

# CURRICULUM VITAE

Stanton Bruce Gelvin

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## Education:

A.B. (1970) Columbia University New York, N.Y. Major: Biology  
M.Phil. (1973) Yale University New Haven, Conn. Department of Molecular  
Biophysics and Biochemistry Advisor: Dr. William C. Summers  
Ph.D. (1977) University of California, San Diego La Jolla, California  
Department of Biology Advisor: Dr. Stephen H. Howell

Post-doctoral Research Associate (1977-78) University of California,  
San Diego La Jolla, California Laboratory of Dr. Stephen H. Howell  
Post-doctoral Research Associate (1978-1981) University of Washington  
Seattle, Washington Laboratory of Dr. Eugene W. Nester

## Academic Positions:

Assistant Professor (1981-1985) Purdue University, West Lafayette, Indiana  
Associate Professor (1985-1991) Purdue University, West Lafayette, Indiana  
Professor (1991-present) Purdue University, West Lafayette, Indiana

## Related Work Experience:

Undergraduate Research: Columbia University New York, N.Y. (1969-70)  
Laboratories of Drs. David Zipser and Ronald Sederoff  
Laboratory Technician: Yale University New Haven, Conn. (1973)  
Laboratory of Dr. Yale Nemerson

## Awards and Honors:

Damon Runyon-Walter Winchell Cancer Fund Post-doctoral Fellowship  
Presidential Young Investigator Award, National Science Foundation

## Editorships:

Associate Editor: Plant Molecular Biology 1985-1994  
Senior Editor: Molecular Plant/Microbe Interactions 1992-1994  
Editor-in-Chief: Molecular Plant/Microbe Interactions 1995-1998

## Panel Memberships:

USDA Competitive Grants Program: Plant Growth and Development  
1985-1987; Plant Pathology 1992; Plant Genome 1994

## Memberships:

American Association for the Advancement of Science  
American Phytopathological Society  
American Society of Plant Physiologists  
International Society of Molecular Plant-Microbe Interactions  
International Society of Plant Molecular Biologists

## Research Interests:

Molecular Biology of Plant Systems, Crop Productivity Improvement by  
Molecular Techniques (Genetic Engineering), Crown Gall Tumorigenesis,  
Plant-microbe Interactions

## PUBLICATIONS

- Gelvin, S. 1977. The Isolation of the Messenger RNA and the Cloning of the Gene Coding for the Large Subunit of D-ribulose-1, 5-bisphosphate Carboxylase from *Chlamydomonas reinhardi*. Thesis, University of California, San Diego.
- Howell, S. H., P. Heizmann, and S. Gelvin. 1976. Localization of the gene coding for the large subunit of ribulose biphosphate carboxylase on the chloroplast genome of *Chlamydomonas reinhardi*, p. 625-628. In T. Bucher, W. Neupert, W. Sebald, and S. Werner (eds). Genetics and Biogenesis of Chloroplasts and Mitochondria. Elsevier/North Holland Biomedical Press, Amsterdam.
- Howell, S. H., P. Heizmann, S. Gelvin, and L. L. Walker. 1977. Identification and properties of the messenger RNA activity in *Chlamydomonas reinhardi* coding for the large subunit of D-ribulose-1, 5-bisphosphate carboxylase. Plant Physiol. 59:464-470.
- Gelvin, S. and S. H. Howell. 1977. Identification and precipitation of the polyribosomes in *Chlamydomonas reinhardi*, involved in the synthesis of the large subunit of D-ribulose-1,5-bisphosphate carboxylase. Plant Physiol. 59:471-477.
- Gelvin, S., P. Heizmann, and S. H. Howell. 1977. Identification and cloning of the chloroplast gene coding for the large subunit of ribulose-1, 5-bisphosphate carboxylase from *Chlamydomonas reinhardi*. Proc. Natl. Acad. Sci. U.S.A. 74:3193-3197.
- Howell, S. H., P. Heizmann, and S. Gelvin. 1977. Properties of the mRNA and localization of the gene coding for the large subunit of ribulose biphosphate carboxylase in *Chlamydomonas reinhardi*, p. 313-318. In Acides Nucleiques et Synthese des Proteines chez les Vegetaux. Editions du C.N.R.S., Paris.
- Howell, S. H. and S. Gelvin. 1978. The messenger RNAs and genes coding for the small and large subunits of RUBPCase in *Chlamydomonas reinhardi*, p. 363-378. In H. W. Siegelman and G. Hind (eds.), Photosynthetic Carbon Assimilation. Plenum Pub. Corp., New York and London.

