
Curriculum Vitae

Sunil Kumar Lal

Professor of Microbiology, School of Science

Monash University Australia (Sunway Campus, Malaysia) (Aug. 2014 – present)

Academic Accomplishments:

BSc (Honours) Biophysics

Panjab University, Chandigarh (India) 1979-82

MSc (Honours) Biophysics

Panjab University, Chandigarh (India) 1982-84

PhD Biology (Molecular Genetics)

Georgia Institute of Technology, Atlanta, GA (USA)
1985-90

Work Experience:

Professor of Microbiology

School of Science, Monash University, Sunway Campus,
Malaysia (2014 – present)

International Research Scientist

Virology Group, International Centre for Genetic Engineering
& Biotechnology (ICGEB) New Delhi (India) (2007 – 2014)

Senior Research Scientist

Virology Group, International Centre for Genetic Engineering
& Biotechnology (ICGEB) New Delhi (India) (1999 – 2006)

Research Scientist

Virology Group, International Centre for Genetic Engineering
& Biotechnology (ICGEB) New Delhi (India) (1994 – 1999)

Faculty Research Associate

Biology Dept., California Institute of Technology (CALTECH),
Pasadena, CA (USA) (1991-1994)

Visiting Professor/Scientist:

- International Centre for Genetic Engineering & Biotechnology (ICGEB), New Delhi, India (2014 – 2016)
- Influenza Division, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC), Atlanta, GA (2009 – 2013)
- Institute of Health & Community Medicine, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia (2002)
- Dept. of Microbiology, National University of Singapore, Singapore (2003, 2005)

Honors & Awards:

- Elected Fellow of the Indian Academy of Sciences (FNASc), Allahabad, India (2009)
- Scholarship Award - Options for the Control of Influenza, Hong Kong (2010)
- Young Investigators Award - Asia-Pacific Association for the Study of Liver (APASL), Taipei, Taiwan (2002)
- Young Investigators Award - American Association for the Study of Liver Disease (AASLD), Boston, USA (2003)
- New Investigator Award - International Society for Infectious Diseases (ISID), Cancun, Mexico (2004)
- International Ambassador of the Year Award - American Society for Microbiology, Washington DC (2006)
- Travel Award - ASM-UNESCO Visiting Resource Person (2001-2003) from the American Society for Microbiology for visiting universities in Turkey, Singapore, Malaysia & Thailand. Detailed write-up published in ASM News 67: 597.

Invited Speaker/Session Chair at Conferences:

- Organizer and Speaker: International Symposium of Systems Biology. November 9, 2018. Monash University, Malaysia.
- Main speaker: Research Methods Workshop – The road to high impact publications. March 8, 2018. Monash University Malaysia.
- Invited speaker: Mupa Symposium United by Research Symposium Series 1. What it takes to build a strong scientific career. April 17, 2018. Monash University, Malaysia.
- Main speaker: Awareness Seminar – The hand Foot & Mouth Disease – Causes, Prevalence and Prevention, August 17, 2018. Monash University, Malaysia.
- 2nd International Conference for Molecular Biology and Biotechnology (ICMBB) Kuala Lumpur (2017)
- Monash Science Symposium Kuala Lumpur (2016)
- Keynote Speaker: International Conference & Summit on Industrial & Pharmaceutical Microbiology, Kuala Lumpur (2016)
- 33rd Symposium of the Malaysia Society for Microbiology, Melaka, Malaysia (2016)
- Flu2016, San Francisco (2016)
- Association of Microbiologists of India (AMI) General Meetings (2010-2015)
- International Congress on Medical Virology, Bangkok (2014)
- New Facets of Biotechnology from Genes to Proteins, Symposium cum Workshop, AMU, Aligarh (2014)
- National Conference on Recent Trends in Molecular Virology, New Delhi (2014)
- ASM General Meeting, New Orleans (2011); San Francisco (2012); Denver (2013)
- IISc Centenary Conference, 10th Sir Dorabji Tata Symposium on Mechanisms of Microbial Pathogenesis; Indian Institute of Science, Bangalore (2009)

Memberships to Professional Societies:

