

Bibliography

- Albers, S. V., Z. Szabo, *et al.* (2003). "Archaeal homolog of bacterial type IV prepilin signal peptidases with broad substrate specificity." Journal of Bacteriology **185**(13): 3918-3925.
- Aloy, P., A. Stark, *et al.* (2003). "Predictions without templates: New folds, secondary structure, and contacts in CASP5." Proteins-Structure Function and Genetics **53**(6): 436-456.
- Altschul, S. F., M. S. Boguski, *et al.* (1994). "Issues in searching molecular sequence databases." Nature Genetics **6**(2): 119-129.
- Altschul, S. F., T. L. Madden, *et al.* (1997). "Gapped BLAST and PSI-BLAST: A new generation of protein database search programs." Nucleic Acids Research **25**(17): 3389-3402.
- Andrade, M. A., F. D. Ciccarelli, *et al.* (2002). "NEAT: A domain duplicated in genes near the components of a putative Fe³⁺ siderophore transporter from Gram-positive pathogenic bacteria." Genome Biology **3**(9): 47.
- Apweiler, R., A. Bairoch, *et al.* (2004). "UniProt: the Universal Protein knowledgebase." Nucleic Acids Research **32**: D115-D119.
- Aravind, L., V. M. Dixit, *et al.* (1999). "The domains of death: Evolution of the apoptosis machinery." Trends in Biochemical Sciences **24**(2): 47-53.
- Asmann, Y. W., F. Kosari, *et al.* (2002). "Identification of differentially expressed genes in normal and malignant prostate by electronic profiling of expressed sequence tags." Cancer Research **62**(11): 3308-+.
- Atrih, A. and S. J. Foster (2001). "Analysis of the role of bacterial endospore cortex structure in resistance properties and demonstration of its conservation amongst species." Journal of Applied Microbiology **91**(2): 364-372.

- Attwood, T. K., P. Bradley, *et al.* (2003). "PRINTS and its automatic supplement, prePRINTS." Nucleic Acids Research **31**(1): 400-402.
- Av-Gay, Y. and M. Everett (2000). "The eukaryotic-like Ser/Thr protein kinases of *Mycobacterium tuberculosis*." Trends in Microbiology **8**(5): 238-244.
- Bao, Q. Y., Y. Q. Tian, *et al.* (2002). "A complete sequence of the *T. tengcongensis* genome." Genome Research **12**(5): 689-700.
- Barquera, B., C. C. Hase, *et al.* (2001). "Expression and mutagenesis of the NqrC subunit of the NQR respiratory Na⁺ pump from *Vibrio cholerae* with covalently attached FMN." Febs Letters **492**(1-2): 45-+.
- Bateman, A., E. Birney, *et al.* (2000). "The Pfam protein families database." Nucleic Acids Research **28**(1): 263-266.
- Bateman, A. and M. Bycroft (2000). "The structure of a LysM domain from *E. coli* membrane-bound lytic murein transglycosylase D (MltD)." Journal of Molecular Biology **299**(4): 1113-1119.
- Bateman, A., L. Coin, *et al.* (2004). "The Pfam protein families database." Nucleic Acids Research **32**: D138-D141.
- Bendtsen, J. D., H. Nielsen, *et al.* (2004). "Improved prediction of signal peptides: SignalP 3.0." Journal of Molecular Biology **340**(4): 783-795.
- Bentley, S. D., K. F. Chater, *et al.* (2002). "Complete genome sequence of the model actinomycete *Streptomyces coelicolor* A3(2)." Nature **417**(6885): 141-147.
- Bentley, S. D., M. Maiwald, *et al.* (2003). "Sequencing and analysis of the genome of the Whipple's disease bacterium *Tropheryma whipplei*." Lancet **361**(9358): 637-644.
- Berman, H. M., T. Battistuz, *et al.* (2002). "The Protein Data Bank." Acta Crystallographica Section D-Biological Crystallography **58**: 899-907.

- Bernstein, C., H. Bernstein, *et al.* (1999). "Bile salt activation of stress response promoters in *Escherichia coli*." Current Microbiology **39**(2): 68-72.
- Bernstein, F. C., T. F. Koetzle, *et al.* (1977). "The Protein Data Bank: A computer-based archival file for macromolecular structures." Journal of Molecular Biology **112**(3): 535-542.
- Bey, S. J., M. F. Tsou, *et al.* (2000). "The homologous terminal sequence of the *Streptomyces lividans* chromosome and SLP2 plasmid." Microbiology-Sgm **146**: 911-922.
- Bitter, W., M. Koster, *et al.* (1998). "Formation of oligomeric rings by XcpQ and PilQ, which are involved in protein transport across the outer membrane of *Pseudomonas aeruginosa*." Molecular Microbiology **27**(1): 209-219.
- Boekema, B. K., J. P. Van Putten, *et al.* (2004). "Host cell contact-induced transcription of the type IV fimbria gene cluster of *Actinobacillus pleuropneumoniae*." Infection and Immunity **72**(2): 691-700.
- Boitel, B., M. Ortiz-Lombardia, *et al.* (2003). "PknB kinase activity is regulated by phosphorylation in two Thr residues and dephosphorylation by PstP, the cognate phospho- Ser/Thr phosphatase, in *Mycobacterium tuberculosis*." Molecular Microbiology **49**(6): 1493-1508.
- Boland, F. M., A. Atrih, *et al.* (2000). "Complete spore-cortex hydrolysis during germination of *Bacillus subtilis* 168 requires SleB and YpeB." Microbiology-Uk **146**: 57-64.
- Bolotin, A., P. Wincker, *et al.* (2001). "The complete genome sequence of the lactic acid bacterium *Lactococcus lactis* ssp *lactis* IL1403." Genome Research **11**(5): 731-753.