- Gelvin, S. and S. H. Howell. 1979. Small repeated sequences in the chloroplast genome of *Chlamydomonas reinhardtii*. *Mol. Gen. Genet.* 173:315-322.
- Stuart, K. and S. B. Gelvin. 1980. Kinetoplast DNA of normal and mutant *Trypanosoma brucei*. *Am. J. Trop. Med. Hyg.* 29:1075-1089. (Suppl.)
- Chilton, M. -D., J. McPherson, R. K. Saiki, M. F. Thomashow, R. C. Nutter, S. B. Gelvin, A. L. Montoya, D. J. Merlo, F. -M. Yang, D. J. Garfinkel, E. W. Nester, and M. P. Gordon. 1981. Characteristics of T-DNA in crown gall tumors, p. 115-133. *In* I. Rubenstein (ed.). *Emergent Techniques for Plant Genome Modification*. University of Minnesota Press.
- Gelvin, S. B., M. P. Gordon, E. W. Nester, and A. I. Aronson. 1981. Transcription of the *Agrobacterium* Ti plasmid in the bacterium and in crown gall tumors. *Plasmid* 6:17-29.
- Gelvin, S. B., M. F. Thomashow, J. C. McPherson, M. P. Gordon, and E. W. Nester. 1982. Sizes and map positions of several plasmid-DNA-encoded transcripts in octopine-type crown gall tumors. *Proc. Natl. Acad. Sci. U.S.A.* 79:76-80.
- Aldrich, J., S. Gelvin, and R. A. Cattolico. 1982. Extranuclear DNA of a marine chromophytic alga. *Plant Physiol.* 69:1189-1195.
- Nester, E. W., D. J. Garfinkel, S. B. Gelvin, A. L. Montoya, and M. P. Gordon. 1982. A mutational and transcriptional analysis of a tumorinducing plasmid of *Agrobacterium tumefaciens*, p. 467-476. *In* R. C. Clowes, S. B. Levy, and E. L. Koenig (eds.), *Molecular Biology, Pathogenicity, and Ecology of Bacterial Plasmids*. Plenum Publishing Corp., New York.
- Stuart, K. and S. B. Gelvin. 1982. Location of kinetoplast DNA maxicircle transcripts in bloodstream and procyclic form *Trypanosoma brucei*. *Mol. Cell. Biol.* 2:845-852.
- Gelvin, S. B., S. J. Karcher, and V. J. DiRita. 1983. Methylation of the T-DNA in *Agrobacterium tumefaciens* and in several crown gall tumors. *Nucleic Acids Res.* 11:159-174.
- Gelvin, S. B., S. J. Karcher, V. J. DiRita, E. W. Taliercio. 1983. Transcription of the Ti-plasmid in Crown Gall Tumors, p. 292-302. *In* A. Puhler (ed.), *Molecular Genetics of the Bacteria-Plant Interaction*. Springer-Verlag, Berlin/Heidelberg/New York/Tokyo.
- Goldsbrough, P. B., S. J. Karcher, S. B. Gelvin, and B. A. Larkins. 1983. Introduction of a zein gene into the Ti-plasmid of *Agrobacterium-tumefaciens*. *UCLA Symposia on Molecular and Cellular Biology, New Series, 12: Plant Mol. Biol.* 34-43.
- Karcher, S. J., V. J. DiRita, and S. B. Gelvin. 1984. Transcript analysis of TR-DNA in octopine-type crown gall tumors. *Mol. Gen. Genet.* 194:159-165.
- Komro, C. T., V. J. DiRita, S. B. Gelvin, and J. D. Kemp. 1985. Site-directed mutagenesis of the TR-DNA region of octopine-type Ti-plasmids. *Plant Mol. Biol.* 4:253-263.
- Virts, E. L. and S. B. Gelvin. 1985. Analysis of the transfer of the Ti-plasmid from *Agrobacterium tumefaciens* to *Petunia* protoplast. *J. Bacteriol.* 162:1030-1038.
- Gelvin, S. B., S. J. Karcher, and P. B. Goldsbrough. 1985. Use of a TR T-DNA promoter to express genes in plants and bacteria. *Mol. Gen. Genet.* 199:240-248

