

Faculty Research Award from American Cancer Society, 1984-1988
Japan Society for Promotion of Science Fellow, 1997
Fellow of the American Academy of Microbiology, 2001
Noel T. Keen Award for Research Excellence in Molecular Plant
Pathology, 2011
Fellow of the American Association for Advancement of Science, 2012

Member: American Association for the Advancement of Science
American Society of Plant Biologists (Physiologists)
International Society for Plant Molecular Biology
International Society for Molecular Plant-Microbe Interaction
American Phytopathological Society
American Society for Microbiology

Editorial Boards: Plant Signaling and Behavior, 2005- 2012
Molecular Plant Pathology, 2000- 2005
Virology, 1985-1998
Plant Physiology, 1996-1997
Journal of Virology, 1989-1995
Molecular and Cellular Biology, 1987-1994
Virus Research, 1983-1989
Journal of Molecular and Applied Genetics, 1981-1984

Teaching: 1973-1974, Head Teaching Fellow for a course in introductory biology, Harvard
University
1981, Course on mRNA metabolism in eukaryotes for graduate students – Univ. of
Utah
1982-1985, Course on gene regulation in prokaryotes and eukaryotes and an
introduction to animal viruses for medical students – Univ. of Utah
1983, Plant molecular biology mini-course, organized together with Raymond
Gesteland – Univ. of Utah
1991 and 1992, Organizer of Cold Spring Harbor Lab course on Molecular and
Developmental Biology of Plants
1986-1994, Director, advanced recombinant DNA techniques course for graduate
students – Rutgers University
1993-2000, Biochemistry and Molecular Biology course for undergraduate and
graduate students – Rutgers University
2008, Current Papers in Plant Biology
2004-present, Problems in Plant Cell & Mol. Biol.

Grants: (Current grants are highlighted)

Institute-wide grants obtained for BTI:

“Molecular and Chemical Ecology Program”		
1/1/02-12/31/06	\$3,994,000*	Atlantic Philanthropies, Inc.
*shared equally with Cornell University and co-authored with T. Eisner and J. Meinwald		
“Plants and Human Health”		
1/1/04-12/31/07	\$1,000,000	Triad Foundation
4/1/03-3/31/04	\$250,000	Triad Foundation
4/1/02-3/31/03	\$250,000	Park Foundation

Plant Research:

“Characterization & utilization of nematode ascaroside (NA)-induced plant immunity”		
4/1/2017 – 3/31/20	\$474,072	USDA
“The Arabidopsis salicylic acid signaling network: A paradigm for phytohormone signaling” – Creativity-based Supplement		
6/1/14 – 5/30/17	\$200,000	
“Reducing losses to potato and tomato late blight by monitoring pathogen populations, improved resistant plants, education and, extension”		
3/1/2011 – 2/28/2016	\$9,000,000	USDA (one of 22 co-IPs)
“The Arabidopsis salicylic acid signaling network: A paradigm for phytohormone signaling”		
6/1/09 - 5/31/14	\$2,279,000	NSF 2010 (w/several co-PIs)
“NO synthase and NO-mediated signaling in plant defense”		
7/1/03 - 6/30/08	\$1,083,000	NIH
"Characterization of salicylic acid binding proteins in plant defense responses"		
8/1/05 - 7/31/09	\$668,000	NSF
8/15/03 - 8/14/05	\$288,000	NSF
9/1/01 - 8/31/02	\$100,000	NSF
9/1/99 - 8/31/01	\$220,000	NSF
"Involvement of salicylic acid inhibition of catalase and ascorbate peroxidase in plant defense responses"		
9/1/96 - 8/31/99	\$300,000	NSF
"Salicylic acid binding proteins"		
9/1/93 - 8/31/95	\$133,000	CIBA-Geigy
9/1/90 - 8/31/93	\$158,000	CIBA-Geigy
"Characterization of the salicylic acid binding protein"		
9/15/92 - 9/14/94	\$105,000	USDA
"Characterization of the salicylic acid signal transduction pathway in plant defense responses"		
9/1/01 - 8/31/05	\$600,000	NSF
10/1/97 - 9/30/01	\$600,000	NSF
8/1/93 - 7/31/97	\$535,000	NSF
"Pathogenesis-related proteins of Nicotiana"		
8/1/90 - 7/31/93	\$412,000	NSF
7/1/87 - 6/30/90	\$300,000	NSF
10/1/85 - 9/30/87	\$110,000	USDA
"Characterization of the <i>Arabidopsis</i> HRT gene, which confers resistance to turnip crinkle virus"		
5/1/07 – 3/31/11	\$680,000	NSF (with Co-PI Pradeep Kachroo)
7/1/03 - 6/30/06	\$300,000	USDA
9/1/99 - 8/3/02	\$225,000	USDA

9/1/97 - 8/31/99	\$120,000	USDA	
"Tobacco <i>SIPK</i> -encoded MAP kinase associated with defense responses to pathogens"			
9/1/98 - 8/31/01	\$190,000	USDA	
"Control of ribulose 1,5-bisphosphate carboxylase gene expression in amaranth/posttranscriptional regulation of chloroplast gene expression"			
8/1/89 - 7/31/91	\$150,000	NSF	
3/1/86 - 8/31/89	\$208,000	NSF	
11/1/82 - 2/28/86	\$189,000	NSF	
"Photoinduction and coordinate expression of ribulose 1,5-bisphosphate carboxylase gene in grain amaranth"			
3/1/83 - 2/28/86	\$105,000	McKnight Scholarship	
<i>Animal DNA Tumor Virus Research:</i>			
"The multi-functional adenovirus DNA binding protein"			
9/1/90 - 8/31/95	\$1,507,000	NIH	
9/1/85 - 8/31/90	\$1,003,000	NIH	
7/1/80 - 8/31/85	\$636,000	NIH	
"Abortive infection of monkey cells by human adenoviruses"			
7/1/88 - 6/30/90	\$160,000	ACS	
1/1/84 - 6/30/87	\$282,000	NIH	
1/1/83 - 12/31/83	\$82,000	ACS	
1/1/81 - 12/31/82	\$150,000	ACS	(American Cancer Society)
"Regulation of gene expression in eukaryotes"			
1/1/84 - 12/31/88	\$155,000	ACS	
Faculty Research Award			
"Control of gene expression in eukaryotes"			
10/1/82 - 2/28/86	\$155,000	Searle Scholarship	

Invited Lectures
at Scientific
Meetings:

- Keynote at Drug Discovery & Therapies World Congress 2016 and Global Biotechnology Congress, Boston, MA 2016
- Keynote at Mid Atlantic Plant Molecular Biology Society meeting, College Park MD 2015
- Keynote on SA and its plant and human targets at PR-IR Workshop, Aachen, Germany 2015
- Second lecture on induction of plant immunity by nematode ascarosides at PR-IR Workshop, Aachen, Germany 2015
- Keynote at Chilean Plant Molecular Biology Meeting, Valdivia, Chile 2015
- XVI Int'l Symposium on Molecular Plant- Microbe Interaction Rhodes, Greece 2014
- Keynote Lecture Korean Society of Plant Pathology Annual Meeting, Suncheon, Korea 2013
- R. R. Nelson Memorial Lecture in Plant Pathology, Penn. State University, State College, PA 2012
- 3rd Sophia Antipolis Workshop on Compatibility Mechanisms in Plant-Microbe Interactions Sophia, France 2011
- PR-Proteins and Induced Resistance Against Pathogens and Insects 2011 – Neuchatel, Switzerland 2011
- Conference on "The Contributions of Plant Biotechnology in Confronting Climate Change" – Tunis, Tunisia 2010
- Int'l Conference on Plant Vascular Biology 2010 – Columbus, OH
- Mol. & Envir. Plant Sciences Symposium – Texas A&M 2010

Keynote: IV Annual Chilean Plant Biology Meeting, LaSerna, Chile – 2009
XII Buenos Aires Plant Biology Lectures – Argentina 2009
Pathogenesis-related Proteins and Induced Resistance Workshop – Doorn,
Netherlands 2007
XIII Int'l Congress on Molecular Plant-Microbe Interactions, Sorrento, Italy 2007
4th Tri-national Arabidopsis Meeting, Vienna, Austria 2007
Roy C. Anderson Memorial Lecture in Parasitology, University of Guelph, Guelph,
Canada 2007
ASPB-Southern section symposium – Daytona, FL 2006 (Keynote Speaker)
Iowa State University Plant Receptor Signaling Symposium – Ames, IA 2006
American Phytopathology Society / Canadian Phytopathology Society Meeting –
Quebec City, Canada 2006
Symposium on “Non-specific and specific innate and acquired plant resistance” –
Budapest, Hungary 2006
Canadian Society of Plant Physiologists – Eastern region meeting – Hamilton,
Canada 2006 (Keynote Speaker)
XII Int'l Congress on Molecular Plant-Microbe Interactions – Cancun, Mexico
2005
American Society for Virology 24th Annual Meeting; Plant Virology Club Satellite
Symposium – State College, PA 2005
Plant Molecular Biology Gordon Research Conference – Plymouth, NH 2004
Juan March Foundation Workshop on Disease Resistance and Related Signaling
Mechanisms in Plants – Madrid, Spain, 2004
International Joint Workshop on PR Proteins and Induced Resistance – Denmark,
2004
Colloquium on Entrepreneurship and Biotechnology: The Coming Revolution”,
Elkhorn, Montana, 2004
Annual Meeting of American Society of Plant Biologists – Orlando, FL, 2004,
Dhirendra Kumar substituted for Dan due to health
Annual Meeting of American Phytopathology Society – Anaheim, CA, 2004,
Dhirendra Kumar substituted for Dan due to health
NATO Advanced Research Workshop on Cell Biology and Instrumentation: UV
Radiation, Nitric Oxide and Cell Death – Yalta, Ukraine, 2004 *David
Wendehenne substituted for Dan due to health*
Iowa State University Symposium – Ames, IA, 2004, *Meena Chandok substituted
for Dan due to health*
15th International Conference on Arabidopsis Research – Berlin, Germany, 2004,
Declined due to health
International Conference on Plant Growth Substances – Canberra, Australia, 2004,
Declined due to health
3rd International Conference on Biology, Chemistry, and Therapeutic Applications
of Nitric Oxide – Nara, Japan, 2004, *Declined due to health*
8th International Congress on Plant Pathology – Keynote Address – Christchurch,
New Zealand, 2003
7th International Congress of Plant Molecular Biology – Barcelona, Spain, 2003
11th International Congress on Molecular Plant-Microbe Interactions – Plenary
Lecture – St. Petersburg, Russia, 2003
Symposium honoring J. D. Watson and the 50th Anniversary of the discovery of the
double-helical structure of DNA – Cold Spring Harbor, NY, 2003
MidAtlantic Plant Molecular Biology Conference – Keynote Address, Beltsville,
MD, 2002
Annual Meeting of Canadian Society of Plant Physiologists, Calgary, Canada, 2002

European Flying Fellowship in Plant Molecular Biology, Cologne, Germany;
Ghent, Belgium; Wageningen, Netherlands; and Gif-sur-Yvette, France,
2002

Annual Meeting of American Phytopathological Society, 2001

10th Congress of the International Society of Molecular Plant-Microbe Interactions,
2001

Annual Meeting of American Society of Plant Biologists, 2001

27th Meeting of FEBS and Pan-American Association of Biochemistry and
Molecular Biology, Lisbon, Portugal, 2001