- Bork, P., K. Hofmann, *et al.* (1997). "A superfamily of conserved domains in DNA damage responsive cell cycle checkpoint proteins." Faseb Journal **11**(1): 68-76.
- Boyington, J. C., B. J. Gaffney, *et al.* (1993). "The crystal structure of soybean lipoxygenase-1." Faseb Journal **7**(7): A1059-A1059.
- Braun, P., W. Bitter, *et al.* (2000). "Activation of *Pseudomonas aeruginosa* elastase in *Pseudomonas putida* by triggering dissociation of the propeptide-enzyme complex." Microbiology-(UK) **146**: 2565-2572.
- Brenot, A., D. Trott, *et al.* (2001). "Penicillin-binding proteins in *Leptospira interrogans*." Antimicrobial Agents and Chemotherapy **45**(3): 870-877.
- Brown, R. L., T. L. Haley, *et al.* (1999). "Pseudechetoxin: A peptide blocker of cyclic nucleotide-gated ion channels." Proceedings of the National Academy of Sciences of the United States of America **96**(2): 754-759.
- Brunskill, E. W., B. L. M. deJonge, *et al.* (1997). "The *Staphylococcus aureus* *scdA* gene: A novel locus that affects cell division and morphogenesis." Microbiology-Uk **143**: 2877-2882.
- Bucher, P., K. Karplus, *et al.* (1996). "A flexible motif search technique based on generalized profiles." Computers & Chemistry **20**(1): 3-23.
- Burge, C. and S. Karlin (1997). "Prediction of complete gene structures in human genomic DNA." Journal of Molecular Biology **268**(1): 78-94.
- Chaowagul, W., N. J. White, *et al.* (1989). "Meloidosis - a major cause of community acquired septicemia in northeastern Thailand." Journal of Infectious Diseases **159**(5): 890-899.
- Chauvaux, S., F. Chevalier, *et al.* (2001). "Cloning of a genetically unstable cytochrome P-450 gene cluster involved in degradation of the pollutant ethyl

- tert-butyl ether by *Rhodococcus ruber*." Journal of Bacteriology **183**(22): 6551-6557.
- Chen, Z. R. (2003). "Assessing sequence comparison methods with the average precision criterion." Bioinformatics **19**(18): 2456-2460.
- Chopra P., B. Singh, *et al.* (2003) "Phosphoprotein phosphatase of *Mycobacterium tuberculosis* dephosphorylates serine-threonine kinases PknA and PknB." Biochemical and Biophysical Research Communications **311**(1):112-20.
- Chothia, C. (1992). "Proteins - 1000 families for the molecular biologist." Nature **357**(6379): 543-544.
- Christiansen, G., A. S. Pedersen, *et al.* (2000). "Potential relevance of *Chlamydia pneumoniae* surface proteins to an effective vaccine." Journal of Infectious Diseases **181**: S528-S537.
- Ciccarelli, F. D., R. R. Copley, *et al.* (2002). "CASH - a beta-helix domain widespread among carbohydrate- binding proteins." Trends in Biochemical Sciences **27**(2): 59-62.
- Clamp, M., J. Cuff, *et al.* (2004). "The Jalview Java alignment editor." Bioinformatics **20**(3): 426-427.
- Clantin, B., H. Hodak, *et al.* (2004). "The crystal structure of filamentous hemagglutinin secretion domain and its implications for the two-partner secretion pathway." Proceedings of the National Academy of Sciences of the United States of America **101**(16): 6194-6199.
- Clarke, S. E., L. C. Sieker, *et al.* (1979). "Mercury binding to hemerythrin. Coordination of mercury and its effects on subunit interactions." Biochemistry **18**(4): 684-689.
- Coutte, L., S. Alonso, *et al.* (2003). "Role of adhesin release for mucosal colonization by a bacterial pathogen." Journal of Experimental Medicine **197**(6): 735-742.

- Crosa, J. H. and C. T. Walsh (2002). "Genetics and assembly line enzymology of siderophore biosynthesis in bacteria." Microbiology and Molecular Biology Reviews **66**(2): 223-+.
- Cuff, J. A. and G. J. Barton (2000). "Application of multiple sequence alignment profiles to improve protein secondary structure prediction." Proteins-Structure Function and Genetics **40**(3): 502-511.
- Cunningham, A. F. and M. E. Ward (2003). "Characterization of human humoral responses to the major outer membrane protein and OMP2 of *Chlamydomphila pneumoniae*." Fems Microbiology Letters **227**(1): 73-79.
- Daniel, R. A., S. Drake, *et al.* (1994). "The *Bacillus subtilis* spovD gene encodes a mother-cell-specific penicillin-binding protein required for spore morphogenesis." Journal of Molecular Biology **235**(1): 209-220.
- Deloffre, L., B. Salzet, *et al.* (2003). "Antibacterial properties of hemerythrin of the sand worm *Nereis diversicolor*." Neuroendocrinology Letters **24**(1-2): 39-45.
- Dessen, A., N. Mouz, *et al.* (2001). "Crystal structure of PBP2x from a highly penicillin-resistant *Streptococcus pneumoniae* clinical isolate - a mosaic framework containing 83 mutations." Journal of Biological Chemistry **276**(48): 45106-45112.
- Dobbelaere, D. A. E. and P. Kuenzi (2004). "The strategies of the Theileria parasite: a new twist in host- pathogen interactions." Current Opinion in Immunology **16**(4): 524-530.
- Drake, S. L. and M. Koomey (1995). "The product of the pilQ gene is essential for the biogenesis of type IV pili in *Neisseria gonorrhoeae*." Molecular Microbiology **18**(5): 975-986.
- Drews, S. J., F. M. Hung, *et al.* (2001). "A protein kinase inhibitor as an antimycobacterial agent." Fems Microbiology Letters **205**(2): 369-374.

- Durbin, R., S. R. Eddy, *et al.* (1998). Biological Sequence Analysis. Cambridge, UK, Cambridge University Press.
- Echenique, J., A. Kadioglu, *et al.* (2004). "Protein serine/threonine kinase StkP positively controls virulence and competence in *Streptococcus pneumoniae*." Infection and Immunity **72**(4): 2434-2437.
- Edelman, G. M. and W. E. Gall (1969). "The antibody problem." Annual Reviews of Biochemistry **38**: 415-466.
- Edgar, R. C. (2004). "MUSCLE: Multiple sequence alignment with high accuracy and high throughput." Nucleic Acids Research **32**(5): 1792-1797.
- Eidne, K. A., J. Zabavnik, *et al.* (1994). "Calcium waves and dynamics visualized by confocal microscopy in *Xenopus* oocytes expressing cloned Trh receptors." Journal of Neuroendocrinology **6**(2): 173-178.
- Eitel, J. and P. Dersch (2002). "The YadA protein of *Yersinia pseudotuberculosis* mediates high- efficiency uptake into human cells under environmental conditions in which invasin is repressed." Infection and Immunity **70**(9): 4880-4891.
- Encarnacion, S., M. del Vargas, *et al.* (2002). "AniA regulates reserve polymer accumulation and global protein expression in *Rhizobium etli*." Journal of Bacteriology **184**(8): 2287-2295.
- Englander, J., E. Klein, *et al.* (2004). "DNA toroids: Framework for DNA repair in *Deinococcus radiodurans* and in germinating bacterial spores." Journal of Bacteriology **186**(18): 5973-5977.
- Enright, A. J., S. Van Dongen, *et al.* (2002). "An efficient algorithm for large-scale detection of protein families." Nucleic Acids Research **30**(7): 1575-1584.

