

CURRICULUM VITAE

Name	David Crich
Date of Birth	July 21, 1959
Nationality	British/Naturalized US citizen
Professional Address	Department of Chemistry Wayne State University 5101 Cass Avenue Detroit, MI 48202 DCrich@chem.wayne.edu , Tel.: 317 577 6203
University Ed.	BSc 1981 Chemistry with French, University of Surrey, England. D ès Sc 1984, Supervisor DHR Barton Université de Paris XI, Orsay, France
Post-Doctoral	1984-1985 DHR Barton and P Potier, Institut de Chimie des Substances Naturelles, Centre National de la Recherche Scientifique Gif sur Yvette, France
Appointments 1985-1990	Lecturer in Chemistry The Christopher Ingold Laboratories, Department of Chemistry University College London
1990-1994	Associate Professor of Chemistry University of Illinois at Chicago

1994-July 1999	Professor of Chemistry University of Illinois at Chicago
1999-2007	Distinguished Professor of Organic Chemistry University of Illinois at Chicago
2001-2007	Member, University of Illinois Cancer Center
2007-2009	A. Paul and Carol C. Schaap Professor of Organic Chemistry, Wayne State University, Detroit, MI
2009-2011	Directeur de l'ICSN, CNRS, Gif-sur-Yvette, France
2011-	A. Paul and Carol C. Schaap Professor of Organic Chemistry, Wayne State University, Detroit, MI

Monographs and Edited Volumes

Best Synthetic Methods: Free Radicals Chain Reactions in Organic Synthesis, Academic Press, London, 1991 (with Prof. W. B. Motherwell).

Handbook of Reagents for Organic Synthesis; Reagents for Glycoside, Nucleotide and Peptide Synthesis, Wiley, Chichester, 2005, (Editor).

Handbook of Reagents for Organic Synthesis; Reagents for Radical and Radical Ion Chemistry, Wiley, Chichester, 2008, (Editor).

Encyclopedia of Reagents for Organic Synthesis, 2009, 2nd Edition, Wiley, Chichester, Editors, L. A. Paquette, D. Crich, P. L. Fuchs, G. Molander

Societies

Member of the American Chemical Society

Honors

1989, Academie des Sciences/Royal Society Franco-British Prize.

1990, Corday-Morgan Medal of Royal Society of Chemistry.

1992, January, Visiting Professor, Université d'Aix-Marseille, France.

1992-1995, University Scholar of the University of Illinois.

1994-1996, Fellow of the A. P. Sloan Foundation.

1994, Royal Society of Chemistry, Carbohydrate Chemistry Award.

2002-2009, Executive Editor, Electronic Encyclopedia of Reagents for Organic Synthesis.

2006, September, Visiting Professor, Université Pierre et Marie Curie, Paris.

2006, December, Fellow of the Japan Society for the Promotion of Science

(Osaka City University).

2007, Honorary Doctor of Science, University of Derby, UK.

2008, Melville L Wolfram Award (ACS Carbohydrate Division).

2009-2015, Editor in Chief, Electronic Encyclopedia of Reagents for Organic Synthesis, Wiley.

2011, ACS, Arthur C Cope Senior Scholar.

2011, European Carbohydrate Society, Emil Fischer Award.

2012-2013, Editor (Natural Products), Elsevier, Athena Chemistry, Molecular Sciences and Chemical Engineering Module.

2014, Haworth Memorial Lecturer and Medal, Royal Society of Chemistry

2017, C. S. Hudson Award (ACS Carbohydrate Division)

2017, Elected Member Wayne State Academy of Scholars

2018, Whistler Prize, International Carbohydrate Organization

Service

1995, 1998, 1999, 2006, 2008, 2015 ad-hoc Member of BNP, MCHA, SBCA Study Sections, NIH.

Dec 2000, Organizer Symposium on Free Radical Chemistry, Pacifichem, Honolulu.

2000-2004, Permanent Member of Med Chem A Study Section, NIH.

2001, vice-Chair, Gordon Research Conference on Free Radicals

2003, Chair, Gordon Research Conference on Free Radicals

2005. Expert Witness, United States International Trade Commission (Rubber Chemicals).

December 2005, Organizer Symposium on Free Radical Chemistry, Pacifichem, Honolulu.

Jan 13, 2007, Member Univ. Wisconsin Milwaukee, Research Growth Initiative Panel.

Jan 26, 2008, Member Univ. Wisconsin Milwaukee, Research Growth Initiative Panel.

