

Bioinformatics Institute Publications – 2017

1.	CHINH Tran-To Su, KWOH Chee-Keong, VERMA Chandra, GAN Samuel Ken-En. Modeling the full length HIV-1 Gag polyprotein reveals the role of its p6 subunit in viral maturation and the effect of non-cleavage site mutations in protease drug resistance. Journal of Biomolecular Structure and Dynamics, 2017, Pg 1-40, doi: 10.1080/07391102.2017.1417160
2.	MILLETARI Mirco, OFFIDANI Manuel, FERREIRA Aires, RAIMONDI Roberto. Covariant Conservation Laws and the Spin Hall Effect in Dirac-Rashba Systems. Physical Review Letters, Vol. 119, Issue 24, 14 Dec 2017, doi: 10.1103/PhysRevLett.119.246801
3.	CHAN Jane Vin, KOH Dawn Xin Ping, LIU Yun, JOSEPH Thomas L, LANE David, VERMA Chandra, TAN Yaw Sing. Role of the N-terminal lid in regulating the interaction of phosphorylated MDMX with p53. Oncotarget, 2017, Vol. 8, No. 68, Pg 112825-112840, doi.org/10.18632/oncotarget.22829
4.	KUMAR Ammu Prasanna, NGUYEN Ngoc Minh, VERMA Chandra, LUKMAN Suryani. Structural analysis of protein tyrosine phosphatase 1B reveals potentially druggable allosteric binding sites. Proteins: Structure, Function, and Bioinformatics, 13 Dec 2017, doi: 10.1002/prot.25440, PMID: 29235148
5.	GRINCHUK Oleg, YENAMANDRA Surya, IYER RamaKrishnan, SINGH Malay, LEE Hwee Kuan, LIM Kiat Hon, CHO Kah-Hoe Pierce, KUZNETSOV Vladimir. Tumor-adjacent tissue co-expression profile analysis reveals pro-oncogenic ribosomal gene signature for prognosis of resectable hepatocellular carcinoma. Molecular Oncology, 8 Nov 2017, doi: 10.1002/1878-0261.12153, PMID: 29117471
6.	HUI Yen Li Eunice, ROUT Bhimsen, TAN Yaw Sing, VERMA Chandra, CHAN Kok-Ping, JOHANNES Charles. An Intramolecular Tryptophan-Condensation Approach for Peptide Stapling. Organic & Biomolecular Chemistry, 2017, doi: 10.1039/C7OB02667F
7.	HUANG Chunli, MILLETARI Mirco, CAZALILLA Miguel A. Spin-charge conversion in disordered two-dimensional electron gases lacking inversion symmetry. Physical Review B, Vol. 96, 2017, doi: 10.1103/PhysRevB.96.205305
8.	YAN Xin-Fu, XIN Lingyi, TAN Jackie Yen, ZENG Yukai, JIN Shengyang, CHEANG Zing Wei, FONG Rachel Andrea, CHIAM Keng-Hwee, LIANG Zhao-Xun, GAO Yong-Gui. Structural analyses unravel the molecular mechanism of cyclic di-GMP regulation of bacterial chemotaxis via a PilZ adaptor protein. Journal of Biological Chemistry, 5 January 2018, 293, 1, 100-111
9.	YADAHALLI Shilpa, LI Jianguo, LANE David, GOSAVI Shachi, VERMA Chandra. Characterizing the Conformational Landscape of MDM2-binding p53 peptides using Molecular Dynamics simulations. Scientific Reports 7, Article no:15600, 2017, doi:10.1038/s41598-017-15930-4.
10.	KUROCHKIN Igor, GUARNERA Enrico, BEREZOVSKY Igor. Optimal Charge-to-Spin Conversion in Graphene on Transition-Metal Dichalcogenides. Physical Review Letters, Vol. 114, Issue 119, 10 Nov 2017, doi: 10.1103/PhysRevLett.119.196801
11.	KUROCHKIN Igor, GUARNERA Enrico, BEREZOVSKY Igor. Insulin-Degrading Enzyme in the Fight against Alzheimer's Disease. Trends in Pharmacological Sciences, 10 Nov 2017, doi : 10.1016/j.tips.2017.10.008, PMID: 29132916
12.	BIRUHALEM Taye, YEO Dawn, LEE Tze Chuen Raphael, TAN Boon Huat, SUGRUE Richard, MAURER-STROH Sebastian. Inter-Species Host Gene Expression Differences in Response to Human and Avian Influenza A Virus Strains. International Journal of Molecular Sciences, Vol. 18, Issue 11, doi: 10.3390/ijms18112295, PMID: 29104227
13.	KANNAN Srinivasaraghavan, PRADAN Mohan, CHERIAN Joseph, JOSEPH Thomas, POH Zhi Yang, YAN Yang Hai, HO Melvyn, LIU Boping, HILL Jeffrey, NACRO Kassoum, VERMA Chandra.