17th International Conference on Plant Growth Substances, Brno, Czech Republic,
2001

6th International Workshop on Pathogenesis-Related Proteins in Plants, Spa,
Belgium, 2001

Commemorative Symposium of the Center for Plant Molecular Genetics and
Breeding Research, Seoul National University, Korea, 2000

First International Symposium on Induced Resistance to Plant Diseases, Corfu,
Greece, 2000

International Symposium on Plant Signaling 2000, Penn State, 2000

Gatsby Fellow Lecture Series, Sainsbury Laboratory, John Innes Centre, Norwich,
UK, 2000

Keystone Symposium on Signals and Signal Perception in Biotic Interactions in
Plants, 2000

9th International Congress of Molecular Plant-Microbe Interactions, Amsterdam,
Netherlands, 1999

Annual Meeting of the American Society of Virology, 1999

International Symposium on Plant Signal Transduction, New Delhi, India, 1999

U.S. National Academy of Sciences Colloquium on Virulence and Defense in
Host-Pathogen Interactions: Common Features between Plants and
Animals, 1999

Cell Death in Plants: Functions and Mechanisms, Banbury Center Meeting, Cold
Spring Harbor Laboratories, 1999

American Society of Pharmacognosy, Association Française pour l'Enseignement
et la Recherche en Pharmacognosie, Gesellschaft für
Arzneipflanzenforschung and the Phytochemical Society of Europe
sponsored Symposium on 2000 Years of Natural Products Research - Past,
Present and Future. Amsterdam, The Netherlands, 1999

University of Missouri Spring Symposium on Plant Hormones: Signaling and Gene
Expression, 1999

Gordon Research Conference on Antimicrobial Peptides, Barga, Italy, 1999

Juan March Foundation sponsored Meeting on Novel Approaches to Study Plant
Growth Factors, Madrid, Spain, 1998

International Symposium of the Polyphenols Group, Lille, France, 1998

7th International Congress of Plant Pathology, Edinburgh, UK, 1998

International Symposium on Recent Advances and Future Perspectives in Life
Science, Gyeongsang, South Korea, 1998

5th International Workshop on Pathogenesis-Related Proteins in Plants, Aussois,
France, 1998

5th International Congress of Plant Molecular Biology, Singapore, Malaysia, 1997

Congress on In Vitro Biology, Washington, DC, 1997

Joint Meeting of Phytochemical Society of Europe and Phytochemical Society of
North America, Noordwijkerhout, Netherlands, 1997

Keystone Symposium on Metabolic Engineering in Transgenic Plants, 1997

Spring Symposium on Information Processing Systems in Plants, University of California, Davis, 1997
8th International Symposium on Molecular Plant-Microbe Interactions, 1996
15th International Conference on Plant Growth Substances, 1995
4th International Workshop on Pathogenesis-Related Proteins in Plants, Kloster Irsee, Germany, 1995
Workshop on Molecular Biology of Disease Resistance Genes in Plants, Banbury Center, Cold Spring Harbor Laboratories, 1995
COE Symposium on Defense Responses in Plants, Tsukuba, Japan, 1995
Keystone Symposium on Signal Transduction in Plants, 1995
U. S. National Acad. of Science Colloquium on Self-Defense by Plants, 1994
German Botanical Society Biannual Meeting, Bayreuth, Germany, 1994
Annual Meeting of Society of Industrial Microbiologist, 1994
Annual National Meeting of ASPP, 1994
7th International Symposium of Molecular Plant-Microbe Interaction, Edinburgh, UK, 1994
4th International Congress on Plant Molecular Biology, Amsterdam, Netherlands, 1994
Clusius Symposium, Leiden, Netherlands, 1994
Annual Meeting of the Washington Area Section of the ASPP, 1994
Merck Symposium on Antifungal Discovery for Crop Protection, 1994
American Phytopathology Society Symposium, 1993
Gordon Research Conference on Plant Molecular Biology, 1993
British Biochemical Society Annual Symposium, Leeds, UK, 1993
Annual European Federation of Plant Pathologists, Strasbourg, France, 1992
3rd International Workshop on Pathogenesis-Related Proteins in Plants, Arolla, Switzerland, 1992
Annual Meeting of Northeast Section of the ASPP, 1992
Gordon Research Conference on Plant Molecular Biology, 1991
Annual Meeting of American Phytopathological Society, 1990
Gordon Research Conference on Plant Molecular Biology, 1990
Conference on Approaches to Genetic Manipulations in Biology and Medicine, Vienna, Austria, 1990
2nd International Workshop on Pathogenesis-Related Proteins in Plants, Valencia, Spain, 1989
52nd Annual Meeting of the Northeastern Section of the American Society of Plant Physiologists (ASPP), 1988
Second Annual ASM Conference on Biotechnology, 1987
FASEB Summer Research Conference on Plant Gene Expression, 1987
International Workshop on RUBISCO 87 - Genes, Proteins and the Regulation of Activity, 1987
Gordon Research Conference on Plant Molecular Biology, 1987
Gordon Research Conference on Plant Molecular Biology, 1986
Viruses as Models for Eukaryotic Gene Expression: ICN-UCI Symposium, 1986
Translational Regulation Meeting at CSH Lab, 1985
DNA Tumor Viruses: Control of Gene Expression and Replication Meeting at CSH Lab, 1985
Chairperson of Adenovirus Transcription Session - Annual SV40, Polysoma, Adenovirus Meeting at CSH Lab, 1982
Symposium on RNA Splicing - ASM Annual Meeting, 1978

Daniel F. Klessig

Committees: Member of Advisory Panel for Eukaryotic Genetics of NSF, 1988-1996
Member of Advisory Panel for Science and Technology Center for NSF, 1989
Basic Research Advisory Group for the New Jersey Commission on Cancer
Research, 1987 - 1995
Ad hoc member of Virology Study Section of NIH, 1983
Peer Review Member, Boyce Thompson Institute, 1998
Review Committee for Life Sciences at Brookhaven National Laboratory, 2000
Several site visit teams

University of Utah
Committees:

Biochemistry Chairperson Search Committee, 1982-1983
Steering Committee for the B.S. - M.S. Program in Molecular Biology and
Genetic Engineering, 1982-1983
Departmental Seminar Chairperson, 1980-1983
Genetics Postdoctoral Fellowship Committee, 1981-1985

Rutgers University
Committees:

Faculty Senate, 1990-1993
Executive Committee for the Graduate School, 1992-1994
University Appointments and Promotion Committee, 1996-1998
Ad hoc Committee for Consolidation of Graduate Programs in the Biological
Sciences, 1993-1994
Search Committee for Dean of Faculty of Arts and Sciences, 1990
Government Relationship Committee, 1988-1989
University Advisory Committee for the J & J Discovery Research Fund, 1988-1990
Executive Committee of Biochemistry Graduate Program, 1990-1993
Executive Committee of Biochemistry and Molecular Biology Graduate Program,
1987-1990
Recruitment Committee of Microbiology and Molecular Genetics Graduate
Program, 1989-1992
Faculty Search Committee for the Center for Advanced Biotechnology and
Medicine, 1986-1990
Molecular Biology and Biochemistry Chairperson Search Committee, 1986-1987
Molecular Biology and Biochemistry Faculty Search Committee, 1990-1992
Molecular Biology and Biochemistry Planning and Policy Committee,
1990-2000
Chair of Appointments and Promotion Committee for Waksman Institute,
1994-2000
Appointments and Promotion Committee for Waksman Institute
1986-1988
1991-1994
Chairman of Faculty Search Committee for Waksman Institute
1986-1987
1989-1990
1992-1994
Chair, Busch Fund and Fellowship Committee for Waksman Institute, 1988-1991
Busch Funds Committee for Waksman Institute, 1986-1988
Lectures and Seminars Committee for Waksman Institute, 1986-1988

Cornell University

Committees:

Provost's Life Science Advisory Counsel, 2000-2003
Governing Board of Center for the Environment, 2000-2002
Environmental Sustainability Committee, 2001

Lab Personnel:

Postdoctoral Fellows:

Kevin Anderson	1980-1984	Shuqun Zhang	1995-1998
Robert Boone	1981-1983	He Du	1995-1998
Basil Nikolau	1983-1985	Jihad Attieh	1998
Jeffrey Johnston	1984-1985	Michael Cooley*	1996-1999
Karl Voelkerding	1984-1986	Robert Noad	1998-1999
Guo-shun He	1986-1987	Gaza Salih	1998-1999
James Berry	1982-1988	Susan Rasmussen	1999-2000
Fumio Tashiro	1986-1988	Youssef Trifa	1999-2000
Nathalie Morin	1986-1989	Yanhong Liu	1997-2001
Claude Delsert	1986-1989	Roy Navarre	1997-2001
John Carr	1984-1989	Shashi Sharma	1998-2001
Mary Metzler	1988-1989	David Slaymaker	1999-2001
David Breiding	1985-1990	Pradeep Kachroo*	1997-2002
Ralph Dewey	1987-1990	Yumiko Shirano	1998-2002
John Cutt	1986-1991	Hui-Ju Wu	1998-2002
Jacek Hennig	1990-1992	Frank Menke	1999-2002
John Martyn	1992-1993	Jeong Mee Park	2000-2002
Paloma Sanchez-Casas	1992-1993	Joseph Kuhl	2000-2002
Joseph Ricigliano	1989-1993	Keiko Yoshioka*	1998-2003
Kristin Wobbe	1991-1994	Wolfgang Möder	2000-2003
John Tonkyn	1992-1995	Meena Chandok*	2000-2004
Andrew Bendall	1993-1995	Dhirendra Kumar*	1998-2005
Uwe Conrath	1993-1995	Jitae Kim	2003-2005
Hideki Takahashi	1994-1995	Fasong Zhou*	2001-2005
Zhixiang Chen*	1990-1995	Corina Vlot	2003-2006
Marc Anderson	1995-1996	Miaoying Tian	2005-2006
Ailan Guo	1993-1997	Yongzeng Wang	2004-2007
Sudam Pathirana	1994-1997	Evans Kaimoyo	2005-2007
Yinong Yang	1994-1997	Hong-Gu Kang*	2000-2011
Ismael Rodrigo	1996-1998	Magali Moreau*	2005-2013
David Wendehenne	1996-1998	Patricia Manosalva*	2007-2014
Jyoti Shah	1992-1998	Po-Pu Liu*	2007-2012
Jörg Durner*	1994-1998	Caroline von Dahl	2007-2011
Gyu In Lee	2003-2008	Miaoying Tian*	2009-2013
Sang Wook Park	2004-2008	Hyong-Woo Choi*	2011-present
		Katarzyna Lorenc-Kukula	2011-2012
		Murli Manohar*	2012-present
		Lei Wang	2017

* promoted to Research Associate or Senior Research Associate

Graduate Students:

Steve Rice	1980-1985	Vaughn Cleghon	1986-1991
Lauren Silverman	1984-1989	Pat Eagle	1988-1991
David Dixon	1984-1991	Douglas Brough	1986-1992

Jocelyn Malamy	1988-1993	Herman Silva	1993-1998
Younggyu Kim	1992-1995	Jun Ma Zhou	1997-2001
D'Maris Dempsey	1987-1996	Daniel Clark	1999-2003

Publications:

