Publications (by year)

[citation counts from SCOPUS given in brackets - May, 2019]

2019

1. Gaydosik AM, Tabib T, Gerskin LJ, Bayan CY, **Conway JF**, Lafyatis R & Fuschiotti P. Clin Cancer Res, in press, 2019.

Single-cell lymphocyte heterogeneity in advanced Cutaneous T-Cell Lymphoma skin tumors.

2018

1. Chaudhary SC, Khalid S, Smethurst V, Monier D, Mobley J, Huet A, **Conway JF** & Napierala D. Connect Tissue Res. 59, 55-61, 2018. [1]

Proteomic profiling of extracellular vesicles released from vascular smooth muscle cells during initiation of phosphate-induced mineralization.

1. Ruhge LL, Huet AGE, **Conway JF** & Smith GA. J Virol 92, e00821-18, 2018.

The apical region of the herpes simplex virus major capsid protein promotes capsid maturation.

2017

1. Heming JD, Conway JF, Homa FL. Adv Anat Embryol Cell Biol 223, 119-142, 2017. [10] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/28528442) [(DOI)](https://doi.org/10.1007/978-3-319-53168-7_6)

Herpesvirus Capsid Assembly and DNA Packaging.

1. Huffman JB, Daniel GR, Falck-Pedersen E, Huet A, Smith GA, **Conway JF** & Homa FL. J. Virol 91, e00641-17, 2017. [5] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/28490590) [(DOI)](https://doi.org/10.1128/JVI.00641-17)

The C-terminus of the herpes simplex virus pUL25 protein is required for release of viral genomes from capsids bound to nuclear pores.

1. Organtini L, Shingler K, Ashley RE, Evans E, Durrani K, Dryden K, Makhov AM, **Conway JF**, Pizzorno M & Hafenstein S. J. Virol 91, e01795-16, 2017. [5] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/27852845) [(DOI)](https://doi.org/10.1128/JVI.01795-16)

Honey bee deformed wing virus structures reveal conformational changes accompany genome release.

1. Vernhes E, Renouard M, Gilquin B, Cuniasse P, Durand D, England P, Hoos S, Huet A, Conway JF, Glukhov A, Ksenzenko V, Jacquet E, Nhiri N, Zinn-Justin S & Boulanger P. Scientific Reports **7**, 41662, 2017. [3] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/28165000) [(DOI)](https://doi.org/10.1038/srep41662)

High affinity anchoring of the decoration protein pb10 onto the bacteriophage T5 capsid.

1. Guan J, Bywaters SM, Brendle SA, Ashley RE, Makhov AM, **Conway JF**, Christensen ND & Hafenstein S. Structure **25**, 253-263, 2017. [21] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/28065506) [(DOI)](https://doi.org/10.1016/j.str.2016.12.001)

Cryoelectron Microscopy Maps of Human Papillomavirus 16 Reveal L2 Densities and Heparin Binding Site.

1. Hua J, Huet A, Lopez CA, Toropova K, Pope WH, Duda RL, Hendrix RW & **Conway JF**. mBio 8, e01579-17, 2017. [5] [(PubMed)](https://www.ncbi.nlm.nih.gov/pubmed/29042498) [(DOI)](https://doi.org/10.1128/mBio.01579-17)

Capsids and genomes of jumbo-sized bacteriophages reveal the evolutionary reach of the HK97 fold.

1. Subramanian S, Organtini LJ, Grossman A, Domeier PP, Cifuente JO, Makhov AM, **Conway JF**, D'Abramo A, Cotmore SF, Tattersall P & Hafenstein S. Virology 510, 216-223, 2017. [2] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/28750325) [(DOI)](https://doi.org/10.1016/j.virol.2017.07.015)

Cryo-EM maps reveal five-fold channel structures and their modification by gatekeeper mutations in the parvovirus minute virus (MVM) of mice.

1. Guan J, Bywaters SM, Brendle SA, Ashley RE, Makhov AM, **Conway JF**, Christensen ND & Hafenstein S. Viruses 9, 374. [1] (Pubmed) [(DOI)](https://doi.org/10.3390/v9120374) doi:10.3390/v9120374, 2017.

High-resolution structure analysis of antibody V5 and U4 conformational epitopes on human papillomavirus 16.

2016

1. Huet A, Duda RL, Hendrix RW, Boulanger P & **Conway JF**. J Mol Biol 428, 165-181, 2016. [5] [(Pubmed)](https://www.ncbi.nlm.nih.gov/pubmed/26616586) [(DOI)](https://doi.org/10.1016/j.jmb.2015.11.019)

Correct assembly of the bacteriophage T5 procapsid requires both the maturation protease and the portal complex.

1. Huet A, Makhov AM, Huffman JB, Vos M, Homa FL & Conway JF. Nat Struct Mol Biol, 23(6):531-539, 2016. [32] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/27111889)) ([DOI](http://dx.doi.org/10.1038/nsmb.3212))

Extensive subunit contacts underpin herpesvirus capsid stability and interior-to-exterior allostery.

1. Stevenson HP, Lin G, Barnes CO, Sutkeviciute I, Krzysiak T, Weiss SC, Reynolds S, Wu Y, Nagarajan V, Makhov AM, Lawrence R, Lamm E, Clark L, Gardella TJ, Hogue BG, Ogata CM, Ahn J, Gronenborn AM, Conway JF, Vilardaga JP, Cohen AE & Calero G. Acta Crystallogr D Struct Biol, **72**, 603-615, 2016. [8] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/27139624)) ([DOI](http://dx.doi.org/10.1107/S2059798316001546))

Transmission electron microscopy for the evaluation and optimization of crystal growth.

