

CURRICULUM VITAE

Name: Anne Elizabeth Simon

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

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 Assistant Professor,

1992- 1996 Associate Professor, Department of Biochemistry and Molecular Biology, UMass

1990-1992 Assistant Professor, Department of Biochemistry and Molecular Biology, UMass

1987-1990 Department of Plant Pathology, University of Massachusetts

Honors and Awards

2003 Finalist, University of Maryland Distinguished Faculty Award

2002 Richard Franks Prize recipient for distinguished research in Plant Virology

2001 Finalist, University of Maryland Distinguished Faculty Award

1997 University of Massachusetts Distinguished Teaching Award

1992 Senior Class Teaching Award

1984-1987 N.I.H. Post-Doctoral Fellowship, 1984-1987

1982 Recipient, Esther L. Kinsley Ph.D. Dissertation Award for the most outstanding Ph.D. thesis at
Indiana University

1978 Graduated Magna Cum Laude, University of California, San Diego

Major Research Interests

Viral and subviral RNA replication and recombination; plant susceptibility and resistance to viruses; symptom expression of subviral RNAs

Professional Societies

American Society for Virology

Past Grant Support

1. National Science Foundation DMB-8704124

Title: Mechanism of disease production by a satellite of turnip crinkle
virus

Period: 1/15/88 - 1/14/91

Amount: \$ 240,000

2. National Science Foundation DMB-8803853

Title: A model system for analyzing the generation of linear satellite
RNAs

Period: 1/1/89 - 1/1/92

Amount: \$ 195,000

3. National Science Foundation DMB-9004665
Title: Subviral RNAs of TCV: Symptom Induction and the Generation of Discontinuous RNAs
Period: 1/15/91 - 1/14/94
Amount: \$ 308,000
4. National Science Foundation DMB-9105890
Title: Processes associated with replication of subviral RNAs in the TCV system
Period: 1/1/92 - 1/1/95
Amount: \$ 279,857
5. National Science Foundation MCB-9419303
Title: Sequences and structures involved in replication and recombination of TCV RNAs
Period: 2/1/95 - 1/31/97
Amount: \$155,000
6. DuPont Educational Aid Grant
Title: Inhibition of Virus Long Distance Movement by Satellite RNAs: a Potential New Mechanism for Control of Plant Viruses
Period: 7/1/97 - 7/1/98
Amount: \$20,000
7. National Science Foundation MCB-9630191
Title: Interactions among sequences, structures and proteins involved in viral replication
Period: 2/1/97 - 2/1/02
Amount: \$300,000
8. National Science Foundation MCB-9728277 (Maryland number MCB-0096274)
Title: Studies on RNA recombination in vivo and in vitro
Period: 1/15/98 – 8/28/02
Amount: \$500,000

Current Grant Support

1. National Science Foundation MCB-0086952
Title: Initiation of (-)-strand synthesis in Turnip crinkle virus associated RNAs
Period: 2/28/01 – 2/28/06
Amount: \$430,155
2. National Institutes of Health 1 RO1 GM61515-01
Title: Elements required for replication of a model viral RNA
Period: 4/2/02 – 4/1/06
Amount: \$888,000
3. National Institutes of Health T32 AI51967-01 (Principal Investigator)
Title: Mechanisms of virus replication and gene expression
Period: 8/1/02-7/31/07
Amount: \$999,644

Invited Presentations at National and International Meetings (past 5 years)

- 2003 International Symposium on Replication mechanisms of RNA viruses and viroids , Valencia, Spain.
- 2003 Plant Virology mini symposium, American Society of Virology Annual Meeting, Davis.
- 2002 Richard Francki Plenary Lecture, International Virology Conference, Paris
- 2002 Workshop convener, International Virology Conference, Paris
- 2001 Workshop convener, American Society of Virology Annual Meeting, Wisconsin
- 1999 Workshop convener, International Virology Conference, Sydney Australia
- 1998 International Plus-strand RNA Virus Meeting, St. Petersburg, Florida
- 1998 American Phytopathology Symposium on Satellite RNAs

Invited Seminars at Universities and Industries (past 5 years)

- 2004 DOE Science Bowl, Chevy Chase, Maryland
- 2004 Indiana University
- 2004 Tennessee State University
- 2004 Yale University
- 2004 Arabidopsis mini-symposium, Maryland
- 2003 University of Maryland Baltimore County
- 2003 Oklahoma State University
- 2002 University of Massachusetts Medical School
- 2002 North Carolina State University
- 2001 Tulane University Medical School
- 2000 University of Michigan Medical School
- 1999 University of California Berkeley, Department of Microbiology and Plant Biology
- 1999 Oregon State University, Department of Microbiology
- 1999 University of Maryland, Department of Cell Biology and Molecular Genetics
- 1999 SUNY, Stony Brook, Department of Microbiology
- 1999 University of Tennessee, Department of Microbiology
- 1999 Rush Memorial Hospital (Chicago)1998 North Carolina State University, Department of Biochemistry
- 1998 Indiana University, Department of Biology
- 1998 University of Massachusetts Medical School
- 1998 Purdue University, Department of Microbiology and Plant Sciences

