

CURRICULUM VITAE

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Education

1982 Ph.D. Genetics, Indiana University
1978 B.A. Biology, Magna Cum Laude, University of California San Diego

Postdoctoral Research Experience

1984-1987 University of California San Diego, NIH Postdoctoral Fellow
1982-1984 Indiana University, Postdoctoral Research Associate

Professional Experience

2002- Director, Inter-institutional Virology Program, University of Maryland
2000- Professor, Department of Cell Biology and Molecular Genetics, University of Maryland
1996-2000 Professor, Department of Biochemistry and Molecular Biology, UMass
1996-1999 Associate Head, Department of Biochemistry and Molecular Biology, UMass
1992- 1996 Associate Professor, Department of Biochemistry and Molecular Biology, UMass
1990-1992 Assistant Professor, Department of Biochemistry and Molecular Biology, UMass
1987-1990 Assistant Professor, Department of Plant Pathology, University of Massachusetts

Honors and Awards

2014 Elected a fellow of the American Academy of Microbiology
2012 Nominated for President of the American Society of Virology
2011 Elected Plant Virus Councilor, American Society of Virology
2008 College of Chemical and Life Sciences Annual Service Award
2002 Richard Francki Prize recipient for Distinguished Research in Plant Virology
1997 University of Massachusetts Distinguished Teaching Award
1982 Recipient, Esther L. Kinsley Ph.D. Dissertation Award for the most outstanding Ph.D. thesis at Indiana University

Other Recent Professional Activities

2018 Local organizer for ASV annual meeting at the University of Maryland
2012, 2014 Organizer of plant virology satellite symposium at ASV
2013-2014 Nominations Committee, ASV
2011- co-Editor-in-Chief, Frontiers in Virology
2007-2017 Editor, Journal of Virology
2011- Editor, Current Opinion in Virology
2011- 2014 Plant Virus Councilor, American Society of Virology
2010- Editorial Board, Viruses
2010-2012 American Society of Virology Program Committee
2009-2015 Panel member, National Institutes of Health, Microbiology and Infectious Diseases B
2005- Associate Editor, Applied and Environmental Microbiology
2004- Guest Editor, Current Protocols in Microbiology
2008- Advisory Board, Science and Entertainment Exchange, National Academy of Sciences
1996-2007 Editor, Virology
2008 Panel member, National Institutes of Health, Topics in Virology (R21/R03/R15)
2008 Chairman, Committee of Visitors reviewing the Division of MCB at NSF
2007 External Reviewer, Institute of Plant and Microbial Sciences, National Academy of Sciences, Taipei, Taiwan
2005 External Reviewer, National Academy of Sciences, Taipei, Taiwan

2003 Panel Member Bard Grant Panel
1998-2003 Panel member, National Institutes of Health, Virology Study Section,
1996-1998 Associate Editor, Molecular Plant-Microbe Interactions
2001 Member, Committee of Visitors reviewing the Arabidopsis genome initiative at NSF
1999 Organized the American Society of Virology's Annual Meeting at UMass,

Ad hoc reviewer for National Science Foundation, Department of Energy, USDA, NIH
Reviewer for J. Virol., Virology, J. Gen. Virology, Virus Research, The Plant Cell, The Plant Journal, Plant Physiology, Mol. Gen. Genet., Mol. Cell. Biol., Proc. Natl. Acad. Sci., Plant Molecular Biology, Mol. Plant-Microbe Interact, RNA, EMBO J., Science, Nature Reviews

Current Grant Support

1. National Science Foundation (Principal Investigator)
Title: Analysis of a ribosome-binding 3' translational enhancer in a plus-strand RNA virus
Period: 4/1/12 – 3/31/15
Amount: \$595,000
2. National Science Foundation (Principal Investigator)
Title: Funds for students to attend the American Society of Virology Meeting 2014
Period: 6/2014-6/2015
Amount: \$6,000
3. National Science Foundation (Principal Investigator)
Title: Translational Enhancement by Multifunctional tRNA Mimics
Period: 4/1/15 – 3/31/18
Amount: \$750,000
4. NIAID R21 (Principal Investigator)
Title: New Paradigms for Ribosome Recoding in (+)Strand Viruses
Period: 3/1/15 - 2/28/17
Amount: \$409,955