- American Society for Biochemistry & Molecular Biology (AMBMB) Member (2012)
- Country Representative: Asia-Pacific Society for Medical Virology (2010-present)
- Elected Fellow of the Indian Academy of Sciences, Allahabad, India (2004 - present)
- Society for Biological Chemists, India (2000-present)
- Indian National Science Congress (2000-present)
- American Society for Microbiology (ASM), USA (1998-present)
- Genetics Society of America (GSA), USA (1996-2003)
- American Society for Microbiology: Member, Committee on Global Engagement (2012-2014)
- American Society for Microbiology: Ambassador to India and Asia (2002-2011)
- American Society for Microbiology: Chairman of Ambassador's Caucus (2003-2005)
- American Society for Microbiology: Advisor, Ambassador's Caucus (2005-2012)
- Eco Development Foundation: Honorary Secretary (1995-present)
- Elected Executive Committee Member – Association of Microbiologists of India (2013-2016)
- Evaluation panel for DuPont India Challenge (2003 - 2004) Level-2 Jury Panel
- Member, Scientific Committee, International Conference & Summit on Industrial & Pharmaceutical Microbiology, Kuala Lumpur, Malaysia. October 17-18, 2016.
- Region/Country Representative - Asia Pacific Society for Medical Virology (2007-present)

Scientific Review Panels:

- **Manuscript Review Panel** –The Lancet, The Lancet Global Health, FEBS Letters, Virology (Elsevier Science), Virus Research, Journal of Biochemistry & Molecular Biology, Journal of Virology (ASM), PLoS One, Journal of Virological Methods, Computer Methods & Programs in Biomedicine, Antiviral Research, Cell Biology International, Medical Science Monitor, Toxicology & Applied Pharmacology, Critical Reviews in Biotechnology.

- **Editorial Board** –Frontiers in Microbiology, World Journal of Virology, World Journal of Biological Chemistry, International Journal of Integrative Biology, Indian Journal of Microbiology, Malaysian Journal of Biochemistry and Molecular Biology, International Journal of Vaccines and Technologies, Proceedings of the National Academy of Sciences (India), Human Virology & Retrovirology, International Journal of Cell & Systems Developmental Biology.
- **Guest Editor** - Special Issue on Genomics & Metagenomics, Indian Journal of Microbiology (March 2007)
- **Grant Review Committee** - Dept. of Biotechnology, Ministry of Science & Technology, Government of India (2005-2015); Defense Research & Development Organization (DRDO) (2006-2014); The Human Immunology Project Consortium (HIPC) (2012-2014); Health and Medical Research Fund and Research Grants Council, under The Government of Hong Kong SAR (China) (2008-present)

Teaching Experience

Graduate level courses:

- Biol4408: Microbial Genetics (6 years)
- ICG601: Molecular & Cell Biology (17 years).
- ICG605: Gene Expression systems & their applications (10 years)
- ICG604: Advanced Molecular & Cellular Biology – II (7 years)

Undergraduate level courses:

- BTH3711: Food & Industrial Microbiology (2 years)
- MIC2702; BTH3722: Medical Microbiology (2 years)
- ENV1800: Environmental Science (2 years)
- BTH2830: Introduction to Microbiology and Microbial Biotechnology (2 years)

Course Coordinator:

- ICG601 (Advanced Cell & Molecular Biology) (12 years)
- BTH3711: Food & Industrial Microbiology (2 year)
- BTH2830: Medical Microbiology (2 year)

Chief Examiner:

- BTH3711: Food & Industrial Microbiology; BTH3722: Medical Microbiology

New Course Design:

- Chief Co-ordinator: Systems Biology Integrated Coursework and Research (MSc Program)
- Chief Co-ordinator: Undergraduate Theory and Lab - Recent Advances in Microscopy & Imaging Techniques

Workshops & short courses conducted:

- Faculty: Practical Course: High Level Expression of Heterologous Proteins in Yeast, 29 October - 9 November 2001, New Delhi, India
- Course organizer& faculty: Practical Course: Expression of heterologous genes in bacteria and yeast, Oct. 28-Nov. 8, 2002. ICGEB, New Delhi, India.