Invited speaker on Science and the Media:

(2000) University of Alabama, Birmingham; Lafayette College; Salem College; Concord College; University of Wisconsin Au Claire; Albion College, Nassau Community College, Penn State Dartmore

(2001) Oklahoma City University, Westminster School, Tarleton State University, University of Southern Mississippi, Keynote speaker at the Maryland High School Science Festival, Speaker at Maryland Day, Flagstaff Science Festival, Dutchess Community College, Keynote Speaker for the Westinghouse-Siemens Science Competition Finals

(2002) Junior science and humanities symposium at Georgetown University, Aurora High School, Worcester Polytechnic University, Marietta College, Alma College, Elk Grove Public Library (Chicago), Elk Grove High School, Aurora High School, Worcester Polytech, Gettysburg College, Old Dominion,

(2002) Addressed the Massachusetts legislature on the subject of Agricultural Biotechnology (invited by the Mass Biotech Council)

(2003) Invited speaker on "Science in the media: is there an obligation to 'Get it Right?'" Parent's Day, University of Maryland College Park.

Other Professional Activities

Editor, Virology 1996-

Associate Editor, Molecular Plant-Microbe Interactions 1996-1998

Panel member, National Institutes of Health, Virology study section, 1998-2003

Panel Member Bard Grant Panel 2003

Member, Committee of Visitors reviewing the Arabidopsis genome initiative at NSF, 2001

Organized the American Society of Virology's Annual Meeting at UMass, 1999

Member, Committee of Visitors reviewing the Division of Molecular and Cellular Biology at NSF, 1998

Panel member, NSF, Eukaryotic Genetics, 1992-1996

Panel member, Research Opportunities for Women, NSF (Cellular and Molecular Biosciences), 1991

Ad hoc reviewer for National Science Foundation, Department of Energy, USDA, NIH

Reviewer for J. Virology, 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.

Graduate Students

Dr. Xiao Hua Li, Ph.D. Current position- Postdoctoral Associate, U. Texas Southwestern Med.

Ms. Angela Valinski, M.A. Current position- Research Technician, Mount Holyoke College.

Dr. Pamela Cascone, Ph.D. Current position- Senior research scientist, CuraGen Corp, CT

Dr. Chunxia Zhang Ph.D. Current position- Optometrist Bethesda, MD

Dr. Chuazheng Song Ph.D. Current position- Senior scientist, Department of Functional Genetics, Novartis

Dr. Jong-Won Oh, Ph.D. Current position- Assistant Professor, Department of Biotechnology, Yonsei University

Dr. Qingzhong Kong, Ph.D. Current position- Assistant Professor, Case Western University Medical School

Dr. Hancheng Guan, Ph.D. Current position- Postdoctoral Associate, University of Pennsylvania

Dr. Jianlong Wong, Ph.D. Current position- Postdoctoral Associate, Harvard University

Ms. Jill Zhang, MA. (Fourth Year) PhD. Program, Cell Biology and Molecular Genetics

Ms. Fengli Zhang, MA (Fourth Year) PhD. Program, Cell Biology and Molecular Genetics

Mr. Xiaoping Sun (Third Year) PhD. Program, Cell Biology and Molecular Genetics

Mr. John McCormack (Third Year) PhD. Program, Cell Biology and Molecular Genetics

Postdoctoral Researchers

Dr. Joel Kreps, Post-doctoral Associate, 1992-1996 Current position, Senior Scientist, Novartis

Dr. Clifford D. Carpenter, Research Associate, 1987-1998 Current position, Senior Research Associate University of Massachusetts

Dr. Peter Nagy, Post-doctoral Associate, 1996-1998 Current position, Assistant 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. Sohrab Bodhagi 2000-2001

Dr. Guohua Zhang 1999-

Dr. Vera Stupina 2003-

Current and Past Professional Scientists Under My Direction

Dr. Jozsef Burgyan, 1999 Visiting Scientist from ABC, Godollo, Hungary

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

College of Life Sciences Search Committee- College Development Officer (2004)
University APT Committee (2004-)
Kirwan Undergraduate Education Award Committee (2003)
Faculty Senate (2002-2003)
Gemstone mentor (2001-)
Head, Virology Specialization Graduate Program (2001-)
Organizer of the Annual Virology Program Retreat (2001-)
Dean's advisory committee (2000-)
College Undergraduate education committee (2001)
Department undergraduate education committee (2000-2002)
University Kirwan Research and Scholarship Prize Committee (2001)
Department personnel committee (2001-)
New Building committee (2000)
Head, Microbiology SAC (2000)

