

BIOGRAPHICAL SKETCH

NATALIA DUDAREVA

Distinguished Professor
Department of Biochemistry
Purdue University
175 South University Street
West Lafayette, IN 47907-2063

Telephone: (765) 494 1325 **Fax:** (765) 494 0391
E-mail: dudareva@purdue.edu

Education:

B.Sc.	Biology and Biochemistry	Novosibirsk State University, Russia	1972
M.Sc.	Biochemistry	Novosibirsk State University, Russia	1974
Ph.D.	Biochemistry and Molecular Biology	Institute of Biochemistry, Kiev, Ukraine	1982
Ph.D. (Hons.)	Plant Molecular Biology	University Louis Pasteur, Strasbourg France	1995

Professional experience:

09. 2016- 02. 2017	Visiting Alexander von Humboldt Fellow, Institute for Plant Biochemistry, Heinrich-Heine-University, Dusseldorf, Germany
2013-present	Distinguished Professor, Department of Biochemistry, Purdue University
2011-2013	Courtesy appointment in the Department of Biochemistry, Purdue University
2010-2013	Distinguished Professor, Department of Horticulture and Landscape Architecture, Purdue University
2005-2010	Professor, Department of Horticulture and Landscape Architecture, Purdue University
09. 2003- 02. 2004	Visiting DAAD Scholar, Max-Planck-Institute for Chemical Ecology, Jena, Germany.
2001-2005	Associate Professor, Department of Horticulture and Landscape Architecture, Purdue University.
1997-2001	Assistant Professor, Department of Horticulture and Landscape Architecture, Purdue University.
1995-1997	Postdoctoral Research Associate, Department of Biology, University of Michigan, Ann Arbor, MI, USA
1993-1995	Postdoctoral Research Associate, Department of Biological Science, University of Windsor, Windsor, Canada.
1991-1993	Research Scientist, Institute de Biologie Moléculaire des Plantes, Strasbourg, France.
1982-1991	Senior Scientist, Institute of Cytology and Genetics, USSR Academy of Sciences, Novosibirsk, Russia.

Honors and awards:

Alexander von Humboldt Research Award, Germany, 2016
Medal for XV Chailakhyan Lecture 2016, Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia
2014 Sigma Xi Faculty Research Award
Elected Chair for the Gordon Research Conference on Plant Metabolic Engineering, 2011 (received the GRC “Hall of Fame” recognition)
AAAS Fellow, 2010
Annual Millionaires Club Award, College of Agriculture, 2008, 2010, 2014, 2016

The Wickersham Chair of Excellence in Agricultural Research, 2006 - 2010
Purdue University: Seed for Success Award, 2006
University Faculty Scholar, 2006 - 2011
2005 Purdue University Agriculture Research Award, 2005
DAAD (German Academic Exchange Service) Fellowship, Germany, 2003
Alexander von Humboldt Fellowship, Germany, 1991
Director of Research in Molecular Biology, Highest Attestation Committee, Russia, 1991
Fellowship from French Ministry of Research and Technology, France, 1990
Visiting Professor, PARIS-IX University, Paris, France, 1988

Funded research grants:

Purdue University's Office of the Provost, Summer 2016 Major Scientific Equipment Grants:
\$229,894 "Acquisition of an Agilent 7890B GC/ 5977B Mass Selective Detector (MSD) with GERSTEL Thermal Desorption Unit (TDU)", 7/1/2016 – 6/30/2017

NSF, MCB: **\$1,075,000** "Collaborative research: Elucidating the molecular architecture and dynamics of phenylalanine biosynthesis in plants" (\$800,000 to ND and Dr. J. Morgan, collaboration with Dr. Guillaume Pilot (Virginia Tech), 08/01/2015 – 07/31/2018

NSF-PGRP: **\$5,091,370** "Evolution of specialized metabolite biosynthetic pathways in the Lamiaceae: Sources of chemical diversity for molecules essential for human use and plant defense" (\$1,369,992 to ND, collaboration with Dr. C. Robin Buell (MSU), Dr. Sarah E. O'Connor (John Innes Center), Drs. Douglas E. Soltis and Pamela S. Soltis (University of Florida), 06/15/2015 – 05/31/2020

AdSEED funding: **\$75,000** "A new molecular approach to enhance floral scent production" (\$37,500 to ND), collaboration with Dr. Clint Chapple, 04/01/2015-03/31/2017

Rural Dev Admin of the Republic of Korea: **\$100,000** "Understanding aromatic amino acid biosynthesis for enhancement of phenylpropanoid-derived metabolites", collaboration with Dr. Sun-Hyung Lim, 3/30/2015 -12/31/2016

AdSEED grant, Purdue School of Agriculture: **\$50,000** "Towards a new strategy to mitigate pollinator shortfalls in agricultural crops: A correlative analysis of floral volatiles and pollinator attraction in wild and cultivated watermelon (*Citrullus lanatus*) varieties" (\$36,808 to ND, collaboration with Dr. I. Kaplan and M. Gutensohn), 04/01/2014-03/31/2015

BSF: **\$ 244,000** "Plant-mediated defense mechanisms in gall-forming aphids" (\$122,000 to ND; collaboration with Dr. I. Moshe and Dr. E. Lewinsohn), 10/01/2013-09/30/2017

Purdue Research Foundation. International travel Grant: **\$1,000**, 2013

DOE, BER: **\$5,274,045** "Modeling and manipulating phenylpropanoid pathway flux for bioenergy" (\$1,426,189 to ND; collaboration with Dr. C. Chapple and Dr. J. Morgan), 09/01/2012 -08/31/2017

USDA-NIFA: **\$463,035** "Delivering on the promise of HIPVs: Manipulating phytochemical signals to enhance predation on pests" (\$147,782 to ND; collaboration with Dr. I. Kaplan and Dr. Jeff Holland), 01/01/2011-02/14/2016

NSF, MCB: **\$8,000** "2011 Plant Metabolic Engineering GRS/GRC", 07/01/2011 to 06/30/2012

DOE, BER and BSS: \$20,000 “2011 Plant Metabolic Engineering GRC/GRS”, 04/24/2011-08/29/2011

USDA-AFRI: \$20,000 “2011 Plant Metabolic Engineering GRC/GRS”, 05/23/2011-08/23/2012

NIH, R13/U13: \$4,000 “2011 Plant Metabolic Engineering GRC/GRS”, 04/24/2011-08/29/2011

BARD: \$315,000 “Scent biosynthesis in petunia flowers under normal and adverse environmental conditions.” (\$20,000 to ND; collaboration with Dr. A. Vainstein and Dr. E. Pichersky), 09/01/10 - 08/31/13

USDA-CSREES-AFRI, Plant Biochemistry: \$350,000 “Phenylalanine biosynthesis and regulation in petunia flowers” Principal Investigator: Natalia Dudareva (80%, Dr. D. Rhodes – 20%), 11/1/09-10/31/13

NSF, MCB/ Metabolic Biochemistry: \$1,042,558 “Benzoic acid biosynthesis in plants”. Principal Investigator: Natalia Dudareva (100%), 9/1/09-8/31/13

NIH, RC2: \$110,000 “Advancing drug development from medicinal plants using transcriptomics and metabolomics” Principal Investigator: Natalia Dudareva (100%), 9/30/09-8/31/12

NSF, Metabolic Engineering: \$39,840 “Deciphering the complex metabolic network in snapdragon flowers: an integrative approach”. Principal Investigator: Natalia Dudareva (100%), 6/1/08-5/31/09

BARD: \$305,000 “The molecular and biochemical basis of terpenoid aroma formation in tomato.” (\$135,000 to ND; collaboration with Dr. E. Lewinsohn and Dr. E. Pichersky), 09/01/08 - 08/31/12

USDA-NRICGP, Plant Biochemistry: \$398,000 “Improvement of tomato fruit flavor through the introduction of genes for high-impact aroma compounds” (\$150,000 to ND; collaboration with Dr. E. Pichersky), 09/01/08 – 08/31/12

NSF, MCB/ Metabolic Biochemistry: \$1,350,000 “Deciphering the complex metabolic network in snapdragon flowers: an integrative approach”. Principal Investigator: Natalia Dudareva (50%, Dr. D. Rhodes – 25%, Dr. J. A. Morgan - 25%), 9/1/2006 -8/31/2011

NSF, Metabolic Engineering: \$36,000 “Deciphering the complex metabolic network in snapdragon flowers: an integrative approach”. Principal Investigator: Natalia Dudareva (100%), 6/1/07-5/31/08

NSF, Metabolic Engineering: \$33,585 “Collaborative research: Metabolic engineering of floral scent”. Principal Investigator: Natalia Dudareva (100%), 6/1/06-5/31/07

Purdue University Competitive Graduate Recruitment Overseas Grant: \$15,000 “Strategic recruitment program for outstanding international graduate students from Eastern Europe” (Collaboration with Dr. S. Weller), 2006-2007

USDA-NRICGP, Plant Biochemistry: \$350,000 “ Benzenoid network in petunia and snapdragon flowers”. Principal Investigator: Natalia Dudareva (70%, Dr. D. Rhodes – 30%), 8/1/05-7/31/08

NSF, Metabolic Engineering: \$31,730 “Collaborative research: Metabolic engineering of floral scent”. Principal Investigator: Natalia Dudareva (100%), 6/1/05-5/31/06

NSF, Metabolic Engineering: multi-agency award \$276,664 (NSF) and \$150,000 (USDA-NRICGP), “Collaborative research: Metabolic engineering of floral scent”. Principal Investigator: Natalia Dudareva (70%, Dr. D. Rhodes – 30%), 10/1/03– 9/30/06

BARD: \$330,000 “Integrating biochemical and genomic approaches to elucidate C6-C2 volatile production: improvement of floral scent and fruit aroma”. Principal Investigator: Natalia Dudareva (45%, Dr. A. Vainstein, Dr. D. Weiss, and Dr. E. Pichersky - 55%), 10/1/03-9/30/07

Purdue Research Foundation, Research Grant: \$27,978 “ Regulation of monoterpene emission in snapdragon flowers ” Investigator: Natalia Dudareva (100%), 2003-2005.

USDA-NRICGP, Plant Biochemistry: \$195,000 “ Benzenoid network in petunia flowers”. Principal Investigator: Natalia Dudareva (50%, Dr. D. Rhodes – 50%), 8/1/03-7/31/05

NSF, MCB/ Metabolic Biochemistry: \$435,000 “Regulation of monoterpene emission in snapdragon flowers”. Principal Investigator: Natalia Dudareva (80%, Dr. D. Rhodes – 20%), 1/1/03-12/31/05

NSF, Integrative Plant Biology: \$285,000 “Molecular and Biochemical Determinants of Floral Scent Production in *Antirrhinum majus*.” Principal Investigator: Natalia Dudareva (100%), 8/1/99-7/31/03

NSF equipment supplement grant: \$17,000 “Molecular and Biochemical Determinants of Floral Scent Production in *Antirrhinum majus*.” Principal Investigator: Natalia Dudareva (100%).

Fred C. Gloeckner Foundation, Inc.: \$155,000 “Floral Scent Production in *Antirrhinum majus*.” Principal Investigator: Natalia Dudareva (100%), 9/1/97 – 8/31/09

Research grant from Ball Helix Company: \$60,000 “Floral scent production in cut flowers.” Principal Investigator: Natalia Dudareva (100%), 2001-2003

Max-Plank Institute of Chemical Ecology: \$9,792 “Monoterpene biosynthesis” Principal Investigator: Natalia Dudareva (100%), 2001

American Floral Endowment Competitive Research Grant: \$75,000 “Improving floral scent production in flowers.” Principal Investigator: Natalia Dudareva (100%), 8/1/00-7/31/03

Grant from Quest International Fragrances Company: \$5,000 “ Identification of new fragrance mixtures” Principal Investigator: Natalia Dudareva (100%), 2002

Office of Academic Programs, Purdue School of Agriculture: \$3,550 “Undergraduate instructional equipment grant”, Spring 2001, Natalia Dudareva (100%)

Office of Academic Programs, Purdue School of Agriculture, Undergraduate instructional equipment grants, 1998, 1999, 2000. Natalia Dudareva (100%). Total: \$3,500

Research grant from Ball Helix Company: \$72,000 “Floral scent production in cut flowers.” Principal Investigator: Natalia Dudareva (100%), 1999-2000.

Purdue Research Foundation, Research Grant: \$26,200 “Molecular engineering of floral scent production in plants.” Investigator: Natalia Dudareva (100%), 2000-2002

Max-Planck Institute and The University of Edinburgh: \$13,200 “*Antirrhinum* EST project”. Investigator: Natalia Dudareva (100%), 2000.

Purdue Research Foundation, International travel grants: 1998, 1999, 2000, 2002, 2004, 2005, 2007, 2008. Total \$8,737

Purdue Research Foundation Genomic Grant: \$2,500 “Analysis of ESTs from *Antirrhinum majus*”. Investigator: Natalia Dudareva (100%), 2000.

Purdue Research Foundation, ARP Assistantship Grant: \$28,000 “Molecular characterization of floral scent biosynthesis and emission in *Antirrhinum majus*.” Investigator: Natalia Dudareva (100%), 1998-2000.