1. Klessig, D.F. and Anderson, C.W. (1975) Block to multiplication of adenovirus serotype 2 in monkey cell. *J. Virol.* 16: 1650-1668.
2. Klessig, D.F. (1977) Isolation of a variant of human adenovirus serotype 2 that multiplies efficiently on monkey cells. *J. Virol.* 21: 1243-1246.
3. Klessig, D.F. (1977) Two adenovirus mRNAs have a common 5' terminal leader sequence encoded at least 10 kb upstream from their main coding regions. *Cell* 12: 9-21.
4. Klessig, D.F. and Hassell, J.A. (1978) Characterization of a variant of human adenovirus type 2 which multiplies efficiently in simian cells. *J. Virol.* 28: 945-956.
5. Gelinas, R.E., Chow, L.T., Roberts, R.J., Broker, T.R. and Klessig, D.F. (1978) The structure of late adenovirus type 2 messenger RNAs. *Brookhaven Symp.* 29: 345-347.
6. Broker, T.R., Chow, L.T., Dunn, A.R., Gelinas, R.E., Hassell, J.A., Klessig, D.F., Lewis, J.B., Roberts, R.J. and Zain, S.D. (1978) Adenovirus 2 messengers - an example of baroque molecular architecture. *Cold Spring Harbor Symp. Quant. Biol.* 42: 531-553.
7. Klessig, D.F. and Grodzicker, T. (1979) Mutants that allow human Ad2 and Ad5 to express late genes in monkey cells map in the viral gene encoding the 72K DNA binding protein. *Cell* 17: 957-966.
8. Klessig, D.F. and Chow, L.T. (1980) Incomplete splicing and deficient accumulation of the fiber messenger RNA in monkey cells infected by human adenovirus type 2. *J. Mol. Biol.* 139: 221-242.
9. Alestrom, P., Akusjarvi, G., Perricaudet, M., Mathews, M.B., Klessig, D.F. and Pettersson, U. (1980) The gene for polypeptide IX of adenovirus type 2 and its unspliced messenger RNA. *Cell* 19: 671-681.
10. Grodzicker, T. and Klessig, D.F. (1980) Expression of unselected adenovirus genes in human cells co-transformed with HSV-1 tk gene and adenovirus 2 DNA. *Cell* 21: 453-463.
11. Klessig, D.F., Quinlan, M.P. and Grodzicker, T. (1982) Proteins containing only half the coding information of early region 1b of adenovirus are functional in human cells transformed with HSV-1 tk gene and adenovirus DNA. *J. Virol.* 41: 423-434.
12. Anderson, K.P. and Klessig, D.F. (1982) Synthesis of human adenovirus early RNA species is similar in productive and abortive infections of monkey and human cells. *J. Virol.* 42: 748-754.
13. Klessig, D.F. and Quinlan, M.P. (1982) Genetic evidence for separate functional domains on the human adenovirus specified 72 kd, DNA binding protein. *J. Mol. Appl. Genet.* 1: 263-272.
14. Klessig, D.F. and Quinlan, M.P. (1982) Normal translation of human adenovirus mRNA in cell-free systems prepared from abortively as well as productively infected monkey cells. *J. Virol.* 44: 426-430.
15. Anderson, K.P. and Klessig, D.F. (1983) Posttranscriptional block to synthesis of a human adenovirus capsid protein in abortively infected monkey cells. *J. Mol. Appl. Genet.* 2: 31-44.
16. Anderson, C.W., Hardy, M.M., Dunn, J.J. and Klessig, D.F. (1983) Independent, spontaneous mutants of Ad2⁺ND3 that grow efficiently in monkey cells possess identical mutations in the adenovirus 2 DNA binding protein gene. *J. Virol.* 48: 31-39.
17. Klessig, D.F. and Berry, J.O. (1983) Improved filter hybridization method for detection of single copy sequences in large eukaryotic genomes. *Plant Mol. Biol. Reporter* 1: 12-18.

18. Rice, S.A. and Klessig, D.F. (1984) The function(s) provided by the adenovirus specified, DNA binding protein required for viral late gene expression is independent of the protein's role in viral DNA replication. *J. Virol.* 49: 35-49.
19. Klessig, D.F., Grodzicker, T. and Cleghon, V. (1984) Construction of human cell lines which contain and express the adenovirus DNA binding protein gene by co-transformation with HSV-1 tk gene. *Virus Res.* 1: 169-188.
20. Anderson, K.P. and Klessig, D.F. (1984) Altered mRNA splicing in monkey cells abortively infected with human adenovirus may be responsible for inefficient synthesis of the virion fiber polypeptide. *Proc. Natl. Acad. Sci. USA* 81: 4023-4027.
21. Klessig, D.F., Brough, D.E. and Cleghon, V. (1984) Introduction, stable integration, and controlled expression of a chimeric adenovirus gene whose product is toxic to the recipient human cell. *Mol. Cell. Biol.* 4: 1354-1362.
22. Brough, D.E., Rice, S.A., Sell, S. and Klessig, D.F. (1985) Restricted changes in the adenovirus DNA binding protein leading to extended host range or temperature sensitive phenotypes. *J. Virol.* 55: 206-212.
23. Silverman, L. Anderson, K.P. and Klessig, D.F. (1985) Synthesis of the Ad2⁺ND5 specified 42K protein is regulated posttranscriptionally in abortively infected monkey cells. *J. Virol.* 56: 814-820.
24. Klockmann, U., Klessig, D.F. and Deppert W. (1985) Similar regulation of the synthesis of the human adenovirus fiber protein and of the simian virus 40 specific proteins encoded by the helper defective Ad2⁺SV40 hybrid viruses Ad2⁺ND5 and Ad2⁺ND4_{del}. *J. Virol.* 56: 821-829.
25. Anderson, K.P., Wong, E.A. and Klessig, D.F. (1985) Microinjection of mRNA enhances the translational efficiency of human adenovirus fiber message in monkey cells. *Mol. Cell. Biol.* 5: 2870-2873.
26. Johnston, J. Anderson, K.P. and Klessig, D.F. (1985) Partial block to transcription of human adenovirus late genes in abortively infected monkey cells. *J. Virol.* 58: 378-385.
27. Rice, S.A. and Klessig, D.F. (1985) Isolation and analysis of adenovirus type 5 mutants containing deletions in the gene encoding the DNA binding protein. *J. Virol.* 56: 767-778.
28. Berry, J.O., Nikolau, B.J., Carr, J.P. and Klessig, D.F. (1985) Transcriptional and post-transcriptional regulation of ribulose 1,5-bisphosphate carboxylase gene expression in light and dark grown amaranthus cotyledons. *Mol. Cell. Biol.* 5: 2238-2246.
29. Carr, J.P., Dixon, D.C. and Klessig, D.F. (1985) The synthesis of pathogenesis-related proteins in tobacco is regulated at the level of mRNA accumulation and occurs on membrane-bound polysomes. *Proc. Natl. Acad. Sci. USA* 82: 7999-8003.
30. Berry, J.O., Nikolau, B.J., Carr, J.P. and Klessig, D.F. (1986) Translational regulation of light-induced ribulose 1,5-bisphosphate carboxylase gene expression of amaranth. *Mol. Cell. Biol.* 6: 2347-2353.
31. Klessig, D.F., Rice, S.A., Cleghon, V., Brough, D.E., Williams, J.F. and Voelkerding, K. (1986) Studies on the adenovirus DNA binding protein. In: *Cancer Cells: DNA Tumor Viruses: Control of Gene Expression and Replication*. Eds. T. Grodzicker, M. Botchan and P. Sharp. Cold Spring Harbor Lab. Press, Cold Spring Harbor, New York, pp. 485-496.
32. Voelkerding, K.V. and Klessig, D.F. (1986) Identification of two nuclear subclasses of the adenovirus type 5 encoded DNA binding protein. *J. Virol.* 60: 353-362.
33. Cleghon, V.G. and Klessig, D.F. (1986) Association of the adenovirus DNA binding protein with RNA both *in vitro* and *in vivo*. *Proc. Natl. Acad. Sci. USA* 83: 8 947-951.
34. Klessig, D.F., Nikolau, B.J., Carr, J.P. and Berry, J.O. (1986) Translational regulation of light-induced ribulose 1,5-bisphosphate carboxylase gene expression in amaranth. In: *Translational Control*. Edited by M. Mathews. Cold Spring Harbor Lab. Press, Cold Spring Harbor, New York, pp. 178-184.

35. Rice, S.A., Klessig, D.F. and Williams, J. (1987) Multiple effects of the 72 kilodalton, Adenovirus-specified DNA binding protein on the efficiency of cellular transformation. *Viol.* 156: 366-376.
36. Carr, J.P., Dixon, D.C., Nikolau, B.J., Voelkerding, K.V. and Klessig, D.F. (1987) Synthesis and localization of pathogenesis-related proteins in tobacco. *Mol. Cell. Biol.* 7: 580-583.
37. Berry, J.O., Carr, J.P. and Klessig, D.F. (1987) Translational regulation of light- induced ribulose 1,5-bisphosphate carboxylase gene expression in amaranth. In: *Progress in Photosynthesis Research*, Vol. 4 . Ed. J. Biggers. Martinus Nijhoff Publishers, Dordrecht, Netherlands, pp. 565-568.
38. Nikolau, B.J. and Klessig, D.F. (1987) Coordinate, organ-specific and developmental regulation of ribulose 1,5-bisphosphate carboxylase gene expression in *Amaranthus hypochondriacus*. *Plant Physiol.* 85: 167-173.
39. Berry, J.O., Carr, J.P. and Klessig, D.F. (1988) mRNAs encoding ribulose 1,5-bisphosphate carboxylase remain bound to polysomes but are not translated in amaranth seedlings transferred to darkness. *Proc. Natl. Acad. Sci. USA* 85: 4190-4194.
40. Cutt, J.R., Dixon, D.C., Carr, J.P. and Klessig, D.F. (1988) Isolation and nucleotide sequence of cDNA clones for the pathogenesis-related proteins PR1a, PR1b and PR1c of *Nicotiana tabacum* cv. xanthi-nc induced by TMV infection. *Nucl. Acids Res.* 16: 9861.
41. Carr, J.P., Beachy, R.N. and Klessig, D.F. (1989) Are the PR1 proteins of tobacco involved in genetically engineered resistance to TMV? *Viol.* 169: 470-473.
42. Cleghon, V., Voelkerding, K., Morin, N., Delsert, C. and Klessig, D.F. (1989) Isolation and characterization of a viable adenovirus mutant defective in nuclear transport of the DNA binding protein. *J. Virol.* 63: 2289-2299.
43. Cutt, J.R., Harpster, M.H., Dixon, D.C., Carr, J.P., Dunsmuir, P. and Klessig, D.F. (1989) Disease response to tobacco mosaic virus in transgenic tobacco plants that constitutively express the pathogenesis-related protein PR1b. *Viol.* 173: 89-97.
44. Delsert, C., Morin, N. and Klessig, D.F. (1989) Cis-acting elements and a trans-acting factor affecting alternative splicing of adenovirus L1 transcripts. *Mol. Cell. Biol.* 9: 4364-4371.
45. Morin, N., Delsert, C. and Klessig, D.F. (1989) Nuclear localization of the adenovirus DNA binding protein: requirement for two signals and complementation during viral infection. *Mol. Cell. Biol.* 9: 4372-4380.
46. Morin, N., Delsert, C. and Klessig, D.F. (1989) Mutations that affect the phosphorylation of the adenovirus DNA binding protein alters its ability to enhance its own synthesis. *J. Virol.* 63: 5228-5237.
47. Silverman, L. and Klessig, D.F. (1989) Characterization of translational defect to fiber synthesis in monkey cells abortively infected with human adenovirus: role of ancillary leaders. *J. Virol.* 63: 4376-4385.
48. Silverman, L., Cleghon, V. and Klessig, D.F. (1989) Increased permissivity of monkey cells to human adenovirus multiplication is affected by culturing conditions and correlates with both synthesis of virion fiber protein and altered splicing of its mRNA. *Viol.* 173: 109-119.
49. Vos, H.L., Brough, D.E., van der Lee, F.M., Hoeben, R.C., Verheijden, G.F.M., Dooijes, D., Klessig, D.F. and Sussenbach, J.S. (1989) Characterization of adenovirus type 5 insertion and deletion mutants encoding altered DNA binding proteins. *Viol.* 172: 634-642.
50. Berry, J.O., Breiding, D.E. and Klessig, D.F. (1990) Light-mediated control of translational initiation of ribulose 1,5-bisphosphate carboxylase in Amaranth cotyledons. *Plant Cell* 2: 795-803.
51. Michalowski, C.B., Bohnert, H.J., Klessig, D.F. and Berry, J.O. (1990) Nucleotide sequence of rbcL from *Amaranthus hypochondriacus* chloroplasts. *Nucl. Acid Res.* 18: 2187.
52. Klessig, D.F., Cutt, J.R., Dixon, D.C., Carr, J.P., Malamy, J., Metzler, M., Harpster, M.H., Dunsmuir, P., Beachy, R.N. and Raskin, I. (1990) The PR-1 proteins - their synthesis,