Recent Past Grant Support

1. National Institutes of Health 2T32AI051967-06A1 (Principal Investigator)
Title: Mechanisms of virus replication and gene expression
Period: 8/1/09-7/31/14
Amount: \$997,333
2. National Science Foundation (co-Principal Investigator)
Title: Collaborative research: Identification of *cis*-acting sequence and structural elements required for replication of a viral RNA
Period: 12/1/09-11/30/13
Amount: 61,392 (to AES)
3. National Science Foundation (Principal Investigator)
Title: Funds for students to attend the American Society of Virology Meeting 2012
Period: 6/2012-6/2013
Amount: \$6,000 (to AES)

4. National Institutes of Health 2 R01 GM 061515-05A2/G120CD (Principal Investigator)
Title: Role of RNA structural switches in the replication of a plus-strand RNA virus
Period: 4/1/07 – 3/31/11
Amount: \$1,600,000 (includes administrative supplement)

Recent Invited Presentations at National and International Meetings

- 2014 Invited Speaker, 2014 International Symposium on RNA Viruses, Chang Gung University, Taiwan
2013 Invited Speaker, EMBO workshop on plant viruses, France
2011 Keynote speaker, International Symposium on RNA Viruses, Taoyuan, Taiwan
2010 Plenary speaker, ASV annual meeting, Montana
2010 Invited Principal Speaker, EMBO workshop on plant viruses, Turino Italy
2010 Invited Speaker and session chair, EMBO World Course on Virus-Host Interactions, Costa Rica
2009 Invited Speaker and session chair, Juan March Cartoblanco Symposium on virus replication and recombination, Madrid
2008 Plenary Speaker, IUMS Virology Congress, Turkey
2008 State-of-the Art Speaker and Plenary Convener, IUMS Virology Congress, Turkey
2007 Invited Speaker, Plus-strand RNA Virus meeting, Washington DC
2006 Invited Speaker, EMBO Workshop on Suppression & Circumvention of Host Defense by Plant Viruses, Finland

Recent Invited Seminars at Universities and Industries

- 2014 Academy Sinica, Taipei
2014 National Chung Hsing University, Taichung
2014 Keynote Speaker, Johns Hopkins School of Public Health, Dept of Immunology and Molecular Microbiology Retreat
2014 Keynote Speaker, Mt. Sinai Virology Program Retreat
2012 National Cancer Institute, Fort Detrick
2012 CAS, Virology, Wuhan, China
2011 Academy of Science, Taipei Taiwan
2011 University of Iowa
2011 Scripps Research Institute, La Jolla
2011 Maryland-Virginia School of Vet Med
2011 SUNY Stony brook
2011 Baylor College of Medicine
2010 CARB, Maryland
2010 University of Texas, Austin, Department of Biochemistry
2010 Oklahoma University, Department of Biochemistry
2010 University de Sherbrooke Quebec Province

Graduate Students

- Ms. Maitreyi Chattopadhyay (Sixth Year) PhD Program, Cell Biology and Molecular Genetics
Ms. My Le (Fifth year) PhD Program, MOCB
Ms. Micki Khulmann (Fifth year) PhD Program, Cell Biology and Molecular Genetics
Dr. Megan Young PhD CBMG Current position- Research Associate, FDA
Dr. Rong Guo PhD CBMG Current position- Postdoctoral Associate, NIH
Dr. John McCormack PhD CBMG Current position- Completed postdoc, Yale University
Dr Fengli Zhang, PhD CBMG Current position- Senior microbiologist, Wisconsin State Laboratory of Hygiene
Dr. Xiaoping Sun PhD. CBMG Current position- Professor, Wuhan University Medical School
Dr. Jiuchun Zhang, PhD. CBMG Current position- Assistant Scientist, Wisconsin National Primate Research Center