Invited seminars:

- 2016 The German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig, Germany
- 2016 Swammerdam Institute for Life Sciences, University of Amsterdam, Amsterdam, The Netherlands
- 2016 Institute of Plant Molecular Biology, Strasbourg, France.
- 2016 Institut des Sciences de la Vie, Université catholique de Louvain, Louvain-la-Neuve, Belgium
- 2016 National Academy of Agricultural Science, Department of Agricultural Biotechnology, Wansan-gu, Korea
- 2016 Seoul National University, College of Agriculture and Life Sciences, Vegetable Breeding Research Center, Seoul, Korea
- 2016 Leibniz Institute of Plant Biochemistry, Halle, Germany
- 2016 The Memorial Chailakhyan Lectures at the Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia
- 2016 Department of Biological Sciences, University of North Texas, Denton, TX
- 2016 Department of Plant Sciences, UC Davis, Davis, CA
- 2015 Department of Biology, Indiana Wesleyan University, Marion, IN
- 2015 Natural Products Affinity Group (NPAG), Salk Institute, University of California San Diego and Scripps Institution of Oceanography, 4500 Hubbs Hall, Scripps Institution of Oceanography, San Diego
- 2014 Whitehead Institute, Nine Cambridge Center, plant, cell an environment Cambridge, Massachusetts
- 2014 Sigma Xi lecture, Purdue University, West Lafayette, IN
- 2014 St. Petersburg State University, Department of Plant Physiology, St. Petersburg, Russia
- 2014 Institute of Plant Physiology, Moscow, Russia
- 2014 ETH Zurich, Department of Biology, Zurich, Switzerland
- 2014 Institute of Plant Science, University of Bern, Bern, Switzerland
- 2013 Department of Biochemistry, Purdue University, West Lafayette, IN
- 2013 Special Salk seminar on metabolism, The Salk Institute for Biological Studies, La Jolla, CA
- 2013 Green Life Sciences seminar, Swammerdam Institute for Life Sciences, University of Amsterdam, Amsterdam, The Netherlands
- 2013 Department of Molecular Biotechnology, Bioenergy Research Center, Chonnam National University, Gwangju, South Korea
- 2013 Advanced Radiation Technology Institute (ARTI)/Research Division for Biotechnology, Korea Atomic Energy Research Institute (KAERI), Jeollabuk-Do, South Korea

- 2013 Department of Biochemistry, Gyeongsang National University, Gyeongnam, South Korea
- 2013 Institute of Biological and Environmental Sciences, Aberdeen University, Scotland (sponsored by The Centre for Genome-Enabled Biology & Medicine).
- 2012 Department of Biology, University of Washington, Seattle, WA
- 2012 Institute of Biological Chemistry, Washington State University, Pullman, WA
- 2012 Institute for Plant Biochemistry, Heinrich-Heine-University, Dusseldorf, Germany
- 2012 Max Planck Institute for Chemical Ecology, Jena, Germany
- 2012 Biochemistry club (for undergraduate students), Department of Biochemistry, Purdue University, West Lafayette, IN
- 2011 Department of Biochemistry, Purdue University, West Lafayette, IN
- 2010 Biotechnology/Life Sciences Seminar Series, Center for Plant Science Innovation, University of Nebraska-Lincoln, Lincoln, NE.
- 2010 Department of Biology, Indiana Wesleyan University, Marion, IN
- 2010 University of Neuchâtel, Institute of Biology, Neuchâtel, Switzerland
- 2010 Institute of Plant Molecular Biology, Strasbourg, France
- 2009 RIKEN Plant Science Center, Yokohama, Japan
- 2009 The Australia National University, Canberra, Australia (sponsored by ARC Center of Excellence in Plant Energy Biology)
- 2009 Barcelona University and Consorcio CSIC IRTA, Barcelona, Spain
- 2009 Donald Danforth Plant Science Center, St. Louis, Missouri
- 2008 The Samuel Roberts Noble Foundation, Ardmore, OK
- 2008 State Key Laboratory of Plant Physiology and Biochemistry College of Biological Sciences, China Agricultural University, Beijing, China.
- 2008 School of Life Sciences, Nanjing University, Nanjing, China
- 2008 Department of Horticultural Sciences, Texas A&M University, College Station, Texas
- 2008 Martin-Luther-University and Leibniz Institute for Plant Biochemistry, Halle, Germany
- 2008 Department of Horticulture and Landscape Architecture, Purdue University, West Lafayette, IN
- 2007 Department of Chemistry and Biochemistry, UCLA, Los Angeles, CA
- 2007 Center for Plant Cell Biology, UC Riverside, CA
- 2007 Centre de Recherche Public – Sante, Luxembourg
- 2007 Molecular Plant Sciences Program, Institute of Biological Chemistry, Washington State University, Pullman, WA
- 2007 Cell and Molecular Biology Graduate Program, Colorado State University, Fort Collins, Colorado
- 2007 Max Planck Institute for Chemical Ecology, Jena, Germany
- 2007 Martin-Luther-University and Leibniz Institute for Plant, Biochemistry, Halle, Germany
- 2007 Department of Soil Science and Agrochemistry, Szent István University, Gödöllő, Hungary
- 2007 Department of Plant Physiology and Biochemistry, Saint-Petersburg State University, St-Petersburg, Russia
- 2007 The Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia
- 2006 Department of Chemistry and Biochemistry, DePauw University, Greencastle, IN
- 2006 College of Agriculture, Purdue University, West Lafayette, IN
- 2006 Boyce Thompson Institute for Plant Research, Ithaca, NY
- 2006 North American Gladiolus Convention, Holiday Inn Select, Indianapolis, IN
- 2005 Department of Plant Biology, University of Illinois at Urbana-Champaign, Urbana, IL
- 2005 Department of Biology, Indiana University-Purdue University at Indianapolis, Indianapolis, IN
- 2005 2005 Agricultural Research Award seminar, Purdue University, West Lafayette, IN.
- 2005 Department of Plant Sciences, The University of Arizona, Tucson, AZ
- 2004 Department of Horticulture and Landscape Architecture, Purdue University, West Lafayette, IN.

- 2004 Department of Biochemistry and Cell Biology, Stony Brook University, SUNY, Stony Brook, NY.
- 2004 Department of Horticulture, Michigan State University, East Lansing, MI.
- 2004 Department of Biochemistry and Molecular Biology, Michigan State University, East Lansing, MI.
- 2004 Max-Planck Institute for Chemical Ecology, Jena, Germany.
- 2003 Institute of Plant Molecular Biology, Strasbourg, France.
- 2003 University Louis Pasteur, Strasbourg, France.
- 2003 Swammerdam Institute for Life Sciences, University of Amsterdam, Amsterdam, The Netherlands.
- 2003 Department of Biological Sciences, University of Rostock, Rostock, Germany.
- 2003 Ball Helix Company, West Chicago, IL.
- 2002 Department of Biological Sciences, Lehman College, City University of New York, Bronx NY.
- 2001 Department of Biology, Michigan State University, East Lansing, MI.
- 2001 Department of Biological Sciences, Western Michigan University, Kalamazoo.
- 2001 Ball Helix Company, West Chicago, IL.
- 2001 The Institutes for Applied Research, Ban –Gurion University, Beer-Sheva, Israel.
- 2001 The Hebrew University of Jerusalem, Otto Warburg Center for Agricultural Biotechnology, Rehovot, Israel.
- 2001 Plant Research International, Wageningen, The Netherlands.
- 2000 Department of Chemistry, Oakwood College, Huntsville, Alabama.
- 2000 Department of Chemistry and Biochemistry, Miami University, Oxford, OH.
- 2000 Horticulture and Landscape Architecture Seminar, Purdue University.
- 2000 Max Planck Institute for Chemical Ecology, Jena, Germany.
- 2000 John Innes Center, Department of Genetics, Norwich Research Park, UK.
- 2000 The Joint Horticulture and Crop and Soil Sciences Seminar Series at Michigan State University, East Lansing, MI.
- 2000 Department of Entomology and the Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, Columbus, OH.
- 2000 Department of Biology, Concordia University, Montreal, Canada.
- 1999 Quest International Fragrance Company, New York, NY.
- 1999 Quest International Fragrance Company, Mount Olive, NJ.
- 1999 PanAmerican Seed Company, Santa Paula, CA.
- 1999 The weekly series of Institute seminars, Max-Plank-Institute, Cologne, Germany.
- 1999 Department of Botany, University of Dusseldorf, Dusseldorf, Germany.
- 1999 Vegmo Plant, Rijsenhout, The Netherlands.
- 1998 Ball Helix Company, West Chicago, IL.
- 1998 Guest Lecture Series, Department of Entomology, Purdue University.
- 1998 Plant Physiology seminar series, Department of Plant Physiology, Wageningen Agricultural University, Wageningen, The Netherlands.
- 1998 Biology seminar series, Department of Biology, York University, Toronto, Canada.
- 1997 Department of Horticulture, Purdue University.
- 1996 Institute of Plant Molecular Biology, Strasbourg, France.
- 1996 Department of Botany, Duke University, NC.
- 1995 Department of Biology, University of Michigan, Ann Arbor, MI.
- 1991 Institute of Plant Molecular Biology, Strasbourg, France.
- 1990 University of Oldenburg, Oldenburg, Germany.
- 1990 University of Dusseldorf, Dusseldorf, Germany.
- 1999 Max-Plank-Institute, Koln, Germany.
- 1989 Humboldt University, Berlin, GDR.
- 1989 Institute of Experimental Botany, Olomouc, Czechoslovakia.

Invited speaker at meetings (last 16 years):

- 2016 Floricultural Fragrance and Industry Status Symposium, National Institute of Horticultural and Herbal Science, Wanju-gun, Korea, October 6.
- 2016 15th World Petunia Days, Lutherstadt Wittenberg, Germany, September 9 -11.
- 2016 Gordon Research Conference on Biogenic Hydrocarbons & the Atmosphere, Girona, Spain, June 26 - July 1.
- 2016 Chemistry Symposium, Max Planck Institute for Chemical Ecology, Jena, Germany, June 20 -21.
- 2016 DOE annual project meeting "2016 Genomic Sciences Program Annual PI Meeting", Tysons, Virginia, March 6 – 9.
- 2016 NSF Lamiaceae Project Meeting, University of Florida, Gainesville, FL, February 18–19.
- 2016 Gordon Research Conference on Plant Volatiles, Ventura, CA, January 31 – February 5.
- 2015 The International Chemical Congress of Pacific Basin Societies (Pacifichem) 2015, Honolulu, Hawaii, December 15 - 20.
- 2015 XV Brazilian Congress of Plant Physiology and I Brazilian-Israeli Plant Science Conference, Foz do Iguacu, Paraná, Brazil, September 28 – October 2.
- 2015 14th World Petunia Days, Murten/Morat, Switzerland, April 9 -12.
- 2015 American Society for Biochemistry and Molecular Biology (ASBMB) 2015 Annual Meeting, Boston, MA, March 28 –April 1.
- 2014 53rd Annual Meeting of the Phytochemistry Society of North America, Raleigh, NC, August 9-13.
- 2014 The 3^d International Conference on Plant Metabolism, Xiamen, China, July 2-5.
- 2014 4th Banff Conference on Plant Metabolism, Banff, Alberta, Canada, June 26 – 30.
- 2014 International workshop “New Achievements in Plant Sciences”, Institute of Plant Physiology, Moscow, Russia, June 9.
- 2013 13th International Congress on Amino Acids, Peptides and Proteins (ICAPP), Galveston, Texas, USA, October 5-7.
- 2013 13th World Petunia Days, Nijmegen, The Netherlands, September 13 -16.
- 2013 EuroVOL summer school “Plant Volatiles: from lab bench to application”, Les Diablerets, Switzerland, September 9-12.
- 2013 2013 International Symposium and Annual Meeting of the Korean Society for Applied Biological Chemistry, Busan, Korea, June 27-29.
- 2013 Terpnet2013, Kolymvari, Crete, Greece, June 1-5.
- 2013 CEPLAS (Cluster of Excellence on Plant Science) Meeting, Dusseldorf, Germany, May 2-3.
- 2013 Kriton-Hatzios Symposium, 2013 Meeting of the Southern Section of the ASBP, Little Rock, AR, April 6 – 8.
- 2013 Banbury Conference, Banbury Center, Cold Spring Harbor NY, March 3 – 6.
- 2012 3rd Banff Conference on Plant Metabolism, Banff, Alberta, Canada, June 28 – July 2.
- 2012 5th International Symposium “Breeding Research on Medicinal and Aromatic Plants” (BREEDMAP 5), Vienna, Austria, June 18-20.
- 2012 NIFA Plant Biology Programs Project Director Meeting, Washington, DC, May 22–23.
- 2012 12th World Petunia Days, Erfurt, Germany, March 17-21.
- 2012 Gordon Research Conference on Plant Volatiles, Ventura, CA, January 29 - February 3.
- 2012 Plant and Animal Genome XX Conference, San Diego, CA, January 14-18.
- 2011 8th Solanaceae and 2^d Cucurbitaceae Joint conference (SOL & ICuGI 2011), Kobe city, Japan, November 28 – December 2.
- 2011 80th Conference of Society of Biological Chemists, Central Institute of Medicinal and Aromatic Plants, Lucknow, India, November 12 -15, 2011
- 2011 13th Annual Fall Symposium, “Plant Genomes to Phenomes”, Donald Danforth Plant Science Center, St. Louis, Missouri, September 28–30.
- 2011 Colloquium: Advances in understanding plant metabolism related to crop quality and composition, ASHS Annual Conference, Waikoloa, Hawaii, September 25-28.

