

## Virulence

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Virulence refers to the degree of pathogenicity of a microbe, or in other words the relative ability of a microbe to cause disease. The word virulent, which is the adjective for virulence, derives from the Latin word virulentus, which means "full of poison." From an ecological point of view, virulence can be defined as the host's parasite-induced loss of fitness. ([From the Wikipedia article Virulence](#).)

### Recent Publications on Virulence:



- [Quantitative anti-F1 and anti-V IgG ELISAs as serological correlates of protection against plague in female Swiss Webster mice.](#)  
*A recombinant fusion protein composed of Yersinia pestis fraction 1...* 21st November, 2009  
Bacteriology Division, United States Army Medical Research Institute of- Vaccine. 2009 Nov 16. ([DOI Direct Link](#))
- [Salmonella enterica serovar Typhimurium mutants completely lacking the F\(0\)F\(1\) ATPase are novel live attenuated vaccine strains.](#)  
*The F(0)F(1) ATPase plays a central role in both the generation of ATP and...* 21st November, 2009  
Department of Veterinary Medicine, University of Cambridge, Madingley- Vaccine. 2009 Nov 16. ([DOI Direct Link](#))
- [Viral and host proteins involved in picornavirus life cycle.](#)  
*ABSTRACT: Picornaviruses cause several diseases, not only in humans but...* 21st November, 2009  
- J Biomed Sci. 2009 Nov 20;16(1):103. ([DOI Direct Link](#))
- [Regulation and secretion of Xanthomonas virulence factors.](#)  
*Abstract Plant pathogenic bacteria of the genus Xanthomonas cause a...* 21st November, 2009  
Genetics Department, Institute of Biology, Martin-Luther University- FEMS Microbiol Rev. 2009 Oct 13. ([DOI Direct Link](#))
- [Queuosine modification of tRNA: its divergent role in cellular machinery.](#)  
*tRNAs possess a high content of modified nucleosides, which display an...* 21st November, 2009  
Biochemistry and Molecular Biology Laboratory, Centre of Advanced Study in- Biosci Rep. 2009 Nov 23;30(2):135-148. ([DOI Direct Link](#))
- [Paraoxonase 2 is downregulated by the Pseudomonas aeruginosa quorum sensing signal N-\(3-oxododecanoyl\)-L-homoserine lactone and attenuates oxidative stress induced by pyocyanin.](#)  
*Two virulence factors produced by Pseudomonas aeruginosa are pyocyanin and...* 21st November, 2009  
- Biochem J. 2009 Nov 19. ([DOI Direct Link](#))
- [Autophagy evasion in herpesviral latency.](#)  
*Autophagy constitutes a major catabolic process for the quality control of...* 20th November, 2009

- Department of Molecular Microbiology and Immunology, University of- Autophagy. 2010 Jan 4;6(1).
- [Genomic and phenotypic characterization of Escherichia coli isolates recovered from the uterus of puerperal dairy cows.](#)  
*The role of Escherichia coli in the pathogenesis of the puerperal uterine...*20th November, 2009  
 Interdisciplinary Centre of Research in Animal Health, Faculty of- J Dairy Sci. 2009  
 Dec;92(12):6000-6010. ([DOI Direct Link](#))
  - [Mutations in NS4B of Classical Swine Fever Virus affect virulence in swine.](#)  
*NS4B is one of the non-structural proteins of Classical Swine Fever Virus...*20th November, 2009  
 Plum Island Animal Disease Center, ARS, USDA, Greenport, NY 11944, USA;- J Virol. 2009 Nov 18. ([DOI Direct Link](#))
  - [Genomic and phenotypic variation in epidemic-spanning Salmonella enterica serovar Enteritidis isolates.](#)  
*ABSTRACT: BACKGROUND: Salmonella enterica serovar Enteritidis (S....*20th November, 2009  
 - BMC Microbiol. 2009 Nov 18;9(1):237. ([DOI Direct Link](#))
  - [Generation of infectious and pathogenic Duck Hepatitis Virus Type 1 from cloned full-length cDNA.](#)  
*A full-length cDNA clone of duck hepatitis virus type 1 (DHV-1) isolated...*19th November, 2009  
 College of Veterinary Medicine, Northwest A & F University, Yangling,- Virus Res. 2009 Nov 14. ([DOI Direct Link](#))
  - [Lupus Vulgaris Occurring in a Locus Minoris Resistentiae.](#)  
*BACKGROUND:The pathogenesis of lupus vulgaris, a form of cutaneous...*19th November, 2009  
 - J Cutan Med Surg. 2009 Dec 1;13(6):313-316.
  - [Staphylococcus aureus SarA is a Regulatory Protein Responsive to Redox and pH that can Support Bacteriophage Lambda Integrase-Mediated Excision/Recombination.](#)  
*Summary Staphylococcus aureus produces a wide array of virulence factors...*19th November, 2009  
 Department of Biology, San Diego State University, San Diego, CA 92182,- Mol Microbiol. 2009 Nov 17. ([DOI Direct Link](#))
  - [Prf immune complexes of tomato are oligomeric and contain multiple Pto-like kinases which diversify effector recognition.](#)  
*Cytoplasmic recognition of pathogen virulence effectors by plant NB-LRR...*19th November, 2009  
 The Sainsbury Laboratory, Colney, Norwich, NR4 7UH, UK.- Plant J. 2009 Nov 16. ([DOI Direct Link](#))
  - [RtxA1-Induced Expression of the Small GTPase Rac2 Plays a Key Role in the Pathogenicity of Vibrio vulnificus.](#)  
*Infection with the human pathogen Vibrio vulnificus leads to the...*19th November, 2009  
 School of Dentistry, Dental Science Research Institute, The 2nd Stage of- J Infect Dis. 2009 Nov 17. ([DOI Direct Link](#))

