate immune events in the skin and transmission of *Yersinia pestis*: *American Journal of Tropical Medicine and Hygiene*, v. 81, p. 418.
- Bossard, R.L., Dryden, M.W., and Broce, A.B., 2002, Insecticide susceptibilities of cat fleas (Siphonaptera: Pulicidae) from several regions of the United States: *Journal of Medical Entomology*, v. 39, p. 742–746.
- Boulanger, L.L., Ettestad, P., Fogarty, J.D., Dennis, D.T., Romig, D., and Mertz, G., 2004, Gentamicin and tetracyclines for the treatment of human plague: Review of 75 cases in New Mexico, 1985–1999: *Clinical Infectious Diseases*, v. 38, p. 663–669.
- Brinkerhoff, R.J., 2008, Mammal and flea occurrence in association with black-tailed prairie dog (*Cynomys ludovicianus*) colonies: Implications for interspecific plague transmission: Boulder, Colo., unpublished Ph.D. dissertation, University of Colorado, 175 p.
- Brinkerhoff, R.J., 2008, Habitat-associated differences in flea assemblages of striped skunks (*Mephitis mephitis*): *Comparative Parasitology*, v. 75, p. 127–131.
- Brinkerhoff, R.J., Ray, C., Thiagarajan, B., Collinge, S.K., Cully, J.F., Holmes, B., and Gage, K.L., 2008, Prairie dog presence affects occurrence patterns of disease vectors on small mammals: *Ecography*, v. 31, p. 654–662.
- Brinkerhoff, R.J., Collinge, S.K., Bai, Y., and Ray, C., 2009, Are carnivores universally good sentinels of plague?: *Vector-Borne and Zoonotic Diseases*, v. 9, p. 491–496.
- Brinkerhoff, R.J., Collinge, S.K., Ray, C., and Gage, K.L., 2010, Rodent and flea abundance fail to predict a plague epizootic in black-tailed prairie dogs: *Vector-Borne and Zoonotic Diseases*, v. 10, p. 47–52.
- Brinkerhoff, R.J., Martin, A.P., Jones, R.T., and Collinge, S.K., 2010, Population genetic structure of the prairie dog flea and plague vector, *Oropsylla hirsuta*: *Parasitology*, v. 138, p. 71–79.
- Brogdon, W.G., and McAllister, J.C., 1998, Insecticide resistance and vector control: *Emerging Infectious Diseases*, v. 4, p. 605–613.
- Brown, H.E., Ettestad, P., Reynolds, P.J., Brown, T.L., Hatton, E.S., Glass, G.E., Gage, K.L., and Eisen, R.J., 2010, Climatic predictors of the intra- and inter-annual distributions of plague cases in New Mexico based on 29 years of animal-based surveillance data: *American Journal of Tropical Medicine and Hygiene*, v. 82, p. 95–102.
- Burroughs, A.L., 1947, Sylvatic plague studies. The vector efficiency of nine species of fleas compared with *Xenopsylla cheopis*: *Journal of Hygiene*, v. 45, p. 371–396.
- Bursten, S.N., Kimsey, R.B., and Owings, D.H., 1997, Ranging of male *Oropsylla montana* fleas via male California ground squirrel (*Spermophilus beecheyi*) juveniles: *Journal of Parasitology*, v. 83, p. 804–809.
- Butler, T., 1983, *Plague and other Yersinia infections*: New York, Plenum Press, 220 p.
- Butler, T., 1989, The black death past and present. 1. Plague in the 1980s: *Transactions of the Royal Society of Tropical Medicine and Hygiene*, v. 83, p. 458–460.
- Butler, T., 1994, *Yersinia infections: centennial of the discovery of the plague bacillus*: *Clinical Infectious Diseases*, v. 19, p. 655–661.
- Butler, T., 2009, Plague into the 21st century: *Clinical Infectious Diseases*, v. 49, p. 736–742.
- Buzby, M., Neckels, D., Antolin, M.F., and Estep, D., 2008, Analysis of the sensitivity properties of a model of vector-borne bubonic plague: *Journal of the Royal Society Interface*, v. 5, p. 1099–1107.

- Campbell, T.M., and Clark, T.W., 1981, Colony characteristics and vertebrate associates of white-tailed and black-tailed prairie dogs in Wyoming: *American Midland Naturalist*, v. 105, p. 269–276.
- Carlson, M.E., 1996, *Yersinia pestis* infection in cats: *Feline Practice*, v. 24, p. 22–24.
- Carlson, D.C., and White, E.M., 1987, Effects of prairie dogs on mound soils: *Soil Science Society of America Journal*, v. 51, p. 389–393.
- Carr, S., Miller, J., Leary, S.E.C., Bennett, A.M., Ho, A., and Williamson, E.D., 1999, Expression of a recombinant form of the V antigen of *Yersinia pestis*, using three different expression systems: *Vaccine*, v. 18, p. 153–159.
- Castle, K.T., Biggins, D., Carter, L.G., Chu, M., Innes, K., and Wimsatt, J., 2001, Susceptibility of the Siberian polecat to subcutaneous and oral *Yersinia pestis* exposure: *Journal of Wildlife Diseases*, v. 37, p. 746–754.
- Caten, J.L., and Karman, L., 1968, Human plague in the United States: 1900–1966: *Journal of the American Medical Association*, v. 205, p. 333–336.
- Cavanaugh, D.C., 1971, Specific effect of temperature on transmission of the plague bacillus by the Oriental rat flea, *Xenopsylla cheopis*: *American Journal of Tropical Medicine and Hygiene*, v. 20, p. 264–273.
- Cavanaugh, D.C., and Marshall, J.D., Jr., 1972, The influence of climate on the seasonal prevalence of plague in the republic of Vietnam: *Journal of Wildlife Diseases*, v. 8, p. 85–94.
- Centers for Disease Control and Prevention, 2010, Plague fact sheet, accessed 23 March 2010 at <http://www.cdc.gov/ncidod/dvbid/plague/resources/plagueFactSheet.pdf>.
- Centers for Disease Control and Prevention, 2010, Website accessed 23 March 2010 at <http://www.cdc.gov/ncidod/dvbid/plague/epi.htm>.
- Chanteau, S., Ratsifasoamanana, L., Rasoamanana, B., Rahalison, L., Randriambeloso, J., Roux, J., and Rabeson, D., 1998, Plague, a reemerging disease in Madagascar: *Emerging Infectious Diseases*, v. 4, p. 101–104.
- Cheyette, F.L., 2008, The disappearance of the ancient landscape and the climatic anomaly of the early Middle Ages: A question to be pursued: *Early Medieval Europe*, v. 16, p. 127–165.
- Chichester, J.A., Musiychuk, K., Farrance, C.E., Mett, V., Lyons, J., Mett, V., and Yusibov, V., 2009, A single component two-valent LcrV-F1 vaccine protects non-human primates against pneumonic plague: *Vaccine*, v. 27, p. 3471–3474.
- Chomel, B.B., Jay, M.R., Smith, C.R., Kass, P.H., Ryan, C.P., and Barrett, L.R., 1994, Serological surveillance of plague in dogs and cats, California, 1979–1991: *Comparative Immunology Microbiology and Infectious Diseases*, v. 17, p. 111–123.
- Cid, M.S., Detling, J.K., Whicker, A.D., and Brizuela, M.A., 1991, Vegetational responses of a mixed-grass prairie site following exclusion of prairie dogs and bison: *Journal of Range Management*, v. 44, p. 100–105.
- Cincotta, R.P., Uresk, D.W., and Hansen, R.M., 1987, Demography of black-tailed prairie dog populations reoccupying sites treated with rodenticide: *Great Basin Naturalist*, v. 47, p. 339–343.
- Cincotta, R.P., Uresk, D.W., and Hansen, R.M., 1988, A statistical model of expansion in a colony of black-tailed prairie dogs, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: Fort Collins, Colo., USDA Forest Service General Technical Report RM-154, p. 30–33.
- Cincotta, R.P., Uresk, D.W., and Hansen, R.M., 1989, Plant compositional change in a colony of black-tailed prairie dogs in South Dakota, in Bjugstad, A.J., Uresk, D.W., and Hamre, R.H., technical coordinators, Ninth Great Plains Wildlife Damage Control Workshop Proceedings: Fort Collins, Colo., USDA Forest Service General Technical Report RM-171, p. 171–177.

- Clark, T.W., Campbell, T.M., III, Socha, D.G., and Casey, D.E., 1982, Prairie dog colony attributes and associated vertebrate species: *Great Basin Naturalist*, v. 42, p. 572–582.
- Cleaveland, S., Hess, G.R., Dobson, A.P., Laurenson, M.K., McCallum, H.I., Roberts, M.G., and Woodroffe, R., 2002, The role of pathogens in biological conservation, *in* Hudson, P.J., Rizzoli, A., Grenfell, B.T., Heesterbeek, H., and Dobson, A.P., eds., *The Ecology of Wildlife Diseases*: New York, Oxford University Press Inc., p. 139–150.
- Clover, J.R., Hofstra, T.D., Kuluris, B.G., Schroeder, M.T., Nelson, B.C., Barnes, A.M., and Botzler, R.G., 1989, Serologic evidence of *Yersinia pestis* infection in small mammals and bears from a temperate rainforest of north coastal California: *Journal of Wildlife Diseases*, v. 25, p. 52–60.
- Coffeen, M.P., and Pederson, J.C., 1993, Techniques for the transplant of Utah prairie dogs, *in* Oldemeyer, J.L., Biggins, D.E., and Miller, B.J., eds., *Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret*: Fort Collins, Colo., U.S. Fish and Wildlife Service Biological Report 13, p. 60–66.
- Collinge, S.K., Johnson, W.C., Ray, C., Matchett, R., Grensten, J., Cully, J.F., Gage, K.L., Kosoy, M.Y., Loye, J.E., and Martin, A.P., 2005, Testing the generality of a trophic-cascade model for plague: *EcoHealth*, v. 2, p. 102–112.
- Collinge, S.K., Johnson, W.C., Ray, C., Matchett, R., Grensten, J., Cully, J.F., Gage, K.L., Kosoy, M.Y., Loye, J.E., and Martin, A.P., 2005, Landscape structure and plague occurrence in black-tailed prairie dogs on grasslands of the western USA: *Landscape Ecology*, v. 20, p. 941–955.
- Collinge, S.K., Ray, C., and Cully, J.F., Jr., 2008, Effects of disease on keystone species, dominant species and their communities, *in* Ostfeld, R.S., Keesing, F., and Eviner, V.T., eds., *Infectious disease ecology: The effects of ecosystems on disease and of disease on ecosystems*: Princeton, New Jersey, Princeton University Press, p. 129–144.
- Colman, R.E., Vogler, A.J., Lowell, J.L., Gage, K.L., Morway, C., Reynolds, P.J., Etestad, P., Keim, P., Kosoy, M.Y., and Wagner, D.M., 2009, Fine-scale identification of the most likely source of a human plague infection: *Emerging Infectious Diseases*, v. 15, p. 1623–1625.
- Colman, R.E., Brinkerhoff, R.J., Ray, C., Keim, P., Collinge, S.K., and Wagner, D.M., 2010, Plague in urban prairie dog colonies: *Vector-borne and Zoonotic Diseases*, v. 10, p. 100. Abstract.
- Comer, J.E., Lorange, E.A., and Hinnebusch, B.J., 2008, Examining the vector-host-pathogen interface with quantitative molecular tools, *in* DeLeo, F.R., and Otto, M., eds., *Bacterial pathogenesis: Methods and protocols*: New York, Humana Press, p. 123–131.
- Congleton, Y.H.K., Wulff, C.R., Kerschen, E.J., and Straley, S.C., 2006, Mice naturally resistant to *Yersinia pestis* delta-pgm strains commonly used in pathogenicity studies: *Infection and Immunity*, v. 74, p. 6501–6504.
- Cook, R.R., Cartron, J.L., and Polechla, P.J., 2003, The importance of prairie dogs to nesting ferruginous hawks in grassland ecosystems: *Wildlife Society Bulletin*, v. 31, p. 1073–1082.
- Coppock, D.L., Detling, J.K., Ellis, J.E., and Dyer, M.I., 1983, Plant-herbivore interactions in a North American mixed-grass prairie: *Oecologia*, v. 56, p. 1–9.
- Cornelius, C.A., Quenee, L.E., Elli, D., Ciletti, N.A., and Schneewind, O., 2009, *Yersinia pestis* IS1541 transposition provides for escape from plague: *Infection and Immunity*, v. 77, p. 1807–1816.
- Cowan, C., Jones, H.A., Kaya, Y.H., Perry, R.D., and Straley, S.C., 2000, Invasion of epithelial cells by *Yersinia pestis*: Evidence for a *Y. pestis*-specific invasion: *Infection and Immunity*, v. 68, p. 4523–4530.
- Creekmore, T.E., Rocke, T.E., and Hurley, J., 2002, A baiting system for delivery of an oral plague vaccine to black-tailed prairie dogs: *Journal of Wildlife Diseases*, v. 38, p. 32–39.

- Cui, Y., Li, Y., Gorge, O., Platonov, M.E., Yan, Y., Guo, Z., Pourcel, C., Dentovskaya, S.V., Balakhonov, S.V., Wang, X., Song, Y., Anisimov, A.P., Vergnaud, G., and Yang, R., 2008, Insight into microevolution of *Yersinia pestis* by clustered regularly interspaced short palindromic repeats: PLoS ONE, v. 3, e2652, p. 1–10.
- Cully, J.F., 1988, Gunnison's prairie dog: an important autumn raptor prey species in northern New Mexico, in Glinski, R.L., Pendleton, B.G., Moss, M.B., Lefranc, M.N., Jr., Millsap, B.A., and Hoffman, S., eds.: Proceedings of the southwest Raptor Management Symposium and Workshop: Washington, D.C., National Wildlife Federal Science Technical Series, no. 11, p. 260–264.
- Cully, J.F., 1991, Response of raptors to reduction of a Gunnison's prairie dog-population by plague: American Midland Naturalist, v. 125, p. 140–149.
- Cully, J.F., 1993, Plague, prairie dogs, and black-footed ferrets: U.S. Fish and Wildlife Service Report, v. 13, p. 38–48.
- Cully, J.F., 1997, Growth and life-history changes in Gunnison's prairie dogs after a plague epizootic: Journal of Mammalogy, v. 78, p. 146–157.
- Cully, J.F., and Williams, E.S., 2001, Interspecific comparisons of sylvatic plague in prairie dogs: Journal of Mammalogy, v. 82, p. 894–905.
- Cully, J.F., Barnes, A.M., Quan, T.J., and Maupin, G., 1997, Dynamics of plague in a Gunnison's prairie dog colony complex from New Mexico: Journal of Wildlife Diseases, v. 33, p. 706–719.
- Cully, J.F., Carter, L.G., and Gage, K.L., 2000, New records of sylvatic plague in Kansas: Journal of Wildlife Diseases, v. 36, p. 389–392.
- Cully, J.F., Biggins, D.E., and Seery, D.B., 2006, Conservation of prairie dogs in areas with plague, in Hoogland, J.L., ed., Conservation of the black-tailed prairie dog: Saving North America's western grasslands: Washington, D.C., Island Press, p. 157–168.
- Cully, J.F., Jr., Johnson, T.L., Collinge, S.K., and Ray, C., 2010, Disease limits populations: plague and black-tailed prairie dogs: Vector-Borne and Zoonotic Diseases, v. 10, p. 7–15.
- Cutler, S.J., Fooks, A.R., van der Poel, W.H.M., 2010, Public health threat of new, reemerging, and neglected zoonoses in the industrialized world: Emerging Infectious Diseases, v. 16, p. 1–7.
- Dalsted, K.J., Sather-Blair, S., Worcester, B.K., and Klukas, R., 1981, Application of remote sensing to prairie dog management: Journal of Range Management, v. 34, p. 218–223.
- Darby, C., Hsu, J.W., Ghori, N., and Falkow, S., 2002, *Caenorhabditis elegans*: Plague bacteria biofilm blocks food intake: Nature, v. 417, p. 243–244.
- Davidson, A.D., Parmenter, R.R., and Gosz, J.R., 1999, Responses of small mammals and vegetation to a reintroduction of Gunnison's prairie dogs: Journal of Mammalogy, v. 80, p. 1311–1324.
- Davis, J.R., and Theimer, T.C., 2003, Increased lesser earless lizard (*Holbrookia maculata*) abundance on Gunnison's prairie dog colonies and short term responses to artificial prairie dog burrows: American Midland Naturalist, v. 150, p. 282–290.
- Davis, R.M., 1999, Use of orally administered chinin inhibitor (Lufenuron) to control flea vectors of plague on ground squirrels in California: Journal of Medical Entomology, v. 36, p. 562–567.
- Davis, R.M., Smith, R.T., Madon, M.B., and Sitko-Cleugh, E., 2002, Flea, rodent, and plague ecology at Chuchupate Campground, Ventura County, California: Journal of Vector Ecology, v. 27, p. 107–127.
- Davis, R.M., Cleugh, E., Smith, R.T., and Smith, C.L., 2008, Use of a chitin synthesis inhibitor to control fleas on wild rodents important in the maintenance of plague, *Yersinia pestis*, in California: Journal of Vector Ecology, v. 33, p. 278–284.
- Davis, R.M., Borchert, J.N., Poche, R.M., and Bruening, J.J., 2010, Decreasing the risks of plague to wildlife and humans using easily applied ground squirrel baits: Vector-borne and Zoonotic Diseases, v. 10, p. 95. Abstract.

- Davis, S., Begon, M., De Bruyn, L., Ageyev, V.S., Klassovskiy, N.L., Pole, S.B., Viljugrein, H., Stenseth, N.C., and Leirs, H., 2004, Predictive thresholds for plague in Kazakhstan: *Science*, v. 304, p. 736–738.
- Davis, S., Calvert, E., and Leirs, H., 2005, Fluctuating rodent populations and risk to humans from rodent-borne zoonoses: *Vector-Borne and Zoonotic Diseases*, v. 5, p. 305–314.
- Davis, S., Makundi, R.H., Machang'u, R.S., and Leirs, H., 2006, Demographic and spatio-temporal variation in human plague at a persistent focus in Tanzania: *Acta Tropica*, v. 100, p. 133–141.
- Davis, S., Leirs, H., Viljugrein, H., Stenseth, N.C., De Bruyn, L., Klassovskiy, N., Ageyev, V., and Begon, M., 2007, Empirical assessment of a threshold model for sylvatic plague: *Journal of the Royal Society Interface*, v. 4, p. 649–657.
- Davis, S., Trapman, P., Leirs, H., Begon, M., and Heesterbeek, J.A.P., 2008, The abundance threshold for plague as a critical percolation phenomenon: *Nature*, v. 454, p. 643–637.
- Deisch, M.S., Uresk, D.W., and Linder, R.L., 1989, Effects of two prairie dog rodenticides on ground-dwelling invertebrates in western South Dakota, *in* Bjugstad, A.J., Uresk, D.W., and Hamre, R.H., technical coordinators, Ninth Great Plains wildlife Damage Control Workshop Proceedings: Fort Collins, Colo., USDA Forest Service General Technical Report RM-171, p. 166–170.
- Deisch, M.S., Uresk, D.W., and Linder, R.L., 1990, Effects of prairie dog rodenticides on deer mice in western South Dakota: *Great Basin Naturalist*, v. 50, p. 347–353.
- Dennis, D.T., and Hughes, J.M., 1997, Multidrug resistance in plague: *The New England Journal of Medicine*, v. 337, p. 702–704.
- Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., 1999, *Plague manual: epidemiology, distribution, surveillance, and control*: World Health Organization, Geneva, Switzerland, 172 p.
- Dennis, D.T., and Gage, K.L., 2003, Plague, *in* Cohen, J., and Powderly, W.G., eds., *Infectious diseases*, (2d ed.): Philadelphia, Mosby, v. 2, p. 1-9.
- Derbise, A., Lesic, B., Dacheux, D., Ghigo, J.M., and Carniel, E., 2003, A rapid and simple method for inactivating chromosomal genes in *Yersinia*: *FEMS Immunology and Medical Microbiology*, v. 38, p. 113–116.
- Derbise, A., Chenal-Francisque, V., Huon, C., Fayolle, C., Demeure, C.E., Chane-Woon-Ming, B., Medigue, C., Hinnebusch, B.J., and Carniel, E., 2010, Delineation and analysis of chromosomal regions specifying *Yersinia pestis*: *Infection and Immunity*, v. 78, p. 3930–3941.
- Desmond, M.J., Savidge, J.A., and Eskridge, K.M., 2000, Correlations between burrowing owl and black-tailed prairie dog declines: A 7-year analysis: *Journal of Wildlife Management*, v. 64, p. 1067–1075.
- Detling, J.K., 1998, Mammalian herbivores: Ecosystem-level effects in two grassland national parks: *Wildlife Society Bulletin*, v. 26, p. 438–448.
- Detling, J.K., and Painter, E.L., 1983, Defoliation responses of western wheatgrass populations with diverse histories of prairie dog grazing: *Oecologia*, v. 57, p. 65–71.
- Detling, J.K., and Whicker, A.D., 1988, Control of ecosystem processes by prairie dogs and other grassland herbivores, *in* Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: Fort Collins, Colo., USDA Forest Service General Technical Report RM-154, p. 23–29.
- Dewoody, R., Merritt, P.M., Houppert, A.S., and Marketon, M.M., 2011, YopK regulates the *Yersinia pestis* type III secretion system from within host cells: *Molecular Microbiology*, v. 79, p. 1445-1461.
- Dinsmore, S.J., White, G.C., and Knopf, F.L., 2005, Mountain plover population responses to black-tailed prairie dogs in Montana: *Journal of Wildlife Management*, v. 69, p. 1546–1553.