1. Lee H, Shingler KL, Organtini LJ, Ashley RE, Subramanium S, Makhov AM, Conway JF & Hafenstein S. Science Advances **2**, e1501929, 2016. [17] ([Pubmed](https://www.ncbi.nlm.nih.gov/pubmed/27574701)) ([DOI](http://dx.doi.org/10.1126/sciadv.1501929))

The novel asymmetric entry intermediate of a picornavirus captured with nanodiscs.

1. Organtini LJ, Lee H, Iketani, S, Huang K, Ashley RE, Makhov A**M, Conway JF,** Parrish CR & Hafenstein S. J Virol **90**, 9733-9742, 2016. [7] ([Pubmed](https://www.ncbi.nlm.nih.gov/pubmed/27535057)) ([DOI](http://dx.doi.org/10.1128/JVI.01112-16))

Near-atomic resolution structure of a highly neutralizing Fab bound to canine parvovirus.

2015

1. Albright BS, Kosinski A, Szczepaniak R, Cook EA, Stow ND, Conway JF & Weller SK. J Virol **89**, 443-453. [10] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25320327)) ([DOI](http://dx.doi.org/10.1128/JVI.01913-14))

The putative HSV-1 chaperone protein UL32 modulates disulfide bond formation during infection.

1. Lee H, Brendle SA, Bywaters SM, Guan J, Ashley RE, Yoder JD, Makhov AM, Conway JF, Christensen ND & Hafenstein S. J Virol **89**, 1428-1438. [33] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25392224)) ([DOI](http://dx.doi.org/10.1128/JVI.02898-14))

A cryo-electron microscopy study identifies the complete H16.V5 epitope and reveals global conformational changes initiated by binding of the neutralizing antibody fragment.

1. Shingler KL, Cifuente JO, Ashley RE, Makhov AM, Conway JF & Hafenstein S. J Virol **89**, 1900-1908. [13] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25428877)) ([DOI](http://dx.doi.org/10.1128/JVI.03098-14))

The Enterovirus 71 procapsid binds neutralizing antibodies and rescues virus infection in vitro

1. Sattar S, Bennett NJ, Wen WX, Guthrie JM, Blackwell LF, Conway JF & Rakonjac J. Frontiers in Microbiology (Virology) **6**, 316. [7] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25941520)) ([DOI](http://dx.doi.org/10.3389/fmicb.2015.00316))

Ff-nano, Short Functionalized Nanorods Derived from Ff (f1, fd or M13) Filamentous Bacteriophage

1. Guan J, Bywaters SM, Brendle SA, Lee H, Ashley RE, Makhov AM, Conway JF, Christensen ND & Hafenstein S. Virology **483**, 253-263. [27] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25996608)) ([DOI](http://dx.doi.org/10.1016/j.virol.2015.04.016))

Structural comparison of four different antibodies interacting with human papillomavirus 16 and mechanisms of neutralization

1. Tandon R, Mocarski ES & Conway JF. Viruses **7**, 899-914. [14] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25730559)) ([DOI](http://dx.doi.org/10.3390/v7030899))

The A, B, Cs of herpesvirus capsids

2014

1. Organtini L, Makhov AM, Conway JF, Hafenstein S & Carson S. J Virol **88**, 5755-5765. [24] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/24623425)) ([DOI](http://dx.doi.org/10.1128/JVI.00299-14))

Kinetic and structural analysis of coxsackievirus B3 receptor interactions and formation of the A-particle.

1. Stevenson HP, DePonte DP, Makhov AM, Conway JF, Zeldin OB, Boutet S, Calero G & Cohen AE. Philos Trans R Soc Lond B **369**, 20130322. [14] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/24914151)) ([DOI](http://dx.doi.org/10.1098/rstb.2013.0322))

Transmission electron microscopy as a tool for nanocrystal characterization pre- and post-injector.

1. Stevenson HP, Makhov AM, Calero M, Edwards AL, Zeldin OB, Mathews II, Lin G, Barnes CO, Santamaria H, Ross TM, Soltis SM, Khosla C, Nagarajan V, Conway JF, Cohen AE & Calero G. Proc Natl Acad Sci USA **111**, 8470-8475. [24] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/24872454)) ([DOI](http://dx.doi.org/10.1073/pnas.1400240111))

Use of transmission electron microscopy to identify nanocrystals of challenging protein targets

1. ZhangL, Franks J, StolzDB, Conway JF & Thibodeau PH. Biochemistry, **53**, 6452-6462. [3] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25232897)) ([DOI](http://dx.doi.org/10.1021/bi5007546))

Inducible polymerization and two-dimensional assembly of the Repeats-in-Toxin (RTX) domain from the Pseudomonas aeruginosa alkaline protease.

1. Cardone G, Duda RL, Cheng N, You L, Conway JF, Hendrix RW & Steven AC. mBio **5**, e02067. [8] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/25389177)) ([DOI](http://dx.doi.org/10.1128/mBio.02067-14))

Metastable intermediates as stepping stones on the maturation pathways of viral capsids.

2013

1. Shingler KL, Yoder JL, Carnegie MS, Ashley RE, Makhov AM, Conway JF & Hafenstein S. PLoS Pathog **9**, e1003240. **[56]** ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23555253)) ([DOI](http://dx.doi.org/10.1371/journal.ppat.1003240))

The Enterovirus 71 A-Particle Forms a Gateway to Allow Genome Release: A CryoEM Study of Picornavirus Uncoating.