2008. Expert Witness, United States International Trade Commission (Artificial Sweeteners).

2009- Editorial Advisory Board of Carbohydrate Research.

Sept 22-24, 2010, Member Quality Assurance Netherlands Evaluation Committee, Leiden Institute of Chemistry, Leiden University, Netherlands.

Oct 5-6, 2012, Co-organiser. 8th Midwest Carbohydrate Symposium, Wayne State Univ, Detroit, MI.

2015- Editorial Advisory Board, Organic Letters.

Nov 20, 2015. Chair, Science Foundation of Ireland, Site Visit Committee, National Univ Ireland, Galway.

2016-2020, Permanent Member of the SBCA Study Section, NIH.

June 2017, Science Foundation of Ireland Panel Member, Dublin

2016-2018, Member, ACS Carbohydrate Division Executive Committee

2016-2019, Member, ACS Carbohydrate Division Awards Committee

2018, Member, International Carbohydrate Organization, Young Investigator Award Committee

2018-2019, Member, Program Committee, Eurocarb 2019, Leiden.

2018, Member, European Carbohydrate Organization, Emil Fischer Award Committee

Entrepreneurial

2015, Cofounder and Board Member, Juvabis AG, Furigen, CH.

David Crich

Current Funding

Methods and Mechanisms in Carbohydrate Chemistry

R01 GM062160; David Crich PI, 04/01/17-02/28/21; ~\$200,000 direct costs/yr.

Shaping Next Generation Aminoglycoside Antibiotics for Treatment of Multidrug-Resistant Diseases

R01 AI123352; David Crich PI, 04/06/16-03/31/20; ~\$490,898 direct costs/yr of which \$274,486 to Crich lab.

Novel Methods and Technologies for Synthesis of Biomedically Relevant Carbohydrates

U01GM125271; David Crich PI, Peter Andreana MPI (Univ Toledo), 08/01/17-07/31/21; ~\$480,000 direct costs/yr of which ~\$230,00 to Crich lab.

Aminoglycoside Drug Development. Swiss National Science Foundation. David Crich, co-PI (PI: E. C. Böttger, Univ Zurich), 03/01/2017-02/28/2020; ~\$35,000 direct costs/year to Crich lab.

Pending

Entirely Carbohydrate Recognizing mAbs as Tools for Targeting Bacterial Oligomers

U01CA231088; David Crich MPI, Peter Andreana PI (Univ Toledo), 08/01/18-07/31/21; \$320,000 direct costs/yr of which \$160,000 to Crich lab (Impact score 35).

Equipment Supplement to Methods and Mechanisms in Carbohydrate Chemistry

R01 GM062160, David Crich, PI, 09/01/18-02/28/19; \$200,000 toward purchase of a mass spectrometer.

PhD Graduates from the Crich Group

	Name	Year of Graduation	Postdoc Advisor and Institution	Present Position and Company
1 ^a	S. M. Fortt	1989	Magnus, Texas; Gallagher, Bath	Patent Attorney, UK
2 ^a	J. W. Davies	1989	SmithKline Beecham	Scientist, Novartis Inst. for Medical Res.
3 ^a	L. B. L. Lim	1990	None	Faculty, Univ. of Brunei
4 ^a	C. O. Chan	1991	None	Scientist, Bush Boake Allen
5 ^a	D. Batty	1992	Langlois, Paris XI	Scientist, Chiroscience
6 ^a	R. Ellis	1992	None	High School Teacher
7 ^a	R. Gajee	1993	Loyola Univ Medical School	-
8 ^b	M. Bruncko	1994	Sharpless, Scripps	Scientist, Abbott Labs
9 ^b	F. Hermann	1995	Hoffmann La Roche	Manager, Pfizer, Groton
10 ^b	J. Brunckova	1995	Perrin, UCSD	Scientist, Abbott Labs
11 ^b	H. Yuan	1995	Vedejs, UW Madison	Consultant, Thousand Oaks, CA
12 ^b	S. Natarajan	1996	Nicolaou, Scripps	Founder, Kemxtree, Bombay
13 ^b	G. F. Filzen	1996	Curran, Pittsburgh	Scientist, Teva Pharmaceuticals
14 ^b	R. Samy	1996	Toogood, U Michigan	FDA, Washington DC
15 ^b	Q. Yao	1996	Still, Columbia	CSO, Sphinx Scientific, Tianjin
16 ^b	J.-T. Hwang	1997	Greenberg, CSU	LG Chemicals., Daejoen, Korea
17 ^b	S. Sun	1997	None	Cofounder Vimgreen Pharma, Hangzhou.
18 ^c	D. Stien	1997	Weinreb, Penn State	Group leader, ICSN, Gif-sur-Yvette, France
19 ^b	A. Pavlovic	1998	Prestwich, U. Utah	Scientist, Arizona Chemical Co, Savannah, GA
20 ^b	Z. Dai	1999	Meltzer, Organix Inc	
21 ^b	X. Hao	1999	None	Founder, Aim Biosciences, San Francisco
22 ^b	J. Cui ^d	2000	Evans, Indiana U	CSO, Waterstone Pharmaceuticals, Wuhan
23 ^b	X. Huang	2000	Nicolaou, Scripps	Scientist, Merck, Kenilworth
24 ^b	G. Barba	2000	Murphy, SRI	-