- Dinsmore, S.J., and Smith, M.D., 2010, Mountain plover responses to plague in Montana: Vector-Borne and Zoonotic Diseases, v. 10, p. 37–45.
- Dobson, F.S., Chesser, R.K., Hoogland, J.L., Sugg, D.W., and Foltz, D.W., 1997, Do black-tailed prairie dogs minimize inbreeding?: Evolution, v. 51, p. 970–978.
- Dobson, F.S., Chesser, R.K., Hoogland, J.L., Sugg, D.W., and Foltz, D.W., 1998, Breeding groups and gene dynamics in a socially structured population of prairie dogs: Journal of Mammalogy, v. 79, p. 671–680.
- Dobson, F.S., Chesser, R.K., Hoogland, J.L., Sugg, D.W., and Foltz, D.W., 2004, The influence of social breeding groups on effective population size in black-tailed prairie dogs: Journal of Mammalogy, v. 85, p. 58–66.
- Doll, J.M., and Wright, M.E., 1985, Plague in Arizona and Petrified Forest National Park: Museum of the Northern Arizona Press Bulletin Series, v. 89, p. 91.
- Doll, J., Fink, T.M., Levy, C., Sands, L., Roberto, R., Smith, C., Dixon, F.R., Pierce, J., and Brus, D., 1992, Plague: United States, 1992: Morbidity and Mortality Weekly Report, v. 41, p. 787–790.
- Doll, J.M., Zeitz, P.S., Etestad, P., Bucholtz, A.L., Davis, T., and Gage, K., 1994, Cat-transmitted fatal pneumonic plague in a person who traveled from Colorado to Arizona: American Journal of Tropical Medicine and Hygiene, v. 51, p. 109–114.
- Dong, X.Q., Lindler, L.E., and Chu, M.C., 2000, Complete DNA sequence and analysis of an emerging cryptic plasmid isolated from *Yersinia pestis*: Plasmid, v. 43, p. 144–148.
- Drancourt, M., and Raoult, D., 2002, Molecular insights into the history of plague: Microbes and Infection, v. 4, p. 105–109.
- Drancourt, M., Aboudharam, G., Signoli, M., Dutour, O., and Raoult, D., 1998, Detection of 400-year-old *Yersinia pestis* DNA in human dental pulp: An approach to the diagnosis of ancient septicemia: Proceedings of the National Academy of Science, v. 95, p. 12637–12640.
- Drancourt, M., Roux, V., Dang, L.V., Tran-Hung, L., Castex, D., Chenal-Francois, V., Ogata, H., Fournier, P., Crubezy, E., and Raoult, D., 2004, Genotyping, Orientalis-like *Yersinia pestis*, and plague pandemics: Emerging Infectious Disease, v. 10, p. 1585–1592.
- Drancourt, M., Houhamdi, L., and Raoult, D., 2006, *Yersinia pestis* as a telluric, human ectoparasite-borne organism: The Lancet, v. 6, p. 234–241.
- Drancourt, M., Signoli, M., Dang, L.V., Bizot, B., Roux, V., Tzortzis, S., and Raoult, D., 2007, *Yersinia pestis* Orientalis in remains of ancient plague victims: Emerging Infectious Diseases, v. 13, p. 332–333.
- Dullum, J.A.L.D., Foresman, K.R., and Matchett, M.R., 2005, Efficacy of translocations for restoring populations of black-tailed prairie dogs: Wildlife Society Bulletin, v. 33, p. 842–850.
- Duplantier, J.M., Duchemin, J.B., Chanteau, S., and Carniel, E., 2005, From the recent lessons of the Malagasy foci towards a global understanding of the factors involved in plague reemergence: Veterinary Research, v. 36, p. 437–453.
- Durham, D.P., and Casman, E.A., 2009, Threshold conditions for the persistence of plague transmission in urban rats: Risk Analysis, v. 29, p. 1655–1663.
- Dyer, N.W., and Huffman, L.E., 1999, Plague in free-ranging mammals in western North Dakota: Journal of Wildlife Diseases, v. 35, p. 600–602.
- Edmunds, D.R., Williams, E.S., O’Toole, D., Mills, K.W., Boerger-Fields, A.M., Jaeger, P.T., Bildfel, R.J., Dearing, P., and Cornish, T.E., 2008, Ocular plague (*Yersinia pestis*) in mule deer (*Odocoileus hemionus*) from Wyoming and Oregon: Journal of Wildlife Diseases, v. 44, p. 983–987.

- Eidson, M., Tierney, L.A., Rollag, O.J., Becker, T., Brown, T., and Hull, H.F., 1988, Feline plague in New Mexico: Risk factors and transmission to humans: *American Journal of Public Health*, v. 78, p. 1333–1335.
- Eidson, M., Thilstead, J.P., and Rollag, O.J., 1991, Clinical, clinicopathologic, and pathologic features of plague in cats: 119 cases (1977–1988): *Journal of the American Veterinary Medicine Association*, v. 199, p. 1191–1197.
- Eini, F., Raoufi, M.F., Soleimani, M., Azarifard, F., Jamshidiyan, E., and Majidzadeh, K., 2010, Design of improved polymerase chain reaction (PCR) method containing internal positive control (IPC) for molecular detection of *Yersinia pestis*: *International Journal of Infectious Diseases*, v. 14, p. E362–E363.
- Eisen, L., and Eisen, R.J., 2011, Using geographic information systems and decision support systems for the prediction, prevention, and control of vector-borne diseases: *Annual Review of Entomology*, v. 56, p. 41–61.
- Eisen, R.J., and Gage, K.L., 2009, Adaptive strategies of *Yersinia pestis* to persist during inter-epizootic and epizootic periods: *Veterinary Research*, v. 40, p. 1.
- Eisen, R.J., Bearden, S.W., Wilder, A.P., Monteneri, J.A., Antolin, M.F., and Gage, K.L., 2006, Early-phase transmission of *Yersinia pestis* by unblocked fleas as a mechanism explaining rapidly spreading plague epizootics: *Proceedings of the National Academy of Sciences*, v. 103, p. 15380–15385.
- Eisen, R.J., Ensore, R.E., Biggerstaff, B.J., Reynolds, P.J., Ettestad, P., Brown, T., Pape, J., Tanda, D., Levy, C.E., Engelthaler, D.M., Cheek, J., Bueno, R., Targhetta, R., Monteneri, J.A., and Gage, K.L., 2007a, Human plague in the southwestern United States, 1957–2004: Spatial models of elevated risk of human exposure to *Yersinia pestis*: *Journal of Medical Entomology*, v. 44, p. 530–537.
- Eisen, R.J., Wilder, A.P., Bearden, S.W., Monteneri, J.A., and Gage, K.L., 2007b, Early-phase transmission of *Yersinia pestis* by unblocked *Xenophylla cheopsis* (Siphonaptera: Pulicidae) is as efficient as transmission by blocked fleas: *Journal of Medical Entomology*, v. 44, p. 678–682.
- Eisen, R.J., Reynolds, P.J., Ettestad, P., Brown, T., Ensore, R.E., Biggerstaff, B.J., Cheek, J., Bueno, R., Targhetta, J., Monteneri, J.A., and Gage, K.L., 2007c, Residence-linked human plague in New Mexico: A habitat suitability model: *American Journal of Tropical Medicine and Hygiene*, v. 77, p. 121–125.
- Eisen, R.J., Lowell, J.L., Monteneri, J.A., Bearden, S.W., and Gage, K.L., 2007d, Temporal dynamics of early-phase transmission of *Yersinia pestis* by unblocked fleas: Secondary infectious feeds prolong efficient transmission by *Oropsylla montana* (Siphonaptera: Ceratophyllidae): *Journal of Medical Entomology*, v. 44, p. 672–677.
- Eisen, R.J., Holmes, J.L., Schotthoefer, A.M., Vetter, S.M., Monteneri, J.A., and Gage, K.L., 2008a, Demonstration of early-phase transmission of *Yersinia pestis* by the mouse flea, *Aetheca wagneri* (Siphonaptera: Ceratophyllidae), and implications for the role of deer mice as enzootic reservoirs: *Journal of Medical Entomology*, v. 45, p. 1160–1164.
- Eisen, R.J., Vetter, S.M., Holmes, J.L., Bearden, S.W., Monteneri, J.A., and Gage, K.L., 2008b, Source of host blood affects prevalence of infection and bacterial loads of *Yersinia pestis* in fleas: *Journal of Medical Entomology*, v. 45, p. 933–938.
- Eisen, R.J., Petersen, J.M., Higgins, C.L., Wong, D., Levy, C.E., Mead, P.S., Schriefer, M.E., Griffith, K.S., Gage, K.L., and Ben Beard, C., 2008, Persistence of *Yersinia pestis* in soil under natural conditions: *Emerging Infectious Diseases*, v. 14, p. 941–943.
- Eisen, R.J., Eisen, L., and Gage, K.L., 2009, Studies of vector competency and efficiency of North American fleas for *Yersinia pestis*: State of the field and future research needs: *Journal of Medical Entomology*, v. 46, p. 737–744.

- Eisen, R.J., Griffith, K.S., Borchert, J.N., MacMillan, K., Apangu, T., Owor, N., Acayo, S., Acidri, R., Zielinski-Gutierrez, E., Winters, A.M., Ensore, R.E., Schriefer, M.E., Beard, C.B., Gage, K.L., and Mead, P.S., 2010, Assessing human risk of exposure to plague bacteria in northwestern Uganda based on remotely sensed predictors: *American Journal of Tropical Medicine and Hygiene*, v. 82, p. 904–911.
- Ell, S.R., 1979, Some evidence for interhuman transmission of Medieval plague: *Reviews of Infectious Diseases*, v. 1, p. 563–566.
- Elvin, S.J., Williamson, E.D., Scott, J.C., Smith, J.N., Perez de Lema, G., Chilla, S., Clapham, P., Pfeffer, K., Schlondorff, D., and Luckow, B., 2004, Evolutionary genetics: Ambiguous role of CCR5 in *Y. pestis* infection: *Nature*, v. 430, p. 606
- Engelthaler, D.M., Gage, K.L., Monteneri, J.A., Chu, M., and Carter, L.G., 1999, PCR detection of *Yersinia pestis* in fleas: Comparison with mouse inoculation: *Journal of Clinical Microbiology*, v. 37, p. 1980–1984.
- Engelthaler, D.M., and Gage, K.L., 2000, Quantities of *Yersinia pestis* in fleas (Siphonaptera: Pulicidae, Ceratophyllidae, and Hystriochopsyllidae) collected from areas of known or suspected plague activity: *Journal of Medical Anthropology*, v. 37, p. 422–426.
- Engelthaler, D.M., Hinnebusch, B.J., Rittner, C.M., and Gage, K.L., 2000, Quantitative competitive PCR as a technique for exploring flea-*Yersinia pestis* dynamics: *American Journal of Tropical Medicine and Hygiene*, v. 62, p. 552–560.
- Ensore, R.E., Biggerstaff, B.J., Brown, T.L., Fulgham, R.F., Reynolds, P.J., Engelthaler, D.M., Levy, C.E., Parmenter, R.R., Monteneri, J.A., Cheek, J.E., Grinnell, R.K., Ettestad, P.J., and Gage, K.L., 2002, Modeling relationships between climate and the frequency of human plague cases in the southwestern United States, 1960–1997: *American Journal of Tropical Medicine and Hygiene*, v. 66, p. 186–196.
- Erickson, D.L., Jarrett, C.O., Wren, B.W., and Hinnebusch, B.J., 2006, Serotype differences and lack of biofilm formation characterize *Yersinia pseudotuberculosis* infection of the *Xenopsylla cheopsis* flea vector of *Yersinia pestis*: *Journal of Bacteriology*, v. 188, p. 1113–1119.
- Erickson, D.L., Waterfield, N.R., Vadyvaloo, V., Long, D., Fischer, E.R., Ffrench-Constant, R., and Hinnebusch, B.J., 2007, Acute oral toxicity of *Yersinia pseudotuberculosis* to fleas: Implications for the evolution of vector-borne transmission of plague: *Cellular Microbiology*, v. 9, p. 2658–2666.
- Erickson, D.L., Anderson, N.E., Cromar, L.M., and Jolley, A., 2009, Bacterial communities associated with flea vectors of plague: *Journal of Medical Entomology*, v. 46, p. 1532–1536.
- Eroshenko, G.A., Vidyaeva, N.A., and Kuttyrev, V.V., 2010, Comparative analysis of biofilm formation by main and nonmain subspecies *Yersinia pestis* strains: *FEMS Immunology and Medical Microbiology*, v. 59, p. 513–520.
- Fagerlund, R.A., Ford, P.L., and Polechla, P.J., 2001, New records for fleas (Siphonaptera) from New Mexico with notes on plague-carrying species: *Southwestern Naturalist*, v. 46, p. 94–96.
- Fagerstone, K.A., Tietjen, H.P., and Williams, O., 1981, Seasonal variation in the diet of black-tailed prairie dogs: *Journal of Mammalogy*, v. 62, p. 820–824.
- Fahnestock, J.T., Larson, D.L., Plumb, G.E., and Detling, J.K., 2003, Effects of ungulates and prairie dogs on seed banks and vegetation in a North American mixed-grass prairie: *Plant Ecology*, v. 167, p. 255–268.
- Fan, S.P., Ruan, C.L., Sun, Y.X., and Yue, Y.J., 2010, Assessment for health education in plague affected area in Dingbian country, Shaanxi Province, Xi'an, China: *Chinese Journal of Endemiology*, v. 29, p. 215–217.

- Felek, S., Muszynski, A., Carlson, R.W., Tsang, T.M., Hinnebusch, B.J., and Krukoni, E.S., 2010, Phosphoglucosyltransferase of *Yersinia pestis* is required for autoaggregation and polymyxin B resistance: *Infection and Immunity*, v. 78, p. 1163–1175.
- Filippov, A.A., Solodovnikov, N.S., Kookleva, L.M., and Protsenko, O.A., 1990, Plasmid content in *Yersinia pestis* strains of different origin: *FEMS Microbiology Letters*, v. 67, p. 45–48.
- Fitzgerald, J.P., 1993, The ecology of plague in Gunnison's prairie dogs and suggestions for the recovery of black-footed ferrets, *in* Oldemeyer, J.L., Biggins, D.E., Miller, B.J., and Crete, R., eds., *Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret*: U.S. Fish and Wildlife Service Biological Report 13, p. 50–59.
- Fitzgerald, J.P., and Lechleitner, R.R., 1974, Observations on the biology of Gunnison's prairie dog in central Colorado: *American Midland Naturalist*, v. 92, p. 146–163.
- Fleer, K.A., Foley, P., Calder, L., and Foley, J.E., 2011, Arthropod vectors and vector-borne bacterial pathogens in Yosemite National Park: *Journal of Medical Entomology*, v. 48, p. 101–110.
- Foley, P., and Foley, J., 2010, Modeling susceptible infective recovered dynamics and plague persistence in California rodent-flea communities: *Vector-Borne and Zoonotic Diseases*, v. 10, p. 59–67.
- Foley, P., and Foley, J., 2010, Features of rodent reservoir and flea vectors contributing to enzootic sylvatic plague in highly biodiverse California communities: *Vector-borne and Zoonotic Diseases*, v. 10, p. 95. Abstract.
- Foley, J.E., Zipser, J., Chomel, B., Girvetz, E., and Foley, P., 2007, Modeling plague persistence in host-vector communities in California: *Journal of Wildlife Diseases*, v. 43, p. 408–424.
- Foltz, D.W., and Hoogland, J.L., 1983, Genetic evidence of outbreeding in the black-tailed prairie dog (*Cynomys ludovicianus*): *Evolution*, v. 37, p. 273–281.
- Foltz, D.W., Hoogland, J.L., and Koscielnny, G.M., 1988, Effects of sex, litter size, and heterozygosity on juvenile weight in black-tailed prairie dogs (*Cynomys ludovicianus*): *Journal of Mammalogy*, v. 69, p. 611–614.
- Forrest, S., 2005, Getting the story right: a response to Vermeire and Colleagues: *BioScience*, v. 55, p. 526–530.
- Foster-McDonald, N.S., and Hygnstrom, S.E., 1991, Effects of a visual barrier fence on the movements of black-tailed prairie dogs, *in* Hygnstrom, S.E., Case, R.M., and Johnson, R.J., eds., *Tenth Great Plains Wildlife Damage Conference Proceedings*: Lincoln, University of Nebraska, Nebr., p. 61.
- Fowler, J.M., Wulff, C.R., Straley, S.C., and Brubaker, R.R., 2009, Growth of calcium-blind mutants of *Yersinia pestis* at 37 degrees C in permissive Ca²⁺-deficient environments: *Microbiology-SGM*, v. 155, p. 2509–2521.
- Franklin, H.A., Stapp, P., and Cohen, A., 2010, Polymerase chain reaction (PCR) identification of rodent blood meals confirms host sharing by flea vectors of plague: *Journal of Vector Ecology*, v. 35, p. 363–371.
- Franklin, W.L., and Garrett, M.G., 1989, Nonlethal control of prairie dog colony expansion with visual barriers: *Wildlife Society Bulletin*, v. 17, p. 426–430.
- Frean, J.A., Arntzen, L., Capper, T., Bryskier, A., and Klugman, K.P., 1996, In vitro activities of 14 antibiotics against 100 human isolates of *Yersinia pestis* from a southern African plague focus: *Antimicrobial Agents and Chemotherapy*, v. 40, p. 2646–2647.
- Friggens, M.M., and Beier, P., 2010, Anthropogenic disturbance and the risk of flea-borne disease transmission: *Oecologia*, v. 164, p. 809–820.

