Curriculum vitae: Sophien Kamoun

The Sainsbury Laboratory, Colney Lane, Norwich NR4 7UH, United Kingdom
Phone: 44(0)1603 450410, e-mail: sophien.kamoun@tsl.ac.uk
Lab web page: www.KamounLab.net

Education

Pierre & Marie Curie Univ., Paris, France	Cell Biology and Genetics	Maitrise	1987
University of California, Davis, USA	Genetics	PhD	1991
NSF CEPRAP, UC Davis, USA	Molecular Plant Pathology	Postdoc	1991-94

Appointments

2007-present	Senior Scientist, The Sainsbury Laboratory, John Innes Centre, Norwich Research Park, UK
2012-present	Professor of Biology, Univ. of East Anglia, Norwich, UK
2009-2014	Head, The Sainsbury Laboratory, Norwich Research Park, UK
2009-2012	Honorary Professor, Univ. of East Anglia, Norwich, UK
2006-2007	Professor, Dept. Plant Pathology, Ohio State Univ, Ohio Ag Res Dev Center (OARDC), Wooster
2002-2006	Associate Professor, Dept. Plant Pathology, Ohio State Univ, OARDC, Wooster
1998-2002	Assistant Professor, Dept. Plant Pathology, Ohio State Univ, OARDC, Wooster
1994-1997	Senior Research Scientist, Dept. Phytopathology, Wageningen Univ, The Netherlands
1991-1994	Postdoc, NSF Ctr for Engineering Plants for Resistance Against Pathogens (CEPRAP), UC Davis
1987-1991	Research Assistant, Dept. Plant Pathology and Genetics Graduate Group, UC Davis
1986	Research Assistant, The Wistar Institute, Philadelphia, Pennsylvania, USA

Awards

2014	EMBO (elected member).
2014-2015	Thomson Reuters Highly Cited Researcher
2013	American Association for the Advancement of Science (elected fellow)
2013	American Phytopathological Society Noel Keen Award
2012	Académie d'Agriculture de France (elected member “correspondant étranger”)
2012	Academia Europaea (elected member).
2010	Daiwa Adrian Prize (scientific collaboration between Japanese and British research teams)
2006	WE. Krauss Director’s Award for Excellence in Graduate Research Mentorship, OARDC
2004	Pomerene Teaching Award, CFAES, Ohio State University
2004	OARDC Junior Faculty Research Award
2003	American Phytopathological Society Syngenta Award

Teaching Activities

Plant Pathology 703, Agricultural Genomics: Principles and Applications (3 cr)
Plant Pathology 602, Plant-Microbe Interactions (3 cr)
Workshops "Molecular Phylogeny" and “Don't Perish: Writing and publishing a scientific paper”

Professional Activities

2014	Member, Gregor Mendel Institute of Molecular Plant Biology Science Advisory Board.
2012	Experimental Plant Science Graduate School Advisory Board (Netherlands).
2012-present	Adivsory Board, Center for Applied Plant Science, Ohio State University.
2011	INRA Département Santé des Plantes et Environnement Advisory Board (France).
2012-2014	President, International Society for Molecular Plant-Microbe Interactions (IS-MPMI).
2010-present	Member, Max Planck Institute for Terrestrial Microbiology Science Advisory Board.
2009-present	Member, Two Blades Foundation Science Advisory Board.

2009	Organizer, 12th New Phytologist Symposium “Effectors in Plant-Microbe Interactions”.
2009	Think Tank ”Exploiting Puccinia graminis f. sp. tritici genome information to control wheat stem rust”, San Diego, CA.
2008-09	Co-editor, Oomycete Molecular Genetics and Genomics, John Wiley & Sons.
2008	Co-editor, Current Opinion of Plant Biology.
2008	Review of Deutsche Forschungsgemeinschaft (DFG)-Research Unit "Mechanisms of compatibility: Reprogramming of plant metabolism by fungal effector molecules".
2008	BBSRC Plant and Microbial Sciences Committee for Evaluation of Responsive Mode Portfolio.
2008	Scientific committee and Chair “Molecular biology of host-pathogen interactions”, Third International late blight conference.
2008	Chair, Workshop “Pathogen genomes”, Keystone Symposium Plant Innate Immunity.
2008-present	Member, BASF Science Panel.
2008	Evaluation Committee INRA Laboratory "Santé de la Vigne et Qualité du Vin", Colmar, France.
2007	Chair, session “Plant/Environment Interactions”, 4th Solanaceae Genomics Workshop.
2007	Chair, session “Pathogenic and symbiotic interactions (fungi and oomycetes)”, 13th IS-MPMI Congress.
2006-2009	Monitoring Editor, Plant Physiology.
2006-2009	Editor In Chief, IS-MPMI Reporter.
2005	Chair, session "Genomes and Evolution", 23d Fungal Genetics Conference.
2004	Chair, symposium "Suppression of Host Defense Responses by Pathogens", Annual Meeting of the American Phytopathological Society.
2004-2005	Member, American Phytopathological Society committee on “Priorities for Plant Pathology”.
2003-2008	Senior Editor, Molecular Plant Pathology.
2002	Chair, symposium "Genomics of Plant-Pathogen Interactions", Annual Meeting of the American Phytopathological Society.
2003	Topical Editor, Encyclopedia of Plant and Crop Science: Fungal and oomycete diseases.
2003	Panel member, USDA National Research Initiative Competitive Grants Program “Functional Genomics of Agriculturally Important Microbes”.
2003	Invited participant, colloquium on Genomes and Pathogenesis, organized by the American Academy of Microbiology.
2002	Invited participant, workshop on Research Priorities for Genomic Analysis of Plant-Associated Microorganisms, organized by the American Phytopathological Society Public Policy Board.
2002-2005	Advisory Committee, NSF Research Collaboration Network on *Phytophthora* Molecular Genetics.
2001-2005	Advisory Committee, Potato Genome Project, NSF Plant Genome Program.

Research Funding **(selected)**

2012-2017	“Next generation disease resistance breeding in plants”. ERC Advanced Investigator. €2,500,000.
2011-2014	“Mechanisms of virulence and avirulence in the Avr3a family of *Phytophthora*”. BBSRC, £280,000.
2011-2014	“A pipeline to identify durable late blight disease resistance in potato”. BBSRC, £300,000.
2008-2011	“Role of the *Phytophthora infestans* secreted kinase CRN8 in plant disease”. BBSRC, £353,325.12.
2008-2010	“Monitoring of *AvrBlb1* and *AvrBlb2* genes in *Phytophthora infestans* populations”. BASF Plant Science, £110,725.
2005-2007	“Genome Sequence of *P. infestans*”. NSF-USDA Microbial Genome Sequencing. $3,745,458.
2005-2007	“Genome sequence of *P. capsici*”. NSF-USDA Microbial Genome Sequencing. $1,729,226.
2005-2006	“*Avr* genes of *Phytopthora infestans*”. BASF Plant Science, $140,022.
2004-2007	“*P. infestans* protease inhibitors”. USDA-NRICGP Biology of Plant Microbe Associations, $365,606.
2003-2004	“Microbial Genome Sequencing: *Phytophthora*”. NSF Emerging Frontiers. $457,000.
2002-2006	"Functional Genomics of *Phytophthora* ". NSF Plant Genome Research Program, $1,891,617.
1999-2002	“*P. infestans* transcriptome” Syngenra Crop Protection, $666,635.

Publications (total = 182; citations: total = ~10800, last 5 years = ~6500; h index = 59) [ResearcherID: B-3529-2009]

Wu, C.-H., Belhaj, K., Bozkurt, T.O., Birk, M.S., and Kamoun, S. 2015. Helper NLR proteins NRC2a/b and NRC3 but not NRC1 are required for Pto-mediated cell death and resistance in Nicotiana benthamiana. New Phytologist, in press.

Chaparro-Garcia, A., Kamoun, S., and Nekrasov, V. 2015. Boosting plant immunity with CRISPR/Cas. Genome Biology, 16:254.

Dong, S., Raffaele, S., and Kamoun, S. 2015. The two-speed genomes of filamentous pathogens: waltz with plants. Current Opinion in Genetics and Development, 35:57-65.

Sharma, R., Xia, X., Cano, L.M., Evangelisti, E., Kemen, E., Judelson, H., Oome, S., Sambles, C., van den Hoogen, D.J., Kitner, M., Klein, J., Meijer, H.J., Spring, O., Win, J., Zipper, R., Bode, H.B., Govers, F., Kamoun, S., Schornack, S., Studholme, D.J., Van den Ackerveken, G., and Thines, M. 2015. Genome analyses of the sunflower pathogen *Plasmopara halstedii* provide insights into effector evolution in downy mildews and *Phytophthora*. BMC Genomics, 16:741.

Petre, B., Lorrain, C., Saunders, D.G., Win, J., Sklenar, J., Duplessis, S., and Kamoun, S. 2015. Rust fungal effectors mimic host transit peptides to translocate into chloroplasts. Cellular Microbiology, in press.

Rickett, L.M., Pullen, N., Hartley, M., Zipfel, C., Kamoun, S., Baranyi, J., and Morris, R.J. 2015. Incorporating prior knowledge improves detection of differences in bacterial growth rate. BMC Systems Biology, 9:60.

Giannakopoulou, A., Steele, J.F., Segretin, M.E., Bozkurt, T., Zhou, J., Robatzek, S., Banfield, M.J., Pais, M., and Kamoun, S. 2015. Tomato I2 immune receptor can be engineered to confer partial resistance to the oomycete *Phytophthora infestans* in addition to the fungus *Fusarium oxysporum*. Molecular Plant-Microbe Interactions, in press.

Chaparro-Garcia, A., Schwizer, S., Sklenar, J., Yoshida, K., Petre, B., Bos, J.I., Schornack, S., Jones, A.M., Bozkurt, T.O., Kamoun, S. 2015. Phytophthora infestans RXLR-WY effector AVR3a associates with Dynamin-Related Protein 2 required for endocytosis of the plant pattern recognition receptor FLS2. PLOS ONE, 10:e0137071.

Yoshida, Y., Sasaki, E., and Kamoun, S. 2015. Computational analyses of ancient pathogen DNA from herbarium samples: challenges and prospects. Frontiers in Plant Science, 6:771.

Terauchi, R., Abe, A., Takagi, H., Tamiru, M., Fekih, R., Natsume, S., Yaegashi, H., Kosugi, S., Kanzaki, H., Matsumura, H., Saitoh, H., Yoshida, K., Cano, L., and Kamoun, S. 2015. Whole genome sequencing to identify genes and QTL in rice. In Advances in the Understanding of Biological Sciences Using Next Generation Sequencing (NGS) Approaches, pp. 33-41.

Maqbool, A., Saitoh, H., Franceschetti, M., Stevenson, C.E.M., Uemura, A., Kanzaki, H., Kamoun, S., Terauchi, R., and Banfield, M.J. 2015. Structural basis of pathogen recognition by an integrated HMA domain in a plant NLR immune receptor. eLife, 4:e08709.

Ilyas, M., Horger, A.C., Bozkurt, T.O., van den Burg, H.A., Kaschani, F., Kaiser, M., Belhaj, K., Smoker, M., Joosten, M.H.A.J., Kamoun, S., and van der Hoorn, R.A.L. 2015. Functional divergence of two secreted immune proteases of tomato. Current Biology, 25:2300-2306.

Rallapalli G., Fraxinus Players, Saunders, D.G., Yoshida, K., Edwards, A., Lugo, C.A., Collin, S., Clavijo, B., Corpas, M., Swarbreck, D., Clark, M., Downie, J.A., Kamoun, S., Team Cooper, and MacLean, D. 2015. Lessons from Fraxinus, a crowd-sourced citizen science game in genomics. eLife, 4:e07460.

Fujisaki, K., Abe, Y., Ito, A., Saitoh, H., Yoshida, K., Kanzaki, H., Kanzaki, E., Utsushi, H., Yamashita, T., Kamoun, S., and Terauchi, R. 2015. Rice Exo70 interacts with a fungal effector, AVR-Pii and is required for AVR-Pii-triggered immunity. Plant Journal, 83:875-887.