	Small molecules targeting the inactive form of the Mnk 1/2 kinases. ACS Omega 2017, 2, Pg 7881 - 7891, doi: 10.1021/acsomega.7b01403
14.	LOO Lit-Hsin, ZINK Daniele. High-throughput Prediction of Nephrotoxicity in Humans. ATLA 45, Pg 241-252, 5 Nov 2017
15.	BUDIANTO Ian-Hartono, GAN Samuel Ken-En. APD volumetric app: android app for the quantification of reagents. Scientific Phone Apps and Mobile Devices (2017) 3:7, doi: 10.1186/s41070-017-0019-8
16.	WONG Jin Huei ALFATAH Mohammad, SIN Mei Fang, SIM Hong May, VERMA Chandra, LANE David, ARUMUGAM Prakash. A yeast two-hybrid system for the screening and characterization of small-molecule inhibitors of protein-protein interactions identifies a novel putative Mdm2-binding site in p53. BMC Biology 2017 15:108, doi: 10.1186/s12915-017-0446-7
17.	KRIZANOVIC Kresimir, ECHCHIKI Amina, ROUX Julien, SIKIC Mile. Evaluation of tools for long read RNA-seq splice-aware alignment. Bioinformatics, 2017, Pg 1-7, doi: 10.1093/bioinformatics/btx668, PMID : 29069314
18.	NG Chen Yang, KANNAN Srinivasaraghavan, CHEN Yong Jun, TAN Chee Kuan Francis, ONG Wee Yong, GO Mei Lin, VERMA Chandra, LOW Chian-Ming, LAM Yulin. A New Generation of Arachidonic Acid Analogues as Potential Neurological Agent Targeting Cytosolic Phospholipase A2. Scientific Reports 7, Article no: 13684, 2017, doi:10.1038/s41598-017-13996-8
19.	VENKATESAN Nandini, WONG Jong Fu, TAN Kuan Pern, CHUNG Hwa Hwa, YAU Yin Hoe, CUKUROGLU Engin, ALLAHVERDI Abdollah, NORDENSKIOLD Lars, GOKE Jonathan, GEIFMAN-SHOCHAT Susana, CHUN Ling Lin Valerie, MADHUSUDHAN M.S., SU I-Hsin. EZH2 promotes neoplastic transformation through VAV interaction-dependent extranuclear mechanisms. Oncogene 2017, Pg 1-17, doi:10.1038/onc.2017.309, PMID: 28967906.
