

Howard Hughes Medical Institute Investigator
John N. Couch Distinguished Professor, Department of Biology
Adjunct Professor, Department of Microbiology and Immunology
Member, Curriculum in Genetics and Molecular Biology
University of North Carolina, Chapel Hill, N.C

Birthdate: October 13, 1957
Birthplace: Grand Rapids, Michigan
Citizenship: USA

Education:

- 1981-1986:** PhD, Genetics, 1986
Department of Genetics
Stanford University Medical School
Stanford, Ca.
- 1976-1981:** BAS (Bachelor of Arts and Sciences), 1981
Biological Sciences and English (Modern Literature);
MS (Biological Sciences), 1981
Stanford University
Stanford, Ca.

Positions Held:

2017-present: HHMI Investigator
2011-2017: HHMI-GBMF Plant Science Investigator.
1995-present: Dept. of Biology, Univ. of North Carolina at Chapel Hill. John N. Couch Distinguished Professor (2000-present); Founding Associate Director, Carolina Center for Genome Sciences (2000-2011) Adjunct Professor of Microbiology and Immunology, UNC-CH School of Medicine (2001-present); John N. Couch Associate Professor (1999-2000); Associate Professor (1995-1999).

Current Research Topics: Molecular mechanisms of plant disease resistance; *Pseudomonas syringae* Type III effectors; plant-microbiomes and mircobiota.

- 1989-1995:** Group Leader (Assistant Professor equivalent)
Max-Delbrück Laboratorium in der MPG, Köln, Germany
Project: *Arabidopsis* as a model to genetically identify and isolate loci necessary for disease resistance responses
- 1986-1989:** NSF Post-doctoral Fellowship
Department of Biochemistry, Prof. Dr. Klaus Hahlbrock, Director
Max-Planck-Institut für Züchtungsforschung, Köln, Germany
Project: Stress-responsive *cis* regulatory elements from plant phenylpropanoid defense genes
- 1981-1986:** PhD. student, Immunogenetics
Department of Genetics
Stanford University Medical School
Prof. Leonard A. Herzenberg, advisor
Dissertation: Correlation of isotype with segmental flexibility and complement fixation among families of immunoglobulins containing identical combining sites
- 1978-1981:** Honors undergraduate research program
Departments of Biology and Genetics
Stanford University
Topic: T-cell ontogeny via cell surface marker expression.

Teaching:

- Strategies of Host-Microbe Interactions (Bio 424; all even numbered years)
- Signal Transduction (Bio 439, all odd numbered years)
- Genetics and Molecular Biology (Bio 202; 1996-2008)
- Plant Molecular Genetics (Bio 639, every spring)
- Advanced Genetics (Genetics 622; selected lectures 2003, 2005)
- Johnston Honors Seminar “Genetics Research: Design and Experiment” (1998)

Service-UNC:

- Carolina Center for Genome Sciences, Member (Founding Associate Director; 2000-2011)
- Morehead Planetarium and Science Center, Faculty Advisory Board
- Office of Post-Doctoral Scholars, Faculty Advisory Board
- HHMI, Searle, Beckman, Burroughs-Wellcome and Pew Scholars *Ad hoc* Nomination Boards

Elected Member:

- American Academy of Microbiology, 2011
- US National Academy of Sciences, 2007
- Fellow, American Association for the Advancement of Science, 2004
- German National Academy Sciences, “The Leopoldina”, 2003

Awards:

- American Society of Plant Biologists (ASPB), Pioneer Award, 2021
- American Society of Plant Biologists (ASPB), Martin Gibbs Medal, 2021
- Honorary Doctorate, The Hebrew University, Jerusalem, 2021
- Danforth Award for Plant Science, 2014
- Ruth Allen Award, American Phytopathological Society (APS), 2012
- Distinguished International Guest Professor, Univ. of Tuebingen, Germany 2011-2015
- Int. Society of Molecular Plant Microbe Interactions (IS-MPMI), Board of Directors Award, 2009
- American Society of Plant Biologists (ASPB), Stephen A. Hales Prize, 2009
- John L. Sanders Award for Distinguished Undergraduate Teaching/Service UNC-CH, 1998.
- Prize for Young Researchers, State of Nord-Rhein-Westfalen, Germany, 1991
- National Science Foundation Plant Molecular Biology Post-Doctoral Fellowship, 1986-89

Other Professional Activities:

Science Policy and National Research Council (NRC):

- Advisor, Kavli Foundation and OSTP, Universal Microbiome Initiative, 2015
- Scientific Advisor for the Secretaries of Energy and Agriculture, HHMI, 2010
- Member, NRC Board of Life Sciences, 2003-2008
- Committee Member and author “2020 Vision for Biology Workshop: The role of plants in addressing grand challenges in biology” National Science Foundation, 2008
- Chair, lead author “Achievements of the National Plant Genome Initiative and New Horizons in Plant Biology, 1998-2007”; NRC 2008
- Chair, lead author “Plant Genome Research Initiative 2003-2008”; NRC 2002.
- Committee Member and co-lead author “The Multinational Coordinated Arabidopsis 2010 Project. Functional Genomics and the Virtual Plant: A blueprint for understanding how plants are built and how to improve them” National Science Foundation, 2000

Service:

- The Arabidopsis Information Resource (TAIR) Advisory Board, 1999-2009.
- Keystone Symposia-Plant Biology Study Group 2002-2005.
- North American Arabidopsis Steering Committee (NAASC; Elected) 1997-2000.
- National Co-coordinator (with Prof. Gerd Juergens), German Research Society (DFG) Focus Program 1992-1995: “Arabidopsis as a Genetic Model for Plant Development”.
- NC Biotech Center, Plant Molecular Biology Consortium, Director, 1996-1998.
- International Society of Plant Molecular Biology, Board of Directors, 2003-2014.
- International Plant Molecular Biology, President-elect/President/past President, 2008-2013.

Editorial Boards:

- Science (Board of Reviewing Editors, from 2007)
- Cell (from 1998)

PLoS Pathogens (from 2005)
Trends in Plant Sciences (from 1995)
PLoS Biology (2003-2016)
PNAS (2007-2010)
Current Opinion in Plant Biology (from 1997; co-Editor-in-Chief 2005-2010 with Detlef Weigel)
The Plant Journal (from 1990, co-Editor from 1995-2008)
Cellular Microbiology (2003-2007)
Molecular Plant-Microbe Interaction (1995-2004; Senior Editor 1998-2000)

Grant Reviews for:

NSF-USDA panel 'Plant Biotic Interactions', Fall 2016
NIH GVE (Genetic Variation & Evolution) study section, member 2004-2006; ad hoc 2000
NIH CDF-1 (Cell and Developmental Function) study section, member 2001-2004
NSF Eukaryotic Genetics Panel, member 1996-2000
Ad hoc: HHMI, USDA, DOE, DFG (Germany), BBSRC (United Kingdom), HFSP, EU, ERC

Scientific Advisory Boards / Consultancies / Start ups:

Co-Founder and Scientific Advisory Board member, AgBiome, LLC (from 2012)
DOE DOE-ORNL, Plant Microbe Interfaces, Scientific Advisory Board (from 2010)
DOE-JGI Scientific Advisory Committee (2010-2019)
DOE-JGI Plant Genomics Advisory Committee (from 2008)
2Blades Foundation (from 2007)
Sainsbury Laboratory Council (2007-2013)
Center for Plant Molecular Biology, Univ. of Tuebingen, Germany (2000-2010)
Torrey Mesa Research Institute (1999-2002)
CropSolution (1999-2007)
Syngenta Biotechnology Institute (1996-2006)