Dr. Hancheng Guan, Ph.D. Current position- Research Assistant Professor, University of Pennsylvania
Dr. Jianlong Wong, Ph.D. Current position- Assistant Professor, Albert Einstein Medical School
Dr. Chuangzheng Song Ph.D. Last position- Senior scientist, Department of Functional Genetics, Novartis (deceased)
Dr. Jong-Won Oh, Ph.D. Current position- Associate Professor, Biotechnology, Yonsei University
Dr. Qingzhong Kong, Ph.D. Current position- Associate Professor, Case Western University Medical School
Dr. Pamela Cascone, Ph.D. Current position- Senior research scientist, CuraGen Corp, CT
Dr. Chunxia Zhang Ph.D. Current position- Optometrist Bethesda, MD
Dr. Xiao Hua Li, Ph.D. Current position- Research Associate, U. Texas Southwestern Med.
Ms. Angela Valinski, M.A. Current position- Research Technician, Mount Holyoke College.

Postdoctoral Researchers

Dr. Feng Gao 2009-
Dr. Vera Stupina 2009-2012
Dr. Xuefeng Yang 2007-2012 Current position: Professor, Shandong Agricultural University
Dr. Kerong Shi 2007-2009 Current position: Associate Professor, Shandong Agricultural University
Dr. Alicia Manfre 2006-2008 Current position: Assistant Professor, Hagerstown Community College
Dr. Guohua Zhang 1999-2006 Current position: Businessman, China
Dr. Sohrab Bodhagi 2000-2001 Current position: Research Consultant, California
Dr. Peter Nagy, Post-doctoral Associate, 1996-1998 Current position, Professor, Department of Plant Pathology, University of Kentucky
Dr. Judit Pogony, Post-doctoral Associate, 1996-1998 Current position, Research Associate, Department of Plant Pathology, University of Kentucky
Dr. Clifford D. Carpenter, Research Associate, 1987-1998 Current position, Senior Research Associate Northwestern University
Dr. Joel Kreps, Post-doctoral Associate, 1992-1996 Current position, Research Manager at BP Biofuels Advanced Technology, San Diego

Past Professional Scientists Under My Direction

Dr. Mary Polacco, sabbatical leave from the University of Missouri, Department of Biochemistry 1989-1990
Dr. Daniel Klessig, sabbatical leave from Rutgers University, Department of Biochemistry, 1991

Departmental and College Committees at the University of Maryland

BISI MCB CA Executive committee (2012-)
Departmental APT Committee (2013)
University Medal Committee (2013)
College APT Committee, vice chair (2012), 2014
Oral Communication Task force, CMNS (2012)
Academic Planning Advisory Committee (APAC) (2010-2012)
Department APT (2008-2011)
College APT Committee, vice chair (2008-2010)
Kirwan Undergraduate Award Committee (2008)
CORE-MIC University Committee (2007-2008)
College Park Scholars Head Search Committee (2008)
College of Life Sciences Search Committee- College Development Officer (2004)
University APT Committee (2004-2005)
Dean's advisory committee (2004-2005)
Kirwan Undergraduate Education Award Committee (2003)
Faculty Senate (2002-2003)
Head, Virology Specialization Graduate Program (2001-)
Organizer of the Annual Virology Program Retreat (2001-)
Gemstone mentor (2001-2004)

College Undergraduate education committee (2001)
Department undergraduate education committee (2000-2002)
University Kirwan Research and Scholarship Prize Committee (2001)
Department personnel committee (2001-2003)
New Building committee (2000)
Head, Microbiology SAC (2000)