Patron, N.J., Orzaez, D., Marillonnet, S., Warzecha, H., Matthewman, C., Youles, M., Raitskin, O., Leveau, A., Farre, G., Rogers, C., Smith, A., Hibberd, J., Webb, A.A., Locke, J., Schornack, S., Ajioka, J., Baulcombe, D.C., Zipfel, C., Kamoun, S., Jones, J.D., Kuhn, H., Robatzek, S., Van Esse, H.P., Sanders, D., Oldroyd, G., Martin, C., Field, R., O'Connor, S., Fox, S., Wulff, B., Miller, B., Breakspear, A., Radhakrishnan, G., Delaux, P.M., Loque, D., Granell, A., Tissier, A., Shih, P., Brutnell, T.P., Quick, W.P., Rischer, H., Fraser, P.D., Aharoni, A.,

Raines, C., South, P.F., Ane, J.M., Hamberger, B.R., Langdale, J., Stougaard, J., Bouwmeester, H., Udvardi, M., Murray, J.A., Ntoukakis, V., Schafer, P., Denby, K., Edwards, K.J., Osbourn, A., Haseloff, J. 2015. Standards for plant synthetic biology: a common syntax for exchange of DNA parts. New Phytologist, 208:13-19.

Solovyeva, I., Schmuker, A., Cano, L.M., van Damme, M., Ploch, S., Kamoun, S., and Thines, M. 2015. Evolution of Hyaloperonospora effectors: ATR1 effector homologs from sister species of the downy mildew pathogen H. arabidopsidis are not recognised by RPP1WsB. Mycological Progress, 14:53-62.

Oliva, R.F., Cano, L., Raffaele, S., Win, J., Bozkurt, T.O., Belhaj, K., Oh, S., Thines, M., and Kamoun, S. 2015. A recent expansion of the RXLR effector gene Avrblb2 is maintained in global populations of *Phytophthora infestans* indicating different contributions to virulence. Molecular Plant-Microbe Interactions, 28:901-912.

Du, J., Verzaux, E., Chaparro-Garcia, A., Bijsterbosch, G., Keizer, L.C.P., Zhou, J., Liebrand, T.W.H., Xie, C., Govers, F., Robatzek, S., van der Vossen, E.A.G., Jacobsen, E., Visser, R.G.F., Kamoun, S., and Vleeshouwers, V.G.A.A. 2015. Elicitin recognition confers enhanced resistance to *Phytophthora infestans* in potato. Nature Plants, 1, 15034.

Takagi, H., Tamiru, M., Abe, A., Yoshida, K., Uemura, A., Yaegashi, H., Obara, T., Oikawa, K., Utsushi, H., Kanzaki, E., Mitsuoka, C., Natsume, S., Kosugi, S., Kanzaki, H., Matsumura, H., Urasaki, N., Kamoun, S., and Terauchi, R. 2015. MutMap accelerates breeding of a salt-tolerant rice cultivar. Nature Biotechnology, 33:445-449.

Hubbard, A., Lewis, C.M., Yoshida, K., Ramirez-Gonzalez, R.H., de Vallavieille-Pope, C., Thomas, J., Kamoun, S., Bayles, R., Uauy, C., and Saunders, D.G.O. 2015. Field pathogenomics reveals the emergence of a diverse wheat yellow rust population. Genome Biology, 16:23.

Wu, C.-H., Krasileva, K.V., Banfield, M.J., Terauchi, R.T., and Kamoun, S. 2015. The sensor domains of plant NLR proteins: more than decoys? Frontiers in Plant Science, 6:134.

Petre, P., Saunders, D.G.O, Sklenar, J., Lorrain, C., Win, J., Duplessis, S., and Kamoun, S. 2015. Candidate effector proteins of the rust pathogen Melampsora larici-populina target diverse plant cell compartments. Molecular Plant-Microbe Interactions, 28:689-700.

Bozkurt, T.O., Belhaj, K., Dagdas, Y.F., Chaparro-Garcia, A., Wu, C.-H., Cano, L.M., and Kamoun, S. 2015. Rerouting of plant late endocytic trafficking towards a pathogen interface. Traffic, 16:204-226.

Kamoun, S., Furzer, O., Jones, J.D.G., Judelson, H.S., Ali, G.S., Dalio, R.J.D., Roy, S.G., Schena, L., Zambounis, A., Panabieres, F., Cahill, D., Ruocco, M., Figueiredo, A., Chen, X-R., Hulvey, J., Stam, R., Lamour, K., Gijzen, M., Tyler, B.M., Grunwald, N.J., Mukhtar, M.S., Tome, D.F.A., Tor, M., Van den Ackerveken, G., McDowell, J., Daayf, F., Fry, W.E., Lindqvist-Kreuze, H., Meijer, H.J.G., Petre, B., Ristaino, J., Yoshida, K., Birch, P.R.J., and Govers, F. 2015. The Top 10 oomycete pathogens in molecular plant pathology. Molecular Plant Pathology, 16:413-434.

Belhaj, K., Chaparro-Garcia, A., Kamoun, S., Patron, N.J., and Nekrasov, V. 2014. Engineering plant genomes with CRISPR/Cas9. Current Opinion in Biotechnology, 32:76-84.

Giannakopoulou, A., Schornack, S., Bozkurt, T.O., Haart, D., Ro, D.K., Faraldos, J.A., Kamoun, S., and O'Maille, P.E. 2014. Variation in capsidiol sensitivity between *Phytophthora infestans* and *Phytophthora capsici* is consistent with their host range. PLOS ONE, 9:e107462.

Lee, H.A., Kim, S.Y., Oh, S.K., Yeom, S.I., Kim, S.B., Kim, M.S., Kamoun, S., and Choi, D. 2014. Multiple recognition of RXLR effectors is associated with nonhost resistance of pepper against *Phytophthora infestans*. New Phytologist, 203:926-938.

Bozkurt, T.O., Richardson, A., Dagdas, Y.F., Mongrand, S., Kamoun, S., Raffaele, S. 2014. The plant membrane-associated REM1.3 remorin accumulates in discrete perihaustorial domains and enhances susceptibility to *Phytophthora infestans*. Plant Physiology, 165:1005-1018.

Yoshida, K., Burbano, H.A., Krause, J., Thines, M., Weigel, D., and Kamoun, S. 2014. Mining herbaria for plant pathogen genomes: back to the future. PLOS Pathogens, 10:e1004028.

Segretin, M.E., Pais, M., Franceschetti, M., Chaparro-Garcia, A., Bos, J.I., Banfield, M.J., and Kamoun, S.

2014. Single amino acid mutations in the potato immune receptor R3a expand response to *Phytophthora* effectors. Molecular Plant-Microbe Interactions, 27:624-637.

Nemri, A., Saunders, D.G., Anderson, C., Upadhyaya, N.M., Win, J., Lawrence, G., Jones, D., Kamoun, S., Ellis, J., and Dodds, P. 2014. The genome sequence and effector complement of the flax rust pathogen *Melampsora lini*. Frontiers in Plant Science, 5:98.

King, S.R.F., McLellan, H., Boevink, P.C., Armstrong, M.R., Bukharova, B., Sukarta, O., Win, J., Kamoun, S., Birch, P.R.J., and Banfield, M.J. 2014. *Phytophthora infestans* RXLR effector PexRD2 interacts with host MAPKKKe to suppress plant immune signaling. Plant Cell, 26:1345-1359.

Petre, B., and Kamoun, S. 2014. Unsolved mystery - How do filamentous pathogens deliver effector proteins into plant cells? PLOS Biology, 12:e1001801.

Dong, S., Stam, R., Cano, L.M., Song, J., Sklenar, J., Yoshida, K., Bozkurt, T.O., Oliva, R., Liu, Z., Tian, M., Win, J., Banfield, M.J., Jones, A.M.E., van der Hoorn, R.A.L., and Kamoun, S. 2014. Effector specialization in a lineage of the Irish potato famine pathogen. Science, 343:552-555.

Lin, K., Limpens, E., Zhang, Z., Ivanov, S., Saunders, D.G.O., Mu, D., Pang, E., Cao, H., Cha, H., Lin, T., Zhou, Q., Shang, Y., Li, Y., Sharma, T., van Velzen, R., de Ruijter, N., Aanen, D.K., Win, J., Kamoun, S., Bisseling, T., Geurts, R., and Huang, S. 2014. Single nucleus genome sequencing reveals high similarity among nuclei of an endomycorrhizal fungus. PLOS Genetics, 10:e1004078.

Qi, J., Liu, X., Shen, D., Miao, H., Xie, B., Li, X., Zeng, P., Wang, S., Shang, Y., Gu, X., Du, Y., Li, Y., Lin, T., Yuan, J., Yang, X., Chen, J., Chen, H., Xiong, X., Huang, K., Fei, Z., Mao, L., Tian, L., Stadler, T., Renner, S.S,, Kamoun, S., Lucas, W.J., Zhang, Z., Huang, S. 2013. A genomic variation map provides insights into the genetic basis of cucumber domestication and diversity. Nature Genetics, 45:1510-1515.

Kosugi, S., Natsume, S., Yoshida, K., MacLean, D., Cano, L., Kamoun, S., and Terauchi, R. 2013. Coval: Improving alignment quality and variant calling accuracy for next-generation sequencing data. PLOS ONE, 8:e75402.

Belhaj, K., Chaparro-Garcia, A., Kamoun, S. and Nekrasov, V. 2013. Plant genome editing made easy: targeted mutagenesis in model and crop plants using the CRISPR/Cas system. Plant Methods, 9:39.

Cano, L.M., Raffaele, S., Haugen, R.H., Saunders, D.G.O., Leonelli, L., MacLean, D., Hogenhout, S.A., and Kamoun, S. 2013. Major transcriptome reprogramming underlies floral mimicry induced by the rust fungus *Puccinia monoica* in *Boechera stricta*. PLOS ONE, 8:e75293.

Fekih, R., Takagi, H., Tamiru, M., Abe, A., Natsume, S., Yaegashi, H., Sharma, S., Sharma, S., Kanzaki, H., Matsumura, H., Saitoh, H., Mitsuoka, C., Utsushi, H., Uemura, A., Kanzaki, E., Kosugi, S., Yoshida, K., Cano. L., Kamoun, S., and Terauchi, R. 2013. MutMap+: Genetic mapping and mutant identification without crossing in rice. PLOS ONE, 8:e68529.

Nekrasov, V., Staskawicz, B., Weigel, D., Jones, J.D.G., and Kamoun, S. 2013. Targeted mutagenesis in the model plant *Nicotiana benthamiana* using Cas9 RNA-guided endonuclease. Nature Biotechnology, 31:691-693.

Pais, M., Win, J., Yoshida, K., Etherington, G.J., Cano, L.M., Raffaele, S., Banfield, M.J., Jones, A., Kamoun, S., and Saunders, D.G.O. 2013. From pathogen genomes to host plant processes: the power of plant parasitic oomycetes. Genome Biology, 14:211.

Takagi, H., Uemura, A., Yaegashi, H., Tamiru, M., Abe, A., Mitsuoka, C., Utsushi, H., Natsume, S., Kanzaki, H., Matsumura, H., Saitoh, H., Yoshida, K., Cano, L.M., Kamoun, S., Terauchi, R. 2013. MutMap-Gap: whole-genome resequencing of mutant F2 progeny bulk combined with de novo assembly of gap regions identifies the rice blast resistance gene Pii. New Phytologist, 200:276-283.

Banfield, M.J., and Kamoun, S. 2013. Hooked and cooked: A fish killer genome exposed. PLOS Genetics, 9:e1003590.

Xia, S., Cheng, Y.T., Huang, S., Win, J., Soards, A., Jinn, T.L., Jones, J., Kamoun, S., Chen, S., Zhang, Y., Li, X. 2013. Regulation of transcription of NB-LRR-encoding genes SNC1 and RPP4 via H3K4 tri-methylation. Plant Physiology, 162:1694-1705.

Yoshida, K., Schuenemann, V., Cano, C., Pais, P, Mishra, B., Sharma, R., Lanz, C., Martin, F., Kamoun, S., Krause, J., Thines, M., Weigel, D., and Burbano, H. 2013. The rise and fall of the *Phytophthora infestans* lineage that triggered the Irish potato famine. eLife, 2:e00731.

Cantu, D., Segovia, V., Maclean, D., Bayles, R., Chen, X., Kamoun, S., Dubcovsky, J., Saunders, D.G., and Uauy, C. 2013. Genome analyses of the wheat yellow (stripe) rust pathogen Puccinia striiformis f. sp. tritici reveal polymorphic and haustorial expressed secreted proteins as candidate effectors. BMC Genomics, 14:270.