Recent Invited Seminars and Symposium Presentations (2013-present):

2013

DOE BER Genomic Sciences Investigator's Meeting, Bethesda, MA (Keynote)
Dept. of Genetics, NCSU, Raleigh NC
Dept. of Plant Biology, Carnegie Institution, Stanford, CA
Oomycete Molecular Genetics Network, Asilomar, CA (Keynote)
Genomics and Computational Biology Program, Cuernevaca, Mexico
Institute of Plant Molecular Biology, Tuebingen, Germany
Max-Planck Institute, Tuebingen, Germany
HHMI Investigators Symposium, Janelia Farm, VA
The Bill and Melinda Gates Foundation, Convening on Potential of Plant Microbiome Research
The Sainsbury Laboratory, Norwich, UK

2014

Faculty Retreat, Dept. of Cell and Molecular Biology, Univ. of Texas, Austin (Keynote)
Dept. of Cell and Systems Biology, Univ. of Toronto
Marion Koshland Symposium, Univ. of Chicago
16th Int. Congress Molecular Plant-Microbe Interactions, Rhodos, Greece (Plenary)
25th Int. Congress of Arabidopsis Research, Vancouver, BC, Canada (Keynote)
Gordon and Betty Moore Foundation, Palo Alto, CA (meeting at HHMI)
'Plant Systems Biology: Solution to Global Food Security', NC State Univ.
Donald Danforth Plant Science Center, St. Louis, MO
'The Human and Environmental Microbiome', Duke Center for Genomics of Microbial Systems

2015

DOE-JGI Strategic Retreat, Pacifica, CA.
HHMI Investigators Retreat, Chevy Chase, MD.
Max Planck Workshop 'NLR Biology in Plants and Animals', Schloss Ringberg, Germany
4th International Rhizosphere Conference, Maastricht, Netherlands (Keynote)
GBMF Marine Microbiology Investigator Symposium (Keynote)
NC State Molecular Biotechnology Training Program (MBTP) Symposium (Keynote)

2016

Microbiomes in Sustainable Agriculture, Asilomar, CA.
Microbial and Plant Systems Modulated by Secondary Metabolites, JGI, Walnut Creek, CA
17th Int. Congress on Molecular Plant-Microbe Interactions, Portland, OR.

2017

Duke Univ., 'Frontiers in Microbiome Dynamics and Engineering'
HHMI Investigators Review, Chevy Chase, MD.
Max-Planck-Institute, Cologne, EMBO Workshop 'Plant Microbiomes'
John Lawrence Lecture, Lawrence Berkeley National Lab, Berkeley, CA
Banbury Conference, 'Plant and Animal NLR Proteins', Cold Spring Harbor, NY
'Molecular Biotechnology Symposia', Keynote; NC State, Raleigh, NC

2018

Stanford University Genetics Depart 60th Anniversary Fete

Publications (PR = Peer Reviewed):

1. Haajiman, JJ, HS Micklem, JA Ledbetter, JL Dangl, LA Herzenberg and LA Herzenberg (1981) T-cell ontogeny: Organ location by surface antigen markers is similar in adults and neonates. *J. Exp. Med.* **153**, 605-614. **PR** PMID 6972987.
2. Dangl, JL, DR Parks, VT Oi and LA Herzenberg (1982) Rapid isolation of cloned isotype switch variants using fluorescence activated cell sorting. *Cytometry* **2**, 395-401. **PR** PMID 6804196.
3. Dangl, JL and LA Herzenberg (1982) Selection of hybridomas and hybridoma variants by fluorescence activated cell sorting: A review. *J. Immunological Methods* **52**, 1-14. **PR** PMID 6811662.
4. Oi, VT, TM Young, RR Hardy, J Reidler, JL Dangl, LA Herzenberg and L Stryer (1984) Correlation between segmental flexibility and effector function of antibodies. *Nature* **307**, 136-140. **PR**
5. Gurling, HMD, SR Grant and JL Dangl (1985) The genetic and cultural transmission of alcohol use, cigarette smoking and coffee drinking: A review and an example using a log-linear cultural transmission model. *The British Journal of Addiction* **80**, 269-279. **PR**
6. Hardy, RR, JL Dangl, K Hayakawa, G Jaeger, LA Herzenberg and LA Herzenberg (1986) Frequent lambda light chain-gene rearrangement in a Ly-1+ B-cell lymphoma with a productive kappa chain allele. *Proc. Natl. Acad. Sci., USA* **83**, 1438-1442. **PR** PMID 3081897
7. Kleinfeld, R, RR Hardy, D Tarlinton, JL Dangl, LA Herzenberg and M Weigert (1986) Recombination between an expressed immunoglobulin heavy-chain gene and a germline variable gene segment in a Ly-1+ B-cell lymphoma. *Nature* **322**, 843-846. **PR**
8. Dangl, JL, KD Hauffe, S Liphardt, K Hahlbrock and D Scheel (1987) Parsley protoplasts retain differential responsiveness to UV-light and fungal elicitor. *EMBO J.* **6**, 2551-2556. **PR** PMID 16453792.
9. Douglas, CJ, JL Dangl, H Hoffmann, S Liphardt and K Hahlbrock (1987) Analysis of fungal elicitor- and UV light-induced gene expression in parsley cells. In: Plant Gene Systems and Their Analysis (eds.) L McIntosh and J Key, Alan R. Liss, New York.
10. Scheel, D, JL Dangl, CJ Douglas, KD Hauffe, A Herrmann, H Hoffmann, K Hahlbrock (1987) Stimulation of phenylpropanoid pathways by environmental factors. In: NATO-ASI Series (eds.) D von Wettstein and N-H Chua, Plenum Press, New York, pp. 315-326.
11. Dangl, JL, TG Wensel, SM Morrison, L Stryer, LA Herzenberg and VT Oi (1988) Segmental flexibility and complement fixation of genetically engineered chimeric human, rabbit, and mouse antibodies. *EMBO J.* **7**, 1989-1994. **PR** PMID 3138110.
12. Liphardt, S, R Brettschneider, F Kreuzaler, J Schell and JL Dangl (1988) Light induced transient gene expression in parsley protoplasts: Functional identification of multiple *cis* regulatory elements in a heterologous chalcone synthase gene. *EMBO J.* **7**, 4027-4033. **PR** PMID 16453865.
13. Schulze-Lefert, P, JL Dangl, M Becker-Andre, K Hahlbrock and W Schulz (1989) *in vivo* DNA footprints define sequences necessary for light activation of the parsley chalcone synthase gene. *EMBO J.* **8**, 651-656. **PR** PMID 2566481.
14. Dangl, JL, K Hahlbrock and J Schell (1989) Regulation and structure of chalcone synthase genes. In: Cell Culture and Somatic Cell Genetics of Plants. Vol. 6: Plant Nuclear Genes and Their Expression (eds.) IK Vasil and J Schell, Academic Press, New York, pp.155-173.
15. Schulze-Lefert, P, M Becker-Andre, W Schulz, K Hahlbrock and JL Dangl (1989) Functional architecture of the light responsive chalcone synthase promoter from parsley. *Plant Cell* **1**, 707-714. **PR** PMID 2535519.