1. Preux O, Durand D, Huet A, Conway JF, Bertin A, Boulogne C, Drouin-Wahbi J, Trévarin D, Pérez J, Vachette P & Boulanger P. J Mol Biol **425**, 1999-2014. [13] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23500494)) ([DOI](http://dx.doi.org/10.1016/j.jmb.2013.03.002))

A two-state cooperative expansion converts the procapsid shell of bacteriophage T5 into a highly stable capsid isomorphous to the final virion head.

1. Cifuente JO, Lee H, Yoder JD, Shingler KL, Carnegie MS, Yoder JL, Ashley RE, Makhov AM, Conway JF & Hafenstein S. J Virol 87, 7637-7645, 2013. [25] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23637404)) ([DOI](http://dx.doi.org/10.1128/JVI.03519-12))

Structures of the procapsid and mature virion of enterovirus 71 strain 1095.

1. Fang P-A, Margolis HC, Conway JF, Simmer JP & Beniash E. J Struct Biol **183**, 250-257. [13] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23707542)) ([DOI](http://dx.doi.org/10.1016/j.jsb.2013.05.011))

CryoTEM study of effects of phosphorylation on the hierarchical assembly of porcine amelogenin and its regulation of mineralization in vitro.

1. Pope WH, Jacobs-Sera D, Best AA, Broussard GW, Connerly PL, Dedrick RM, Kremer TA, Offner S, Ogiefo AH, Pizzorno M, Rochenbach K, Russell D, Stowe EL, Stukey J, Thibault SA, Conway JF, Hendrix RW & Hatfull GF. PLoS One. PLoS ONE 8, e69273. [12] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23874930)) ([DOI](http://dx.plos.org/10.1371/journal.pone.0069273))

Cluster J mycobacteriophages: Intron splicing in capsid and tail genes.

1. Homa FL, Huffman JB, Toropova K, Lopez HR, Makhov AM & Conway JF. J Mol Biol **425**, 3415-3428. [30] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23827137)) ([DOI](http://dx.doi.org/10.1016/j.jmb.2013.06.034))

Structure of the pseudorabies virus capsid: comparison with herpes simplex virus type 1 and differential binding of essential minor proteins

1. Lee H, Cifuente JO, Ashley RE, Conway JF, Makhov AM, Tano Y, Shimizu H, Nishimura Y & Hafenstein S. J Virol **87**, 11363-11370. [29] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/23946455)) ([DOI](http://dx.doi.org/10.1128/JVI.01926-13))
*A strain-specific epitope of Enterovirus 71 identified by cryoEM of the complex with Fab from neutralizing antibody.*

2012

1. Yeh JI, Levine AS, Du S, Chinte U, Ghodke H, Wang H, Shi H, Hsieh CL, Conway JF, van Houten B & Rapíc-Otrin V. PNAS **109**, E2737-E2746. [38] ([Pubmed](http://www.ncbi.nlm.nih.gov/pubmed/22822215)) [(DOI)](http://dx.doi.org/10.1073/pnas.1110067109)

Damaged DNA induced UV-DDB dimerization and its roles in chromatinized DNA repair.

1. Zhang L, Conway JF & Thibodeau PH. J Biol Chem **287**, 4311-4322. [(Pubmed)](http://www.ncbi.nlm.nih.gov/pubmed/22170064) [(DOI)](http://dx.doi.org/10.1074/jbc.M111.310300)
*Calcium-induced folding and stabilization of the Pseudomonas aeruginosa alkaline protease.*

2011

1. Conway JF & Homa FL. In “Alphaherpesviruses”, ed. S.K. Weller, Caister Academic Press, 175-194.

Nucleocapsid structure, assembly and DNA packaging of herpes simplex virus.

1. Fang P-A, Margolis HC, Conway JF, Simmer JP, Dickinson GH & Beniash E. Cells Tissues Organs **194**, 166-170. [11] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/21597263) [(DOI)](http://dx.doi.org/10.1159/000324250)

Cryogenic transmission electron microscopy study of amelogenin self-assembly at different pH.

1. Cockrell SK, Huffman JB, Toropova K, Conway JF & Homa FL. J Virol **85**, 4875-4887. [41] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/21411517) [(DOI)](http://dx.doi.org/10.1128/JVI.00242-11)

Residues of the UL25 protein of herpes simplex virus that are required for its stable interaction with capsids.

1. Watts NR, Conway JF, Cheng N, Stahl SJ, Steven AC & Wingfield PT. J Mol Biol **409**, 202-213. [13] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/21463641) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2011.03.049)

Role of the propeptide in controlling conformation and assembly state of hepatitis B virus e-antigen.

1. Toropova K, Huffman JB, Homa FL & Conway JF. J Virol **85**, 7513-7522. **[68]** [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/21632758) [(DOI)](http://dx.doi.org/10.1128/JVI.00837-11)

The herpes simplex virus 1 UL17 protein is the second constituent of the capsid vertex-specific component required for DNA packaging and retention.



1. Szczepaniak R, Nellissery J, Makov AM, Kosinski A, Conway JF & Weller SK. J Virol **85**, 8625-8634. [17] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/21697480) [(DOI)](http://dx.doi.org/10.1128/JVI.00214-11)

Disulfide bond formation contributes to herpes simplex virus capsid stability and retention of pentons.

1. Fang P-A, Conway JF, Margolis HC, Simmer JP & Beniash E. PNAS USA108, 14097-14102. **[93]** [(Pubmed)](http://www.ncbi.nlm.nih.gov/pubmed/21825148) [(DOI)](http://dx.doi.org/10.1073/pnas.1106228108)

Hierarchical self-assembly of amelogenin and the regulation of biomineralization at the nanoscale.