- Feng, D. F. and R. F. Doolittle (1987). "Progressive sequence alignment as a prerequisite to correct phylogenetic trees." Journal of Molecular Evolution **25**(4): 351-360.
- Fenollar, F. and D. Raoult (2001). "Whipple's disease." Clinical and Diagnostic Laboratory Immunology **8**(1): 1-8.
- Floriano, B. and M. Bibb (1996). "*afsR* is a pleiotropic but conditionally required regulatory gene for antibiotic production in *Streptomyces coelicolor* A3(2)." Molecular Microbiology **21**(2): 385-396.
- Fong, H. K. W., J. B. Hurley, *et al.* (1986). "Repetitive segmental structure of the transducin beta subunit - homology with the Cdc4 gene and identification of related messenger RNAs." Proceedings of the National Academy of Sciences of the United States of America **83**(7): 2162-2166.
- Galm, U., J. Schimana, *et al.* (2002). "Cloning and analysis of the simocyclinone biosynthetic gene cluster of *Streptomyces antibioticus* TO 6040." Archives of Microbiology **178**(2): 102-114.
- Galperin, M. Y., T. A. Gaidenko, *et al.* (2001). "MHYT, a new integral membrane sensor domain." Fems Microbiology Letters **205**(1): 17-23.
- Garciabustos, J. and A. Tomasz (1990). "A biological price of antibiotic resistance - major changes in the peptidoglycan structure of penicillin-resistant pneumococci." Proceedings of the National Academy of Sciences of the United States of America **87**(14): 5415-5419.
- George, R. A. and J. Heringa (2002). "Protein domain identification and improved sequence similarity searching using PSI-BLAST." Proteins-Structure Function and Genetics **48**(4): 672-681.

- Gerstein, M. (1998). "Patterns of protein-fold usage in eight microbial genomes: A comprehensive structural census." Proteins-Structure Function and Genetics **33**(4): 518-534.
- Gitai, Z., N. Dye, *et al.* (2004). "An actin-like gene can determine cell polarity in bacteria." Proceedings of the National Academy of Sciences of the United States of America **101**(23): 8643-8648.
- Goebel, M. and M. Yanagida (1991). "The TPR snap helix - a novel protein repeat motif from mitosis to transcription." Trends in Biochemical Sciences **16**(5): 173-177.
- Gollop, R., M. Inouye, *et al.* (1991). "Protein U, a late developmental spore coat protein of *Myxococcus xanthus*, is a secretory protein." Journal of Bacteriology **173**(11): 3597-3600.
- Golovin, A., T. J. Oldfield, *et al.* (2004). "E-MSD: an integrated data resource for bioinformatics." Nucleic Acids Research **32**: D211-D216.
- Gomes, J. P., W. J. Bruno, *et al.* (2004). "Recombination in the genome of *Chlamydia trachomatis* involving the polymorphic membrane protein C gene relative to *ompA* and evidence for horizontal gene transfer." Journal of Bacteriology **186**(13): 4295-4306.
- Gomis-Ruth, F.X., U. Gohlke, *et al.* (1996). "The helping hand of collagenase-3 (MMP-13): 2.7 Å crystal structure of its C-terminal haemopexin-like domain." Journal of Molecular Biology **264**:556-566.
- Gordon, E., N. Mouz, *et al.* (2000). "The crystal structure of the penicillin-binding protein 2X from *Streptococcus pneumoniae* and its acyl-enzyme form: Implication in drug resistance." Journal of Molecular Biology **299**(2): 477-485.

- Gouzy, J., F. Corpet, *et al.* (1999). "Whole genome protein domain analysis using a new method for domain clustering." Computers & Chemistry **23**(3-4): 333-340.
- Gracy, J. and P. Argos (1998). "Automated protein sequence database classification. II. Delineation of domain boundaries from sequence similarities." Bioinformatics **14**(2): 174-187.
- Grant, A., D. Lee, *et al.* (2004). "Progress towards mapping the universe of protein folds." Genome Biology **5**(5): art. no.-107.
- Grebe, T. and R. Hakenbeck (1996). "Penicillin-binding proteins 2b and 2x of *Streptococcus pneumoniae* are primary resistance determinants for different classes of beta-lactam antibiotics." Antimicrobial Agents and Chemotherapy **40**(4): 829-834.
- Griffiths-Jones, S. and A. Bateman (2002). "The use of structure information to increase alignment accuracy does not aid homologue detection with profile HMMs." Bioinformatics **18**(9): 1243-1249.
- Grishin, N. V. (2001). "Fold change in evolution of protein structures." Journal of Structural Biology **134**(2-3): 167-185.
- Gu, R. S., S. Fonseca, *et al.* (2004). "Transcript identification and profiling during salt stress and recovery of *Populus euphratica*." Tree Physiology **24**(3): 265-276.
- Gurian-Sherman, D. and S.E. Lindow (1993). "Bacterial ice nucleation: significance and molecular basis." FASEB Journal **7**(14): 1338-1343.
- Haft, D. H., J. D. Selengut, *et al.* (2003). "The TIGRFAMs database of protein families." Nucleic Acids Research **31**(1): 371-373.
- Hall, D. R., D. G. Gourley, *et al.* (1999). "The high-resolution crystal structure of the molybdate- dependent transcriptional regulator (ModE) from *Escherichia coli*: A novel combination of domain folds." Embo Journal **18**(6): 1435-1446.