- Friggens, M.M., Parmenter, R.R., Boyden, M., Ford, P.L., Gage, K., and Keim, P., 2010, Flea abundance, diversity, and plague in Gunnison's prairie dogs (*Cynomys gunnisoni*) and their burrows in montane grasslands in northern New Mexico: *Journal of Wildlife Diseases*, v. 46, p. 356–367.
- Fukuto, H.S., Svetlanov, A., Palmer, L.E., Karzai, A.W., and Bliska, J.B., 2010, Global gene expression profiling of *Yersinia pestis* replicating inside macrophages reveals the roles of putative stress-induced operon in regulating Type III secretion and intracellular cell division: *Infection and Immunity*, v. 78, p. 3700–3715.
- Gabitzsch, E.S., Vera-Tudela, R., Eisen, R.J., Bearden, S.W., Gage, K.L., and Zeidner, N.S., 2008, Short report: Development of a real-time quantitative PCR assay to enumerate *Yersinia pestis* in fleas: *American Journal of Tropical Medicine and Hygiene*, v. 79, p. 99–101.
- Gage, K.L., 1998, Plague, in Colliers, L., Balows, A., Sussman, M., and Hausles, W.J., eds., *Wilson's microbiology and microbiological infections*, v. 3: London, Edward Arnold Press, p. 885–903.
- Gage, K.L., 1999, Plague surveillance, in Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., principal authors, *Plague manual: Epidemiology, distribution, surveillance and control*: World Health Organization, WHO/CDS/CSR/EDC/99.2, p.135–165.
- Gage, K.L., and Kosoy, M.Y., 2005, Natural history of plague: perspectives from more than a century of research: *Annual Review of Entomology*, v. 50, p. 505–528.
- Gage, K.L., Ostfeld, R.S., and Olson, J.G., 1995, Nonviral vector-borne zoonoses associated with mammals in the United States: *Journal of Mammalogy*, v. 76, p. 695–715.
- Gage, K.L., Montenieri, J.A., and Thomas, R.E., 1994, The role of predators in the ecology, epidemiology, and surveillance of plague in the United States: *Proceedings of the Vertebrate Pest Conference*, v. 16, p. 200–206.
- Gage, K.L., Dennis, D.T., Orloski, K.A., Ettestad, P., Brown, T.L., Reynolds, P.J., Pape, W.J., Fritz, C.L., Carter, L.G., and Stein, J.D., 2000, Cases of cat-associated human plague in the Western US, 1977–1998: *Clinical Infectious Diseases*, v. 30, p. 893–900.
- Galdan, B., Baatar, U., Molotov, B., and Dashdavaa, O., 2010, Plague in Mongolia: Vector-borne and zoonotic diseases, v. 10, p. 69–75.
- Galimand, M., Guiyoule, A., Gerbaud, B., Rasoamanana, B., Chanteau, S., Carniel, E., and Courvalin, P., 1997, Multidrug resistance in *Yersinia pestis* mediated by a transferable plasmid: *New England Journal of Medicine*, v. 337, p. 677–680.
- Galimand, M., Carniel, E., and Courvalin, P., 2006, Resistance of *Yersinia pestis* to antimicrobial agents: *Antimicrobial Agents and Chemotherapy*, v. 50, p. 3233–3236.
- Galindo, C.L., Sha, J., Moen, S.T., Agar, S.L., Kirtley, M.L., Foltz, S.M., McIver, L.J., Kozlova, E.V., Garner, H.R., and Chopra, A.K., 2010, Comparative global gene expression profiles of wild-type *Yersinia pestis* CO92 and its Braun lipoprotein mutant at flea and human body temperatures: *Comparative and Functional Genomics*, v. 2010, article ID 342168, p. 1–11.
- Galvani, A.P., and Montgomery, S., 2003, Evaluating plague and smallpox as historical selective pressures for the CCR5-delta32 HIV-resistance allele: *Proceedings of the National Academy of Science*, v. 100, p. 15276–15279.
- Galyov, E.E., Smirnov, E.Y., Karlishchev, A.V., Volkovoy, K.I., Denesyuk, A.I., Nazimov, I.V., Rubtsov, K.S., Abramov, V.M., Dalvadyanz, S.M., and Zav'yalov, V.P., 1990, Nucleotide sequence of the *Yersinia pestis* gene encoding F1 antigen and the primary structure of the protein: Putative T and B cell epitopes: *FEBS Letters*, v. 277, p. 230–232.

- Galyov, E.E., Karlishhev, A.V., Chernovskaya, T.V., Dolgikh, D.A., Smirnov, O.Y., Volkovoy, K.I., Abramov, V.M., and Zav'yalov, V.P., 1991, Expression of the envelope antigen F1 of *Yersinia pestis* is mediated by the product of caf1M gene having homology with the chaperone protein PapD of *Escherichia coli*: FEBS Letters, v. 286, p. 79–82.
- Gao, M.X., Li, X.W., Cao, C.X., Zhang, H., Li, Q., Zhou, H., He, Q.S., Xu, M., Zhao, J., Zheng, S., and Chen, W., Spatial prediction and analysis of Himalayan marmot plague natural epidemic foci in China based on HJ-1 satellite data: Science China Earth Sciences, v. 53 (SUPPL. 1), p. 8–15.
- Garrett, M.G., Hoogland, J.L., and Franklin, W.L., 1982, Demographic differences between an old and a new colony of black-tailed prairie dogs (*Cynomys ludovicianus*): American Midland Naturalist, v. 108, p. 51–59.
- Garrett, M.G., and Franklin, W.L., 1988, Behavioral ecology of dispersal in the black-tailed prairie dog: Journal of Mammalogy, v. 69, p. 236–250.
- Gasper, P.W., Barnes, A.M., Quan, T.J., Benziger, J.P., Carter, L.G., Beard, M.L., and Maupin, G.O., 1993, Plague (*Yersinia pestis*) in cats —Description of experimentally induced disease: Journal of Medical Entomology, v. 30, p. 20–26.
- Gendrin, C., Sarrazin, S., Bonnaffe, D., Jault, J.M., Lortat-Jacob, H., and Dessen, A., 2010, Hijacking of the pleiotropic cytokine interferon-gamma by the type III secretin system of *Yersinia pestis*: PLoS ONE, v. 5, p. 1–12.
- Generalova, A.N., Sizova, S.V., Oleinikov, V.A., Zubov, V.P., Artemyev, M.V., Spemath, L., Kamyshny, A., and Magdassi, S., 2009, Highly fluorescent ethyl cellulose nanoparticles containing embedded semiconductor nanocrystals: Colloids and Surfaces A: Physicochemical and Engineering Aspects, v. 342, p. 59–64.
- Geng, J., Song, Y., Yang, L., Feng, Y., Qiu, Y., Li, G., Guo, J., Bi, Y., Qu, Y., Wang, W., Wang, X., Guo, Z., Yang, R., and Han, Y., 2009, Involvement of the post-transcriptional regulator Hfq in *Yersinia pestis* virulence: PLoS One, v. 4, article no. e6213.
- Gerry, A.C., Zhang, X., Walker, T., Frederickson, S., Metzger, M., Hu, R., and Krieger, R.I., 2005, Worker exposure to diazinon during flea control operations in response to a plague epizootic: Bulletin of Environmental Contamination and Toxicology, v. 74, p. 391–398.
- Gese, E.M., Schultz, R.D., Johnson, M.R., Williams, E.S., Crabtree, R.L., and Raff, R.L., 1997, Serological survey for diseases in free-ranging coyotes (*Canis latrans*) in Yellowstone National Park, Wyoming: Journal of Wildlife Diseases, v. 33, p. 47–56.
- Gese, E.M., Karki, S.M., Klavetter, M.L., Schauster, E.R., and Kitchen, A.M., 2004, Serologic survey for canine infectious diseases among sympatric swift foxes (*Vulpes velox*) and coyotes (*Canis latrans*) in southeastern Colorado: Journal of Wildlife Diseases, v. 40, p. 741–748.
- Girard, J.M., Wagner, D.M., Vogler, A.J., Keys, C., Allender, C.J., Drickamer, L.C., and Keim, P., 2004, Differential plague-transmission dynamics determine *Yersinia pestis* population genetic structure on local, regional, and global scales: Proceedings of the National Academy of Sciences, v. 101, p. 8408–8413.
- Goddard, J., 1999, Fleas and plague: Infections in Medicine, v. 16, p. 21–23.
- Gompper, M.E., and Williams, E.S., 1998, Parasite conservation and the black-footed ferret recovery program: Conservation Biology, v. 12, p. 730–732.
- Goodrich, J.M., and Buskirk, S.W., 1998, Spacing and ecology of North American badgers (*Taxidea taxus*) in a prairie-dog (*Cynomys leucurus*) complex: Journal of Mammalogy, v. 79, p. 171–179.
- Gould, L.H., Pape, J., Ettestad, P., Griffith, K.S., and Mead, P.S., 2008, Dog-associated risk factors for human plague: Zoonoses and Public Health, v. 55, p. 448–454.

- Grant-Hoffman, M.N., and Detling, J.K., 2006, Vegetation on Gunnison's prairie dog colonies in southwestern Colorado: *Rangeland Ecology and Management*, v. 59, p. 73–79.
- Gratz, N.G., 1999a, Rodent reservoirs and flea vectors of natural foci of plague, in Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., principal authors, *Plague manual: Epidemiology, distribution, surveillance and control: World Health Organization, WHO/CDS/CSR/EDC/99.2*, p. 63–96.
- Gratz, N.G., 1999b, Control of plague transmission, in Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., principal authors, *Plague manual: Epidemiology, distribution, surveillance and control: World Health Organization, WHO/CDS/CSR/EDC/99.2*, p. 97–134.
- Green, M., Rogers, D., Russell, P., Stagg, A.J., Bell, D.L., Eley, S.M., Titball, R.W., and Williamson, E.D., 1999, The SCID/Beige mouse as a model to investigate protection against *Yersinia pestis*: *FEMS Immunology and Medical Microbiology*, v. 23, p. 107–113.
- Gregg, C.T., 1985, *Plague—An ancient disease in the twentieth century (revised ed.)*: Albuquerque, N. Mex., University of New Mexico Press, 169 p.
- Griffin, K.A., Martin, D.J., Rosen, L.E., Sirochman, M.A., Walsh, D.P., Wolfe, L.L., and Miller, M.W., 2010, Detection of *Yersinia pestis* DNA in prairie dog-associated fleas by polymerase chain reaction assay of purified DNA: *Journal of Wildlife Diseases*, v. 46, p. 636–643.
- Guarner, J., Shieh, W.J., Chu, M., Perlman, D.C., Kool, J., Gage, K.L., Ettestad, P., and Zaki, S.R., 2005, Persistent *Yersinia pestis* antigens in ischemic tissues of a patient with septicemic plague: *Human Pathology*, v. 36, p. 850–853.
- Gubler, D.J., Reiter, P., Ebi, K.L., Yap, W., Nasci, R., and Patz, J.A., 2001, Climate variability and change in the United States: Potential impacts on vector- and rodent-borne diseases: *Environmental Health Perspectives*, v. 109, p. 223–233.
- Guinet, F., Ave, P., Jones, L., Huerre, M., and Carniel, E., 2008, Defective innate cell response and lymph node infiltration specify *Yersinia pestis* infection: *PLoS ONE*, v. 3, e1688, p. 1–11.
- Guiyoule, A., Grimont, F., Iteman, I., Grimont, P.D., Lefevre, M., and Carniel, E., 1994, Plague pandemics investigated by ribotyping of *Yersinia pestis* strains: *Journal of Clinical Microbiology*, v. 32, p. 634–641.
- Guiyoule, A., Gerbaud, G., Buchrieser, C., Galimand, M., Rahalison, L., Chanteau, S., Courvalin, P., and Carniel, E., 2001, Transferable plasmid-mediated resistance to streptomycin in a clinical isolate of *Yersinia pestis*: *Emerging Infectious Disease*, v. 7, p. 43–48.
- Gurtler, J.B., Rivera, R.B., Zhang, H.Q., and Sommers, C.H., 2010, Behavior of a virulent *Yersinia pestis* in liquid whole egg as affected by storage temperature, antimicrobials and thermal pasteurization: *Journal of Food Safety*, v. 30, p. 537–557.
- Haiko, J., Laakkonen, L., Juuti, K., Kalkkinen, N., and Korhonen, T.K., 2010, The omptins of *Yersinia pestis* and *Salmonella enterica* cleave the reactive center loop of plasminogen activator inhibitor 1: *Journal of Bacteriology*, v. 192, p. 4553–4561.
- Hanson, D.A., Britten, H.B., Restani, M., and Washburn, L.R., 2007, High prevalence of *Yersinia pestis* in black-tailed prairie dog colonies during an apparent enzootic phase of sylvatic plague: *Conservation Genetics*, v. 8, p. 789–795.
- Hansen, R.M., and Gold, I.K., 1977, Blacktail prairie dogs, desert cottontails and cattle trophic relations on shortgrass range: *Journal of Rangeland Management*, v. 30, p. 210–214.
- Harrison, F.J., Jr., 1996, Managing plague in endangered species habitats: *Proceedings of the Vertebrate Pest Conference*, v. 17, p. 230–233.
- Hartley, L.M., Detling, J.K., and Savage, L.T., 2009, Introduced plague lessens the effects of an herbivorous rodent on grassland vegetation: *Journal of Applied Ecology*, v. 46, p. 861–869.

- Haynie, M.L., Van Den Bussche, R.A., Hoogland, J.L., and Gilbert, D.A., 2003, Parentage, multiple paternity, and breeding success in Gunnison's and Utah prairie dogs: *Journal of Mammalogy*, v. 84, p. 1244–1253.
- He, Y.Q., Rush, H.G., Liepman, R.S., Xiang, Z.S., and Colby, L.A., 2007, Pathobiology and management of laboratory rodents administered CDC Category A agents: *Comparative Medicine*, v. 57, p. 18–32.
- Heesemann, J., Kalthoff, H., and Koch, F., 1986, Monoclonal antibodies directed against plasmid-encoded released proteins of enteropathogenic *Yersinia*: *FEMS Microbiology Letters*, v. 36, p. 15–19.
- Heath, D.G., Anderson, G.W., Jr., Mauro, J.M., Welkos, S.L., Andrews, G.P., Adamovicz, J., and Friedlander, A.M., 1998, Protection against experimental bubonic and pneumonic plague by a recombinant capsular F1-V antigen fusion protein vaccine: *Vaccine*, v. 16, p. 1131–1137.
- Henke, S.E., Pence, D.B., Demarais, S., and Johnson, J.R., 1990, Serologic survey of selected zoonotic disease agents in black-tailed jack rabbits from western Texas: *Journal of Wildlife Diseases*, v. 26, p. 107–111.
- Hess, G.R., Randolph, S.E., Arneberg, P., Chemini, C., Furlanello, C., Harwood, J., Roberts, M.G., and Swinton, J., 2002, Spatial aspects of disease dynamics, *in* Hudson, P.J., Rizzoli, A., Grenfell, B.T., Heesterbeek, H., and Dobson, A.P., eds., *The ecology of wildlife diseases*: New York, Oxford University Press Inc., p. 102–118.
- Higgins, J.A., Ezzell, J., Hinnebusch, B.J., Shipley, M., Henchal, E.A., and Ibrahim, M.S., 1998, 5' nuclease PCR assay to detect *Yersinia pestis*: *Journal of Clinical Microbiology*, v. 36, p. 2284–2288.
- Hines, J., Skrzypek, E., Kajava, A.V., and Straley, S.C., 2001, Structure-function analysis of *Yersinia pestis* YopM's interaction with alpha-thrombin to rule on its significance in systemic plague and to model YopM's mechanism of binding host proteins: *Microbial Pathogenesis*, v. 30, p. 193–209.
- Hinnebusch, B.J., 1997, Bubonic plague: A molecular genetic case history of the emergence of an infectious disease: *Journal of Molecular Medicine*, v. 75, p. 645–652.
- Hinnebusch, B.J., 2005, The evolution of flea-borne transmission in *Yersinia pestis*: *Current Issues in Molecular Biology*, v. 7, p. 197–212.
- Hinnebusch, B.J., 2010, The evolution of stable flea-borne transmission cycles of *Yersinia pestis*: *Vector-borne and Zoonotic Diseases*, v. 10, p. 96. Abstract.
- Hinnebusch, B.J., Fischer, E.R., and Schwan, T.G., 1998, Evaluation of the role of the *Yersinia pestis* plasminogen activator and other plasmid-encoded factors in temperature-dependent blockage of the flea: *Journal of Infectious Diseases*, v. 178, p. 1406–1415.
- Hinnebusch, B.J., Gage, K.L., and Schwan, T.G., 1998, Estimation of vector infectivity rates for plague by means of a standard curve-based competitive polymerase chain reaction method to quantify *Yersinia pestis* in fleas: *American Journal of Tropical Medicine and Hygiene*, v. 58, p. 562–569.
- Hinnebusch, B.J., Cherepanov, P., Du, Y., Rudolph, A., Dixon, J.D., Schwan, T., and Forsberg, A., 2000, Murine toxin of *Yersinia pestis* shows phospholipase D activity but is not required for virulence in mice: *International Journal of Medical Microbiology*, v. 290, p. 483–487.
- Hinnebusch, B., Rosso, M., Schwan, T., and Carniel, E., 2002, High-frequency conjugative transfer of antibiotic resistance genes to *Yersinia pestis* in the flea midgut: *Molecular and Microbiology*, v. 46, p. 349–354.
- Hinnebusch, B.J., Rudolph, A.E., Cherepanov, P., Dixon, J.E., Schwan, T.G., and Forsberg, A., 2002, Role of *Yersinia* murine toxin in survival of *Yersinia pestis* in the midgut of the flea vector: *Science*, v. 296, p. 733–735.
- Hirst, L.F., 1953, *The conquest of plague: A study of the evolution of epidemiology*: Oxford, Clarendon Press, 478 p.

- Hoar, B.R., Chomel, B.B., Rolfe, D.L., Chang, C.C., Fritz, C.L., Sacks, B.N., and Carpenter, T.E., 2003, Spatial analysis of *Yersinia pestis* and *Bartonella vinsonii* subsp *berkhoffii* seroprevalence in California coyotes (*Canis latrans*): Preventive Veterinary Medicine, v. 56, p. 299–311.
- Hof, J., Bevers, M., Uresk, D.W., and Schenbeck, G.L., 2002, Optimizing habitat location for black-tailed prairie dogs in southwestern South Dakota: Ecological Modeling, v. 147, p. 11–21.
- Holland, E.A., and Detling, J.K., 1990, Plant response to herbivory and belowground nitrogen cycling: Ecology, v. 71, p. 1040–1049.
- Holmes, B.E., Foresman, K.R., and Matchett, M.R., 2006, No evidence of persistent *Yersinia pestis* infection at prairie dog colonies in north-central Montana: Journal of Wildlife Diseases, v. 42, p. 164–169.
- Holt, A.C., Salkeld, D.J., Fritz, C.L., Tucker, J.R., and Gong, P., 2009, Spatial analysis of plague in California: Niche modeling predictions of the current distribution and potential response to climate change: International Journal of Health Geographics, v. 88, p. 38.
- Hoogland, J.L., 1981, The evolution of coloniality in white-tailed and black-tailed prairie dogs (*Sciuridae: Cynomys leucurus* and *C. ludovicianus*): Ecology, v. 62, p. 252–272.
- Hoogland, J.L., 1982, Prairie dogs avoid extreme inbreeding: Science, v. 215, p. 1639–1641.
- Hoogland, J.L., 1983, Black-tailed prairie dog coterries are cooperatively breeding units: American Naturalist, v. 121, p. 275–280.
- Hoogland, J.L., 1985, Infanticide in prairie dogs: Lactating females kill offspring of close kin: Science, v. 230, p. 1037–1040.
- Hoogland, J.L., 1992, Levels of inbreeding among prairie dogs: American Naturalist, v. 139, p. 591–602.
- Hoogland, J.L., 1996, Why do Gunnison’s prairie dogs give anti-predator calls?: Animal Behavior, v. 51, p. 871–880.
- Hoogland, J.L., 1998a, Estrus and copulation of Gunnison’s prairie dogs: Journal of Mammalogy, v. 79, p. 887–897.
- Hoogland, J.L., 1998b, Why do female Gunnison’s prairie dogs copulation with more than one male?: Animal Behavior, v. 55, p. 351–359.
- Hoogland, J.L., 1999, Philopatry, dispersal, and social organization of Gunnison’s prairie dogs: Journal of Mammalogy, v. 80, p. 243–251.
- Hoogland, J.L., 2001, Black-tailed, Gunnison’s, and Utah prairie dogs reproduce slowly: Journal of Mammalogy, v. 82, p. 917–927.
- Hoogland, J.L., and Hutter, J.M., 1987, Using molar attrition to age live prairie dogs: Journal of Wildlife Management, v. 51, p. 393–394.
- Hoogland, J.L., Angell, D.K., Daley, J.G., and Radcliffe, M.C., 1988, Demography and population dynamics of prairie dogs, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: USDA Forest Service General Technical Report RM-154, Fort Collins, Colo., p. 18–22.
- Hoogland, J.L., Davis, S., Benson-Amram, S., Labruna, D., Goossens, B., and Hoogland, M.A., 2004, Pyreperm kills fleas and halts plague among Utah prairie dogs: Southwestern Naturalist, v. 49, p. 376–383.
- Huang, D., Chen, C.Y., Ali, Z., Shao, L.Y., Shen, L., Lockman, H.A., Barnewall, R.E., Sabourin, C., Eestep, J., Reichenberg, A., Hintz, M., Jomaa, H., Wang, R., and Chen, Z.W., 2009, Antigen-specific V gamma 2V delta 2 T effector cells confer homeostatic protection against pneumonic plague lesions: Proceedings of the National Academy of Sciences, v. 106, p. 7553–7558.