- location and possible function. Workshop on Pathogenesis-Related Proteins in Plants, University Series 247. Juan March Foundation, Madrid, pp. 61-62.
53. Malamy, J., Carr, J.P., Klessig, D.F. and Raskin, I. (1990) Salicylic acid - a likely endogenous signal in the resistance response of tobacco to tobacco mosaic virus infection. *Science* 250: 1002-1004.
 54. Côté, F., Cutt, J.R., Asselin, A. and Klessig, D.F. (1991) The pathogenesis-related acidic β -1,3-glucanase genes of tobacco are regulated by both stress and developmental signals. *Mol. Plant Microbe Interact.* 4: 173-181.
 55. Dixon, D.C., Cutt, J.R. and Klessig, D.F. (1991) Differential targeting of the tobacco PR-1 pathogenesis-related proteins to the extracellular space and vacuoles of crystal idioblasts. *EMBO J.* 10: 1317-1324.
 56. Metzler, M.C., Cutt, J.R. and Klessig, D.F. (1991) Isolation and characterization of a gene encoding a PR-1 like protein from *Arabidopsis thaliana*. *Plant Physiol.* 96: 346-348.
 57. Chen, Z. and Klessig, D.F. (1991) Identification of a soluble salicylic acid-binding protein that may function in signal transduction in the plant disease-resistance response. *Proc. Natl. Acad. Sci. USA.* 88: 8179-8183.
 58. Wang, J.L., Klessig, D.F. and Berry, J.O. (1992) Regulation of C4 gene expression in developing *Amaranth* leaves. *Plant Cell* 4: 173-184.
 59. Eagle, P. and Klessig, D.F. (1992) A zinc binding motif located between a.a. 273-286 in the adenovirus DNA-binding protein is necessary for ssDNA binding. *Virology* 187: 777-787.
 60. Malamy, J., Hennig, J. and Klessig, D.F. (1992) Temperature dependent induction of salicylic acid and its conjugates during the resistance response to tobacco mosaic virus infection. *Plant Cell* 4: 359-365.
 61. Cleghon, V. and Klessig, D.F. (1992) Characterization of the adenovirus DNA-binding protein's nucleic acid binding region by partial proteolysis and photochemical cross-linking. *J. Biol. Chem.* 267: 17872-17881.
 62. Brough, D.E., Cleghon, V. and Klessig, D.F. (1992) Construction, characterization, and utilization of cell lines which inducibly express the adenovirus DNA-binding protein. *Virology* 190: 624-634.
 63. Carter, B.J., Antoni, B.A. and Klessig, D.F. (1992) Adenovirus containing a deletion of the early region 2A gene allows growth of adeno-associated virus with decreased efficiency. *Virology* 191: 473-476.
 64. Klessig, D. F., Malamy, J., Hennig, J., Chen, Z. and Sánchez-Casas, P. (1993) Induction, modification, and reception of the salicylic acid signal in plant defense. In: *Mechanisms of Plant Defense Responses: Developments in Plant Pathology, Proceedings of the 2nd EFPP Conference, Vol. 2.* Eds. B. Fritig and M. Legrand. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 185-195.
 65. Brough, D.E., Droguett, G., Horwitz, M.S. and Klessig, D.F. (1993) Multiple functions of the adenovirus DNA-binding protein are required for efficient viral DNA synthesis. *Virology* 196: 269-281.
 66. Cleghon, V., Piderit, A., Brough, D. and Klessig, D.F. (1993) Phosphorylation of the adenovirus DNA-binding protein and epitope mapping of monoclonal antibodies against it. *Virology* 197: 564-575.
 67. Hennig, J., Dewey, R.E., Cutt, J.R. and Klessig, D.F. (1993) Pathogen, salicylic acid and developmental dependent expression of a β -1,3-glucanase/GUS gene fusion in transgenic tobacco plant. *Plant J.* 4: 481-493.
 68. Hennig, J., Malamy, J., Gryniewicz, G., Indulski, J. and Klessig, D.F. (1993) Interconversion of the salicylic acid signal and its glucoside in tobacco. *Plant J.* 4: 593-600.
 69. Dempsey, D.A., Wobbe, K.K. and Klessig, D.F. (1993) Resistance and susceptible responses of *Arabidopsis thaliana* to turnip crinkle virus. *Phytopathology* 83: 1021-1029.

70. Gryniewicz, G., Achmatowicz, O., Hennig, J., Indulski, J. and Klessig, D.F. (1993) Synthesis and characterization of the salicylic acid β -D-glucopyranoside. *Pol. J. Chem.* 67: 1251-1254.
71. Chen, Z., Ricigliano, J. and Klessig, D.F. (1993) Purification and characterization of a soluble salicylic acid binding protein from tobacco. *Proc. Natl. Acad. Sci. USA.* 90: 9533-9537.
72. Chen, Z., Silva, H. and Klessig, D.F. (1993) Active oxygen species in the induction of plant systemic acquired resistance by salicylic acid. *Science* 262: 1883-1886.
73. Malamy, J., Hennig, J., Sánchez-Casas, P., Gryniewicz, G., Indulski, J. and Klessig, D.F. (1993) Role of salicylic acid in systemic acquired resistance. In: *Plant Signals in Interactions with Other Organisms - Current Topics in Plant Physiology, Series 11.* American Society of Plant Physiologists, Rockville, MD, pp. 230-232.
74. Klessig, D.F., Malamy, J., Hennig, J., Sánchez-Casas, P., Indulski, J., Gryniewicz, G. and Chen, Z. (1994) Induction, modification, and perception of the salicylic acid signal in plant defense. *British Biochem. Soc. Symp.* 60: 219-229.
75. Ricigliano, J.W., Brough, D.E. and Klessig, D.F. (1994) Identification of a high molecular weight cellular protein complex containing the adenovirus DNA binding protein. *Virology* 202: 715-723.
76. Greenberg, J.T., Guo, A., Klessig, D.F. and Ausubel, F.M. (1994) Programmed cell death in plants: a pathogen-triggered response activated coordinately with multiple defense functions. *Cell* 77: 551-563.
77. Sánchez-Casas, P. and Klessig, D.F. (1994) A salicylic acid-binding activity and a salicylic acid-inhibitable catalase activity are present in a variety of plant species. *Plant Physiology* 106: 1675-1679.
78. Chen, Z., Malamy, J., Hennig, J., Conrath, U., Sánchez-Casas, P., Ricigliano, J., Silva, H. and Klessig, D.F. (1994) "The salicylic acid signal for activation of plant defenses is mediated by active oxygen species." In: *Advances in Molecular Genetics of Plant-Microbe Interactions, Vol. 3.* Eds. M. J. Daniels, J. A. Downie, and A. E. Osbourn. Kluwer Academic Publishers, The Netherlands, pp. 349-354.
79. Bowling, S.A., Guo, A., Cao, H., Gordon, A.S., Klessig, D.F. and Dong, X. (1994) A mutation in *Arabidopsis* that leads to constitutive expression of systemic acquired resistance. *Plant Cell* 6: 1845-1857.
80. Chen, Z., Malamy, J., Hennig, J., Conrath, U., Sánchez-Casas, P., Silva, H., Ricigliano, J. and Klessig, D.F. (1995) Induction, modification, and transduction of the salicylic acid signal in plant defense responses. *Proc. Natl. Acad. Sci. USA.* 92: 4134-4137.
81. Conrath, U., Chen, Z., Ricigliano, J.R. and Klessig, D.F. (1995) Two inducers of plant defense responses, 2,6-dichloroisonicotinic acid and salicylic acid, inhibit catalase activity in tobacco. *Proc. Natl. Acad. Sci. USA* 92: 7143-7147.
82. Durner, J. and Klessig, D.F. (1995) Inhibition of ascorbate peroxidase by salicylic acid and 2,6-dichloroisonicotinic acid, two inducers of plant defense responses. *Proc. Natl. Acad. Sci. USA.* 92: 11312-11316.
83. Conrath, U., Chen, Z., Malamy, J., Durner, J., Hennig, J., Sánchez-Casas, P., Silva, H., Ricigliano, J.W. and Klessig, D.F. (1995) The salicylic acid signal for the activation of plant disease resistance: induction, modification, perception and transduction. In: *Modern Fungicides and Antifungal Compounds, 11th International Symposium, Reinhardsbrunn.* Eds. H. Lyr, P.E. Russell and H.D. Sisler, Intercept Ltd. andover, UK, pp. 467-473.
84. Malamy, J., Sánchez-Casas, P., Hennig, J., Guo, A. and Klessig, D.F. (1996) Dissection of the salicylic acid signalling pathway for defense responses in tobacco. *Mol. Plant-Microbe Interactions* 9: 474-482.
85. Klessig, D.F., Durner, J., Chen, Z., Anderson, M., Du, H., Guo, A., Liu, Y., Shah, J., Silva, H., Takahashi, H. and Yang, Y. (1996) Studies of the salicylic acid signal transduction pathway. In: *Advances in Molecular Genetics of Plant-Microbe Interactions, Vol. 4.* Eds. G. Stacey, B. Mullin and P.M. Gresshoff. Kluwer Academic Publishers, The Netherlands, pp. 33-38.