16. Block, A, JL Dangl, K Hahlbrock and P Schulze-Lefert (1990) Functional borders, genetic fine-structure, and distance requirements of *cis*-elements mediating light responsiveness of the parsley chalcone synthase promoter. *Proc. Natl. Acad. Sci., USA* **87**, 5387-5391. PR PMID 2371277.
17. Dangl, JL, H Lehnackers, S Kiedrowski, C Rupprecht, T Debener, M Arnold and IE Somssich (1991) Interactions between *Arabidopsis thaliana* and phytopathogenic *Pseudomonas* pathovars: A model for the genetics of disease resistance. In: Advances in Molecular Genetics of Plant-Microbe Interactions (eds.) H Hennecke and DPS Verma, Kluwer Academic Publications, Dordrecht, pp. 78-83.
18. Hauffe, KD, U Paszkowski, M Ellard, P Schulze-Lefert, K Hahlbrock, JL Dangl and CJ Douglas (1991) A 210bp parsley 4CL-1 promoter specifies complex expression patterns in transgenic tobacco. *Plant Cell* **3**, 435-443. PR PMID 1840921.
19. Douglas, CJ, KD Hauffe, M-E Ites-Morales, U Paszkowski, K Hahlbrock and JL Dangl (1991) Exonic sequences are required for elicitor and light activation of a plant defense gene, but promoter sequences are sufficient for tissue-specific expression. *EMBO J.* **10**, 1767-1775 PR PMID 2050114 (**cover**).
20. Debener, T, H Lehnackers, M Arnold and JL Dangl (1991) Identification and molecular mapping of a single *Arabidopsis* locus conferring resistance against a phytopathogenic *Pseudomonas* isolate. *Plant Journal* **1**, 289-302. PR
21. Dangl, JL (1992) Regulatory elements controlling developmental and stress induced expression of phenylpropanoid genes. In: Plant Gene Research, Vol. 8, Genes Involved in Plant Defense (eds.) pp. 303-326, T Boller and F Meins, Springer Verlag, Vienna/New York.
22. Dangl, JL (1992) The Major Histocompatibility Complex a la carte: Are there analogies to plant disease resistance genes on the menu? *Plant Journal* **2**, 3-11. PR
23. Dangl, JL, EB Holub, T Debener, H Lehnackers, C Ritter and IR Crute (1992) Genetic definition of *Arabidopsis* loci involved in plant-pathogen interactions. In: Methods in Arabidopsis Research (eds.) C Koncz, N-H Chua, and J Schell, World Scientific Publishing, LTD, Singapore, pp.393-418.
24. Dangl, JL, C Ritter, MJ Gibbon, JR Wood, LAJ Mur, S Goss, JW Mansfield, JD Taylor and A Vivian (1992) Functional homologs of the *Arabidopsis RPM1* disease resistance gene in bean and pea. *Plant Cell* **4**, 1359-1369. PR PMID 1477552.
25. Kiedrowski, S, P Kawalleck, K Hahlbrock, IE Somssich and JL Dangl (1992) Rapid activation of a novel plant defense gene is strictly dependent on the *Arabidopsis RPM1* disease resistance locus. *EMBO J.* **11**, 4677-4684. PR PMID 1464303.
26. Dangl, JL, T Debener, M Gerwin, S Kiedrowski, C Ritter, A Bendahmane, H Liedgens, and J Lewald (1992) Genetic approaches to an understanding of specific resistance responses of *Arabidopsis thaliana* against phytopathogenic *Pseudomonads*. In: Advances in Molecular Genetics of Plant-Microbe Interactions, Vol. 2 (ed.) E Nester and DPS Verma, Kluwer Academic Publications, Dordrecht, pp. 405-416.
27. Dangl, JL (1993) Applications of *Arabidopsis thaliana* to outstanding issues in plant-pathogen interactions. *Int. Review of Cytology* **144**, 53-93.
28. Dangl, JL (1993) The emergence of *Arabidopsis thaliana* as a model for plant-pathogen interactions. *Adv. Plant Pathology* **10**, 127-156. PR
29. Merkle, T, H Frohnmeyer, P Schulze-Lefert, JL Dangl, K Hahlbrock and E Schäfer (1994) Analysis of the chalcone synthase promoter in parsley in response to different light qualities. *Planta* **193**, 275-282. PR PMID 7764988.

- 30.** Crute, I., J Beynon, J Dangl, E Holub, B Mauch-Mani, A Slusarenko, B Staskawicz and F. Ausubel (1994) Microbial pathogenesis of *Arabidopsis*. In: *Arabidopsis*, (eds.) EM Meyerowitz and CR Somerville, Cold Spring Harbor Laboratory Press, NY, pp. 705-748.
- 31.** Dietrich, RA, TP Delaney, SJ Uknes, ER Ward, JA Ryals and JL Dangl (1994) Arabidopsis mutants simulating disease response. *Cell* **77**, 565-578. **PR** PMID 8187176.
- 32.** Dangl, JL (1994) The enigmatic avirulence genes of phytopathogenic bacteria. In: "Bacterial Pathogenesis of Plants and Animals: Molecular and Cellular Mechanisms", Vol. 192 of Current Topics in Microbiology and Immunology, (ed.) JL Dangl, Springer Verlag, Vienna/New York/Heidelberg, pp. 99-118. PMID 7859515.
- 33.** Godiard, L, MR Grant, RA Dietrich, S Kiedrowski and JL Dangl (1994) Perception and response in plant disease resistance. *Curr. Opin. Genet. & Develop.* **4**, 662-671. PMID 7849505.
- 34.** Dangl, JL, RA Dietrich, MR Grant, L Godiard, C Ritter, J-B. Morel, J. Lewald and E Straube (1994) Plant and Pathogen Loci Determining Recognition and Cell Death in *Arabidopsis thaliana*. In: Advances in Molecular Genetics of Plant-Microbe Interactions, Vol. 3 (ed.) MJ Daniels, JA Downie, A Osbourn, Kluwer Academic Publications, Dordrecht. pp. 289-296.
- 35.** Dangl, JL (1995) Piéce de résistance: Novel classes of plant disease resistance genes. *Cell* **80**, 363-366. **PR** PMID 7859277.
- 36.** Dangl, JL (1995) Genes Involved in Bacterial Pathogenesis of Plants. In: Pathogenesis and Host Specificity in Plant Diseases Vol. 1 (ed.) US Singh, Elsevier Sciences, Oxford. pp. 293-303.
- 37.** Dangl, JL, Preuss, D. and JI Schroeder (1995) Talking through walls: Signaling in plant development. *Cell* **83**, 1071-1077. PMID 8548795.
- 38.** Ritter, C. and JL Dangl (1995) The *avrRpm1* gene of *Pseudomonas syringae* pv. *maculicola* is required for virulence on Arabidopsis. *Mol. Plant-Microbe Interact.* **8**, 444-453. **PR** PMID 7655064.
- 39.** Grant, MR, L Godiard, E Straube, T Ashfield, J Lewald, A Sattler, RW Innes and JL Dangl (1995) Structure of the Arabidopsis *RPM1* gene which enables dual-specificity disease resistance. *Science* **269**, 843-846. **PR** PMID 7638602.
- 40.** Ritter, C and JL Dangl (1996) Interference between two specific pathogen recognition events mediated by distinct plant disease resistance genes. *Plant Cell* **8**, 251-257. **PR** PMID 12239384.
- 41.** Jones, AM, and JL Dangl (1996) Logjam at the Styx: Programmed cell death in plants. *Trends in Plant Science* **1**, 114-119.
- 42.** Boyes, DC, JM McDowell and JL Dangl (1996) Plant disease resistance: Many roads lead to resistance. *Current Biology* **6**, 634-637. PMID 8793280.
- 43.** Dangl, JL, RA Dietrich, J-B Morel, DC Boyes, T Jabs, JM McDowell, MR Grant, S Kjemtrup and S Kaufman (1996) Genetic interactions between genes controlling cell death and pathogen recognition in *Arabidopsis*. In: Biology of Plant-Microbe Interactions (eds.) G Stacey, B Mullin, PM Gresshoff, IS-MPMI, St. Paul, Mn. pp. 39-46.
- 44.** Jabs, T, RA Dietrich and JL Dangl (1996) Initiation of runaway cell death in an Arabidopsis mutant by extracellular superoxide. *Science* **273**, 1853-1856. **PR** PMID 8791589.
- 45.** Dangl, JL, RA Dietrich and MH Richberg (1996) Death don't have no mercy: Cell death programs in plant-microbe interactions. *Plant Cell* **8**, 1793-1807. **PR** PMID 12239362