- Huang, Y., and Haas, C.N., 2009, Time-dose-response models for microbial risk assessment: Risk Analysis, v. 29, p. 648–661.
- Huang, Y., Bartrand, T.A., Haas, C.N., and Weir, M.H., 2009, Incorporating time postinoculation into a dose-response model of *Yersinia pestis* in mice: Journal of Applied Microbiology, v. 107, p. 727–735.
- Hudson, B.W., and Quan, T.J., 1975, Serologic observations during an outbreak of rat borne plague in the San Francisco Bay area of California: Journal of Wildlife Diseases, v. 11, p. 431–436.
- Hygnstrom, S.E., 1996, Plastic visual barriers were ineffective at reducing recolonization rates of prairie dogs, in Masters, R.E., and Huggins, J.G., eds., Twelfth Great Plains Wildlife Damage Control Workshop Proceedings: Ardmore, Okla., Noble Foundation, p. 74–76.
- Hygnstrom, S.E., McDonald, P.M., and Virchow, D.R., 1998, Efficacy of three formulations of zinc phosphide for managing black-tailed prairie dogs: International Biodeterioration and Biodegradation, v. 42, p. 147–152.
- Iqbal, S.S., Chambers, J.P., Brubaker, R.R., Goode, M.T., and Valdes, J.J., 1999, Detection of *Yersinia pestis* using branched DNA: Molecular and Cellular Probes, v. 13, p. 315–320.
- Iqbal, S.S., Chambers, J.P., Goode, M.T., Valdes, J.J., and Brubaker, R.R., 2000, Detection of *Yersinia pestis* by pestacin fluorogenic probe-coupled PCR: Molecular and Cellular Probes, v. 14, p. 109–114.
- India Plague Commission, 1908, Reports on plague investigation in India, XXXI: On the seasonal prevalence of plague in India: Journal of Hygiene, v. 8, p. 266–301.
- Jackson, M.W., 2000, Interactions between type III secretion apparatus components from *Yersinia pestis* detected using the yeast two-hybrid system: FEMS Microbiology Letters, v. 186, p. 85–90.
- Janse, I., Hamidjaja, R.A., Bok, J.M., and van Rotterdam, B.J., 2010, Reliable detection of *Bacillus anthracis*, *Francisella tularensis* and *Yersinia pestis* by using multiplex qPCR including internal controls for nucleic acid extraction and amplification: BMC Microbiology, v. 10, p. 1–12.
- Jarrett, C.O., Deak, E., Isherwood, K.E., Oyston, P.C., Fischer, E.R., Whitney, A.R., Kobayashi, S.D., DeLeo, F.R., and Hinnebusch, B.J., 2004, Transmission of *Yersinia pestis* from an infectious biofilm in the flea vector: Journal of Infectious Diseases, v. 190, p. 783–792.
- Jessup, D.A., Murphy, C.J., Kock, N., Jang, S., and Hoefler, L., 1989, Ocular lesions of plague (*Yersinia pestis*) in a black-tailed deer (*Odocoileus hemionus columbianus*): Journal of Zoo and Wildlife Medicine, v. 20, p. 360–363.
- Johnson, W.C., and Collinge, S.K., 2004, Landscape effects on black-tailed prairie dog colonies: Biological Conservation, v. 115, p. 487–497.
- Jones, P.H., and Britten, H.B., 2010, The absence of concordant population genetic structure in the black-tailed prairie dog and the flea, *Oropsylla hirsuta*, with implications for the spread of *Yersinia pestis*: Molecular Ecology, v. 19, p. 2038–2049.
- Jones, P.H., Wallace, L., and Britten, H.B., 2009, Isolation and characterization of 11 microsatellite loci from *Oropsylla hirsuta*, a vector of sylvatic plague: Molecular Ecology Resources, v. 9, p. 1041–1044.
- Jones, P.H., Britten, H.B., Hanson, D.A., and Washburn, L.R., 2010, Monitoring plague epizootics in black-tailed prairie dog colonies with a sensitive PCR-based protocol: Vector-borne and Zoonotic Diseases, v. 10, p. 96. Abstract.
- Jones, R.T., Knight, R., and Martin, A.P., 2010, Bacterial communities of disease vectors sampled across time, space, and species: ISME Journal, v. 4, p. 223–231.
- Joshi, K., Thakur, J.S., Kumar, R., Singh, A.J., Ray, P., Jain, S., and Varma, S., 2009, Epidemiological features of pneumonic plague outbreak in Himachal Pradesh, India: Transactions of the Royal Society of Tropical Medicine and Hygiene, v. 103, p. 455–460.

- Kacki, S., Rahalison, L., Rajerison, M., Ferroglia, E., and Bianucci, R., 2011, Black Death in the rural cemetery of Saint-Laurent-de la Cabrerisse Aude-Languedoc, southern France, 14th century: Immunological evidence: *Journal of Archaeological Science*, v. 38, p. 581–587.
- Karhu, R.R., and Anderson, S.H., 2000, Effects of pyriproxyfen spray, powder, and oral bait treatments on the relative abundance of nontarget arthropods of black-tailed prairie dog (Rodentia: Sciuridae) towns: *Journal of Medical Anthropology*, v. 37, p. 612–618.
- Kartman, L., 1957, The concept of vector efficiency in experimental studies of plague: *Experimental Parasitology*, v. 6, p. 599–609.
- Kartman, L., 1958, An insecticide-bait-box method for the control of sylvatic plague vectors: *Journal of Hygiene*, v. 56, p. 455–465.
- Kartman, L., 1970, Historical and oecological observations on plague in the United States: *Trop Geogr Med*, v. 22, p. 257–275.
- Kausrud, K.L., Begon, M., Ari, T.B., Viljugrein, H., Esper, J., Buntgen, U., Leirs, H., Junge, C., Yang, B., Yang, M., Xu, L., and Stenseth, N.C., 2010, Modeling the epidemiological history of plague in Central Asia: Palaeoclimatic forcing on a disease system over the past millennium: *BMC Biology*, v. 8:112, p. 1–14.
- Keckler, M.S., Gallardo-Romero, N.F., Langham, G.L., Damon, I.K., Karem, K.L., and Carroll, D.S., 2010, Physiologic reference ranges for captive black-tailed prairie dogs (*Cynomys ludovicianus*): *Journal of the American Association for Laboratory Animal Science*, v. 49, p. 274–281.
- Keeling, M.J., and Gilligan, C.A., 2000, Metapopulation dynamics of bubonic plague: *Nature*, v. 407, p. 903–906.
- Keeling, M.J., and Gilligan, C.A., 2000, Bubonic plague: a metapopulation model of a zoonosis: *Proceedings of the Royal Society of London B*, v. 267, p. 2219–2230.
- Kia, E.B., Moghddas-Sani, H., Hassanpoor, H., Vatandoost, H., Zahabiun, F., Akhavan, A.A., Hanafi-Bojd, A.A., and Telmadarraiy, Z., 2009, Ectoparasites of rodents captured in Bandar Abbas, southern Iran: *Iranian Journal of Arthropod-borne Diseases*, v. 3, p. 44–49.
- Kingston, R., Burke, F., Robinson, J.H., Bedford, P.A., Jones, S.M., Knight, S.C., and Williamson, E.D., 2007, The fraction 1 and V protein antigens of *Yersinia pestis* activate dendritic cells to induce primary T cell responses: *Clinical and Experimental Immunology*, v. 149, p. 561–569.
- Klein, K.A., and Bliska, J.B., 2009, How *Yersinia pestis* becomes a foreign obstruction in the digestive system of the macrophage: *Autophagy*, v. 4, p. 882–883.
- Klevytska, A.M., Price, L.B., Schupp, J.M., Worsham, P.L., Wong, J., and Keim, P., 2001, Identification and characterization of variable-number tandem repeats in the *Yersinia pestis* genome: *Journal of Clinical Microbiology*, v. 39, p. 3179–3185.
- Klukas, R.W., 1988, Management of prairie dog populations in Wind Cave National Park, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: USDA Forest Service General Technical Report RM-154, Fort Collins, Colo., p. 50–52.
- Knopper, L.D., Mineau, P., Scheuhammer, A.M., Bond, D.E., and McKinnon, D.T., 2006, Carcasses of shot Richardson's ground squirrels may pose lead hazards to scavenging hawks: *Journal of Wildlife Management*, v. 70, p. 295–299.
- Knowles, C.J., 1986, Population recovery of black-tailed prairie dogs following control with zinc phosphide: *Journal of Rangeland Management*, v. 39, p. 249–251.
- Kolbe, J.J., Smith, B.E., and Browning, D.M., 2002, Burrow use by tiger salamanders (*Ambystoma tigrinum*) at a black-tailed prairie dog (*Cynomys ludovicianus*) town in southwestern South Dakota: *Herpetological Review*, v. 33, p. 95–99.

- Konnov, N.P., Popov, N.V., Velichko, L.N., and Knyazeva, T.V., 2010, The phenomenon of *Yersinia pestis* biofilm formation in the organism of fleas: *Entomological Review*, v. 90, p. 638–642.
- Kotliar, N.B., 2000, Application of the new keystone species concept to prairie dogs: How well does it work?: *Conservation Biology*, v. 14, p. 1715–1721.
- Kotliar, N.B., Baker, B.W., Whicker, A.D., and Plumb, G., 1999, A critical review of assumptions about the prairie dog as a keystone species: *Environmental Management*, v. 24, p. 177–192.
- Krasnov, B.R., Shenbrot, G.I., Mouillot, D., Khokhlova, I.S., and Poulin, R., 2006, Ecological characteristics of flea species relate to their suitability as plague vectors: *Oecologia*, v. 149, p. 474–481.
- Kretzer, J.E., and Cully, J.F., Jr., 2001a, Effects of black-tailed prairie dogs on reptiles and amphibians in Kansas shortgrass prairie: *Southwestern Naturalist*, v. 46, p. 171–177.
- Kretzer, J.E., and Cully, J.F., Jr., 2001b, Prairie dog effects on harvester ant species diversity and density: *Journal of Range Management*, v. 54, p. 11–14.
- Krug, L.E., and Elston, D.M., 2010, What's eating you? Oriental rat flea (*Xenopsylla cheopis*): *Cutis*, v. 86, p. 282–284.
- Kumar, K., Sharma, S.K., Gill, K.S., Katyal, R., Biswas, S., and Lal, S., 1997, Entomological and rodent surveillance of suspected plague foci in agro-environmental and feral biotopes of a few districts in Maharashtra and Gujarat States of India: *Japanese Journal of Medical Science and Biology*, v. 50, p. 219–226.
- Kupferschmidt, H., 1997, History of the epidemiology of plague: changes in the understanding of plague epidemiology since the discovery of the plague pathogen in 1894: *Antimicrobics and Infectious Diseases Newsletter*, v. 16, p. 51–53.
- Kutyrev, V.V., Filippov, A.A., Oparina, O.S., and Protsenko, O.A., 1992, Analysis of *Yersinia pestis* chromosomal determinants Pgm⁺ and Pst^S associated with virulence: *Microbial Pathogenesis*, v. 12, p. 177–186.
- Kutyrev, V.V., Eroshenko, G.A., Popov, N.V., Vidyayeva, N.A., and Konnov, N.P., 2009, Molecular mechanisms of interactions of plague causative agents with invertebrates: *Molecular Genetics Microbiology and Virology*, v. 24, p. 169–176.
- Lamb, B.L., and Cline, K., 2003, Public knowledge and perceptions of black-tailed prairie dogs: *Human Dimensions of Wildlife*, v. 8, p. 127–143.
- Lamb, B.L., Cline, K., Brinson, A., Sexton, N., and Ponds, P.D., 2001, Citizen knowledge of and attitudes toward black-tailed prairie dogs: Completion report: U.S. Geological Survey, Open-File Report 01-471, Fort Collins, Colo., 53 p.
- Lang, J.D., 1991, Ecology of sylvatic plague in the San Jacinto Mountains of southern California: *Bulletin of the Society for Vector Ecology*, v. 16, p. 183–199.
- Lang, J.D., 1993, Fleas found on mammals in San Diego County, California: *Bulletin of the Society for Vector Ecology*, v. 18, p. 114–124.
- Lang, J.D., 1996, Factors affecting the seasonal abundance of ground squirrel and wood rat fleas (Siphonaptera) in San Diego County, California: *Journal of Medical Entomology*, v. 33, p. 790–804.
- Lang, J.D., 2004, Rodent-flea-plague relationships at the higher elevations of San Diego County, California: *Journal of Vector Ecology*, v. 29, p. 236–247.
- Larson, D.L., 2003, Native weeds and exotic plants: Relationships to disturbance in mixed-grass prairie: *Plant Ecology*, v. 169, p. 317–333.
- Lasch, P., Drevinek, M., Nattermann, H., Grunow, R., Stammer, M., Dieckmann, R., Schwecke, T., and Naumann, D., 2010, Characterization of *Yersinia* using MALDI-TOF mass spectrometry and chemometrics: *Analytical Chemistry*, v. 82, p. 8464–8475.

- Lathem, W.W., Price, P.A., Miller, V.L., and Goldman, W.E., 2007, A plasminogen-activating protease specifically controls the development of primary pneumonic plague: *Science*, v. 315, p. 509–513.
- Laudisoit, A., Leirs, H., Makundi, R.H., Van Dongen, S., Davis, S., Neerinckx, S., Deckers, J., and Libois, R., 2007, Plague and the human flea, Tanzania: *Emerging Infectious Diseases*, v. 13, p. 687–693.
- Laudisoit, A., Neerinckx, S., Makundi, R.H., Leirs, H., and Krasnov, B.R., 2009, Are local plague endemicity and ecological characteristics of vectors and reservoirs related? A case study in northeast Tanzania: *Current Zoology*, v. 55, p. 200–211.
- Lawal, A., Jejelowo, O.A., and Rosenzweig, J.A., 2010, The effects of low-shear mechanical stress on *Yersinia pestis* virulence: *Astrobiology*, v. 10, p. 881–888.
- Lawrence, J.G., 2002, Gene transfer in bacteria: speciation without species?: *Theoretical Population Biology*, v. 61, p. 449–460.
- Lawrenz, M.B., Lenz, J.D., and Miller, V.L., 2009, A novel autotransporter adhesin is required for efficient colonization during bubonic plague: *Infection and Immunity*, v. 77, p. 317–326.
- Laws, T.R., Davey, M.S., Titball, R.W., and Lukaszewski, R., 2010, Neutrophils are important in early control of lung infection by *Yersinia pestis*: *Microbes and Infection*, v. 12, p. 331–335.
- Lechleitner, R.R., Kartman, L., Goldenberg, M.I., and Hudson, B.W., 1968, An epizootic of plague in Gunnison's prairie dogs (*Cynomys gunnisoni*) in south-central Colorado: *Ecology*, v. 49, p. 734–743.
- Leighton, T., 2001, Plague on the prairies: *Blue Jay*, v. 59, p. 200–205.
- Lee-Lewis, H., and Anderson, D.M., 2010, Absence of inflammation and pneumonia during infection with nonpigmented *Yersinia pestis* reveals a new role for the pgm locus pathogenesis: *Infection and Immunity*, v. 78, p. 220–230.
- Lenski, R.E., 1988, Evolution of plague virulence: *Nature*, v. 334, p. 473–474.
- Leslie, T., Whitehouse, C.A., Yingst, S., Baldwin, C., Kakar, F., Mofleh, J., Hami, A.S., Mustafa, L., Omar, F., Ayazi, E., Rossi, C., Noormal, B., Ziar, N., and Kakar, R., 2011, Outbreak of gastroenteritis caused by *Yersinia pestis* in Afghanistan: *Epidemiology and Infection*, v. 139, p. 1–8.
- Levy, C.E., and Gage, K.L., 1999, Plague in the United States, 1995–1997: *Infectious Medicine*, v. 16, p. 54–64.
- Lewis, J.C., McIlvain, E.H., McVickers, R., and Peterson, B., 1979, Techniques used to establish and limit prairie dog towns: *Proceedings of the Oklahoma Academy of Sciences*, v. 59, p. 27–30.
- Lewis, R.J., 1989, Plague in bushy-tailed woodrats: *Canadian Veterinary Journal*, v. 30, p. 496–497.
- Li, Y., Dai, E., Cui, Y., Li, M., Zhang, Y., Wu, M., Zhou, D., Guo, Z., Dai, X., Cui, B., Qi, Z., Wang, Z., Wang, H., Dong, X., Song, Z., Zhai, J., Song, Y., and Yang, R., 2008, Different region analysis for genotyping *Yersinia pestis* isolates from China: *PLoS ONE*, v. 3, e2166, p. 1–10.
- Li, Y., Cui, Y., Hauck, Y., Platonov, M.E., Dai, E., Song, Y., Guo, Z., Pourcel, C., Dentovskaya, S.V., Anisimov, A.P., Yang, R., and Vergnaud, G., 2009, Genotyping and phylogenetic analysis of *Yersinia pestis* by MLVA: Insights into worldwide expansion of central Asia plague foci: *PLoS ONE*, v. 4, e6000, p. 1–9.
- Licht, D.S., Castle, K.T., Roddy, D.E., and Muenchau, B.L., 2010, Management of plague at Wind Cave National Park: A case study in the application of the one health concept of disease management: *Park Science*, v. 27, p. 38–45.
- Lindler, L.E., 2009, Typing methods for the plague pathogen, *Yersinia pestis*: *Journal of AOAC International*, v. 92, p. 11740–1183.
- Link, V.B., 1955, A history of plague in the United States of America: *Public Health Monograph*, v. 26, p. 1–11.