86. Shah, J. and Klessig, D.F. (1996) Identification of a salicylic acid-responsive element in the promoter of the tobacco pathogenesis-related β -1,3-glucanase gene, PR-2d. *Plant J.* 10: 1089-1101.
87. Yang, Y. and Klessig, D.F. (1996) Isolation and characterization of a TMV-inducible *myb* oncogene homologue from tobacco. *Proc. Natl. Acad. Sci. USA* 93: 14972-14977.
88. Durner, J. and Klessig, D.F. (1996) Salicylic acid is a modulator of tobacco and mammalian catalases. *J. Biol. Chem.* 271: 28492-28501.
89. Shah, J., Tsui, F. and Klessig, D.F. (1997) Characterization of a salicylic acid-insensitive mutant (*sai1*) of *Arabidopsis thaliana*, identified in a selective screen utilizing the SA-inducible expression of the *tms2* gene. *Mol. Plant-Microbe Interact.* 10: 69-78.
90. Conrath, U., Silva, H. and Klessig, D.F. (1997) Protein dephosphorylation mediates salicylic acid-induced expression of *PR-1* genes in tobacco. *Plant J.* 11: 747-757.
91. Dempsey, D., Pathirana, M.S., Wobbe, K.K. and Klessig, D.F. (1997) Identification of an *Arabidopsis* locus required for resistance to turnip crinkle virus. *Plant J.* 11: 301-311.
92. Du, H. and Klessig, D.F. (1997) Identification of a soluble, high affinity salicylic acid-binding protein from tobacco. *Plant Physiol.* 113: 1319-1327.
93. Zhang, S. and Klessig, D.F. (1997) Salicylic acid activates a 48-kD MAP kinase in tobacco. *Plant Cell* 9: 809-824.
94. Chen, Z., Iyer, S., Caplan, A., Klessig, D.F. and Fan, B. (1997) Differential accumulation of salicylic acid and salicylic acid-sensitive catalase in different rice tissues. *Plant Physiol.* 114: 193-201.
95. Takahashi, H., Chen, Z., Du, H., Liu, Y. and Klessig, D.F. (1997) Development of necrosis and activation of disease resistance in transgenic tobacco plants with severely reduced catalase levels. *Plant J.* 11: 993-1005.
96. Yu, D., Liu, Y., Xie, Z., Fan, B., Klessig, D.F. and Chen, Z. (1997) Is the high basal level of salicylic acid important for disease resistance in potato? *Plant Physiol.* 115: 343-349.
97. Du, H. and Klessig, D.F. (1997) Role of salicylic acid in the activation of defense responses in catalase-deficient transgenic tobacco. *Mol. Plant-Microbe Interact.* 10: 922-925.
98. Bowling, S., Clarke, J.D., Liu, Y., Klessig, D.F. and Dong, X. (1997) The *cpr5* mutant of *Arabidopsis* expresses both salicylic acid-dependent and salicylic acid-independent resistance. *Plant Cell* 9: 1573-1584.
99. Wendehenne, D., Durner, J., Chen, Z. and Klessig, D.F. (1998) Benzothiadiazole, an inducer of plant defenses, inhibits catalase and ascorbate peroxidase. *Phytochemistry* 47: 651-657.
100. Anderson, M., Chen, Z. and Klessig, D.F. (1998) Possible involvement of lipid peroxidation in salicylic acid-mediated induction of *PR-1* gene expression. *Phytochemistry* 47: 555-566.
101. Zhang, S., Du, H. and Klessig, D.F. (1998) Activation of the tobacco SIP kinase by both a cell wall-derived carbohydrate elicitor and purified proteinaceous elicitors from *Phytophthora* spp. *Plant Cell* 10: 435-449.
102. Zhang, S. and Klessig, D.F. (1998) The tobacco wounding-activated mitogen-activated protein kinase is encoded by *SIPK*. *Proc. Natl. Acad. Sci. USA* 95: 7225-7230.
103. Zhang, S. and Klessig, D.F. (1998) Resistance gene *N*-mediated *de novo* synthesis and activation of a tobacco mitogen-activated protein kinase by tobacco mosaic virus infection. *Proc. Natl. Acad. Sci. USA* 95: 7433-7438.
104. Clarke, J.D., Liu, Y., Klessig, D.F. and Dong, X. (1998) Uncoupling *PR* gene expression from NPR1 and bacterial resistance: The story of the dominant *cpr6* mutant in *Arabidopsis*. *Plant Cell* 10: 557-569.
105. Wobbe, K.K., Akgoz, M., Dempsey, D.A. and Klessig, D.F. (1998) A single amino acid change in turnip crinkle virus movement protein p8 affects RNA binding and virulence on *Arabidopsis thaliana*. *J. Virol.* 72: 6247-6250.
106. Zhou, N., Tootle, T.L., Tsui, F., Klessig, D.F. and Glazebrook, J. (1998) *PAD4* functions upstream from salicylic acid to control defense responses in *Arabidopsis*. *Plant Cell* 10: 1021-1030.

107. Durner, J., Wendehenne, D. and Klessig, D.F. (1998) Defense gene induction in tobacco by nitric oxide, cyclic GMP and cyclic ADP ribose. *Proc. Natl. Acad. Sci. USA* 95: 10328-10333.
108. Guo, A., Durner, J. and Klessig, D.F. (1998) Characterization of a tobacco epoxide hydrolase gene induced during the resistance response to TMV. *Plant J.* 15: 647-656.
109. Conrath, U., Klessig, D.F. and Bachmair, A. (1998) Tobacco plants perturbed in the ubiquitin-dependent protein degradation system accumulate callose, salicylic acid, and pathogenesis-related protein. *Plant Cell Reports* 17: 876-880.
110. Citovsky, V., Ghoshroy, S., Tsui, F. and Klessig, D.F. (1998) Non-toxic concentrations of cadmium inhibit systemic movement of turnip vein clearing virus by salicylic acid-independent mechanism. *Plant J.* 16: 13-20.
111. Shah, J., Kachroo, P. and Klessig, D.F. (1999) The *Arabidopsis ssi1* mutation restores pathogenesis-related gene expression in *npr1* plants and renders defensin gene expression SA dependent. *Plant Cell* 11: 191-206.
112. Romeis, T., Piedras, P., Zhang, S., Klessig, D.F., Hirt, H. and Jones, J.D.G. (1999) Rapid, Avr9- and Cf-9-dependent activation of MAP kinases in tobacco cell cultures and leaves: Convergence in resistance gene, elicitor, wound and salicylate responses. *Plant Cell* 11: 273-287.
113. Tang, X., Xie, M., Kim, Y. J., Zhou, J., Klessig, D.F. and Martin, G.B. (1999) Overexpression of *Pto* activates defense responses and confers broad resistance. *Plant Cell* 11: 15-29.
114. Corey, A.C., Dempsey, D.A., Klessig, D.F. and Berry, J.O. (1999) Three RbcS cDNAs (Accession Nos. AF150665, AF150666, AF150667) from the C4 dicotyledonous plant *Amaranthus hypochondriacus*. *Plant Physiol. Gene Register*: #PGR99-101.
115. Silva, H., Yoshioka, K., Dooner, H.K. and Klessig, D.F. (1999) Characterization of a new *Arabidopsis* mutant exhibiting enhanced disease resistance. *Mol. Plant-Microbe Interact.* 12: 1053-1063.
116. Cooley, M., Pathirana, M.S., Wu, H.-J., Kachroo, P. and Klessig, D.F. (2000) Members of the *Arabidopsis HRT/RPP8* family of resistance genes confer resistance to both viral and oomycete pathogens. *Plant Cell* 12: 663-676.
117. Kachroo, P., Yoshioka, K., Shah, J., Dooner, H.K. and Klessig, D.F. (2000) Resistance to turnip crinkle virus in *Arabidopsis* is regulated by two host genes, is salicylic acid dependent but *NPR1*, ethylene and jasmonate independent. *Plant Cell* 12: 677-690.
118. Zhao, Y., DelGrosso, L., Yigit, E., Dempsey, D.A., Klessig, D.F. and Wobbe, K.K. (2000) The amino-terminus of the turnip crinkle virus coat protein is the Avr factor recognized by resistant *Arabidopsis*. *Mol. Plant-Microbe Interact.* 13: 1015-1018.
119. Klessig, D.F., Durner, J., Zhou, J.M., Kumar, D., Navarre, R., Zhang, S., Shah, J., Wendehenne, D., Trifa, Y., Noad, R., Kachroo, P., Pontier, D., Lam, E. and Silva, H. (2000) NO and salicylic acid signaling in plant defense. *Proc. Natl. Acad. Sci. USA.* 97: 8849-8855.
120. Guo, A., Salih, G. and Klessig, D.F. (2000) Activation of a diverse set of genes during the tobacco resistance response to TMV is independent of salicylic acid; induction of a subset is also ethylene independent. *Plant J.* 21: 409-418.
121. Navarre, D., Wendehenne, D., Durner, J., Noad, R. and Klessig, D.F. (2000) Nitric oxide modulates the activity of tobacco aconitase. *Plant Physiol.* 122: 573-582.
122. Clark, D., Durner, J., Navarre, D.A. and Klessig, D.F. (2000) Nitric oxide inhibition of tobacco catalase and ascorbate peroxidase. *Mol. Plant-Microbe Interact.* 13: 1380-1384.
123. Kumar, D. and Klessig, D.F. (2000) Differential induction of tobacco MAP kinases by the defense signals nitric oxide, salicylic acid, ethylene and jasmonic acid. *Mol. Plant Microbe Interact.* 13: 347-351.
124. Zhang, S., Liu, Y. and Klessig, D.F. (2000) Multiple levels of tobacco WIPK activation during induction of cell death by fungal elicitors. *Plant J.* 23: 339-347.