Sharma, S., Sharma, S., Hirabuchi, A., Yoshida, K., Fujisaki, K., Ito, A., Uemura, A., Terauchi, R., Kamoun, S., Sohn, K.H., Jones, J.D., and Saitoh, H. 2013. Deployment of *Burkholderia glumae* type III secretion system as an efficient tool for translocating pathogen effectors to monocot cells. Plant Journal, 74:701-712.

MacLean, D., Yoshida, K., Edwards, A., Crossman, L., Clavijo, B., Clark, M., Swarbreck, D., Bashton, M., Chapman, P., Gijzen, M., Caccamo, M., Downie, A., Kamoun, S., and Saunders, D. 2013. Crowdsourcing genomic analyses of ash and ash dieback -- power to the people. GigaScience, 2:2.

Takagi, H., Abe, A., Yoshida, K., Kosugi, S., Natsume, S., Mitsuoka, C., Uemura, A., Utsushi, H., Tamiru, M., Takuno, S., Innan, H., Cano, L.M., Kamoun, S., and Terauchi, R. 2013. QTL-seq: Rapid mapping of quantitative trait loci in rice by whole genome resequencing of DNA from two bulked populations. Plant Journal, 74:74-183.

Wang, E., Schornack, S., Marsh, J.F., Gobbato, E., Schwessinger, B., Eastmond, P., Schultze, M., Kamoun, S., and Oldroyd, G.E.D. 2012. A common signaling process that promotes mycorrhizal and oomycete colonization of plants. Current Biology, 22:2242-2246.

Cooke, D.E.L., Cano, L.M., Raffaele, S., Bain, R.A., Cooke, L.R., Etherington, G.J., Deahl, K.L., Farrer, R.A., Gilroy, E.M., Goss, E.M., Grunwald, N.J., Hein, I., MacLean, D., McNicol, J.W., Randall, E., Oliva, R.F., Pel, M.A., Shaw, D.S., Squires, J.N., Taylor, M.C., Vleeshouwers, V.G.A.A., Birch, P.R.J., Lees, A.K., and Kamoun, S. 2012. Genome analyses of an aggressive and invasive lineage of the Irish potato famine pathogen. PLoS Pathogens, 8:e1002940.

Saunders, D.G.O., Breen, S., Win, J., Schornack, S., Hein, I., Bozkurt, T.O., Champouret, N., Birch, P.R.J., Gilroy, E.M., and Kamoun, S. 2012. Host protein BSL1 associates with *Phytophthora infestans* RXLR effector AVR2 and the *Solanum demissum* immune receptor R2 to mediate disease resistance. Plant Cell, 24:3420-3434.

Lamour, K.H,, Mudge, J., Gobena, D., Hurtado-Gonzales, O.P., Schmutz, J., Kuo, A., Miller, N.A., Rice, B.J., Raffaele, S., Cano, L.M., Bharti, A.K., Donahoo, R.S., Finley, S., Huitema, E., Hulvey, J., Platt, D., Salamov, A., Savidor, A., Sharma, R., Stam, R., Storey, D., Thines, M., Win, J., Haas, B.J., Dinwiddie, D.L., Jenkins, J., Knight, J.R., Affourtit, J.P., Han, C.S., Chertkov, O., Lindquist, E.A., Detter, C., Grigoriev, I.V., Kamoun, S., Kingsmore, S.F.. 2012. Genome sequencing and mapping reveal loss of heterozygosity as a mechanism for rapid adaptation in the vegetable pathogen *Phytophthora capsici*. Molecular Plant-Microbe Interactions, 25:1350-1360.

van Damme, M., Bozkurt, T.O., Cakir, C., Sklenar, J., Jones, A.M.E., and Kamoun, S. 2012. The Irish potato famine pathogen *Phytophthora infestans* translocates the CRN8 kinase into host plant cells. PLoS Pathogens, 8:e1002875.

Raffaele, S., and Kamoun, S. 2012. Genome evolution in filamentous plant pathogens: why bigger can be better. Nature Reviews Microbiology, 10:417-430.

Saitoh, H., Fujisawa, S., Mitsuoka, C., Ito, A., Hirabuchi, A., Ikeda, K., Irieda, H., Yoshino, K., Yoshida, K., Matsumura, H., Tosa, Y., Win, J., Kamoun, S., Takano, Y., and Terauchi, R. 2012. Large-scale gene disruption in *Magnaporthe oryzae* identifies MC69, a secreted protein required for infection by monocot and dicot fungal pathogens. PLoS Pathogens, 8:e1002711.

Bozkurt, T.O., Schornack, S., Banfield, M.J., and Kamoun, S. 2012. Oomycetes, effectors, and all that jazz. Current Opinion in Plant Biology, 15:483-492.

Rietman, H., Bijsterbosch, G., Cano, L.M., Lee, H.-R., Vossen, J.H., Jacobsen, E., Visser, R.G.F., Kamoun, S., and Vleeshouwers, V.G.A.A. 2011 Qualitative and quantitative late blight resistance in the potato cultivar Sarpo Mira is determined by the perception of five distinct RXLR effectors. Molecular Plant-Microbe Interactions, 25:910-919.

Abe, A., Kosugi, S., Yoshida, K., Natsume, S., Takagi, H., Kanzaki, H., Matsumura, H., Yoshida, K., Mitsuoka, C., Tamiru, M., Innan, H., Cano, L., Kamoun, S., and Terauchi, R. 2012. Genome sequencing reveals agronomically important loci in rice using MutMap. Nature Biotechnology, 30:174-178.

Lu, Y.-J., Schornack, S., Spallek, T., Geldner, N., Chory, J., Schellmann, S., Schumacher, K., Kamoun, S., and Robatzek, S. 2012. Patterns of plant subcellular responses to successful oomycete infections reveal differences in host cell reprogramming and endocytic trafficking. Cellular Microbiology, 14:682-697.

Win, J., Krasileva, K.V., Kamoun, S., Shirasu, K., Staskawicz, B.J., and Banfield, M.J. 2012**.** Sequence divergent RXLR effectors share a structural fold conserved across plant pathogenic oomycete species. PLoS Pathogens, 8:e1002400.

MacLean, D., and Kamoun, S. 2012. Big data in small places. Nature Biotechnology, 30:33-34.

Saunders, D.G.O., Win, J., Cano, L.M., Szabo, L.J., Kamoun, S., and Raffaele, S. 2012. Using hierarchical clustering of secreted protein families to classify and rank candidate effectors of rust fungi. PLoS One, 7:e29847.

Bozkurt, T.O., Schornack, S., Win, J., Shindo, T., Ilyas, M., Oliva, R., Cano, L.M., Jones, A.M.E., Huitema, E., van der Hoorn, R.A.L., and Kamoun, S. 2011. *Phytophthora infestans* effector AVRblb2 prevents secretion of a plant immune protease at the haustorial interface. Proceedings of the National Academy of Sciences USA, 108:20832-20837.

Yaeno, T. Li, H., Chaparro-Garcia, A., Schornack, S., Koshiba, S., Watanabe, S., Kigawa, T., Kamoun, S., and Shirasu, K. 2011. Phosphatidylinositol monophosphate-binding interface in the oomycete RXLR effector AVR3a is required for its stability in host cells to modulate plant immunity. Proceedings of the National Academy of Sciences USA, 108:14682-14687.

Boutemy, L.S., King, S.R.F., Win, J., Hughes, R.K., Clarke, T.A., Blumenschein, T.M.A., Kamoun, S., and Banfield, M.J. 2011. Structures of *Phytophthora* RXLR effector proteins: a conserved but adaptable fold underpins functional diversity. Journal of Biological Chemistry, 41:35834–35842.

Vleeshouwers, V.G.A.A., Raffaele, R., Vossen, J., Champouret, N., Oliva, R., Segretin, M.E., Rietman, H., Cano, L.M., Lokossou, A., Kessel, G., Pel, M.A., and Kamoun, S. 2011. Understanding and exploiting late blight resistance in the age of effectors. Annual Reviews of Phytopathology, 49:507-531.

Gilroy, E.M., Breen, S., Whisson, S.C., Squires, J., Hein, I., Kaczmarek, M., Turnbull, D., Boevink, P.C., Lokossou, A., Cano, L.M., Morales, J., Avrova, A.O., Pritchard, L., Randall, E., Lees, A., Govers, F., van West, P., Kamoun, S., Vleeshouwers, V.G.A.A., Cooke, D.E.L. and Birch, P.R.J. 2011. Presence/absence, differential expression and sequence polymorphisms between PiAVR2 and PiAVR2-like in *Phytophthora infestans* determine virulence on R2 plants. New Phytologist, 191:763-776.

Chaparro-Garcia, A., Wilkinson, R.C., Gimenez-Ibanez, S., Findlay, K., Coffey, M.D., Zipfel, C., Rathjen, J.P., Kamoun, S., and Schornack, S. 2011. The receptor-like kinase SERK3/BAK1 is required for basal resistance against the late blight pathogen *Phytophthora infestans* in *Nicotiana benthamiana*. PLoS One, 6:e16608.

Raffaele, S., Farrer, R.A., Cano, L.M., Studholme, D.J., MacLean, D., Thines, M., Jiang, R.H.Y., Zody, M.C., Kunjeti, S.G., Donofrio, N.M., Meyers, B.C., Nusbaum, C., and Kamoun, S. 2010. Genome evolution following host jumps in the Irish potato famine pathogen lineage. Science, 330:1540-1543.

Baxter, L., Tripathy, S., Ishaque, N., Boot, N., Cabral, A., Kemen, E., Thines, M., Ah-Fong, A., Anderson, R., Badejoko, W., Bittner-Eddy, P., Boore, J.L., Chibucos, M.C., Coates, M., Dehal, P., Delehaunty, K., Dong, S., Downton, P., Dumas, B., Fabro, G., Fronick, C., Fuerstenberg, S.I., Fulton, L., Gaulin, E., Govers, F., Hughes, L., Humphray, S., Jiang, R.H.Y., Judelson, H., Kamoun, S., Kyung, K., Meijer, H., Minx, P., Morris, P., Nelson, J., Phuntumart, V., Qutob, D., Rehmany, A., Rougon-Cardoso, A., Ryden, P., Torto-Alalibo, T., Studholme, D., Wang, Y., Win, J., Wood, J., Clifton, S.W., Rogers, J., Van den Ackerveken, G., Jones, J.D.G., McDowell, J.M., Beynon, J., and Tyler, B.M. 2010. Signatures of adaptation to obligate biotrophy in the *Hyaloperonospora arabidopsidis* genome. Science, 330:1549-1551.

Raffaele, S., Win, J., Cano, L.M., Kamoun, S. 2010. Analyses of genome architecture and gene expression reveal novel candidate virulence factors in the secretome of *Phytophthora infestans*. BMC Genomics, 11:637.

Kaschani, F., Shabab, M., Bozkurt, T., Shindo, T., Schornack, S., Gu, C., Ilyas, M., Win, J., Kamoun, S., van der Hoorn, R.A. 2010. An effector-targeted protease contributes to defense against *Phytophthora infestans* and is under diversifying selection in natural hosts. Plant Physiology, 154:1794-804.

Schornack, S., van Damme, M., Bozkurt, T.O., Cano, L.M., Smoker, M., Thines, M., Gaulin, E., Kamoun S., and Huitema, E. 2010. Ancient class of translocated oomycete effectors targets the host nucleus**.** Proceedings of the National Academy of Sciences USA, 107:17421-17426.

Levesque, C.A., Brouwer, H., Cano, L., Hamilton, J.P., Holt, C., Huitema, E., Raffaele, S., Robideau, G.P., Thines, M., Win, J., Zerillo, M.M., Beakes, G.W., Boore, J.L., Busam, D., Dumas, B., Ferriera, S., Fuerstenberg, S.I., Gachon, C.M., Gaulin, E., Govers, F., Grenville-Briggs, L., Horner, N., Hostetler, J., Jiang, R.H., Johnson, J., Krajaejun, T., Lin, H., Meijer, H.J., Moore, B., Morris, P., Phuntmart, V., Puiu, D., Shetty, J., Stajich, J.E., Tripathy, S., Wawra, S., van West, P., Whitty, B.R., Coutinho, P.M., Henrissat, B., Martin, F., Thomas, P.D., Tyler, B.M., De Vries, R.P., Kamoun, S., Yandell, M., Tisserat, N., and Buell, C.R. 2010. Genome sequence of the necrotrophic plant pathogen, *Pythium ultimum*, reveals original pathogenicity mechanisms and effector repertoire. Genome Biology, 11:R73.