20.	IVANOV Stefan, CAWLEY Andrew, HUBER Roland, BOND Peter, WARWICKER Jim. Protein-protein interactions in paralogues: Electrostatics modulates specificity on a conserved steric scaffold. PLOS ONE, 10 Oct 2017, doi: 10.1371/journal.pone.018592, PMID: 29016650
21.	JOSHI Anjali, COX Emily, SEDANO Melina, PUNKE Erin, LEE Tze Chuen Raphael, MAURER-STROH Sebastian, KAUR Palvinder, NG Oon Tek, GARG Himanshu. HIV-1 subtype CRF01_AE and B differ in utilization of low levels of CCR5, Maraviroc susceptibility and potential N-glycosylation sites. Virology, 512, 2017 December, Pg 222-233, doi: 10.1016/j.virol.2017.09.02, PMID: 29020646
22.	WANG Jianxu, JENJAROENPUN Piroon, BHINGE Akshay, ANGARICA Vladimir Esposina, DEL SOL Antonio, NOOKAEW Intawat, KUZNETSOV Vladimir, STANTON Lawrence. Single-cell gene expression analysis reveals regulators of distinct cell subpopulations among developing human neurons. Genome Research 2017, 27, PMID: 29030469, Pg 1783-1794, doi: 10.1101/gr.223313.117
23.	KUZNETSOV Vladimir, TANG Zhiqun, IVSHINA Anna. Identification of common oncogenic and early developmental pathways in the ovarian carcinomas controlling by distinct prognostically significant microRNA subsets. BMC Genomics. 2017; 18(Suppl 6): 692, doi: 10.1186/s12864-017-4027-5, PMID: 28984201
24.	LIU Zhenguang, CHENG Li, LIU Anan, ZHANG Luming, HE Xiangnan, ZIMMERMANN Roger. Multiview and Multimodal Pervasive Indoor Localization. Multi Media 17, Proceedings of the 2017 ACM on Multimedia Conference, Pg 109-117. Mountain view, California, USA, Oct 23-27 2017, doi: 10.1145/3123266.3123436
25.	TIE Hieng Chiong, CHEN Bing, SUN Xiuping, CHENG Li, LU Lei. Quantitative Localization of a

	Golgi Protein by Imaging Its Center of Fluorescence Mass. JoVE Journal of Visualized Experiments, 2017, doi:10.3791/55996
26.	TOH Yew Kwang, BALAKRISHNA Asha Manikkoth, MANIMEKALAI Malathy S.S, CHIONH Boon Bin, SEETHARAMAN Rmya R C S, EISENHABER Frank, EISENHABER Birgit, GRUBER Gerhard. Novel insights into the vancomycin-resistant Enterococcus faecalis (V583) alkylhydroperoxide reductase subunit F. Biochimica et Biophysica Acta (BBA), 2017 Sep 19, doi: 10.1016/j.bbagen.2017.09.011, PMID: 28935609
27.	MARAKASOVA Ekaterina, EISENHABER Birgit, MAURER-STROH Sebastian, EISENHABER Frank, BARANOVA Ancha. Prenylation of Viral Proteins by Enzymes of the Host: Virus-Driven Rationale for Therapy With Statins and FT/GGT1 Inhibitors. BioEssays, 2017 Oct;39(10). doi: 10.1002/bies.201700014, PMID: 28885709
28.	BOND Peter, VERMA Chandra. Editorial Overview : Exploring mechanisms in biology: simulations and experiments come together. Progress in Biophysics and Molecular Biology, 2017 Sep;128:1-2. doi: 10.1016/j.pbiomolbio.2017.07.005, PMID: 28743422
29.	AMIT Moran, NA'ARA Shorook, FRANCIS Demilza, MATANIS Wisam, ZOLOTOV Sagit, EISENHABER Birgit, EISENHABER Frank, SAGIE Michal Weiler, MALKIN Leonid, BILLAN Salem, CHARAS Tomer, GIL Ziv. Post-translational Regulation of Radioactive Iodine Therapy Response in Papillary Thyroid Carcinoma. JNCI: Journal of the national Cancer Institute, 2017, Vol. 109, Issue 12, 1 Dec 2017, doi: 10.1093/jnci/djx092
30.	KUZNETSOV Vladimir. Mathematical Modeling of Avidity Distribution and Estimating General Binding Properties of Transcription Factors from Genome-Wide Binding Profiles. Book Chapter: Biological Networks and Pathway Analysis, Methods in Molecular Biology, vol. 1613, Pg 193-276, doi: 10.1007/978-1-4939-7027-8_9, PMID 28849563
31.	SIM Jia-Zhi, ZHANG Yu, NGUYEN Phi-vu, LEOW Khee-Shing Melvin, GAN Ken-En Samuel. Thyroid-SPOT for mobile devices: personalised thyroid treatment management app. Scientific Phone Apps and Mobile Devices 2017, 3:4 doi: 10.1186/s41070-017-0016-y.