2010

1. Conway JF, Cockrell SK, Copeland AM, Newcomb WW, Brown JC & Homa FL. J Mol Biol 397, 575-586. **[57]** [(PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20109467)) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2010.01.043)

Labeling and localization of the herpes simplex virus capsid protein UL25 and its interaction with the two triplexes closest to the penton.

1. Effantin G, Figueroa-Bossi N, Schoehn G, Bossi L & Conway JF. Virology **402**, 355-365. [9] ([PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20427067)) ([DOI](http://dx.doi.org/10.1016/j.virol.2010.03.041))

The tripartite capsid gene of Salmonella phage Gifsy-2 yields a capsid assembly pathway engaging features from HK97 and λ.

1. Anjum DH, Stiger RM, Finley JJ & Conway JF. J Materials Research **27**, 1264-1271. [6] ([DOI](http://dx.doi.org/10.1557/JMR.2010.0166))

Cryo-transmission electron microscopy of Ag nano-particles grown on an ionic liquid substrate.

1. Long KR, Yamamoto Y, Baker AL, Watkins SC, Coyne CB, Conway JF & Aridor M. J Cell Biol, J Cell Biol **190**, 115-128. [49] ([PubMed](http://www.ncbi.nlm.nih.gov/pubmed/20624903)) ([DOI](http://dx.doi.org/10.1083/jcb.201004132))

Sar1 assembly regulates membrane constriction and ER export.

1. Huet A, Conway JF, Letellier L & Boulanger P. J Virology, **84**, 9350-9358. [19] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/20573812) [(DOI)](http://dx.doi.org/10.1128/JVI.00942-10)

In vitro assembly of the T = 13 procapsid of bacteriophage T5 with its scaffolding domain.

2009

1. Thakur AK, Jayaraman M, Mishra R, Thakur M, Chellgren VM, Byeon I-J, Anjum DH, Kodali R, Creamer TP, Conway JF, Gronenborn AM & Wetzel R. Nat Struct Mol Biol 16, 380-389. **[273]** [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/19270701) [(DOI)](http://dx.doi.org/10.1038/nsmb.1570)

Polyglutamine disruption of the huntingtin exon 1 N terminus triggers a complex aggregation mechanism.

1. Duda RL, Ross PD, Cheng N, Firek BA, Hendrix RW, Conway JF & Steven AC. J Mol Biol **391**, 471-483. [32] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/19540242) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2009.06.035)

Structure and energetics of encapsidated DNA in bacteriophage HK97 studied by scanning calorimetry and cryo-electron microscopy.

2008

1. Lee KK, Gan L, Tsuruta H, Conway JF, Hendrix RW, Steven AC, Duda RL & Johnson JE. Structure 16, 1491-1502. [28] ([PubMed](http://www.ncbi.nlm.nih.gov/pubmed/18940605?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)) ([DOI](http://dx.doi.org/10.1016/j.str.2008.06.014))

Virus capsid expansion driven by the capture of mobile surface loops.

2007

1. Stoppin-Mellet V, Gaillard J, Timmers T, Neumann E, Conway JF, and Vantard M. Plant Physiol Biochem. [23] [(PubMed)](http://www.ncbi.nlm.nih.gov/pubmed/17977001?ordinalpos=14&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum) [(DOI)](http://dx.doi.org/10.1016/j.plaphy.2007.09.005)

Arabidopsis katanin severs cortical microtubules using a multimeric microtubule-binding domain.

1. Weigele PR, Pope WH, Pedulla ML, Houtz JM, Smith AL, Conway JF, King J, Hatfull GF, Lawrence JG & Hendrix RW (2007) Environ Microbiol 9, 1675-1695. **[113]** [(PubMed)](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=17564603&ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum) [(DOI)](http://dx.doi.org/10.1111/j.1462-2920.2007.01285.x)

Genomic and structural analysis of Syn9, a cyanophage infecting marine Prochlorococcus and Synechoococcus



1. Conway JF, Cheng N, Ross PD, Hendrix RW, Duda RL & Steven AC (2007) J Struct Biol 158, 224-232. [30] [(PubMed)](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=ShowDetailView&TermToSearch=17188892&ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum) [(DOI)](http://dx.doi.org/10.1016/j.jsb.2006.11.006)

A thermally induced phase transition in a viral capsid transforms the hexamers, leaving the pentamers unchanged.

2006

1. Gan L, Speir JA, Conway JF, Lander G, Cheng N, Firek BA, Hendrix RW, Duda RL, Liljas L & Johnson JE (2006) Structure **14**, 1655-1665. **[53]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=17098191&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.str.2006.09.006)

Capsid conformational sampling in HK97 maturation visualized by X-ray crystallography and cryo-EM.


1. Ross PD, Conway JF, Cheng N, Dierkes L, Firek BA, Hendrix RW, Steven AC & Duda, RL. (2006) J Mol Biol **364**, 512-525. [34] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=17007875&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2006.08.048)

A free energy cascade with locks drives assembly and maturation of bacteriophage HK97 capsid.


1. Fuschiotti P, Fender P, Schoehn G & Conway JF (2006) J Gen Virol **87**, 2901-2905. [8] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=16963748&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1099/vir.0.82025-0)

Development of the dodecahedral penton particle from Adenovirus 3 for therapeutic application.