- 2011 DAS-Purdue Workshop on “Utilizing omics technologies to accelerate crop improvement”, Purdue Research Park, September 15.
- 2011 2^d International Conference on Plant Metabolism, Qingdao, China, June 30 - July 3.
- 2011 NIFA Plant Biology Programs Project Director Meeting, Washington, DC, May 24-25.
- 2010 2^d Banff Conference on Plant Metabolism, Banff, Canada, June 24-28.
- 2010 Gordon Research Conference on Biogenic Hydrocarbons & the Atmosphere, Les Diablerets, Switzerland, May 23-28.
- 2010 2^d Medicinal Plant Consortium Meeting, University of Mississippi, Oxford, MS, March 25– 26.
- 2009 Research Workshop on Metabolism, Metabolomics and Metabolic Engineering in Plants to Increase Crop Productivity and Nutritional Value, Kibbutz Ein-Gedi, Israel, November 1-4.
- 2009 2009 AIChE Annual Meeting, Gaylord Opryland Hotel, Nashville, TN, November 8-13.
- 2009 Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH, July 12-17.
- 2009 HLA Research Retreat, Purdue University, West Lafayette, IN.
- 2009 TERPNET 2009, Tokyo, Japan, May 25-29.
- 2009 9th World Petunia Days, Cartagena, Spain, March 28-31.
- 2008 Banff Conference on Plant Metabolism, Banff, Canada, July 30 – August 3.
- 2008 1st International Conference on Plant Secondary Metabolism, Kunming, China. June 8– 10.
- 2008 HLA Research Retreat, Purdue University, West Lafayette, IN.
- 2007 9th World Petunia Days, Amsterdam, The Netherlands, October 28-31.
- 2007 International scientific conference “Biogenic Volatile Organic Compounds: Sources and Fates in a Changing World”, Montpellier, October 3-5.
- 2007 2007 Gordon Research Conference on Floral and Vegetative Volatiles, Les Diablerets, Switzerland, October 7-12.
- 2007 Gordon Research Conference on Plant Metabolic Engineering, Tilton, NH, July 15-20.
- 2007 TERPNET 2007, Strasbourg, France, April 30 – May 4.
- 2006 Eighth World Petunia Days, Jacksonville Beach, FL, October 12-14.
- 2006 Evolutionary Genomics and Bioinformatics Symposium, Academia Sinica, Taipei, Taiwan, August 15-17.
- 2006 Plant Biology 2006, Annual Meeting of the American Society of Plant Biologists, Boston, Massachusetts, August 5-9.
- 2005 230th American Chemical Society National Meeting, Washington, DC, August 28 – September 1.
- 2005 Phytochemical Society of North America 2005 Annual Meeting, “Integrative Plant Biochemistry as We Approach 2010”, La Jolla, CA, July 30 – August 3.
- 2005 102nd Annual International Conference of the American Society for Horticultural Science, Las Vegas, Nevada, July 17- 21.
- 2005 Plant Biology 2005, Annual Meeting of the American Society of Plant Biologists, Seattle, Washington, July 16-20.
- 2005 2005 In Vitro Biology Meeting, Baltimore, Maryland, June 5-7.
- 2005 XV International Antirrhinum Meeting, Salamanca, Spain, May 25-29.
- 2005 First International Symposium on Chloroplast Bioengineering, University of Illinois, Urbana, IL, May 2-7.
- 2005 Terpnet 2005, 7th International Symposium on Isoprenoids and Terpenes, Wageningen, The Netherlands, April 20-23.
- 2004 XIV International Antirrhinum Meeting, Banyuls s/Mer, France, May 5-9.
- 2003 XIII International Antirrhinum Meeting, Cartagena, Spain, April 23-26.
- 2003 Terpnet 2003, 6th International Symposium on Isoprenoids and Terpenes, Lexington, Kentucky, May 14-17.
- 2002 New Genetic Approaches to Novelty in Floriculture, The Salk Institute for Biological Studies, La Jolla, CA, October 17-18.

- 2002 Plant Biology 2002, Annual Meeting of the American Society of Plant Biologists, Denver, Colorado, August 3-7.
- 2002 Plant Biology Canada 2002, Annual Meeting of the Canadian Society of Plant Physiologists, Calgary, Alberta, Canada (plenary lecture), June 8-12.
- 2002 XII International Antirrhinum Meeting, Porticcio – Corsica, France, April 17-21.
- 2002 Second Gordon Research Conference on the biology, chemistry and evolution of floral scent, Ventura, CA (discussion leader), March 3-8.
- 2002 X Conference “Plant, Animal and Microbe Genomes”, San Diego, CA, January 12-16.
- 2001 Eleventh International Antirrhinum Meeting, Gargnano, Italy, May 2-6.
- 2001 47th Annual Meeting of Midwest Section of American Society of Plant Biologists, Knox College, IL, March 23-24.
- 2000 Tenth International Antirrhinum Meeting, Leeds, UK, April 26-30.
- 2000 46th Annual Meeting of Midwest Section of American Society of Plant Physiologists, Purdue University, IN, March 17-18.
- 1999 Gordon Conference “Biology, Chemistry and Evolution of Floral Scent”, Queen’s College, Oxford, UK, September 5 –10.
- 1999 ”Evolution of Metabolic Pathways”, Phytochemical Society of North America, Concordia University, Montreal, Canada, July 10 – 13.
- 1999 Ninth International Antirrhinum Meeting, Madrid, Spain, May 5 – 8.

Professional societies:

American Society of Plant Biologists, since 1996
 Canadian Society for Plant Molecular Biology, since 1993
 International Society for Plant Molecular Biology, since 1990
 Gamma Sigma Delta, Purdue University, since 1998
 Midwest American Society of Plant Biologists, since 1997
 Phytochemical Society of North America, since 1999

Professional activities:

An organizer and a chair of the major symposium at Plant Biology 2017 Meeting “Major Symposium III – The Chemical Dictionary of Plants: Origin and Translation”, Honolulu, Hawaii, June 24-28, 2017.

An organizer and a chair of the session on “Biosynthesis and Regulation of Phenolic Compounds” at the 4th International Conference on Plant Metabolism “Plant Metabolism and Nutrition-Sensitive Agriculture”, Dalian, China, July 16 – 20, 2017.

Member of the organizing committee for Terpnet 2017 Meeting, Dalian, Liaoning Province, China, July 16-20, 2017.

Chair for the session on "Genome in motion II" at the 15th World Petunia Days, Lutherstadt Wittenberg, Germany, September 9 -11, 2016.

Member, grant review panel at NSF, Metabolism and Metabolomics, March 2016.

Member of the review board for the Leibniz Institute for Vegetable and Ornamental Crops in Großbeeren and Erfurt, Großbeeren , Germany, June 9 – 10, 2015.

Member of the peer review committee for the Graduate School Experimental Plant Sciences, Wageningen, The Netherlands, June 2 – 5, 2015.

Member of the organizing committee for Terpnet 2015 Meeting, Vancouver, Canada June 1 - 5.

Provided assistance to the children’s magazine “Highlights” (www.Highlights.com) on “How do flowers get their scent?”, July 2015, pp. 10-11

Chair for the session on "Floral scent" at the 14th World Petunia Days, Murten/Morat, Switzerland, April 9 -12, 2015.

Participant of Isoprenoid synthase superfamily (ISS) workshop hosted by Enzyme Function Initiative and New York Structural Genomics Research Consortium, October 5, 2013

Member of the grant review panel for the AAAS Research Competitiveness Program for proposals submitted for KASCT (The King Abdulaziz City for Science and Technology) funding, 2013, Spring and Fall 2014, Spring 2015

An organizer and chair of session on "Plant Amino Acids" at the 13th International Congress on Amino Acids, Peptides and Proteins (ICAPP), Galveston, Texas, October 5-7, 2013

Member of the Scientific Advisory Board for a Center of Excellence on Plant Sciences (CEPLAS), Heinrich-Heine-University, Dusseldorf, Germany, 2012 - present

Member of the "oversight committee" for GRC 2013 on Plant Metabolic Engineering, Waterville Valley, NH, July 7-12, 2013.

Co-editor of the "Plant Biotech 2013" section of Current Opinion in Biotechnology.

Member of the EuroVOL review panel at European Science Foundation, mid-term evaluation, Florence, Italy, April, 2013

External member of search committee for professorship position in Horticulture at the Department of Crop Sciences at University of Natural Resources and Life Sciences, Vienna, Austria, May – August 2013

Co-Chair for the 3^d Banff Conference on Plant Metabolism, Banff, Canada, June 28 –July 2, 2012.

Participate in the NIFA/AFRI Stakeholder Listening Session, Washington, February 22, 2012.

Chair of the plenary section "Metabolite sensing and metabolons" at the 3rd Banff Conference on Plant Metabolism, Banff, Alberta, Canada, June 28 – July 2, 2012

Chair for the Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH, July 24-29, 2011.

Member, grant review panel at NSF, Metabolism and Microbial Communities, 2011.

Editor for Molecular Plant, 2011 –

External Mentor for Associate Professor Dr. Sanja Roje, Institute of Biological Chemistry, Washington State University via an NSF ADVANCEing EXCELinSE program, Pullman, WA, 2011- 2012

Member of the Editorial Board of Journal of Integrative Plant Biology, 2010 –.

Participant of a kickoff workshop meeting for preparing an NSF Science and Technology Center pre-proposal on "Chemical Diversity in the Plant Biosphere", Ames, IA March 29 - 30, 2011.

Editor for a Focus Issue of Molecular Plant on Plant Metabolism, January 2010.

Participant of NSF-JST Metabolomic Workshop, UC Davis, Davis, May 6 -7, 2010.

Member of the EuroVOL review panel at European Science Foundation, Strasbourg, France, 2010

Vise-Chair for the Gordon Research Conference on Plant Metabolic Engineering, 2009.

Section Chair at 2007 Gordon Research Conference on Floral and Vegetative Volatiles, Les Diablerets, Switzerland, October 7-12.

Section Chair at 2007 TERPNET Meeting, Strasbourg, France, April 30 – May 4.

Member of the review panel of the Horticulture and Food Research Institute of New Zealand, Auckland, New Zealand, February 27 – March 1, 2007.

Editor for Communicative and Integrative Biology journal (CIB), 2007 –

A member of the panel discussing "Getting Published" at the ASPB's Laboratory Leadership Workshop for graduate students and Assistant Professors, Chicago, July 5-6, 2007.

Member of the Board Directors of the Rebeiz Foundation for Basic Research, 2005 - 2009

Section Chair at the Plant Biology 2005 Annual Meeting of the American Society of Plant Biologists, Seattle, Washington, July 16-20.

Section Chair at the Terpnet 2005 (7th International Symposium on Isoprenoids and Terpenes), Wageningen, The Netherlands, April 20-23.

Editor for a book "Biology of Floral Scent", CRC Press, 2006

Monitoring editor for Plant Physiology, 2002 – 2007

Member, grant review panel at NSF, Metabolic Biochemistry, 2002, 2006, 2007, 2009, 2011

Editor for a Focus Issue of Plant Physiology on Biochemistry of Plant Volatiles, July – August 2004

ad hoc reviewer for journals: Science, Plant Cell, Plant Journal, Plant Physiology, PNAS USA, Plant Molecular Biology, Planta, Plant Science, In Vitro Plant, cellular and developmental biology, Phytochemistry, Gene, Journal of American Society for Horticultural Science.

ad hoc reviewer for Introduction to Plant Physiology, 2nd Edition by William G. Hopkins for John Wiley & Sons, Inc.

Member of the editorial board for volume 26 of Horticultural Reviews, 2000.

Section Chair at the 46th Annual Meeting of Midwest Section of American Society of Plant Physiologists, Purdue University, West Lafayette, IN, March 17-18, 2000.

Reviewed grants for BARD, NSF, USDA, FWF (Austrian Science Funds).

Publications:

- Bombarely A, Moser M, Amrad A, Bao M, Bapaume L, Barry CS, Bliet M, Boersma MR, Borghi L, Bruggmann R, Bucher M, D'Agostino N, Davies K, Druege U, **Dudareva N**, Egea-Cortines M, Delledonne M, Fernandez-Pozo N, Franken P, Grandont L, Heslop-Harrison JS, Hintzsche J, Johns M, Koes R, Lv X, Lyons E, Malla D, Martinoia E, Mattson NS, Morel P, Mueller LA, Muhlemann J, Nouri E, Passeri V, Pezzotti M, Qi Q, Reinhardt D, Rich M, Richert-Pöggeler KR, Robbins TP, Schatz MC, Schranz EM, Schuurink RC, Schwarzacher T, Spelt K, Tang H, Urbanus SL, Vandenbussche M, Vijverberg K, Villarino GH, Warner RM, Weiss J, Yue Z, Zethof J, Quattrocchio F, Sims TL, Kuhlemeier C. 2016. Insight into the evolution of the Solanaceae from the parental genomes of *Petunia hybrida*. Nature Plants, 2:16074 (Cover, **highlighted in Nature 2016, 534: 328-329 and Nature Plants 2016, 2, June issue, as comment and editorial**).
- Shaipulah NFM, Muhlemann JK, Woodworth BD, Van Moerkercke A, Verdonk JC, Ramirez AA, Haring MA, **Dudareva N**, Schuurink RC. 2016. *CCoAOMT* down-regulation activates anthocyanin biosynthesis in petunia. Plant Physiology, 170: 717-731.
- Widhalm JR, Jaini R, Morgan JA, **Dudareva N**. 2015. Rethinking how volatiles are released from plant cells. Trends in Plant Sci., 20: 545-550.
- Widhalm JR, Gutensohn M, Yoo H, Adebessin F, Qian Y, Guo L, Jaini R, McCoy RM, Lynch J, Shreve JT, Thimmapuram J, Rhodes D, Morgan JA, **Dudareva N**. 2015. Identification of a plastidial phenylalanine exporter that influences flux distribution through the phenylalanine biosynthetic network. Nature Communications, 6: 8142 doi:10.1038/ncomms9142.
- Wang P, **Dudareva N**, Morgan J, Chapple C. 2015. Genetic manipulation of lignocellulosic biomass for bioenergy. Current Opinion in Chemical Biology, 29: 32-39.
- Henry LK, Gutensohn M, Thomas ST, Noel JP, **Dudareva N**. 2015. Orthologs of the archaeal isopentenyl phosphate kinase regulate terpenoid production in plants. Proc. Natl. Acad. Sci. USA, 112: 10050-10055.
- Cna'ani A., Muhlemann JK, Ravid J, Masci T, Klempien A, Nguyen TTH, **Dudareva N**, Pichersky E, Vainstein A. 2015. *Petunia x hybrida* floral scent production is negatively affected by high-temperature growth conditions. Plant, Cell & Environment, 38: 1333-1346.
- Widhalm JR, **Dudareva N**. 2015. A familiar ring to it: Biosynthesis of plant benzoic acids. Mol. Plant, 8: 83-97.
- Pan H, Zhou R, Louie GV, Muhlemann JK, Bomati EK, Bowman ME, **Dudareva N**, Dixon RA, Noel JP, Wang X. 2014. Structural studies of cinnamoyl-CoA reductase and cinnamyl-alcohol dehydrogenase, key enzymes of monolignol biosynthesis. The Plant Cell, 26: 3709-3727.
- Dornfeld C, Weisberg AJ, Ritesh KC, **Dudareva N**, Jelesko JG, Maeda HA. 2014. Phylobiochemical characterization of class-Ib aspartate/prephenate aminotransferases reveals evolution of the plant arogenate phenylalanine pathway. The Plant Cell, 26: 3101-3114.
- Muhlemann JK, Woodworth BD, Morgan JA, **Dudareva N**. 2014. The monolignol pathway contributes to biosynthesis of volatile phenylpropenes in flowers. New Phytologist, 204: 661-670.