125. Petersen, M., Brodersen, P., Næsted, H., Mattsson, O., Nielsen, H.B., Lacy, M., Austin, M.J., Parker, J.E., Sharma, S.B., Klessig, D.F., Martienssen, R., Jensen, A.B. and Mundy, J. (2000) *Arabidopsis* MAP kinase 4 regulates systemic acquired resistance. *Cell*. 103: 1111-1120.
126. Mikolajczyk, M., Awotunde, O.S., Muszynska, G., Klessig, D.F. and Dobrowolska G. (2000) Osmotic stress induces rapid activation of SIP kinase and a novel 42 kD protein kinase in tobacco cells. *Plant Cell* 12: 165-178.
127. Liu, Y., Zhang, S. and Klessig, D.F. (2000) Molecular cloning and characterization of a tobacco MAP kinase kinase that interacts with SIPK. *Mol. Plant-Microbe Interact.* 13: 118-124.
128. Zhou, J.M., Trifa, Y., Silva, H., Pontier, D., Lam, E., Shah, J. and Klessig, D.F. (2000) NPR1 differentially interacts with members of TGA/OBF family of transcription factors which bind an element of the *PR-1* gene required for induction by salicylic acid. *Mol. Plant-Microbe Interact.* 13: 191-202.
129. Klessig, D.F., Kumar, D., Navarre, R., Zhou, J.M., Shah, J., Durner, J., Zhang, S., Wendehenne, D., Kachroo, P., Trifa, Y., Silva, H., Pontier, D., Lam, E. and Noad, R. (2000) Salicylic acid- and nitric oxide-mediated signal transduction in plant disease resistance. In: *Biology of Plant-Microbe Interactions 2*: 13-18. Edited by P. de Witt., T. Bisseling and W. Stiekema. Kluwer Academic Publishers, The Netherlands.
130. Klessig, D.F., Navarre, R., Kumar, D., Zhou, J.M., Shah, J., Durner, J., Zhang, S., Wendehenne, D., Kachroo, P., Trifa, Y., Silva, H., Pontier, D., Lam, E. and Noad, R. (2000) Salicylic acid- and nitric oxide-mediated signaling in plant-microorganism interactions. In: *2000 Years of Natural Products Research; Past, Present and Future*. Edited by T.J.C. Luijendijk, Phtoconsult, Leiden, The Netherlands, pp. 105-118.
131. Shah, J., Kachroo, P., Nandi, A. and Klessig, D.F. (2001) A recessive mutation in the *Arabidopsis* *SSI2* gene confers SA- and *NPR1*-independent expression of resistance against bacterial and oomycete pathogens. *Plant J.* 25: 563-574.
132. Yoshioka, K., Nakashita, H., Klessig, D.F. and Yamaguchi, I. (2001) Probenazole induces systemic acquired resistance in *Arabidopsis* with a novel type of action. *Plant J.* 25: 149-157.
133. Yoshioka, K., Kachroo, P., Tsui, F., Sharma, S.B., Shah, J. and Klessig, D.F. (2001) Environmentally-sensitive, SA-dependent defense response in the *cpr22* mutant of *Arabidopsis*. *Plant J.* 26: 447-459.
134. Lee, J., Klessig, D.F. and Nürnberger, T. (2001) A harpin binding site in tobacco plasma membranes mediates activation of the pathogenesis-related gene *HIN1* independent of extracellular calcium but dependent on mitogen-activated protein kinase activity. *Plant Cell* 13: 1079-1093.
135. Kloek, A.P., Verbsky, M.L., Sharma, S.B., Schoelz, J.E., Vogel, J., Klessig, D.F. and Kunkel, B.N. (2001) Resistance to *Pseudomonas syringae* conferred by an *Arabidopsis thaliana* coronatine insensitive (*coi1*) mutation occurs through two distinct mechanisms. *Plant J.* 26: 509-522.
136. Kachroo, P., Shanklin, J., Shah, J., Whittle, E.J. and Klessig, D.F. (2001) A fatty acid desaturase modulates the activation of defense signaling pathways in plants. *Proc. Natl. Acad. Sci. USA.* 98: 9448-9453.
137. Klessig, D.F., Durner, J., Navarre, R., Kumar, D., Shah, J., Zhou, J.M., Zhang, S., Wendehenne, D., Kachroo, P., Silva, H., Yoshioka, K., Trifa, Y., Pontier, D., Lam, E., Chen, Z. Anderson, M. and Du, H. (2001) Salicylic acid- and nitric oxide-mediated signal transduction in disease resistance. In: *Signal Transduction in Plants: Current Advances*. Edited by S.K. Sopory, R. Oelmüller and S.C. Maheshwari. Kluwer Academic Plenum Publishers, The Netherlands. pp. 201-207.
138. Klessig, D.F., Kachroo, P., Slaymaker, D., Yoshioka, K., Navarre, D.A., Clark, D., Kumar, D. and Shah, J. (2001) SA- and NO-mediated signaling in plant disease resistance. *Biology of Plant-Microbe Interactions*. Eds. S.A. Long, C. Allen and W.W. Triplett. Int'l Soc. Mol. Plant-Microbe Interactions, St. Paul, MN, pp. 78-82.

139. Slaymaker, D.H., Navarre, D.A. Clark, D., del Pozo, O., Martin, G.B. and Klessig, D.F. (2002) The tobacco salicylic acid-binding protein (SABP) 3 is the chloroplast carbonic anhydrase, which exhibits antioxidant activity and plays a role in the hypersensitive defense response. *Proc. Natl Acad. Sci. USA.* 99: 11640-11645.
140. Shirano, Y., Kachroo, P., Shah, J. and Klessig, D.F. (2002) A gain-of-function mutation in an Arabidopsis TIR-NBS-LRR type R gene triggers defense responses and results in enhanced disease resistance. *Plant Cell* 14: 3149-3162.
141. Pontier, D., Privat, I., Trifa, Y., Zhou, J-M., Klessig, D.F. and Lam, E. (2002) Post-transcriptional control of specific TGA transcription factors are differentially regulated via the proteasome pathway. *Plant J.* 32: 641-653.
142. Nandi, A., Kachroo, P., Fukushige, H., Hildebrand, D., Klessig, D.F. and Shah, J. (2003) Ethylene and jasmonic acid signaling affect the NPR1-independent expression of defense genes without impacting resistance to *Pseudomonas syringae* and *Peronospora parasitica* in the Arabidopsis *ssi1* mutant. *Mol. Plant-Microbe Interact.* 16: 588-599.
143. Atkinson, R.C., Beachy, R.N., Conway, G., Cordova, F.A., Fox, M.A., Holbrook, K.A., Klessig, D.F., McCormick, R.L., McPherson, P.M., Rawlings III, H.R., Rapson, R., Vanderhoef, L.N., Wiley, J.D. and Young, C.E. (2003) Intellectual property rights: Public sector collaboration for agricultural IP management. *Science* 301: 174-175.
144. Kumar, D. and Klessig, D.F. (2003) The high affinity salicylic acid binding protein 2 is required for plant innate immunity and has SA-stimulated lipase activity. *Proc. Natl. Acad. Sci. USA.* 100: 16101-16106.
145. Kachroo, P., Kachroo, A., Lapchyk, L., Hildebrand, D. and Klessig, D.F. (2003) Restoration of defective cross talk in *ssi2* mutants: role of salicylic acid, jasmonic acid, and fatty acid in *SSI2*-mediated signaling. *Mol. Plant-Microbe Interact.* 16: 1022-1029.
146. Kachroo, A., Lapchyk, L., Fukushige, H., Hildebrand, D., Klessig, D.F. and Kachroo, P. (2003) Plastidal fatty acid signaling modulates salicylic acid- and jasmonic acid-mediated defense pathways in the Arabidopsis *ssi2* mutant. *Plant Cell.* 15: 2952-2965
147. Menke, F.L.H., van Pelt, J.A., Pieterse, C.M.J. and Klessig, D.F. (2004) Silencing of the mitogen-activated protein kinase MPK6 compromises disease resistance in Arabidopsis. *Plant Cell.* 16: 897-907.
148. Clark, D., Rowlett, R.S., Coleman, J.R. and Klessig, D.F. (2004) Complementation of the yeast deletion mutant Δ NCE103 by members of the β class of carbonic anhydrases is dependent on carbonic anhydrase activity rather than on antioxidant activity. *Biochem. J.* 379: 609-615.
149. Chen, Z., Kloek, A., Cuzick, A., Moeder, W., Tang, D., Innes, R., Klessig, D.F., McDowell, J., Kunkel, B. (2004) The *Pseudomonas syringae* type III effector AvrRpt2 functions downstream or independently of SA to promote virulence on *Arabidopsis thaliana*. *Plant J.* 40: 494-504.
150. Jurkowski, G.I., Smith, Jr., R.K., Yu, I-c, Ham, J.H., Sharma, S.B., Klessig, D.F., Fengler, K.A. and Bent, A.F. (2004) *Arabidopsis DND2*, a second cyclic nucleotide-gated ion channel gene for which mutation causes the "Defense, No Death" phenotype. *Mol. Plant-Microbe Interact.* 17: 511-520.
151. Barth, C., Moeder, W., Klessig, D.F. and Conklin, P.L. (2004) The timing of senescence and response to pathogens is altered in the ascorbate-deficient Arabidopsis mutant *vtc1*. *Plant Physiol.* 134: 1784-1792
152. Zhou, F., Menke, F.L.H., Yoshioka, K., Moeder, W., Shirano, Y. and Klessig, D.F. (2004) High humidity suppresses *ssi4*-mediated cell death and disease resistance upstream of MAP kinase activation, H₂O₂ production and defence gene expression. *Plant J.* 39: 920-932.
153. Chandra-Sekar, A.C., Navarre, R., Kachroo, A., Kang, H.G., Klessig, D.F. and Kachroo, P. (2004) Signaling requirements and role of salicylic acid in *HRT*-mediated hypersensitive response and *HRT*- and *rrt*-mediated resistance to turnip crinkle virus in Arabidopsis. *Plant J.* 40: 647-659

154. Forouhar, F., Yang, Y., Kumar, D., Chen, Y., Fridman, E., Park, S.W., Chiang, Y., Acton, T.B., Montelione, G. T., Pichersky, E., Klessig, D.F. and Tong, L. (2005) Crystal structure and biochemical studies identify tobacco SABP2 as a methyl salicylate esterase and further implicate it in plant innate immunity. *Proc. Nat'l. Acad. Sci. USA.* 102:1773-1778.
155. Kang, H. G. and Klessig, D. F. (2005) Salicylic acid - inducible Arabidopsis CK2-like activity phosphorylates TGA2. *Plant Mol. Biol.* 57:541-557.
156. Moeder, W., Yoshioka, K. and Klessig, D.F. (2005) Involvement of the small GTPase Rac in the defense responses of tobacco to pathogens. *Mol. Plant-Microbe Interact.* 18:116-124.
157. Menke, F.L.H., Kang, H.G., Chen, Z., Park, J.K., Kumar, D., and Klessig, D.F. (2005) Transcription factor NtWRKY1 is phosphorylated by the MAP kinase SIPK and mediates HR-like cell death in tobacco. *Mol. Plant-Microbe Interact.* 18:1027-1034.
158. Nandi, A., Moeder, W., Kachroo, P., Klessig, D.F., and Shah, J. (2005) *Arabidopsis ssi2* - conferred susceptibility to *Botrytis cinerea* is dependent on *EDS5* and *PAD4*. *Mol. Plant-Microbe Interact.* 18:363-370.
159. Kumar, D., Gustafsson, C., and Klessig, D. F. (2006) Validation of RNAi silencing specificity using synthetic genes: salicylic acid-binding protein 2 is required for plant innate immunity. *Plant J.* 45:863-868.
160. Yoshioka, K., Moeder, W., Kang, H.-G., Kachroo, P., Masmoudi, K., Berkowitz, G. and Klessig, D.F. (2006) The chimeric cyclic nucleotide-gated ion channel AtCNGC11/12 activates multiple pathogen resistance responses. *Plant Cell* 18:747-763.
161. Chandra-Shekhara, A. C., Gupte, M., Navarre, D., Raina, S., Raina, R, Klessig, D. F. and Kachroo, P. (2006) Light-dependent hypersensitive response and resistance signaling to turnip crinkle virus in Arabidopsis. *Plant J.* 45:320-334.
162. Klessig, D.F., Kumar, D., Forouhar, F., Tong, L., Yang, Y., Pichersky, E., Montelione, G.T., Chen, Y., Park, S.-W., Vlot, A.C., and Shulaev, V. (2007) Salicylic acid-binding protein(SABP)2 and systemic acquired resistance. *Biology of Plant-Microbe Interactions*, Eds. F. Sanchez, C. Quinto, I. M. Lopez-Lara and O. Geiger, Int'l Soc. for Molecular Plant-Microbe Interactions, St. Paul, MN. 5:176-181.
163. Moeder, W., del Pozo, O., Navarre, D. A., Martin, G. B. and Klessig, D. F. (2007) Aconitase plays a role in regulating resistance to oxidative stress and cell death in Arabidopsis and *Nicotiana benthamiana*. *Plant Mol. Biol.* 63:273-287.
164. Zheng, Z., Mosher, S. L., Fan, B., Klessig, D.F., and Chen, Z. (2007) Functional analysis of Arabidopsis WRKY25 transcription factors in plant defense against *Pseudomonas syringae*. *BMC Plant Biology* 7:2.
165. Jagadeeswaran, G., Raina, S., Acharya, B., Maqbool, S., Mosher, S., Appel, H., Schultz, J., Klessig, D., and Raina, R. (2007) Arabidopsis GH3-LIKE DEFENSE GENE 1 is required for accumulation of salicylic acid, activation of defense responses and resistance to *Pseudomonas syringae*. *Plant J.* 51:234-246.
166. Acharya, B., Raina, S., Maqbool, S., Jagadeeswaran, G., Mosher, S., Appel, H., Schultz, J., Klessig, D.F., and Raina, R. (2007) CRK13, an Arabidopsis cysteines-rich receptor-like kinase positively regulates cell death and resistance against pathogens. *Plant J.* 50:488-499.
167. Park, S.-W., Kaiyomo, E., Kumar, D., Mosher, S.L., and Klessig, D.F. (2007) Methyl salicylate is a critical mobile signal for plant systemic acquired resistance. *Science* 318:113-116.
168. Forouhar, F., Kuzin, A., Seetharaman, J., Lee, I., Zhou, W., Abashidze, M., Chen, Y., Yong, W., Janjua, H., Fang, Y., Wang, D., Cunningham, K., Xiao, R., Acton, T.B., Pichersky, E., Klessig, D.F., Porter, C.W., Montelione, G.T., and Tong, L. (2007) Functional insights from structural genomics. *J. Struct and Funct Genomics.* 8:37-44.
169. Zhou, F., Mosher, S., Tian, M., Sassi, G., Parker, J., and Klessig, D. F. (2008) The Arabidopsis gain-of-function mutant *ssi4* requires *RARI* and *SGT1b* differentially for defense activation and morphological alterations. *Mol. Plant-Microbe Interact.* 21:40-49.