46. Dangl, JL (1997) Learning from the mammalian immune system in the wake of the *R* gene flood. In: The Gene-for-Gene Relationship in Plant-Parasite Interactions (eds.) IR Crute, EB Holub, and JJ Burdon and, CAB International, Oxford, pp. 389-400.
47. Dietrich, RA, MH Richberg, R Schmidt, C Dean and JL Dangl (1997) A novel zinc finger protein is encoded by the *Arabidopsis LSD1* gene and functions as a negative regulator of plant cell death. *Cell* **88**, 685-694. PR PMID 9054508.
48. Hunt, MD, TP Delaney, RA Dietrich, KB Weymann, JL Dangl and JA Ryals (1997) Salicylate-independent lesion formation in *Arabidopsis lsd* mutants. *Mol. Plant-Microbe Interact.* **10**, 531-536. PR PMID 9204559.
49. Morel, J-B and JL Dangl (1997) The Hypersensitive response and the induction of cell death in plants. *Cell Death & Different.* **19**, 17-24. PR PMID 16465279.
50. Dangl, JL and EB Holub (1997) La Dolce Vita: A Molecular Feast in Plant-Pathogen Interactions. *Cell* **91**, 17-24.
51. Dangl, JL (1998) Plants just say NO to pathogens. *Nature* **394**, 525-526
52. McDowell, JM, D Murali, TA Long, MGM Aarts, S Goff, EB Holub and JL Dangl (1998) Intragenic recombination and diversifying selection contribute to the evolution of downy mildew resistance at the *RPP8* locus in *Arabidopsis*. *Plant Cell* **10**, 1861-1874. PR PMID 9811794.
53. Richberg, MH, DH Aviv and JL Dangl (1998) Dead cells DO tell tales. *Curr. Opin. Plant Biol.* **1**, 480-485. PMID 10066637.
54. Grant, MR, JM McDowell, AG Sharpe, M de Torres Zabala, DJ Lydiate and JL Dangl (1998) Independent deletions of a pathogen resistance gene in *Brassica* and *Arabidopsis*. *Proc. Natl. Acad. Sci., USA* **95**, 15843-15848. PR PMID 9861058.
55. Boyes, DC, J Nam and JL Dangl (1998) The *Arabidopsis thaliana RPM1* disease resistance gene product is a peripheral plasma membrane protein that is degraded coincident with the hypersensitive response. *Proc. Natl. Acad. Sci., USA* **95**, 15849-15854. PR PMID 9861059.
56. Morel, J-B and JL Dangl (1999) Suppressors of the *Arabidopsis lsd5* cell death mutation identify genes involved in regulating disease resistance responses. *Genetics* **151**, 305-319. PR PMID 9872969.
57. Kliebenstein, DJ, RA Dietrich, AC Martin, RL Last and JL Dangl (1999) LSD1 regulates salicylic acid induction of copper zinc superoxide dismutase in *Arabidopsis thaliana*. *Molec. Plant-Microbe Interact.* **12**, 1022-1026. PR PMID 10550898.
59. Dangl, JL (2000) Mechanisms of specific disease resistance: Current understanding and future challenges. Keynote Address. In: Biology of Plant-Microbe Interactions (eds.) PJGM DeWit, T Bisseling, WJ Stiekema; IS-MPMI, St. Paul, Mn. Pp. 1-12.
58. Dangl, JL (1999) A long view from a high plateau. *Nature* **401**, 543-544.
60. McDowell, JM and JL Dangl (2000) Signal transduction in the plant immune response. *Trends Biochem. Sci.* **25**, 79-82. PR PMID 10664588.
61. Holt III, BF, D Mackey and JL Dangl (2000) Strength through diversity: Role of leucine rich repeats in disease resistance of plants. *Curr. Biol.* **100**, R5-R7. PMID 10660284.
62. Kjemtrup, S., Z. Nimchuk and JL Dangl (2000) Effector proteins of phytopathogenic bacteria: Bifunctional signals in virulence and host recognition. *Curr. Opin. Microbiol.* **3**, 73-78. PMID 10679421.
63. McDowell, JM, A Cuzick, C Can, J Beynon, JL Dangl and EB Holub (2000) Downy mildew (*Peronospora parasitica*) resistance genes in *Arabidopsis* vary in functional requirements for