- Gutensohn M, Nguyen TTH, McMahon RD III, Kaplan I, Pichersky E, **Dudareva N**. 2014. Metabolic engineering of monoterpene biosynthesis in tomato fruits via introduction of the non-canonical substrate neryl diphosphate. *Metabolic Engineering*, 24: 107-116.
- Block A, Widhalm JR, Fatihi A, Cahoon RE, Wamboldt Y, Elowsky C, Mackenzie SA, Cahoon EB, Chapple C, **Dudareva N**, Basset GJ. 2014. The origin and biosynthesis of the benzenoid moiety of ubiquinone (coenzyme Q) in plants. *The Plant Cell*, 26:1938-1948.
- Muhlemann JK, Klempien A, **Dudareva N**. 2014. Floral volatiles: from biosynthesis to function. *Plant, Cell & Environment*, 37: 1936-1949.
- Yoo H, Widhalm JR, Qian Y, Maeda H, Cooper BR, Jannasch AS, Gonda I, Lewinsohn E, Rhodes D, **Dudareva N**. 2013. An alternative pathway contributes to phenylalanine biosynthesis in plants via a cytosolic tyrosine: phenylpyruvate aminotransferase. *Nature Communications*, 4: 2833 doi:10.1038/ncomms3833.
- Gutensohn M, Orlova I, Nguyen T, Davidovich-Rikanati R, Ferruzzi M, Sitrit Y, Lewinsohn E, Pichersky E, **Dudareva N**. 2013. Cytosolic monoterpene biosynthesis is supported by plastid-generated geranyl diphosphate substrate in transgenic tomato fruits. *The Plant J.*, 75: 351-363 (cover, featured article).
- Dudareva N**, Klempien A, Muhlemann JK, Kaplan I. 2013. Biosynthesis, function and metabolic engineering of plant volatile organic compounds. *Tansley review. New Phytologist*, 198: 16-32.
- Dudareva N**, DellaPenna D. 2013. Plant metabolic engineering: Future prospects and challenges. (Editorial). *Current Opinion in Biotechnology*, 24: 226-228.
- Heinig U, Gutensohn M, **Dudareva N**, Aharoni A. 2013. The challenges of cellular compartmentalization in plant metabolic engineering. *Current Opinion in Biotechnology*, 24: 239-246.
- Yeo Y-S, Nybo SE, Chittiboyina AG, Weerasooriya AD, Wang Y-H, Góngora Castillo E, Vaillancourt B, Buell CR, DellaPenna D, Celiz MD, Jones AD, Syrkin Wurtele E, Ransom N, **Dudareva N**, Shabaan KA, Tibrewal N, Chandra S, Smillie T, Khan IA, Coates RM, Watt DS, Chappell J. 2013. Functional identification of valerena-1,10-diene synthase, a terpene synthase catalyzing a unique chemical cascade in the biosynthesis of biologically active sesquiterpenes in *Valeriana officinalis*. *J. Biol. Chem.*, 288: 3163-3173.
- Lee S, Kaminaga Y, Cooper B, Pichersky E, **Dudareva N**, Chapple C. 2012. Benzoylation and sinapoylation of glucosinolate R-groups in Arabidopsis. *Plant J.* 72: 411-422.
- Qualley AV, Widhalm JR, Adebisin F, Kish CM, **Dudareva N**. 2012. Completion of the core β -oxidative pathway of benzoic acid biosynthesis in plants. *Proc. Natl. Acad. Sci. USA*, 109: 16383-16388.
- Maeda H, **Dudareva N**. 2012. The shikimate pathway and aromatic amino acid biosynthesis in plants. *Annu. Rev. Plant Biol.*, 63: 73-105.
- Muhlemann JK, Maeda H, Chang C-Y, San Miguel P, Baxter I, Cooper B, Perera MA, Nikolau BJ, Vitek O, Morgan JA, **Dudareva N**. 2012. Developmental changes in the metabolic network of snapdragon flowers. *PLoS ONE*, 7: e40381.
- Qualley AV, Cooper BR, **Dudareva N**. 2012. Profiling hydroxycinnamoyl-Coenzyme A thioesters: unlocking the back door of phenylpropanoid metabolism. *Anal. Biochem.*, 420: 182-184.
- Klempien A, Kaminaga Y, Qualley A, Nagegowda DA, Widhalm JR, Orlova I, Shasany AK, Taguchi G, Kish CM, Cooper BR, D'Auria JC, Rhodes D, Pichersky E, **Dudareva N**. 2012. Contribution of CoA ligases to benzenoid biosynthesis in petunia flowers. *The Plant Cell*, 24: 2015-2030.
- Maeda H, Yoo H, **Dudareva N**. 2011. Prephenate aminotransferase directs plant phenylalanine biosynthesis via arogonate. *Nat. Chem. Biol.*, 7: 19-21.
- Gutensohn M, Klempien A, Kaminaga Y, Nagegowda DA, Negre-Zakharov F, Huh J-H, Luo H, Weizbauer R, Mengiste T, Tholl D, **Dudareva N**. 2011. Role of aromatic aldehyde synthase in wounding/herbivory response and flower scent production in different Arabidopsis ecotypes. *The Plant J.*, 66: 591-602.

- Bunik VI, Schloss JV, Pinto JT, **Dudareva N**, Cooper AJL. 2011. A survey of oxidative paracatalytic reactions catalyzed by enzymes that generate carbanionic intermediates: Implications for ROS production, cancer etiology and neurodegenerative diseases. *Advances in Enzymology and Related Areas of Molecular Biology*, 77: 305-358.
- Marshall-Colón A, Sengupta N, Rhodes D, **Dudareva N**, Morgan J. 2010. A kinetic model describes metabolic response to perturbations and distribution of flux control in the benzenoid network of *Petunia hybrida*. *The Plant J.*, 62: 64-76.
- Qualley A, **Dudareva N**. 2010. Plant Volatiles. *In: Encyclopedia of life sciences 2010*, John Wiley & Sons, Ltd: Chichester <http://www.els.net/> [DOI: 10.1002/9780470015902.a0000910. pub2].
- Maeda H, Shasany AK, Schnepf J, Orlova I, Taguchi G, Cooper BR, Rhodes D, Pichersky E, **Dudareva N**. 2010. RNAi suppression of arogenate dehydratase 1 reveals that phenylalanine is synthesized predominantly via the arogenate pathway in petunia petals. *The Plant Cell*, 22:832-849. **Highlighted in Nature Chemical Biology 2010, 6: 310.**
- Orlova I, Nagegowda DA, Kish CM, Gutensohn M, Maeda H, Varbanova M, Fridman E, Yamaguchi S, Hanada A, Kamiya Y, Krichevsky A, Citovsky V, Pichersky E, **Dudareva N**. 2009. Small subunit of geranyl diphosphate synthase modifies the chain length specificity of phylogenetically distant geranylgeranyl diphosphate synthase *in planta*. *The Plant Cell*, 21: 4002-4017.
- Nieuwenhuizen NJ, Wang MY, Matich AJ, Green SA, Chen X, Yauk Y-K, Beuning LL, Nagegowda DA, **Dudareva N**, Atkinson RG. 2009. Two terpene synthases are responsible for the major terpenes emitted from the flowers of kiwifruit (*Actinidia deliciosa*). *Journal of Experimental Botany*, 60: 3203-3219.
- Long MC, Nagegowda DA, Kaminaga Y, Ho KK, Kish CM, Schnepf J, Sherman D, Weiner H, Rhodes D, **Dudareva N**. 2009. Involvement of snapdragon benzaldehyde dehydrogenase in benzoic acid biosynthesis. *The Plant J.*, 59: 256-265.
- Koeduka T, Orlova I, Baiga TJ, Noel JP, **Dudareva N**, Pichersky E. 2009. The lack of floral synthesis and emission of isoeugenol in *Petunia axillaris* subsp. *parodii* is due to a mutation in the isoeugenol synthase gene. *The Plant J.*, 58: 961-969.
- Zheng Z, Qualley A, Fan B, **Dudareva N**, Chen Z. 2009. An important role of a BAHD acyl transferase-like protein in plant innate immunity. *The Plant J.*, 57: 1040-1053.
- Nagegowda DA, Gutensohn M, Wilkerson C, **Dudareva N**. 2008. Two nearly identical terpene synthases catalyze the formation of nerolidol and linalool in snapdragon flowers. *Plant J.*, 55: 224-239.
- Dudareva N**, Pichersky E. 2008. Metabolic engineering of plant volatiles. *Current Opinion in Biotechnology*, 19: 181-189. **1th out of 10 top articles published on the same topic since its publication, July 11, 2011, BioMedLib.**
- Ben-Zvi MM, Negre-Zakharov F, Masci T, Ovadis M, Shklarman E, Ben-Meir H, Tzfira T, **Dudareva N**, Vainstein A. 2008. Interlinking showy traits: co-engineering of scent and color biosynthesis in flowers. *Plant Biotech. J.*, 8: 403-415 (cover).
- Koeduka T, Louie GV, Orlova I, Kish CM, Ibdah M, Wilkerson CG, Bowman ME, Baiga TJ, Noel JP, **Dudareva N**, Pichersky E. 2008. The multiple phenylpropene synthases in both *Clarkia breweri* and *Petunia hybrida* represent two distinct protein lineages. *Plant J.*, 54: 362-374.
- Kapteyn J, Qualley AV, Xie Z, Fridman E, **Dudareva N**, Gang DR. 2007. Evolution of cinnamate/*p*-coumarate carboxyl methyltransferases and their role in the biosynthesis of methylcinnamate. *The Plant Cell*, 19: 3212-3229.
- Gershenzon J, **Dudareva N**. 2007. The function of terpene natural products in the natural world. *Nature Chem. Biol.*, 3: 408-414.
- Pichersky E, **Dudareva N**. 2007. Scent Engineering: Toward the goal of controlling how flowers smell. *Trends in Biotech.* 25: 105-110 (cover).
- Horiuchi J, Badri DV, Kimball BA, Negre F, **Dudareva N**, Paschke MW, Vivanco JM. 2007. The floral volatile, methyl benzoate, from snapdragon (*Antirrhinum majus*) triggers phytotoxic effects in *Arabidopsis thaliana*. *Planta*, 226: 1-10 (cover).

- Dexter R, Qualley A, Kish CM, Ma CJ, Koeduka T, Nagegowda DA, **Dudareva N**, Pichersky E, Clark D. 2007. Characterization of a petunia acetyltransferase involved in the biosynthesis of the floral volatile isoeugenol. *Plant J.* 49: 265-275.
- Orlova I, Marshall-Colón A, Schnepf J, Wood B, Varbanova M, Fridman E, Blakeslee JJ, Peer WA, Murphy AS, Rhodes D, Pichersky E, **Dudareva N**. 2006. Reduction in the synthesis of benzenoids in petunia flowers reveals multiple pathways to benzoic acid and an unexpected enhancement in auxin transport. *The Plant Cell*, 18: 3458-3475.
- Kaminaga Y, Schnepf J, Peel G, Kish CM, Ben-Nissan G, Weiss D, Orlova I, Lavie O, Rhodes D, Wood K, Porterfield DM, Cooper AJL, Pichersky E, Vainstein A, **Dudareva N**. 2006. Plant phenylacetaldehyde synthase is a bifunctional homotetrameric enzyme that catalyzes both decarboxylation and oxidation of phenylalanine. *J. Biol. Chem.*, 281: 23357-23366.
- Koeduka T, Fridman E, Gang DR, Vassão DG, Jackson BL, Kish CM, Orlova I, Spaaova SM, Lewis NG, Noel JP, Baiga TJ, **Dudareva N**, Pichersky E. 2006. Eugenol and isoeugenol, characteristic aromatic constituents of spices, are biosynthesized via reduction of a coniferyl alcohol ester. *Proc. Natl. Acad. Sci. USA*, 103: 10128-10133.
- Dudareva N**, Negre F, Nagegowda DA, Orlova I. 2006. Plant volatiles: recent advances and future perspectives. *Critical Reviews in Plant Sciences*, 25: 417-440. **1th out of 10 most cited articles in Critical Reviews in Plant Sciences 2006-2008**
- Pichersky E, Noel JP, **Dudareva N**. 2006. Biosynthesis of plant volatiles: nature's diversity and ingenuity. *Science*, 311: 808-811 (cover).
- Guterman I, Masci T, Chen X, Negre F, Pichersky E, **Dudareva N**, Weiss D, Vainstein A. 2006. Generation of phenylpropanoid pathway-derived volatiles in transgenic plants: rose alcohol acetyltransferase produces phenylethyl acetate and benzyl acetate in petunia flowers. *Plant Mol. Biol.*, 60: 555-563.
- Farhi M, **Dudareva N**, Masci T, Weiss D, Vainstein A, Abeliovich H. 2006. Synthesis of the food flavoring methyl benzoate by genetically engineered *Saccharomyces cerevisiae*. *J. Biotechnol.*, 122: 307-315.
- Dudareva N**, Pichersky E. 2006. Metabolic engineering of floral scent of ornamentals. *Journal of Crop Improvement*, 18: 325-346.
- Deschamps C, Gang D, **Dudareva N**, Simon JE. 2006. Developmental regulation of phenylpropanoid biosynthesis in leaves and glandular trichomes of basil (*Ocimum basilicum* L.). *Int. J. Plant Sci.* 167: 447-454.
- Effmert U, Saschenbrecker S, Ross J, Negre F, Fraser CM, Noel JP, **Dudareva N**, Piechulla B. 2005. Floral benzenoid carboxyl methyltransferases: from *in vitro* to *in planta* function. *Phytochemistry*, 66: 1211-1230.
- Dudareva N**, Andersson S, Orlova I, Gatto N, Reichelt M, Rhodes D, Boland W, Gershenzon J. 2005. The nonmevalonate pathway supports both monoterpene and sesquiterpene formation in snapdragon flowers. *Proc. Natl. Acad. Sci. USA*, 102: 933-938 (cover).
- Dudareva N**, Negre F. 2005. Practical applications of research into the regulation of plant volatile emission. *Current Opinion in Plant Biology*, 8: 113-118.
- Wright GA, Lutmerding A, **Dudareva N**, Smith BH. 2005. Parameters of complex floral scents that affect their discriminability by honeybees (*Apis mellifera*). *J. Comp. Physiol. A*, 191: 105-114.
- Boatright JL, Negre F, Chen XL, Kish CM, Wood B, Peel G, Orlova I, Gang D, Rhodes D, **Dudareva N**. 2004. Understanding *in vivo* benzenoid metabolism in petunia petal tissue. *Plant Physiology*, 135: 1993-2011 (cover).
- Dudareva N**, Pichersky E, Gershenzon J. 2004. Biochemistry of plant volatiles. *Plant Physiology*, 135: 1893-1902.
- Tholl D, Kish CM, Orlova I, Sherman D, Gershenzon J, Pichersky E, **Dudareva N**. 2004. Formation of monoterpenes in *Antirrhinum majus* and *Clarkia breweri* flowers involves heterodimeric geranyl diphosphate synthases. *The Plant Cell*, 16:977-992.
- Negre F, Kish K, Boatright J, Underwood B, Shibuya K, Wagner C, Clark DG, **Dudareva N**. 2003. Regulation of methylbenzoate emission after pollination in snapdragon and petunia flowers. *The Plant Cell*, 15: 2992-3006.