Publications

Peer-Reviewed Journals:

1. Sun, X., and Simon, A. E. (2004) Short internal motifs involved in RNA accumulation and virion repression in a subviral RNA associated with Turnip crinkle virus. Manuscript in preparation
2. Zhang, J., Stuntz, R. M., and Simon, A. E. (2004) Analysis of a viral replication repressor: Sequence requirements in the large symmetrical loop. Manuscript submitted.
3. McCormack, J., Zhang, J., Stuntz, R. and Simon, A. E. (2004) Hypermutability of an RNA virus caused by mutations in an untranslated hairpin. ***J. Virol.*** (in press).
4. Zhang G, McCormack JC, Zhang J, Simon AE. (2004). Repression and derepression of minus-strand synthesis in a plus-strand RNA virus replicon. ***J. Virol.*** (in press).
5. 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.
6. 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. Virology*** 77, 7880-7889.
7. 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.
8. 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.
9. 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.

10. 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.
11. 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.
12. Yoshinari, S., Nagy, P. D., Simon, A. E., and Dreher, T. W. (2000) Control of positive strand RNA viral transcription by -CCA- initiation boxes. *RNA* **6**, 698-707.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.

27. 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
28. 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.
29. Carpenter, C. D., and Simon, A. E. (1996) Repair of deletions at the 3' end of a TCV satellite RNA in vivo may involve two abortive synthesis events. *Virology* **226**, 153-160.
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.
35. Song, C., and Simon, A. E. (1995) Synthesis of novel products in vitro by an RNA-dependent RNA polymerase. *J. Virol.* **69**. 4020-4028.
36. 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.
37. Zhang, C., and Simon, A. E. (1994) Effect of template size on replication of defective interfering RNAs. *J. Virol.* **68**, 8466-8469.
38. 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.
39. Carpenter, C.D. and Simon, A.E. (1994) Recombination between plus and minus strands of turnip crinkle virus. *Virology* **201**, 419-423.
40. 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.
41. 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.
42. 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.

43. Zhang, C., Cascone, P.J. and Simon, A.E. (1991) Recombination between satellite and genomic RNAs of turnip crinkle virus. *Virology* **184**, 791-794.
44. 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.
45. 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.
46. Carpenter, C.D., Cascone, P.J., and Simon, A.E. (1991) Formation of multimers of linear satellite RNAs. *Virology* **183**, 586-594.
47. 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.
48. 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.
49. Carpenter, C.D. and Simon, A.E. (1990) Simplified RNA sequencing using dideoxy chain termination. *Biotechniques* **8**, 8-9.
50. 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.
51. 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.
52. Simon, A.E. and Howell, S.H. (1987) Synthesis *in vitro* of infectious RNA copies of the virulent satellite of turnip crinkle virus. *Virology* **156**, 146-152.
53. Simon, A.E. and Howell, S.H. (1986) The virulent satellite RNA of turnip crinkle virus has a major domain homologous to the 3'-end of the helper virus genome. *EMBO J.* **5**, 3423-3428.
54. Simon, A. E., Tenbarge, K. M., Scofield, S. R., Finkelstein, R. R., and Crouch, M. L. (1985) Nucleotide sequence of a cDNA clone of *Brassica napus* 12S storage protein shows homology with legumin from *Pisum sativum*. *Plant Mol. Biol.* **5**, 191-201.
55. Crouch, M. L., Tenbarge, K. M., Simon, A. E., and Ferl, R. J. (1983) cDNA clones for *Brassica napus* seed storage proteins: evidence from nucleotide sequence analysis that both subunits of napin are cleaved from a precursor polypeptide. *Mol. and Applied Genet.* **2**, 273-283.
56. Simon, A.E., Taylor, M.W., and Bradley, W.E.C. (1983) Mutation at the *aprt* locus in CHO cells: Analysis of heterozygous and hemizygous cell lines. *Mol. and Cell. Biol.* **3**, 1703-1710.
57. Simon, A.E. and Taylor, M.W. (1982) High-frequency mutation at the adenine phosphoribosyltransferase locus due to deletion of the gene. *Proc. Natl. Acad. Sci. USA* **80**, 810-814.
58. Simon, A.E., Taylor, M.W., Bradley, W.E.C., and Thompson, L.H. (1982) Model involving gene inactivation in the generation of autosomal recessive mutants in mammalian cells in culture. *Mol. Cell. Biol.* **2**, 1126-1133.