- Taliercio, E. W., D. Coates, and S. B. Gelvin. 1985. The nucleosome structure of the rRNA genes of some tumorous and nontumorous *Nicotianacell* lines. *Plant Mol. Biol.* 5:247-255.
- Goldsbrough, P. B., S. B. Gelvin, and B. A. Larkins. 1986. Expression of maize zein genes in transformed sunflower cells. *Mol. Gen. Genet.* 202:374-381.
- Veluthambi, K., R. K. Jayaswal, and S. B. Gelvin. 1986. Role of *vir* genes in the excision of T-DNA from the Ti-plasmid, p. 319-324. In D. P. Verma and N. Brisson (eds.), *Molecular Genetics of Plant-Microbe Interactions*. Martinus Nijhoff Publishers, Dordrecht, Boston, Lancaster.
- DiRita, V. J. and S. B. Gelvin. 1987. Deletion analysis of the mannopinesynthase gene promoter in sunflower crown gall tumors and *Agrobacterium tumefaciens*. *Mol. Gen. Genet.* 207:233-241.
- Coates, D., E. W. Taliercio, and S. B. Gelvin. 1987. Chromatin structure of integrated T-DNA in crown gall tumors. *Plant Mol. Biol.* 8:159-168.
- Veluthambi, K., R. K. Jayaswal, and S. B. Gelvin. 1987. Virulence genes A, G, and D mediate the double-stranded border cleavage of T-DNA from the *Agrobacterium* Ti plasmid. *Proc. Natl. Acad. Sci. USA* 84:1881-1885.
- Jayaswal, R. K., K. Veluthambi, S. B. Gelvin, and J. L. Slightom. 1987. Double-stranded cleavage of T-DNA and generation of single-stranded T-DNA molecules in *Escherichia coli* by a *virD*-encoded border-specific endonuclease from *Agrobacterium tumefaciens*. *J. Bacteriol.* 169:5035-5045.
- Orser, C. S., B. Goodner, H. M. Johnston, S. B. Gelvin, and L. N. Csonka. 1988. The *Escherichia coli proB* gene corrects the proline auxotrophy of *Saccharomyces cerevisiae pro1* mutants. *Mol. Gen. Genet.* 212:124-128.
- Csonka, L. N., S. B. Gelvin, B. W. Goodner, C. S. Orser, D. Siemieniak, and J. L. Slightom. 1988. Nucleotide sequence of a mutation in the *proB* gene of *Escherichia coli* that confers proline overproduction and enhanced tolerance of osmotic stress. *Gene* 64:199-205.
- Veluthambi, K., W. Ream, and S. B. Gelvin. 1988. Virulence genes, borders, and overdrive generate single-stranded T-DNA molecules from the A6 Ti plasmid of *Agrobacterium tumefaciens*. *J. Bacteriol.* 170:1523-1532.
- Leisner, S. M. and S. B. Gelvin. 1988. Structure of the octopine synthase upstream activator sequence. *Proc. Natl. Acad. Sci. USA* 85:2553-2557.
- Gelvin, S. B. 1988. Plant biotechnology news and views. *Plant Mol. Biol.* 11:73-75.
- Ji, J. M., K. Veluthambi, S. B. Gelvin, W. Ream. 1988. The *A. tumefaciens* T-DNA transmission enhancer, overdrive, stimulates T-DNA accumulation, p. 11-18, In N. T. Keen, T. Kosuge, L. L. Walling (eds), *Physiology and Biochemistry of Plant-Microbial Interactions*. ASPP Press, Rockville.
- Ji, J. M., A. Martinez, M. Dabrowski, K. Veluthambi, S. B. Gelvin, W. Ream. 1988. The overdrive enhancer sequence stimulates production of T-strands from the *Agrobacterium tumefaciens* tumor-inducing plasmid. In B. Staskawicz, T. Alhquist, and O. Yoder (eds.), *Molecular Biology of Plant-Pathogen Interactions*. UCLA Symposia on Molecular and Cellular Biology. New Series, 101, in press.