Bos, J.I.B., Armstrong, M.R., Gilroy, E.M., Boevink, P.C., Hein, I., Taylor, R.M., Zhendong, T., Engelhardt, S., Vetukuri, R.R., Harrower, B., Dixelius, C., Bryan, G., Sadanandom, A., Whisson, S.C., Kamoun, S., and Birch, P.R.J. 2010. *Phytophthora infestans* effector AVR3a is essential for virulence and manipulates plant immunity by stabilizing host E3 ligase CMPG1. Proceedings of the National Academy of Sciences USA, 107:9909-14.

Thines, M., and Kamoun, S. 2010. Oomycete-plant coevolution: recent advances and future prospects**.** Current Opinion in Plant Biology, 13:427-433.

Oliva, R., Win, J., Raffaele, S., Boutemy, L., Bozkurt, T.O., Chaparro-Garcia, A., Segretin, M.E., Stam, R., Schornack, S., Cano, L.M., van Damme, M., Huitema, E., Thines, M., Banfield, M.J., and Kamoun, S. 2010. Recent developments in effector biology of filamentous plant pathogens**.** Cellular Microbiology, 12:705–715.

Green, S., Studholme, D.J., Laue, B.E., Dorati, F., Lovell, H., Arnold, D., Cottrell, J.E., Bridgett, S., Blaxter, M., Huitema, E., Thwaites, R., Sharp, P.M., Jackson, R.W., and Kamoun, S. 2010. Comparative genome analysis provides insights into the evolution and adaptation of *Pseudomonas syringae* pv. *aesculi* on *Aesculus hippocastanum***.** PLoS ONE, 5:e10224.

Lebrun, M.H., and Kamoun S. 2010. Effectors, effectors et toujours des effectors**.** New Phytologist, 186:290-292.

Schornack, S., Huitema, E., Cano, L.M., Bozkurt, T.O., Oliva, R., van Damme, M., Schwizer, S., Raffaele, S., Chaparro-Garcia, A., Farrer, R., Segretin, M.E., Bos, J., Haas, B.J., Zody, M.C., Nusbaum, C., Win, J., Thines, M., and Kamoun, S. 2009. Ten things to know about oomycete effectors**.** Molecular Plant Pathology, 10:795-803.

Oh, S.-K., Young, C., Lee, M., Oliva, R., Bozkurt, T., Cano, L.M., Win, J., Bos, J.I.B., Liu, H.,-Y., van Damme, M., Morgan, W., Choi, D., van der Vossen, E.A.G., Vleeshouwers, V., and Kamoun, S. 2009. *In planta* expression screens of *Phytophthora infestans* RXLR effectors reveal diverse phenotypes, including activation of the *Solanum bulbocastanum* disease resistance protein Rpi-blb2**.** Plant Cell, 21:2028-2947.

Haas, B.J., Kamoun, S., Zody, M.C., Jiang, R.H.Y., Handsaker, R.E., Cano, L.M., Grabherr, M., Kodira, C.D., Raffaele, S., Torto-Alalibo, T., Bozkurt, T.O., Ah-Fong, A.M.V., Alvarado, L., Anderson, V.L., Armstrong, M.R., Avrova, A., Baxter, L., Beynon, J., Boevink, P.C., Bollmann, S.R., Bos, J.I.B., Bulone, V., Cai, G., Cakir, C., Carrington, J.C., Chawner, M., Conti, L., Costanzo, S., Ewan, R., Fahlgren, N., Fischbach, M.A., Fugelstad, J., Gilroy, E.M., Gnerre, S., Green, P.J., Grenville-Briggs, L.J., Griffith, J., Grunwald, N.J., Horn, K., Horner, N.R., Hu, C.-H., Huitema, E., Jeong, D.-H., Jones, A.M.E., Jones, J.D.G., Jones, R.W., Karlsson, E.K., Kunjeti, S.G., Lamour, K., Liu, Z., Ma, L., MacLean, D., Chibucos, M.C., McDonald, H., McWalters, J., Meijer, H.J.G., Morgan, W., Morris, P.F., Munro, C.A., O,ÄôNeill, K., Ospina-Giraldo, M., Pinzon, A., Pritchard, L., Ramsahoye, B., Ren, Q., Restrepo, S., Roy, S., Sadanandom, A., Savidor, A., Schornack, S., Schwartz, D.C., Schumann, U.D., Schwessinger, B., Seyer, L., Sharpe, T., Silvar, C., Song, J., Studholme, D.J., Sykes, S., Thines, M., van de

Vondervoort, P.J.I., Phuntumart, V., Wawra, S., Weide, R., Win, J., Young, C., Zhou, S., Fry, W., Meyers, B.C., van West, P., Ristaino, J., Govers, F., Birch, P.R.J., Whisson, S.C., Judelson, H.S., and Nusbaum, C. 2009. Genome sequence and analysis of the Irish potato famine pathogen *Phytophthora infestans*. Nature, 461:393-398.

Schornack, S., Fuchs, R., Huitema, E., Rothbauer, U., Lipka, V., and Kamoun, S. 2009. Protein mislocalization in plant cells using a GFP-binding chromobody**.** Plant Journal, 60:744-754.

Jagdale. G.B., Kamoun, S., and Grewal, P.S. 2009. Entomopathogenic nematodes induce components of systemic resistance in plants: Biochemical and molecular evidence. Biological Control, 51:102-109.

Yoshida, K., Saitoh, H., Fujisawa, S., Kanzaki, H., Matsumura, H., Yoshida, K., Tosa, Y., Chuma, I., Takano, Y., Win, J., Kamoun, S., and Terauchi, R. 2009. Association genetics reveals three novel avirulence genes from the rice blast fungal pathogen *Magnaporthe oryzae*. Plant Cell, 21:1573–1591.

Kawamura, Y., Hase, S., Takenaka, S., Kanayama, Y., Yoshioka, H., Kamoun, S., and Takahashi, H. 2009. INF1 elicitin activates jasmonic acid- and ethylene-mediated signalling pathways and induces resistance to bacterial wilt disease in tomato. Journal of Phytopathology, 157:287-297.

Birch, P.R.J., Armstrong, M., Bos, J., Boevink, P., Gilroy, E.M., Taylor, R.M., Wawra, S., Pritchard, L., Conti, L., Ewan, R., Whisson, S.C., van West, P., Sadanandom, A., and Kamoun, S. 2009. Towards understanding the virulence functions of RXLR effectors of the oomycete plant pathogen *Phytophthora infestans*. Journal of Experimental Botany, 60:1133-1140.

Bos, J..I.B., Chaparro-Garcia, A., Quesada-Ocampo, L.M., McSpadden-Gardener, B.B., and Kamoun, S. 2009. Distinct amino acids of the *Phytophthora infestans* effector AVR3a condition activation of R3a hypersensitivity and suppression of cell death. Molecular Plant-Microbe Interactions, 22:269-281.

Song, J., Win, J., Tian, M., Schornack, S., Kaschani, F., Ilyas, M., van der Hoorn, R.A.L., and Kamoun, S. 2009. Two effectors secreted by unrelated eukaryotic plant pathogens target the tomato defense protease Rcr3. Proceedings of the National Academy of Sciences USA, 106:1654-1659.

Hogenhout, S.A., Van der Hoorn, R.A.L., Terauchi, R., and Kamoun, S. 2009. Emerging concepts in effector biology of plant-associated organisms. Molecular Plant-Microbe Interactions, 22:115-122.

Bai, X., Correa, V.R., Toruno, T.Y., Ammar, E.-D., Kamoun, S., and Hogenhout, S.A. 2009. AY-WB phytoplasma secretes a protein that targets plant cell nuclei. Molecular Plant-Microbe Interactions, 22:18-30.

Cheung, F., Win, J., Lang, J.M., Hamilton, J., Vuong, H., Leach, J.E., Kamoun, S., Levesque, C.A., Tisserat, N., and Buell, C.R. 2008. Analysis of the *Pythium ultimum* transcriptome using Sanger and Pyrosequencing approaches. BMC Genomics, 9:542.

Van der Hoorn, R.A. and Kamoun, S. 2008. From guard to decoy: a new model for perception of plant pathogen effectors. Plant Cell, 20:2009-2017.

Kanzaki, H., Saitoh, H., Takahashi, Y., Berberich, T., Ito, A., Kamoun, S., and Terauchi, R. 2008. NbLRK1, a lectin-like receptor kinase protein of *Nicotiana benthamiana*, interacts with *Phytophthora infestans* INF1 elicitin and mediates INF1-induced cell death. Planta, 228:977-987.

Vleeshouwers, V.G.A.A., Rietman, H., Krenek, P., Champouret, N., Young, C., Oh, S.-K., Wang, M., Bouwmeester, K., Vosman, B., Visser, R.G.F., Jacobsen, E., Gover, F., Kamoun, S., and van der Vossen, E.A.G. 2008. Effector genomics accelerates discovery and functional profiling of potato disease resistance and *Phytophthora infestans* avirulence genes. PLoS ONE 3:e2875.

Shabab, M., Shindo, T., Gu, C., Kaschani, F., Pansuriya, T., Chintha, R., Harzen, A., Colby, T., Kamoun, S., and van der Hoorn, R.A. 2008. Fungal effector protein AVR2 targets diversifying defense-related Cys proteases of tomato. Plant Cell, 20:1169-1183.

Damasceno, C.M.B., Bishop, J.G., Ripoll, R.D., Win, J., Kamoun, S., and Rose, J.K.C. 2008. Structure of the glucanase inhibitor protein (GIP) family from *Phytophthora* species suggests coevolution with plant endo-beta-1,3-glucanases. Molecular Plant-Microbe Interactions, 21:820-830.

Judelson, H.S., Ah-Fong, A.M., Aux, G., Avrova, A.O., Bruce, C., Cakir, C., da Cunha, L., Grenville-Briggs, L., Latijnhouwers, M., Ligterink, W., Meijer, H.J., Roberts, S., Thurber, C.S., Whisson, S.C., Birch, P.R., Govers, F., Kamoun, S., van West, P., Windass, J. 2008. Gene expression profiling during asexual development of the late blight pathogen *Phytophthora infestans* reveals a highly dynamic transcriptome. Molecular Plant-Microbe Interactions, 21:433-447.

Oh, S.-K., Baek, K.-H., Park, J.M., Yi, S.Y., Yu, S.H., Kamoun, S., and Choi, D. 2008. *Capsicum annuum* WRKY protein CaWRKY1 is a negative regulator of pathogen defense. New Phytologist, 177:977-989.

Coemans, B., Takahashi, Y., Berberich, T., Ito, A., Kanzaki, H., Matsumura, H., Saitoh, H., Tsuda, S., Kamoun, K., Sági, L., Swennen, R., and Terauchi, R. 2007. High-throughput *in planta* expression screening identifies an ADP-ribosylation factor (ARF1) that is involved in non-host resistance and *R* gene mediated resistance. Molecular Plant Pathology, 177:977-989.

Morgan, W., and Kamoun, S. 2007. RXLR effector of plant pathogenic oomycetes. Current Opinion in Microbiology, 10:332-338.

Win, J, Morgan, W., Bos, J., Krasileva, K.V., Cano, L.M., Chaparro-Garcia, A., Ammar, R., Staskawicz, B.J., and Kamoun, S. 2007. Adaptive evolution has targeted the C-terminal domain of the RXLR effectors of plant pathogenic oomycetes. Plant Cell, 19:2349-2369.

Kamoun, S. 2007. Groovy times: Filamentous pathogen effectors revealed. Current Opinion in Plant Biology, 10:358-365.

Lamour, K, Win, J., and Kamoun, S. 2007. Oomycete genomics: new insights and future directions. FEMS Microbiology Letters, 274:1-8.

Kamoun, S, and Goodwin, S.B. 2007. Fungal and oomycete genes galore. New Phytologist, 173:713-717.