- NDR1, EDS1, NPR1* and Salicylic Acid accumulation. *Plant J.* **22**, 523-530. **PR** PMID 10886772.
64. Nimchuk, Z, E Marois, S Kjemtrup, RT Leister, F Katagiri and JL Dangl (2000) Eukaryotic fatty acylation drives plasma membrane targeting and enhances function of several Type III effector proteins from *Pseudomonas syringae*. *Cell* **101**, 353-363. **PR** PMID 10830163.
65. Schrick, K, U Mayer, A Horrichs, C Kuhnt, C Bellini, J Dangl, J Schmidt and G Jürgens (2000) Cell expansion in *Arabidopsis* embryogenesis requires *FACKEL* (*FK*), a sterol C-14 reductase. *Genes & Develop.* **14**, 1471-1484. **PR**
66. Dangl, JL, RA Dietrich and H Thomas (2000) Senescence and Programmed Cell Death. In: Biochemistry and Molecular Biology of Plants (eds.) B. Buchanan, W. Gruisse, R. Jones. ASPP Press, Rockville, Md. Pgs.1044-1100.
67. Maleck, K, A Levine, T Eulgem, A Morgan, J Schmid, K Lawton, JL Dangl and RA Dietrich (2000) The transcriptome of *Arabidopsis* during systemic acquired resistance. *Nature Genet.* **26**, 403-410. **PR** PMID 11101835.
68. The Arabidopsis Genome Initiative (2000) Analysis of the genome of the flowering plant *Arabidopsis thaliana*. *Nature* **408**, 796-815. **PR** PMID 11130711.
69. Somerville, C and J Dangl (2000) Genomics: Plant biology in 2010 (Policy forum). *Science* **290**, 2077-2078.
70. Nimchuk, Z, L Rohmer, JH Chang and JL Dangl (2001) Knowing the Dancer from the Dance: *R* gene products and their interactions with other proteins from host and pathogen. *Curr. Opin. Plant Biol.* **4**, 288-294. PMID 11418337.
71. Dangl, JL and JDG Jones (2001) Plant pathogens and integrated defence responses to infection. *Nature* **411**, 826-833. **PR** PMID 11459065.
72. Staskawicz, BJ, MB Mudgett, JL Dangl and JE Galan (2001) Common and contrasting mechanisms of pathogen virulence and host resistance in plant and animal disease. *Science* **292**, 2285-2289. **PR** PMID 11423652.
73. Rustérucci, C, DH Aviv, BF Holt III, JL Dangl and JE Parker (2001) The disease resistance signalling components *EDS1* and *PAD4* are essential regulators of the cell death pathway controlled by *LSD1* in *Arabidopsis*. *Plant Cell* **13**, 2211-2224. **PR** PMID 11595797.
74. Tornero, P and JL Dangl (2001) A high throughput method for quantifying growth of phytopathogenic bacteria in *Arabidopsis thaliana*. *Plant J.* **28**, 475-481. **PR** PMID 11737784.
75. Torres, MA, JL Dangl and JDG Jones (2002) *Arabidopsis* gp91^{phox} homologues *AtrbohD* and *AtrbohF* are required for accumulation of reactive oxygen intermediates in the plant defense response. *Proc. Natl. Acad. Sci., USA* **99**, 523-528. **PR** PMID 11756663.
76. Tornero, P, R Chao, W Luthin, S Goff and JL Dangl (2002) Large scale structure-function analysis of the *Arabidopsis* *RPM1* disease resistance protein. *Plant Cell* **14**, 435-450. **PR** PMID 11884685.
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- 237.** Wang, B, Z Zhao, L Jabusch, D Chiniquy, K Ono, J Conway, Z Zhang, G Wang, D Robinson, J-F Cheng, JL Dangl, T Northen and Y Yoshikuni (2020) Modular assembly of a resource for studying plant-microbe interactions using CRAGE-Duet. *ACS Synthetic Biology* **9**, 2610-2615. doi: 10.1021/acssynbio.0c00280. PMID: 32786359.
- 238.** Saile, SC, P Jacob, B Castel, LM Jubic, I Salas-González, M Bäcker, JDG Jones*, JL Dangl*, F El Kasmi* (2020) Two unequally redundant "helper" immune receptor families mediate *Arabidopsis thaliana* intracellular "sensor" immune receptor functions. *PLoS Biology* **18**, e3000783 (*co-corresponding authors). doi: <https://doi.org/10.1371/journal.pbio.3000783>. PR PMID: 32925907.
- 239.** Finkel, OM, I Salas-González, G Castrillo, JM Conway, TF Law, PJPL Teixeira, ED Wilson, CR Fitzpatrick, CD Jones and JL Dangl (2020) A single bacterial genus maintains root growth in a complex microbiome. *Nature* **587**, 103-108. Advanced publication Sept. 30, 2020. doi: <https://doi.org/10.1038/s41586-020-2778-7> PR PMID: 32999461. preprint posted at: <https://doi.org/10.1101/645655>.

- 240.** Salas-González I, G Reyt, P Flis, V Custódio, D Gopaulchan, N Bakhoum, K Suresh, R Benni Franke, JL. Dangl, DE. Salt and G Castrillo (2021) Coordination between the microbiota and the root endodermis is required for plant mineral nutrient homeostasis. *Science* **371**, eabd0695. doi: 10.1126/science.abd0695. **PR** PMID: 33214288. Published online 19 Nov. 2020.
- 241.** Parys K, NR Colaianni, H-S Lee, U Hohmann, N Edelbacher, A Trgovcevic, Z Blahovska, D Lee, A Mechtler, Z Muhari-Portik, M Madalinski, N Schandry, I Rodríguez-Arévalo, C Becker, E Sonnleitner, A Korte, U Bläsi, N Geldner, M Hothorn, CD Jones*, JL Dangl* and Y Belkhadir* (2021) Signatures of antagonistic pleiotropy in a bacterial flagellin epitope. *Cell Host & Microbe* **29**, 620-634 ('co-correspondng authors). doi: [10.1016/j.chom.2021.02.008](https://doi.org/10.1016/j.chom.2021.02.008) **PR** PMID: 33713601. Published online 12 March, 2021.
- 242.** Colaianni, NR, K Parys, H-S Lee, JM Conway, NH Kim, N Edelbacher, TS Mucyn, M Madalinski, TF. Law, CD Jones*, Y Belkhadir* and JL Dangl* (2021) A complex immune response to flagellin epitope variation in commensal communities. *Cell Host & Microbe* **29**, 635-649 ('co-correspondng authors). doi: [10.1016/j.chom.2021.02.006](https://doi.org/10.1016/j.chom.2021.02.006) **PR** PMID: 33713602. Published online 12 March, 2021.
- 243.** Teixeira PJPL, NR Colaianni, TF. Law, JM. Conway, S Gilbert, H Li, I Salas-González, D Panda, NM. Del Risco, OM Finkel, G Castrillo, P Mieczkowski, CD Jones, JL Dangl (2021) Specific modulation of the root immune system by a community of commensal bacteria. *Proc. Natl. Acad. Sci., USA* **118**, e2100678118. doi: [10.1073/pnas.2100678118](https://doi.org/10.1073/pnas.2100678118) **PR** PMID: 33879573. Published online 16 April, 2021.
- 244.** Jacob, P, NH Kim, F Wu, F El-Kasmi, Y Chi, WG Walton, OJ Furzer, AD Lietzan, S Sunil, K Kempthorn, MR Redinbo, Z-M Pei*, L Wan* and JL Dangl* (2021) Plant "helper" immune receptors are Ca^{2+} -permeable non-selective cation channels. *Science* **373**, 420–425 ('co-correspondng authors). doi: 10.1126/science.abg7917. Published early online 17 June, 2021 <https://science.sciencemag.org/content/early/2021/06/16/science.abg7917>. **PR** PMID: 34140391.
- 245.** Pruitt, RN, F Locci,, F Wanke, L Zhang, SC Saile, A Joe, C Hua, D Karelina, K Fröhlich, W-L Wan, M Hu, S Rao, S Stolze, A Harzen, AA Gust, K Harter, MHAJ Joosten, BPHJ Thomma, J-M Zhou, JL Dangl, D Weigel, H Nakagami, C Oecking, F El Kasmi,, JE Parker and T Nürnberg (2021) The EDS1-PAD4-ADR1 node mediates *Arabidopsis* pattern-triggered immunity. *Nature* **598**, 495–499 (2021). doi: 10.1038/s41586-021-03829-0. Published early online 8 September, 2021. **PR** PMID: 34497423. Preprint posted at: <https://doi.org/10.1101/2020.11.23.391516>.
- 246.** Tzipilevich, E, D Russ, JL Dangl and PN Benfey (2021) Plant immune system activation is necessary for efficient interaction with auxin secreting beneficial bacteria. *Cell Host & Microbe* Published online 4 October, 2021. doi: 10.1016/j.chom.2021.09.005. **PR** PMID: 34610294.
- 247.** Saile, SC, FM Ackerman, S Sunil, J Keicher, A Bayless, V Bonardi, L Wan, M Doumane, E Stöbbe, Y Jaillais, M-C Caillaud, JL Dangl, MT Nishimura, C Oecking and F El Kasmi (2021) *Arabidopsis* ADR1 helper NLR immune receptors localize and function at the plasma membrane in a phospholipid dependent manner. *New Phytol.* **232**, 2440–2456. doi: 10.1111/nph.17788. Published online 10 October, 2021. **PR** PMID: 34628646. preprint posted at: <https://doi.org/10.1101/2020.11.18.388520>.
- 248.** Qi M, JC Berry, K Veley, L O'Connor, OM Finkel, I Salas-González, M Kuhs, J Jupe, E Holcomb, T Del Rio, C Creech, P Liu, SG Tringe, JL Dangl, DP Schachtman, RS. Bart (2022) Identification of beneficial and detrimental bacteria impacting sorghum responses to drought using multi-scale and multi-system microbiome comparisons. *ISME J.* **revised**.
- 249.** Kim, NH, P Jacob and JL Dangl (2022) Tansley Insight: Con- Ca^{2+} -tenating plant immune responses via calcium-permeable cation channels. *New Phytol.* **submitted**.
- 250.** Conway, JM, WG Walton, I Salas-González, TF Law, CA Lindberg, LE Crook, SM Kosina, CR Fitzpatrick, AD Lietzan, TR Northen, CD Jones, OM Finkel, MR Redinbo* and JL Dangl*