- Williamson, J. D., G. Galili, K. L. Shaw, B. A. Larkins, and S. B. Gelvin. 1988. The synthesis of a 19kD zein protein in transgenic *Petunia* plants. *Plant Physiol.* 88:1002-1007.
- Veluthambi, K., M. Krishnan, J. H. Gould, R. H. Smith, and S. B. Gelvin. 1989. Opines stimulate the induction of the *vir* genes of the *Agrobacterium tumefaciens* Ti-plasmid. *J. Bacteriol.* 171:3696-3703.
- Williamson, J. D., M. E. Hirsch-Wyncott, B. A. Larkins, and S. B. Gelvin. 1989. Differential accumulation of a transcript driven by the CaMV 35S promoter in transgenic tobacco. *Plant Physiol.* 90:1570-1576.
- Leisner, S. M. and S. B. Gelvin. 1989. Multiple domains exist within the upstream activator sequence of the octopine synthase gene. *Plant Cell* 1:925-936.
- Chang, C.-C., R. K. Jayaswal, C.-M. Chen, and S. B. Gelvin. 1989. Altered imino diacid synthesis and transcription in crown-gall tumors with transposon Tn $\underline{5}$  insertions in the 3' end of the octopine synthase gene. *J. Bacteriol.* 171:5922-5927.
- Gelvin, S. B. 1990. Crown gall disease and hairy root disease: A sledgehammer and a tackhammer. *Plant Physiol.* 92:281-285.
- Gelvin, S. B., and L. L. Habeck. 1990. *Vir* genes influence the conjugal transfer of the Ti-plasmid of *Agrobacterium tumefaciens*. *J. Bacteriol.* 172:1600-1608.
- Wallace, J. C., T. Ohtani, C. R. Lending, M. Lopes, J. D. Williamson, K. L. Shaw, S. B. Gelvin, and B. A. Larkins. 1990. Factors affecting physical and structural properties of maize protein bodies. *Plant Gene Transfer*, pp. 205-216.
- Rong, L., S. J. Karcher, K. O'Neal, M. C. Hawes, C. D. Yerkes, R. K. Jayaswal, C. A. Hallberg, and S. B. Gelvin. 1990. *picA*, A novel plant-inducible gene on the *Agrobacterium tumefaciens* chromosome. *J. Bacteriol.* 172:5828-5836.
- Rong, L., S. J. Karcher, and S. B. Gelvin. 1991. Genetic and molecular analyses of *picA*, a plant-inducible locus on the *Agrobacterium tumefaciens* chromosome. *J. Bacteriol.* 173:5110-5120.
- Krishnan, M., W. S. Chilton, J. W. Burgner, and S. B. Gelvin. 1991. Transport of nonmetabolizable opines by *Agrobacterium tumefaciens*. *J. Bacteriol.* 173:903-905.
- Kononowicz, H., E. Wang, L. L. Habeck, and S. B. Gelvin. 1992. Subdomains of the octopine synthase upstream activating element direct cell-specific expression in transgenic tobacco plants. *Plant Cell.* 4:17-27.
- Gray, J., J. Wang, and S. B. Gelvin. 1992. Mutation of the *miaA* gene of *Agrobacterium tumefaciens* results in reduced *vir* gene expression. *J. Bacteriol.* 174:1086-1098.
- Filichkin, S. A., and S. B. Gelvin. 1992. Effect of dimethylsulfoxide concentration on specificity of primer matching in the polymerase chain reaction. *BioTechniques* 12:828-830.
- Li, X.-Q., C.-N. Liu, S. W. Ritchie, J.-Y. Peng, S. B. Gelvin, and T. K. Hodges. 1992. High efficiency transient transformation of rice by *Agrobacterium tumefaciens*. *Plant Mol. Biol.* 20:1037-1048.