- Course organizer & faculty: Workshop: “Protein Interaction Technologies in Biomedical Research” 21 November-2 December, 2005. International Centre for Genetic Engineering & Biotechnology (ICGEB), New Delhi, India.
- Teaching faculty: ICRO-UNESCO, 8th Workshop in Molecular Biology and Disease, August 16-27, 2004, National Institute of Hygiene & Epidemiology, Hanoi, Vietnam.
- Course organizer & faculty: Molecular Evolution & Epidemiology of Avian Influenza, 13-24 October, 2008. New Delhi, India
- Co-organizer: International Symposium on Avian Influenza. October 29-31, 2007. New Delhi.
- Workshop organizer & faculty: ASM Workshop on Good Scientific Writing and Publishing:
 - Panjab University, Chandigarh. November 20th, 2011.
 - Amity University, Noida. May 25th 2012.
 - Siriraj Hospital, Mahidol University, Bangkok, Thailand. June 11th, 2012
 - Kashmir University, Srinagar. July 23rd, 2012.
 - Birla Institute of Technology, Pilani (Goa Campus). August 9th, 2012.
 - Jaipee Institute of Technology, New Delhi. September 28th, 2012.
 - KIIT University, Bhubaneswar, Orissa. November 20th, 2012.
 - Sri Venkateswara College, Delhi University, New Delhi. February 6th, 2013.
 - KhonKaen University, Thailand. September 4th, 2013
 - Chiang Mai University, Thailand. September 6th, 2013
 - Mahidol University, Bangkok, Thailand. September 9th, 2013
- Organizer & faculty: Workshop on “The Road to High-Impact Publishing” Monash University, March 2018

Peer-Reviewed Publications

1. D. Verma, D. Gupta and **S. K. Lal. 2018.** Host Lipid Rafts Play a Major Role in Binding and Endocytosis of Influenza A Virus. *Viruses*. 2018 doi: 10.3390/v10110650 (**H index: 52; Q1; IF: 3.76**)
2. P. Kumar, P. Gaur, R. Kumari and **S. K. Lal. 2018.** Influenza A virus neuraminidase protein interacts with Hsp90, to stabilize itself and enhance cell survival. *J. Cell. Biochem.* 2018 doi: 10.1002/jcb.27935 (**H index: 147; Q2; IF: 3.5**)
3. Z. Y. Kho, **S. K. Lal. 2018.** The human gut microbiome – a controller of wellness and disease. *Frontiers in Microbiology* 2018 9:1835; doi: 10.3389/fmicb.2018.01835 (**H index: 69; Q1; IF: 4.11**)
4. V. Thukral, B. Varshney, RB Ramly, SS Ponia, SK Mishra, CM Olsen, AC Banerjea, SK Mukherjee, R. Zaidi, E. Rimstad, **S. K Lal. 2017.** s8ORF2 protein of infectious salmon anaemia virus is a RNA-silencing suppressor and interacts with Salmon salar Mov10 (SsMov10) of the host RNAi machinery. *Virus Genes*. 2017 Dec 7. doi: 10.1007/s11262-017-1526-z (**H index: 51; Q2; IF: 1.54**)
5. S. Bhowmick, C. Chakravarty, S. Sellathamby, **S. K. Lal. 2017.** The Influenza A virus Matrix protein 2 undergoes retrograde transport from the endoplasmic reticulum into the cytoplasm and bypasses cytoplasmic proteasomal degradation. *Archives of Virol* doi:10.1007/s00705-016-3153-8 (**H index: 90; Q2; IF: 2.11**)
6. A. Sharma, S. K. Lal. **2017.** Zika Virus: Transmission dynamics and modes of detection. *Frontiers in Microbiology* doi: 10.3389/fmicb.2017.00110 (**H index: 41; Q1; IF: 5.69**)