- Little, L., ed., 2007, *Plague and the end of antiquity: The pandemic of 541-750*: Cambridge University Press, 384 p.
- Liu, H.H., Wang, H., Qiu, J.F., Wang, X.Y., Guo, Z.B., Qiu, Y.F., Zhou, D.S., Han, Y.P., Du, Z.M., Li, C., Song, Y.J., and Yang, R.F., 2009, Transcriptional profiling of a mace plague model: Insights into interaction between *Yersinia pestis* and its host: *Journal of Basic Microbiology*, v. 49, p. 92–99.
- Lloyd-Smith, J.O., Cross, P.C., Briggs, C.J., Daugherty, M., Getz, W.M., Latto, J., Sanchez, M.S., Smith, A.B., and Swei, A., 2005, Should we expect population thresholds for wildlife disease?: *Trends in Ecology and Evolution*, v. 20, p. 511–519.
- Lloyd-Smith, J.O., George, D., Pepin, K.M., Pitzer, V.E., Pulliam, J.R.C., Dobson, A.P., Hudson, P.J., and Grenfell, B.T., 2009, Epidemic dynamics at the human-animal interface: *Science*, v. 326, p. 1362–1367.
- Loiez, C. Herweigh, S., Wallet, F., Armand, S., Guinet, F., and Courcol, R.J., 2003, Detection of *Yersinia pestis* in sputum by real-time PCR: *Journal of Clinical Microbiology*, v. 41, p. 4873–4875.
- Lomolino, M.V., and Smith, G.A., 2003a, Prairie dog towns as islands: Applications of island biogeography and landscape ecology for conserving nonvolant terrestrial vertebrates: *Global Ecology and Biogeography*, v. 12, p. 275–286.
- Lomolino, M.V., and Smith, G.A., 2003b, Terrestrial vertebrate communities at black-tailed prairie dog (*Cynomys ludovicianus*) towns: *Biological Conservation*, v. 115, p. 89–100.
- Lomolino, M.V., Smith, G.A., and Vidal, V., 2003, Long-term persistence of prairie dog towns: Insights for designing networks of prairie reserves: *Biological Conservation*, v. 115, p. 111–120.
- Lorange, E.A., Race, B.L., Sebbane, F., and Hinnebusch, B.J., 2005, Poor vector competence of fleas and the evolution of hypervirulence in *Yersinia pestis*: *Journal of Infectious Diseases*, v. 191, p. 1907–1912.
- Loveless, B.M., Yermakova, A., Christensen, D.R., Kondig, J.P., Heine, H.S., Wasieloski, L.P., and Kulesh, D.A., 2010, Identification of ciprofloxacin resistance by SimpleProbe™, high resolution melt and pyrosequencing™ nucleic acid analysis in biothreat agents: *Bacillus anthracis*, *Yersinia pestis*, and *Francisella tularensis*: *Molecular and Cellular Probes*, v. 24, p. 154–160.
- Lowell, J.L., Wagner, D.M., Atshabar, B., Antolin, M.F., Vogler, A.J., Keim, P., Chu, M.C., and Gage, K.L., 2005, Identifying sources of human exposure to plague: *Journal of Clinical Microbiology*, v. 43, p. 650–656.
- Lowell, J.L., Eisen, R.J., Schotthoefer, A.M., Xiaocheng, L., Montenieri, J.A., Tanda, D., Pape, J., Schriefer, M.E., Antolin, M.F., and Gage, K.L., 2009, Colorado animal-based plague surveillance systems: Relationships between targeted animal species and prediction efficacy of areas at risk for humans: *Journal of Vector Ecology*, v. 34, p. 22–31.
- Lybecker, D., Lamb, B.L., and Ponds, P.D., 2002, Public attitudes and knowledge of the black-tailed prairie dog: A common and controversial species: *BioScience*, v. 52, p. 607–613.
- Madon, M.B., Hitchcock, J.C., Davis, R.M., Myers, C.M., Smith, C.R., Fritz, C.L., Emery, K.L., and O’Rullian, W., 1997, An overview of plague in the United States and a report of investigations of two human cases in Kern County, California, 1995: *Journal of Vector Ecology*, v. 22, p. 77–82.
- Magle, S., J. Zhu, and Crooks, K.R., 2005, Behavioral responses to repeated human intrusion by black-tailed prairie dogs (*Cynomys ludovicianus*): *Journal of Mammalogy*, v. 86, p. 524–530.
- Maher, S.P., Ellis, C., Gage, K.L., Enscoe, R.E., and Peterson, A.T., 2010, Range-wide determinants of plague distribution in North America: *American Journal of Tropical Medicine and Hygiene*, v. 83, p. 736–742.

- Makundi, R.H., Massawe, A.W., Mulungu, L.S., Katakweba, A., Mbise, T.J., and Mgone, G., 2008, Potential mammalian reservoirs in a bubonic plague outbreak focus in Mbulu District, northern Tanzania, in 2007: Mammalia, v. 72, p. 253–257.
- Mann, J., 1984, Plague—Perspectives on a rare disease: Western Journal of Medicine, v. 140, p. 650–651.
- Mann, J.M., Martone, W.J., Boyce, J.M., Kaufmann, A.F., Barnes, A.M., and Weber, N.S., 1979, Endemic human plague in New Mexico: Risk factors associated with infection: Journal of Infectious Diseases, v. 140, p. 397–401.
- Marchette, N.J., Lundgren, D.L., Nichols, P.S., Bushman, J.B., and Vest, D., 1962, Studies on infectious diseases in wild animals in Utah. II. Susceptibility of wild mammals to experimental plague: Zoonoses Research, v. 1, p. 225–250.
- Marketon, M.M., DePaolo, R.W., DeBord, K.L., Jabri, B., and Schneewind, O., 2005, Plague bacteria target immune cells during infection: Science, v. 309, p. 1739–1741.
- Marsh, R.E., 1987, Relevant characteristics of zinc phosphide as a rodenticide, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: USDA Forest Service General Technical Report RM-154, Fort Collins, Colo., p. 70–74.
- Matchett, M.R., Biggins, D.E., Carlson, V., Powell, B., and Roake, T., 2010, Enzootic plague reduces black-footed ferret (*Mustela nigripes*) survival in Montana: Vector-Borne and Zoonotic Diseases, v. 10, p. 27–35.
- Matsuura, M., Takahashi, H., Watanabe, H., Saito, S., and Kawahara, K., 2010, Immunomodulatory effects of *Yersinia pestis* lipopolysaccharides on human macrophages: Clinical and Vaccine Immunology, v. 17, p. 49–55.
- McCormick, M., 2003, Rats, communication, and plague: toward an ecological history: Journal of Interdisciplinary History, v. 34, p. 1–25.
- McCue, P.M., and O'Farrell, T.P., 1988, Serological survey for selected diseases in the endangered San Joaquin kit fox (*Vulpes macrotis mutica*): Journal of Wildlife Diseases, v. 24, p. 274–281.
- McElroy, K.M., Blagburn, B.L., Breitschwerdt, E.B., Mead, P.S., and McQuiston, J.H., 2010, Flea-associated zoonotic diseases of cats in the USA: Bartonellosis, flea-borne rickettsioses, and plague: Trends in Parasitology, v. 26, p. 197–204.
- McEvedy, C., 1988, The bubonic plague: Scientific American, v. 258, p. 118–123.
- McGee, B.K., Butler, M.J., Pence, D.B., Alexander, J.L., Nissen, J.B., Ballard, W.B., and Nicholson, K.L., 2006, Possible vector dissemination by swift foxes following a plague epizootic in black-tailed prairie dogs in northwestern Texas: Journal of Wildlife Diseases, p. 42 and p. 415–420.
- Mecenas, J., Franklin, G., Kuziel, W.A., Brubaker, R.R., Falkow, S., and Mosier, D.E., 2004, Evolutionary genetics: CCR5 mutation and plague protection: Nature, v. 427, p. 606.
- Mecenas, J.J., and Strauss, E.J., 1996, Molecular mechanisms of bacterial virulence: Type III secretion and pathogenicity islands: Emerging Infectious Diseases, v. 2, p. 270–288.
- Meerburg, B.G., Singleton, G.R., and Kijlstra, A., 2009, Rodent-borne diseases and the risks for public health: Critical Reviews in Microbiology, v. 35, p. 221–270.
- Mekalanos, J.J., 1992, Environmental signals controlling expression of virulence determinants in bacteria: Journal of Bacteriology, v. 174, p. 1–7.
- Melo, A.C., Almeida, A.M.P., and Leal, N.C., 2003, Retrospective study of a plague outbreak by multiplex-PCR: Letters in Applied Microbiology, v. 37, p. 361–364.

- Mencher, J.S., Smith, S.R., Powell, T.D., Stinchcomb, D.T., Osorio, J.E., and Rocke, T.E., 2004, Protection of black-tailed prairie dogs (*Cynomys ludovicianus*) against plague after voluntary consumption of baits containing recombinant raccoon poxvirus vaccine: *Infection and Immunity*, v. 72, p. 5502–5505.
- Menkens, G.E., and Anderson, S.H., 1991, Population-dynamics of white-tailed prairie dogs during an epizootic of sylvatic plague: *Journal of Mammalogy*, v. 72, p. 328–331.
- Menkens, G.E., and Anderson, S.H., 1993, Mark-recapture and visual counts for estimating population size of white-tailed prairie dogs, in Oldemeyer, J.L., Biggins, D.E., and Miller, B.J., eds., *Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret*: U.S. Fish and Wildlife Service Biological Report 13, Fort Collins, Colo., p. 67–72.
- Menkens, G.E., Miller, B.J., and Anderson, S.H., 1987, White-tailed prairie dog ecology in Wyoming, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, *Eighth Great Plains Wildlife Damage Control Workshop Proceedings*: USDA Forest Service General Technical Report RM-154, Fort Collins, Colo., p. 34–38.
- Menkens, G.E., Biggins, D.E., and Anderson, S.H., 1990, Visual counts as an index of white-tailed prairie dog density: *Wildlife Society Bulletin*, v. 18, p. 290–296.
- Merriman, J.W., 2003, Raptors associated with black-tailed prairie dog colonies and directional manipulation of prairie dog colony expansion using visual barriers in shortgrass prairie: Lubbock, Texas Tech University, unpublished M.S. thesis, 51 p.
- Merriman, J.W., Zwank, P.J., Boal, C.W., and Bashore, T.L., 2004, Efficacy of visual barriers in reducing black-tailed prairie dog colony expansion: *Wildlife Society Bulletin*, v. 32, p. 1316–1320.
- Merriman, J.W., Boal, C.W., Bashore, T.L., Zwank, P.J., and Wester, D.B., 2007, Abundance of diurnal raptors in relation to prairie dog colonies: Implications for bird-aircraft strike hazard: *Journal of Wildlife Management*, v. 71, p. 811–815.
- Mett, V., Lyons, J., Musiyuchuk, K., Chichester, J.A., Brasil, T., Couch, R., Sherwood, R., Palmer, G.A., Streatfield, S.J., and Yusibov, V., 2007, A plant-produced plague vaccine candidate confers protection to monkeys: *Vaccine*, v. 25, p. 3014–3017.
- Meyer, K.F., 1961, Pneumonic plague: *Bacteriological Reviews*, v. 25, p. 249–261.
- Meyer, K.F., Holdenried, R., Burroughs, A.L., and Jawetz, E., 1943, Sylvatic plague studies: IV. Inapparent, latent sylvatic plague in ground squirrels in central California: *Journal of Infectious Diseases*, v. 73, p. 144–157.
- Meyer, K.F., Cavanaugh, D.C., Bartelloni, P.J., and Marshal, J.D., 1974, Plague immunization I. Past and present trends: *Journal of Infectious Disease*, v. 129, p. S13–18.
- Mian, L.S., Nwadike, C.N., Hitchcock, J.C., and Madon, M.B., 1994, Plague surveillance in San Bernardino County during 1993: *Proceedings and Papers of the Annual Conference of the California Mosquito and Vector Control Association*, v. 62, p. 44–46.
- Mian, L.S., Nwadike, C.N., Hitchcock, J.C., and Madon, M.B., 1995, Plague activity in San Bernardino County during 1994: *Proceedings and Papers of the Annual Conference of the California Mosquito and Vector Control Association*, v. 63, p. 35–38.
- Mian, L.S., Nwadike, C.N., Hitchcock, J.C., Madon, M.B., and Myers, C.M., 1996, Plague activity in San Bernardino County during 1995: *Proceedings and Papers of the Annual Conference of the California Mosquito and Vector Control Association*, v. 64, p. 80–84.
- Mian, L.S., Nwadike, C.N., Hitchcock, J.C., Madon, M.B., and Myers, C.M., 1997, Plague activity in San Bernardino County during 1996: *Proceedings and Papers of the Annual Conference of the Mosquito and Vector Control Association of California*, v. 65, p. 76–79.

- Mian, L.S., and Hitchcock, J.C., 1998, Plague surveillance in San Bernardino County—A decade (1988–97) in review: Proceedings and Papers of the California Mosquito and Vector Control Association, v. 66, p. 89–94.
- Mian, L.S., Hitchcock, J.C., Madon, M.B., and Myers, C.M., 2004, Field efficacy of deltamethrin for rodent flea control in San Bernardino County, California, USA: Journal of Vector Ecology, v. 29, p. 212–217.
- Miller, B., Ceballos, G., and Reading, R., 1994, The prairie dog and biotic diversity: Conservation Biology, v. 8, p. 677–681.
- Miller, B., Reading, R., Hoogland, J., Clark, T., Ceballos, G., List, R., Forrest, S., Hanebury, L., Manzano, P., Pacheco, J., and Uresk, D., 2000, The role of prairie dogs as a keystone species: Response to Stapp: Conservation Biology, v. 14, p. 318–321.
- Miller, D.S., Covell, D.F., McLean, R.G., Adrian, W.J., Niezgodna, M., Gustafson, J.M., Rongstad, O.J., Schultz, R.D., Kirk, L.J., and Quan, T.J., 2000, Serologic survey for selected infectious disease agents in swift and kit foxes from the Western United States: Journal of Wildlife Diseases, v. 36, p. 798–805.
- Miller, J., Williamson, E.D., Lakey, J.H., Pearce, M.J., Jones, S.M., and Titball, R.W., 1998, Macromolecular organization of recombinant *Yersinia pestis* F1 antigen and the effect of structure on immunogenicity: FEMS Immunology and Medical Microbiology, v. 21, p. 213–221.
- Miller, S.D., and Cully, J.F., Jr., 2001, Conservation of black-tailed prairie dogs (*Cynomys ludovicianus*): Journal of Mammalogy, v. 82, p. 889–893.
- Milne-Laux, S., and Sweitzer, R.A., 2006, Experimentally induced colony expansion by black-tailed prairie dogs (*Cynomys ludovicianus*) and implications for conservation: Journal of Mammalogy, v. 87, p. 296–303.
- Mittal, R., Peak-Chew, S.Y., Sade, R.S., Vallis, Y., and McMahon, H.T., 2010, The acetyltransferase activity of the bacterial toxin YopJ of *Yersinia* is activated by eukaryotic host cell inositol hexakisphosphate: Journal of Biological Chemistry, v. 285, p. 19927–19934.
- Mizel, S.B., Graff, A.H., Sriranganathan, N., Ervin, S., Lees, C.J., Lively, M.O., Hantgan, R.R., Thomas, M.J., Wood, J., and Bell, B., 2009, Flagellin-F1-V fusion protein is an effective plague vaccine in mice and two species of nonhuman primates: Clinical and Vaccine Immunology, v. 16, p. 21–28.
- Monecke, S., Monecke, H., and Moneckec, J., 2009, Modelling the black death. A historical case study and implications for the epidemiology of bubonic plague: International Journal of Medical Microbiology, v. 299, p. 582–593.
- Montiel-Arteaga, A., Acosta, R., Ceballos, G., and Suzan, G., 2010, Flea community and prevalence of *Yersinia pestis* in black-tailed prairie dogs (*Cynomys ludovicianus*) from northwestern Mexico: Vector-borne and Zoonotic Diseases, v. 10, p. 101. Abstract.
- Montman, C.E., Barnes, A.M., and Maupin, G.O., 1986, An integrated approach to bubonic plague control in a southwestern plague focus: Proceedings of the Vertebrate Pest Conference, v. 12, p. 97–101.
- Nakazawa, Y., Williams, R., Peterson, A.T., Mead, P., Staples, E., and Gage, K.L., 2007, Climate change effects on plague and tularemia in the United States: Vector-Borne and Zoonotic Diseases, v. 7, p. 529–540.
- Nascarella, M.A., Bradford, C.M., Burns, T.H., Marsland, E.J., Pepper, C.M., and Presley, S.M., 2005, Ectoparasite fleas of cottontail rabbits and black-tailed prairie dogs inhabiting the high plains of west Texas: Southwestern Entomologist, v. 30, p. 239–243.
- NIAD, 2008 (2008, October). *Medline Plus*. Accessed January 23, 2009, at <http://www.nlm.nih.gov/medlineplus/plague.html>.

- Nelson, B.C., 1980, Plague studies in California—The roles of various species of sylvatic rodents in plague ecology in California: Proceedings of the Vertebrate Pest Conference, v. 9, p. 89–96.
- Nelson, B.C., 1987, Plague, national scene: Vector Ecology Newsletter, v. 18, p. 3–9.
- Nelson, B.C., and Smith, C.R., 1976, Ecological effects of a plague epizootic on the activities of rodents inhabiting caves at Lava Beds National Monument, California: Journal of Medical Entomology, v. 13, p. 51–61.
- Nelson, B.C., Madon, M.B., and Tilzer, A., 1986, The complexities at the interface among domestic/wild rodents, fleas, pets, and man in urban plague ecology in Los Angeles County, California: Proceedings of the Vertebrate Pest Conference, v. 12, p. 88–96.
- Nelson, K.E., Williams, C.M., and Graham, N.M.H., 2001, Infectious disease epidemiology: Theory and practice: Gaithersburg, Maryland, Aspen Publishers, Inc., 748 p.
- Nieto, N.C., Dabritz, H., Foley, P., Drazenovich, N., Calder, L., Adjemian, J., Conrad, P.A., and Foley, J.E., 2007, Ectoparasite diversity and exposure to vector-borne disease agents in wild rodents in central coastal California: Journal of Medical Entomology, v. 44, p. 328–335.
- Nilles, M.L., 2004, Dissecting the structure of LcrV from *Yersinia pestis*, a truly unique virulence protein: Structure, v. 12, p. 357–358.
- Odell, E.A., Pusateri, F.M., and White, G.C., 2008, Estimation of occupied and unoccupied black-tailed prairie dog colony acreage in Colorado: Journal of Wildlife Management, v. 72, p. 1311–1317.
- Oguge, N.O., Durden, L.A., Keirans, J.E., Balami, H.D., and Schwan, T.G., 2009, Ectoparasites (sucking lice, fleas and ticks) of small mammals in southeastern Kenya: Medical and Veterinary Entomology, v. 23, p. 387–392.
- Okan, N.A., Mena, P., Benach, J.L., Bliska, J.B., and Karzai, A.W., 2010, The smpB-ssrA mutant of *Yersinia pestis* functions as a live attenuated vaccine to protect mice against pulmonary plague infection: Infection and Immunity, v. 78, p. 1284–1293.
- Oldemeyer, J.L., Biggins, D.E., Miller, B.J., and Crete, R., eds., 1993, Proceedings of the Symposium on the Management of Prairie Dog Complexes for the Reintroduction of the Black-footed Ferret; U.S. Fish and Wildlife Service Biological Report 13, 102 p.
- Orent, W., 2004, Plague—The mysterious past and terrifying future of the World’s most dangerous disease: New York, Free Press, 276 p.
- Orloski, K.A., Eidson, M., 1995, *Yersinia pestis* infection in three dogs: Journal of the American Veterinary Medical Association, v. 207, p. 316–318.
- Orloski, K.A., Tyler, A., and Dennis, D.T., 1997, Risk factors for fatality in human plague cases, United States, 1956–1994: Clinical Infectious Diseases, v. 25, p. 411. Abstract.
- Orloski, K.A., and Lathrop, S.L., 2003, Zoonosis update—Plague: A veterinary perspective: Journal of the American Veterinary Medical Association, v. 222, p. 444–448.
- Papworth, S.K., Rist, J., Coad, L., and Milner-Gulland, E.J., 2009, Evidence for shifting baseline syndrome in conservation: Conservation Letters, v. 2, p. 93–100.
- Park, S., Chan, K.S., Viljugrein, H., Nekrassova, L., Suleimenov, B., Ageyev, V.S., Klassovskiy, N.L., Pole, S.B., and Stenseth, N.C., 2007, Statistical analysis of the dynamics of antibody loss to a disease-causing agent: Plague in natural populations of great gerbils as an example: Journal of the Royal Society Interface, v. 4, p. 57–64.
- Parkhill, J., Wren, B.W., Thompson, N.R., Titball, R.W., Holden, M.T.G., Prentice, M.B., Sebahia, M., James, K.D., Churcher, C., Mungall, K.L., Baker, S., Basham, D., Bentley, S.D., Brooks, K., Cerdeno-Tarraga, A.M., Chillingworth, T., Cronin, A., Davies, R.M., Davis, P., Dougan, G., Feltwell, T., Hamlin, N., Holroyd, S., Jagels, K., Karlyshev, A.V., Leather, S., Moule, S., Oyston, P.C.F.,