Alfano, G., Lewis Ivey, M.L., Cakir, C., Bos, J.I.B., Miller, S.A., Madden, L.V., Kamoun, S., and Hoitink, H.A.J.. 2007. Systemic modulation of gene expression in tomato by *Trichoderma hamatum* 382. Phytopathology, 97:429-437.

Kanneganti, T. -D., Bai, X., Tsai, C.-W., Win, J., Meulia, T., Goodin, M., Kamoun, S., and Hogenhout, S.A. 2007. A functional genetic assay for nuclear trafficking in plants. Plant Journal, 50:149-158.

Takahashi, Y., Bin Nasir, K. H., Ito, A., Kanzaki, H., Matsumura, H., Saitoh, H., Fujisawa, S., Kamoun, S., and Terauchi, R. 2007. A high-throughput screen of cell-death-inducing factors in *Nicotiana benthamiana* identifies a novel MAPKK that mediates INF1-induced cell death signaling and nonhost resistance to *Pseudomonas cichorii*. Plant Journal, 49:1030-1040.

Tian, M., Win, J., Song, J., van der Hoorn, R., van der Knaap, E., and Kamoun, S. 2007. A *Phytophthora infestans* cystatin-like protein targets a novel tomato papain-like apoplastic protease. Plant Physiology, 143:364-377.

Haldar, K., Kamoun, S., Hiller, L. N., Bhattacharjee, S., and and van Ooij, C. 2006. Common infection strategies of pathogenic eukaryotes. Nature Reviews Microbiology, 4:922-931.

Tyler, B.M., Tripathy, S., Zhang, X., Dehal, P., Jiang, R.H., Aerts, A., Arredondo, F.D., Baxter, L., Bensasson, D., Beynon, J.L., Chapman, J., Damasceno, C.M., Dorrance, A.E., Dou, D., Dickerman, A.W., Dubchak, I.L., Garbelotto, M., Gijzen, M., Gordon, S.G., Govers, F., Grunwald, N.J., Huang, W., Ivors, K.L., Jones, R.W., Kamoun, S., Krampis, K., Lamour, K.H., Lee, M.K., McDonald, W.H., Medina, M., Meijer, H.J., Nordberg, E.K., Maclean, D.J., Ospina-Giraldo, M.D., Morris, P.F., Phuntumart, V., Putnam, N.H., Rash, S., Rose, J.K., Sakihama, Y., Salamov, A.A., Savidor, A., Scheuring, C.F., Smith, B.M., Sobral, B.W., Terry, A., Torto-Alalibo, T.A., Win, J., Xu, Z., Zhang, H., Grigoriev, I.V., Rokhsar, D.S., Boore, J.L. 2006. *Phytophthora* genome sequences uncover evolutionary origins and mechanisms of pathogenesis. Science, 313:1261-1266.

Vleeshouwers, V.G.A.A., Driesprong, J.-D., Kamphuis, L.G., Torto-Alalibo, T., van 't Slot, K.A.E., Govers, F., Visser, R.G.F., Jacobsen, E., and Kamoun, S. 2006. Agroinfection-based high throughput screening reveals specific recognition of INF elicitins in *Solanum*. Molecular Plant Pathology, 7:499-510.

Bos, J..I.B., Kanneganti, T. -D., Young, C., Cakir, C., Huitema, E., Win, J., Armstrong, M., Birch, P.R.J., and Kamoun, S. 2006. The C-terminal half of *Phytophthora infestans* RXLR effector AVR3a is sufficient to trigger R3a-mediated hypersensitivity and suppress INF1-induced cell death in *Nicotiana benthamiana*. Plant Journal, 48:165-176.

Gaulin, E., Drame, N., Lafitte, C., Torto-Alalibo, T., Martinez, Y., Ameline-Torregrosa, C., Khatib, M., Mazarguil, H., Villalba-Mateos, F., Kamoun, S., Mazars, C., Dumas, B., Bottin, A., Esquerre-Tugaye, M.T., and Rickauer, M. 2006. Cellulose-binding domains of a *Phytophthora* cell wall protein are novel pathogen-associated molecular patterns. Plant Cell, 18:1766-1777.

Bhattacharjee, S., Hiller, L. N., Liolios, K., Win, J., Kanneganti, T. -D., Young, C., Kamoun, S., and Haldar, K. 2006. The malarial host-targeting signal is conserved in the Irish potato famine pathogen. PLoS Pathogens 2: e50.

Pons, J., Barraclough, T. G., Gomez-Zurita, J., Cardoso, A., Duran, D. P., Hazell, S., Kamoun, S., Sumlin, W. D., Vogler, A. P. 2006. Sequence-based species delimitation for the DNA taxonomy of undescribed insects. Systematic Biology, 55:595-609.

Kanneganti, T. -D., Huitema, E., Cakir, C., and Kamoun, S. 2006. Synergistic interactions of the plant cell death pathways induced by *Phytophthora infestans* Nep1-like protein PiNPP1.1 and INF1 elicitin. Molecular Plant-Microbe Interactions, 19:854-863.

Kamoun, S. 2006. A catalogue of the effector secretome of plant pathogenic oomycetes. Annual Review of Phytopathology, 44:41-60.

Birch, P. R. J., Rehmany, A. P., Pritchard, L., Kamoun, S., and Beynon, J. L. 2006. Trafficking arms: oomycete effectors enter host plant cells. Trends in Microbiology, 14:8-11.

Win, J., Kanneganti, T. -D., Torto-Alalibo, T., and Kamoun, S. 2006. Computational and comparative analyses of 150 full-length cDNA sequences from the oomycete plant pathogen *Phytophthora infestans*. Fungal Genetics and Biology, 43:20-33.

Gajendran, K., Gonzales, M. D., Farmer, A., Archuleta, E., Win, J., Waugh, M. E., and Kamoun, S. 2006. Phytophthora functional genomics database (PFGD): functional genomics of *Phytophthora*-plant interactions. Nucleic Acids Research, 34:D465-D470.

Tian, M. and Kamoun, S. 2005. A two disulfide bridge Kazal domain from *Phytophthora* exhibits stable inhibitory activity against serine proteases of the subtilisin family. BMC Biochemistry, 6:15.

Torto-Alalibo, T., Tian, M., Gajendran, K., Waugh, M. E., van West, P., and Kamoun, S. 2005. Expressed sequence tags from the oomycete fish pathogen *Saprolegnia parasitica* reveal putative virulence factors. BMC Microbiology, 5:46.

Bin Nasir, K. H., Takahashi, Y., Ito, A., Saitoh, H., Matsumura, H., Kanzaki, H., Shimizu, T., Ito, M., Fujisawa, S., Sharma, P. C., Ohme-Takagi, M., Kamoun, S., and Terauchi, R. 2005. High-throughput *in planta* expression screening identifies a class II ethylene responsive element binding factor-like protein that regulates plant cell death and nonhost resistance. Plant Journal, 43:491-505.

Tian, M., Benedetti, B. and Kamoun, S. 2005. A second Kazal-like protease inhibitor from *Phytophthora infestans* inhibits and interacts with the apoplastic pathogenesis-related protease P69B of tomato. Plant Physiology, 138:1785-93.

Kim, K. J. , Eom, S. H., Lee, S. P., Jung, H. S., Kamoun, S., Lee, Y. S. 2005. A genetic marker associated with the A1 mating type locus in *Phytophthora infestans*. Journal of Microbiology and Biotechnology, 15:502-509.

Armstrong, M.R., Whisson, S.C., Pritchard, L., Bos, J.I.B., Venter, E., Avrova, A.O., Rehmany, A. P., Böhme, U., Brooks, K., Cherevach, I., Hamlin, N., White, B., Fraser, A., Lord, A., Quail, M.A., Churcher, C., Hall, N., Berriman, M., Huang, S., Kamoun, S., Beynon, J.L., and Birch, P.R.J. 2005. An ancestral oomycete locus contains late blight avirulence gene *Avr3a,* encoding a protein that is recognised in the host cytoplasm. Proceedings of the National Academy of Sciences USA, 102:7766-7771.

Rehmany, A. P., Gordon, A., Rose, L.E., Allen, R.L., Armstrong, M.R., Whisson, S.C., Kamoun, S., Tyler, B.M., Birch, P.R.J., and Beynon, J.L. 2005. Differential recognition of highly divergent downy mildew avirulence gene alleles by *RPP1* genes from two Arabidopsis lines. Plant Cell, 17:1839-1850.

Kamoun, S., and Smart, C.D. 2005. Late blight of potato and tomato in the genomics era. Plant Disease, 89:692-699.

Saint-Jean, S., Testa, A., Kamoun, S., and Madden, L.V. 2005. Use of a green fluorescent protein marker for studying splash dispersal of sporangia of *Phytophthora infestans*. European Journal of Plant Pathology, 112:391-394.

Huitema, E., Vleeshouwers, V.G.A.A., Cakir, C., Kamoun, S., and Govers, F. 2005. Differences in intensity and specificity of hypersensitive response induction in *Nicotiana* spp. by INF1, INF2A and INF2B of *Phytophthora infestans*. Molecular Plant-Microbe Interactions, 18:183-193.

Randall, T.A., Dwyer, R.A., Huitema, E., Beyer, K., Cvitanich, C., Kelkar, H., Ah Fong, A.M.V., Gates, K., Roberts, S., Yatzkan, E., Gaffney, T., Law, M., Testa, A., Torto-Alalibo, T., Zhang, M., Zheng, L., Mueller, E., Windass, J., Binder, A., Birch, P.R.J., Gisi, U., Govers, F., Gow, N.A., Mauch, F., van West, P., Waugh, M.E., Yu, J., Boller, T., Kamoun, S., Lam, S.T., and Judelson, H.S. 2005. Large-scale gene discovery in the oomycete *Phytophthora infestans* reveals likely components of phytopathogenicity shared with true fungi. Molecular Plant-Microbe Interactions, 18:229-243.

Liu, Z., Bos, J.I.B., Armstrong, M., Whisson, S.C., da Cunha, L., Torto-Alalibo, T., Win, J., Avrova, A.O., Wright, F., Birch P.R.J., and Kamoun, S. 2005. Patterns of diversifying selection in the phytotoxin-like *scr74* gene family of *Phytophthora infestans*. Molecular Biology and Evolution, 22:659-672.

Yang, W., Bai, X., Kabelka, E., Eaton, C., Kamoun, S., van der Knaap, E., and Francis, D. 2004. Discovery of single nucleotide polymorphisms in *Lycopersicon esculentum* by computer aided analysis of expressed sequence tags. Molecular Breeding, 14:21-34.

Tian, M., Huitema, E., da Cunha, L., Torto-Alalibo, T., and Kamoun, S. 2004. A Kazal-like extracellular serine protease inhibitor from *Phytophthora infestans* targets the tomato pathogenesis-related protease P69B. Journal of Biological Chemistry, 279:26370-26377.

Huitema, E., Bos, J.I.B., Tian, M., Win, J., Waugh, M.E., and Kamoun, S. 2004. Linking sequence to phenotype in *Phytophthora*-plant interactions. Trends in Microbiology, 12:193-200.

Matsumura, H., Reich, S., Ito, A., Saitoh, H., Kamoun, S., Winter, P., Kahl, G., Reuter, M., Kruger, D. H., and Terauchi, R. 2003. Gene expression analysis of plant host-pathogen interactions by SuperSAGE. Proceedings of the National Academy of Sciences USA, 100:15718-15723.

Huitema, E., Vleeshouwers, V. G. A. A., Francis, D. M., and Kamoun, S. 2003. Active defence responses associated with non-host resistance of *Arabidopsis thaliana* to the oomycete pathogen *Phytophthora infestans*. Molecular Plant Pathology, 4:487-500.

Kanzaki, H., Saitoh, H., Ito, A., Fujisawa, S., Kamoun, S., Katou, S., Yoshioka, Y., and Terauchi, R. 2003. Cytosolic HSP90 and HSP70 are essential components of INF1-mediated hypersensitive response and non-host resistance to *Pseudomonas cichorii* in *Nicotiana benthamiana*. Molecular Plant Pathology, 4:383-391.

Sharma, P. C., Ito, A., Shimizu, T., Terauchi, R., **Kamoun, S., and Saitoh, H.** 2003. Virus-induced silencing of *WIPK* and *SIPK* genes in *Nicotiana benthamiana* cause reduced resistance against an incompatible bacterial pathogen but no effect on HR triggered by INF1. Molecular Genetics and Genomics, 269:583-591.