7. J. Batra, S. Tripathi, A. Kumar, J. M. Katz, N. J. Cox, R. B. Lal, S. Sambhara, **S. K. Lal. 2016.** Human heat shock protein 40 (Hsp40/DnaJB1) promotes influenza A virus replication by assisting nuclear import of viral ribonucleoproteins. *Scientific Reports (Nature Publishing Group)* 6:19063. doi: 10.1038/srep19063 **(H index: 69; Q1; IF:5.6)**
8. A. K. Mayank, S. Sharma, H. Nailwal, **S. K. Lal. 2015.** Nucleoprotein of Influenza A virus negatively regulates anti-apoptotic protein API5 to enhance E2F1-dependent apoptosis and virus replication. *Cell Death & Disease (Nature Publishing Group)* 6:e2018. doi: 10.1038/cddis.2015.360. **(H index: 48; Q1; IF: 5.4)**
9. H. Nailwal, S. Sharma, A. K. Mayank, **S. K. Lal.2015.** The Nucleoprotein of Influenza A virus induces p53 signaling and apoptosis via attenuation of host Ubiquitin ligase RNF43. *Cell Death & Disease (Nature Publishing Group)* 6:e1768. doi: 10.1038/cddis.2015.131. **(H index: 48; Q1; IF:5.4)**
- 10.S. Tripathi, J. Batra, **S. K. Lal. 2015.** Interplay between Influenza A virus and host factors: Targets for anti-viral intervention. *Archives of Virology* 160:1877-1891 doi: 10.1007/s00705-015-2452-9 **(H index: 90; Q2; IF: 2.11)**
- 11.M. Subathra, P. Santhakumar, M. L. Narasu, S. S. Beevi, **S. K. Lal. 2014.** Evaluation of antibody response in mice against avian influenza A (H5N1) strain neuraminidase expressed in yeast *Pichia pastoris*. *J.Biosci.*39:443-51. **(H index: 54; Q2; IF: 2.1)**
- 12.V. Baniasadi, **S. K. Lal. 2014.** A novel method to produce Influenza A virus matrix protein M1 Capsid Like Particles (CLPs). *J. Virol. Methods* 4:205C:1-2.doi: 10.1016/j.jviromet.2014.03.027 **(H index: 79; Q3; IF: 1.76)**
13. S. Sharma, A. K. Mayank, S. Tripathi, J. R. Patel, P. Gaur, R. O. Donis, J. M. Katz, N. J. Cox, R. B. Lal, S. Sambhara, **S. K. Lal. 2014.** Influenza A viral nucleoprotein interacts with cytoskeleton scaffolding protein α -actinin-4 for viral replication. *FEBS J.*281:2899-914. **(H index: 163; Q1; IF: 2.14)**
14. M. Subathra, P. Santhakumar, S. S. Naidu, M. L. Narasu, T. M. A. Senthilkumar, **S. K. Lal. 2014.** Expression of Avian Influenza virus (H5N1) hemagglutinin and matrix protein 1 in *Pichia pastoris* and evaluation of their immunogenicity in mice. *Appl. Biochem. Biotechnol.* 172, 3635-3645. **(H index: 61; Q2; IF: 1.43)**
15. A. K. Mayank, S. Sharma, R. K. Deshwal, **S. K. Lal. 2014.** LIMD1 antagonizes E2F1 activity and cell cycle progression by enhancing Rb function in cancer cells. *Cell Biology International* 38 (7): 809-817. doi: 10.1002/cbin.10266. **(H index: 59; Q3; IF: 1.75)**
16. H. Nailwal, K. Kamra, **S. K. Lal. 2014.** H7N9: A killer in the making or a false alarm? *Canadian J. Microbiology* 8:425-429. **(H index: 71; Q2; IF: 1.22)**
17. A. K. Mayank, S. Sharma, R. K. Deshwal, **S. K. Lal. 2014.** Genome-wide screens – a systematic approach to redefine the influenza A virus-host crosstalk. *Virology Discovery* 2:2 **(IF: 0.66)**
18. S. Tripathi, W. Cao, K. Sharma, J.R. Patel, P. Ranjan, J. M. Katz, N. J. Cox, R. B. Lal, S. Sambhara, **S. K. Lal. 2013.** Influenza A virus Nucleoprotein induces cell death in human lung epithelial cells by targeting Clusterin. *Cell Death & Disease (Nature Publishing Group)* 4: e562; doi:10.1038 / cddis.2013.89. **(H index: 48; Q1; IF: 5.4)**