1. Neumann E, Garcia-Saez I, de Bonis S, Wade RH, Kozielski F & Conway JF (2006) J Mol Biol **362**, 203-211. [12] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=16926026&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2006.07.042)

Human kinetochore-associated kinesin CENP-E visualized at 17 angstrom resolution bound to microtubules.



1. Effantin G, Boulanger P, Neumann, E, Letellier L & Conway JF (2006) J Mol Biol **361**, 993-1002. **[74]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=16876823&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2006.06.081)

Bacteriophage T5 structure reveals similarities with HK97 & T4 suggesting evolutionary relationships.



1. Harris A, Belnap DM, Watts NR, Conway JF, Cheng N, Stahl SJ, Vethanayagam JG, Wingfield PT & Steven AC (2006) J Mol Biol **355**, 562-576. [22] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16309704&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2005.10.035)

Epitope diversity of hepatitis B virus capsids: Quasiequivalent variations in spike epitopes and binding of different antibodies to the same epitope.



1. Duda RL, Hendrix RW, Huang WM & Conway JF (2006) Current Biology **16**, R11-13. [31] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16401408&query_hl=8&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.cub.2005.12.023)

Shared architecture of bacteriophage SPO1 and herpesvirus capsids.



1. Fuschiotti P, Schoehn G, Fender P, Hewat EA, Ruigrok RWH, Chroboczek J & Conway JF (2006) J Mol Biol **356**, 510-520. [38] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16375921&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2005.11.048)

Structure of the dodecahedral penton particle from human adenovirus type 3.



1. Rakonjac J & Conway JF (2006) in “Microbial Nanotechnology: Biological Self-Assembly Systems and Biopolymer-based Nanostructures”, ed. Bernd Rehm, ISBN 1904933165, Horizon Scientific Press, Norwich, 153-190.

Bacteriophages: Self-assembly and applications.

1. Wikoff WR, Conway JF, Tang J, Lee KK, Gan L, Cheng N, Duda RL, Hendrix RW, Steven AC & Johnson JE. (2006) J Struct Biol **153**, 303-306. [44] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16427314&query_hl=5&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jsb.2005.11.009)

Time-resolved molecular dynamics of virus maturation interpreted by electron cryo-microscopy and x-ray crystallography.



2005

1. Plisson C, Uzest M, Drucker M, Froissart R, Dumas C, Conway J, Thomas D, Blanc S & Bron P (2005) J Mol Biol **346**, 267-277. [42] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15663943&query_hl=3&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2004.11.052)

Structure of the mature P3-virus particle complex of Cauliflower mosaic virus revealed by cryo-electron microscopy.

1. Unser M, Sorzano COS, Thévenaz P, Joníc S, El-Bez C, de Carlo S, Conway JF & Trus BL (2005) J Struct Biol **149**, 243-255. [44] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15721578&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jsb.2004.10.011)

Spectral signal-to-noise ratio and resolution assessment of 3d reconstructions.

1. Bruemmer A, Scholari F, Lopez-Ferber M, Conway JF & Hewat EA (2005) J Mol Biol **347**, 791-801. [16] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15769470&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2005.02.009)

Structure of an insect parvovirus (Junonia coenia densovirus) at 8.7Å resolution determined by cryo-electron microscopy.

1. Li Y-Y, Conway JF, Cheng N, Steven AC, Hendrix RW & Duda RL (2005) J Mol Biol **348**, 167-182. [28] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15808861&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jmb.2005.02.045)

Control of virus assembly: HK97 “Whiffleball” mutant capsids without pentons.



1. Steven AC, Heymann JB, Cheng N, Trus BL & Conway JF (2005) Curr Opinion Struct Biol **15**, 227-236. **[131]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15837183&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.sbi.2005.03.008)

Virus maturation: Dynamics and mechanism of a stabilizing structural transition that leads to infectivity.

1. Ross PD, Cheng N, Conway JF, Firek BA, Hendrix RW, Duda RL & Steven AC (2005) EMBO J **24**, 1352-1363. [45] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15775971&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1038/sj.emboj.7600613)

Crosslinking renders bacteriophage HK97 capsid maturation irreversible and effects an essential stabilization.

1. Fabry C, Rosa-Calatrava M, Conway JF, Zubieta C, Cusack S, Ruigrok RWH & Schoehn G (2005) EMBO J **24**, 1645-1654. **[98]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=retrieve&db=pubmed&list_uids=15861131&dopt=Abstract) [(DOI)](http://dx.doi.org/10.1038/sj.emboj.7600653)

A quasi-atomic model of human Adenovirus type 5 capsid.

1. Steven AC, Conway JF, Cheng N, Watts NR, Belnap DM, Harris A, Stahl SJ & Wingfield PT (2005) in “Advances in Virus Research, Volume 64: Virus Assembly” ed P. Roy, Academic Press. 126-164. ISBN 012039863X. **[61]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16139594&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/S0065-3527%2805%2964005-5)

Structure, assembly and antigenicity of hepatitis B virus capsid proteins.

1. Ruigrok RWH, Schoehn G & Conway JF (2005) in “Topley and Wilson’s Microbiology & Microbial Infections: Virology”, 10th Edition, eds B. Mahy & V. ter Meulen, vol. 1. ISBN 0340885610, Hodder Arnold, 57-85. [(On-line TOC)](http://www.topleyandwilson.com/virology1.htm)

The morphology and structure of viruses.

2004

1. Gan L, Conway JF, Firek BA, Cheng N, Hendrix RW, Steven AC, Johnson JE & Duda RL (2004) Molecular Cell **14**, 559-569. [49] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15175152&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.molcel.2004.05.015)

Control of cross-linking by quarternary structure changes during bacteriophage HK97 maturation.