Bos, J. I. B., Armstrong, M., Whisson, S. C., Torto, T., Ochwo, M., Birch, P. R. J., and Kamoun, S. 2003. Intraspecific comparative genomics to identify avirulence genes from *Phytophthora*. New Phytologist, 159:63-72.

Torto, T., Li, S., Styer, A., Huitema, E., Testa, A., Gow, N.A.R., van West, P., and Kamoun, S. 2003. EST mining and functional expression assays identify extracellular effector proteins from the plant pathogen *Phytophthora*. Genome Research, 13:1675-1685.

Lee, S.A., Wormsley, S., Kamoun, S., Joiner, K., and Wong, B. 2003. An analysis of the *Candida albicans* genome database for soluble secreted proteins using computer-based prediction algorithms. Yeast, 20:595-610.

Kamoun, S. 2003. Molecular genetics of pathogenic oomycetes. Eukaryotic Cell, 2:191-199.

Qutob, D., Huitema, E., Gijzen, M., and Kamoun, S. 2003. Variation in structure and activity among elicitins from *Phytophthora sojae*. Molecular Plant Pathology, 4:119-124.

Kamoun, S., Hamada, W., and Huitema, E. 2003. Agrosuppression: a bioassay for the hypersensitive response suited to high-throughput screening. Molecular Plant-Microbe Interactions, 16:7-13.

Qutob, D., Kamoun, S., and Gijzen, M. 2002. Expression of a *Phytophthora sojae* necrosis inducing protein occurs during transition from biotrophy to necrotrophy. Plant Journal, 32:361-373.

Ochwo, M.K.N., Kamoun, S., Adipala, E. , Rubaihayo, P.R., Lamour, K., Olanya, M. 2002. Genetic Diversity of *Phytophthora infestans* (Mont.) de Bary in the Eastern and Western Highlands of Uganda. Journal of Phytopathology, 150:541-542.

Torto, T., Rauser, L., and Kamoun, S. 2002. The *pipg1* gene of the oomycete *Phytophthora infestans* encodes a fungal-like endopolygalacturonase. Current Genetics, 40:385-390.

Kamoun, S., Dong, S., Hamada, W., Huitema, E., Kinney, D., Morgan, W.R., Styer, A., Testa, A., and Torto, T. 2002. From sequence to phenotype: Functional genomics of *Phytophthora*. Canadian Journal of Plant Pathology, 24:6-9.

Kamoun, S. 2001. Nonhost resistance to *Phytophthora*: novel prospects for a classical problem. Current Opinion in Plant Biology, 4:295-300.

Vleeshouwers, V.G.A.A., Martens, A., van Dooijeweert, W., Colon, L.T., Govers, F., and Kamoun, S. 2001. Ancient Diversification of the *Pto* Kinase Family Preceded Speciation in *Solanum.* Molecular Plant-Microbe Interactions, 8:996-1005.

Birch, P, and Kamoun, S. 2000. Studying interaction transcriptomes: coordinated analyses of gene expression during plant-microorganism interactions. *In*: New Technologies for Life Sciences: A Trends Guide (supplement to Elsevier Trends Journals, Dec. 2000), pp. 77-82.

Sasabe, M., Takeuchi, K., Kamoun, S., Ichinose, Y., Govers, F., Kazuhiro, T., Shiraishi, T., Yamada, T. 2000. Independent pathways leading to apoptotic cell death, oxidative burst and defense gene expression in response to elicitin in tobacco cell suspension culture. European Journal of Biochemistry, 267:5005-5013.

Vleeshouwers, V.G.A.A., van Dooijeweert, W., Govers, F., Kamoun, S., Colon, L.T. 2000. Does basal *PR* gene expression in *Solanum* species contribute to nonspecific resistance to *Phytophthora infestans*? Physiological and Molecular Plant Pathology, 57:35-52.

Vleeshouwers, V.G.A.A., van Dooijeweert, W., Govers, F., Kamoun, S., Colon, L.T. 2000. The hypersensitive response is associated with host and nonhost resistance to *Phytophthora infestans*. Planta, 210:853-864.

Kamoun, S., Hraber, P., Sobral, B., Nuss, D., Govers, F. 1999. Initial assessment of gene diversity for the oomycete pathogen *Phytophthora infestans* based on expressed sequences. Fungal Genetics and Biology, 28:94-106.

van West, P., Kamoun, S., van't Klooster, J.W., Govers, F. 1999. *Ric1*, a *Phytophthora infestans* gene with homology to stress-induced genes. Current Genetics, 36:310-315.

van West, P., Reid, B., Campbell, T., Sandrock, R., Fry, W.E., Kamoun, S., Gow, N.A.R.G. 1999. Green Fluorescent Protein (GFP) as a reporter gene for the plant pathogenic oomycete *Phytophthora palmivora*. FEMS Letters, 178:71-80.

Kamoun, S., Huitema, E., Vleeshouwers, V.G.A.A. 1999. Resistance to oomycetes: A general role for the hypersensitive response? Trends in Plant Sciences, 4:196-200.

Kamoun, S., Honee, G., Weide, R., Lauge, R., Kooman-Gersmann, M., de Groot, K., Govers, F., de Wit, P.J.G.M. 1999. The fungal gene *Avr9* and the oomycete gene *inf1* confer avirulence to potato virus X on tobacco. Molecular Plant-Microbe Interactions, 12: 459-462.

van West, P., Kamoun, S., van't Klooster, J.W., Govers, F. 1999. Internuclear gene silencing in *Phytophthora*. Molecular Cell, 3: 339-348.

Kamoun, S., T. van der Lee, G. van den Berg-Velthuis, K. de Groot, and F. Govers. 1998. Loss of Production of the Elicitor Protein INF1 in the Clonal Lineage US-1 of *Phytophthora infestans*. Phytopathology. 88: 1315-1323.

Kamoun, S., P. van West, and F. Govers. 1998. Quantification of late blight resistance of potato using transgenic *Phytophthora infestans* expressing β-glucuronidase. European Journal of Plant Pathology. 104:521-525.

Kamoun, S., P. van West, V.G.A.A. Vleeshouwers, K. de Groot, and F. Govers. 1998. Resistance of *Nicotiana benthamiana* to *Phytophthora infestans* is Mediated by the Recognition of the Elicitor Protein INF1. Plant Cell. **10**:1413-1425.

Kamoun, S., H. Lindqvist, and F. Govers. 1997. A novel class of elicitin-like genes from *Phytophthora infestans*. Molecular Plant-Microbe Interactions. **10**:1028-1030.

Kamoun, S., P. van West, A.J. de Jong, V.G.A.A. Vleeshouwers, and F. Govers. 1997. A gene encoding a protein elicitor of *Phytophthora infestans* is down-regulated during infection of potato. Molecular Plant-Microbe Interactions. **10**:13-20.

Kamoun, S., and S.A. Hogenhout. 1997. Results of a five months expedition (1993-94) to study the tiger beetles of Australia (Coleoptera: Cicindelidae). Cicindela. **29**:1-18.

Kamoun, S. 1996. Occurrence of the threatened *Cicindela senilis frosti* Varas-Arangua in an inland salt marsh in Riverside county, California (Coleoptera: Cicindelidae). Coleopterists Bulletin. **50**:369-371.

Kamoun, S., and S.A. Hogenhout. 1996. Flightlessness and rapid terrestrial locomotion in tiger beetles of the *Cicindela* L. subgenus *Rivacindela* van Nidek from saline habitats of Australia (Coleoptera: Cicindelidae). Coleopterists Bulletin. **50**:221-230.

Kamoun, S., M. Young, H. Forster, M.D. Coffey, and B.M. Tyler. 1994. Potential role of elicitins in the interaction between *Phytophthora* species and tobacco. Applied and Environmental Microbiology. **60:**1593- 1598.

Kamoun, S., K.M. Klucher, M.D. Coffey, and B.M. Tyler. 1993. A Gene encoding a host-specific elicitor protein of *Phytophthora parasitica* Molecular Plant-Microbe Interactions. **6:**573-581.

Kamdar, H.V., Kamoun, S., and Kado, C.I. 1993. Restoration of pathogenicity of avirulent *Xanthomonas oryzae* pv. oryzae and *X. campestris* pathovars by reciprocal complementation with the *hrpXo* and *hrpXc* gene and identification of HrpX function by sequence analyses. Journal of Bacteriology. **175:**2017-2025.

Kamoun, S., M. Young, C.B. Glascock, and B.M. Tyler. 1993. Extracellular protein elicitors from *Phytophthora*: Host-specificity and induction of resistance to bacterial and fungal pathogens. Molecular Plant- Microbe Interactions. **6:**15-25.

Kamoun, S., E. Tola, H.V. Kamdar, and C.I. Kado. 1992. Rapid generation of directed and unmarked chromosomal deletions in *Xanthomonas*. Molecular Microbiology. **6:**809-816.

Kamoun, S., H.V. Kamdar, E. Tola, and C.I. Kado. 1992. Incompatible interactions between crucifers and *Xanthomonas campestris* involve a vascular-hypersensitive response: Role of the *hrpX* locus. Molecular Plant-Microbe Interactions. **5:**22-33.

Kamoun, S. 1991. Parasematic coloration: A novel anti-predator mechanism in tiger beetles (Coleoptera: Cicindelidae). Coleopterists Bulletin. **45**:15-19.

Kamoun, S., and C.I. Kado. 1990. Phenotypic switching in *Xanthomonas campestris* affecting chemotaxis, xanthan production, and virulence. Applied and Environmental Microbiology. **56:**3855-3860.

Kamoun, S., and C.I. Kado. 1990. A plant-inducible gene of *Xanthomonas campestris* pv. campestris encodes an exocellular component required for growth in the host and hypersensitivity on nonhosts. Journal of Bacteriology. **172**:5165-5172.

Kamoun, S., M.B. Cooley, P.M. Rogowsky, and C.I. Kado. 1989. Two chromosomal loci involved in exopolysaccharide production in *Agrobacterium tumefaciens*. Journal of Bacteriology. **171:**1755-1759.

Other publications (total = 32)

Kamoun, S. 2015. Be positive! From witch hunts to the new reward culture. [blog post]. https://blushgreengrassatafridayafternoon.wordpress.com/2015/01/22/be-positive-from-witch-hunts-to-the-new-reward-culture/

Alfred, J., Dangl, J.L., Kamoun, S., and McCouch, S.R. 2014. New horizons for plant translational research. PLOS Biology, 12:e1001880.

Youle, M., Rohwer, F., Whiteley, M., Steel, B.C., Delalez, N.J., Nord, A.L., Berry, R.M., Armitage, J.P., Kamoun, S., Hogenhout, S., Diggle, S. P., Gurney, J., Pollitt, E. J. G., Boetius, A. and Cary, S. C. 2012. Microbial Olympics. Nature Reviews Microbiology, 10:583-588.

Kamoun, S., and Ward, E. 2012. Next-generation disease resistance breeding: Crop plants with DNA deletions are not GMOs. Biofortified. http://www.biofortified.org/2012/05/next-gen-disease-resistance/

Kamoun, S. 2012. Genomics of emerging plant pathogens: too little, too late. Microbiology Today, 39:140.

Win, J., Kamoun, S., Jones, A.M. 2011. Purification of effector-target protein complexes via transient expression in *Nicotiana benthamiana*. *In* " Methods in Molecular Biology, The Plant Immune Response", J. McDowell, ed. Humana Press.

Huitema, E., Smoker, M., and Kamoun S. 2011. A straightforward protocol for electrotransformation of *Phytophthora capsici* zoospores. *In* " Methods in Molecular Biology, The Plant Immune Response", J. McDowell, ed. Humana Press.

Huitema, E., Schornack, S., van Damme, M., Bozkurt, T.O., Cano, L.M., Smoker, M., Thines, M. and Kamoun S. 2010. Oomycete Crinklers are a novel class of host-translocated effectors that target the nucleus. *In* "Biology of Plant-Microbe Interactions Vol. 6", IS-MPMI, St. Paul, Minnesota.

Lamour, K. and Kamoun, S. (Eds) 2009. "Oomycete Genetics and Genomics: Diversity, Interactions, and Research Tools" John Wiley and Sons**.**

Kamoun, S. 2009. Oomycetes. *In* Encyclopedia of Microbiology.