19. S. N. Khan, M. Danishuddin, B. Varshney, **S. K. Lal**, A. U. Khan. **2013**. Inhibition of N-terminal lysines acetylation and transcription factor assembly by epirubicin induced deranged cell homeostasis. *PLoS ONE* **7**(12):e51850. **(H index: 181; Q1; IF: 3.1)**
20. S. Murugan, S. Ponselaran, L. Kannivel, L. N. Mangamoori, D. Chandran, S. Villuppanoor Alwar, C. Chakravarty, **S. K. Lal**. **2012**. A Recombinant *Pichia pastoris* expressing highly pathogenic avian influenza Neuraminidase elicits neutralizing antibody response in mice. *J. Viol. Methods* **187**:20-25. **(H index: 79; Q3; IF: 0.87)**
21. M. Subathra, P. Santhakumar, M. Lakshmi Narasu, **S. K. Lal**. **2012**. Cloning, Expression and Characterization of Matrix protein (M1) of highly pathogenic avian influenza H5N1 in *Escherichia coli*. *Curr. Trends Biotech. Pharm.***6**: 433-440. **(H index: 8; Q4; IF: 0.00)**
22. M. Subathra, P. Santhakumar, P. Pardhasaradhi, M. Lakshmi Narasu, C. Chakravarty, **S. K. Lal**. **2012**. Cloning, Expression and Purification of Haemagglutinin and Neuraminidase gene of highly Pathogenic Avian Influenza H5N1 in *Escherichia coli*. *Curr. Trends Biotech. Pharm.***6**: 222-228. **(H index: 8; Q4; IF: 0.00)**
23. M. Surjit, B. Varshney, **S. K. Lal**. **2012**. The ORF2 glycoprotein of Hepatitis E virus inhibits cellular NF- κ B activity by blocking ubiquitination mediated proteasomal degradation of I κ B α in human hepatoma cells. *BMC Biochemistry* **13**:7. **(H index: 38; Q3; IF: 1.3)**
24. P. Gaur, P. Ranjan, S. Sharma, J.R. Patel, J.B. Bowzard, S. K. Rahman, R. Kumari, S. Gangappa, J.M. Katz, N.J. Cox, R.B. Lal, S. Sambhara, **S. K. Lal**. **2012**. Influenza A virus Neuraminidase protein enhances cell survival through interaction with CEACAM6. *J. Biol. Chem.* **287**:15109-15117. **(H index: 435; Q1; IF: 4.58)**
25. B. Varshney, S. Agnihotram, Y-J Tan, R. Baric, **S. K. Lal**. **2012**. SARS Coronavirus 3b protein modulates transcriptional activity of RUNX1b. *PLoS ONE* **7**(1):e29542. **(H index: 181; Q1; IF: 3.1)**
26. B. Varshney, **S. K. Lal**. **2011**. SARS-CoV accessory protein 3b induces AP-1 transcriptional activity through activation of JNK and ERK pathways. *Biochemistry***50**: 5419–5425. **(H index: 208; Q1; IF: 3.0)**
27. K. Sharma, S. Ackerstorm, A. K. Sharma, V.T.K. Chow, S. Teow, B. Abrenica, S. A. Booth, T. F. Booth, A. Mirazimi, **S. K. Lal**. **2011**. SARS-CoV 9b protein diffuses into nucleus, undergoes active crm1 mediated nucleocytoplasmic export and triggers apoptosis when retained in the nucleus. *PLoS ONE* **6**(5): e19436. **(H index: 181; Q1; IF: 3.1)**
28. K. Sharma, S. Tripathi, P. Ranjan, P. Kumar, R. Garten, V. Deyde, J. M. Katz, N. J. Cox, R. B. Lal, S. Sambhara, **S. K. Lal**. **2011**. Influenza A virus Nucleoprotein exploits Hsp40 to inhibit PKR activation. *PLoS ONE* **6**(6): e20215. **(H index: 181; Q1; IF: 3.1)**
29. P. Gaur, A. Munjal, **S. K. Lal**. **2011**. Influenza virus and cell signaling pathways. *Med. Sci. Monit.* **17**(6): RA148-154. **(H index: 67; Q2; IF: 1.43)**
30. V. Baniasadi, P. Kumar, **S. K. Lal**. **2011**. Influenza vaccines and antivirals – current update. *Int. J. Biotechnol. Biosci.* **1**(4): 389-399.
31. S. Karjee, A. Minhas, V. Sood, S. S. Ponia, A. C. Banerjee, V. T. K. Chow, S. K. Mukherjee, **S. K. Lal**. **2010**. The 7a accessory protein of SARS-CoV acts as a RNA silencing suppressor. *J. Virol.* **84**:10395-10401. **(H index: 246; Q1; IF: 5.1)**