- Haslam, R. J., H. B. Koide, *et al.* (1993). "Pleckstrin domain homology." Nature **363**(6427): 309-310.
- Hayashi, M., Y. Nakayama, *et al.* (2001). "FMN is covalently attached to a threonine residue in the NqrB and NqrC subunits of Na⁺-translocating NADH-quinone reductase from *Vibrio alginolyticus*." Febs Letters **488**(1-2): 5-8.
- Heck, L. W., K. Morihara, *et al.* (1986). "Degradation of soluble laminin and depletion of tissue-associated basement membrane laminin by *Pseudomonas aeruginosa* elastase and alkaline protease." Infection and Immunity **54**(1): 149-153.
- Henderson, J., S. Salzberg, *et al.* (1997). "Finding genes in DNA with a Hidden Markov Model." Journal of Computational Biology **4**(2): 127-141.
- Hinnebusch, J. and K. Tilly (1993). "Linear plasmids and chromosomes in bacteria." Molecular Microbiology **10**(5): 917-922.
- Hodgson, D. A. (2000). Primary metabolism and its control in streptomycetes: A most unusual group of bacteria. Advances in Microbial Physiology, Vol 42. **42**: 47-238.
- Hofmann, K. and P. Bucher (1995). "The FHA domain - a putative nuclear signaling domain found in protein kinases and transcription factors." Trends in Biochemical Sciences **20**(9): 347-349.
- Hogeweg, P. and B. Hesper (1984). "The alignment of sets of sequences and the construction of phyletic trees - an integrated method." Journal of Molecular Evolution **20**(2): 175-186.
- Holden, M., R. W. Titball, *et al.* (2004). " Genomic plasticity of the causative agent of melioidosis, *Burkholderia pseudomallei*." Proceedings of the National Academy of Sciences of the United States of America **101**(39): 14240-14245

- Holm, M. M., S. L. Vanlerberg, *et al.* (2003). "The hag protein of *Moraxella catarrhalis* strain O35E is associated with adherence to human lung and middle ear cells." Infection and Immunity **71**(9): 4977-4984.
- Hopwood, D. A. (1988). "The Leeuwenhoek lecture, 1987 - towards an understanding of gene switching in streptomyces, the basis of sporulation and antibiotic production." Proceedings of the Royal Society of London Series B-Biological Sciences **235**(1279): 121-&.
- Huang, C. H., Y. S. Lin, *et al.* (1998). "The telomeres of streptomyces chromosomes contain conserved palindromic sequences with potential to form complex secondary structures." Molecular Microbiology **28**(5): 905-916.
- Huang, X. Q. and W. Miller (1991). "A time-efficient, linear-space local similarity algorithm." Advances in Applied Mathematics **12**(3): 337-357.
- Hughey, R. and A. Krogh (1996). "Hidden Markov models for sequence analysis: Extension and analysis of the basic method." Computer Applications in the Biosciences **12**(2): 95-107.
- Hulo, N., C. J. A. Sigrist, *et al.* (2004). "Recent improvements to the PROSITE database." Nucleic Acids Research **32**: D134-D137.
- Huth, J. R., C. A. Bewley, *et al.* (1997). "The solution structure of an HMG-I(Y)-DNA complex defines a new architectural minor groove binding motif." Nature Structural Biology **4**(8): 657-665.
- Ito, H., I. Uchida, *et al.* (1993). "A cryptic DNA sequence, isolated from *Actinobacillus pleuropneumoniae*, confers a hemolytic activity upon *Escherichia coli* K12 strains." Journal of Veterinary Medical Science **55**(1): 173-175.

- Jacobson, M. R., K. E. Brigle, *et al.* (1989). "Physical and genetic map of the major Nif gene cluster from *Azotobacter vinelandii*." Journal of Bacteriology **171**(2): 1017-1027.
- Jarrell, K. F., J. D. Correia, *et al.* (1999). "Is the processing and translocation system used by flagellins also used by membrane-anchored secretory proteins in archaea?" Molecular Microbiology **34**(2): 395-398.
- Jiang, Y. X., A. Lee, *et al.* (2003). "X-ray structure of a voltage-dependent K⁺ channel." Nature **423**(6935): 33-41.
- Jouanneau, Y., H. S. Jeong, *et al.* (1998). "Overexpression in *Escherichia coli* of the rnf genes from *Rhodobacter capsulatus* - characterization of two membrane-bound iron-sulfur proteins." European Journal of Biochemistry **251**(1-2): 54-64.
- Kachlany, S. C., P. J. Planet, *et al.* (2000). "Nonspecific adherence by *Actinobacillus actinomycetemcomitans* requires genes wide-spread in Bacteria and Archaea." Journal of Bacteriology **182**(21): 6169-6176.
- Kalakoutsikii, L. V. and S. N. Agre (1976). "Comparative aspects of development and differentiation in Actinomycetes." Bacteriological Reviews **40**(2): 469-524.
- Kalman, S., W. Mitchell, *et al.* (1999). "Comparative genomes of *Chlamydia pneumoniae* and *C. trachomatis*." Nature Genetics **21**(4): 385-389.
- Katoh, K., K. Misawa, *et al.* (2002). "MAFFT: A novel method for rapid multiple sequence alignment based on fast Fourier transform." Nucleic Acids Research **30**(14): 3059-3066.
- Kessler, E., M. Safrin, *et al.* (1998). "Elastase and the LasA protease of *Pseudomonas aeruginosa* are secreted with their propeptides." Journal of Biological Chemistry **273**(46): 30225-30231.

- Kloda, A. and B. Martinac (2001). "Mechanosensitive channels in Archaea." Cell Biochemistry and Biophysics **34**(3): 349-381.
- Komatsuzawa, H., K. Ohta, *et al.* (2000). "Tn551-mediated insertional inactivation of the *fntB* gene encoding a cell wall-associated protein abolishes methicillin resistance in *Staphylococcus aureus*." Journal of Antimicrobial Chemotherapy **45**(4): 421-431.
- Kong, L. S. and S. Ranganathan (2004). "Delineation of modular proteins: Domain boundary prediction from sequence information." Briefings in Bioinformatics **5**(2): 179-192.
- Koonin, E. V., Y. I. Wolf, *et al.* (2000). Protein fold recognition using sequence profiles and its application in structural genomics. Advances in Protein Chemistry, Vol 54. **54**: 245-275.
- Koponen, M. A., D. Zlock, *et al.* (1991). "Melioidosis - forgotten, but not gone." Archives of Internal Medicine **151**(3): 605-608.
- Korf, I., M. Yandell, *et al.* (2003). BLAST, O'Reilly.
- Krogh, A., B. Larsson, *et al.* (2001). "Predicting transmembrane protein topology with a hidden Markov model: Application to complete genomes." Journal of Molecular Biology **305**(3): 567-580.
- Kurtz, D. M. (1997). "Structural similarity and functional diversity in diiron-oxo proteins." Journal of Biological Inorganic Chemistry **2**(2): 159-167.
- Kurtz, D. M. (1999). Oxygen-carrying proteins: Three solutions to a common problem. Essays in Biochemistry, Vol 34, 1999. **34**: 85-100.
- La Scola, B., F. Fenollar, *et al.* (2001). "Description of *Tropheryma whipplei* gen. nov., sp nov., the Whipple's disease bacillus." International Journal of Systematic and Evolutionary Microbiology **51**: 1471-1479.