25 ^b	H. Li	2001	Theodorakis, UCSD	Scientist, Merck, Kenilworth
26 ^b	V. Dudkin	2001	Danishefsky, MSKCC	Scientist, Johnson and Johnson, Spring House, PA
27 ^b	J. Mataka	2002	none	Lecturer, N. Eastern Illinois Univ
28 ^b	S. Neelamkavil	2002	Hirschman, Penn	Scientist, Merck, Kenilworth
29 ^b	Q. Yao	2004	Wang, Ohio State Univ	Founder, Sphinx Scientific Lab. Corp, Tianjin, China
30 ^b	J. Picione	2004	Cossy, Paris	Assoc Prof, Daytona Beach CC
31 ^b	K. Ranganathan	2004	Danishefsky, MSKCC	Scientist, Celgene
32 ^b	D.-H. Suk	2004	Patterson, Univ. Minn. Center for Drug Design	Manager, Korea University, Green Manufacturing Res Center
33 ^b	P. Jayalath	2006	Gervay-Hague, UC Davis Beal, UC Davis	California Dept of Public Health
34 ^b	M. Patel	2007	none	Manager, Chemical Standards, Agilent, Wilmington, DE
35 ^b	Y. Zou	2007	Jun Yin, Univ Chicago	Scientist, Syncem Inc, Chicago
36 ^b	D. Grant	2007	Cosford, Burnham Inst	Director, Early Dev Medicine Lead. Novartis, NY
37 ^b	A. Banerjee	2007	Wipf, Pittsburgh	Head of Med Chem, Amgen Bangalore, India
38 ^b	V. Krishnamurthy	2007	Lee, Princeton Chaikoff, Emory, Chaikoff, HMS	Senior Scientist, Astra Zeneca, Cambridge, MA
39 ^b	W. Li	2007	Kishi, Harvard	Founder Samuel Pharma, Jinan.
40 ^b	A. A. Bowers	2007	Williams, Colorado State, Walsh, HMS	Asst Prof, Univ. North Carolina, Chapel Hill.
41 ^b	O. Vinogradova	2007	none	Patent Attorney
42 ^b	H. Xu	2007	UW Madison	Assoc. Prof. Changzhou Univ
43 ^e	B. Wu	2009	Wang, Ohio State Univ	Scientist, Asymchem, Tianjin
44 ^e	L. Li	2009	Vedejs, Univ Michigan	Post doc, Univ Colorado Anschutz Medical Campus (LaBarbera)
45 ^e	F. Cai	2009	Ready, UT Southwestern	Assoc Prof, Shangdong Univ,