- Dudareva N**, Martin D, Kish CM, Kolosova N, Gorenstein N, Faldt J, Miller B, Bohlman J. 2003. (*E*)- β -Ocimene and myrcene synthase genes of floral scent biosynthesis in snapdragon: function and expression of three terpene synthase genes of a new TPS-subfamily. *The Plant Cell*, 15:1227-1241 (cover).
- Goodwin SM, Kolosova N, Kish CM, Wood KV, **Dudareva N**, Jenks MA. 2003. Cuticle characteristics and volatile emission of petals in *Antirrhinum majus* L. *Physiologia Plantarum*, 117:1-9.
- Negre F, Kolosova N, Knoll J, Kish CM, **Dudareva N**. 2002. Novel *S*-adenosyl-L-methionine: salicylic acid carboxyl methyltransferase, an enzyme responsible for biosynthesis of methyl salicylate and methyl benzoate, is not involved in floral scent production in snapdragon flowers. *Archives of Biochemistry and Biophysics* 406: 261-270.
- Kolosova N, Gorenstein N, Kish CM, **Dudareva N**. 2001. Regulation of circadian methyl benzoate emission in diurnally and nocturnally emitting plants. *The Plant Cell*, 13: 2333-2347.
- Kolosova N, Sherman D, Karlson D, **Dudareva N**. 2001. Cellular and subcellular localization of *S*-adenosyl-L-methionine:benzoic acid carboxyl methyltransferase, the enzyme responsible for biosynthesis of the volatile ester methylbenzoate in snapdragon flowers. *Plant Physiology*, 126: 956-964. (cover)
- Gang DR, Wang J, **Dudareva N**, Nam KH, Simon J, Lewinsohn E, Pichersky E. 2001. An investigation of the storage and biosynthesis of phenylpropenes in sweet basil. *Plant Physiology*, 125: 539-555.
- Dudareva N**, Murfitt LM, Mann CJ, Gorenstein N, Kolosova N, Kish CM, Bonham C, Wood K. 2000. Developmental regulation of methyl benzoate biosynthesis and emission in snapdragon flowers. *The Plant Cell*, 12: 949-961.
- Dudareva N**, Pichersky E. 2000. Biochemical and molecular genetic aspects of floral scents. *Plant Physiology*, 122: 627-633.
- Murfitt LM, Kolosova N, Mann CJ, **Dudareva N**. 2000. Purification and characterization of *S*-adenosyl-L-methionine:benzoic acid carboxyl methyltransferase, the enzyme responsible for biosynthesis of the volatile ester methyl benzoate in flowers of *Antirrhinum majus*. *Archives of Biochemistry and Biophysics*, 382: 145-151.
- Mandragon-Jacobo C, **Dudareva N**, Bordelon BP. 2000. DNA extraction from several cacti. *HortScience* 35:1124-1126.
- Nam KH, **Dudareva N**, Pichersky E. 1999. Characterization of benzylalcohol acetyltransferases in scented and non-scented *Clarkia* species. *Plant Cell Physiology*, 40: 916-923.
- Dudareva N**, Piechulla B, Pichersky E. 1999. Biogenesis of floral scents. *Horticultural Reviews*, 24: 31-54.
- Wang J, **Dudareva N**, Kirsh CM, Simon JE, Lewinsohn E, Pichersky E. 1999. Nucleotide sequences of two cDNAs encoding caffeic acid *O*-methyltransferases (accession Nos. AF154917 and AF154918) from sweet basil (*Ocimum basilicum*). *Plant Physiology*, 120: 1205.
- Cseke L, **Dudareva N**, Pichersky E. 1998. Structure and evolution of linalool synthase. *Mol. Biol. Evol.* 15: 1491-1498.
- Dudareva N**, D'Auria J, Raguso RA, Pichersky E. 1998. Acetyl CoA: Benzylalcohol Acetyltransferase - an enzyme involved in floral scent production in *Clarkia breweri*. *Plant Journal* 14 (3): 297-304
- Dudareva N**, Raguso RA, Wang J, Ross JR, Pichersky E. 1998. Floral scent production in *Clarkia breweri*. III. Enzymatic synthesis and emission of benzoid esters. *Plant Physiology* 116: 599-604.
- Wang J, **Dudareva N**, Bhakta S, Raguso RA, Pichersky E. 1997. Floral scent production in *Clarkia breweri* (Onagraceae). II. Localization and developmental modulation of the enzyme *S*-adenosyl-L-methionine:(iso)eugenol *O*-methyltransferase and phenylpropanoid emission. *Plant Physiology* 114: 213-221.

- Dudareva N**, Cseke L, Blanc VM, Pichersky E. 1996. Evolution of floral scent in *Clarkia*: Novel patterns of S-Linalool synthase gene expression in the *C. breweri* flower. *The Plant Cell* 8: 1137-1148 (cover).
- Dudareva N**, Reddy JT, Krauter R, Bronner R, Steinmetz A, Pillay DTN. 1996. A flower-specific gene family whose expression is regulated temporally and spatially during flower development in sunflower. *Plant Science* 120: 161-173.
- Reddy JT, **Dudareva N**, Evrard JL, Krauter R, Steinmetz A, Pillay DTN. 1995. A pollen-specific gene from sunflower encodes a member of the leucine-rich-repeat protein superfamily. *Plant Science* 111: 81-93.
- Dudareva N**, Evrard JL, Pillay DTN, Steinmetz A. 1994. Molecular characterization of a pollen-specific cDNA from *Helianthus annuus* L and its expression. *Mol. Biol. (Life Sci. Adv.)* 13: 261-268.
- Dudareva N**, Evrard JL, Pillay DTN, Steinmetz A. 1994. Nucleotide sequence of a pollen-specific cDNA from *Helianthus annuus* L encoding a highly basic protein. *Plant Physiol.* 106: 403-404.
- Dikalova AE, **Dudareva N**, Kubalokova M, Salganik RI. 1993. Rearrangement in sugar beet mitochondrial DNA induced by cell suspension, callus cultures and regeneration. *Theor. Appl. Genet.* 86: 699-704.
- Steinmetz A, Baltz R, Domon C, **Dudareva N**, Evrard JL, Krauter R, Mundel C, Tabidze V. 1993. Flower-specific genes in sunflower. *Biotechnol. & Biotechnol. Eq.* 7 (series B): 16-20.
- Weihe A, **Dudareva NA**, Veprev SG, Maletsky SI, Melzer R, Salganik RI, Borner Th. 1991. Molecular characterization of mitochondrial DNA of different subtypes of male-sterile cytoplasm of the sugar beet *Beta vulgaris* L. *Theor. Appl. Genet.* 82: 11-16.
- Salganik RI, **Dudareva NA**, Kiseleva EV. 1991. Structural organization and transcription of plant mitochondria and chloroplast genomes. In: *Electron Microscopy Reviews, Subcellular and Biomolecular Structure*, Pergamon Press, Oxford, N-Y. 4: 221-247.
- Dudareva NA**, Popovsky AV, Kasjanova UV, Veprev SG, Mglinets AV, Salganik RI. 1991. Expression of mitochondrial genes in fertile and sterile sugar beet cytoplasm with different nuclear fertility restorer genes. *Theor. Appl. Genet.* 83: 217-224.
- Gorbacheva LA, **Dudareva NA**, Salganik RI. 1991. Molecular mechanisms of plant resistance to pathogens (review). *Usp. Sovrem. Biol. USSR* 111: 122-136 (in Russian).
- Dudareva NA**, Veprev SG, Popovsky AV, Maletsky SI, Gileva IP, Salganik RI. 1990. High rate spontaneous reversion to cytoplasmic male sterility in sugar beet: A characterization of the mitochondrial genomes. *Theor. Appl. Genet.* 79: 817-824.
- Dudareva NA**, Dikalova AE, Maletskii SI, Gileva IP, Salganik RI. 1990. Changes in the structure of mitochondrial DNA in *Beta vulgaris* L., associated with the origin of cytoplasmic male sterility. *Doklady Biochemistry, Proceedings of the Academy of Sciences of the USSR* 308: 291-294.
- Gorbacheva LA, **Dudareva NA**, Chalova LI, Ozeretskovskaya OL, Salganik RI. 1990. Long-term change ability for stress-induced expression of potato gene for hydroxyproline-rich glycoprotein under action of biogenic elicitors. *Doklady Biochemistry, Proceedings of the Academy of Sciences of the USSR* 312: 134-137.
- Kiseleva EV, **Dudareva NA**, Dikalova AE, Khristolyubova NB, Salganik RI, Laktionov PP, Roshke VV, Zaichikov EF. 1989. The chloroplast genome of *Beta vulgaris* L.: Structural organization and transcriptional activity. *Plant Science* 62: 92-103.
- Kiseleva EV, **Dudareva NA**, Dikalova AE, Khristolyubova NB, Salganik RI. 1989. Structural organization of the chloroplast genome of *Beta vulgaris* L. *Doklady Biological Sciences, Proceedings of the Academy of Sciences of the USSR* 302: 528-531.
- Dudareva NA**, Boyarintseva AE, Maletskii SI, Kiseleva EV, Khristolyubova NB, Salganik RI. 1989. Comparative study of the structure of mitochondrial genomes of fertile and sterile forms of *Beta vulgaris*. *Soviet Genetics* 24: 1517-1523 (in Russian).
- Kiseleva EV, **Dudareva NA**, Dikalova AE, Khristolyubova NB, Salganik RI, Laktionov PP, Roshke VV, Zaichikov EF. 1989. Location of transcriptionally active regions in the genome

- of *Beta vulgaris* L. chloroplasts with the aid of monoclonal antibodies to the β -subunit of *E. coli* RNA polymerase. Doklady Biological Sciences, Proceedings of the Academy of Sciences of the USSR 304: 1-3.
- Kiseleva EV, **Dudareva NA**, Dikalova AE, Khristolyubova NB, Salganik RI. 1988. Structural analysis of mitochondrial genome of *Beta vulgaris*. Biopolimery i Kletka 4: 321-328 (in Russian).
- Dudareva NA**, Kiseleva EV, Dikalova AE, Khristolyubova NB, Salganik RI. 1988. Structural organization of sugar beet mitochondrial and chloroplast genomes. Genome 30(suppl.1): 322.
- Dudareva NA**, Kiseleva EV, Boyarintseva AE, Maystrenko AG, Khristolyubova NB, Salganik RI. 1988. Structure of the mitochondrial genome of *Beta vulgaris* L. Theor. Appl. Genet. 76: 753-759.
- Frumgarts LA, Kipriyanov SM, Kalachikov SM, **Dudareva NA**, Dymshyts GM, Karpova GG, Salganik RI. 1986. Preparation of fluorescent-labelled DNA and its application as a probe for molecular hybridization. Bioorgan. Khimiya 12: 1508-1513 (in Russian).
- Dudareva NA**, Dashkevich VS, Vorobjeva NV, Blinova NN. 1982. Distribution of sequences coding for the synthesis of cytoplasmic mRNAs in functionally different fractions of rat liver DNA. Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR 2: 25-31 (in Russian).
- Dudareva NA**, Dashkevich VS, Salganik RI. 1982. Increase in the number of repeating sequences of DNA in transcriptionally active sites of rat genome induced by cortisol and phenobarbitol. Biochemistry 46: 1014-1021.
- Dudareva NA**, Dashkevich VS, Kuzmenko AP, Salganik RI. 1982. Cortisol induced changes in methylation of repeating sequences of transcriptionally active rat liver DNA. Biochemistry 46: 1177-1181.
- Dudareva NA**, Dashkevich VS, Salganik RI. 1981. Changes in the composition of nucleotide sequences in the transcriptionally active fraction of rat liver DNA under induction by cortisol. Biochemistry 45: 997-1002.
- Dudareva NA**, Dashkevich VS. 1978. Effect of the methods of the purification and fragmentation of DNAs with different transcribing activity on the nature of their renaturation. Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR 2: 89-93 (in Russian).
- Dashkevich VS, **Dudareva NA**, Arshinova TV, Salganik RI. 1977. Studies of the properties of replicating DNA in regenerating rat liver isolated by phenol fractionation. Molecular Biology 11: 645-652.