- Liu, C.-N., X.-Q. Li, and S. B. Gelvin. 1992. Multiple copies of *virG* enhance the transient transformation of celery, carrot, and rice tissues by *Agrobacterium tumefaciens*. *Plant Mol. Biol.* 20:1071-1087.
- Hood, E. E., S. B. Gelvin, L. S. Melchers, and A. Hoekema. 1993. New *Agrobacterium* helper plasmids for gene transfer to plants. *Transgenic Research* 2:208-218.
- Ritchie, S. W., C.-N. Liu, J. C. Sellmer, H. Kononowicz, T. K. Hodges, and S. B. Gelvin. 1993. *Agrobacterium tumefaciens*-mediated *gusA* expression in maize tissues. *Transgenic Research* 2:252-265.
- Liu, C.-N., T. R. Steck, L. L. Habeck, J. A. Meyer, and S. B. Gelvin. 1993. Multiple copies of *virG* allow induction of *Agrobacterium tumefaciens* *vir* genes and T-DNA processing at alkaline pH. *Molecular Plant-Microbe Interactions.* 6:144-156.
- Filichkin, S. A. and S. B. Gelvin. 1993. Formation of a putative relaxation intermediate during T-DNA processing directed by the *Agrobacterium tumefaciens* VirD1,D2 endonuclease. *Mol. Microbiol.* 8:915-926.
- Rong, L., N. C. Carpita, A. Mort, and S. B. Gelvin. 1994. Soluble cell wall compounds from carrot roots induce the *picA* and *pgl* loci of *Agrobacterium tumefaciens*. *Molecular Plant-Microbe Interactions.* 7:6-14.
- Yusibov, V. M., T. R. Steck, V. Gupta, and S. B. Gelvin. 1994. Association of single-stranded transferred DNA from *Agrobacterium tumefaciens* with tobacco cells. *Proc. Natl. Acad. Sci. U.S.A.* 91:2994-2998.
- Ni, M., D. Cui, J. Einstein, S. Narasimhulu, C. Vergara, and S.B. Gelvin. 1995. Strength and tissue specificity of chimaeric promoters derived from the octopine and mannopine synthase genes. *Plant J.* 7:661-676.
- Ni, M., Cui, D., and Gelvin, S.B. 1996. Sequence-specific interactions of wound-inducible nuclear factors with mannopine synthase 2' promoter wound-responsive elements. *Plant Mol. Biol.* 30:77-96.
- Gray, J., Gelvin, S.B., Meilan, R., and Morris, R.O. 1996. Transfer RNA is the source of extracellular isopentenyladenine in a Ti-plasmidless strain of *Agrobacterium tumefaciens*. *Plant Physiol.* 110:431-438.
- Narasimhulu, S.B., Deng, X.-B, Sarria, R., and Gelvin, S.B. 1996. Early transcription of *Agrobacterium tumefaciens* T-DNA genes in tobacco and maize. *Plant Cell* 8:873-886.
- He, S., Abad, A., Gelvin, S., and Mackenzie, S. 1996. A CMS-associated mitochondrial protein causes pollen disruption in transgenic tobacco. *Proc. Natl. Acad. Sci. USA.* 93:11763-11768.
- Kononov, M.E., Bassuner, B., and Gelvin, S.B. 1997. Integration of T-DNA binary vector "backbone" sequences into the tobacco genome: Evidence for multiple complex patterns of integration. *Plant J* 11:945-957.
- Nam, J., Matthyse, A.G., and Gelvin, S.B. 1997. Differences in susceptibility of *Arabidopsis* ecotypes to crown gall disease may result from a deficiency in T-DNA integration. *Plant Cell.* 9:317-333.