- Laible, G., B. G. Spratt, *et al.*, (1991) "Interspecies recombinational events during the evolution of altered PBP 2x genes in penicillin-resistant clinical isolates of *Streptococcus pneumoniae*." Molecular Microbiology **5**(8): 1993-2002
- LaPointe, C. F. and R. K. Taylor (2000). "The type 4 prepilin peptidases comprise a novel family of aspartic acid proteases." Journal of Biological Chemistry **275**(2): 1502-1510.
- Laskowski, R. A. (2001). "PDBsum: Summaries and analyses of PDB structures." Nucleic Acids Research **29**(1): 221-222.
- Lauer, B., R. Russwurm, *et al.* (2001). "Molecular characterization of co-transcribed genes from *Streptomyces tendae* Tu901 involved in the biosynthesis of the peptidyl moiety and assembly of the peptidyl nucleoside antibiotic nikkomycin." Molecular and General Genetics **264**(5): 662-673.
- Lee, W., M. A. McDonough, *et al.* (2001). "A 1.2-angstrom snapshot of the final step of bacterial cell wall biosynthesis." Proceedings of the National Academy of Sciences of the United States of America **98**(4): 1427-1431.
- Letunic, I., R. R. Copley, *et al.* (2004). "SMART 4.0: Towards genomic data integration." Nucleic Acids Research **32**: D142-D144.
- Liechty, A., J. H. Chen, *et al.* (2000). "Origin of antibacterial stasis by polymyxin B in *Escherichia coli*." Biochimica Et Biophysica Acta-Biomembranes **1463**(1): 55-64.
- Lipman, D. J., A. Souvorov, *et al.* (2002). "The relationship of protein conservation and sequence length." BMC Evolutionary Biology **2**(1): 20.
- Liu, J. F. and B. Rost (2004). "CHOP: Parsing proteins into structural domains." Nucleic Acids Research **32**: W569-W571.
- Loewen, S. K., A. M. L. Ng, *et al.* (1999). "Identification of amino acid residues responsible for the pyrimidine and purine nucleoside specificities of human

- concentrative Na⁺ nucleoside cotransporters hCNT1 and hCNT2." Journal of Biological Chemistry **274**(35): 24475-24484.
- Loewen, S. K., S. Y. M. Yao, *et al.* (2004). "Transport of physiological nucleosides and anti-viral and anti- neoplastic nucleoside drugs by recombinant *Escherichia coli* nucleoside-H⁺ cotransporter (NupC) produced in *Xenopus laevis* oocytes." Molecular Membrane Biology **21**(1): 1-10.
- Longbottom, D. and L. J. Coulter (2003). "Animal chlamydioses and zoonotic implications." Journal of Comparative Pathology **128**(4): 217-244.
- Lupas, A., M. Vandyke, *et al.* (1991). "Predicting coiled coils from protein sequences." Science **252**(5009): 1162-1164.
- Lytle, B. L., F. C. Peterson, *et al.* (2004). "Letter to the Editor: Structure of the hypothetical protein At3g17210 from *Arabidopsis thaliana*." Journal of Biomolecular Nmr **28**(4): 397-400.
- Madec, E., A. Laszkiewicz, *et al.* (2002). "Characterization of a membrane-linked Ser/Thr protein kinase in *Bacillus subtilis*, implicated in developmental processes." Molecular Microbiology **46**(2): 571-586.
- Madera, M. and J. Gough (2002). "A comparison of profile hidden Markov model procedures for remote homology detection." Nucleic Acids Research **30**(19): 4321-4328.
- Madera, M., C. Vogel, *et al.* (2004). "The SUPERFAMILY database in 2004: additions and improvements." Nucleic Acids Research **32**: D235-D239.
- Maeda, T., J. Nishida, *et al.* (1999). "Expression pattern, subcellular localization and structure- function relationship of rat Tpx-1, a spermatogenic cell adhesion molecule responsible for association with Sertoli cells." Development Growth & Differentiation **41**(6): 715-722.

- Maehara, A., S. Taguchi, *et al.* (2002). "A repressor protein, PhaR, regulates polyhydroxyalkanoate (PHA) synthesis via its direct interaction with PHA." Journal of Bacteriology **184**(14): 3992-4002.
- Malho, R., N. D. Read, *et al.* (1995). "Calcium channel activity during pollen tube growth and reorientation." Plant Cell **7**(8): 1173-1184.
- Marie-Claire, C., B. P. Roques, *et al.* (1998). "Intramolecular processing of prothermolysin." Journal of Biological Chemistry **273**(10): 5697-5701.
- Massimi, I., E. Park, *et al.* (2002). "Identification of a novel maturation mechanism and restricted substrate specificity for the SspB cysteine protease of *Staphylococcus aureus*." Journal of Biological Chemistry **277**(44): 41770-41777.
- May, A. C. W. (2004). "Percent sequence identity: The need to be explicit." Structure **12**(5): 737-738.
- Meinhardt, L. W., H. B. Krishnan, *et al.* (1993). "Molecular cloning and characterization of a Sym plasmid locus that regulates cultivar-specific nodulation of soybean by *Rhizobium fredii* USDA257." Molecular Microbiology **9**(1): 17-29.
- Mesnager, S., T. Fontaine, *et al.* (2000). "Bacterial SLH domain proteins are non-covalently anchored to the cell surface via a conserved mechanism involving wall polysaccharide pyruvylation." Embo Journal **19**(17): 4473-4484.
- Meyer, I. M. and R. Durbin (2002). "Comparative *ab initio* prediction of gene structures using pair HMMs." Bioinformatics **18**(10): 1309-1318.
- Miller, J., A. D. McLachlan, *et al.* (1985). "Repetitive zinc-binding domains in the protein transcription factor Iiia from *Xenopus* oocytes." Embo Journal **4**(6): 1609-1614.