Publications

Peer-Reviewed Journals

1. Simon, A.E. 2015. 3'UTR of Carmoviruses. *Virus Res.*, in press.
2. Dashi, A., Schwander, P., Langlois, R., Fung, R., Li, W., Hosseinizadeh, A., Liao, H. Y., Pallesen, J., Sharma, G., Stupina, V.A., Simon, A.E., Dinman, J.D., Frank, J., Ourmazd, A. Trajectories of the ribosome as a Brownian nanomachine. *Proc. Natl. Acad. Sci. USA* 111, 17492–17497.
3. Gao, F., Kasprzak, W., Szabo, C., Shapiro, B.A., and Simon, A.E. 2014. The 3'UTR of Pea enation mosaic virus contains two T-shaped ribosome-binding cap-independent translation enhancers. *J Virol* 89, 11696-11712.
4. Babaie, G., Habibi, M.K., Massah, A., Dizadji, A., Izadinejad, L., and Simon, A. E. 2014. Complete genome sequence and genome analysis of Eggplant mottled dwarf virus-Iranian isolate. *J. Phytophthol.*, (in press).
5. Chattopadhyay, M., Kuhlmann, M., Kumar, K., and Simon, A.E. 2014. Position of the kissing-loop interaction associated with PTE-type 3'CITEs can affect enhancement of cap-independent translation. *Virology*, 458-459, 43-52. PMID in progress
6. Gao, F., Reddy, S., Kasprzak, W., Shapiro, B.A., Dinman, J.D., and Simon, A.E. 2013. The kissing-loop T-shaped structure translational enhancer of Pea enation mosaic virus can bind simultaneously to ribosomes and a 5' proximal hairpin. *J. Virol.* 87, 11987-2002. PMID: PMC3807929
7. Simon, A. E., and Miller, W. A. 2013. 3' Cap-independent translation enhancers of plant viruses. *Annu. Rev. Microbiol.* 67: 21–42. PMID: PMC4034384
8. Stupina, V.A. and Simon, A.E. 2013. Preparation of biologically active Arabidopsis ribosomes and comparison with yeast ribosomes for binding to a tRNA-mimic that enhances translation of plant plus-strand RNA viruses. *Front. Plant Sci.* 4, 271. doi: 10.3389/fpls.2013. PMID: PMC3718319
9. Gao, F., Kasprzak, W., Stupina, V.A., Shapiro, B.A. and Simon, A.E. 2012. A ribosome-binding, 3' translational enhancer has a T-shaped structure and engages in a long distance RNA:RNA interaction. *J. Virol.* 86, 9828-9842. PMID: PMC3446580
10. Yuan, X., Shi, K., and Simon, A.E. 2012. An interactive network of RNA elements supports translation and replication in Turnip crinkle virus. *J. Virol.* 86, 4065-4081. PMID: PMC3318645
11. Guo, R., Meskauskas, A., Dinman, J.D., and Simon, A.E. 2011. Evolution of a helper virus-derived ribosome binding translational enhancer in an untranslated satellite RNA of Turnip crinkle virus. *Virology* 419, 10-16. PMID: PMC3176665