32.	Liu H, Wang ZZ, Li Y, Yu GQ, Fu X, Wang C, Liu WT, Yu YX, Bao FF, Irwanto A, Liu J, Chu TS, Andiappan AK, Maurer-Stroh S, Limviphuvadh V, Wang HL, Mi ZH, Sun YH, Sun LL, Wang L, Wang CL, You JB, Li JH, Foo JN, Liany H, Meah WY, Niu GY, Yue ZH, Zhao Q, Wang N, Yu MW, Yu WJ, Cheng XJ, Khor CC, Sim KS, Aung T, Wang NL, Wang DY, Shi L, Ning Y, Zheng ZY, Yang RD, Li JL, Yang J, Yan LB, Shen JP, Zhang GC, Chen SM, Liu JJ, Zhang F. Genome-wide Analysis of Protein-Coding Variants in Leprosy. Journal of Investigative Dermatology, 2017, Aug 22, doi: 10.1016/j.jid.2017.08.004, PMID: 2884232
33.	HO Rou Hui, CHAN Chun Yip James, FAN Hao, KIOH Yan Qin Dorinda, LEE Bee Wah, CHAN Chun Yong Eric. In Silico and in Vitro Interactions between Short Chain Fatty Acids and Human Histone Deacetylases. 10.1021/acs.biochem.7b00508
34.	SUNDARAM Gopinath, ISMAIL Hisyam, BASHIR Mohsin, MUHURI Manish, VAZ Candida, NAMA Srikanth, OW Ghim Siong, VLADIMIROVNA Ivshina, RAMALINGAM Rajkumar, BURKE Brian, TANAVDE Vivek, KUZNETSOV Vladimir, LANE Birgitte, SAMPATH Prabha. EGF hijacks miR-198/FSTL1 wound-healing switch and steers a two-pronged pathway toward metastasis. The Journal of Experimental Medicine, 2017,doi: 10.1084/jem.20170354
35.	DE Jaydeep, ZHANG Xiaowei, LIN Feng, CHENG Li. Transduction on Directed Graphs via Absorbing Random Walks. IEEE Transactions on Pattern Analysis and Machine Intelligence, Issue 99, 2017, doi: 10.1109/TPAMI.2017.2730871, PMID: 28809671
36.	TAYE Biruhalem, VAZ Candida, TANAVDE Vivek, KUZNETSOV Vladimir, EISENHABER Frank, SUGRUE Richard, MAURER-STROH Sebastian. Benchmarking selected computational gene network growing tools in context of virus-host interactions. Scientific Reports, 2017 Jul

	19;7(1):5805. doi: 10.1038/s41598-017-06020-6, PMID: 28724991
37.	CHANG Hsiao-Han, HUBER Roland, BOND Peter, GRAD Yonatan, CAMERINI David, MAURER-STROH Sebastian, LIPSTICH Marc. Systematic analysis of protein identity between Zika virus and other arthropod-borne viruses. Bulletin of the World Health Organization, 2017, Jul 1: 95(7): Pg 517-525i
38.	ARELLANO-LLAMAS R, ALFARO-RUIZ L, ARRIAGA CANON C, IMAZ ROSSHANDLER I, CRUZ-LAGUNAS A, ZUNIGA J, REBOLLAR VEGA R, WONG CW, MAURER-STROH S, ROMERO CORDOBA S, LIU ET, HILDALGO-MIRANDA A, VAZQUEZ-PEREZ JA. Molecular features of influenza A (H1N1) pdm09 prevalent in Mexico during winter seasons 2012-2014. PLoS One, July 10, 2017, doi: 10.1371/journal.pone.0180419, PMID: 28692701
39.	GUARNERA Enrico, TAN Zhen Wah, ZHENG Zejun, BEREZOVSKY Igor. AlloSigMA: Allosteric Signalling and Mutation Analysis server. Bioinformatics, 2017, doi: 10.1093/bioinformatics/btx430
40.	KARGAS Vasileios, MARZINEK Jan, HOLDBROOK Daniel, YIN Hang, FORD Robert. A polar SxxS motif drives assembly of the transmembrane domains of Toll-like receptor 4. Biochimica et Biophysica Acta (BBA) - Biomembranes, 2017 Jul 22;1859(10):2086-2095. doi: 10.1016/j.bbamem.2017.07.010, PMID: 28739292
41.	BAKER James, WONG Wing-Cheong, EISENHABER Birgit, WARWICKER Jim, EISENHABER Frank. Charged residues next to transmembrane regions revisited: "Positive-inside rule" is complemented by the "negative inside depletion/outside enrichment rule". BMC Biology 2017 Jul 24;15(1):66. doi: 10.1186/s12915-017-0404-4, PMID: 28738801
42.	SU Chin Tran-To, LING Wei-Li, LUA Wai-Heng, POH Jun-Jie, GAN Ken-En Samuel. The role of Antibody V_k Framework 3 region towards Antigen binding: Effects on recombinant production and Protein L binding. Scientific Reports 7, Article no: 3766 (2017), doi:10.1038/s41598-017-02756-3
43.	NGUYEN Minh, PRADHAN Mohan, VERMA Chandra, ZHONG Pingyu. The interfacial character of antibody paratopes: analysis of antibody-antigen structures. Bioinformatics, 2017, doi: 10.1093/bioinformatics/btx389
44.	KAAN Hung Yi Kristal, SIM Adelene, TAN Siew Kim Joyce, VERMA Chandra, SONG Haiwei. Targeting YAP/TAZ-TEAD protein-protein interactions using fragment-based and computational modeling approaches. PLoS One, 2017 Jun 1, doi: org/10.1371/journal.pone.0178381.