- Milne, T. J., G. Abbenante, *et al.* (2003). "Isolation and characterization of a cone snail protease with homology to CRISP proteins of the pathogenesis-related protein superfamily." Journal of Biological Chemistry **278**(33): 31105-31110.
- Miyoshi, S., H. Nakazawa, *et al.* (1998). "Characterization of the hemorrhagic reaction caused by *Vibrio vulnificus* metalloprotease, a member of the thermolysin family." Infection and Immunity **66**(10): 4851-4855.
- Mott, R. (2000). "Accurate formula for P-values of gapped local sequence and profile alignments." Journal of Molecular Biology **300**(3): 649-659.
- Moyle, M., D. L. Foster, *et al.* (1994). "A hookworm glycoprotein that inhibits neutrophil function is a ligand of the Integrin Cd11b/Cd18." Journal of Biological Chemistry **269**(13): 10008-10015.
- Mulder, N. J., R. Apweiler, *et al.* (2003). "The InterPro Database, 2003 brings increased coverage and new features." Nucleic Acids Research **31**(1): 315-318.
- Murzin, A. G. (1992). "Structural principles for the propeller assembly of beta-sheets - the preference for 7-fold symmetry." Proteins-Structure Function and Genetics **14**(2): 191-201.
- Murzin, A. G., S. E. Brenner, *et al.* (1995). "SCOP - a structural classification of proteins database for the investigation of sequences and structures." Journal of Molecular Biology **247**(4): 536-540.
- Mushegian, A. R. and E. V. Koonin (1996). "Sequence analysis of eukaryotic developmental proteins: ancient and novel domains." Genetics **144**(2): 817-828.
- Nagarajan, N. and G. Yona (2004). "Automatic prediction of protein domains from sequence information using a hybrid learning system." Bioinformatics **20**(9): 1335-1360.

- Neer, E. J., C. J. Schmidt, *et al.* (1994). "The ancient regulatory-protein family of WD-repeat proteins." Nature **371**(6500): 812-812.
- Neu, J. M., S. V. MacMillan, *et al.* (2002). "StoPK-1, a serine/threonine protein kinase from the glycopeptide antibiotic producer *Streptomyces toyocaensis* NRRL 15009, affects oxidative stress response." Molecular Microbiology **44**(2): 417-430.
- Neu, J. M. and G. D. Wright (2001). "Inhibition of sporulation, glycopeptide antibiotic production and resistance in *Streptomyces toyocaensis* NRRL 15009 by protein kinase inhibitors." Fems Microbiology Letters **199**(1): 15-20.
- Nielsen, H. and A. Krogh (1998). Prediction of signal peptides and signal anchors by a hidden Markov model. Proceedings of the International Conference on Intelligent Systems for Molecular Biology.
- Nissen, M. S., T. A. Langan, *et al.* (1991). "Phosphorylation by Cdc2 kinase modulates DNA-binding activity of high mobility group-I nonhistone chromatin protein." Journal of Biological Chemistry **266**(30): 19945-19952.
- Notredame, C. (2002). "Recent progress in multiple sequence alignment: a survey." Pharmacogenomics **3**(1): 131-144.
- Notredame, C., L. Holm, *et al.* (1998). "COFFEE: An objective function for multiple sequence alignments." Bioinformatics **14**(5): 407-422.
- Nouwen, N., H. Stahlberg, *et al.* (2000). "Domain structure of secretin PulD revealed by limited proteolysis and electron microscopy." Embo Journal **19**(10): 2229-2236.
- Oh, J. T., Y. Cajal, *et al.* (2000). "Cationic peptide antimicrobials induce selective transcription of *micF* and *osmY* in *Escherichia coli*." Biochimica Et Biophysica Acta-Biomembranes **1463**(1): 43-54.

- Oke, M., R. Sarra, *et al.* (2004). "The plug domain of a neisserial TonB-dependent transporter retains structural integrity in the absence of its transmembrane beta-barrel." Febs Letters **564**(3): 294-300.
- Olson, J. H., X. Y. Xiang, *et al.* (2001). "Allurin, a 21-kDa sperm chemoattractant from *Xenopus* egg jelly, is related to mammalian sperm-binding proteins." Proceedings of the National Academy of Sciences of the United States of America **98**(20): 11205-11210.
- O'Toole, G., H. B. Kaplan, *et al.* (2000). "Biofilm formation as microbial development." Annual Review of Microbiology **54**: 49-79.
- Pahl, A., K. Brune, *et al.* (1997). "Fit for life? Evolution of chaperones and folding catalysts parallels the development of complex organisms." Cell Stress & Chaperones **2**(2): 78-86.
- Pearl, F. M. G., C. F. Bennett, *et al.* (2003). "The CATH database: an extended protein family resource for structural and functional genomics." Nucleic Acids Research **31**(1): 452-455.
- Pedersen, A. G., L. J. Jensen, *et al.* (2000). "A DNA structural atlas for *Escherichia coli*." Journal of Molecular Biology **299**(4): 907-930.
- Pedersen, A. S., G. Christiansen, *et al.* (2001). "Differential expression of Pmp10 in cell culture infected with *Chlamydia pneumoniae* CWL029." Fems Microbiology Letters **203**(2): 153-159.
- Perozo, E., A. Kloda, *et al.* (2002). "Physical principles underlying the transduction of bilayer deformation forces during mechanosensitive channel gating." Biophysical Journal **82**(1): 1298.
- Pohlmann, A., R. Cramm, *et al.* (2000). "A novel NO-responding regulator controls the reduction of nitric oxide in *Ralstonia eutropha*." Molecular Microbiology **38**(3): 626-638.

- Pons, T., R. Gomez, *et al.* (2003). "Beta-propellers: Associated functions and their role in human diseases." Current Medicinal Chemistry **10**(6): 505-524.
- Ponting, C.P., L. Aravind, *et al.* (1999) "Eukaryotic signalling domain homologues in archaea and bacteria. Ancient ancestry and horizontal gene transfer." Journal of Molecular Biology **289**(4):729-745.
- Ponting, C. P., R. Mott, *et al.* (2001). "Novel protein domains and repeats in *Drosophila melanogaster*: Insights into structure, function, and evolution." Genome Research **11**(12): 1996-2008.
- Qi, Y., J. M. Pei, *et al.* (2002). "C-terminal domain of gyrase A is predicted to have a beta- propeller structure." Proteins-Structure Function and Genetics **47**(3): 258-264.
- Qian, J., N. M. Luscombe, *et al.* (2001). "Protein family and fold occurrence in genomes: Power-law behaviour and evolutionary model." Journal of Molecular Biology **313**(4): 673-681.
- Rawlings, N. D., D. P. Tolle, *et al.* (2004). "MEROPS: The peptidase database." Nucleic Acids Research **32**: D160-D164.
- Read, T. D., R. C. Brunham, *et al.* (2000). "Genome sequences of *Chlamydia trachomatis* MoPn and *Chlamydia pneumoniae* AR39." Nucleic Acids Research **28**(6): 1397-1406.
- Reichmann, P., A. Konig *et al.* (1996). "Penicillin-binding proteins as resistance determinants in clinical isolates of *Streptococcus pneumoniae*." Microbial Drug Resistance **2**(2): 177-181
- Roberts, C. J., A. J. Stewart, *et al.* (2004). "Human PHOSPHO1 displays high specific phosphoethanolamine and phosphocholine phosphatase activities: A means of generating inorganic phosphate in mineralising cells." Journal of Bone and Mineral Research **19**(6): 1041-1041.