- Gelvin, S.B. 1998. The introduction and expression of transgenes in plants. *Curr. Opin. Biotechnol.* *Curr. Opin. Biotechnol.* 9:227-232.
- Mysore, K.S., Bassuner, B., Deng, X-b., Darbinian, N.S., Motchoulski, A., Ream, W., and Gelvin, S.B. 1998. Role of the *Agrobacterium tumefaciens* VirD2 protein in T-DNA transfer and integration. *Mol. Plant-Microbe Interact.* 11:668-683.
- Nam, J., Mysore, K.S., and Gelvin, S.B. 1998. *Agrobacterium* transformation of the radiation hypersensitive *Arabidopsis* mutants *uvh1* and *rad5*. *Mol. Plant-Microbe Interact.* 11:1136-1141.
- Gelvin, S.B. 1998. *Agrobacterium* VirE2 proteins can form a complex with T-strands in the plant cytoplasm. *J. Bacteriol.* 180:4300-4302.
- Gelvin, S.B. 1998. Multigene plant transformation: More is better! *Nature Biotechnol.* 16:1009-1010.
- Lee, L.-Y., Gelvin, S.B., and Kado, C.I. 1999. pSa causes oncogenic suppression of *Agrobacterium* by inhibiting VirE2 protein export. *J. Bacteriol.* 181:186-196.
- Nam, J., Mysore, K.S., Zheng, C., Knue, M., Matthyse, A.G., and Gelvin, S.B. 1999. Identification of T-DNA tagged *Arabidopsis* mutants that are resistant to *Agrobacterium* transformation. *Mol. Gen. Genet.* 261:429-438.
- Mysore, K.S., and Gelvin, S.B. 1999. *Agrobacterium* germ-line transformation bypasses some of the steps involved during conventional root transformation of *Arabidopsis*. Submitted.
- Kononov, M.E., and Gelvin, S.B. 1999. New and improved plant transformation vectors containing the super-promoter. *Plant Mol. Biol.* Submitted.
- Mysore, K.S., Nam, J., and Gelvin, S.B. 1999. An *Arabidopsis* histone H2A mutant is deficient in *Agrobacterium* T-DNA integration. Submitted.
- Tao, Y., Rao, P., and Gelvin, S.B. 1999. A plant phosphatase is involved in nuclear import of the *Agrobacterium* VirD2/T-DNA complex. Submitted.
- Gelvin, S.B. 1999. *Agrobacterium* and plant proteins involved in T-DNA transfer and integration. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* Submitted.
- Lee, L.-Y., and Gelvin, S.B. 1999. Expression of the *osa* gene in transgenic plants makes them resistant to *Agrobacterium* transformation and crown gall disease. Submitted.
- Tao, Y., Rao, P., and Gelvin, S.B. 1999. Ser<sup>394</sup>, a potentially phosphorylated residue of VirD2 protein, plays a role in nuclear import of T-DNA and in crown gall tumorigenesis. In preparation.
- Mysore, K.S., Yi, H.-C., and Gelvin, S.B. 1999. Molecular cloning, characterization, and structural organization of histone H2A genes in *Arabidopsis*. In preparation.
- Mysore, K.S., and Gelvin, S.B. 1999. Transgenic *Arabidopsis* plants expressing *Agrobacterium* VirD2 protein are resistant to *Agrobacterium* transformation. In preparation.
- Kononov, M.E., Bassuner, B., Wang, K., and Gelvin, S.B. 1999. A comparison of the super-promoter with other promoters in maize. In preparation.