(2022) Structure, function and microbiota ecology of diverse MarR bacterial auxin receptors.
(co-corresponding authors). **submitted.**

Current Graduate Students, Post-Doctoral Fellows and Undergraduates (09/2021)

Graduate Students:

Post-doctoral fellows:

Nak Hyun Kim (KOSEF Korean Fellowship)
Pierre Jacob
Connor Fitzpatrick (Canada, NSERC Fellowship)
Dor Russ (EMBO Long Term Fellowship)
Yu Yang

Gap Year and Undergraduate Research Students:

The following are currently gap year or undergraduate research students in the lab:

Current Positions of Former Graduate Students and Post-Doctoral Fellows

Former Graduate Students (31):

Uta Paszkowski, Diplom (M. Sc.), 1989, Professor, Plant Science, Cambridge Univ., Cambridge, UK
 Abdelhafid Bendamane, Diplom (M.Sc.), 1992, Directeur de Recherche, INRA, Versailles, France
 Siegrid Kiedrowski, PhD. 1994, Staff Scientist, Bayer, AG Monheim, Germany
 Claudia Ritter, PhD. 1995, Program Officer, Deutscher Forschungsgemeinschaft, Bonn, Germany
 Andrea Horrichs, PhD. 1996, Manager, Diabetes Care, Abbott Labs, Aachen, Germany
 Jean-Benoit Morel, PhD. 1998, Directeur de Recherche, INRA, Montpellier, France ; Head of the Institute for Plant Health, Montpellier
 Michael H. Richberg, MSc 1998, Free lance computer consultant, Durham, NC
 Eric Marois, MSc 1999, Charge de Recherche, IBMC, Strasbourg, France
 Patrizia Marchesini, PhD. 2000 (Université Fribourg, Switzerland), Scientist, Nestle Corp.
 Daniel H. Aviv (Curriculum in Genetics [GMB Training Grant]), PhD. 2002, Upper School STEM Director, the Leffell School, Westchester, NY
 Ben F. Holt, III, PhD. 2002, Science Director, AgBiome, LLC, RTP, NC
 Laurence Rohmer, PhD. 2003 (INRA-Versailles), Post-doc UW, CompSci, DuPont; Nutrition/Biosciences
 Zachary Nimchuk PhD. 2003, Post-Doc, E. Meyerowitz lab, Cal Tech, Pasadena, CA, Associate Prof.; Dept of Biology, UNC-CH
 Filiz Kavlaki, M. Sc., 2004, Biology Teacher, Turkey
 Youssef Belkadir, PhD. 2005, (INRA-Evry, France, Univ. Paris VI), LSRF Post-doc, Salk Institute; CEO MENATECH, Casablanca, Morocco; Research Group Leader, Gregor Mendel Inst., Vienna, Austria; Altos Lab Institute, CA.
 David A. Hubert, PhD. 2007, Post-doc, UNC-Chapel Hill, Research Manager, Crop Phenotyping and Screening, BASF Crop Sciences, RTP, NC
 Emily J. Fisher, PhD. 2008, Lecturer, Director of Undergraduate Studies, Dept. of Biology, Johns Hopkins University, Baltimore, MD
 Tim Eitas, PhD. 2010 (Curriculum in Genetics [GMB Training Grant]), Post-Doc, Jenny Ting lab, UNC-CH; Senior Scientist, Mersana Therapeutics, Boston, MA.
 Beth Mole, PhD. 2010 (IBMS), UC Santa Cruz, School of Journalism; staff writer *The Scientist*; staff writer, *Nature* (Washington DC); staff science writer *Science News* (Washington DC).
 Eui-Hwan Chung, PhD 2010, Post-doc UNC-CH, Senior Scientist, Syngenta Biotechnology, RTP, NC
 Yijian He, PhD 2012, Post-Doc, P. Balint-Kurti lab, NCSU; Scientist, Phillip Morris Research Center.
 Melinda Roberts, PhD 2012, Instructor, Chemistry and Biochemistry, Texas Tech Univ., Lubbock, TX
 Karen Cherkis, PhD 2012 (Curriculum in Genetics [GMB Training Grant]), Medical Science Liason; bioTheranostics, RTP, NC; Director of field medical training, TESARO, Waltham, MA.
 Erica Washington, PhD 2013 (Biology, IBMS, [CMB Grant, Immunology Grant]), Post-Doc, UNC-CH Post-Doc, Richard Brennan lab, Duke Univ.
 Derek Lundberg, PhD 2014 (Curriculum in Genetics [GMB Training Grant]; Kenan/Hobgood GMB Dissertation Award); Post-Doc, Detlef Weigel lab, Max-Planck-Tuebingen (HFSP Fellow); Group Leader and NovoNordisk Foundation Fellow, Swedish University of Agricultural Sciences, Uppsala, Sweden
 Sur Herrera-Paredes, PhD 2017 (HHMI International Fellowship; [BCB Training Grant]); Post-Doc, Hunter Fisher lab, Stanford (LSRF Fellow)
 Tianxiang Gao, PhD 2017 (Joint with Prof. Valdimir Jojic; Dept. of Computer Science); Machine Learning Research Group, FaceBook, Seattle, WA.
 Scott Yourstone, PhD 2017 (Joint with Prof. Corbin Jones; Bioinformatics and Computational Biology [BCB Training Grant]); Bioinformatician, Q2 Solutions, RTP, NC.
 Nick Colaianni, PhD 2021 (Joint with Prof. Corbin Jones; Bioinformatics and Computational Biology); Computational Biologist, Pivot Bio, Berkeley, CA.
 Isai Salas-González, PhD 2021 (Joint with Prof. Corbin Jones; Bioinformatics and Computational Biology); Computational Biologist, Bioskyrb, Durham, NC
 Lance Jubic (Genetics and Molecular Biology Training Grant); Research Scientist, Syngenta, RTP, NC

Former Post-Doctoral Fellows (63):

Hiltrud Liedgens, Staff Scientist, Max-Planck Institute, Köln, Germany
 Thomas Debener, Professor, Universität Hannover, Hannover, Germany