- Quail, M., Rutherford, K., Simmonds, M., Skelton, J., Stevens, K., Whitehead, S., and Barrell, B.G., 2001, Genome sequence of *Yersinia pestis*, the causative agent of plague: *Nature*, v. 413, p. 523–237.
- Parmenter, R.R., Yadav, E.P., Parmenter, C.A., Etestad, P., and Gage, K.L., 1999, Incidence of plague associated with increased winter-spring precipitation in New Mexico: *American Journal of Tropical Medicine and Hygiene*, v. 61, p. 814–821.
- Pauli, J.N., Buskirk, S.W., Williams, E.S., and Edwards, W.H., 2006, A plague epizootic in the black-tailed prairie dog (*Cynomys ludovicianus*): *Journal of Wildlife Diseases*, v. 42, p. 74–80.
- Paul-Murphy, J., Work, T., Hunter, D., McFie, E., and Fjelline, D., 1994, Serologic survey and serum biochemical reference ranges of the free-ranging mountain lion (*Felis concolor*) in California: *Journal of Wildlife Diseases*, v. 30, p. 205–215.
- Pavlin, B.I., Schloegel, L.M., and Daszak, P., 2009, Risk of importing zoonotic diseases through wildlife trade, United States: *Emerging Infectious Diseases*, v. 15, p. 1721–1726.
- Peeler, E.J., Oidtmann, B.C., Midtlyng, P.J., Miossec, L., and Gozlan, R.E., 2010, Non-native aquatic animals introductions have driven disease emergence in Europe: *Biological Invasions*, v. 13, p. 1291–1303.
- Pence, D.B., Kamler, J.F., and Ballard, W.B., 2004, Ectoparasites of the swift fox in northwestern Texas: *Journal of Wildlife Diseases*, v. 40, p. 543–547.
- Perry, R.D., 2003, A plague of fleas—Survival and transmission of *Yersinia pestis*: *ASM News*, v. 69, p. 336.
- Perry, R.D., and Fetherston, J.D., 1997, *Yersinia pestis*—Etiologic agent of plague: *Clinical Microbiology Reviews*, v. 10, p. 35–66.
- Perry, R.D., Shah, J., Bearden, S.W., Thompson, J.M., and Fetherston, J.D., 2003, *Yersinia pestis* TonB: Role of iron, heme, and hemoprotein utilization: *Infection and Immunity*, v. 71, p. 4159–4162.
- Pfaffenberger, G.S., and Valencia, V.B., 1987, Parasites of public health concern associated with New Mexico desert cottontails (*Sylvilagus audubonii*) and blacktail jack rabbits (*Lepus californicus*): *New Mexico Journal of Science*, v. 27, p. 79–85.
- Phalen, D.N., 2004, Prairie dogs: Vectors and victims: *Seminars in Avian and Exotic Pet Medicine*, v. 13, p. 105–107.
- Pham, H.V., Dang, D.T., Minh, N.N.T., Nguyen, D., and Nguyen, T.V., 2009, Correlates of environmental factors and human plague: An ecological study in Vietnam: *International Journal of Epidemiology*, v. 38, p. 1634–1641.
- Pieper, R., Huang, S.T., Clark, D.J., Robinson, J.M., Alami, H., Parmar, P.P., Suh, M.J., Kuntumalla, S., Bunai, C.L., Perry, R.D., Fleischmann, R.D., and Peterson, S.N., 2009, Integral and peripheral association of proteins and protein complexes with *Yersinia pestis* inner and outer membranes: *Proteome Science*, v. 7, p. 1–5.
- Pieper, R., Huang, S.T., Robinson, J.M., Clark, D.J., Alami, H., Parmar, P.P., Perry, R.D., Fleischmann, R.D., and Peterson, S.N., 2009, Temperature and growth phase influence the outer membrane proteome and the expression of a type VI secretion system in *Yersinia pestis*: *Microbiology*, v. 155, p. 498–512.
- Pieper, R., Huang, S.T., Parmar, P.P., Clark, D.J., Alami, H., Fleischmann, R.D., Perry, R.D., and Peterson, S.N., 2010, Proteomic analysis of iron acquisition, metabolic and regulatory responses of *Yersinia pestis* to iron starvation: *BMC Microbiology*, v. 10, p. 1–21.
- Pohanka, M., and Skladal, P., 2009, *Bacillus anthracis*, *Francisella tularensis* and *Yersinia pestis*. The most important bacterial warfare agents—Review: *Folia Microbiologica*, v. 54, p. 263–272.

- Poland, J.D., and Barnes, A.M., 1979, Plague, in Steele, J.H., ed., CRC Handbook Series in Zoonoses. Section A: Bacterial, Rickettsial, and Mycotic Diseases, v. 1: Boca Raton, Fla., CRC Press, , p. 515–597.
- Poland, J.D., and Dennis, D.T., 1999a, Diagnosis and clinical manifestations, in Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., principal authors, Plague manual: Epidemiology, distribution, surveillance and control: World Health Organization, WHO/CDS/CSR/EDC/99.2, p. 43–53.
- Poland, J.D., and Dennis, D.T., 1999b, Treatment of plague, in Dennis, D.T., Gage, K.L., Gratz, N., Poland, J.D., and Tikhomirov, E., principal authors, Plague manual: Epidemiology, distribution, surveillance and control: World Health Organization, WHO/CDS/CSR/EDC/99.2, p. 55–62.
- Poland, J.D., Quan, T.J., and Barnes, A.M., 1994, Plague, in Beran, G.W., ed., CRC Handbook Series in Zoonoses. Section A: Bacterial, Rickettsial, and Mycotic Diseases: Boca Raton, Fla., CRC Press, p. 93–112.
- Pollitzer, R., 1954, Plague: World Health Organization Monography Series, no. 22., Geneva, World Health Organization.
- Potera, C., 2000, Prairie dogs plagued by *Yersinia pestis*: ASM News, v. 66, p. 718–719.
- Powell, B., Andrews, G., Enama, J., Jendrek, S., Bolt, C., Worsham, P., Pullen, J.K., Ribot, W., Hines, H., Smith, L., Heath, D.G., 2005, Design and testing for a non-tagged F1-V fusion protein as vaccine antigen against bubonic and pneumonic plague: Biotechnology Progress, v. 21, p. 1490–1510.
- Powell, E.M., 2004, Ecology and physiology of free-ranging black-tailed and Utah prairie dogs: Fort Collins, Colo., unpublished Ph.D. dissertation, Colorado State University, 140 p.
- Powell, K.L., Robel, R.J., Kemp, K.E., and Nellis, M.D., 1994, Aboveground counts of black-tailed prairie dogs: Temporal nature and relationship to burrow entrance density: Journal of Wildlife Management, v. 58, p. 361–366.
- Prentice, M.B., and Rahalison, L., 2007, Plague: Lancet, v. 369, p. 1196–1207.
- Price, P.W., Westoby, M., and Rice, B., 1988, Parasite-mediated competition: Some predictions and tests: American Naturalist, v. 131, p. 544–555.
- Prior, J.L., and Titball, R.W., 2002, Monoclonal antibodies against *Yersinia pestis* lipopolysaccharide detect bacteria cultured at 28°C or 37°C: Molecular and Cellular Probes, v. 16, p. 251–256.
- Prior, J.L., Hitchen, P.G., Williamson, D.E., Reason, A.J., Morris, H.R., Dell, A., Wren, B.W., and Titball, R.W., 2001, Characterization of the lipopolysaccharide of *Yersinia pestis*: Microbial Pathogenesis, v. 30, p. 49–57.
- Prior, J.L., Parkhill, J., Hitchen, P.G., Mungall, K.L., Stevens, K., Morris, H.R., Reason, A.J., Oyston, P.C.F., Dell, A., Wren, B.W., and Titball, R.W., 2001, The failure of different strains of *Yersinia pestis* to produce lipopolysaccharide O-antigen under different growth conditions is due to mutations in the O-antigen gene cluster: FEMS Microbiology Letters, v. 197, p. 229–233.
- Protsenko, O.A., Filippov, A.A., and Kuttyrev, V.V., 1991, Integration of the plasmid encoding the synthesis of capsular antigen and murine toxin into *Yersinia pestis* chromosome: Microbial Pathogenesis, v. 11, p. 123–128.
- Quan, T.J., Barnes, A.M., Carter, L.G., and Tsuchiya, K.R., 1985, Experimental plague in rock squirrels, *Spermophilus variegates*: Journal of Wildlife Diseases, v. 21, p. 205–210.
- Quan, T.J., Larson, A., and Meyer, K., 1948, Streptomycin in experimental plague: Proceedings of the Society for Experimental Biology and Medicine, v. 66, p. 528–532.
- Radnedge, L., Gamez-Chin, S., McCreedy, P.M., Worsham, P.L., and Andersen, G.L., 2001, Identification of nucleotide sequences for the specific and rapid detection of *Yersinia pestis*: Applied Environmental Microbiology, v. 67, p. 3759–3762.

- Rahalison, L., Vololonirina, E., Ratsitorahina, M., and Chanteau, S., 2000, Diagnosis of bubonic plague by PCR in Madagascar under field conditions: *Journal of Clinical Microbiology*, v. 38, p. 260–263.
- Rahelinirina, S., Duplantier, J.M., Ratovonjato, J., Ramilijaona, O., Ratsimba, M., and Rahalison, L., 2010, Study on the movement of *Rattus rattus* and evaluation of the plague dispersion in Madagascar: *Vector-Borne and Zoonotic Diseases*, v. 10, p. 77–84.
- Rahelinirina, S., Duplantier, J.M., Ratsimba, J.M., Ratovonjato, J., Ramilijaona, O., Papillon, Y., and Rahalison, L., 2010, Assessment of Rhodamine B for labeling the plague reservoir *Rattus rattus* in Madagascar: *African Journal of Ecology*, v. 48, p. 662–666.
- Rajerison, M., Dartevell, S., Ralafiarisoa, L.A., Bitam, I., Tuyet, D.T.N., Andrianaivoarimana, V., Nato, F., and Rahalison, L., 2009, Development and evaluation of two simple, rapid immunochromatographic tests for the detection of *Yersinia pestis* antibodies in humans and reservoirs: *PLoS Neglected Tropical Diseases*, v. 3, art. no. e421, p. 1–7.
- Rakin, A., Noelting, C., Schropp, P., and Heesemann, J., 2001, Integrative module of the high-pathogenicity island of *Yersinia*: *Molecular Microbiology*, v. 39, p. 407–416.
- Rapoport, L.P., Melnichuck, E.A., Orlova, L.M., and Nuriev, K.K., 2010, A comparative analysis of the flea fauna and its epizootic importance in deserts of southern Kazakhstan: *Zoologicheskyy Zhurnal*, v. 89, p. 1087–1097.
- Ratsitorahina, M., Chanteau, S., Rahalison, L., Ratsifasoamanana, L., and Boisier, P., 2000, Epidemiological and diagnostic aspects of the outbreak of pneumonic plague in Madagascar: *The Lancet*, v. 355, p. 111–113.
- Ray, C., and Collinge, S.K., 2006, Potential effects of a keystone species on the dynamics of sylvatic plague, *in* Collinge, S.K., and Ray, C., eds., *Disease ecology: community structure and pathogen dynamics*: New York, Oxford University Press Inc., p. 202–216.
- Rayor, L.S., 1985a, Dynamics of a plague outbreak in Gunnison prairie dog: *Journal of Mammalogy*, v. 66, p. 194–196.
- Rayor, L.S., 1985b, Effects of habitat quality on growth, age of first reproduction, and dispersal in Gunnison's prairie dogs (*Cynomys ludovicianus*): *Canadian Journal of Zoology*, v. 63, p. 2835–2840.
- Rayor, L.S., Brody, A.K., and Gilbert, C., 1987, Hibernation in the Gunnison's prairie dog: *Journal of Mammalogy*, v. 68, p. 147–150.
- Reisner, B.S., 1996, Plague—Past and present: *Clinical Microbiology Newsletter*, v. 18, p. 153–157.
- Restani, M., Rau, L.R., and Flath, D.L., 2001, Nesting ecology of burrowing owls occupying black-tailed prairie dog towns in southeastern Montana: *Journal of Raptor Research*, v. 35, p. 296–303.
- Revell, P.A., and Miller, V.L., 2001, *Yersinia* virulence: More than a plasmid: *FEMS Microbiology Letters*, v. 205, p. 159–164.
- Richerson, J.V., Scudday, J.F., and Tabor, S.P., 1992, An ectoparasite survey of mammals in Brewster County, Texas, 1982–1985: *Southwestern Entomologist*, v. 17, p. 7–15.
- Riley, S.P.D., Foley, J., and Chomel, B., 2004, Exposure to feline and canine pathogens in bobcats and gray foxes in urban and rural zones of a national park in California: *Journal of Wildlife Diseases*, v. 40, p. 11–22.
- Roach, J.L., Stapp, P., Van Horne, B., and Antolin, M.F., 2001, Genetic structure of a metapopulation of black-tailed prairie dogs: *Journal of Mammalogy*, v. 82, p. 946–959.
- Robinette, K.W., Andeldt, W.F., and Burnham, K.P., 1995, Effect of group-size on survival of relocated prairie dogs: *Journal of Wildlife Management*, v. 59, p. 867–874.

- Robinson, J.B., Telepnev, M.V., Zudina, I.V., Bouyer, D., Montenieri, J.A., Bearden, S.W., Gage, K.L., Agar, S.L., Foltz, S.M., Chauhan, S., Chopra, A.K., and Motin, V.L., 2009, Evaluation of a *Yersinia pestis* mutant impaired in a theroregulated type VI-like secretion system in flea, macrophage and murine models: *Microbial Pathogenesis*, v. 47, p. 243–251.
- Robinson, V.L., Oyston, P.C.F., and Titball, R.W., 2005, A *dam* mutant of *Yersinia pestis* is attenuated and induces protection against plague: *FEMS Microbiology Letters*, v. 252, p. 251–256.
- Rocke, T.E., Smith, S.R., Stinchcomb, D.T., and Osorio, J.E., 2008, Immunization of black-tailed prairie dog against plague through consumption of vaccine-laden baits: *Journal of Wildlife Diseases*, v. 44, p. 930–937.
- Rocke, T.E., Iams, K.P., Dawe, S., Smith, S.R., Williamson, J.L., Heisey, D.M., and Osorio, J.E., 2009, Further development of raccoon poxvirus-vectored vaccines against plague (*Yersinia pestis*): *Vaccine*, v. 28, p. 338–344.
- Rocke, T.E., Pussini, N., Smith, S.R., Williamson, J., Powell, B., and Osorio, J.E., 2010, Consumption of baits containing raccoon pox-based plague vaccines protects black-tailed prairie dogs (*Cynomys ludovicianus*): *Vector-Borne and Zoonotic Diseases*, v. 10, p. 53–58.
- Roe, K.A., and Roe, C.M., 2003, Habitat selection guidelines for black-tailed prairie dog relocations: *Wildlife Society Bulletin*, v. 31, p. 1246–1253.
- Roemer, D.M., and Forrest, S.C., 1996, Prairie dog poisoning in northern Great Plains: An analysis of programs and policies: *Environmental Management*, v. 20, p. 349–359.
- Rogers, J.V., and Choi, Y.W., 2009, Decreased time for detection and quantification of virulent *Bacillus anthracis* and *Yersinia pestis* using a BioNanoPore (BNPTM) membrane technology: *Letters in Applied Microbiology*, v. 48, p. 793–796.
- Rollins, S.E., Rollins, S.M., and Ryan, E.T., 2003, *Yersinia pestis* and the plague: *American Journal of Clinical Pathology*, v. 119, p. S78–85.
- Rose, L.J., Donlan, R., Banerjee, S.N., and Arduino, M.J., 2003, Survival of *Yersinia pestis* on environmental surfaces: *Applied and Environmental Microbiology*, v. 69, p. 2166–2171.
- Rosen, W., 2007, *Justinian’s flea: The first great plague and the birth of Europe*: Penguin Group, New York, 346 p.
- Rosqvist, R., Skurnik, M., and Wolf-Watz, H., 1988, Increased virulence of *Yersinia pseudotuberculosis* by two independent mutations: *Nature*, v. 334, p. 522–525.
- Ruiz, A., 2001, Plague in the Americas: *Emerging Infectious Diseases*, v. 7, p. 539–540.
- Russell, P., Eley, S.M., Hibbs, S.E., Manchee, R.J., Stagg, A.J., and Titball, R.W., 1995, A comparison of plague vaccine, USP and EV76 vaccine induced protection against *Yersinia pestis* in a murine model: *Vaccine*, v. 13, p. 1551–1556.
- Russell, P., Nelson, M., Whittington, D., Green, M., Eley, S.M., and Titball, R.W., 1997, Laboratory diagnosis of plague: *British Journal of Biomedical Science*, v. 54, p. 231–236.
- Rust, J.H., Cavanaugh, D.C., O’Shita, R., and Marshall, J.D., 1971, The role of domestic animals in the epidemiology of plague. I. Experimental infection of dogs and cats: *Journal of Infectious Disease*, v. 124, p. 522–526.
- Rust, M.K., 2005, Advances in the control of *Ctenocephalides felis* (cat flea) on cats and dogs: *Trends in Parasitology*, v. 21, p. 232–236.
- Salkeld, D.J., and Stapp, P., 2006, Seroprevalence rates and transmission of plague (*Yersinia pestis*) in mammalian carnivores: *Vector-Borne and Zoonotic Diseases*, v. 6, p. 231–239.
- Salkeld, D.J., and Stapp, P., 2008, No evidence of deer mouse involvement in plague (*Yersinia pestis*) epizootics in prairie dogs: *Vector-Borne and Zoonotic Diseases*, v. 8, p. 331–337.

- Salkeld, D.J., and Stapp, P., 2008, Prevalence and abundance of fleas in black-tailed prairie dog burrow: Implications for the transmission of plague (*Yersinia pestis*): *Journal of Parasitology*, v. 94, p. 616–621.
- Salkeld, D.J., and Stapp, P., 2009, Effects of weather and plague-induced die-offs of prairie dogs on the fleas of northern grasshopper mice: *Journal of Medical Entomology*, v. 46, p. 488–594.
- Salkeld, D.J., Eisen, R.J., Antolin, M.F., Stapp, P., and Eisen, L., 2006, Host usage and seasonal activity patterns of *Ixodes kingi* and *I. sculptus* (Acari:Ixodidae) nymphs in a Colorado prairie landscape, with a summary of published North American host records for all life stages: *Journal of Vector Ecology*, v. 31, p. 168–180.
- Salkeld, D.J., Eisen, R.J., Stapp, P., Wilder, A.P., Lowell, J., Tripp, D.W., Albertson, D., and Antolin, M.F., 2007, The potential role of swift foxes (*Vulpes velox*) and their fleas in plague outbreaks in prairie dogs: *Journal of Wildlife Diseases*, v. 43, p. 425–431.
- Salkeld, D.J., Salathe, M., Stapp, P., and Jones, J.H., 2010, Plague outbreaks in prairie dog populations explained by percolation thresholds of alternate host abundance: *Proceedings of the National Academy of Sciences*, v. 107, p. 14247–14250.
- Sarovich, D.S., Colman, R.E., Price, E.P., Chung, W.K., Lee, J., Schupp, J.M., Cobble, K.R., Busch, J.D., Alexander, J., Keim, P., and Wagner, D.M., 2010, Selective isolation of *Yersinia pestis* from plague-infected fleas: *Journal of Microbiological Methods*, v. 82, p. 95–97.
- Schrag, S.J., and Wiener, P., 1995, Emerging infectious diseases: What are the relative roles of ecology and evolution?: *Trends in Ecology and Evolution*, v. 10, p. 319–324.
- Schubert, S., Rakin, A., Fischer, D., Sorsa, F., and Heesemann, J., 1999, Characterization of the integration site of *Yersinia* high-pathogenicity island in *Escherichia coli*: *FEMS Microbiology Letters*, v. 179, p. 409–414.
- Schubert, S., Picard, B., Gouriou, S., Heeseman, J., and Denamur, E., 2002, *Yersinia* high-pathogenicity island contributes to virulence in *Escherichia coli* causing extraintestinal infections: *Infection and Immunity*, v. 70, p. 5335–5337.
- Schwan, T.G., Thompson, D., and Nelson, B.C., 1985, Fleas on roof rats in 6 areas of Los Angeles County, California—Their potential role in the transmission of plague and murine typhus to humans: *American Journal of Tropical Medicine and Hygiene*, v. 34, p. 372–379.
- Scott-Morales, L.M., Gottschalk, E., and Muhlenberg, M., 2005, Decline in the endemic Mexican prairie dog *Cynomys mexicanus*: What do we know about extinction risk?: *Oryx*, v. 39, p. 389–397.
- Sebbane, F., Devalckenaere, A., Foulon, J., Carniel, E., and Simonet, M., 2001, Silencing and reactivation of urease in *Yersinia pestis* is determined by one G residue at a specific position in the ureD gene: *Infection and Immunity*, v. 69, p. 170–176.
- Sebbane, F., Gardner, D., Long, D., Gowen, B.B., and Hinnebusch, B.J., 2005, Kinetics of disease progression and host response in a rat model of bubonic plague: *American Journal of Pathology*, v. 166, p. 1427–1439.
- Sebbane, F., Jarrett, C.O., Gardner, D., Long, D., and Hinnebusch, B.J., 2006, Role of *Yersinia pestis* plasminogen activator in the incidence of distinct septicemic and bubonic forms of flea-borne plague: *Proceedings of the National Academy of Sciences*, v. 103, p. 5526–5530.
- Sebbane, F., Jarrett, C., Garner, D., Long, D., and Hinnebusch, B.J., 2009, The *Yersinia pestis* caf1M1A1 Fimbrial Capsule Operon promotes transmission by flea bite in a mouse model of bubonic plague: *Infection and Immunity*, v. 77, p. 1222–1229.
- Seery, D.B., and Matiatos, D.J., 2000, Response of wintering Buteos to plague epizootics in prairie dogs: *Western North American Naturalist*, v. 60, p. 420–425.