45.	LOH Sheng Yang Michael, OGAWA Yoshitaka, KAWANA Sara, TAMURA Koichiro, LEE Hwee Kuan. Semi-automated quantitative Drosophila wings measurements. BMC Bioinformatics 2017 Jun 28;18(1):319. doi: 10.1186/s12859-017-1720-y, PMID: 28659123
46.	HOLDBROOK Daniel, BURMANN Bjorn, HUBER Roland, PETOUKHOV Maxim, SVERGUN Dmitri, HILLER Sebastian, BOND Peter. A Spring-Loaded Mechanism Governs the Clamp-like Dynamics of the Skp Chaperone. Structure, 2017 Jul 5;25(7):1079-1088.e3. doi: 10.1016/j.str.2017.05.018, PMID: 28648612
47.	SINGH Malay, KALAW Emarene Mationg, GRION Danilo Medina, CHONG Kian-Tai, TAN Chew Lim, LEE Hwee Kuan. Gland segmentation in prostate histopathological images. Journal of Medical Imaging, 2017 Apr;4(2):027501, doi: 10.1117/1.JMI.4.2.027501, PMID: 28653016
48.	TAYE Birualem, CHEN Hui, MYAING Myint Zu, TAN Boon Huat, MAURER-STROH Sebastian, SUGRUE Richard. Systems-based approach to examine the cytokine responses in primary mouse lung macrophages infected with low pathogenic avian Influenza virus circulating in South East Asia. BMC Genomics. 2017 May 30;18(1):420. doi: 10.1186/s12864-017-3803-6, PMID: 28558796

49.	<i>Mohashin Pathan, Shivakumar Keerthikumar, David Chisanga , Riccardo Alessandro, Ching-Seng Ang , Philip Askenase, Arsen O Batagov, Alberto Benito-Martin, Giovanni Camussi , Aled Clayton, Federica Collino, Dolores Di Vizio, Juan Manuel Falcon-Perez, Pedro Fonseca, Pamali Fonseka, Simona Fontana, Yong Song Gho, An Hendrix, Esther Nolte-'t Hoen, Nunzio Iraci, Kenneth Kastaniegaard, Thomas Kislinger, Joanna Kowal, Igor V Kurochkin 6, Tommaso Leonardi, Yaxuan Liang, Alicia Llorente, Taral R Lunavat, Sayantan Maji, Francesca Monteleone, Anders Øverbye, Theocharis Panaretakis, Tushar Patel, Héctor Peinado, Stefano Pluchino, Simona Principe, Goran Ronquist, Felix Royo, Susmita Sahoo, Cristiana Spinelli, Allan Stensballe, Clotilde Théry, Martijn J C van Herwijnen, Marca Wauben, Joanne L Welton, Kening Zhao, Suresh Mathivanan. A novel community driven software for functional enrichment analysis of extracellular vesicles data. Journal of Extracellular Vesicles 2017, Vol. 6, 2017, Issue 1, doi: 10.1080/20013078.2017.1321455</i>
50.	<i>BOAGS Alister, HSU Pin Chia, SAMSUDIN Firdaus, BOND Peter, KHALID Syma. Progress in Molecular Dynamics Simulations of Bacterial Cell Envelopes. The Journal of Physical Chemistry Letters, 2017 Jun 1;8(11):2513-2518. doi: 10.1021/acs.jpcclett.7b00473, PMID: 28467715</i>
51.	<i>AZIMZADEH Maryam, SRINIVASARAGHAVAN Kannan, VERMA Chandra. Role of N-glycosylation in EGFR ectodomain ligand binding. Proteins: Structure, Function, and Bioinformatics, Vol. 85, Issue 8, Aug 2017, Pg. 1529-1549, doi: 10.1002/prot.25314, PMID: 28486782</i>
52.	<i>BADOWSKI Cedric, SIM Adelene, VERMA Chandra, SZEVERENYI Iidiko, NATESAVELALAR Chidambaram, TERRON-KWIATKOWSKI Ana, HARPER John, O'TOOLE Edel, LANE Birgitte. Modeling the Structure of Keratin 1 and 10 Terminal Domains and their Misassembly in Keratoderma. Journal of Investigative Dermatology, 2017 May 16. pii: S0022-202X(17)31522-1. doi: 10.1016/j.jid.2017.03.038, PMID: 28526297</i>
53.	<i>Singapore Zika Study Group. Outbreak of Zika virus infection in Singapore: an epidemiological, entomological, virological, and clinical analysis. The Lancet Infectious Diseases, Vol. 17, No. 8, pg 813-821, Aug 2017, doi: 10.1016/S1473-3099(17)30249-9, PMID: 28527892</i>