Books and book chapters authored:

- Gutensohn M, **Dudareva N**. 2016. Tomato fruits - a platform for metabolic engineering of terpenes. Methods in Enzymology, doi:10.1016/bs.mie.2016.03.012
- Coruzzi G, Last R, **Dudareva N**, Amrhein N. 2015. Amino acids. In Buchanan BB, Gruissem W, Jones RL (eds) Biochemistry and molecular biology of plants. Second Edition. John Wiley & Sons, Ltd., Chapter 7, pp. 289-336.
- Davidovich-Rikanati R, Sitrit Y, Tadmor Y, Pichersky E, **Dudareva N**, Lewinsohn E. 2014. Tomato Aroma: Biochemistry and Biotechnology. In Dudai N and Havkin-Frenkel D (eds) Biotechnology in Flavor Production. Blackwell Publishing, 2nd edition, Oxford, *in press*
- Qualley AV, **Dudareva N**. 2014. Quantification of plant volatiles. *In*: Sriram G (ed) Plant Metabolism: Methods and Protocols. Methods in Molecular Biology, vol. 1083. Humana Press Inc., Springer Science +Business Media NY, Chapter 4, pp. 41-53.
- Gutensohn M, Nagegowda DA, **Dudareva N**. 2013. Involvement of compartmentalization in monoterpene and sesquiterpene biosynthesis in plants. In Bach T and Rohmer M (eds) Isoprenoid synthesis in plants and microorganisms: New concepts and experimental approaches. Springer Science +Business Media NY, Chapter 10, pp. 155-169.
- Nagegowda DA, Rhodes D, **Dudareva N**. 2010. The role of the methyl-erythritol-phosphate pathway in rhythmic emission of volatiles. *In*: Rebeiz CA et al. (eds) The Chloroplast: Basics and Application. Springer Science+Business Media B.V., Chapter 10, pp. 139-153.

- Qualley AV, **Dudareva N.** 2009. Metabolomics of plant volatiles. *In: Belostotsky DA (ed) Methods in Molecular Biology: Plant Systems Biology.* Humana Press Inc., NY, pp. 329-343.
- Negre-Zakharov F, Long MC, **Dudareva N.** 2009. Floral scent and fruit aromas inspired by nature. *In: Osbourn AE, Lanzotti V (eds) Plant-derived Natural Products: Synthesis, Function, and Application.* Springer Science+Business Media, LLC, NY, pp. 405-431.
- Colón AJM, Morgan JA, **Dudareva N,** Rhodes D. 2009. Application of dynamic flux analysis in plant metabolic networks. *In: Schwender J (ed) Plant Metabolic Networks.* Springer, NY, 285-305.
- Clark D, Pichersky E, Verdonk J, **Dudareva N,** Haring M, Klahre U, Schuurink R. 2009. Benzenoids dominate the fragrance of petunia flowers. *In: Gerats T, Strommer J(eds) Petunia. Evolutionary, developmental and physiological genetics.* Springer Science + Business Media, NY, pp. 51-69.
- Qualley AV, **Dudareva N.** 2008. Aromatic volatiles and their involvement in plant defense. *In: Schaller A (ed) Induced Plant Resistance to Herbivory.* Springer Science+Business Media B.V., pp. 409-432.
- Nagegowda DA, **Dudareva N.** 2007. Plant biochemistry and biotechnology of flavor compounds and essential oils. *In: Kayser O, Quax W (eds) Medicinal Plant Biotechnology. From Basic Research to Industrial Applications.* Wiley-VCH, Verlag GmbH & Co. KGaA, Weinheim, pp. 469-492.
- Dudareva N,** Pichersky E. 2006. Floral scent metabolic pathways, their regulation, and evolution. *In N. Dudareva, E. Pichersky (eds), Biology of Floral Scent,* CRC Press, Taylor and Francis Group, Boca Raton, London, NY, pp. 55-78.
- Dudareva N,** Pichersky E. 2006. Metabolic engineering of floral scent of ornamentals. *In Y. Li, Y. Pei (eds), Plant biotechnology in ornamental horticulture,* The Haworth Press, NY, pp. 325-346.
- Schnepp J, **Dudareva N.** 2005. Floral scent – biosynthesis, regulation, and genetic modifications. *In: Ainsworth C (ed) Flowering and its Manipulation.* Blackwell Publishing, UK, 240-257.
- Dudareva N.** 2004. Floral scent. *In R.M. Goodman (ed), Encyclopedia of Plant and Crop Science,* Marcel Dekker, Inc. NY, pp. 456-459.
- Rhodes D, Peel GJ, **Dudareva N.** 2004. Engineering pathways of secondary metabolism. *In R.M. Goodman (ed), Encyclopedia of Plant and Crop Science,* Marcel Dekker, Inc. NY, pp. 720-723.
- Lewinsohn E, M Shalit, D Gang, N Lavid, E Bar, D Weiss, A Vainstein, Z Adam, D Zamir, **N Dudareva,** M Zaccari, JE Simon, E Pichersky. 2003. Functional genomics to isolate genes involved in fragrance production for genetic engineering of scent in flowers. *In Plant Biotechnology 2002 and Beyond (IK Vasil, ed), Kluwer Academic Publishers,* the Netherlands, pp. 329-332.
- Dudareva N.** 2002. Molecular control of floral fragrance. *In A. Vainstein (ed), Breeding for ornamentals: classical and molecular approaches,* Kluwer Academic Publishers, Dordrecht/ Boston/ London, 295-309.
- Boatright J, **Dudareva N.** 2001. RNA gel blot analysis to determine gene expression of floral scents. *In J.F. Jackson, H.F. Linskens, R.B. Inman (eds), Molecular Methods of Plant Analysis, Vol. 21 “Analysis of Taste and Aroma”, Springer-Verlag,* Berlin Heidelberg, pp. 249-261.
- Pichersky E, **Dudareva N,** Wang J, Cseke L, Lewinsohn E. 1999. Biosynthesis of scent and flavor compounds. *In A. Altman, M. Ziv, S. Izhar (eds), Plant Biotechnology and In Vitro Biology in the 21st Century,* Kluwer Academic Press, Dordrecht, Boston, London, pp. 601-604.
- Steinmetz A, Baltz R, Domon C, **Dudareva N,** Evrard JL, Krauter R. 1992. Gametophytic and sporophytic gene expression in *Helianthus annuus* L. *In: Reproductive Biology and Plant Breeding,* Eds. Y. DattÈe, C. Dumas and A. Gallais. Springer Verlag (Berlin, Heidelberg), pp. 59-68.

- Maletsky SI, Veprev SG, Shavrukov YuN, Konovalov AA, Maletskay EU, **Dudareva NA**, Mglinets AV. 1991. Genetic control of sugar beet reproduction. Novosibirsk, Nauka, 265 pp (in Russian).
- Salganik RI, **Dudareva NA**, Popovsky AV, Kiseleva EV, Rozov SM. 1990. Structure of the plant mitochondrial genome and light-regulated transcription of the mitochondrial genes. *In: Nuclear structure and function*, Eds. by J.R. Harris and I.B. Zbarsky, Plenum Press, N-Y., pp. 19-22.
- Minchenko AG, **Dudareva NA**. 1990. The mitochondrial genome. Novosibirsk, Nauka, 194 pp (in Russian).
- Dudareva NA**, Boyarintseva AE, Maletsky SI, Salganik RI. 1988. A study of mitochondrial DNA structure for identification of the cytoplasmic male sterile plasmotypes in sugar beet. *In: Biochemical identification of varieties*. Leningrad, USSR, pp. 244-249.
- Dashkevich VS, **Dudareva NA**, Kuzmenko AP, Salganik RI. 1982. Changes in transcriptionally active DNA of rat liver under hormonal induction and regeneration. *In: Molecular mechanisms of genetic processes*, Moscow, Nauka, pp. 24-30.

Non-refereed papers in magazines:

- Dudareva N.** 2007. Career Profile: Biochemist and Plant Molecular Biologist". *J. Chem. Education* 84: 1564-1567 (cover).
- Dudareva N.** 2001. The joy of scent. *Chemistry in Britain*, vol. 37, No. 2, pp. 28-30.
- Dudareva N.** 1999. Floral scent production in snapdragon, *Antirrhinum majus*. *Flowering Newsletter*, 28: 32-38.
- Steinmetz A, Baltz R, Domon C, **Dudareva N**, Evrard JL, Krauter R, Mundel C, Tabidze V. 1993. Anther-, pollen- and pistil-specific genes in sunflower. *Flowering Newsletter* 15: 41-44.
- Dudareva N.** Ask the experts. *Scientific American*, 2005, Vol. 293, issue 1, p96.

Patents:

- US Patent #6558,922: "Methods and compositions for production of floral scent compounds". Issued: May 6, 2003.
- US Patent #7087,552 "Modification of floral scent in flowering plants" (A. Blowers and N. Dudareva), Issued: August 8, 2006.
- US Patent # 15/223,874 "A new molecular approach to enhance biochemical output traits in crops" (C. Chapple, N. Dudareva, N. Bonawitz and J.-I. Kim).

Posters presented at meetings:

30 posters have been presented at different national and international meeting from 1971 to 1995.

80 posters have been presented at different national and international meeting from 1995 to 2012.

Teaching:

- BCHM 690 Seminar in Biochemistry (graduate), 2014 – 1 credit, enrollment 7 students.
- HORT 640 Metabolic Plant Physiology Part A (graduate), 2011, 2013, 2015 - 3 credits, total enrollment 46 students. Percent taught 50%. Taught together with Dr. D. Rhodes.
- AGRY 598 Cell Biology of Plants, 2013 guest lectures on "Plant Metabolic Engineering".
- HORT 640 Metabolic Plant Physiology Part A (graduate), 2005, 2007, 2008, 2009 - 3 credits, total enrollment 30 students. Percent taught 30%. Taught together with Dr. D. Rhodes and Dr. N. Carpita.
- HORT 301 Plant Physiology (undergraduate), 1997, 1998, 1999, 2000, 2001, 2002, 2004 -

- 4 credits, total enrollment 321 students. Percent taught: 50%. Taught together with Dr. R. Joly.
- HORT 301 Plant Physiology (undergraduate), 2008 and 2009 guest lectures on “Plant Secondary Products”.
- HORT 694D Plant-Plant and Plant–Insect Interactions (graduate), Spring 2000
1 credit, enrollment 7 students.
- HORT 491 Undergraduate Research, Spring 1998 – 1 student, Fall 1998 – 2 students, Spring 1999 – 1 student, Fall 1999 – 1 student, Spring 2000 – 1 student, Fall 2001 – 2 students, Fall 2004 - 1 student, Fall 2004 – 2 students, Summer 2005 - 1 student, Fall 2007 – 2 students, Spring 2008 – 5 students, Spring 2009 – 1 student, Fall 2009 – 1 student, Fall 2010 - 1 student, Fall 2012 – 1 student
Fall 2012 – 1 student
- BIOL 294 Fall 2012 – 1 student
- BCHM 298 Fall 2013 – 1 student, Spring 2014 – 1 student, Fall 2014 – 1 student, Spring 2015 - 1 student, Spring 2016 - 1 student
- BIOL 499 Bio Honors Thesis Research, Spring 1999 – 1 student.
- BIOL 495R Senior Research, Fall 2000 – 1 student, Spring 2001 – 1 student, Fall 2001 - 1 student, Fall 2002 - 1 student, Spring 2003 - 2 students, Spring 2004 - 1 student.
- BIOL 394 Biology Research, Spring and Summer 2002 - 1 student, Fall 2001 - 1 student.
- BIOL 494 Undergraduate Research, Fall 2008 - 1 student, Fall 2011 - 1 student, Spring 2012 – 2 students, Fall 2012 – 1 student, Fall 2013 – 1 student
- BTNY 498 Research and Plant Science, Fall 1999 – 1 student.
- BCHM 498 Undergraduate Research, Fall 2013 – 1 student, Spring 2014 – 1 student, Fall 2014 – 2 students, 2015 – 3 students, 2016, 2016 - 3 students
- HORT 590 Specific Studies in Horticulture, Summer 2005 - 1 student, Fall 2007 - 1 student, Fall 2008 – 1 student
- HORT 690 Topical Research, Fall 1999 - 1 student.
- HORT 698 Master Research, Fall 2000 - 1 student (rotation).
- HORT 699 Research PhD thesis 2007 – 4 students, 2008 – 4 students
- BCHM 699 PhD Research, Fall 1999 - 1 PBP student (rotation), Fall 2000 - 1 PBP student (rotation), Fall 2001 – 1 PBP student (rotation), Spring 2006 - 1 PULSe student (rotation), Fall 2006 - 1 PULSe student (rotation), Spring 2009 - 1 PULSe student (rotation), Fall 2011 - 1 PULSe student (rotation), Spring 2012 – two graduate students from Biochemistry Department (rotation), Spring 2012 – 2 PULSe students and 1 student from Biochemistry Department (rotation), Spring 2013 - 1 PULSe student, Spring 2014 - 1 PULSe student (rotation), Fall 2014 – 2 students from Biochemistry Department and 1 PULSe student (rotation); Fall 2015 – 1 student from Biochemistry Department and 1 PULSe student (rotation)

Mentoring:

Graduate Students Supervised: 5 Current, 15 Past

Lisa Murfitt, M.S. awarded 2/2000 - currently Microbiology lab supervisor at Wyoming Department of Agriculture, Cheyenne, WY

Natasha Kolosova, M.S. awarded 7/2001 – currently postdoc at UBC, Vancouver, Canada

Cicero Deschamps, Ph.D. awarded 12/2002 - currently Assistant Professor at Federal University of Parana (Brazil)

Joe Knoll, M.S. awarded 12/2002 – currently a research geneticist at USDA, Tifton, CA