1. Heymann JB, Conway JF & Steven AC (2004) J Struct Biol **147**, 291-301. [30] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15450298&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/j.jsb.2004.02.006)

Molecular dynamics of protein complexes from four-dimensional cryo-electron microscopy.

2003

1. Cerritelli ME, Trus BL, Smith CS, Cheng N, Conway JF & Steven AC (2003) J Mol Biol **327**, 1-6. [31] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12614603&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/S0022-2836%2803%2900117-7)

A second symmetry mismatch at the portal vertex of bacteriophage T7: 8-fold symmetry in the procapsid core.

1. Conway JF, Watts NR, Belnap DM, Cheng N, Stahl SJ, Wingfield PT & Steven AC (2003) J Virol **77**, 6466-6473. **[57]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12743303&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1128/JVI.77.11.6466-6473.2003)

Characterization of a conformational epitope on hepatitis B virus core antigen and quasiequivalent variations in antibody binding.

1. Cerritelli ME, Conway JF, Cheng N, Trus BL & Steven AC (2003) in “Advances in Protein Chemistry, Volume 64: Virus Structure” eds W. Chiu & JE. Johnson, 301-320. ISBN 0120342642. [44] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=13677051&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1016/S0065-3233%2803%2901008-8)

Molecular mechanisms in bacteriophage T7 procapsid assembly, maturation, and DNA containment.

1. Belnap DM, Watts NR, Conway JF, Cheng N, Stahl SJ, Wingfield PT & Steven AC (2003) Proc Natl Acad Sci U S A **100**, 10884-10889. **[60]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12954985&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1073/pnas.1834404100)

Diversity of core antigen epitopes of hepatitis B virus.

2000-2002

1. Belnap DM, Filman DJ, Trus BL, Cheng N, Booy FP, Conway JF, Curry S, Hiremath CN, Tsang SK, Steven AC & Hogle JM (2000) J Virol **74**, 1342-1354. **[184]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10627545&query_hl=1&itool=pubmed_DocSum)

Molecular tectonic model of virus structural transitions: the putative cell entry states of poliovirus.

1. Hewat EA, Neumann E, Conway JF, Moser R, Ronacher B, Marlovits TC & Blaas D (2000) EMBO J **19**, 6317-6325. **[100]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11101504&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1093/emboj/19.23.6317)

The cellular receptor to human rhinovirus 2 binds around the 5-fold axis and not in the canyon: a structural view.

1. Lata R, Conway JF, Cheng N, Duda RL, Hendrix RW, Wikoff WR, Johnson JE, Tsuruta H & Steven AC (2000) Cell **100**, 253-263. **[121]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10660048&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1016/S0092-8674%2800%2981563-9)

Maturation dynamics of a viral capsid: visualization of transitional intermediate states.

1. Yang F, Forrer P, Dauter Z, Conway JF, Cheng N, Cerritelli ME, Steven AC, Pluckthun A & Wlodawer A (2000) Nat Struct Biol **7**, 230-237. **[122]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10700283&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1038/73347)

Novel fold and capsid-binding properties of the lambda-phage display platform protein gpD.

1. Conway JF, Wikoff WR, Cheng N, Duda RL, Hendrix RW, Johnson JE & Steven AC (2001) Science **292**, 744-748. **[169]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11326105&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1126/science.1058069)

Virus maturation involving large subunit rotations and local refolding.

1. Watts NR, Conway JF, Cheng N, Stahl SJ, Belnap DM, Steven AC & Wingfield PT (2002) EMBO J **21**, 876-884. **[61]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11867516&query_hl=1&itool=pubmed_docsum) [(DOI)](http://dx.doi.org/10.1093/emboj/21.5.876)

The morphogenic linker peptide of HBV capsid protein forms a mobile array on the interior surface.

1996-1999

1. Cerritelli ME, Wall JS, Simon MN, Conway JF & Steven AC (1996) J Mol Biol **260**, 767-780. **[76]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8709154&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jmbi.1996.0436)

Stoichiometry and domainal organization of the long tail-fiber of bacteriophage T4: a hinged viral adhesin.

1. Conway JF, Trus BL, Booy FP, Newcomb WW, Brown JC & Steven AC (1996) J Struct Biol **116**, 200-208. [24] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8742744&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006%3Ajsbi.1996.0031)

Visualization of three-dimensional density maps reconstructed from cryoelectron micrographs of viral capsids.

1. Trus BL, Kocsis E, Conway JF & Steven AC (1996) J Struct Biol **116**, 61-67. [43] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8742724&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jsbi.1996.0011)

Digital image processing of electron micrographs: the PIC system-III.

1. Zlotnick A, Cheng N, Conway JF, Booy FP, Steven AC, Stahl SJ & Wingfield PT (1996) Biochemistry **35**, 7412-7421. **[208]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8652518&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1021/bi9604800)

Dimorphism of hepatitis B virus capsids is strongly influenced by the C-terminus of the capsid protein.

1. Conway JF, Cheng N, Zlotnick A, Wingfield PT, Stahl SJ & Steven AC (1997) Nature **386**, 91-94. **[348]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9052787&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1038/386091a0)

Visualization of a 4-helix bundle in the hepatitis B virus capsid by cryo-electron microscopy.

1. Steven AC, Trus BL, Booy FP, Cheng N, Zlotnick A, Caston JR & Conway JF (1997) FASEB J **11**, 733-742. [40] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9271358&query_hl=1&itool=pubmed_DocSum)

The making and breaking of symmetry in virus capsid assembly: glimpses of capsid biology from cryoelectron microscopy.