				Jinan, China
46 ^e	F. Yang	2009	Kohler, UT Southwestern	-
47 ^e	V. Subramanian	2010	Thompson, Scripps, Fla and U Mass Med School	Senior Scientist, Sigma-Aldrich, Natick, MA
48 ^e	K. Sana	2010	Liebeskind, Emory	Principal Scientist, Dupont Crop Protection, Hyderabad.
49 ^f	S. Peixoto	2010	Pfaltz, Univ Basel	Regulatory Compliance Officer JYTA Labs, Carros, France
50 ^f	I. Sinigaglia	2010	-	Scientist, Robertet SA, Grasse, France
51 ^e	I. Sharma	2011	Tan, MSKCC	Asst Prof, Univ Oklahoma
52 ^e	M. Sardar	2011	Chaikoff, HMS	Scientist, BlackThorn Therapeutics, San Francisco
53 ^f	C. Ouairy	2011	Overkleeft, Leiden Univ	Research Chemist, Syncom, Groningen, Holland
54 ^f	M. Huang	2012	Boons, Univ Georgia, Flitsch, Manchester U	Postdoc, Flitsch Lab, Manchester Univ, UK
55 ^f	A. Noel	2012	Woolley, Texas A&M	Scientist, Almac, Northern Ireland
56 ^e	C. Navuluri	2012	Charette, Univ Montreal	Senior Scientist, Alphora Research, Inc, Toronto
57 ^e	M. Moumé-Pymbock	2012	-	-
58 ^f	A. Ferry	2013	Glorius, Univ Münster	Maitre de Conferences, Univ Cergy-Pontoise (Brigaud)
59 ^e	A. Mandhapat	2016	Chaikoff, HMS	Postdoc, Chaikoff lab, HMS
60 ^e	A. Sonousi	2017	None	Assist Prof, Cairo Univ, Egypt
61 ^e	Girish C Sati	2017	Montgomery, UoM	Postdoc, Montgomery Lab, Ann Arbor
62 ^e	Peng Wen	2018	Tan, Wisconsin Madison, Pharmacy	Postdoc, Tan Lab, Wisconsin

a: Graduated from University College London

b: Graduated from University of Illinois at Chicago

c: Graduated from Univ. Aix-Marseille (joint student with Prof Bertrand in Marseille)

d: Joint student with M. E. Johnson, UIC Dept of Medicinal Chemistry

e: Graduated from Wayne State University

f: Graduated from Univ Paris-Sud XI

Current Crich Group Students

	Name	Started	Previous Degree and Institution
1	P. Adero	2012	MS, Youngstown State Univ
2	H. Amarasekara	2012	BS, Univ Peradeniya, Sri Lanka
3	S. Dhanju	2013	MS, Tribhuban Univ
4	B. Dhakal	2013	MS, Osmania Univ
5	G. Yang	2013	MS, Beijing Univ.
6	X. Liao	2013	MS, Nankai Univ
7	M. Pirrone	2014	BS, Lawrence Tech Univ
8	P. Ngoje	2015	MS, Youngstown State Univ
9	M. Hawsawi	2015	MS, Rochester Inst Technology
10	N. Kondasinghe	2015	MS, Sri Lanka
11	J. Quirke	2016	BS, Oberlin College
12	T. McMillan	2016	BS, Saginaw Valley State Univ
13	S. J. S. Arachchige	2016	BS, Univ Peradeniya, Sri Lanka
14	M. R. Rukshana	2017	BS, Colombo Univ
15	E. Onobun	2017	MS, East Tennessee State Univ
16	C. .Kondor	2017	BS, Albion College
17	A.Samarbakhsh	2017	BS, College of Saint Rose

Past Postdocs in the Crich Group

	Name	Period	PhD Advisor and Institution	Present Position and Company
1	T. J. Ritchie	1986-89	Queen Mary College, London	Scientist, Novartis Inst. Med. Res.
2	C. Chen	1990-92	Huang, Shanghai Inst. Org. Chem.	Scientist, Neurocrine Bioscience
3	J. Z. Zhang	1992-1993	Mock, UIC	FDA, Washington DC
4	X.-Y. Jiao	1994-1996	Beijing Med. U.	Scientist, Amgen, San Francisco
5.	J. Escalante	1995	Juaristi, Politec. Inst., Mexico	Faculty, U. Cuernavaca
6	X.-S. Mo	1995-1998	Huang, Shanghai Inst. Org. Chem.	Scientist, DeCode Genetics.
7	L. Enache	1997	Moriarty, UIC	Scientist, DeCode Genetics
8	M. Lucas	1997-1998	Schiesser, Melbourne, Aus	Patent Lawyer.
9	S. Gastaldi	1998	Bertrand, Marseille, France	Research director, CNRS, Marseille, France
10	A. Lund	1999	Page, Liverpool	Scientist, Carbogen-Amcis, UK