Books:

Gelvin, S. B. and R. A. Schilperoort (eds). 1988. Plant Molecular Biology Manual, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S. B., R. A. Schilperoort, and D. P. S. Verma. 1989. Plant Molecular Biology Manual, Supplement 1, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S. B., R. A. Schilperoort, and D. P. S. Verma. 1990. Plant Molecular Biology Manual, Supplement 2, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S. B., R. A. Schilperoort, and D. P. S. Verma. 1991. Plant Molecular Biology Manual, Supplement 3, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S. B., R. A. Schilperoort, and D. P. S. Verma. 1991. Plant Molecular Biology Manual, Supplement 4, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S. B., R. A. Schilperoort, and D.P.S. Verma. 1993. Plant Molecular Biology Manual, Supplement 5, Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S.B., and R.A. Schilperoort. 1994. Plant Molecular Biology Manual. Second Edition. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S.B., and R.A. Schilperoort. 1995. Plant Molecular Biology Manual. Second Edition, Supplement 1. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Gelvin, S.B., and R.A. Schilperoort. 1996. Plant Molecular Biology Manual. Second Edition, Supplement 2. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Ream, W., and S.B. Gelvin. 1996. Crown Gall: Advances in Understanding Interkingdom Gene Transfer. APS Press, St. Paul, MN.

Book Chapters:

Gelvin, S. B. 1984. Plant tumorigenesis, p. 343-377. *In* T. Kosuge and E. W. Nester (eds.), Plant-Microbe Interactions: Molecular and Genetic Aspects, Vol. 1., Macmillan Press, New York.

Gelvin, S. B. 1992. Chemical Signaling Between *Agrobacterium* and Its Plant Host. *in* D. P. S. Verma (ed.) Molecular Signals in Plant-Microbe Interactions. CRC Press, Inc. (Boca Raton, FL). pp 138-167.

Gelvin, S. B. 1993. Molecular Genetics of T-DNA Transfer From *Agrobacterium* to Plants. *in* S.-D. Kung and R. Wu (eds.) Transgenic Plants. Academic Press (New York, NY). pp 49-87.

Gelvin, S.B., and C.-N. Liu. 1994. Genetic manipulation of *Agrobacterium tumefaciens* strains to improve transformation of recalcitrant plant species. *in* S.B. Gelvin and R.A. Schilperoort (eds.) Plant Molecular Biology Manual, Second Edition. Kluwer Academic Publishers, Dordrecht, The Netherlands. pp B4/1-13.



- Gelvin, S.B. and Karcher, S.J. 1996. Reporter genes and transgenic plants to study response to environmental signals. in *Tested Studies for Laboratory Teaching*. Vol. 17 (J. C. Glase, ed.). Proceedings of the 17th Workshop/Conference of the Association for Biology Laboratory Educators (ABLE). pp. 71-84.
- Narasimhulu, S.B., Nam, J., Deng, X.-B., Sarria, R., Ream, W., and Gelvin, S.B. 1996. *Agrobacterium* and plant genes affecting T-DNA transfer and integration. in *Crown Gall: Advances in Understanding Interkingdom Gene Transfer*. (W. Ream and S.B. Gelvin, eds.). APS Press, St. Paul, MN. pp. 99-125.
- Narasimhulu, S., Nam, J., Deng, X.-B., and Gelvin, S.B. 1996. *Agrobacterium* and plant genes affecting T-DNA transfer and integration. in *Biology of Plant-Microbe Interactions*. (G. Stacey, B. Mullin, and P.M. Gresshoff, eds.). APS Press, St. Paul, MN. pp. 127-132.
- Nam, J., and Gelvin, S.B. 1998. *Arabidopsis* ecotypes resistant to crown gall tumorigenesis. in *Horizontal Gene Transfer*. (M. Syvanen and C. Kado, eds.) Chapman-Hall, London.