1. Zlotnick A, Cheng N, Stahl SJ, Conway JF, Steven AC & Wingfield PT (1997) Proc Natl Acad Sci U S A **94**, 9556-9561. **[133]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9275161&query_hl=1&itool=pubmed_DocSum)

Localization of the C terminus of the assembly domain of hepatitis B virus capsid protein: implications for morphogenesis and organization of encapsidated RNA.

1. Conway JF, Cheng N, Zlotnick A, Stahl SJ, Wingfield PT, Belnap DM, Kanngiesser U, Noah M & Steven AC (1998) J Mol Biol **279**, 1111-1121. **[79]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9642088&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jmbi.1998.1845)

Hepatitis B virus capsid: localization of the putative immunodominant loop (residues 78 to 83) on the capsid surface, and implications for the distinction between c and e-antigens.

1. Conway JF, Cheng N, Zlotnick A, Stahl SJ, Wingfield PT & Steven AC (1998) Proc Natl Acad Sci U S A **95**, 14622-14627. [27] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9843939&query_hl=1&itool=pubmed_DocSum)

Localization of the N terminus of hepatitis B virus capsid protein by peptide-based difference mapping from cryoelectron microscopy.

1. Lanczycki CJ, Johnson CA, Trus BL, Conway JF, Steven AC & Martino RL (1998) IEEE Computational Science & Engineering **5**, 76-91. [8] [(IEEE)](http://csdl2.computer.org/persagen/DLAbsToc.jsp?resourcePath=/dl/mags/cs/&toc=comp/mags/cs/1998/02/c2toc.xml&DOI=10.1109/99.683745) [(DOI)](http://dx.doi.org/10.1109/99.683745)

Parallel computing strategies for viral capsid structure determination by cryo-electron microscopy.

1. Zlotnick A, Stahl SJ, Wingfield PT, Conway JF, Cheng N & Steven AC (1998) FEBS Lett **431**, 301-304. [22] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9714530&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1016/S0014-5793%2898%2900755-8)

Shared motifs of the capsid proteins of hepadnaviruses and retroviruses suggest a common evolutionary origin.

1. Cheng N, Conway JF, Watts NR, Hainfeld JF, Joshi V, Powell RD, Stahl SJ, Wingfield PT & Steven AC (1999) J Struct Biol **127**, 169-176. **[50]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10527906&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jsbi.1999.4120)

Tetrairidium, a four-atom cluster, is readily visible as a density label in three-dimensional cryo-EM maps of proteins at 10-25 A resolution.

1. Conway JF & Steven AC (1999) J Struct Biol **128**, 106-118. **[141]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10600565&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jsbi.1999.4168)

Methods for reconstructing density maps of "single" particles from cryoelectron micrographs to subnanometer resolution.

1991-1995

1. Conway JF, Trus BL, Booy FP, Newcomb WW, Brown JC & Steven AC (1993) J Struct Biol **111**, 222-233. **[96]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8003383&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006%3Ajsbi.1993.1052)

The effects of radiation damage on the structure of frozen hydrated HSV-1 capsids.

1. Makhov AM, Trus BL, Conway JF, Simon MN, Zurabishvili TG, Mesyanzhinov VV & Steven AC (1993) Virology **194**, 117-127. [44] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8480415&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/viro.1993.1241)

The short tail-fiber of bacteriophage T4: molecular structure and a mechanism for its conformational transition.

1. Booy FP, Trus BL, Newcomb WW, Brown JC, Conway JF & Steven AC (1994) Proc Natl Acad Sci U S A **91**, 5652-5656. **[89]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8202543&query_hl=1&itool=pubmed_DocSum)

Finding a needle in a haystack: detection of a small protein (the 12-kDa VP26) in a large complex (the 200-MDa capsid of herpes simplex virus).

1. Johnson CA, Weisenfeld NI, Trus BL, Conway JF, Martino RL, & Steven AC (1994) Proceedings of Supercomputing ’94, Washington DC, 550‑559. [7] [(ACM)](http://portal.acm.org/citation.cfm?id=602864&coll=GUIDE&dl=GUIDE&CFID=62260352&CFTOKEN=30563577) [(DOI)](http://doi.acm.org/10.1145/602770.602864)

Orientation determination in the 3D reconstruction of icosahedral viruses using a parallel computer.

1. Makhov AM, Hannah JH, Brennan MJ, Trus BL, Kocsis E, Conway JF, Wingfield PT, Simon MN & Steven AC (1994) J Mol Biol **241**, 110-124. **[81]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7519681&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jmbi.1994.1478)

Filamentous hemagglutinin of Bordetella pertussis. A bacterial adhesin formed as a 50-nm monomeric rigid rod based on a 19-residue repeat motif rich in beta strands and turns.

1. Conway JF, Duda RL, Cheng N, Hendrix RW & Steven AC (1995) J Mol Biol **253**, 86-99. **[146]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7473720&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1006/jmbi.1995.0538)

Proteolytic and conformational control of virus capsid maturation: the bacteriophage HK97 system.

1986-1991

1. Parry DA, Conway JF & Steinert PM (1986) Biochem J 238, 305-308. [43] [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3800939&query_hl=1&itool=pubmed_DocSum)

Structural studies on lamin. Similarities and differences between lamin and intermediate-filament proteins.

1. Parry DAD, Conway JF, Goldman AE, Goldman RD & Steinert PM (1987) Int J Biol Macromol **9**, 137‑145. [24] [(DOI)](http://dx.doi.org/10.1016/0141-8130%2887%2990041-9)

Nuclear lamin proteins: Common structures for paracrystalline, filamentous and lattice forms.