54.	<i>SINGH Malay, ZENG Zeng, KALAW Emarene Mationg, GIRON Danilo Medina, CHONG Kian-Tai, LEE Hwee Kuan. A Study of Nuclei Classification Methods in Histopathological Images. Proceedings of the 5th KES International Conference on Innovation in Medicine and Healthcare (KES-InMed 2017)</i>
55.	<i>LEE Xiong Ann, SIM Adelene. Designing dual inhibitors of Mdm2/MdmX: Unexpected coupling of water with gatekeeper Y100/99. PROTEINS: Structure, Function and Bioinformatics, 2017, doi: 10.1002/prot.25310</i>
56.	<i>SRINIVASARAGHAVAN Kannan, PRADHAN Mohan, TIWARI Garima, TAN Wei-Chong, CHOWBAY Balram, TAN Eng Huat, TAN Shao-Weng Daniel, VERMA Chandra. Hydration effects on the efficacy of the Epidermal growth factor receptor kinase inhibitor Afatinib. Scientific Reports 7, Article no: 1540 (2017), doi:10.1038/s41598-017-01491-z</i>
57.	<i>PETRLOVA Jitka, HANSEN Finja, VAN DER PLAS Mariena, HUBER Roland, MORGELIN Matthias, MALMSTEN Martin, BOND Peter, SCHMIDTCHEN Artur. Aggregation of thrombin-derived C-terminal fragments as a previously undisclosed host defense mechanism. Proceedings of the National Academy of Sciences (PNAS), May 4, 2017, doi: 10.1073/pnas.1619609114, PMID: 28473418</i>
58.	<i>KAM Yiu-Wing, LEE Yi-Pin Cheryl, TEO Teck-Hui, HOWLAND Shanshan, AMRUN Siti Naqiah, LUM Fok-Moon, SEE Peter, KNG Qing-Rong Nicholas, HUBER Roland, XU Mei-Hu, TAN Heng-</i>

	<i>Liang, CHOO Andre, MAURER-STROH Sebastian, GINHOUX Florent, FINK Katja, WANG Cheng-I, NG Lisa F.P, RENIA Laurent. Cross-reactive dengue human monoclonal antibody prevents severe pathologies and death from Zika virus infections. JCI Insight. 2017 Apr 20;2(8). pii: 92428. doi: 10.1172/jci.insight.92428</i>
59.	<i>CLIFFE Adam, DOUPE David, SUNG Hsin Ho, LIM Kok Hwee Isaac, ONG Kok Haur, CHENG Li, YU Weimiao. Quantitative 3D analysis of complex single border cell behaviors in coordinated collective cell migration. Nature Communications, 2017 Apr 4;8:14905. doi: 10.1038/ncomms14905, PMID: 28374738</i>
60.	<i>SANTOS-MORENO Javier, EAST Alexandra, GUILVOUT Ingrid, NADEAU Nathalie, BOND Peter, TRAN VAN NHIEU Guy, FRANCTIC Olivera. Polar N-terminal Residues Conserved in Type 2 Secretion Pseudopilins Determine Subunit Targeting and Membrane Extraction Steps during Fibre Assembly. Journal of Molecular Biology, Vol. 429, Issue 11, 2 Jun 2017, Pg 1746-1765, PMID: 28427876</i>
61.	<i>COLLINS Richard, KARGAS Vasileios, CLARKE Brad, SIEBERT Alistair, CLARE Daniel, BOND Peter, WHITFIELD Chris, FORD Robert. Full-length, Oligomeric Structure of Wzz Determined by Cryoelectron Microscopy Reveals Insights into Membrane-Bound States. Structure, 2017 May 2;25(5):806-815. e3. doi: 10.1016/j.str.2017.03.017, PMID: 28434914</i>
62.	<i>TRAN Thi Nhu Hoa, DRIGO Rafael Arrojo, BERGGREN Per-Olof, BOUDIER Thomas. A novel toolbox to investigate tissue spatial organization applied to the study of the islets of Langerhans. Scientific Reports 7, Article number: 44261 (2017), doi:10.1038/srep44261</i>
63.	<i>MUHAMMAD NG Khairani, WONG Chun-Foong, XIN Andre Liang, LIEW Ying-Heng, YEO-YI Joshua, LUA Wai-Heng, QIAN Xi-Juan, GAN Ken-En Samuel. APD SpectBT: Arduino-based mobile vis-Spectrophotometer. Nature Methods Application Notes 2017</i>