- Roberts, K. P., K. M. Ensrud, *et al.* (2002). "A comparative analysis of expression and processing of the rat epididymal fluid and sperm-bound forms of proteins D and E." Biology of Reproduction **67**(2): 525-533.
- Rojas, C. M., J. H. Ham, *et al.* (2002). "HecA, a member of a class of adhesins produced by diverse pathogenic bacteria, contributes to the attachment,, aggregation, epidermal cell killing, and virulence phenotypes of *Erwinia chrysanthemi* EC16 on *Nicotiana clevelandii* seedlings." Proceedings of the National Academy of Sciences of the United States of America **99**(20): 13142-13147.
- Rossman, A. G. and A. Liljas (1974). "Recognition of structural domains in globular proteins." Journal of Molecular Biology **85**(1): 177-181.
- Rost, B. (1996). PHD: Predicting one-dimensional protein structure by profile- based neural networks. Computer Methods for Macromolecular Sequence Analysis. **266**: 525-539.
- Rost, B. and C. Sander (1993). "Prediction of protein secondary structure at better than 70 percent accuracy." Journal of Molecular Biology **232**(2): 584-599.
- Rutherford, K., J. Parkhill, *et al.* (2000). "Artemis: sequence visualization and annotation." Bioinformatics **16**(10): 944-945.
- Rzychon, M., A. Sabat, *et al.* (2003). "Staphostatins: An expanding new group of proteinase inhibitors with a unique specificity for the regulation of staphopains, *Staphylococcus* spp. cysteine proteinases." Molecular Microbiology **49**(4): 1051-1066.
- Scheffers, D. J., L. J. F. Jones, *et al.* (2004). "Several distinct localization patterns for penicillin-binding proteins in *Bacillus subtilis*." Molecular Microbiology **51**(3): 749-764.

- Servant, F., C. Bru, *et al.* (2002). "ProDom: Automated clustering of homologous domains." Briefings in Bioinformatics **3**(3): 246-251.
- Shapiro, L., H. H. McAdams, *et al.* (2002). "Generating and exploiting polarity in bacteria." Science **298**(5600): 1942-1946.
- Sheldon, P. J., S. B. Busarow, *et al.* (2002). "Mapping the DNA-binding domain and target sequences of the *Streptomyces peucetius* daunorubicin biosynthesis regulatory protein, DnrI." Molecular Microbiology **44**(2): 449-460.
- Sheu, Y. and M. Snyder (2001). Control of cell polarity and shape. Biology of the fungal cell. R. J. Howard and N. A. R. Gow. Berlin-Heidelberg-New York, Springer. **8**: 19-54.
- Silva, M. T., P. M. Macedo, *et al.* (1985). "Ultrastructure of bacilli and the bacillary origin of the macrophagic inclusions in Whipples disease." Journal of General Microbiology **131**(MAY): 1001-1013.
- Silverman-Gavrila, L. B. and R. R. Lew (2003). "Calcium gradient dependence of *Neurospora crassa* hyphal growth." Microbiology-Sgm **149**: 2475-2485.
- Skerker, J. M. and L. Shapiro (2000). "Identification and cell cycle control of a novel pilus system in *Caulobacter crescentus*." Embo Journal **19**(13): 3223-3234.
- Slakeski, N., S. M. Cleal, *et al.* (1999). "Characterization of a *Porphyromonas gingivalis* gene *prtK* that encodes a lysine-specific cysteine proteinase and three sequence-related adhesins." Oral Microbiology and Immunology **14**(2): 92-97.
- Smirnova, A., H. Q. Li, *et al.* (2001). "Thermoregulated expression of virulence factors in plant-associated bacteria." Archives of Microbiology **176**(6): 393-399.

- Sonnhammer, E. L. L. and R. Durbin (1995). "A dot-matrix program with dynamic threshold control suited for genomic DNA and protein-sequence analysis." Gene-Combis **167**: 1-10.
- Sonnhammer, E. L. L. and D. Kahn (1994). "Modular arrangement of proteins as inferred from analysis of homology." Protein Science **3**(3): 482-492.
- Springer, T. A. (1997). "Folding of the N-terminal, ligand-binding region of integrin alpha-subunits into a beta-propeller domain." Proceedings of the National Academy of Sciences of the United States of America **94**(1): 65-72.
- Strong, M., T. G. Graeber, *et al.* (2003). "Visualization and interpretation of protein networks in *Mycobacterium tuberculosis* based on hierarchical clustering of genome-wide functional linkage maps." Nucleic Acids Research **31**(24): 7099-7109.
- Samatey F. A., H. Matsunami, *et al.* (2004) "Structure of the bacterial flagellar hook and implication for the molecular universal joint mechanism." Nature **431**(7012):1062-1068.
- Subramanian, G., E. V. Koonin, *et al.* (2000). "Comparative genome analysis of the pathogenic spirochetes *Borrelia burgdorferi* and *Treponema pallidum*." Infection and Immunity **68**(3): 1633-1648.
- Swan, D. G., K. Phillips, *et al.* (1999). "Evidence for localisation of a Theileria parasite AT hook DNA- binding protein to the nucleus of immortalised bovine host cells." Molecular and Biochemical Parasitology **101**(1-2): 117-129.
- Szyperski, T., C. Fernandez, *et al.* (1998). "Structure comparison of human glioma pathogenesis-related protein GliPR and the plant pathogenesis-related protein P14a indicates a functional link between the human immune system and a plant defense system." Proceedings of the National Academy of Sciences of the United States of America **95**(5): 2262-2266.