Kamoun, S. 2009. The secretome of plant-associated fungi and oomycetes. *In* "Plant Relationships, 2nd Edition, The Mycota V" H. Deising (Ed.), Springer-Verlag Berlin Heidelberg.

Grant, M. and Kamoun, S. 2008. Biotic interactions: Common threads amid diversity. Current Opinion in Plant Biology.

Morgan, W., Bos, J., Bruce, C., Lee, M., Liu, H.-Y., Oh, S.-K., Song, J., Win, J., Young, C., and Kamoun, S. 2008. Structure and function of RXLR effectors of plant pathogenic oomycetes. In "*Genomics of Disease*", J.P. Gustafson, ed. Springer.

Kamoun, S. 2008. Reprogramming the host: The effector secretome of *Phytophthora infestans*. *In* "Biology of Plant-Microbe Interactions Vol. 5", xxx eds, IS-MPMI, St. Paul, Minnesotta, pp. xx-xx.

Bos, J..I.B., Kanneganti, T. -D., Young, C., Win, J., Armstrong, M., Birch, P.R.J., and Kamoun, S. 2008. Characterization of AVR3a of *Phytophthora infestans*, a member of the RXLR family of cytoplasmic effectors. *In* "Biology of Plant-Microbe Interactions Vol. 5", xxx eds, IS-MPMI, St. Paul, Minnesotta, pp. xx-xx.

Kanneganti , T.-D., Huitema, E., and Kamoun, S. 2007. *In planta* expression of fungal and oomycete effectors. *In* "Plant-Pathogen Interactions" P. Ronald, ed. Humana Press, 35-43.

Kamoun, S. 2004. Foreword. *In* "Fungal Disease Resistance in Plants: Biochemistry, Molecular Biology, and Genetic Engineering" Z.K. Punja, ed. Haworth Press, xvii-xviii.

Kamoun, S. 2004. Pet breeding has a long and colourful history. Nature, 427:485.

Huitema, E., Torto, T.A., Styer, A., and Kamoun, S. 2003. Combined ESTs from plant-microbe interactions: Using GC counting to determine the species of origin. *In* "Plant Functional Genomics: Methods and Protocols" E. Grotewold, ed. Humana Press, 79-83.

Kamoun, S. 2002. Molecular genetics of the oomycete plant pathogen *Phytophthora*. Recent Res. Devel. Genet. 2:133-147.

Kamoun, S. 2002. Basic biology: What makes *Phytophthora infestans* a pathogen?. *In* "Late Blight: Managing the Global Threat. Proceedings of the Global Initiative on late Blight Conference, Hamburg, Germany, 11-13 July 2002" C. Lizarraga, ed. The International Potato Center, Lima, Peru, pp. 11-12.

Kamoun, S. 2002. Oomycetes. *In* "Magill's Encyclopedia of Science: Plant Life", B. Ness, ed, Salem Press, Pasadena, CA, pp. 743-745.

Torto, T.A., Testa, A., Styer, A., Morgan, W.R., Kinney, D., Huitema, E., Hamada, W., Dong, S., and Kamoun, S. 2002. Applying the sequence-to-phenotype functional genomics paradigm to *Phytophthora*. *In* "Biology of Plant-Microbe Interactions Vol. 3", S.A. Leong, C. Allen, E.W. Triplett eds, IS-MPMI, St. Paul, Minnesotta, pp. 331-335.

Kamoun, S., Hogenhout, S.A. 2001. Agricultural Microbes Genome 2: First glimpses into the genomes of plant-associated microbes (meeting report). Plant Cell, 13:451-458.

Kamoun, S. 2000. *Phytophthora*. *In* "Fungal Pathology", J. Kronstad, ed. Kluwer Academic Publishers, pp. 237-265.

Kamoun, S. 2000. Virulence and Avirulence in *Phytophthora*. *In* "Potato, Global Research and Development - Volume I", S.M. Paul Khurana, G.S. Shekhawat, B.P. Singh, S.K. Pandey. Indian Potato Association, Shimla, India. pp. 540-555.

Kamoun, S., Dong, S., Huitema, E., Torto, G.A., van West, P., Vleeshouwers, V.G.A.A. and Govers, F. 2000. Dissection of nonhost resistance of *Nicotiana* to *Phytophthora infestans*. *In* "Biology of Plant-Microbe Interactions Vol. 2", P.J.G.M. de Wit, T. Bisseling, W. Stiekema eds, IS-MPMI, St. Paul, Minnesotta, pp. 180-185.

Van 't Klooster, J., Vleeshouwers, V.G.A.A., Kamoun, S. and Govers, F. 1999.
Characterization of a cDNA Encoding a Pathogenesis-Related Protein PR-1 from Potato (*Solanum tuberosum*) (Accession No. AJ250136) (PGR99-182). Plant Physiology 121: 1383.

Kamoun, S. 1998. Weeds and tobacco: Unlikely allies in fighting *Phytophthora*? OSU Soy News. **1**(3).

Kamoun, S. and F. Govers. 1997. *Phytophthora* Diseases Worldwide (book review). European Journal of Plant Pathology. 103: 491-492.

Kamoun, S., and C.I. Kado. 1993. Genetic Engineering for Plant Disease Resistance. *In* "Advanced Engineered Pesticides", L. Kim, ed. Marcel Dekker Inc. pp. 120.

Invited Presentations

2015 Max Planck Institute for Evolutionary Biology, Plön, Germany.
2015 10th DOE Joint Genome Institute Genomics of Energy & Environment Meeting, Walnut Creek, CA.
2015 Donald Danforth Plant Science Center, St. Louis, MO.
2015 Molecular Microbiology, Washington University Medical school, St Louis, MO.
2015 Organizer: Researcher Links workshop UK-Thailand on plant pathology, Bangkok, Thailand.
2015 Keynote speaker at Workshop: Genomics on Plant-Parasite Interactions UK-MX, Leon, Mexico.
2015 Workshop on Genomics, Cesky Krumlov, Czech Republic.
2015 Imperial College, London.
2014 Biotechnology Havana, Ag-Biotech for food sustainability.
2014 BASF Plant Science, Raleigh, NC.
2014 IRC2014 International Rice Congress, Bangkok, Thailand.
2014 COST SUSTAIN 2nd annual conference, Zakopane, Poland.
2014 Donald Danforth Plant Science Center, 16th annual Fall Symposium, St. Louis, MO.
2014 New Phytologist workshop, Origin and evolution of plants and their interactions with fungi, London.
2014 Tübingen International PhD Programme (TIPP) Retreat.
2014 IC-MPMI Rhodes Greece.
2014 BBSRC workshop on new crop breeding technologies, London.
2014 Plant Genomics Congress, London.
2014 NOVA course, impact of genomics on plant pathology, Ishøj Strand, Denmark.
2014 University of Copenhangen plant pathology seminars.
2014 12th European Conference on Fungal Genetics, Seville, Spain.
2014 UK-JAPAN Workshop, Yokohama.
2014 University College Dublin.
2013 Plant Proteases “Death” Conference, Barcelona, Spain.
2013 Keynote Speaker and Session Chair at International Congress of Plant Pathology, ICPP, Beijing.
2013 Keynote Speaker at Rice Blast Conference at Jeju Island, Korea.
2013 Summer School TULIP, Toulouse, France.
2013 30th Annual Interdisciplinary Plant Group Symposium, University of Missouri, Columbia.
2013 Wellcome Trust Conference: “Evolution of Parasitism”, Hinxton, UK.
2013 Leibniz Institute of Plant Biochemistry, Halle, Germany.
2013 Keystone Symposium “Plant Immunity: Pathways and Translation”, Big Sky, MT.
2013 Frontiers in Genomics, Cuernavaca, Mexico.
2012 50th Anniversary Meeting of the Korean Society of Plant Pathology, Seoul, Republic of Korea.
2012 Keynote presentation at 5th Croatian Congress of Microbiology, Primošten, Croatia.
2012 CSHL Quantitative Biology Symposium “The Biology of Plants”.
2012 Whetzel Westcott Dimock Lecture, Cornell University, Ithaca, NY.
2012 Center for Plant Molecular Biology (ZMBP), Tuebingen, Germany.
2012 "Plant Biology Seminar" series at HHU Düsseldorf, Germany.
2012 Lausanne Genomics Days, Switzerland.
2012 East Malling Research, UK.
2012 Centro Biotecnología Genómica Plantas (CBGP), Madrid, Spain.
2012 “Understanding plant disease emergence: evolutionary ecology meets genomics", Madrid, Spain.
2012 Evomics Workshop on Genomics, Cesky Krumlov, Czech Republic.
2011 «L’Immunité innée», Académie des Sciences et Académie d’agriculture de France, Paris.
2011 CSHL: Plant Genomes & Biotechnology, Long Island, NY.
2011 Biotechnology Havana 2011, Cuba.
2011 Effectome Meeting, Montpellier, France.
2011 Plant Interactions Course, Geneva, Switzerland.
2011 Queenstown Molecular Biology, Queenstown, New Zealand.

2011 CENICAFE, Chinchiná, Colombia.
2011 XXX Colombian and the XVI Latin American Plant Pathology Meeting, Bogota, Colombia.
2011 CNRS-Jacques Monod Conference “New and Emerging Fungal Diseases", Roscoff, France.
2011 Keynote presentation at International Arabidopsis Conference, Madison, WI.
2011 Max Planck Institute for Terrestrial Microbiology, Marburg, Germany.
2011 "Communication in Plants and their Response to the Environment", Halle, Germany.
2011 Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy.
2011 Fungal Genetics, Asilomar, California
2011 Chair, Plant Pathogenomics Conference, Shenzhen, China
2010 University of Athens
2010 Annual Plant Sciences Institute Mini-Symposium: Effectors of Plant Pathogens, Iowa State University
2010 SOL 2010, 7th Solanaceae conference Dundee, Scotland
2010 BGRI Technical Workshop, Wheat Congress
2010 Crop Functional Genomics, Jeju, Korea
2010 Plenary talk at Keystone Conference, Granlibakken, Tahoe, California
2010 ETH Zurich
2010 FPSM Aussois, France
2009 Merida
2009 2nd International Phytophthora capsici meeting, Florida
2009 9th International Plant Molecular Biology Congress, St Louis, Missouri.
2009 EMBO Comparative Genomics of Lower Eukaryotes, San Feliu de Guixols, Costa Brava, Spain.
2009 Keynote presentation at Botanical Congress, "Phytopathology" Symposium, Leipzig, Germany.
2009 Keynote presentation at Dutch national meeting ALW, Molecular Genetics, Lunteren, Netherlands.
2009 Plenary talk at 8th Plant GEM meeting, Lisbon, Portugal.
2009 12th New Phytologist Symposium “Effectors in Plant Microbe Interactions”, Paris, France.
2009 British Mycological Society Annual Scientific meeting, The Fungal Cell, Dundee, Scotland.
2009 14th International Congress of Molecular Plant-Microbe Interactions, Plenary session “Dynamics of plant responses to microbes”, Quebec, Canada.
2009 Plant Sciences Department, Hilary Term 2009, Oxford University.
2009 25th Fungal Genetics Conference, Workshop “Fungal and oomycete effectors”, Asilomar, Pacific Grove, California.
2009 Dept. of Plant Pathology, Kansas State University, Mannhatan, Kansas.
2009 II Simposio Brasileiro de Genetica Molecular Vegetal, Buzios, Rio de Janeiro, Brazil.
2009 Max Planck Institute of Plant Breeding, Cologne, Germany.
2009 Dept. of Horticulture and Crop Sciences, Seoul National University, Korea.
2009 Iwate Biotechnology Research Center, Kitakami, Japan.
2009 RIKEN Plant Science Center, Yokohama, Japan.
2009 Plant & Microbe Genomes XVII Program, Workshop Host-Pathogen Interactions, San Diego, California.
2008 Potato Late Blight Symposium, Global Conference on Potato, New Delhi, India.
2008 Rothamsted Research, Harpenden, United Kingdom.
2008 TSL+ Minisymposium, Norwich, United Kingdom.
2008 Regine Kahman’s 60th Birthday Symposium, Max-Planck-Institute for Terrestrial Microbiology, Marburg, Germany.
2008 Warwick HRI, Wellesbourne, Warwick, United Kingdom.
2008 50th Anniversary of the Department of Genetics, Smurfit Inst., Trinity College, Dublin, Ireland.
2008 International Congress of Plant Pathology, session "Host-pathogen interactions", Torino, Italy.
2008 Gatsby Plant Science Network Annual Meeting, Pembroke College, Oxford University.
2008 Gordon Research Conference “Cellular and Molecular Fungal Biology”, Holderness, New Hampshire.
2008 4th European Plant Science Organization (EPSO) Conference “Plant for Life”, Toulon, France .
2008 BioExploit Summer School ‘On the evolution of plant pathogen interactions: from principles to practice’, Wageningen, the Netherlands.