Florence Negre, Ph.D. awarded 9/2005 – currently Associate Professor at UC Davis

Christine M Kish, M.S. awarded 5/2008, worked as a lab manager in my lab until 2012

Antje Klempien, M.S. from the University of Rostock, awarded 1/2008

Amy Marshall-Colón, Ph.D. awarded 7/2009 – currently Assistant Professor at the University of Illinois at Urbana-Champaign

Anthony Qualley, Ph.D. awarded 11/2009 - currently a research scientist at Manus Biosynthesis, Cambridge, MA

Michael Long, Ph.D. awarded 4/2013 – currently a postdoc at the University of Albany,
Albany, NY
Joelle Muhlemann, PULSe program, Ph.D. awarded 11/2012, currently a postdoc in the lab
Antje Klempien, Ph.D. awarded 4/2013, currently a postdoc at Purdue University
Heejin Yoo, PULSe program, Ph.D. awarded 04/2014, currently postdoc at Duke
University, Durham NC
Yichun Qian, M.S. candidate, Department of Biochemistry
Laura Henry, Ph.D. candidate, Department of Biochemistry
Funmilayo Adebesein, Ph.D. candidate, Biochemistry Department
Hongji Gui, Ph.D. candidate, Biochemistry Department, dropped from the program in
Spring 2013
Ben Woodworth, Ph.D. candidate, Biochemistry Department, dropped from the program
in Summer 2016
Rachel McCoy, Ph.D. candidate, PULSe program, dropped from the program in Spring
2016
Ryan L Benke, Ph.D. candidate, Biochemistry Department

Postdoctoral Scholars Sponsored:

Jennifer Schnepf,
Irina Orlova, currently a research scientist at the Scotts Company, Ohio
Yasuhisa Kaminaga, currently a research scientist at the Company, Japan
Xinlu Chen, currently a research associate II, Department of Plant Sciences, The
University of Tennessee, Knoxville, TN
Dinesh Nagegowda, currently principal scientist & Ramalingaswami fellow, CSIR-Central
Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow, India
Gregory Peel – currently a senior research scientist at Monsanto, Davis, CA
Florence Negre - currently Associate Professor at UC Davis, Davis, CA
Hiroshi Maeda – currently Assistant Professor at UW-Madison, Madison, WI
Anthony Qualley - currently a research scientist at Manus Biosynthesis, Cambridge, MA
Michael Gutensohn - currently Assistant Professor at West Virginia University,
Morgantown, WV.
Joshua Widhalm – currently Assistant Professor at the Department of Horticulture and
Landscape Architecture, Purdue University.
Natalie O'Donnell – back to Australia
Joelle Muhlemann – currently postdoc at Wake Forest University, NC
Antje Klempien - currently postdoc at Purdue University
Heejin Yoo - currently postdoc at Duke University, NC
Joseph Lynch
Bo Wang
Matthew B Kilgore
Benoit JP Boachon

Undergraduate Students Supervised: 43 total, including 5 minority students

Lisa Bushue – Spring 1998
Christine M. Kish – Fall 1998 – Spring 1999; Fall 1999 – Spring 2000
Ryan P. Hyser – Fall 1998 – Spring 1999
Katherine Elzer – Fall 1999
Amber Spurgin - Fall 1999
Erin M. Uhlemann – Fall 1999
Erika Smiley – Fall 2000
Susan Elaine Dome – Spring 2001- Fall 2001
Sven Buhlmann – Summer 2001
Jessica Milchak – Fall 2001, Fall 2002, Spring and Summer 2002, Spring 2003.
Justin Bell – Spring 2003

Shanwen Chen – Fall 2004
 Michael Nigh – Fall 2004, Summer 2005
 Mallory Mynsberge – Fall 2007 and Spring 2008
 Marta Panozzo – Fall 2006, Spring and Fall 2007
 Allison Bowers – Fall 2007
 Marta Panozzo – Spring 2008
 Phillip Henady – Spring 2008
 Jiameng Zheng – Fall 2008 and Spring 2009
 Brett Marsh – Fall 2009 and Summer 2010 (SURF student)
 Jennifer Mansfield – Fall 2010
 Natalie Smith – Fall 2011, Spring 2012, Fall 2012
 Kristin Lee Overbey - Spring 2012
 Richard McMahon – Fall 2012, Fall 2013
 Dohson Kim – Fall 2012
 Kipchamba Kibet – Fall 2013, Spring 2014
 Heard Onwaniqua, - NSF REU student, summer 2013
 Scott Gentry - Spring, 2014 and Summer 2014 (SURF student)
 Zhou Fei, visiting scholar from Nanjing University, China – October – December, 2013
 Joseph Crook - NSF REU student, summer 2014
 Taylor Peterson – Fall 2014
 Reinagle Kayla – Fall 2014, Spring and Summer 2015
 Grasso Alyson – Fall 2014
 Natasha De Winter - NSF REU student, summer 2015
 Junellie Cruz-Lebron - NSF REU student, summer 2015
 Evan Adams – Spring and Summer 2016 (SURF student), Fall 2016
 Alekzander Garcia - NSF REU student, summer 2016
 Raeva Ogas – summer 2016
 Matthew Dawson – Fall 2016
 Gabrielle Buck – Fall 2016
 Purdue MARC/AIM Summer Research Program:
 2001 – Steve Lawrence, University of the Virgin Islands
 2000 - Lisandra Negron-Vega, University of Puerto Rico.
 1999 - Kandis Daramola, Alabama State University

Undergraduate students' mentoring:
 2016 – Jimmy Breedlove, Mengran Ma, Ben Kick, Sarah Innis

Students'/postdoc's awards and honors:

Graduate student Laura Henry received 2016 Henry Moses Award based on a scientific paper that she has authored that demonstrates her productivity and excellence in scientific research, Purdue University, Biochemistry Department, April 2016.
 Graduate student Funmilayo Adebesein served as a discussion leader at the Plant volatile biosynthesis and engineering section at the Gordon Research Seminar (GRS) on Plant Volatiles, January 30-31, 2016, Ventura, CA.
 Undergraduate student Evan Adams from Biochemistry Department received SURF 2016 fellowship to conduct a research in my lab during summer 2016.
 Postdoc Joshua Widhalm served as a chair of Gordon Research Seminar (GRS) on Plant Metabolic Engineering "Priming Plant Metabolism for the New Bioeconomy", July 18-19, 2015, Waterville Valley, NH.
 Graduate student Funmilayo Adebesein served as a discussion leader at the GRS on Plant Metabolic Engineering "Priming Plant Metabolism for the New Bioeconomy", July 18-19, 2015, Waterville Valley, NH.
 Dr. Sun-Hyung Lim from Department of Agricultural Biotechnology, National Academy of Agricultural Science, Gyeonggido, Korea received a grant from the Rural Development

Administration of the Republic of Korea to visit my laboratory from March 30, 2015 through December 31, 2016.

Postdoc Joseph Lynch received USDA-NIFA Postdoctoral Fellowship Grant (\$129,585) to conduct research in my laboratory for two years (2015 – 2017) on “Elucidation of the cytosolic shikimate pathway in plants: characterization of shikimate pathway enzymes and evaluation of metabolic engineering potential”.

Postdoc Joshua R. Widhalm received 2015 Don Carlson Senior Research Award, Purdue University, Biochemistry Department, April 28, 2015.

Graduate student Laura k Henry received Beach Travel grant to participate in GRC on Plant Metabolic Engineering, 2015

Undergraduate student Scott Gentry from Biochemistry Department received SURF 2014 fellowship to conduct a research in my lab during summer 2014.

Postdoc Heejin Yoo received an award for the best postdoctoral poster presentation at the 53rd Annual Meeting of the Phytochemistry Society of North America, Raleigh, NC, August 9-13, 2014.

Postdoc Michael Gutensohn received an award for the best postdoctoral poster presentation at the HLA Poster Competition 2014, Purdue University, Stewart Center, West Lafayette, IN, May 16, 2014.

Graduate student Heejin Yoo received an award for the best graduate student poster presentation at the HLA Poster Competition 2014, Purdue University, Stewart Center, West Lafayette, IN, May 16, 2014.

Graduate student Heejin Yoo received PULSe 2014 Student Publication of the Year Award, April 2014

Graduate student Heejin Yoo received 1st place for the outstanding oral presentation at the Annual Meeting of Midwestern section of ASPB, Ohio State University, March 22-23, 2014.

Postdoc Joshua Widhalm received a grant from Life Science Research Foundation (\$171,000) to conduct research in my laboratory for three years (2012 – 2015) on “Salicylic Acid Biosynthesis in Plants: Enzyme Discovery and Exploring Pathway Dynamics” (his application is one of 25 finalists from 950 applicants).

Dr. Bao Yang from South China Botanical Garden, Chinese Academy of Sciences, Guangzhou (China) received a fellowship from Chinese Academy of Sciences to visit my laboratory from April 6, 2012 through April 5, 2013.

Graduate student Heejin Yoo received a Certificate of Excellence Award for her poster “Phenylalanine biosynthesis in petunia flowers.” The award was presented by the Office of Interdisciplinary Graduate Programs for Heejin’s first-place poster among the Integrative Plant Sciences Group of PULSe, April 4, 2012.

Graduate student Heejin Yoo received 2011 PULSe travel grant to participate the Gordon Research Conference on Plant Volatiles, Ventura, CA, January 29 - February 3, 2012.

Postdoc Hiroshi Maeda received the Eric E. Conn Young Investigator Award from the American Society of Plant Biologists, 2011.

Professor Marcos Egea-Cortines from the Technical University of Cartagena, Spain received a fellowship from Ministry of Education (Spain) to visit my laboratory from May 29th till August 31st, 2011.

Professor Julia Weiss from the Technical University of Cartagena, Spain received a fellowship from Ministry of Education (Spain) to visit my laboratory from May 29th till August 31st, 2011.

Postdoc Hiroshi Maeda received an award for the best postdoctoral poster presentation at the Annual Research Retreat in HLA Department, Purdue University, University Plaza Hotel, West Lafayette, IN, May 11, 2011.

Graduate student Antje Klempien received an award for the best graduate student oral presentation at the Annual Research Retreat in HLA Department, Purdue University, University Plaza Hotel, West Lafayette, IN, May 11, 2011.

Graduate student Joëlle Mühlemann received an award for the best graduate student poster presentation at the Annual Research Retreat in HLA Department, Purdue University, University Plaza Hotel, West Lafayette, IN, May 11, 2011.

Graduate student Joëlle Mühlemann received 2010 Purdue University Graduate Student Government travel grant and 2011 PULSe travel grant to participate the Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH, July 24-29, 2011.

Assistant professor Vinod Chhokar from the Department of Bio & Nano Technology, Guru Jambheshwar University of Science & Technology (Hisar, India) received BOYSCAST Fellowship from the Ministry of Science and Technology, Government of India and spent a year as a visiting scientist in my laboratory, 1st September 2010 - 29th August, 2011.

Graduate student Michael Long received CETA Teaching Award, April, 2010.

Undergraduate student Brett Marsh from Chemistry Department received SURF 2010 fellowship to conduct a research in my lab during summer 2010.

Graduate student Michael Long received a second prize in the oral presentation category at the 2010 Midwest ASPB Meeting, March 27, 2010.

Graduate student Antje Klempien received an award for the best poster presentation at the Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH, July 12-17, 2009.

Postdoc Hiroshi Maeda received an award for the best poster presentation at the Gordon Research Conference on Plant Metabolic Engineering, Waterville Valley, NH, July 12-17, 2009.

Graduate student Michael Long received an award for the best poster presentation at the Annual Research Retreat in HLA Department, Purdue University, J. S. Wright Center, West Lafayette, IN, May 15, 2009.

Dr. Ajit Kumar Shasany from the Central Institute of Medicinal and Aromatic Plants (CSIR, India) received a fellowship from Department of Biotechnology, Government of India and spent a year as a visiting scientist in my laboratory, 17th August 2007 - 8th August, 2008.

Postdoc Hiroshi Maeda received a fellowship from Japan Society for the Promotion of Science (JSPS) to conduct research in my laboratory for two years (April 2008 – March 2010).

Graduate student Antje Klempien received an award for the best poster presentation at the Annual Research Retreat in HLA Department, Purdue University, Ross Camp A-Frame, West Lafayette, IN, May 9, 2008.

Postdoc Dinesh Nagegowda received a Ramalingaswamy Fellowship (DBT, Government of India) and an Assistant Professor position at the Department of Plant Molecular Biology at the Indian Institute of Advanced Research, Gandhingar, India.

A mentor for Stephen Griffith, who is an Indiana University graduate student pursuing PhD in Environmental Science and has received Biosphere Atmosphere Research and Training (BART) fellowship from the University of Michigan Biological Station

Graduate student Amy Marshall-Colón was invited and participated in organizing committee and as a talk moderator in Graduate Research Seminar in Plant Metabolic Engineering held before 2007 Plant Metabolic Engineering Gordon Research Conference, Tilton, NH, July 15-20, 2007.

Graduate student Amy Marshall-Colón received a travel grant to give a talk at 2007 Gordon Research Conference on Floral and Vegetative Volatiles, Les Diablerets, Switzerland, October 7-12, 2007.

Undergraduate student Marta Panozzo received an undergraduate research scholarship of \$2000.00 from Ag Research Programs to perform research in my laboratory in the Fall 2007 – Spring 2008.

Graduate student Anthony Qualley received a travel grant to participate 2007 Gordon Research Conference on Floral and Vegetative Volatiles, Les Diablerets, Switzerland, October 7-12, 2007.

Graduate student Michael Long received a travel grant to participate 2007 Gordon Research Conference on Floral and Vegetative Volatiles, Les Diablerets, Switzerland, October 7-12, 2007.

Postdoc Irina Orlova received an award for the best poster presentation at the Annual Research Retreat in HLA Department, Purdue University, Ross Camp A-Frame, West Lafayette, IN, May 11, 2006.