170. Kang, H.-G., Kuhl, J. C., Kachroo, P., and Klessig, D. F. (2008) CRT1, an Arabidopsis ATPase that interacts with diverse resistance proteins and modulates disease resistance to Turnip Crinkle Virus. *Cell Host & Microbe*. 3:48-57.
171. Vlot, A.C., Liu, P.P., Cameron, R.K., Park, S.W., Yang, Y., Kumar, D., Zhou, F., Padukkavidana, T., Gustafsson, C., Pichersky, E., and Klessig, D.F. (2008) Identification of likely orthologs of tobacco salicylic acid-binding protein 2 and their role in systemic resistance in Arabidopsis thaliana. *Plant J*. 56:445-456.
172. Yang, Y., Xu, R., Ma, C.-J., Vlot, A. C., Klessig, D. F., and Pichersky, E. (2008) Inactive methyl indole-3-acetic acid ester can be hydrolyzed and activated by several esterases belonging to the AtMES esterase family of Arabidopsis. *Plant Physiol*. 147:1034-1045.
173. Moreau, M., Lee, G.-I., Wong, Y., Crane, B.R., and Klessig, D.F. (2008) AtNOS/A1 is a functional Arabidopsis thaliana cGTPase and not a nitric oxide synthase. *J. Biol. Chem*. 283:32957-32967.
174. Sudhamsu, J., Lee, G.-I., Klessig, D.F., and Crane, B.R. (2008) The structure of YqeH: An AtNOS1/AtNOA1 ortholog that couples GTP hydrolysis to molecular recognition. *J. Biol. Chem*. 283:32968-32976.
175. Kang, H.G. and Klessig, D.F. (2008) The involvement of the Arabidopsis CRT1 ATPase family in disease resistance protein-mediated signaling. *Plant Signaling & Behav*. 3:689-690.
176. Kumar, D. and Klessig, D.F. (2008) The search for the salicylic acid receptor led to discovery of the SAR signal receptor. *Plant Signaling & Behav*. 3:691-692.
177. Jeong, R.-D., Chandra-Shekara, A. C., Kachroo, A., Klessig, D. F., and Kachroo, P. (2008) HRT-mediated hypersensitive response and resistance to Turnip crinkle virus in Arabidopsis does not require the function of TIP, the presumed guard protein. *Mol. Plant-Microbe Interact*. 21:1316-1324.
178. Sekine, K.-T., Kawakami, S., Hase, S., Kubota, M., Ichinose, Y., Shat, J., Kang, H.G., Klessig, D.F., and Takahashi, H. (2008) High-level expression of a virus resistance gene, *RCY1*, confers extreme resistance to Cucumber mosaic virus in Arabidopsis thaliana. *Mol. Plant-Microbe Interact*. 21:1398-1407.
179. Park, S.-W., Liu, P.-P., Forouhar, F., Vlot, A.C., Tong, L., Tietjen, K., and Klessig, D.F. (2009) Use of a synthetic salicylic acid analog to investigate the roles of methyl salicylate and its esterases in plant disease resistance. *J. Biol. Chem*. 284:7307-7317.
180. Kawamura, Y., Takenaka, S., Hase, S., Kubota, M., Ichinose, y., Kanayama, Y., Nakaho, K., Klessig, D. F., and Takahashi, H. (2009) Enhanced defense responses in Arabidopsis induced by the cell wall protein fractions from *Pythium oligandrum* require *SGT1*, *RAR1*, *NPR1* and *JAR1*. *Plant Cell Physiol*. 50:924-934.
181. Liu, P.-P., Bhattacharjee, S., Klessig, D.F., and Moffett, P. (2010) Systemic acquired resistance is induced by R gene-mediated responses independent of cell death. *Mol. Plant Pathol*. 11:155-160.
182. Liu, P.-P., Yang, Y., Pichersky, E., and Klessig, D.F. (2010) Altering expression of *Benzoic Acid/Salicylic Acid Carboxyl Methyltransferase 1* compromises systemic acquired resistance and PAMP-triggered immunity in Arabidopsis. *Mol. Plant-Microbe Interact*. 23:82-90.
183. Kang, H.-G., Oh, C.-S., Sato, M., Katagiri, F., Glazebrook, J., Takahashi, H., Kachroo, P., Martin, G., and Klessig, D. F. (2010) Endosome-associated CRT1 functions early in resistance gene-mediated defense signaling in Arabidopsis and Tobacco. *Plant Cell*, 22:918-936.
184. Manosalva, P.M., Park, S.W., Forouhar, F., Tong, L., Fry, W.E., and Klessig, D.F. 2010. *Methyl esterase 1 (StMES1)* is required for systemic acquired resistance in potato. *Mol. Plant-Microbe Interact*. 23:1153-1163.
185. Mosher, S., Moeder, W., Nishimura, N., Jikumaru, Y., Joo, S.-H., Urquhart, W., Klessig, D. F., Kim, S.-K., Nambara, E., and Yoshioka, K. (2010) The lesion-mimic mutant cpr22 shows alterations in abscisic acid signaling and abscisic acid insensitivity in a salicylic acid-dependent manner. *Plant Physiol*. 152:1901-1913.

186. Jeong, R.-D., Chandra-Shekara, A. C., Barman, S. R., Navarre, D., Klessig, D. F., Kachroo, A., and Kachroo, P. (2010) Blue-light photoreceptors are required for the stability and function of a resistance protein-mediating viral defense. *Proc. Natl. Acad. Sci. USA.* 107:13538-13543.
187. Liu, P.-P., von Dahl, C. C., Park, S.-W., and Klessig, D. F. (2011) Interconnection between methyl salicylate and lipid-based long-distance signaling during systemic acquired resistance in *Arabidopsis* and tobacco. *Plant Physiol.* 155:1762-1768.
188. Liu, P.-P., von Dahl, C. C., and Klessig, D. F. (2011) The extent to which methyl salicylate is required for signaling systemic acquired resistance is dependent on exposure to light after infection. *Plant Physiol.* 157:2216-2226.
189. Tian, M., von Dahl, C. C., Liu, P.-P., Friso, G., van Wijk, K. J., and Klessig, D. F. (2012) The combined use of photoaffinity labeling and surface plasmon resonance-based technology identifies multiple salicylic acid-binding proteins. *Plant J.* 72:1027-1038.
190. Kang, H.-G., Choi, H. W., von Einem, S., Manosalva, P., Ehlers, K., Liu, P.-P., Buxa, S. V., Moreau, M., Mang, H.-G., Kachroo, P., Kogel, K.-H., and Klessig, D. F. (2012) CRT1 is a nuclear-translocated MORC endonuclease that participates in multiple levels of plant immunity. *Nature Comm.* 3:1297 (DOI: 10.1030?ncomms2279)
191. Moreau, M., Tian, M., and Klessig, D. F. (2012) Salicylic acid binds NPR3 and NPR4 to regulate NPR1-dependent defense responses. *Cell Research* 22:193.
192. Mang, H.-G., Qian, W., Zhu, Y., Qian, J., Kang, H.-G., Klessig, D. F., and Hua, J. (2012) ABA deficiency antagonizes high temperature inhibition of disease resistance through enhancing nuclear accumulation of R proteins SNC1 and RPS4. *Plant Cell* 24:1271-1284.
193. Zheng, X.-Y., Spivey, N.W., Zeng, W., Liu, P.-P., Fu, Z.Q., Klessig, D.F., He, S.Y., and Dong, X. (2012) Coronatine promotes *Pseudomonas syringae* virulence in plants by activating a signaling cascade that inhibits salicylic acid accumulation. *Cell Host & Microbe* 11:587-596.
194. Zhu, S., Jeong, R.-D., Lim, G.-H., Yu, K., Chandra-Shekara, A. C., Navarre, D., Klessig, D. F., Kachroo, A., and Kachroo P. (2013) Double-Stranded RNA-Binding Protein 4 is required for resistance protein-mediated signaling against viral and bacterial pathogens. *Cell Reports* 4:1168-1184.
195. Langen, G., von Einem, S., Koch A., Imani J., Pai S. B., Manohar M., Ehlers K., Choi H. W., Mang H.-G., Bordiya Y., Stein N., Kang H.-G., Klessig D. F., and Kogel K.-H. (2014) The CRT1 subfamily of MORC ATPases Regulates Disease Resistance in Barley to Biotrophic and Necrotrophic Pathogens *Plant Physiol.* 164:866-878.
196. Wang, R., Rajagopalan, K., Sadre-Bazzaz, K., Moreau, M., Klessig, D.F., and Tong, L. (2014) Crystal structure of the *Arabidopsis thaliana* TOP2 oligopeptidase *Acta Cryst F*70:555-559.
197. Liao, Y., Tian, M., Zhang, H., Li, X., Xiaojian Xia, X., Zhou, J., Zhou, Y., Yu1, J., Shi K., and Klessig, D. F. (2014) Salicylic acid binding of mitochondrial alpha-ketoglutarate dehydrogenase E2, which interacts with the downstream mitochondrial electron transport chain, plays a crucial role in basal defense against TMV in tomato. *New Phytologist*, DOI: 10.1111/nph.13137.
198. Tian, M., Sasvari, Z., Friso, G., Rowland, E., Liu, X.-M., van Wijk, K., Nagy, P. D., and Klessig, D. F. (2015) Salicylic acid inhibits the replication of *Tomato Bushy Stunt Virus* by directly targeting a host component in the replication complex. *Mol Plant Microbe Inter* 28:379-386. DOI: 10.1094/MPMI-09-14-0259-R
199. Manohar, M., Tian, M., Moreau, M., Park, S.-W., Choi, H.W., Fei, Z., Friso, G., Asif, M., Manosalva, P., von Dahl, C.C., Shi, K., Ma, S., Dinesh-Kumar, S.P., O'Doherty, I., Schroeder, F.C., van Wijk, K.J., and Klessig, D. F. (2015) Identification of multiple salicylic acid-binding proteins using two high throughput screens. *Frontiers Plant Sci* 5:777 DOI: 10.3389/fpls.2014.00777
200. Manosalva, P., Manohar, M., Kogel, K.-H., Kang, H.-G., and Klessig, D.F. (2015) The GHKL ATPase MORC1 modulates species-specific plant immunity in Solanaceae. *Mol Plant Microbe Inter* 28:927-942.