11	S. Combes	1999	Finet, Marseille	Lecturer, Univ Marseille
12	W.-H. Huang	1999-2001	Huang, Shanghai Inst. Org. Chem.	Professor, Tianjin University
13	M. Smith	2000-2002	Stoodley, UMIST	Head, Med Chem Knowledge Center, Stanford Univ, Chem-H Dept; Co-Founder, Riboscience LLC, Palo Alto
14	M. Sannigrahi	2000-2002	Clive, U. Alberta	Patent attorney.
15	S. Rumthao	2001-2003	Pandey, Pune	Scientist, Chem Impex
16	A. U. Vinod	2001-2004	Nair, Trivandrum	Scientist, Almac, UK
17	M. de la Morán	2002-2003	Cruz, UNAM	-
18	T. Hutton	2003-2005	Proctor, Glasgow	IP Officer, Purdue
19	F. Brebion	2004-2006	Malacria, Paris	Scientist, Serano, Geneva
20	M. Karatholuvil	2006-2008	Fuchs, Purdue	Scientist, Biocon, India
21	T. Hu	2006-2008	Li, SIOC	Co-founder, Saccharid Biotech, Suzhou, PRC
22	M. Li	2006-2008	Yu, SIOC	Professor, Ocean Univ, China
23	S. Picard	2008-2010	Bashiardes, Poitiers, France	Postdoc, Univ Bordeaux, Blanchard-Desce lab
24	Q. Cai	2009	Bashiardes, Poitiers, France	-
24	S. Aubry	2009-2010	Lemaire, Lyon, Kishi, Harvard	Chemical Industry, Lyon, France
25	K. Sasaki	2007-2011	Toshima, Keio University	Assoc Prof, Toho University, Japa
26	I. Cumpstey	2010-2011	Oxford Univ, Stockholm Univ	-
27	M. Thomas	2011-2011	Gesson, Poitiers, Furstner, Mulheim	Lecturer, Univ Poitiers
28	Gaelle Malik	2010-2012	Quideau, Bordeaux	Consultant, Meetsys
29	Sujit Mondal	2011-2013	Ghosh, IACS, Calcutta	Scientist, Indian Oil Corp, India
30	Rajender Salla Reddy	2011-2013	Pandey, NCL, Pune	Scientist, Halliburton Technology Center, Pune, India
31	Fabien Fécourt	2012-2013	Pale, Univ Strasbourg	-
32	P. Kancharla	2011-2013	Vankar, IIT Kanpur	Asst Prof, IIT Guwahati, India
33	T. Furukawa	2011-2013	Nishimura, Hokkaido	Assoc Prof, Hokkaido Univ, School of Medicine, Jpn
34	T. Matsushita	2012-2015	Nishimura, Hokkaido	Assist Prof, Saitama Univ, Jpn.
35	S. Buda	2014-2015	Mlynarski, Cracow	Assist Prof, Jagiellonian Univ, Cracow, Poland
36	O. Popik	2015-2016	Mlynarski, Warsaw	Postdoc, Chmielewski, Warsaw

37	S. Dharuma	2014-2016	Vankar, IIT Kanour	Postdoc, Lee, St Judes Childrens, Hospital, Memphis
38	T, Kato	2012-2017	Machinami, Meisei Univ	Scientist, Cyclodextrin Labs, Jpn

Current Postdocs in the Crich Group

	Name	Started	PhD Advisor and Institution
1	Vikram Sarpe	2016	Kulkarni, IIT Bombay
2	Parasuraman Rajasekaran	2017	Vankar, IIT, Kanpur
3	Govind P. Singh	2017	Fairbanks, Univ Canterbury

Sabbaticals and Visiting Students, etc

	Name	Position	Period	Home Institution
1	J. Sandoval-Ramirez	Sabbatical	1992 and 1994	U. Puebla, Mexico
2	L. B. L. Lim	Sabbatical	1992 and 1996	U. Brunei
3	A. Ortiz	Visiting student	1995-1996	Politec. Inst., Mexico
4	D. Stien	Joint-PhD	1995	U. Marseille
5	F. Recupero	Visiting student	1997	Politecnico di Milano
6	F. Sartillo-Piscil	Visiting student	2000	U. Puebla, Mexico
7	M. de la Mora	Visiting student	2000	Instituto de Quimica, UNAM
8	C. Marcus Pedersen	Visiting student	2006	Aarhus Univ, Denmark
9	C. Ortiz-Nava	Visiting student	2008	Universidad Autónoma del Estado de Morelos
10	J. Bjerre	Visiting Student	2009	Aarhus Univ, Denmark
11	D. Lachkar	Visiting Student (M2)	2011	Univ Paris Sud 11
12	D. Mukherjee	Sabbatical	2011-2012	Indian Inst Integrative Medicine, Jammu
13	G. Garivet	Visiting student (M2)	2013	Univ Bordeaux.
14	S. Abdullayev	Visiting Student (M2)	2016	Univ Lyon I
15	N. Wickramasinghe	Sabbatical	2017-2018	Univ Peradeniya, Sri Lanka
16	R. Ogasahara	Visiting Student (MS)	2017-2018	Keio Univ, Japan

David Crich, Invited and Plenary Lectures

1985: University of Surry, UK (11/25).