- Seery, D.B., Biggins, D.E., Montenieri, J.A., Ensore, R.E., Tanda, D.T., and Gage, K.L., 2003, Treatment of black-tailed prairie dog burrows with deltamethrin to control fleas (Insecta: Siphonaptera) and plague: *Journal of Medical Entomology*, v. 40, p. 718–722.
- Severson, K.E., and Plumb, G.E., 1998, Comparison of methods to estimate population densities of black-tailed prairie dogs: *Wildlife Society Bulletin*, v. 26, p. 859–866.
- Sexton, N.R., Brinson, A., Ponds, P.D., Cline, K., and Lamb, B.L., 2001, Citizen knowledge and perception of black-tailed prairie dog management: report to respondents: U.S. Geological Survey Open-File Report 01-467, Fort Collins, Colo., 23 p.
- Shalaway, S., and Slobodchikoff, C.N., 1988, Seasonal changes in the diet of Gunnison's prairie dog: *Journal of Mammalogy*, v. 69, p. 835–841.
- Sharps, J.C., and Uresk, D.W., 1990, Ecological review of black-tailed prairie dogs and associated species in western South Dakota: *Great Basin Naturalist*, v. 50, p. 339–345.
- Shaughnessy, M.J., and Cifelli, R.L., 2004, Influence of black-tailed prairie dog towns (*Cynomys ludovicianus*) on carnivore distributions in the Oklahoma panhandle: *Western North American Naturalist*, v. 64, p. 184–192.
- Shaw, J.H., McAbee, W., Carter, T.S., and Leslie, D.M., Jr., 1993, Assessment of black-tailed prairie dog colonies for reintroduction of black-footed ferrets in western Oklahoma: *Proceedings of the Oklahoma Academy of Science*, v. 73, p. 47–52.
- Shiel, W.C., and Stoppler, M.C., eds., 2008, *Webster's New World Medical Dictionary* (3d ed.): Wiley Publishing, Inc., 480 p.
- Shier, D.M., 2006, Effect of family support on the success of translocated black-tailed prairie dogs: *Conservation Biology*, v. 20, p. 1780–1790.
- Shim, H., Musson, J.A., Harper, H.M., McNeill, H.V., Walker, N., Flick-Smith, H., Von Delwig, A., Williamson, E.D., and Robinson, J.H., 2006, Mechanisms of major histocompatibility complex class II-restricted processing and presentation of the V antigen of *Yersinia pestis*: *Immunology*, v. 119, p. 385–392.
- Shipley, B.K., and Reading, R.P., 2006, A comparison of herpetofauna and small mammal diversity on black-tailed prairie dog (*Cynomys ludovicianus*) colonies and non-colonized grasslands in Colorado: *Journal of Arid Environments*, v. 66, p. 27–41.
- Shivaji, S., Bhanu, N. V., and Aggarwal, R.K., 2000, Identification of *Yersinia pestis* as the causative organism of plague in India as determined by 16S rDNA sequencing and RAPD-based genomic fingerprinting: *FEMS Microbiology Letters*, v. 189, p. 247–252.
- Sidle, J.G., Ball, M., Byer, T., Chynoweth, J.J., Foli, G., Hodorff, R., Moravek, G., Peterson, R., and Svingen, D.N., 2001, Occurrence of burrowing owls in black-tailed prairie dog colonies on Great Plains National Grasslands: *Journal of Raptor Research*, v. 35, p. 316–321.
- Skrade, P.D.B., and Dinsmore, S.J., 2010, Sex-related dispersal in the mountain plover (*Charadrius montanus*): *Auk*, v. 127, p. 671–677.
- Slobodchikoff, C.N., Robinson, A., and Schaack, C., 1988, Habitat use by Gunnison's prairie dogs, in Szaro, R.C., Severson, K.E., and Patton, D.R., technical coordinators, *Management of Amphibians, Reptiles and Small Mammals in North America: Proceedings of the symposium: USDA Forest Service General Technical Report RM-166*, Fort Collins, Colo., p. 403–408.
- Smith, C.R., 1994, Wild carnivores as plague indicators in California—A cooperative interagency disease surveillance program: *Proceedings of the Vertebrate Pest Conference*, v. 16, p. 192–199.
- Smith, C.R., Nelson, B.C., and Barnes, A.M., 1984, The use of wild carnivore serology in determining patterns of plague activity in rodents in California: *Proceedings of the 11th Vertebrate Pest Conference*, University of Nebraska, Lincoln, Nebr., p. 71–76.

- Smith, C.R., Wilson, B.A., Thompson, M.A., and Jones, R., 1994, Plague surveillance and disease activity in California during 1990–1993: Proceedings and Papers of the Annual Conference of the California Mosquito and Vector Control Association, v. 62, p. 39–43.
- Smith, C.R., Tucker, J.R., Wilson, B.A., and Clover, J.R., 2010, Plague studies in California: A review of long-term disease activity, flea-host relationships and plague ecology in the coniferous forests of the southern Cascades and northern Sierra Nevada mountains: *Journal of Vector Ecology*, v. 35, p. 1–12.
- Smith, G.A., and Lomolino, M.V., 2004, Black-tailed prairie dogs and the structure of avian communities on the shortgrass plains: *Oecologia*, v. 138, p. 592–602.
- Smith, T., 1987, Plague discovered in San Diego County: *Vector Ecology Newsletter*, v. 18, p. 9–10.
- Snall, T., Benestad, R.E., and Stenseth, N.C., 2009, Expected future plague levels in a wildlife host under different scenarios of climate change: *Global Change Biology*, v. 15, p. 500–507.
- Snall, T., O’Hara, R.B., Ray, C., and Collinge, S.K., 2008, Climate-driven spatial dynamics of plague among prairie dog colonies: *American Naturalist*, v. 171, p. 238–248.
- Sofer-Podesta, C., Ang, J., Hackett, N.R., Senina, S., Perlin, D., Crystal, R.G., and Boyer, J.L., 2009, Adenovirus-mediated delivery of an anti-V antigen monoclonal antibody protects mice against a lethal *Yersinia pestis* challenge: *Infection and Immunity*, v. 77, p. 1561–1568.
- Soleimani, M., Eini, F., Raufi, M.F., Azari, F., Farzampour, S., Jamshidian, E., Khoshdel, A., and Majidzadeh, K., 2010, Design of multiplex polymerase chain reaction (PCR) method for molecular detection of *Yersinia pestis* bacterium: *Yakhteh*, v. 12, p. 363–370.
- Spano, R.K., 1994, Ground squirrel management in the Angeles National Forest: Proceedings of the Vertebrate Pest Conference, v. 16, p. 68–71.
- Stafford, K., and Coles, G., 2009, Drug resistance in ectoparasites of medical and veterinary importance, in Mayers, D.L., ed., *Antimicrobial drug resistance*, v. 1: Mechanisms of drug resistance: New York, Springer, Humana Press, p. 647–654.
- Stapp, P., 1998, A reevaluation of the role of prairie dogs in Great Plains Grasslands: *Conservation Biology*, v. 12, p. 1253–1259.
- Stapp, P., 2007, Rodent communities in active and inactive colonies of black-tailed prairie dogs in shortgrass steppe: *Journal of Mammalogy*, v. 88, p. 241–249.
- Stapp, P., and Salkeld, D.J., 2009, Inferring host-parasite relationships using stable isotopes: Implications for disease transmission and host specificity: *Ecology*, v. 90, p. 3268–3273.
- Stapp, P., Antolin, M.F., and Ball, M., 2004, Patterns of extinction in prairie dog metapopulations: Plague outbreaks follow El Nino events: *Frontiers in Ecology and the Environment*, v. 2, p. 235–240.
- Stapp, P., Salkeld, D.J., Eisen, R.J., Pappert, R., Young, J., Carter, L.G., Gage, K.L., Tripp, D.W., and Antolin, M.F., 2008, Exposure of small rodents to plague during epizootics in black-tailed prairie dogs: *Journal of Wildlife Diseases*, v. 44, p. 724–730.
- Stapp, P., Salkeld, D.J., Franklin, H.A., Kraft, J.P., Tripp, D.W., Antolin, M.F., and Gage, K.L., 2009, Evidence for the involvement of an alternate rodent host in the dynamics of introduced plague in prairie dogs: *Journal of Animal Ecology*, v. 78, p. 807–817.
- Stapp, P., Salkeld, D.J., Antolin, M.F., and Gage, K.L., 2010, The role of alternative rodent hosts in the dynamics of plague in black-tailed prairie dog colonies: *Vector-borne and Zoonotic Diseases*, v. 10, p. 98. Abstract.
- Steenhof, K., Yensen, E., Kochert, M.N., and Gage, K.L., 2006, Populations and habitat relationships of mute ground squirrels in southwestern Idaho: *Western North American Naturalist*, v. 66, p. 482–491.
- Stenseth, N.C., Atshabar, B.B., Begon, M., Belmain, S.R., Bertherat, E., Carniel, E., Gage, K.L., Leirs, H., and Rahalison, L., 2008, Plague: Past, present, and future: *PLOS Medicine*, v. 5, p. 9–13.

- Stenseth, N.C., Samia, N.I., Viljugrein, H., Kausrud, K.L., Begon, M., Davis, S., Leirs, H., Dubyanskiy, V.M., Esper, J., Ageyev, V.S., Klassovskiy, N.L., Pole, S.B., and Chan, K.S., 2006, Plague dynamics are driven by climate variation: *Proceedings of the National Academy of Sciences*, v. 103, p. 13110–13115.
- Stevenson, H.L., Bai, Y., Kosoy, M.Y., Monteneri, J.A., Lowell, J.L., Chu, M.C., and Gage, K.L., 2003, Detection of novel *Baronella* strains and *Yersinia pestis* in prairie dogs and their fleas (Siphonaptera: ceratophyllidae and pulicidae using multiplex polymerase chain reaction: *Journal of Medical Entomology*, v. 40, p. 329–337.
- Stohlgren, T.J., Schell, L.D., and Heuvel, B.V., 1999, How grazing and soil quality affect native and exotic plant diversity in Rocky Mountain Grasslands: *Ecological Applications*, v. 9, p. 45–64.
- Stoltenberg, M.B., 2004, Effects of prairie dogs on plant community composition and vegetation disappearance in mixed-grass prairie: Brookings, South Dakota, South Dakota State University, unpublished M.S. thesis, 88 p.
- Storm, J.J., and Ritzi, C.M., 2008, Ectoparasites of small mammals in western Iowa: *Northeastern Naturalist*, v. 15, p. 283–292.
- Stramer, S.L., Hollinger, F.B., Katz, L.M., Kleinman, S., Metzger, P.S., Gregory, K.R., and Dodd, R.Y., 2009, Emerging infectious disease agents and their potential threat to transfusion safety: *Transfusion*, v. 49, p. 1S–29S.
- Strayley, S.C., 1991, The low-Ca²⁺ response virulence regulon of human-pathogenic yersiniae: *Microbial Pathogenesis*, v. 10, p. 87–91.
- Sun, Y.C., Hinnebusch, B.J., and Darby, C., 2008, Experimental evidence for negative selection in the evolution of a *Yersinia pestis* pseudogene: *Proceedings of the National Academy of Sciences*, v. 105, p. 8097–8101.
- Sun, Y.C., Koumoutsis, A., and Darby, C., 2009, The response regulator PhoP negatively regulates *Yersinia pseudotuberculosis* and *Yersinia pestis* biofilms: *FEMS Microbiology Letters*, v. 290, p. 85–90.
- Swinton, J., Woodhouse, M.E.J., Begon, M.E., Dobson, A.P., Ferroglio, E., Grenfell, B.T., Guberti, V., Hails, R.S., Heesterbeek, J.A.P., Lavazza, A., Roberts, M.G., White, P.J., and Wilson, K., 2002, Microparasite transmission and persistence, in Hudson, P.J., Rizzoli, A., Grenfell, B.T., Heesterbeek, H., and Dobson, A.P., eds., *The ecology of wildlife diseases*: New York, Oxford University Press Inc., p. 83–101.
- Tabor, S.P., and Thomas, R.E., 1986, The occurrence of plague (*Yersinia pestis*) in a bobcat from the Trans-Pecos area of Texas: *Southwestern Naturalist*, v. 3, p. 135–136.
- Telepnev, M.V., Klimpel, G.R., Haithcoat, J., Knirel, Y.A., Anisimov, A.P., and Motin, V.L., 2009, Tetraacylated lipopolysaccharide of *Yersinia pestis* can inhibit multiple toll-like receptor-mediated signaling pathways in human dendritic cells: *Journal of Infectious Diseases*, v. 200, p. 1694–1702.
- Terrall, D.F., 2006, Use of natural vegetative barriers to limit black-tailed prairie dog town expansion in western South Dakota: Brookings, South Dakota, South Dakota State University, unpublished M.S. thesis, 85 p.
- Thiagajaran, B., Bai, Y., Gage, K.L., and Cully, J.F., 2008a, Prevalence of *Yersinia pestis* in rodents and fleas associated with black-tailed prairie dogs (*Cynomys ludovicianus*) at Thunder Basin National Grassland, Wyoming: *Journal of Wildlife Diseases*, v. 44, p. 731–736.
- Thiagajaran, B., Cully, J.F., Loughin, T.M., Monteneri, J.A., and Gage, K.L., 2008b, Geographic variation in rodent-flea relationships in the presence of black-tailed prairie dog colonies: *Journal of Vector Ecology*, v. 33, p. 178–190.

- Thiagarajan, B., Cully, J.F., and Gage, K.L., 2010, Ecology of rodents and fleas associated with black-tailed prairie dogs in areas with plague: *Vector-borne and Zoonotic Diseases*, v. 10, p. 103. Abstract.
- Thomas, C.U., and Hughes, P.E., 1992, Plague surveillance by serological testing of coyotes (*Canis latrans*) in Los Angeles County, California: *Journal of Wildlife Diseases*, v. 28, p. 610–613.
- Thomas, R.E., 1988, A review of flea collection records from *Onychomys leucogaster* with observations on the role of grasshopper mice in the epizootology of wild rodent plague: *Great Basin Naturalist*, v. 48, p. 83–95.
- Thomas, R.E., Barnes, A.M., Quan, T.J., Beard, M.L., Carter, L.G., and Hopla, C.E., 1988, Susceptibility to *Yersinia pestis* in the northern grasshopper mouse (*Onychomys leucogaster*): *Journal of Wildlife Diseases*, v. 24, p. 327–333.
- Thomson, N.R., Howard, S., Wren, B.W., Holden, M.T.G., Crossman, L., Challis, G.L., Churcher, C., Mungall, K., Brooks, K., Chillingworth, T., Feltwell, T., Abdellah, Z., Hauser, H., Jagels, K., Maddison, M., Moule, S., Sanders, M., Whitehead, S., Quail, M.A., Dougan, G., Parkhill, J., and Prentice, M.B., 2006, The complete genome sequence and comparative genome analysis of the high pathogenicity *Yersinia enterocolitica* strain 8081: *PLoS Genet*, v. 2, e206, p. 2040–2051.
- Thorne, E.T., Quan, T.J., Williams, E.S., Walthall, T.J., and Daniels, D., 1987, Plague in a free-ranging mule deer from Wyoming: *Journal of Wildlife Diseases*, v. 23, p. 155–159.
- Titball, R.W., and Williamson, E.D., 2004, *Yersinia pestis* (plague) vaccines: Expert Opinion on Biological Therapy, v. 4, p. 965–973.
- Titball, R.W., Hill, J., Lawton, D.G., and Brown, K.A., 2003, *Yersinia pestis* and plague: *Biochemical Society Transactions*, v. 31, p. 104–107.
- Tomaso, H., Jacob, D., Eickhoff, M., Scholz, H.C., Al Dahouk, S., Kattar, M.M., Reischl, U., Plicka, H., Olsen, J.S., Nikkari, S., Matero, P., Beuret, C., Ciammaruconi, A., Lista, F., Gala, J.L., Broll, H., Appel, B., Cano, R.E.S., de Villavicencio, M.D.Y., Broekhuijsen, M., Indra, A., Peterson, R., and Neubauer, H., 2008, Preliminary validation of real-time PCR assays for the identification of *Yersinia pestis*: *Clinical Chemistry and Laboratory Medicine*, v. 46, p. 1239–1344.
- Torres-Escobar, A., Juarez-Rodriguez, M.D., Gunn, B.M., Branger, C.G., Tinge, S.A., and Curtiss, R., 2010, Fine-tuning synthesis of *Yersinia pestis* LcrV from runaway-like replication balanced-lethal plasmid in a *Salmonella enterica* serovar typhimurium vaccine induces protection against a lethal *Y. pestis* challenge in mice: *Infection and Immunity*, v. 78, p. 2529–2543.
- Touchman, J.W., Wagner, D.W., Hao, J., Mastrian, S.D., Shah, M.K., Vogler, A.J., Allender, C.J., Clark, E.A., Benitez, D.S., Youngkin, D.J., Girard, J.M., Auerbach, R.K., Beckstrom-Sternberg, S.M., and Keim, P., 2007, A North American *Yersinia pestis* draft genome sequence: SNPs and phylogenetic analysis: *PLoS ONE*, v. 2, e220, p. 1–5.
- Townzen, K.R., Thompson, M.A., and Smith, C.R., 1996, Investigations and management of epizootic plague at Ice House Reservoir, Eldorado National Forest, California, 1994 ad 1995: *Proceedings of the Vertebrate Pest Conference*, v. 17, p. 68–74.
- Travis, S.E., 1994, A molecular genetic analysis of social system dynamics and population structure in Gunnison's prairie dog: Flagstaff, Ariz., Northern Arizona University, unpublished Ph.D. dissertation, 136 p.
- Travis, S.E., and Slobodchikoff, C.N., 1993, Effects of food resource distribution on the social system of Gunnison's prairie dog (*Cynomys gunnisoni*): *Canadian Journal of Zoology*, v. 71, p. 1186–1192.
- Travis, S.E., Slobodchikoff, C.N., and Keim, P., 1995, Ecological and demographic effects on intraspecific variation in the social system of prairie dogs: *Ecology*, v. 76, p. 1794–1803.
- Travis, S.E., Slobodchikoff, C.N., and Keim, P., 1996, Social assemblages and mating relationships in prairie dogs: A DNA fingerprint analysis: *Behavioral Ecology*, v. 7, p. 95–100.