32. H-L. J. Oh, S. Akerstrom, S. Shen, S. Berezky, H. Karlberg, J. Klingström, **S. K. Lal**, A. Mirazimi, Y-J Tan. **2010**. An antibody against a novel and conserved epitope in the 1 HA1 subunit neutralizes numerous H5N1 influenza viruses. *J. Virol.* **84**: 8275-8286. (H index: 246; Q1; IF: 5.1)
33. Z. Tan, S. Akerstrom, B. Y. Wee, **S. K. Lal**, A. Mirazimi, Y-J. Tan. **2010**. A new panel of NS1 antibodies for easy detection and titration of influenza A virus. *J. Med. Virol.* **82**:467–475. (H index: 98; Q2; IF: 2.4)
34. S. N. Khan, **S. K. Lal**, P. Kumar, A. U. Khan. **2010**. Effect of mitoxantrone on proliferation dynamics and cell cycle progression. *Biosci. Rep.* **30**:375-381. (H index: 56; Q2; IF: 2.5)
35. S. Shen, G. Mahadevappa, **S. K. Lal**, Y-J Tan. **2009**. Hemagglutinin immunoglobulin M (IgM) monoclonal antibody that neutralizes multiple clades of avian H5N1 influenza A virus. *J. Antivir. Antiretrovir.* **1**:051-055. (H index ; Q4; IF: 2.96)
36. A.U. Khan, S. Shakil, **S. K. Lal**. **2009**. Efficacy of NA inhibitors against pandemic H1N1 viral strains. *Indian J. Microbiol.* **61**:370-376. (H index: 25; Q3; IF: 1.04)
37. S. Sharma, A.K. Mayank, **S.K. Lal**. **2009**. Molecular events leading to the creation of a pandemic influenza virus. *Indian J. Microbiol.* **61**:332-338. (H index: 25; Q3; IF: 1.04)
38. R. Ratra, A. Kar-Roy, **S. K. Lal**. **2009**. The ORF3 protein of Hepatitis E virus interacts with the b beta chain of fibrinogen resulting in decreased fibrinogen secretion from HuH-7 cells. *J. Gen. Virol.* **90**:1359-1370. (H index 135; Q1; IF: 3.34)
39. T. Narasaraju, M.K. Sim, H.H. Ng, M.C. Phoon, N. Shanker, **S.K. Lal**, V.T.K. Chow. **2009**. Adaptation of human influenza H3N2 virus in a mouse pneumonitis model: insights into viral virulence, tissue tropism and host pathogenesis. *Microbes Infect.* **11**:2-11. (H index: 114; Q1; IF: 2.30)
40. S. Shen, G. Mahadevappa, H-L. J. Oh, B. Y. Wee, Y-W. Choi, L-A. Hwang, S. G. Lim, W. Hong, **S. K. Lal**, Y-J. Tan. **2008**. Comparing the antibody responses against recombinant hemagglutinin proteins of avian influenza A (H5N1) virus expressed in insect cells and bacteria. *J. Med. Virol.* **80**:1972-1983. (H index: 98; Q2; IF: 2.40)
41. R. Ratra, A. Kar-Roy, **S. K. Lal**. **2008**. The ORF3 protein of Hepatitis E Virus interacts with hemopexin by means of its 26 amino acid N-terminal hydrophobic domain II. *Biochemistry* **47**:1957-1969. (H index: 208; Q1; IF: 3.0)
42. M. Surjit, **S. K. Lal**. **2008**. The SARS-CoV nucleocapsid protein; a protein with multifarious activities. *Infect. Genet. Evol.* **8**:397-405. (H index: 59; Q1; IF: 2.5)
43. R. Ratra, **S. K. Lal**. **2008**. Functional genomics as a tool in virus research. *Indian J. Microbiol.* **48**:195-201. (H index: 25; Q3; IF: 1.04)
44. K. Sharma, M. Surjit, N. Satija, B. Liu, V. T. K. Chow, **S. K. Lal**. **2007**. The 3a accessory protein of SARS-CoV is an RNA binding protein and specifically interacts with the 5' UTR of its viral RNA using a 92 amino-acid interaction domain. *Biochemistry* **46**:6488-6499. (H index: 208; Q1; IF: 3.0)
45. P. Kumar, V. Gunalan, B. Liu, V. T. K. Chow, J. Druce, C. Birch, M. Catton, B. C. Fielding, Y-J Tan, **S. K. Lal**. **2007**. The nonstructural protein 8 (nsp8) of the SARS coronavirus interacts with its ORF6 accessory protein. *Virology* **366**: 293-303. (H index: 147; Q1; IF: 3.35)