12. Chattopadhyay, M., Shi, K., Yuan, X., and Simon, A.E. 2011. Long-distance kissing loop interactions between a 3' proximal Y-shaped structure and apical loops of 5' hairpins enhance translation of Saguaro cactus virus. *Virology* 417, 113-125. PMID: PMC3152624
13. Stupina, V.A, Yuan, X, Meskauskas, A., Dinman, J.D., and Simon, A.E. 2011. Ribosome binding to a 5' translational enhancer is altered in the presence of the 3'UTR in cap-independent translation of Turnip crinkle virus. *J. Virol.* 85, 4638-4653. PMID: PMC3126203
14. Yuan, X., Shi, K., Young, M. Y. L., and Simon, A. E. 2010. The terminal loop of a 3' proximal hairpin plays a critical role in the structure of the 3' region of Turnip crinkle virus and the RdRp-mediated conformational switch. *Virology* 402, 271-280. PMID: PMC2891086
15. Zuo, X, Wang, J., Yu, P., Eyler, D., Xu, H., Starich, M.R., Tiede, D.M., Simon, A.E., Kasprzak, W., Schwieters, C.D., Shapiro, B.A., and Wang, Y.-W. 2010. The cap-independent translational enhancer and ribosome binding structure element in 3' UTR of Turnip crinkle virus RNA folds into a tRNA-like shape in solution. *Proc. Natl. Acad. Sci. USA* 107, 1385-1390. PMID: PMC2803139
16. Cao, M.X., Ye, X.H., Willie, K., Lin, J.Y., Zhang, X.C., Redinbaugh, M.G., Simon, A.E., Morris, T.J., and Qu, F. 2010. The capsid protein of Turnip crinkle virus overcomes two separate defense barriers To facilitate systemic movement of the virus in Arabidopsis. *J. Virol.* 84, 7793-7802. PMID: PMC2897622
17. Yuan, X., Shi, K., Meskauskas, A. and Simon, A.E. 2009. The 3' End of Turnip crinkle virus contains a highly interactive structure with a translational enhancer that is disrupted by binding to the RNA-dependent RNA polymerase. *RNA* 15, 1849-1864. PMID: PMC2743042
18. Guo, R., Lin, W., Zhang, J., Simon, A. E., and Kushner, D. B. 2009. Structural plasticity and rapid evolution in a viral RNA revealed by *in vivo* genetic selection. *J. Virol.* 83, 927-939. PMID: PMC2612397
19. Stupina, V. A., Meskauskas, A., McCormack, J. C., Yingling, Y. G., Kasprzak, W., Shapiro, B. A., Dinman, J. D., and Simon, A. E. 2008. The 3' proximal translational enhancer of Turnip crinkle virus binds to 60S ribosomal subunits. *RNA* 14, 2379-2393. PMID: PMC2578866
20. McCormack, J. C., Yuan, X., Yingling, Y. G., Zamora, R. E., Shapiro, B. A., and Simon, A. E. 2008. Structural domains within the 3' UTR of Turnip crinkle virus. *J. Virol.* 82, 8706-8720. PMID: PMC2519621
21. Manfre, A. J., and Simon, A. E. 2008. Importance of coat protein and RNA silencing in satellite RNA/virus interactions. *Virology* 379, 161-167.
22. Zhang, J., Zhang, G., Guo, R., Shapiro, B. and Simon, A. E. 2006. A pseudoknot in a pre-active form of a viral RNA is part of a structural switch activating minus-strand synthesis. *J. Virol* 80, 9181-9191 PMID: 16940529.
23. Zhang, J., Zhang, G., McCormack, J. and Simon, A. E. 2006. Evolution of virus-derived sequences for high level replication of a subviral RNA. *Virology* 351, 476-488. PMID: PMC3176665
24. Sun, X., and Simon, A. E. 2006 A cis-replication element functions in both orientations to enhance replication of *Turnip crinkle virus*. *Virology* 352, 39-51. PMID: PMC2937274