- Tang, B., S. Nirasawa, *et al.* (2003). "General function of N-terminal propeptide on assisting protein folding and inhibiting catalytic activity based on observations with a chimeric thermolysin-like protease." Biochemical and Biophysical Research Communications **301**(4): 1093-1098.
- Tatusov, R. L., N. D. Fedorova, *et al.* (2003). "The COG database: An updated version includes eukaryotes." Bmc Bioinformatics **4**: art. no.-41.
- Teichmann, S. A., J. Park, *et al.* (1998). "Structural assignments to the *Mycoplasma genitalium* proteins show extensive gene duplications and domain rearrangements." Proceedings of the National Academy of Sciences of the United States of America **95**(25): 14658-14663.
- Thompson, J. D., D. G. Higgins, *et al.* (1994). "Clustal-W - improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice." Nucleic Acids Research **22**(22): 4673-4680.
- Thompson, J. D., F. Plewniak, *et al.* (1999). "BALiBASE: A benchmark alignment database for the evaluation of multiple alignment programs." Bioinformatics **15**(1): 87-88.
- Throup, J. P., F. Zappacosta, *et al.* (2001). "The *srhSR* gene pair from *Staphylococcus aureus*: Genomic and proteomic approaches to the identification and characterization of gene function." Biochemistry **40**(34): 10392-10401.
- Tomaras, A. P., C. W. Dorsey, *et al.* (2003). "Attachment to and biofilm formation on abiotic surfaces by *Acinetobacter baumannii*: Involvement of a novel chaperone-usher pili assembly system." Microbiology-Sgm **149**: 3473-3484.
- Toye, P., E. Gobright, *et al.* (1995). "Structure and sequence variation of the genes encoding the polymorphic, immunodominant molecule (PIM), an antigen of

- Theileria parva* recognized by inhibitory monoclonal antibodies." Molecular and Biochemical Parasitology **73**(1-2): 165-177.
- Umeyama, T., P. C. Lee, *et al.* (2002). "Protein serine/threonine kinases in signal transduction for secondary metabolism and morphogenesis in *Streptomyces*." Applied Microbiology and Biotechnology **59**(4-5): 419-425.
- Vallet, I., S. P. Diggle, *et al.* (2004). "Biofilm formation in *Pseudomonas aeruginosa*: Fimbrial cup gene clusters are controlled by the transcriptional regulator MvaT." Journal of Bacteriology **186**(9): 2880-2890.
- van der Woude, M. W. and A. J. Baumler (2004). "Phase and antigenic variation in bacteria." Clinical Microbiology Reviews **17**(3): 581-+.
- Vollack, K. U. and W. G. Zumft (2001). "Nitric oxide signaling and transcriptional control of denitrification genes in *Pseudomonas stutzeri*." Journal of Bacteriology **183**(8): 2516-2526.
- von Mering C., M. Huynen, *et al.* (2003) "STRING: a database of predicted functional associations between proteins." Nucleic Acids Research **31**(1):258-261.
- Voorhorst, W. G. B., R. I. L. Eggen, *et al.* (1996). "Isolation and characterization of the hyperthermostable serine protease, pyrolysin, and its gene from the hyperthermophilic archaeon *Pyrococcus furiosus*." Journal of Biological Chemistry **271**(34): 20426-20431.
- Wang, Z. X., S. M. Li, *et al.* (2000). "Identification of the coumermycin A(1) biosynthetic gene cluster of *Streptomyces rishiriensis* DSM 40489." Antimicrobial Agents and Chemotherapy **44**(11): 3040-3048.
- Wehrl, W., V. Brinkmann, *et al.* (2004). "From the inside out - processing of the Chlamydial autotransporter PmpD and its role in bacterial adhesion and activation of human host cells." Molecular Microbiology **51**(2): 319-334.

- Weichart, D., R. Lange, *et al.* (1993). "Identification and characterization of stationary phase- inducible genes in *Escherichia coli*." Molecular Microbiology **10**(2): 407-420.
- Wetlaufer, D. B. (1973). "Nucleation, rapid folding, and globular intrachain regions in proteins." Proceedings of the National Academy of Sciences of the United States of America **70**(3): 697-701.
- Wheeler, D. L., D. M. Church, *et al.* (2004). "Database resources of the National Center for Biotechnology Information update." Nucleic Acids Research **1**(32): D35-40.
- Whittle, G., N. B. Shoemaker, *et al.* (2002). "Characterization of genes involved in modulation of conjugal transfer of the Bacteroides conjugative transposon CTnDOT." Journal of Bacteriology **184**(14): 3839-3847.
- Wilson, J. J., O. Matsushita, *et al.* (2003). "A bacterial collagen-binding domain with novel calcium-binding motif controls domain orientation." Embo Journal **22**(8): 1743-1752.
- Wilson, K. H., R. Blichington, *et al.* (1991). "Phylogeny of the Whipples disease-associated bacterium." Lancet **338**(8765): 474-475.
- Wootton, J. C. and S. Federhen (1993). "Statistics of local complexity in amino acid sequences and sequence databases." Computers & Chemistry **17**(2): 149-163.
- Yamakawa, T., S. Miyata, *et al.* (1998). "cDNA cloning of a novel trypsin inhibitor with similarity to pathogenesis-related proteins, and its frequent expression in human brain cancer cells." Biochimica Et Biophysica Acta-Gene Structure and Expression **1395**(2): 202-208.
- Yeats, C. and A. Bateman (2003). "The BON domain: a putative membrane-binding domain." Trends in Biochemical Sciences **28**(7): 352-355.

- Yeats, C., S. Bentley, *et al.* (2003). "New knowledge from old: *In silico* discovery of novel protein domains in *Streptomyces coelicolor*." Bmc Microbiology **3**: art. no.-3.
- Yeats, C., R. D. Finn, *et al.* (2002). "The PASTA domain: A beta-lactam-binding domain." Trends in Biochemical Sciences **27**(9): 438-440.
- Yeats, C., N. D. Rawlings, *et al.* (2004). "The PepSY domain: A regulator of peptidase activity in the microbial environment?" Trends in Biochemical Sciences **29**(4): 169-172.
- Yim, H. H. and M. Villarejo (1992). "OsmY, a new hyperosmotically inducible gene, encodes a periplasmic protein in *Escherichia coli*." Journal of Bacteriology **174**(11): 3637-3644.
- Yona, G., N. Linial, *et al.* (1999). "ProtoMap: Automatic classification of protein sequences, a hierarchy of protein families, and local maps of the protein space." Proteins-Structure Function and Genetics **37**(3): 360-378.
- Zhang, J., P. C. Fitzjames, *et al.* (1993). "Cloning and characterization of a cluster of genes encoding polypeptides present in the insoluble fraction of the spore coat of *Bacillus subtilis*." Journal of Bacteriology **175**(12): 3757-3766.