2008 Department of Plant Pathology, University of Wisconsin, Madison.
2008 Third International late blight conference, Scientific committee and Chair “Molecular biology of host-pathogen interactions”, Beijing, China.
2008 Dept. of Plant Pathology, National Taiwan University, Taipei, Taiwan.
2008 Advances in Plant-Microbe Interactions, Academia Sinica, Taipei, Taiwan.
2008 Keystone Symposium, Plant Innate Immunity, Workshop chair “Pathogen genomes”, Keystone, Colorado.

2007 Biology Department, Imperial College, London, United Kingdom.
2007 Keynote presentation at the Society of Irish Plant Pathologists Annual Meeting, Carlow, Ireland.
2007 John Innes Centre Annual Science Meeting, Norwich, United Kingdom.
2007 Solanaceae Genomics, Chair of the session “Plant/Environment Interactions”, Jeju Island, Korea.
2007 Institute of Vegetables and Flowers, Chinese Academy of Agriculture Sciences, Beijing, China.
2007 13th International Congress of Molecular Plant-Microbe Interactions, Chair of the session “Pathogenic and symbiotic interactions (fungi and oomycetes)”, Sorrento, Italy.
2007 The Downy Mildews, 2nd International Symposium, Olomouc, Czech Republic.
2007 CSIRO Transformational Biology Workshop, Canberra, Australia.
2007 International Meeting “Communication in Plants and their Response to the Environment“, Halle, Germany.
2007 BASF Plant Sciences, Ludwigshafen, Germany.
2007 24th Fungal Genetics Conference, Workshop, Asilomar, Pacific Grove, California.
2007 Department of Plant Pathology, Michigan State University, East Lansing.
2007 Department of Microbiology, University of Florida, Gainesville.
2007 Fungal Genomics Workshop at Plant & Animal Genomics Conference, San Diego, CA.

2006 Case Western Reserve University, Cleveland, Ohio.
2006 Hokkaido University, Sapporo, Japan.
2006 Iwate Plant Science Symposium, The Frontier of Molecular Plant Biology, Morioka, Japan.
2006 Department of Plant Pathology, University of Tokyo, Japan.
2006 Stadler Symposium “Genomics of Disease”, Columbia, Missouri.
2006 VI International Solanaceae Conference, Madison, Wisconsin.
2006 C.I. Kado retirement colloquium, UC Davis.
2006 Department of Plant Biology, UC Berkeley.
2006 Plant Biology, Indiana University, Bloomington, Indiana.
2006 Department of Microbiology and Plant Pathology, Texas A&M.
2006 Department of Plant Pathology, UC Riverside.
2006 Center for Integrative Fungal Genomics at North Carolina State University.

2005 12th International Congress of Molecular Plant-Microbe Interactions, Session Fungal-Plant Interactions, Merida, Mexico.
2005 University of Mar del Plata, Argentina.
2005 INTA, Balcarce, Argentina.
2005 Plant Biology Lectures, Buenos Aires, Argentina.
2005 The Sainsbury Laboratory, Norwich, United Kingdom.
2005 Plant Research International, Wageningen, the Netherlands.
2005 NSF Potato Genome Project Annual Meeting, University of Minnesota, St Paul.
2005 Department of Plant Microbiology & Pathology, University of Missouri, Columbia.
2005 23d Fungal Genetics Conference, Session "Fungal Interactions", Asilomar, Pacific Grove, California.
2005 Department of Plant Pathology, University of Minnesota, St Paul.

2004 Department of Biology, College of Wooster.
2004 Department of Plant Pathology, Pennsylvania State University.
2004 Iwate Biotechnology Research Center, Kitakami, Japan.
2004 College of Agriculture and Life Sciences, Seoul National University, Republic of Korea.
2004 Iwate Biotechnology Research Center, Kitakami, Japan.
2004 20th Anniversary Meeting of the Korean Society of Plant Pathology, Pyungchang, Republic of Korea.

2004 Division of Genomics, Korean Research Institute of Biology and Biotechnology, Taejon, Republic of Korea.
2004 7th Conference of the European Foundation for Plant Pathology & British Society for Plant Pathology Presidential Meeting, Discovery, Development and Delivery In Plant Pathology, Aberdeen, Scotland, United Kingdom.
2004 Institute of Medical Sciences, University of Aberdeen, Scotland, United Kingdom.
2004 The Sainsbury Laboratory, Norwich, United Kingdom.
2004 NorFA Course 'Oomycetes –Plant-Pathogen Interactions', Aas, Norway.
2004 Department of Horticultural and Crop Sciences, The Ohio State University, Wooster, OH.
2004 Syngenta Phytophthora Consortium meeting, New Orleans, LA.
2004 National Agronomic Institute of Tunisia (INAT), Tunis, Tunisia.
2004 Department of Plant Pathology, Cornell University.
2004 Department of Microbiology, The Ohio State University, Columbus, OH.
2004 Plant, Animal, & Microbe Genomes XII Program, Workshop Host-Pathogen Interactions.
2004 Plant, Animal, & Microbe Genomes XII Program, Workshop Solanaceae.

2003 Woody Plant Genomics Symposium at the University of Tennessee, Knoxville, TN.
2003 Keynote presentation at the North Central American Phytopathological Society Annual Meeting, Mini-symposium "Phytophthora", East Lansing, MI.
2003 2nd International Aphanomyces Symposium, Pasco, WA.
2003 Fungal Genetics Conference, Session "Genomes and Evolution", Asilomar, Pacific Grove, CA.
2003 International Congress of Plant Pathology, Symposium "Molecular Plant-Fungal Interactions", Christchurch, New Zeland.
2003 International Congress of Plant Pathology, Session "Resistance Genes in the Genomics Era", Christchurch, New Zeland.

2002 INRA-CNRS Laboratory of Molecular Biology of Plant-Microbe Interactions, Castanet-Tolosan, France.
2002 The Sainsbury Laboratory, Norwich, United Kingdom..
2002 10th New Phytologist Symposium on Functional Genomics of Plant-Microbe Interactions, Nancy, France.
2002 Annual Meeting of the American Phytopathological Society, Symposium "Genomics of Plant-Pathogen Interactions", Milwaukee, Wisconsin.
2002 University of Munich, Germany.
2002 Max-Planck-Institute for Terrestrial Microbiology, Marburg, Germany.
2002 International Potato Center, Global Initiative on Late Bligh 2002 Conference, Hamburg, Germany.
2002 Max-Planck-Institute for Plant Breeding Research, Cologne, Germany.
2002 Department of Plant Breeding, Wageningen Agricultural University, The Netherlands.
2002 Department of Molecular Genetics, Utrecht University, The Netherlands.
2002 Gordon Research Conference on Cellular and Molecular Mycology, Session "Fungal Pathogens of Plants", Plymouth, New Hampshire.
2002 Syngenta Phytophthora Consortium meeting, Aberdeen, Scotland.
2002 Phytopathology Graduate Course, organized by the National Center for Competence in Research, Plant Survival, Université de Neuchâtel, Switzerland.
2002 Plant, Animal, & Microbe Genomes X Program, Workshop "Plant Interactions with Pests and Pathogens", San Diego, California.

2001 Discovery Seminar Series of Dow AgroSciences, Indianapolis, Indiana.
2001 Syngenta Phytophthora Consortium meeting, Hangzhou, China.
2001 11th Annual Retreat of the NSF Center for Engineering Plants for Resistance Against Pathogens, Marconi Center, California.
2001 DOE Plant Research Laboratory, Michigan State University, East Lansing.
2001 Oomycete Genetics 2001, Wooster, OH.
2001 10th International Congress of Molecular Plant-Microbe Interactions, Session Functional Genomics and Biotechnology, Madison, Wisconsin.

2001 Annual Meeting of Canadian Phytopathological Society, Symposium "Genomics and Plant Pathology: Where are We and Where are We Going?, London, Ontario, Canada.
2001 21st Fungal Genetics Conference, Oomycetes Workshop, Asilomar, Pacific Grove, CA.
2001 Syngenta Phytophthora Consortium meeting, Asilomar, Pacific Grove, CA.
2001 Functional genomics seminar series, Genetics Graduate Program, University of California, Davis. Jointly sponsored by the Department of Plant Pathology.
2001 Department of Horticultural and Crop Sciences, The Ohio State University, Wooster, OH.
2001 Agricultural Microbes Genome II, Functional Genomics Session, San Diego, CA.

2000 3nd Annual Plant Molecular Biology and Biotechnology Research Symposium, The Ohio State University, Columbus , OH.
2000 Colloquium of the Molecular, Cellular, and Developmental Biology Graduate Program, Columbus , OH.
2000 Department of Plant Pathology, University of Brasilia, Brazil.
2000 Novartis Agribusiness Research Institute, Research Triangle Park, North Carolina.
2000 Department of Phytopathology, Wageningen Agricultural University, The Netherlands.
2000 Scottish Crop Research Institute, Dundee, Scotland.
2000 2nd Meeting of the Novartis Phytophthora Consortium, Zurich, Switzerland.
2000 Agriculture-AgriFood Canada, London, Ontario, Canada.
2000 Panel discussion on Genetically Modified Organisms, Department of Horticulture & Crop Sciences, Wooster, OH.

1999 Potato Late Blight Symposium, Global Conference on Potato, New Delhi, India.
1999 Phytophthora Molecular Genetics Symposium: Beyond Y2K, Wooster, OH.
1999 University of Massachusetts, Amherst, MA.
1999 Soybean Biotechnology Disease Group meeting, St Louis, MI.
1999 2nd Annual Plant Molecular Biology and Biotechnology Research Symposium, The Ohio State University, Columbus , OH.
1999 Department of Plant Biology, The Ohio State University, Columbus , OH.
1999 Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN.
1999 9th International Congress on Molecular Plant-Microbe Interactions, Amsterdam, "Plant Pathogenic Fungus Interactions" Session. The Netherlands.
1999 Department of Plant Pathology, North Carolina State University, Raleigh, NC.
1999 1st Meeting of the Novartis Phytophthora Consortium, Fearrington Country Inn, Chapel Hill, NC.
1999 20th Fungal Genetics Conference, Oomycetes Workshop, Asilomar, Pacific Grove, CA.
1999 Workshop on constructing a molecular toolkit for developing country research, Global Initiative on Late Bligh 1999 Conference "Late Blight: A Threat to Global Food Security", Quito, Ecuador
1999 Soybean Disease Biotechnology Group, Iowa State University, Ames, IA.

1998 Department of Biology, Bowling Green State University, Bowling Green, OH.
1998 Department of Biology, College of Wooster, Wooster, OH.
1998 Department of Plant Pathology, The Ohio State University, Wooster, OH.
1998 Recent Advances in Phytophthora Molecular Genetics Symposium, Edinburgh, Scotland.
1998 Phytophthora Genome Initiative Meeting, National Center for Genome Resources, Santa Fe, NM.
1998 Department of Plant Pathology, Cornell University, Ithaca, NY.
1998 Novartis Inc., Research Triangle Park, NC.
1998 Department of Horticultural and Crop Sciences, The Ohio State University, Wooster, OH.

1997 Institute of Plant Biochemistry, Halle, Germany.
1997 Sainsbury Laboratory, Norwich, United Kingdom.
1997 Ohio Research and Development Center, Wooster, Ohio, and the Ohio State University, Department of Plant Pathology, Columbus Ohio.
1997 5th International Congress of Plant Molecular Biology, Singapore.
1995 Fourth International Symposium on the Molecular Biology of the Potato, Wageningen, the Netherlands.
1993 17th Fungal Genetics Conference, Asilomar, Pacific Grove, CA.

1993 Department of Plant Pathology, University of California, Riverside.
1989 Fallen Leaf Lake conference on the molecular biology of bacterial plant pathogens, Lake Tahoe, CA.