25. Zhang, G., Zhang, J., George, A. T., Baumstark, T., and Simon, A. E. 2006. Conformational changes involved in initiation of minus-strand synthesis of a virus-associated RNA. *RNA* 12, 147-162.
26. Zhang, J. and Simon, A. E. 2005. Importance of sequence and structural elements within a viral replication repressor *Virology* 333, 301-315.
27. Sun, X., Zhang, G., and Simon, A. E. 2005. Short internal sequences involved in RNA replication and virion accumulation in a subviral RNA of *Turnip crinkle virus*. *J. Virol.* 79, 512-524. PMID: PMC538713
28. Zhang, J., Stuntz, R. M., and Simon, A. E. 2004. Analysis of a viral replication repressor: Sequence requirements in the large symmetrical loop. *Virology* 326,90-102.
29. McCormack, J. and Simon, A. E. 2004. Biased hypermutagenesis associated with mutations in an untranslated hairpin of an RNA virus. *J. Virol.* 78, 7813-7817. PMID: PMC434097
30. Zhang G, Zhang, J., Simon, A. E. 2004. Repression and derepression of minus-strand synthesis in a plus-strand RNA virus replicon. *J. Virol.* 78, 7619-7633. PMID: PMC434078
31. Zhang, F. and Simon, A.E. 2003. A novel procedure for the localization of viral RNAs in protoplasts and whole plants. *Plant J.* 35, 665-673. PMID: 12940959
32. Sun, X., and Simon, A.E. 2003. Fitness of a Turnip crinkle virus satellite RNA correlates with a sequence-nonspecific hairpin and flanking sequences that enhance replication and repress accumulation of virions. *J. Virol.* 77, 7880-7889. PMID: PMC161943
33. Zhang, F. and Simon, A.E. 2003. Enhanced viral pathogenesis associated with a virulent mutant virus or a virulent satellite RNA correlates with reduced virion accumulation and abundance of free coat protein. *Virology* 312, 8-13. PMID: 12890616
34. Zhang, G. and Simon, A. E. 2003. A multifunctional turnip crinkle virus replication enhancer revealed by in vivo functional selex. *J. Mol. Biol.* 326, 35-48. PMID: 12547189
35. Nagy, P. D., Pogany, J., and Simon, A. E. 2001. In vivo and in vitro characterization of an RNA replication enhancer in a satellite RNA associated with Turnip crinkle virus: comparison of sequences and structures stimulating primer-dependent and primer-independent RNA synthesis. *Virology* 288, 315-324. PMID: 11601903
36. Guan, H and Simon, A. E. 2000. Polymerization of non-template bases prior to transcription initiation by an RNA-dependent RNA polymerase: A novel activity involved in 3'-end repair of viral RNAs. *Proc. Natl. Acad. Sci.* 97, 12451-12456.
37. Wang, J. and Simon, A. E. 2000. 3'-end stem-loops of the subviral RNAs associated with turnip crinkle virus are involved in symptom modulation and coat protein binding. *J. Virol.* 74, 6528-6537. PMID: 10864666
38. Yoshinari, S., Nagy, P. D., Simon, A. E., and Dreher, T. W. 2000. CCA initiation boxes without unique promoter elements support in vitro transcription by three viral RNA-dependent RNA polymerases.. *RNA* 6, 698-707. PMID: 10836791