- Travis, S.E., Slobodchikoff, C.N., and Keim, P., 1997, DNA fingerprinting reveals low genetic diversity in Gunnison's prairie dog (*Cynomys gunnisoni*): *Journal of Mammalogy*, v. 78, p. 725–732.
- Trebesius, K., Harmsen, D., Rakin, A., Schmelz, J., and Heesemann, J., 1998, Development of rRNA-targeted PCR and in situ hybridization with fluorescently labeled oligonucleotides for detection of *Yersinia pestis*: *Journal of Clinical Microbiology*, v. 36, p. 2557–2564.
- Trevino-Villarreal, J., Berk, I.M., Aguirre, A., and Grant, W.E., 1998, Survey for sylvatic plague in the Mexican prairie dog (*Cynomys mexicanus*): *Southwestern Naturalist*, v. 43, p. 147–154.
- Tripp, D.W., Gage, K.L., Monteneri, J.A., and Antolin, M.F., 2009, Flea abundance on black-tailed prairie dogs (*Cynomys ludovicianus*) increases during plague epizootics: *Vector-Borne and Zoonotic Diseases*, v. 9, p. 313–321.
- Tripp, D.W., Gage, K.L., Monteneri, J.A., and Antolin, M.F., 2010, Flea loads on black-tailed prairie dogs (*Cynomys ludovicianus*) during plague epizootics in Colorado: *Vector-borne and Zoonotic Diseases*, v. 10, p. 103. Abstract.
- Trudeau, K.M., Britten, H.B., and Restani, M., 2004, Sylvatic plague reduces genetic variability in black-tailed prairie dogs: *Journal of Wildlife Diseases*, v. 40, p. 205–211.
- Truett, J.C., Dullum, J.L.D., Matchett, M.R., Owens, E., and Seery, D., 2001, Translocating prairie dogs: A review: *Wildlife Society Bulletin*, v. 29, p. 863–872.
- Tsang, T.M., Felek, S., and Krukoni, E.S., 2010, Ail binding to fibronectin facilitates *Yersinia pestis* binding to host cells and Yop delivery: *Infection and Immunity*, v. 78, p. 3358–3368.
- Turner, J.K., Xu, J.L., and Tapping, R.I., 2009, Substrains of 129 mice are resistant to *Yersinia pestis* KIM5: Implications for interleukin-10-deficient mice: *Infection and Immunity*, v. 77, p. 367–373.
- Ubico, S.R., Maupin, G.O., Fagerstone, K.A., and McLean, R.G., 1988, A plague epizootic in the white-tailed prairie dogs (*Cynomys leucurus*) of Meeteetse, Wyoming: *Journal of Wildlife Diseases*, v. 24, p. 399–406.
- Uresk, D.W., 1984, Black-tailed prairie dog food habits and forage relationships in western South Dakota: *Journal of Range Management*, v. 37, p. 325–329.
- Uresk, D.W., 1985, Effects of controlling black-tailed prairie dogs on plant production: *Journal of Range Management*, v. 38, p. 466–468.
- Uresk, D.W., and Schenbeck, G.L., 1987, Effect of zinc phosphide rodenticide on prairie dog colony expansion as determined from aerial photography: *Prairie Naturalist*, v. 19, p. 57–61.
- Uresk, D.W., King, R.M., Apa, A.D., and Linder, R.L., 1986, Efficacy of zinc phosphide and strychnine for black-tailed prairie dog control: *Journal of Range Management*, v. 39, p. 298–299.
- Uresk, D.W., King, R.M., Apa, A.D., Deisch, M.S., and Linder, R.L., 1988, Rodenticide effects of zinc phosphide and strychnine on nontarget species, in Uresk, D.W., Schenbeck, G.L., and Cefkin, R., technical coordinators, Eighth Great Plains Wildlife Damage Control Workshop Proceedings: Fort Collins, Colo., USDA Forest Service General Technical Report RM-154, p. 57–63.
- Vadyvaloo, V., Jarrett, C., Sturdevant, D., Sebbane, F., and Hinnebusch, B.J., 2007, Analysis of *Yersinia pestis* gene expression in the flea vector: *Advances in Experimental Medicine and Biology*, v. 603, p. 192–200.
- Vadyvaloo, V., Jarrett, C., Sturdevant, D.E., Sebbane, F., and Hinnebusch, B.J., 2010, Transit through the flea vector induces a pretransmission innate immunity resistance phenotype in *Yersinia pestis*: *PLoS Pathogens*, v. 6, e1000783, p. 1–11.
- VanBlankenstein, T., and Botzler, R.G., 1996, Effect of ectoparasite removal procedures on recapture of *Microtus californicus*: *Journal of Wildlife Diseases*, v. 32, p. 714–715.
- Verdolin, J.L., and Slobodchikoff, C.N., 2002, Vigilance and predation risk in Gunnison's prairie dog (*Cynomys gunnisoni*): *Canadian Journal of Zoology*, v. 80, p. 1197–1203.

- Vermeire, L.T., Heitschmidt, R.K., Johnson, P.S., and Sowell, B.F., 2004, The prairie dog story: Do we have it right?: *BioScience*, v. 54, p. 689–695.
- Vetter, S.M., Eisen, R.J., Schotthoefer, A.M., Montenieri, J.A., Holmes, J.A., Bobrov, A.G., Bearden, S.W., Perry, R.D., and Gage, K.L., 2010, Biofilm formation is not required for early-phase transmission of *Yersinia pestis*: *Microbiology*, v. 156, p. 2216–2225.
- Vinogradov, E.V., Lindner, B., Kocharova, N.A., Senchenkova, S.N., Shashkov, A.S., Knirel, Y.A., Holst, O., Gremyakova, T.A., Shaikhutdinova, R.Z., and Anisimov, A.P., 2002, The core structure of the lipopolysaccharide from the causative agent of plague, *Yersinia pestis*: *Carbohydrate Research*, v. 337, p. 775–777.
- Virchow, D., Kramer, W.L., Hygnstrom, S.E., Brown, C.S., and Barnes, A.M., 1992, First evidence of plague (*Yersinia pestis*) in Nebraska is found in Panhandle predators: *Transactions of the Nebraska Academy of Sciences*, v. 19, p. 49–55.
- Von Reyn, C.F., Barnes, A.M., Weber, N.S., and Hodgins, U.G., 1976, Bubonic plague from exposure to a rabbit: A documented case, and a review of rabbit-associated plague cases in the United States: *American Journal of Epidemiology*, v. 104, p. 81–87.
- Von Reyn, C.F., Barnes, A.M., Weber, N.S., Quan, T., and Dean, W.J., 1976, Bubonic plague from direct exposure to a naturally infected coyote: *American Journal of Tropical Medicine and Hygiene*, v. 25, p. 626–629.
- Wagner, D.M., 2002, Current status and habitat use of Gunnison’s prairie dogs (*Cynomys gunnisoni*) in Arizona: Flagstaff, Ariz., Northern Arizona University, unpublished PhD dissertation, 90 p.
- Wagner, D.M., and Drickamer, L.C., 2004, Abiotic habitat correlates of Gunnison’s prairie dog in Arizona: *Journal of Wildlife Management*, v. 68, p. 188–197.
- Wagner, D.M., Drickamer, L.C., Krpata, D.M., Allender, C.J., Van Pelt, W.E., and Keim, P., 2006, Persistence of Gunnison’s prairie dog colonies in Arizona, USA: *Biological Conservation*, v. 130, p. 331–339.
- Wagner, D.M., Runberg, J., Vogler, A.J., Lee, J., Driebe, E., Price, L.B., Engelthaler, D.M., Fricke, W.F., Ravel, J., and Keim, P., 2010, No resistance plasmid in *Yersinia pestis*, North America: *Emerging Infectious Diseases*, v. 16, p. 885–887.
- Wagner, D.M., Vogler, A., Lee, J., Peterson, J., Auerbach, R., Roumagnac, P., Achtman, M., and Keim, P., 2010, Population structure and evolutionary history of *Yersinia pestis* in North America: *Vector-borne and Zoonotic Diseases*, v. 10, p. 99. Abstract.
- Walloe, L., 2010, Were medieval plagues the same disease as modern plague?: *Historisk Tidsskrift*, v. 89, p. 13–28.
- Wang, L., Zhou, L., and Ma, Y., 2010, Analysis on species richness pattern of plague host rodents and the environmental factor in plague epidemic areas in China: *Acta Theriologica Sinica*, v. 30, p. 411–417.
- Wang, S.X., Mboudjeka, I., Goguen, J.D., and Lu, S., 2010, Antigen engineering can play a critical role in the protective immunity elicited by *Yersinia pestis* DNA vaccines: *Vaccine*, v. 28, p. 2011–2019.
- Webb, C.T., Brooks, C.P., Gage, K.L., and Antolin, M.F., 2006, Classic flea-borne transmission does not drive plague epizootics in prairie dogs: *Proceedings of the National Academy of Sciences*, v. 103, p. 6236–6241.
- Weeks, S., Hill, J., Friedlander, A., and Welkos, S., 2002, Anti-V antigen antibody protects macrophages from *Yersinia pestis*-induced cell death and promotes phagocytosis: *Microbial Pathogenesis*, v. 32, p. 227–237.

- Welch, T.J., Fricke, W.F., McDermott, P.F., White, D.G., Rosso, M., Rasko, D.A., Mammel, M.K., Eppinger, M., Rosovitz, M.J., Wagner, D., Rahalison, L., LeClerc, J.E., Hinshaw, J.M., Lindler, L.E., Cebula, T.A., Carniel, E., and Ravel, J., 2007, Multiple antimicrobial resistance in plague: An emerging public health risk: *PLoS ONE*, v. 2, e309, p. 1–6.
- Welford, M., and Bossak, B., 2010, Body lice, *Yersinia pestis orientalis*, and Black Death: *Emerging Infectious Diseases*, v. 16, p. 1649.
- Welkos, S., Friedlander, A., McDowell, D., Weeks, J., and Tobery, S., 1998, V antigen of *Yersinia pestis* inhibits neutrophil chemotaxis: *Microbial Pathogenesis*, v. 24, p. 185–196.
- Weltzin, J.F., Archer, S., and Heitschmidt, R.K., 1997, Small-mammal regulation of vegetation structure in a temperate savanna: *Ecology*, v. 78, p. 751–763.
- Weltzin, J.F., Dowhower, S.L., and Heitschmidt, R.K., 1997, Prairie dog effects on plant community structure in southern mixed-grass prairie: *Southwestern Naturalist*, v. 42, p. 251–258.
- Whicker, A.D., and Detling, J.K., 1988, Ecological consequences of prairie dog disturbances: *BioScience*, v. 38, p. 778–785.
- White, G.C., Dennis, J.R., and Pusateri, F.M., 2005, Area of black-tailed prairie dog colonies in eastern Colorado: *Wildlife Society Bulletin*, v. 33, p. 265–272.
- Whitehall, J.S., 2009, Plague in a time of war: An experience in South Vietnam: *Medical Journal of Australia*, v. 191, p. 671–673.
- Wiechmann, I., and Grupe, G., 2006, Detection of *Yersinia pestis* DNA in two early medieval skeleton finds from Aschheim (Upper Bavaria, 6th century AD): *American Journal of Physical Anthropology*, v. 126, p. 48–55.
- Wienberg, A.N., and Heller, H.M., 1994, Unusual bacterial pneumonias caused by human commensal, environmental, and animal-associated pathogens, in Pennington, J.E., ed., *Respiratory infections: Diagnosis and management*(3d ed.): p. 485–513.
- Wild, M.A., Shenk, T.M., and Spraker, T.R., 2006, Plague as a mortality factor in Canada Lynx (*Lynx canadensis*) reintroduced to Colorado: *Journal of Wildlife Diseases*, v. 42, p. 646–650.
- Wilder, A.P., Eisen, R.J., Beardon, S.W., Montenieri, J.A., Gage, K.L., and Antolin, M.F., 2008b, *Oropsylla hirsute* (Siphonaptera: Ceratophyllidae) can support plague epizootics in black-tailed prairie dogs (*Cynomys ludovicianus*) by early-phase transmission of *Yersinia pestis*: *Vector-Borne and Zoonotic Diseases*, v. 8, p. 359–367.
- Wilder, A.P., Eisen, R.J., Beardon, S.W., Montenieri, J.A., Tripp, D.W., Brinkerhoff, R.J., Gage, K.L., and Antolin, M.F., 2008a, Transmission efficiency of two flea species (*Oropsylla tuberculata cynomuris* and *Oropsylla hirsute*) involved in plague epizootics among prairie dogs: *Ecohealth*, v. 5, p. 205–212.
- Williams, E.S., Thorne, E.T., Quan, T.J., and Anderson, S.L., 1991, Experimental-infection of domestic ferrets (*Mustela putorius furo*) and Siberian polecats (*Mustela eversmanni*) with *Yersinia pestis*: *Journal of Wildlife Diseases*, v. 27, p. 441–445.
- Williams, E.S., Mills, K., Kwiatkowski, D.R., Thorne, E.T., and Boergerfields, A., 1994, Plague in a black-footed ferret (*Mustela nigripes*): *Journal of Wildlife Disease*, v. 30, p. 581–585.
- Williams, K., Oyston, P.C.F., Dorrell, N., Li, S., Titball, R.W., and Wren, B.W., 2000, Investigations into the role of the serine protease HtrA in *Yersinia pestis* pathogenesis: *FEMS Microbiology Letters*, v. 186, p. 281–286.
- Williamson, E.D., 2001, Plague vaccine research and development: *Journal of Applied Microbiology*, v. 91, p. 606–608.
- Wimsatt, J., and Biggins, D.E., 2009, A review of plague persistence with special emphasis on fleas: *Journal of Vector Borne Diseases*, v. 46, p. 85–99.

- Winter, S.L., Cully, J.F., Jr., and Pontius, J.S., 2002, Vegetation of prairie dog colonies and non-colonized short-grass prairie: *Journal of Range Management*, v. 55, p. 502–508.
- Winters, A.M., Staples, J.E., Ogen-Odoi, A., Mead, P.S., Griffith, K., Owor, N., Babi, N., Ensore, R.E., Eisen, L., Gage, K.L., and Eisen, R.J., 2009, Spatial risk models for human plague in the West Nile region of Uganda: *American Journal of Tropical Medicine and Hygiene*, v. 80, p. 1014–1022.
- Witmer, G.W., and Fagerstone, K.A., 2003, The use of toxicants in black-tailed prairie dog management: an overview, *in* Fagerstone, K.A., and Witmer, G.W., eds., *Proceedings of the 10th Wildlife Damage Management Conference: Fort Collins, Colo., USDA, APHIS, Wildlife Services, National Wildlife Research Center, Research Report Number 11-55-005*, p. 359–369.
- Wobeser, G., Campbell, G.D., Dallaire, A., and McBurney, S., 2009, Tularemia, plague, yersiniosis, and Tyzzer's disease in wild rodents and lagomorphs in Canada: A review: *Canadian Veterinary Journal*, v. 50, p. 1251–1256.
- Wong, D., Wild, M.A., Walburger, M.A., Higgins, C.L., Callahan, M., Czarnecki, L.A., Lawaczek, E.W., Levy, C.E., Patterson, J.G., Sunenshine, R., Adem, P., Paddock, C.D., Zaki, S.R., Petersen, J.M., Schriefer, M.E., Eisen, R.J., Gage, K.L., Griffith, K.S., Weber, I.B., Spraker, T.R., and Mead, P.S., 2009, Primary pneumonic plague contracted from a mountain lion carcass: *Clinical Infectious Disease*, v. 49, p. E33–E38.
- Wong, J.D., Barash, J.R., Sandfort, R.F., and Janda, J.M., 2000, Susceptibilities of *Yersinia pestis* strains to 12 antimicrobial agents: *Antimicrobial Agents and Chemotherapy*, v. 44, p. 1995–1996.
- Woods, M.E., Montenieri, J.A., Eisen, R.J., Zeidner, N.S., Borchert, J.N., Laudisoit, A., Babi, N., Atiku, L.A., Ensore, R.E., and Gage, K.L., 2009, Identification of flea blood meals using multiplexed real-time polymerase chain reaction targeting mitochondrial gene fragments: *American Journal of Tropical Medicine and Hygiene*, v. 80, p. 998–1003.
- World Health Organization, 2011, accessed October 12, 2011, at <http://www.who.int/mediacentre/factsheets/fs267/en/>.
- Wortham, B.W., Oliveira, M.A., Fetherston, J.D., and Perry, R.D., 2010, Polyamines are required for the expression of key Hms proteins important for *Yersinia pestis* biofilm formation: *Environmental Microbiology*, v. 12, p. 2034–2047.
- Wuerther, G., 1995, Last chance for the prairie dog: *Wild Earth*, v. 5, p. 21–25.
- Wuerther, G., 1997, Viewpoint: the black-tailed prairie dog headed for extinction?: *Journal of Range Management*, v. 50, p. 459–466.
- Yang, F., Ke, Y., Tan, Y., Bi, Y., Shi, Q., Yang, H., Qiu, J., Wang, X., Guo, Z., Ling, H., Yang, R., and Du, Z., 2010, Cell membrane is impaired, accompanied by enhanced type III secretion expression in *Yersinia pestis* deficient in RovA regulator: *PLoS ONE*, v. 5, no. e12840, p. 1–13.
- Ye, Z., Kerschen, E.J., Cohen, D.A., Kaplan, A.M., van Rooijen, N., and Straley, S.C., 2009, Gr1(+) cells control growth of YopM-negative *Yersinia pestis* during systemic plague: *Infection and Immunity*, v. 77, p. 3791–3806.
- Yensen, E., Baird, C.R., and Sherman, P.W., 1996, Larger ectoparasites of the Idaho ground squirrel (*Spermophilus brunneus*): *Great Basin Naturalist*, v. 56, p. 237–246.
- Zaubernam, A., Tidhar, A., Levy, Y., Bar-Haim, E., Halperin, G., Flashner, Y., Cohen, S., Shafferman, A., and Mamroud, E., 2009, *Yersinia pestis* endowed with increased cytotoxicity is avirulent in a bubonic plague model and induces rapid protection against pneumonic plague: *PLoS ONE*, v. 4, e5938, p. 1–11.
- Zhou, D., Han, Y., Song, Y., Huang, P., and Yang, R., 2004, Comparative and evolutionary genomics of *Yersinia pestis*: *Microbes and Infection*, v. 6, p. 1226–1234.

- Zhou, D., Han, Y.P., and Yang, R.F., 2006, Molecular and physiological insights into plague transmission virulence and etiology: *Microbes and Infection*, v. 8, p. 273–284.
- Zhou, D., Qin, L., Han, Y., Qiu, J., Chen, Z., Li, B., Song, Y., Wang, J., Guo, Z., Zhai, J., Du, Z., Wang, X., and Yang, R., 2006, Global analysis of iron assimilation and fur regulation in *Yersinia pestis*: *FEMS Microbiology Letters*, v. 258, p. 9–17.
- Zhou, D., and Yang, R., 2009, Molecular Darwinian evolution of virulence in *Yersinia pestis*: *Infection and Immunity*, v. 77, p. 2242–2250.
- Zhou, D., Zongshong, T., Song, Y., Han, Y., Pei, D., Pang, X., Zhai, J., Li, M., Cui, B., Qi, Z., Jin, L., Dai, R., Du, Z., Wang, J., Guo, Z., Wang, J., Huang, P., and Yang, R., 2004, Genetics of metabolic variations between *Yersinia pestis* biovars and the proposal of a new biovar, microtus: *Journal of Bacteriology*, v. 186, p. 5147–5152.
- Zietz, B.P., and Dunkelberg, H., 2004, The history of plague and the research on the causative agent *Yersinia pestis*: *International Journal of Hygiene and Environmental Health*, v. 207, p. 165–178.
- Zinsser, H., 1934, *Rats, lice and history*: Boston, Mass., Little, Brown, and Company, 301 p.

Publishing support provided by:
Denver Publishing Service Center

For more information concerning this publication, contact:
Center Director, USGS Fort Collins Science Center
2150 Centre Ave., Bldg. C
Fort Collins, CO 80526-8118
(970)226-9398

Or visit the Fort Collins Science Center Web site at:
<http://www.fort.usgs.gov/>