## BioNews Results for Virulence

- [Mixed CMV Infection Boosts Virulence in Transplant Recipients](#)  
*Medscape: Nov 10 2009 8:05PM Matching: virulence*
- [2-Pronged Protein Attack Could Be Source Of SARS Virulence](#)  
*Medical News Today: Oct 30 2009 4:52PM Matching: virulence*
- [Medical News: 2-Pronged Protein Attack Could Be Source Of SARS Virulence](#)  
*Medical News Today: Oct 30 2009 4:19PM Matching: virulence*
- [Two-Pronged Protein Attack Could be Source of SARS Virulence](#)  
*Infection Control Today: Oct 29 2009 10:16PM Matching: virulence*





## Virulence Patents:

- 7604971- [Sequence-determined DNA fragments encoding UBIE/COQ5 methyltransferase family proteins](#)
- 7608422- [Simian immunodeficiency virus \(SIV\) molecular clone encoding mutant gag gene lacking inhibitory/instability regions](#)
- 7608441- [Sequence-determined DNA fragments encoding sterol desaturase proteins](#)
- 7608442- [.beta.1,3-galactosyltransferase polypeptides from the LOS locus of C. jejuni](#)
- 7608443- [Lysophosphatidic acid acetyltransferases](#)
- 7608450- [Nucleic acid and amino acid sequences relating to Staphylococcus epidermidis for diagnostics and therapeutics](#)
- 7608640- [Glycine betaine and its use](#)
- 7608751- [Fungus resistant plants and their uses](#)
- 7608752- [Gene targeting using replicating DNA molecules](#)
- 7608755- [Inositol polyphosphate kinase genes and uses thereof](#)
- 7611700- [Protease resistant modified interferon alpha polypeptides](#)
- 7608419- [Method and apparatus for detecting and quantifying bacterial spores on a surface](#)
- 7608398- [Polynucleotides for use tags and tag complements, manufacture and use thereof](#)
- 7608291- [Treatment of infection in animals](#)
- 7604973- [DNA encoding hyaluronan synthase from Pasteurella multocida and methods of use](#)
- 7604975- [Glycosylated LPXTGases and uses thereof](#)
- 7604976- [Sequence-determined DNA fragments encoding glutamine amidotransferase proteins](#)
- 7604978- [Inhibition of biofilm formation](#)
- 7608256- [Methods to increase transgene expression from bacterial-based delivery systems by co-expressing suppressors of the eukaryotic type I interferon response](#)
- 7608257- [Sensitization of chemotherapeutic agent resistant neoplastic cells with a virus](#)
- 7608265- [Treatment for bacterial infections](#)
- 7608266- [Yersinia species compositions](#)
- 7608272- [Methods and compositions for vaccination of animals with PRRSV antigens with improved immunogenicity](#)
- 7608288- [Caffeine fraction obtained from tea leaves and a method for inducing Agrobacterium tumefaciens-mediated genetic transformation in plants using said caffeine fraction](#)
- 7611704- [Compositions and methods for treating viral infections using antibodies and immunoconjugates to aminophospholipids](#)
- 7611712- [Immunogenic compositions capable of eliciting Th1 immune responses comprising an HIV-1 MA myristate binding site polypeptide](#)
- 7615209- [Compositions of NDV and methods of use thereof for treatment of cancer](#)
- 7615222- [Enriched antibody for detecting mycobacterial infection, methods of use and diagnostic test employing same](#)
- 7615228- [Polypeptide fragments of hepatitis E virus, the vaccine comprising said fragments and the diagnostic kits](#)
- 7618392- [Methods and compositions for detection of microbial contaminants in peritoneal dialysis solution](#)
- 7618635- [Super-antigen fusion proteins and the use thereof](#)
- 7618640- [Method and composition for reducing E. coli disease and enhancing performance](#)
- 7618783- [Anthrax specific antibodies](#)

- 7618797- [Infectious cDNA clone of North American porcine reproductive and respiratory syndrome \(PRRS\) virus and uses thereof](#)
- 7618802- [Compositions of coronaviruses with a recombination-resistant genome](#)
- 7619138- [Precise breeding](#)
- 7612253- [Methods of modulating cytokinin related processes in a plant using B3 domain proteins](#)
- 7612251- [Nucleotide sequences mediating male fertility and method of using same](#)
- 7612045- [Compounds, compositions and methods for controlling biofilms and bacterial infections](#)
- 7611714- [Methods and compositions for immunizing against Pseudomonas infection](#)
- 7611717- [Identifying virally infected and vaccinated organisms](#)
- 7611718- [Attenuation of cytomegalovirus virulence](#)
- 7611720- [Tuberculosis vaccines including recombinant BCG strains expressing alanine dehydrogenase, serine dehydratase and/or glutamine synthetase](#)
- 7611837- [Kit for detecting non-pathogenic or pathogenic influenza a subtype h5 virus](#)
- 7611862- [Method and apparatus for detecting and quantifying bacterial spores on a surface](#)
- 7611883- [Plasmid maintenance](#)
- 7611897- [AP1 amine oxidase variants](#)
- 7612019- [Polypeptide display libraries and methods of making and using thereof](#)
- 7612035- [Inhibition of mitogen-activated protein kinase \(MAPK\) pathway: a selective therapeutic strategy against melanoma](#)
- 7619146- [Method for modifying plant morphology, biochemistry and physiology](#)

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