Thorsten Jabs, Chemical Patent Department, BASF AG, Limburgerhof, Germany
Murray R. Grant, Professor and Elizabeth Creak Chair in Food Security, Univ. of Warwick, UK
D. Murali, DuPont India, Hyderbad, India
Laurence Godiard, Chargé de Recherche, INRA, Toulouse, France
Douglas Boyes, Enko Chem, Boston, MA
Robert A. Dietrich, Senior Group Leader, Syngenta, Research Triangle Park, N. C.
Patricia Brand Monteiro (Brazilian Science Ministry Fellowship), Biological and Agronomical Sciences Program Director, FAPESP, Sao Paulo, Brazil.
John McDowell (NIH-NSRA, USDA Fellowships), Professor and Head, VBI, Virginia Tech University.
Jaesung Nam, Assistant Professor, Dong-A University, Pusan, South Korea.
Susanne Kjemtrup (NIH Ruth Kirschstein NRSA Postdoctoral Fellowship), Site Lead, Monsanto, RTP.
Mats Ellerström (Swedish National Sci. Foundation Fellow); Assistant Professor, Botanical Institute, Gøteborg University, Gøteborg, Sweden
David Mackey (Life Science Research Foundation Fellow); Professor, Ohio State Univ.
Tsutomu Kawasaki (Japanese Ministry of Science Fellow); Professor, Laboratory of Molecular Biotechnology, Department of Bioscience, Graduate School of Agriculture, Kinki University, Nara, Japan
Pablo Tornero (Spanish Ministry of Agriculture and Science Fellowship), Ramon y Cajal Research Fellow, Professor, Universidad Politécnica de Valencia, Valencia, Spain
Thomas Eulgem (German Research Society Fellowship, DFG; Otto Hahn Medallion Award), Professor, UC Riverside, Ca.
Gopal Subramanian (NSERC Fellow), Senior Staff Scientist, AgCanada, Ottawa, Canada
Hironori Kaminaka (Japanese Ministry of Science Fellow), Associate Professor, Laboratory of Plant Biotechnology Faculty of Agriculture Tottori University, Koyama, Japan
Saijun Tang, Staff Scientist, Chinese Agricultural University, Beijing, China
Hyeong-Cheol Park (KOSEF, South Korea), Senior Researcher, National Inst. Ecology, South Korea.
Camilo Lopez (with Prof. Sarah Grant), Associate Professor, Univ. Nacional, Bogota, Columbia
Han Suk Kim (Frederick Gardner Cottrell Postdoc. Fellow), Staff Scientist, CERES, Inc.
Darrell Desveaux (Canadian NSERC Fellow), Associate Professor, Botany, Univ. of Toronto
Alex U. Singer (joint with Prof. John Sondek, UNC-CH); Res. Assistant Prof. Univ. of Toronto
Ajay Kumar Goel (joint with Prof. Sarah Grant); DuPont Corporation, Hyderabad, India
Jeff Chang (NIH Ruth Kirschstein NRSA Fellowship); Professor, Oregon State Univ.
Darby Brown (NIH Ruth Kirschstein NRSA Fellowship); Assistant Prof., Univ. of Wisconsin-Richland
Kirk Overmyer (Finnish National Science Fellowship), Group Leader, Univ. of Helsinki, Finland
Ben F. Holt, III, Associate Professor, Dept. of Botany and Microbiology, University of Oklahoma; Science Officer, AgBiome, RTP, NC
Miguel-Angel Torres, Associate Professor, Universidad Politécnica de Madrid
Brian J. McNulty, Research Staff Scientist, Bayer Crop Science, RTP, NC
David A. Hubert, Lab Manager, Crop Phenotyping and Screening, BASF Crop Sciences, RTP, NC
Ai-jiuan Wu, Group Leader for Microbiology, Bayer CropScience, RTP North Carolina
Qingli Liu, Staff Scientist-Nematologist, Syngenta, Research Triangle Park, NC
Shahid Mukhtar, Associate Professor, Dept. of Biology, Univ. of Alabama, Birmingham, AL
David Baltrus (NIH Ruth Kirschstein NRSA Postdoctoral Fellowship), Associate Prof., Univ. of Arizona
Zhiyong Gao, Professor, Wuhan University, China
Nuria Sanchez Coll (Swiss National Funds Fellowship), Associate Professor, Dept. of Molecular Genetics, Centre for Research in Agricultural Genomics (CRAG), Barcelona, Spain.
Petra Epple (Swiss National Foundation and German Research Society [DFG] Fellowship); Fungal Traits Management Team, BASF Crop Sciences, RTP, North Carolina
Yijian He, Post-Doc, P. Balint-Kurti lab, Dept. of Genetics and Plant Breeding, NC State University, Raleigh, NC; Senior Scientist, RJ Reynolds, Plant Molecular Biology, Winston-Salem, NC
Sarah Lebeis (HHMI-SPIRE Fellowship); Assistant Professor, Dept. of Microbiology, Univ. of Tennessee, Knoxville, TN; Associate Professor, Michigan State Univ.
Natalie Breakfield (NIH F32-NRSA Fellowship); Director, Molecular Biology, NewLeaf Symbiotics, St. Louis, MO.
Vera Bonardi (HFSP Fellowship); Senior Scientist, Novozymes Research, RTP, NC
Erica Washington, Post-Doc, Richard Brennan lab, Duke Univ.
Marc T. Nishimura, Assistant Professor, Colorado State Univ., Ft. Collins, CO.
Michael Iakovidis (joint with Prof. Sarah R. Grant), Senior Researcher-Genetics; Mediterranean Agronomic Institute, Crete, Greece
Austin Smith (with Gary Pielak, Dept. of Chemistry); Scientist, KBI Biopharma, RTP, NC.
Jason Corwin, Post-doctoral Research Associate, Dept. of Biology, Colorado Univ., Boulder CO

Meghan Feltcher (NIH F32 NRSA Fellowship), Senior Scientist, Becton-Dickinson Diagnostics, RTP, NC.

Farid El Kasmi (German Research Society [DFG] Fellowship); Group Leader, Center for Plant Molecular Biology, Tuebingen, Germany

Li Yang (Life Science Research Fellowship); Assistant Professor, Dept. of Plant Pathology, Univ. of Georgia, Athens, GA.

Ryan Anderson (NIH T32 Training Grant; NIH F32 Ruth Kirchstein NRSA Fellowship); Staff Scientist, Bayer Crop Sciences, RTP, NC

Gabriel Castrillo, Lecturer, School of Biosciences, Univ. of Nottingham, Nottingham, UK.

Andrew P. Klein, Staff Scientist, Amyris, Inc., Emeryville, CA

Tatiana Mucyn, retired to Brittany, France

Freddy Monteiro, Head, Functional Genomics Core Facility; Institute for Research in Biomedicine (IRB) in Barcelona

Eui-Hwan Chung, Staff Scientist, Syngenta Biotechnology, RTP, NC, Assistant Professor, Division of Biotechnology, Korea University, Seoul, 02841, Korea

Paulo José P. Teixeira (Pew Latin America Fellowship), Asst. Professor, Dept. of Biology "Luiz de Queiroz" College of Agriculture (ESALQ), University of São Paulo (USP), Piracicaba, SP, Brazil.

Li Wan, Research Professor of Plant Pathology, National Laboratory of Plant Molecular Genetics, Institute of Plant Physiology and Ecology, Chinese Academy of Sciences Center for Excellence in Molecular Plant Sciences, Shanghai PRC.

Omri M. Finkel (NIH F32 Ruth Kirchstein NRSA Fellowship), Senior Lecturer, Department of Plant and Environmental Sciences, Alexander Silberman Institute of Life Sciences, The Hebrew University of Jerusalem

Sarah Gilbert, Product Technical Scientist, Novagene, RTP, NC.