46. M. Surjit, S. K. Lal. 2007. Glycogen synthase kinase phosphorylates and regulates the stability of p27kip1 protein. *Cell Cycle* 6:580-588. (H index: 111; Q1; IF:5.1)
47. M. Surjit, S. Jameel, S. K. Lal. 2007. Cytoplasmic localization of the ORF2 protein of Hepatitis E virus is dependent on its ability to undergo retro-translocation from the endoplasmic reticulum. *J. Virol.* 81: 3339-3345. (H index: 246; Q1; IF: 5.1)
48. T. Anwar, S. K. Lal, A. U. Khan. 2006. Matrix protein 1: A comparative *in-silico* study on different strains of influenza A H5N1 virus. *Bioinformation* 1:253-256. (H index: 18; IF: 2.46)
49. T. Anwar, S. K. Lal, A. U. Khan. 2006. *In-silico* analysis of genes Nucleoprotein, Neuramindase and Hemagglutinin: a comparative study on different strains of influenza A (Bird Flu) virus sub-type H5N1. *In Silico Biology* 6:15-20. (H index: 40; Q2)
50. M. Surjit, B. Liu, V. T. K. Chow, S. K. Lal. 2006. The Nucleocapsid protein of SARS-coronavirus inhibits the activity of cyclin-CDK complex and blocks S phase progression in mammalian cells. *J. Biol. Chem.* 281:10669-10681. (H index: 435; Q1; IF: 4.58)
51. M. Surjit, R. Oberoi, R. Kumar, S. K. Lal. 2006. Enhanced α_1 -microglobulin secretion from Hepatitis E virus ORF3 expressing human hepatoma cells is mediated by the tumor susceptibility gene 101. *J. Biol. Chem.* 281:8135-8142. (H index: 435; Q1; IF: 4.58)
52. S. K. Lal, P. Kumar, W. M. Yeo, A. Kar-Roy, V. T. K. Chow. 2006. The VP1 protein of human Enterovirus 71 self-associates via an interaction domain spanning amino acids 66-297. *J. Med. Virol.* 78: 582-590. (H index: 98; Q2; IF: 2.37)
53. S. Tyagi, M. Surjit, S. K. Lal. 2005. The 41-amino acid C-terminal region of the Hepatitis E virus ORF3 protein interacts with Bikunin, a Kunitz-type serine protease inhibitor. *J. Virol.* 79:12081-12087. (H index: 246; Q1; IF: 5.1)
54. M. Surjit, R. Kumar, R. N. Mishra, M. K. Reddy, V.T.K. Chow, S. K. Lal. 2005. The SARS coronavirus nucleocapsid (N) protein is phosphorylated and localizes in the cytoplasm by 14-3-3 mediated translocation. *J. Virol.* 79:11476-11486. (H index: 246; Q1; IF: 5.1)
55. M. Surjit, B. Liu, S. Jameel, V. T. K. Chow, S. K. Lal. 2004. The SARS coronavirus nucleocapsid (N) protein induces actin reorganization and apoptosis in COS-1 cells. *Biochem. J.* 383:13-18. (H index: 222; Q1; IF: 4.40)
56. A. Kar-Roy, H. Korkaya, R. Oberoi, S. K. Lal, S. Jameel. 2004. The hepatitis E virus ORF3 protein activates ERK through binding and inhibition of the MAPK phosphatase. *J. Biol. Chem.* 279: 28345-28357. (H index: 435; Q1; IF: 4.58)
57. S. Tyagi, M. Surjit, A. Kar Roy, S. Jameel, S. K. Lal. 2004. The ORF3 protein of hepatitis E virus interacts with liver specific α_1 -microglobulin and its precursor α_1 -microglobulin/bikunin precursor (AMBP) and expedites their export from the hepatocyte. *J. Biol. Chem.* 279:29308-29319. (H index: 435; Q1; IF: 4.58)
58. B. Bagewadi, S. Chen, S. K. Lal, N. R. Choudhury, S. K. Mukherjee. 2004. PCNA interacts with IMYMV-Rep and downregulates Rep activity. *J. Virol.* 78:11890-11903. (H index: 246; Q1; IF: 5.1)
59. M. Surjit, S. Jameel, S. K. Lal. 2004. The ORF2 protein of Hepatitis E virus binds the 5' region of viral RNA. *J. Virol.* 78:320-328. (H index: 246; Q1; IF: 5.1)