201. Manosalva, P., Manohar, M., von Reuss, S.H., Chen, S., Micikas, R.J., Koch, A., Choe, A., Kaplan, F., Xiaohong Wang, X., Kogel, K.-H., Sternberg, P.W., Williamson, V. M., Schroeder, F.C., and Klessig, D.F. (2015) Conserved nematode signaling molecules elicit plant defenses and pathogen resistance *Nature Comm* 6:7795/DOI: 10.1038/ncomms8795.
202. Choi, H.W., Tian, M., Song, F., Venereau, E., Preti, A., Park, S.-W., Hamilton, K., Swapna, G.V.T., Manohar, M., Moreau, M., Agresti, A., Gorzanelli, A., De Marchis, F., Wang, H., Antonyak, M., Micikas, R., Gentile, D.R., Cerione, R.A., Schroeder, F.C., Montelione, G.T., Bianchi, M.E., and Klessig, D.F. (2015) Aspirin's Active Metabolite Salicylic Acid Targets Human High Mobility Group Box 1 to Modulate Inflammatory Responses. *Mol Med* 21:526-535. DOI:10.2119/molmed.2015.00148
203. Choi, H.W., Tian, M., Manohar, M., Harraz, M.M., Park, S.-W., Schroeder, F.C., Snyder, S.H., and Klessig, D.F. (2015) Human GAPDH is a target of aspirin's primary metabolite salicylic acid and its derivatives. *PLOS ONE* 10:e0143447. DOI: 10.1371/journal.pone.0143447.
204. Choi, H.W., Manohar¹, M., Manosalva, P., Tian, M., Moreau, M., and Klessig, D.F. (2016) Activation of Plant Innate Immunity by Extracellular High Mobility Group Box 3 and Its Inhibition by Salicylic Acid. *PLoS Pathog* 12: e1005518. DOI: 10.1371/journal.ppat.1005518.
205. Bordiya, Y., Zheng, Y., Nam, J.-C., Bonnard, A.C., Choi, H.W., Lee, B.-K., Kim, J., Klessig, D.F., Fei, Z., and Kang, H.-G. (2016) Pseudomonas infection of Arabidopsis enhances accessibility to transposon-associated chromatin, which displays physical association with MORC1. *Mol Plant Microbe Inter* 29:674-687.
206. Manohar, M., Choi, H.W., Manosalva, P., Austin, C.A., Peters, J.E., and Klessig, D.K. (2017) Plant and human MORC proteins have DNA modifying activities similar to type II topoisomerases, but require additional factor(s) for full activity. *Mol Plant Microbe Inter* 30:87-100.

Book Chapters and Reviews:

- Klessig, D.F. (1984) Adenovirus-Simian Virus 40 Interactions. In: *The Adenoviruses*. Ed. H.S. Ginsberg. Plenum Press, New York and London, pp. 399-449.
- Carr, J.P. and Klessig, D.F. (1989) The Pathogenesis-Related Proteins of Plants. In: *Genetic Engineering, Principles and Methods*, Vol. 11. Ed. J. K. Setlow. Plenum Press, New York, pp. 65-109.
- Cutt, J.R. and Klessig, D.F. (1992) Pathogenesis-Related Proteins. In: *Plant Gene Research, Genes Involved In Plant Defense*. Eds. T. Boller and F. Meins Jr. Springer-Verlag, Wien and New York, pp. 209-243.
- Cutt, J.R. and Klessig, D.F. (1992) Salicylic Acid, A Changing Perspective. In: *Pharmaceutical Technology*, Vol. 16. pp. 26-34.
- Malamy, J. and Klessig, D.F. (1992) Salicylic Acid and Plant Disease Resistance. *Plant J.* 2: 643-654.
- Klessig, D.F. and Malamy, J. (1994) The Salicylic Acid Signal in Plants. *Plant Mol. Biol.* 26: 1439-1458.
- Dempsey, D.A. and Klessig, D.F. (1994) Salicylic Acid, Active Oxygen Species and Systemic Acquired Resistance in Plants. *Trends in Cell Biol.* 4: 334-338.
- Dixon, D.C. and Klessig, D.F. (1995) Immunolocalization of Proteins in Fixed and Embedded Plant Tissues. In: *Methods in Plant Molecular Biology: A Laboratory Manual*. Eds. P. Maliga, D. Klessig, A. Cashmore, W. Gruissem, and J. Varner. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, pp. 95-110.
- Dixon, D.C., Cutt, J.R. and Klessig, D.F. (1995) *In Situ* Hybridization for the Detection of RNA in Plant Tissues. In: *Methods in Plant Molecular Biology: A Laboratory Manual*. Eds. P. Maliga, D. Klessig, A. Cashmore, W. Gruissem, and J. Varner. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, pp. 111-139.
- Dempsey, D.A. and Klessig, D.F. (1995) Signals in Plant Disease Resistance. *Bulletin de l'Institut Pasteur* 93: 167-186.

- Wobbe, K.K. and Klessig, D.F. (1996) Salicylic Acid-an Important Signal in Plants. In: Signal Transduction in Plant Growth and Development . Ed. D.P.S. Verma. Springer, Wien and New York, pp. 167-196.
- Durner, J., Shah, J. and Klessig, D.F. (1997) Salicylic Acid and Disease Resistance in Plants. Trends in Plant Sci. 2: 266-274.
- Yang, Y., Shah, J. and Klessig, D.F. (1997) Signal Perception and Transduction in Plant Defense Responses. Genes and Dev. 11: 1621-1639.
- Dempsey, D., Silva, H. and Klessig, D.F. (1998) Engineering Disease and Pest Resistance in Plants. Trends in Microbiol. 6: 54-61.
- Klessig, D.F., Durner, J., Shah, J. and Yang, Y. (1998) Salicylic Acid-Mediated Signal Transduction in Plant Disease Resistance. In: Recent Advances in Phytochemistry. Eds. J. Romeo, K. Downum, and R. Verpoorte. Plenum Press, New York, pp. 119-137.
- Shah, J. and Klessig, D.F. (1999) Salicylic Acid: Signal Perception and Transduction. In: Biochemistry and Molecular Biology of Plant Hormones. Eds. P.P.J. Hooykaas, M.A. Hall, and K.R. Libbenga. Elsevier, New York, pp. 513-541.
- Dempsey, D., Shah, J. and Klessig, D.F. (1999) Salicylic acid and disease resistance in plants." Critical Reviews in Plant Sciences 18: 547-575.
- Durner, J. and Klessig, D.F. (1999) NO as a signal in plants. Curr. Opin. in Plant Biol. 2: 369-374.
- Zhang, S. and Klessig, D.F. (2000) Pathogen-Induced MAP Kinases in Tobacco. In: MAP Kinases in Plant Signal Transduction. Ed. H. Hirt. Springer-Verlag, Heidelberg, pp. 65-84.
- Wendehenne, D., Pugin, A., Klessig, D.F. and Durner, J. (2001) Nitric oxide: comparative synthesis and signaling in animal and plant cells. Trends in Plant Sci. 4:177-183.
- Zhang, S. and Klessig, D.F. (2001) MAPK cascades in plant defense signaling Trends in Plant Sci. 6:520-527.
- Ichimura, K., Shinozaki, K., Tena, G., Sheen, J., Henry, Y., Champion, A., Kreis, M., Zhang, S., Hirt, H., Wilson, C., Heberle-Bors, E., Ellis, B.E., Morris, P.C., Innes, R.W., Ecker, J.R., Scheel, D., Klessig, D.F., Machida, Y., Mundy, J., Ohashi, Y. and Walker, J.C. (2002) Mitogen-activated protein kinase cascades in plants: a new nomenclature. Trends in Plant Sci. 7: 301-308.
- Dempsey, D.A. and Klessig, D.F. (2003) Salicylic Acid. In: Encyclopedia of Hormones, Elsevier Science (USA), pp. 321-329.
- Wendehenne, D., Durner, J. and Klessig, D.F. (2004) Nitric oxide: A new player in plant signaling and defense responses. In. Curr. Opin. in Plant Biol. 7:449-455.
- Kachroo, P., Chandra-Shekhara, A. C. and Klessig, D. F. (2006) Plant signal transduction and defense against viral pathogens. Advances in Virus Research, Eds. K. Maramorosch and A. Shatkin Elsevier/Academic Press Vol. 66, pp.161-191.
- Hanel, L.P., Nicole, M.C., Sritubtim, S., Morency, M.J., Ellis M., Ehlting, J., Beaudoin, N., Barbazuk, B., Klessig, D., Lee, J., Martin, G., Mundy, J., Ohashi, Y., Scheel, D., Sheen, J., Xing, T., Zhang, S., Seguin, A. and Ellis, B.E. (2006) Ancient signals: comparative genomics of plant MAPK and MAPKK gene families. Trends Plant Sci. 11:192-198.
- Moffett, P. and Klessig, D.F. (2008) Plant resistance to viruses: Natural resistance associated with dominant genes. In Encyclopedia of Virology, 3rd Edit. (BWJ Mahy & MHV Van Regenmortel Editors), pp.170-177 Oxford: Elsevier.
- Vlot, A.C., Klessig, D.F., and Park, S.W. (2008) Systemic acquired resistance: the elusive signal(s). Curr. Opin. Plant Biol. 11:436-442.
- Vlot, A.C., Dempsey, D.A., and Klessig, D.F. (2009) Salicylic acid, a multifaceted hormone to combat disease. Ann. Rev. Phytopathol. 47:177-206.
- Moreau, M., Lindermayr, C., Durner, J., and Klessig, D.F. (2010) NO synthesis and signaling in plants – where do we stand? Physiologia Plantarum 138:372-383.
- Dempsey, D. A., Vlot, A. C., Wildermuth, M. C., and Klessig, D. F. (2011) Salicylic acid biosynthesis and metabolism. The Arabidopsis Book 9: e0156. doi: 10.1199/tab.0156
- Dempsey, D. A. and Klessig, D. F. (2012) SOS – too many signals for systemic acquired resistance? Trends Plant Sci. 17:538-545.
- Klessig, D. F. (2016) Newly identified targets of aspirin and its primary metabolite, salicylic acid.

DNA Cell Biol 35:1-4 doi: 10.108/dna.2016.3260

Klessig, D. F., Tian, M., and Choi H.W. (2016) Multiple targets of salicylic acid and its derivatives in plants and animals. *Front. Immunol.* 7:1-10 doi: 10.3389/fimmu.2016.00206.

Choi, H.W. and Klessig, D.F. (2016) DAMPs, MAMPs, and NAMPs in plant innate immunity. *BMC Plant Biol* 16:232 doi: 10.1186/s12870-016-0921-2.

Klessig, D. F. (2017) How does aspirin work in plants and humans? *Frontiers for Young Minds* doi: 10.3389/frym.2017.00014.

Dempsey, D. A. and Klessig, D.F. (2017) How does the multifaceted plant hormone salicylic acid come disease in plants and are similar mechanisms utilized in humans? *BioMed Central Biology* 15:23 doi 10.1186/s12915-017-0364-8.