Jonathan Conway, Assistant Professor, Department of Chemical and Biological Engineering, Princeton University.

Oliver Furzer, Consultant, CREAM, LLC, Las Vegas. NV

Sabbatical Guests

Prof. Shauna Somerville (Carnegie Inst. Stanford University), 1992-1993

Prof. Carl Douglas (Univ. of British Columbia), 1994

Prof. Reinhard Kunze (Free University, Berlin, Germany) 1998

Dr. Duk-Ju Hwang (National Inst. of Agricultural Science and Technology, Suwon, Korea) 2001

Prof. Sheng Yang He (Michigan State University) 2003

Prof. Ulla Bonas (University of Halle, Germany) 2005

Next and/or Current Positions of Former Lab Undergraduates, by graduating class:

1998

Sara Hashway (Couch Award for best Molecular and Cellular Biology Honors thesis), Univ. of Georgia School of Veterinary Medicine.

Terri Long (Leclair Award for best Botany Honors thesis); PhD, Univ. of Georgia (2005); Associate Professor, NC State University, Raleigh, NC

2000

Aaron Levine (Couch Award for best Molecular and Cellular Biology Honors thesis; Churchill Fellowship; HHMI Doctoral Fellowship); Masters student at Cambridge University; PhD, 2007, Woodrow Wilson School of Public Policy at Princeton Univ.; currently Assistant Professor, Georgia Tech, School of Public Policy

Amanda Mack (Leclair Award for best Botany Honors thesis); PhD, 2007, Cancer Biology, Univ. of Wisconsin; currently Staff Research Scientist in a Madison, WI. Stem Cell company.

Scott Williams, Graduated, Armed Services Medical School. Practicing physician.

Billy Luthin, Graduated, UNC School of Medicine. Practicing physician.

2001

H. Claire Taylor (Couch Award for best Molecular and Cellular Biology Honors oral thesis presentation thesis); MD, Univ. of Massachusetts Medical School. Practicing physician.

Nick Siefers (Couch Award for best Molecular and Cellular Biology Honors written thesis); lab technician, UNC-CH SOM.

Ulrike Sandberg, currently a practicing Genetic Counselor.

Veronica Franco, doctoral program, UC Santa Cruz

2002

Ryon Chao, MD (UNC-CH School of Medicine)

William (Billy) Rowell, MS, UC Berkeley; Research Technician and Core Director, HHMI/Janelia Farm

Jenny Shock, PhD, 2008, UCSF, Joe DeRisi's lab; now director of the Center for Advanced

Technology (CAT) at UCSF

2003

Duc Tang, UNC-CH School of Dentistry, now a practicing dentist.

Victor Weigmann, PhD. UNC-CH Bioinformatics Training Program. Now at a biotech firm in Durham.

Greg Tayrose, Holderness Distinguished Medical Scholar, UNC-CH School of Medicine

Mike Stagner, software analyst, Washington DC area

Charles (Britt) Beasley, Medical School, Univ. of Virginia

2004

Lan Chi Tran (Highest Honors); MD MPH student, UNC-CH Schools of Medicine/Public Health

Elizabeth S. Perry; MD student, UNC-CH School of Medicine

2005

Priyesh Patel (Highest Honors, Couch Award for best Molecular and Cellular Biology Honors written thesis); MD-PhD program, Duke Medical School

Rebecca Werner, (Highest Honors); UNC-CH School of Medicine

Allison Osborn, Senior (Highest Honors/Environ. Sci.), Envir. Engin. PhD program, UT Austin

William Bynum, III, Medical College of South Carolina

Saurabh Gombar, Dartmouth Medical School

2006

Zafia Anklesaria (ASPB/Smallwood Foundation Fellowships), Jefferson Med School; now a physician

Charles Clover, UNC-CH School of Medicine; now a physician at UNC

Laura Musselwhite (Smallwood Foundation Fellowship), Duke Medical School; now a physician

Derek Lundberg, graduate student, UNC-CH, Curriculum in Genetics; HFSP Post-doc, Weigel lab, Tuebingen, Germany.

2007

David Rybnicek, UNC-CH School of Medicine

Kathleen Touloupas, Pharmacy School, UNC-CH

Timothy Craig Brock, East Carolina School of Medicine

2008

Lynda Yang, PhD Program, Computational Biology, University of Illinois

2010

Anna Stallman, UNC-CH/HHMI Teaching Fellow; PhD Program, Genetics, NC State (NSF Fellowship)
Christopher (CJ) Harbort, Max Planck Institute for Infection Biology, Berlin, Germany, PhD program;
Post-doc MPIZ, Cologne, Germany.

2011

Nathan MacDonald, PhD Program, Vanderbilt University

Andrea Smidler, Gap Year Res. Tech., IBMC, Strasbourg, France; PhD Program, Harvard

Abigail Lind, Gap Year Res. Tech, UNC-CH; PhD program in Biomedical Informatics, Vanderbilt Univ.,
Bioinformatics Fellow, Gladstone Institute, San Francisco

2012

Jase Gehring, (UNC Summer Undergraduate Res. Fellowship); PhD Program, MCB, UC Berkeley

Barclay McGhee, unknown

Alex Loehr, New York Medical College

2013

Surjowit Biswas, (Beckman Undergraduate Research Fellowship; Mathematical Decision Sciences
Award for 2013), Gap Year Res. Tech, UNC-CH; Churchill Scholar (Cambridge Univ., UK); PhD
Genetics, Harvard; Founder and CEO Nabla Bio, Cambridge, MA.

Andrew Chan, UNC-CH, PhD Program, Dept. of Chemistry

Bill Odette, Gap Year Technician, Dangl lab, UNC-CH; PhD Program, Chemistry, McGill University)

Ruth Natalie Reed, Teach For America

Paul McIntosh, UNC-CH Medical School

Rachel Relyea, Physician's Assistant Program

2014

Matt Karas, Gap year Technician, Dangl lab, UNC-CH; Gilead Pharmaceuticals, SF, CA.

Michael Huynh, (HHMI Research Fellowship); Gap year Technician, Dangl lab, UNC-CH; unknown

Hunter Cameron, Gap year Tech., Dangl lab, UNC-CH; BASF Computational Sciences, RTP, NC.

2015

Meredith McDonald, Gap year Technician, Dangl lab, UNC-CH; Medical School
Marie English, Doctoral Program, Univ. of Tennessee

2016

Rachel Black, Internship at Quintiles, RTP, NC

Nick Colaianni, Gap Year research, Dangl lab; UNC-CH BCB PhD Program

2017

Julia Nuan Shen (Couch Award for best Molecular and Cellular Biology Honors written thesis);
Physician's Assistant school

2019

Dilan Chudasma, Bluebird Biotech, Boston, MA

Emily Getzen, Doctoral program Biostatistics, Univ. of Pennsylvania

Brock McKinney, research technician, Duke Univ.

Lee-Ann Nguyen, Project Manager, Epic, Verona WI.

May Priegel, Locus Biosciences, RTP, NC

Hudson Sowders, Master's program, Accounting, Wake Forest Univ.

Ellie Wilson, Doctoral program, BME, UNC-CH

2020

Darshana Panda, UNC Medical School

Nicole Del Risco, George Washington Univ. Medical School

Payton Martinez, BME, Interdisciplinary Quantitative Biology Ph.D Program
University of Colorado - Boulder