60. M. Surjit, B. Liu, P. Kumar, V. T. K. Chow, **S. K. Lal. 2004.** The nucleocapsid (N) protein of the SARS coronavirus is capable of self-association through a C-terminal 209 amino acid interaction domain. *Biochem. Biophys. Res. Comm.* **317**:1030-1036. (H index: 217; Q2; IF: 2.30)
61. R. Srivastava, **S. K. Lal. 2003.** A yeast assay for high throughput screening of natural anti-viral agents. *Biochem. Biophys. Res. Comm.* **301**:218-221. (H index: 217; Q2; IF: 2.30)
62. A. Khan, **S. K. Lal. 2003.** Ribozymes: A Modern Tool in Medicine. *J. Biomed. Sci.* **10**:457-467. (H index: 59; Q1; IF: 2.74)
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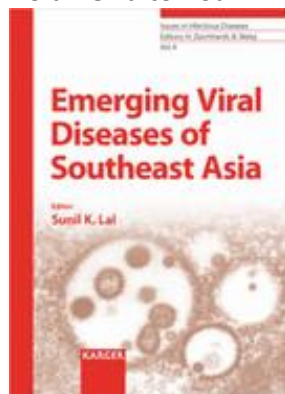
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Volume Editor: Sunil K. Lal



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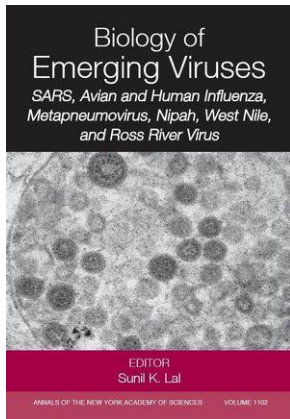
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2. *The Biology of Emerging viruses*

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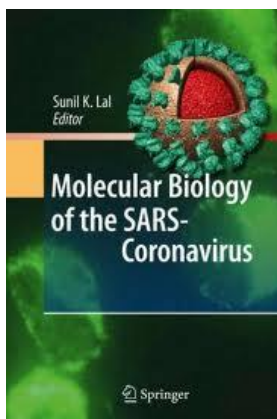
Guest Editor: Hemant J. Purohit, Jitender P. Khurana, Rakesh Sharma, **Sunil K. Lal** & Vipin C. Kalia.

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4. The Molecular Biology of SARS Coronavirus

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5. Indian Journal of Microbiology. Special Issue on Swine Flu Pandemic.

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Patents:

1. A process for producing recombinant Matrix 1 protein (M1) Capsid Like Proteins (CLPs) and their use as potential influenza vaccine candidate. Vahid Baniyasi & **Sunil K. Lal**. Patent No. 91/DEL/2013; Date of filing: January 14, 2013