39. Guan, H., Carpenter, C. D., and Simon, A. E. 2000. Requirement of a 5'-proximal linear sequence on minus strands for plus-strand synthesis of a satellite RNA associated with TCV. *Virology* **268**, 355-363. PMID: 10704343
40. Guan, H., Carpenter, C. D., and Simon, A. E. 2000. Analysis of cis-acting sequences involved in plus-strand synthesis of a TCV-associated satellite RNA identifies a new carmovirus replication element. *Virology* **268**, 345-354. PMID: 10704342
41. Nagy, P. E., Pogany, J., and Simon, A. E. 1999. RNA elements required for RNA recombination function as replication enhancers in vitro and in vivo in a plus strand RNA virus. *EMBO J* **18**, 5653-5665. PMID: 10523308
42. Wang, J. and Simon, A. E. 1999. Symptom Attenuation By A Satellite RNA In Vivo Is Dependent On Reduced Levels of Virus Coat Protein. *Virology* **259**, 234-245. PMID: 10364508
43. Wang, J., Carpenter, C. D., and Simon, A. E. 1999. Minimal sequence and structural requirements of a subgenomic RNA promoter for turnip crinkle virus. *Virology* **253**, 327-336. PMID: 9918891
44. Nagy, P. D., and Simon, A. E. 1998. In vitro characterization of late steps of RNA recombination in turnip crinkle virus I: role of the motif1-hairpin structure. *Virology* **249**, 379-392. PMID: 9791030
45. Nagy, P. D., and Simon, A. E. 1998. In vitro characterization of late steps of RNA recombination in turnip crinkle virus II: role of the priming stem and flanking sequences. *Virology* **249**, 393-405. PMID: 9791029
46. Carpenter, C. D., and Simon, A. E. 1998. Analysis of sequences and putative structures required for viral satellite RNA accumulation by in vivo genetic selection. *Nucleic Acids Res.* **26**, 2426-2432. PMID: 9580696
47. Nagy, P. D., Zhang, C., and Simon, A. E. 1998. Dissecting RNA recombination in vitro: role of RNA sequences and the viral replicase. *EMBO J.* **17**, 2392-2403. PMID: 9545250
48. Guan, H., Song, C., and Simon, A. E. 1997. RNA promoters located on (-)-strands of a subviral RNA associated with turnip crinkle virus. *RNA* **3**, 1401-1412. PMID: 9404891
49. Stupina, V., and Simon, A. E. 1997. Analysis in vivo of turnip crinkle virus satellite RNA C variants with mutations in the 3' terminal minus strand promoter. *Virology* **238**, 470-477. PMID: 9400619
50. Kong, Q., Oh, J.-W., Carpenter, C. D. and Simon, A. E. 1997. The coat protein of turnip crinkle virus is involved in subviral RNA-mediated symptom modulation and accumulation. *Virology* **238**, 478-485. PMID: 9400620
51. Kong, Q., Wang, J., and Simon, A. E. 1997. Satellite RNA-mediated resistance to turnip crinkle virus in Arabidopsis involves a reduction in virus movement. *Plant Cell* **9**, 2051-2063. PMID: 9401127
52. Wang, J. and Simon, A. E. 1997. Analysis of the two subgenomic RNA promoters for turnip crinkle virus in vivo and in vitro. *Virology* **232**, 174-186. PMID: 9185601
53. Kreps, J. A., and Simon, A. E. 1997. Environmental and genetic effects on circadian regulated gene expression in Arabidopsis thaliana. *Plant Cell* **9**, 297-304. PMID: 9090876