Postdoc Dinesh Nagegowda received a PSNA award for the best poster presentation at the Phytochemical Society of North America 2005 Annual Meeting, “Integrative Plant Biochemistry as We Approach 2010”, La Jolla, CA, July 30 – August 3.

Graduate student Anthony Qualley received a PSNA travel grant to participate Phytochemical Society of North America 2005 Annual Meeting, “Integrative Plant Biochemistry as We Approach 2010”, La Jolla, CA, July 30 – August 3.

Graduate student Florence Negre received 2004 Purdue University travel grant to participate XIV International Antirrhinum Meeting, Banyuls s/Mer, France, May 5-9, 2004

Graduate student Florence Negre received an Honorable Mention for her outstanding performance at the 2003 Purdue University graduate student poster competition, West Lafayette, February 21, 2003

Graduate student Florence Negre received a travel grant to participate Second Gordon Research Conference on the “Biology, chemistry, and evolution of floral scent”, Ventura, CA, March 3-8, 2002

Postdoc Jennifer Boatright received a PSNA travel grant to participate “Phytochemistry in the genomics and post-genomics eras”, Oklahoma City, August 4-8, 2001

Graduate student Natasha Kolosova received an ASPP travel grant to Plant Biology 2001

Graduate student Natasha Kolosova received an award for the best graduate presentation at the 46th Annual Meeting of Midwest section of ASPP, March 17-18, 2000

Undergraduate minority student (Purdue MARC/AIM Summer Research Program) Kandis Daramola gave the best presentation at research summary report section and was invited to repeat this presentation at Banquet and Reception, July 30, 1999

University service activities:

Member of the CMA steering committee, 2016

Member of the Faculty Search Committee for Center of Molecular Agriculture (CMA), 2014-2015, 2015-2016, 2016-2017

Member of the post-graduate curriculum, awards and activities committee, Department of Biochemistry, 2014 – 2016

Member of the administrative five-year review committee for Senior Associate Dean for Research and faculty Affairs Karen Plaut, October 2015 – January 2016

Distinguished Professor Nomination Review Committee for Prof. Nick Carpita (Department of Botany and Plant Pathology) – April – September 2016

Member for Pillars of Excellence in the Life Sciences “ Cell biology and cellular dynamics”, July 2015

Responsible for 2014, 2015 and 2016 Annual Research Retreat of the Department of Biochemistry

Hosted 2016 Annual Beach Distinguished Lectures

Member of the administrative five-year review committee for Dean Jay Akridge, October 2014 – January 2015

Distinguished Professor Nomination Review Committee for Prof. Larry L. Murdock (Entomology Department) – January 2015 – April 2015

Distinguished Professor Nomination Review Committee for Prof. Arkady Plotnitsky (English Department), F. Robert Sabol (Visual and Performing Arts) and S. Laurel Weldon (Political Science), May-August 2014

Search Committee for Plant Hormone Biology Faculty Position in Botany and Plant Pathology Department, 2014
 Faculty Search Committee for Plant Biology Institute, 2014 - 2015
 Member of the Post-graduate curriculum, awards and activities committee, Department of Biochemistry, 2013 - present
 Advisory group, Department of Biochemistry, 2013- 2015
 Distinguished Professor Nomination Review Committee for Prof. Bruce Hamaker (Food Science Department), May-August 2013
 Protein Biochemistry Search Committee, Department of Biochemistry, 2012, 2013
 Epigenetics Search Committee, HLA, 2011, 2012
 Member of the Promotion and Tenure Committee to discuss research scholarship, 2012
 Mentoring of Assistant and Associate professors of College of Agriculture on grant writing and trips to funding Agencies in DC, Fall 2012
 Participant of LEAD21, 2011-2012
 Chair of Admissions Committee for PULSe program, integrative Plant Science training group 2010 - 2015
 Plant Science Initiative Committee, 2010
 ARP Director Search Committee, School of Agriculture, 2009
 Specialty Crops Production Search Committee, HLA, 2009
 2008 Agriculture Research Award Committee, School of Agriculture
 Area Promotion and Tenure Committee for School of Agriculture, 2007-2010
 Plant Biochemical & Molecular Genetics Search Committee, HLA, 2008
 Administrative member of PULSe Plant Biology training group
 Metabolite profiling Facility Steering Committee, 2005 -
 Faculty Search Committee for Floriculture position, HLA, 2006
 Undergraduate Teaching Committee, 1997-2006
 Graduate Teaching Committee, 1997-present
 Horticulture Seminar Committee, 1997-2000, chair, 2001-2003, 2011
 Faculty Search Committee for the Assistant Professor of Plant Molecular Genetics, HLA, 1999
 Chair of Annual HLA Research Retreat, March 2, 2001
 Member of Gregory Peel doctoral dissertation committee, HLA, March 25, 2005
 Member of Eric Rebeck doctoral dissertation committee, Department of Entomology, April 12, 2004
 Member of Bhaskaran Aparna master thesis committee, HLA, 2000 – 2002
 Member of Piki Saha master thesis committee, Food Science Department, February 19, 1998
 Member of mentoring committees for:
 Dr. Brian Dilkes, Assistant Professor HLA
 Dr. Wendy Peer, Assistant Professor HLA
 Dr. Michael V. Mickelbart, Assistant Professor HLA
 Dr. Burkhard Schulz, Assistant Professor HLA (Chair)
 Dr. Joe Kappock, Assistant Professor, Department of Biochemistry
 Dr. Humaira Gowher, Assistant Professor, Department of Biochemistry
 Dr. Anjali S Iyer-Pascuzzi, Assistant Professor, Department of Botany and Plant Pathology
 Dr. Jeremy R. Lohman, Assistant Professor, Department of Biochemistry
 Dr. Chunhua Zhang, Assistant Professor, Department of Botany and Plant Pathology
 Dr. Joshua Widhalm, Assistant Professor HLA
 Committee member for Nickolas Anderson, Ph.D. student, Department of Biochemistry, 2009-2014
 Committee member for Aurelie Chuong, Ph.D. student, Department of Biochemistry, 2010 - May 2015
 Committee member for Macarena Silva Guzman, Ph.D. student, HLA, 2011 – May 2015

Member for Ying Wang doctoral dissertation committee, Department of Forestry and Natural Resources, November 25, 2013
 Committee member for Marwa El Hindawy, Ph.D. student, Department of Biochemistry, 2012
 Committee member for Elizabeth Rowen, MS student, Entomology Department, 2013- April 2015
 Committee member for Peng Wang, Ph.D. student, PULSe, Department of Biochemistry, 2013
 Committee member for Longyun Guo, Ph.D. student, Chemical Engineering Department, 2013
 Committee member for Fabiola Muro-Villanueva, Ph.D. student, PULSe, Department of Biochemistry, 2015
 Committee member for Rohit Jaini, Ph.D. student, Chemical Engineering Department, 2014

Preliminary Examination Committee member:

Xiangying (Candy) Mao	2016
Xiangying (Candy) Mao	2015
Fabiola Muro-Villanueva (chair)	2015
Rohit Jaini	2015
Longyun Guo (chair)	2014
Jingqun Ma	2014
Siwen Wang	2014
Peng Wang (chair)	2013
Macarena Silva Guzman	2013
Ying Wang	2012
Aurelie Chuong	2011
Nickolas Anderson	2010
Christian Hans	2010
Anthony Qualley	2008
Madhuvanthi Ramaiah	2007
Savithri Nambeesan	2007
Amy Marshall-Colón	2007
Erik Rebek	2002
Cicero Deschamps	2001
Gregory Peel	2001
Joshua Blakeslee	2001
Xia Li (chair)	2000
Jeremy Kapteyn (chair)	2000
Winthrop Phippen	1997
Roberto Fontes Vieira	1997

Community outreach:

Provided assistance on a new museum-quality traveling exhibition about fragrance and perfume created by Longwood Gardens (www.longwoodgardens.org), 2009.

Provided expression vectors with BAMT, SAMT and BSMT genes for undergraduate iGEM (international genetically engineered machines) research project at MIT “Eau d’e coli igem 2006: mit”

Invited speaker at:

North American Gladiolus Convention, January 16, 2006, Holiday Inn Select, Indianapolis, IN. “Will flowers smell again?”

Indiana Beekeepers’ Association, “Floral nectars: Essences for Honey Bee Foragers”. October 21, 2000, Purdue University, West Lafayette, IN

Agricultural biotechnology teachers symposium, “Floral scent production research” October 26-27, 2000, Purdue University, West Lafayette, IN

Master Gardeners, "Why flowers lost their scent?" October 5, 1999, Purdue University, West Lafayette, IN
Hoosier Prairie Herb Society August Meeting, August 17, 1999, Tippecanoe County Public Library, Lafayette, IN

Popular press publications about research going on in my laboratory:

The Purdue Exponent – 7/10/98 – Researcher helps restore roses' scent
Agricultures Magazine – Fall 1998 – Flower Power
Journal and Courier – 3/14/99 – The nose knows: Flowers used to have more scent
The Purdue Exponent – 4/30/99 – Researcher pioneers study of floral scent
Gannett News Service - 5/25/99 - Where has all the flower smell gone?
Newsweek – 6/7/99 – Making flowers make scent
Purdue – 6/8/99 – Dudareva: Scent of flowers is disappearing
Sunday London Times - 6/13/99 - Flower scents by design
Washington Times - 6/13/99 - Scent lost as breeding makes flowers last longer
Calgary (Ontario) Herald - 6/14/99 - Stop . . . and smell the (designer) roses
Los Angeles Times, 1999
Indianapolis Star, 1999
Scientific American – 9/1999, vol 281, issue 3, p.38 – Not making scent
Sunday Express (UK) –9/5/99 –Why the blooms that have no smell are losers by a nose
Toledo Blade News, 1999
Health Newsletter by Ruth Winter, 12/6/99 – Where have all the flowers gone?
LEAF, Land, Environment, Agriculture and Food at Purdue, vol.4, issue 2, 1999 – Student's career path changes course
Washington Monthly, 4/1/00 – Tilting at windmills
Sunday Gazette Mail (W.Va), 4/23/00 – Floral scents
USA Today 4/00 – Scientist wants to find out what went sour with flowers
U.S. News and World Report, 8/14/00 – Of luscious lawns and lavender lilies
Chicago Tribune, 2/13/00 – Missing something? (Sweet smell of flowers)
Milwaukee Journal, 2000
New Scientist, 2/12/00 – Aroma therapy, p.30-34
Indianapolis Star 7/19/00 – Makes scents
USA Today Magazine, 6/00, vol. 128, issue 2661, p.15 – Why have flowers lost their scent?
Ottawa Citizen Newspaper, 7/12/00
Discover 2000, vol. 21, N 10, p. 17 – Odor engineers.
GPN (greenhouse product news) 9/00- Can growers tweak flower fragrances?
Journal and Courier 12/31/00
Science 2001, vol. 291, p. 977 – Bring back smell
FlowerTECH 2001, vol. 4/no.2, p. 11 – Similar biochemical mechanisms lead to attractive scents
DN. LordagSondag (Stockholm), 6/30/01, p.17
Science 2001, vol. 293, p. 763-765 – Efficient Fragrance
Science 2002, vol.296, pp. 2327-2329 – Something to sniff at: unbottling floral scent.
The Exponent – 6/28/2002 – Professor studies loss of floral scent.
Science News 2002, vol. 162, pp. 56-58 – Making scents of flowers.
The Daily Telegraph 7/10/2002, p.16 – On the scent of designer blooms.
The Exponent – 4/16/2003 - Molecular biologist enjoys taking time to smell roses, p.5
Flower News 2003, vol.57, N 17 – AFE fragrance research revealed.
Scientific American, February 2004, vol.290, issue 2, p. 26 – Aroma Therapy
German magazine "Bild der wissenschaft", 2004
The Exponent – 2/15/2005 – Thousands of plant compounds form in single center.
Science News – September 2005, vol 168, N 13, p. 202-204 – Save the flowers.
Purdue Agricultures Magazine, Fall 2005, pp19-21 - Pioneers progress. Women faculty forge pathways in agriculture.

Newhouse News Service submitted to 40 newspapers across North America – Science aims to restore what flowers have lost – fragrance.
Plants & Gardens News - Summer 2005, vol. 20, No 2 - Perfume for pollinators—using fragrant plants to lure insects and other critters into the garden.
Science Daily News, June 13, 2006 – Scientists seek source of spicy smells.
NRI Knowledge for tomorrow’s solution, Cover Stories: Major scientific publications featuring NRI-funded research, 2007, No. 4 – covered our publication in Science.
“Roses are blue, violets are red”, The Economist, February 10, 2007, pp. 83-84.
Amy Stewart “Flower Confidential”, 2007, pp. 52-54 (#31 on the New York Times Bestseller list).
“Restoring the lost scent of flowers”, Destination Purdue, 2007, vol 12, No. 2, p.1.
USA Weekend Magazine, 2007.
The Exponent – 4/15/2010 – Professor wins award for scent research.
Purdue Agriculture News – 9/18/2012 – Scientists uncover last steps for benzoic acid creation in plants.
Purdue Agriculture News – 9/19/2012 – Purdue gets \$5.2 million to develop new biofuel process.
Research performed in the lab was highlighted in 2014 Purdue University Annual Research Report, “Bringing aroma and flavor back to tomatoes”, 2015, pp. 2-3.
Purdue Today “Biology, not just physics, controls release of scent compounds from plants”, 8/6/2015

Floral scent research conducted in my laboratory has also been the subject of numerous radio and television stories and interviews. These include:
MIT project was covered in radio presentation, 2006
BBC: How does your garden grow? (27 May 2003)
CNN (January, February 2001)
WLFI-TV, Lafayette News (6/26/00)
Science Update, Flower Scents (August 2000)
WLFI-TV, Lafayette News (1999)
BBC (1999)
CBC News (1999)
Deutschlandfunk radio station (1999)
ABC News (1999)
Science Update (1999)
Consumer Line Radio, Minneapolis (1999)
Purdue radio station (1999)