64.	<i>LOO Lit-Hsin, BOUGEN-ZHUKOV Nicola, TAN Cecilia Wei-Ling. Early spatiotemporal-specific changes in intermediate signals are predictive of cytotoxic sensitivity to TNFα and co-treatments. Scientific Reports 7, Article 43541 (2017), doi:10.1038/srep43541.</i>
65.	<i>KAMARIAH Neelagandan, EISENHABER Birgit, EISENHABER Frank, GRUBER Gerhard. Essential role of the flexible linker on the conformational equilibrium of bacterial peroxiredoxin reductase for effective regeneration of peroxiredoxin. The Journal of Biological Chemistry, 7 Mar 2017, doi : 10.1074/jbc.M117.775858</i>
66.	<i>LI Jianguo, HU Zhongqiao, BEUERMAN Roger, VERMA Chandra. Molecular Environment Modulates Conformational Differences between Crystal and Solution States of Human beta-defensin 2. Journal of Physical Chemistry Part B, 2017, doi : 10.1021/acs.jpcc.7b00083.</i>
67.	<i>LANDRE Viven, Bhindu REVI, MIR Maria, VERMA Chandra, HUPP Ted, GILBERT Nick, BALL Kathryn. Regulation of Transcriptional Activators by DNA-Binding Domain Ubiquitination. Cell Death and Differentiation 2017 May;24(5):903-916. doi: 10.1038/cdd.2017.42, PMID: 28362432.</i>
68.	<i>WASSER Martin, PUAH Wee Choo, CHINTA Rambabu. Quantitative microscopy uncovers ploidy changes during mitosis of live Drosophila maternal-haploid embryos and their effect on nuclear size. Biology Open 2017 6: 390-401; doi: 10.1242/bio.022079.</i>
69.	<i>CHEN Liming, JENJAROENPUN Piroon, PILLAI Andrea Mun Ching, IVSHINA Anna, OW Ghim Siong, EFTHIMIOS Motakis, TANG Zhiqun, TAN Tuan Zea, LEE Song-Choon, ROGERS Keith, WARD Jerrold, MORI Seiichi, ADAMS David, JENKINS Nancy, COPELAND Neal, BAN Hon-Kim Kenneh, KUZNETSOV Vladimir, THIERY Jean Paul. Transposon insertional mutagenesis in mice identifies human breast cancer susceptibility genes and signatures for stratification. Proceedings of the National Academy of Sciences of the United States of America, PNAS, Vol. 114, No. 11, E2215–E2224, doi: 10.1073/pnas.1701512114, PMID: 28251929</i>

70.	LI Jianguo, KOH Jun-Jie, LIU Shouping, LAKSHMINARAYANAN Rajamani, VERMA Chandra, BEUERMAN Roger. Membrane Active Antimicrobial Peptides: Translating Mechanistic Insights to Design . <i>Frontiers in Neuroscience</i> , Feb 2017, Vol. 11, Article 73, doi: 10.3389/fnins.2017.00073
71.	LOKE Jun Jie, KUMAR Akshita, HOON Shawn, VERMA Chandra, MISEREZ Ali. Hierarchical Assembly of Tough Bioelastomeric Egg Capsules is Mediated by a Bundling Protein . <i>Biomacromolecules</i> , 2017, 18 (3), pg 931-942, doi: 10.1021/acs.biomac.6b01810
72.	CHEN Yaqi, LI Tao, LI Jianguo, CHEN Shiyan, WANG Jinghui, VERMA Chandra, ZHAO Yibing, WU Chuanliu. Stabilization of Peptides against Proteolysis through Disulfide-Bridged Conjugation with Synthetic Aromatics . <i>Organic & Biomolecular Chemistry</i> , 2017, Issue 15, Pg 1921-1929, doi: 10.1039/C6OB02786E
73.	VAZ Candida, TAN Bee Tee Betty, YONG Delicia, LEE Qian Yee, TANAVDE Vivek. Mesenchymal Stromal Cells Derived from Human Embryonic Stem Cells, Fetal Limb and Bone Marrow Share a Common Phenotype but Are Transcriptionally and Biologically Different . <i>Stem Cell Discovery</i> , 2017, 7, Pg 1-26, doi: 10.4236/scd.2017.71001.