54. Nagy, P. D., Carpenter, C. D., and Simon, A. E. 1997. A novel 3' end repair mechanism in an RNA virus. *Proc. Natl. Acad. Sci. USA*. 94, 1113-1118. PMID: 9037015
55. Carpenter, C. D., and Simon, A. E. 1996. In vivo repair of 3'-end deletions in a TCV satellite RNA may involve two abortive synthesis and priming events. *Virology* **226**, 153-160. PMID: 8955033
56. Carpenter, C. D. and Simon, A. E. 1996. Changes in locations of crossover sites over time in de novo generated RNA recombinants. *Virology* **223**, 165-173. PMID: 8806550
57. Carpenter, C. D. and Simon, A. E. 1996. In vivo restoration of biologically active 3' ends of virus-associated RNAs by non-homologous RNA recombination and replacement of a terminal motif. *J. Virol.* **70**, 478-486. PMID: 8523561
58. Song, C. and Simon, A. E. 1995. Requirement of a 3'-terminal stem-loop in in vitro transcription by an RNA-dependent RNA polymerase. *J. Mol. Biol.* **254**, 6-14. PMID: 7473759
59. Kong, Q., Oh, J.-W., and Simon, A. E. 1995. Symptom attenuation by a normally virulent satellite RNA of turnip crinkle virus is associated with the coat protein open reading frame. *Plant Cell* **7**, 1625-1634. PMID: 9750054
60. Oh, J.-W., Kong, Q., Song, C., Carpenter, C. D., and Simon, A. E. 1995. Open reading frames of turnip crinkle virus involved in satellite symptom expression and incompatibility with *Arabidopsis thaliana* ecotype Dijon. *Mol. Plant-Microbe Interact.* **8**, 979-987. PMID: 8664506
61. Song, C., and Simon, A. E. 1995. Synthesis of novel products in vitro by an RNA-dependent RNA polymerase. *J. Virol.* **69**. 4020-4028.
62. Carpenter, C.D., Oh, J.-W., Zhang, C., and Simon, A. E. 1995. Involvement of a stem-loop structure in the location of junction sites in viral RNA recombination. *J. Mol. Biol.* **245**, 608-622. PMID: 7844830
63. Zhang, C., and Simon, A. E. 1994. Effect of template size on replication of defective interfering RNAs. *J. Virol.* **68**, 8466-8469. PMID: 7966644
64. Song, C., and Simon, A.E. 1994. RNA-dependent RNA polymerase from plants infected with turnip crinkle virus can transcribe (+)- and (-)-strands of virus-associated RNAs. *Proc. Natl. Acad. Sci. USA*. **91**, 8792-8796. PMID: 7539504
65. Carpenter, C.D. and Simon, A.E. 1994. Recombination between plus and minus strands of turnip crinkle virus. *Virology* **201**, 419-423. PMID: 8184554
66. Carpenter, C.D., Kreps, J.A., and Simon, A.E. 1994. Genes encoding glycine-rich *Arabidopsis thaliana* proteins with RNA-binding motifs are influenced by cold treatment and an endogenous circadian rhythm. *Plant Physiol.* **104**, 1015-1025. PMID: 7513083
67. Cascone, P.J., Haydar, T. and Simon, A.E. 1993. Sequences and structures required for RNA recombination between virus-associated RNAs *Science* **260**, 801-805. PMID: 8484119
68. Simon, A.E., Li, X.H., Lew, J., Stange, R., Zhang, C. Polacco, M., and Carpenter, C.D. 1992. Susceptibility and resistance of *Arabidopsis thaliana* to turnip crinkle virus. *Mol. Plant-Microbe Interact.* **5**, 496-503.

69. Zhang, C., Cascone, P.J. and Simon, A.E. 1991. Recombination between satellite and genomic RNAs of turnip crinkle virus. *Virology* **184**, 791-794. PMID: 1716029
70. Li, X. H. and Simon, A. E. 1991. *In vivo* accumulation of a turnip crinkle virus DI RNA is affected by alterations in size and sequence. *J. Virol.* **65**, 4582-4590. PMC248912
71. Carpenter, C.D., Cascone, P.J., and Simon, A.E. 1991. Mutations in a satellite RNA of turnip crinkle virus result in addition of poly(U) in vivo. *Virology* **183**, 595-601. PMID: 1713000
72. Carpenter, C.D., Cascone, P.J., and Simon, A.E. 1991. Formation of multimers of linear satellite RNAs. *Virology* **183**, 586-594. PMID: 1712999
73. Cascone, P.J., Carpenter, D.C., Li, X.H. and Simon, A.E. 1990. Recombination between satellite RNAs of turnip crinkle virus. *EMBO J.* **9**, 1709-1715. PMID: 1693330
74. Li, X.H. and Simon, A.E. 1990. Symptom intensification on cruciferous hosts by the virulent sat-RNA of turnip crinkle virus. *Phytopathology* **80** 238-242.
75. Carpenter, C.D. and Simon, A.E. 1990. Simplified RNA sequencing using dideoxy chain termination. *Biotechniques* **8**, 8-9.
76. Li, X.H., Heaton, L., Morris, T.J. and Simon, A.E. 1989. Defective interfering RNAs of turnip crinkle virus intensify viral symptoms and are generated *de novo*. *Proc. Natl. Acad. Sci. USA* **86**, 9173-9177. PMID: 2594759
77. Simon, A.E., Engel, H., Johnson, R., and Howell, S.H. 1988. Identification of determinants affecting virulence, RNA processing and infectivity in the virulent satellite of turnip crinkle virus. *EMBO J.* **7**, 2645-2651. PMID: 3181135
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