1. Conway JF, Fraser RDB, MacRae TP & Parry DAD (1988) in “The Biology of Wool and Hair”, Eds GE Rogers, PJ Reis, KA Ward & RC Marshall, Chapman & Hall, London & New York, 127‑144. ISBN 0412321203. [10]

Protein chains in wool and epidermal keratin IF: Structural features and spatial arrangement.

1. Conway JF & Parry DAD (1988) Int J Biol Macromol **10**, 79‑98. **[117]** [(DOI)](http://dx.doi.org/10.1016/0141-8130%2888%2990015-3)

Intermediate filament structure: 3. Analysis of sequence homologies.

1. Craig AS, Birtles MJ, Conway JF & Parry DA (1989) Connect Tissue Res **19**, 51-62. **[84]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2477190&query_hl=1&itool=pubmed_DocSum)

An estimate of the mean length of collagen fibrils in rat tail-tendon as a function of age.

1. Conway JF & Parry DAD (1989) in “Cytoskeletal and Extracellular Proteins: Structure, Interactions and Assembly”, Springer Series in Biophysics, Vol 3, eds. U Aebi & J Engel, Springer-Verlag, Berlin, 140‑149. ISBN 0387500677.

Structure and spatial organization of intermediate filament and nuclear lamin molecules.

1. Conway JF & Parry DA (1990) Int J Biol Macromol **12**, 328-334. **[133]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2085501&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1016/0141-8130%2890%2990023-4)

Structural features in the heptad substructure and longer range repeats of two-stranded alpha-fibrous proteins.

1. Conway JF & Parry DA (1991) Int J Biol Macromol **13**, 14-16. **[63]** [(PubMed)](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1711893&query_hl=1&itool=pubmed_DocSum) [(DOI)](http://dx.doi.org/10.1016/0141-8130%2891%2990004-E)

Three-stranded alpha-fibrous proteins: the heptad repeat and its implications for structure.

Cover Pictures

1. Bisher ME, Conway JF, Kessel M, Steven AC & Trus BL (July, 1991) Molecular Microbiology **5**(7). Crystalline organization of bacterial surface protein, porin.
2. Newcomb WW, Brown JC, Booy FP, Conway JF, Steven AC & Trus BL (December, 1991) Australian & New Zealand Physicist **28**(12). HSV‑1 capsid structure.
3. Conway JF, Duda RL, Cheng N, Hendrix RW & Steven AC (October 13,1995) J Mol Biol **253**(1). Bacteriophage HK97 capsid structure.
4. Conway JF, Trus BL, Booy FP, Newcomb WW, Brown JC & Steven AC (Mar/Apr, 1996) J Struct Biol **116**(2). HSV‑1 capsid structure.
5. Steven AC, Trus BL, Booy FP, Cheng N, Zlotnick A, Caston JR & Conway JF (August, 1997) FASEB J **11**(10). HSV‑1 prohead and mature capsid structures.
6. Conway JF, Cheng N, Zlotnick A, Stahl SJ, Wingfield PT, Belnap DM, Kanngießer U, Noah M & Steven AC (June 26, 1998) J Mol Biol **279**(5). HBV with Fab decoration.
7. Cerritelli ME, Trus BL, Smith CS, Cheng N, Conway JF & Steven AC (March 14, 2003) J Mol Biol **327**(1). Phage T7.
8. Li Y-Y, Conway JF, Cheng N, Steven AC, Hendrix RW & Duda RL (April 22, 2005) J Mol Biol **348**(1). HK97 Whiffleball.
9. Duda RL, Hendrix RW, Huang WM & Conway JF, Current Biology (January 10, 2006) **16**(1). SPO1 and Herpesvirus capsids.
10. Fuschiotti P, Schoehn G, Fender P, Hewat EA, Ruigrok RWH, Chroboczek J & Conway JF, J Mol Biol (February 17, 2006) **356**(2). The dodecahedral penton particle of Adenovirus 3.
11. Wikoff WR, Conway JF, Tang J, Lee KK, Gan L, Cheng N, Duda RL, Hendrix RW, Steven AC & Johnson JE (March, 2006) J Struct Biol **153**(3). Molecular dynamics of virus maturation.
12. Effantin G, Boulanger P, Neumann, E, Letellier L & Conway JF (September 1, 2006) J Mol Biol **361**(5). Phage T5 and structural connections with phages HK97 and T4.
13. Neumann E, Garcia-Saez I, de Bonis S, Wade RH, Kozielski F & Conway JF (September 15, 2006) J Mol Biol **362**(1). Human kinesin CENP-E bound to microtubules.
14. Fuschiotti P, Schoehn G, Fender P & Conway JF (February 2007) J Medical Microbiology **56**(2). Paper in J Gen Virol **87**, 2901-2905. Encapsidation of a gold marker particle in adenovirus 3 dodecahedron.
15. Ross PD, Conway JF, Cheng N, Steven AC, Dierkas L, Firek BA, Hendrix RW & Duda RL (December 1, 2006) J Mol Biol **364**(3). A free energy cascade with locks drives assembly and maturation of bacteriophage HK97 capsid.
16. Weigele PR, Pope WH, Pedulla ML, Houtz JM, Smith AL, Conway JF, King J, Hatfull GF, Lawrence JG & Hendrix RW (July 2007) Environmental Microbiology **9**(7). Genomic and structural analysis of Syn9, a cyanophage infecting marine Prochlorococcus and Synechoococcus.