74.	LIN Shuimu, KOH Jun-Jie, AUNG Thet Tun, LIM Fanghui, LI Jianguo, ZOU Hanxun, WANG Lin, LAKSHMINARAYANAN Rajamani, VERMA Chandra, WANG Yingjun, TAN Donald, CAO Derong, BEUERMAN Roger, REN Li, LIU Shouping. Symmetrically Substituted Xanthone Amphiphiles Combat Gram-Positive Bacterial Resistance with Enhanced Membrane Selectivity . <i>Journal of Medicinal Chemistry</i> , 2017, 60 (4), pg: 1362–1378, doi: 10.1021/acs.jmedchem.6b01403
75.	LUKMAN Suryani, NGUYEN Minh, SIM Kelvin, TEO Jeremy C.M. Discovery of Rab1 binding sites using an ensemble of clustering methods . <i>PROTEINS: Structure, Function, and Bioinformatics</i> , doi: 10.1002/prot.25254
76.	LUA Wai-Heng, LING Wei-Li, SU Tran-To Chinh, VERMA Chandra, EISENHABER Birgit, EISENHABER Frank, GAN Ken-En Samuel. Discovery of a novel splice variant of FcαR (CD89) unravels sequence segments necessary for efficient secretion: a story of bad signal peptides and good ones that nevertheless do not make it . <i>Cell Cycle</i> 2016, doi: 10.1080/15384101.2017.1281480
77.	XU Wenshu, LAU Yu Heng, FISCHER Gerhard, TAN Yaw Sing, CHATTOPADHYAY Anasuya, DE LA ROCHE Marc, HYVONEN Marko, VERMA Chandra, SPRING David, ITZHAKI Laura. Macrocyclized extended peptides: Inhibiting the substrate-recognition domain of tankyrase . <i>Journal of the American Chemical Society</i> , doi: 10.1021/jacs.6b10234
78.	VASSER Robert, SOVIC Ivan, NAGARAJAN Niranjan, SIKIC Mile. Fast and accurate de novo genome assembly from long uncorrected Reads . <i>Genome Research</i> , 2017, doi: 10.1101/gr.214270.116
79.	BEREZOVSKY Igor, BASTOLLA Ugo. Editorial overview : Proteins: bridging theory and experiment . <i>Current Opinion in Structural Biology</i> , Vol. 42, Feb 2017,doi: 10.1016/j.sbi.2016.12.013
80.	TIWARI Garima, VERMA Chandra. Toward Understanding the Molecular Recognition of Albumin by p53-Activating Stapled Peptide ATSP-7041 . <i>The Journal of Physical Chemistry B</i> , 2017, 121 (4), pg 657-670, doi : 10.1021/acs.jpcc.6b09900
81.	VIRK Ramandeep Kaur, GUNALAN Vithiagar, HONG Kai Lee, INOUE Masafumi, CHUA Catherine, TAN Boon-Huan, TAMBYAH Paul Anantharajah. Molecular Evidence of Transmission of Influenza A/H1N1 2009 on a University Campus . <i>PLOS ONE</i> , 2017,12 (1), doi: 10.1371/journal.pone.0168596, PMID: 28060851