Review Articles:

1. Simon, A. E., Roossinck, M. J., and Havelda, Z. (2004). Plant virus satellite and defective interfering RNAs: new paradigms for a new century. *Annu. Rev. Phytopath.* (in press).
2. Simon, A. E. and Nagy, P. D (1997) New insights into the mechanisms of RNA recombination. *Virology* **235**, 1-9.
3. Simon, A. E. and Nagy, P. D (1997) Recombination in the turnip crinkle virus system. *Sem. Virol.* **7**, 373-379.
4. Simon, A.E. and Bujarski, J.J. (1994) RNA recombination and evolution in infected plants. *Annu. Rev. Phytopath.* **32**, 337-362.
5. Roux, L., Simon, A.E. and Holland, J.J. (1991) Effects of defective interfering viruses on virus replication and pathogenesis in vitro and in vivo. *Advances in Virus Research* **40**, 181-211.
6. Simon, A.E. (1988) Satellite RNAs of plant viruses. *Plant Molec. Biol. Reporter* **64**, 240-252.
7. Simon, A.E. and Taylor, M.W. (1983) Mechanism of mutation at the APRT locus. *Progress in Nucleic Acid Research and Molecular Biology* **29**, 42-47.

Books:

Simon, A. E. (1999) The Real Science Behind the X-Files: Microbes, Meteorites and Mutants. 300 pp. Simon and Schuster, NY

Book Chapters:

1. Simon, A. E. (2001) Genus Carmovirus (Tombusviridae). The Springer Index of Viruses.
1. Simon, A. E. (1999). Replication, recombination, and symptom-modulation properties of the satellite RNAs of turnip crinkle virus. Current Topics in Microbiology & Immunology. 239:19-36, 1999.
2. Simon, A. E., Nagy, P. D., and Carpenter, C. D. (1998). Studies of RNA recombination in vivo and in vitro. Proceedings of the OECD Workshop on Potential Ecological Impact of Transgenic Plants Expression Viral Sequences. Springer Verlag.
3. Carpenter, C. D., and Simon, A. E. (1998) Preparation of RNA. Methods in Molecular Biology, J. M. Walker, ed. Humana Press, in press.
4. Kong, Q., and Simon, A. E. (1998) In situ hybridization to RNA in whole Arabidopsis plants. Methods in Molecular Biology, J. M. Walker, ed. Humana Press, in press.
5. Simon, A.E., Cascone, P.J., Zhang, C. and Carpenter, C.D. (1995) RNA recombination in the turnip crinkle virus system. Fifth International Symposium on Biotechnology. D. D. Biolls and S. Kung, eds. pp 217-230.
6. Simon, A.E. (1995) Virus-Arabidopsis Interactions. In: Arabidopsis, E. Meyerowitz and C. Somerville, eds. Cold Spring Harbor Press, pp 685-704.
7. Simon, A.E. (1995) Turnip crinkle virus. In: Compendium of Brassica Crop Diseases. APS Press.

8. Simon, A.E., Polacco, M., Li, X.H., Lew, J.E., Stange, R.E., and Carpenter, C.D. (1993) *Arabidopsis thaliana* and turnip crinkle virus: A model plant-pathogen system. Arabidopsis thaliana as a model for plant-pathogen interactions. Davis, K.R., and Hammersmidt, R., eds. APS Symposium Series. APS Press. Pp. 85-97.
9. Simon, A.E., Engel, H, and Howell, S.H. (1989) Turnip crinkle virus satellite domains involved in virulence and processing. In: Molecular Biology of Plant Pathogen Interactions. UCLA Symposia on Molecular and Cellular Biology. New Series, Vol 101. Eds. B. Staskowitz, P. Ahlquist and O. Yoder. Alan R. Liss Inc. New York, NY. pp. 217-227.
10. Finkelstein, R.R., DeLisle, A.J., Simon, A.E., and Crouch, M. L. (1986) Role of abscisic acid and restricted water uptake during embryogeny in Brassica. 1986 UCLA Symposium. Alan R. Liss Inc. New York, NY.
11. Crouch, M.L., Tenbarger, K., Simon, A., Finkelstein, R., Scofield, S., and Solberg, L. (1985) Storage protein mRNA levels can be regulated by abscisic acid in *Brassica* embryos. In Molecular Form and Function of the Plant Genome. L. Van Vloten-Doting, G.S.P. Groot, and T.C. Hall, Eds. Plenum Pub. pp. 555-566.
12. Taylor, M.W., Simon, A.E., and Khotari, R.H. (1985) The APRT System. In: Molecular and Cell Genetics Michael Gottesmann, Ed. John Wiley and Sons, Inc., New York, pp. 311-332.
13. Crouch, M., Tenbarger, K. and Simon, A. (1984) Molecular cloning of the mRNA sequences for the storage proteins of *Brassica napus*. 6^e Congres International sur le Colza. pp 613-618.
14. Simon, A.E. and Taylor, M.W. (1984) Correlation between a mutant APRT protein and altered DNA in CHO cells. Purine Metabolism in Man IV. Plenum Press. pp. 391-395.