1986: Roche Products Ltd, Welwyn, UK (7/1); ICI Pharmaceuticals, Macclesfield, UK (7/22); ICI Plant Protection, Jealots Hill, UK (8/6); University College London (10/15); Imperial College London (11/11°).

1987: Queen Mary College London (1/21); ICI Fine Chemicals, Manchester, UK (2/25); European Symposium on Bioorganic Chemistry, Gregynog, Wales (5/16); Parke Research Unit, Cambridge, UK (7/9); University of Illinois at Chicago (11/3); Sheffield University, UK (11/25); Manchester University, UK (12/9).

1988: NATO Workshop on Free Radicals in Synthesis, Bardolino, Italy (5/12); European Symposium on Bioorganic Chemistry, Gregynog, Wales (5/21); Universidad Autonoma de México (8/3); Instituto Nacional Politecnico, Mexico City (8/5); Quest International, Ashford, UK (9/12); RSC Heterocycles Meeting, Dagenham, UK (10/20); University of East Anglia, Norwich, UK (10/26).

1989: RSC Anglia Meeting, Welwyn, UK (1/25); Glaxo Group Research, Ware, UK (2/22); Kings College London (2/26); Nottingham University, UK (3/1); Society for Chemical Industry, Fine Chemicals Group, London, UK (3/28); Loughborough University, Loughborough, UK (4/20); Durham, Durham, UK (4/27); GRC on Free Radical Chemistry, New London, NH (7/27); RSC Autumn Meeting, Loughborough, UK (9/27); Liverpool University, UK (11/22); Ottawa-Carlton Research Institute, Ottawa, Canada (11/28); Royal Holloway and Bedford New College, Egham, UK (11/29); Birmingham University, UK (12/5).

1990: University of Illinois at Urbana Champaign (1/11); Schering Agrochemicals, Saffron Walden, UK (1/23); Warwick University, Coventry, UK (1/26); Oxford University, UK, (2/15); RSC Carbohydrates Meeting, Cardiff, Wales (3/25); Smith Kline Beecham Research, Welwyn, UK (4/25); Ecole Normale Supérieure, Paris, France (5/9); Université de Paris-Sud, Orsay, France (5/11); ICSN, Gif-sur-Yvette, France (5/16); Université Louis Pasteur, Strasbourg, France (5/22); Universität Basel, Basel, CH (5/23); Universität Zurich, Zurich, CH (5/25); Université d'Aix-Marseille III, Marseille, France (5/28); Université de Bordeaux 1, Talence, France (5/31); Glaxo Group Research, Greenford, UK (6/6); Bath University, Bath, UK (6/14).

1991: Parke Davis Pharmaceutical Research, Ann Arbor, MI (3/5); Indianapolis University-Purdue University at Indianapolis (3/13); University of Alberta at Edmonton, Canada (4/18); 23rd NSF Workshop on Organic Synthesis and Natural Product Chemistry, Squam Lake, NH (7/11); 13rd International Congress on Heterocyclic Chemistry, Corvallis, OR (8/12); University of Michigan, Ann Arbor, MI (10/16); Texas A & M University, College Station, TX (10/31); University of Cincinnati, OH (11/14); Miami University, Oxford, OH (11/15).

1992: Université d'Aix-Marseille III, Marseille, France (1/7, 28 & 30); Smith Kline Beecham, Brockham Park, UK (1/15); RSC, London (1/16); Université de Reims, France (2/4); Université de Paris Sud, Orsay, France (2/5); Université de Pierre et Marie Curie, Paris, France (2/6); GD Searle, Skokie, IL (4/22); University College London (12/16).

1993: Northern Illinois University, DeKalb, IL (4/12); Organic Synthesis, Perspectives on 21st Century, US Virgin Islands (6/9); Illinois Institute of Technology, Chicago, IL (9/29); Wayne State University,

Detroit, MI (11/10); University of Alberta at Edmonton, Canada (12/9); Université d'Aix-Marseille III, Marseille, France (12/16).

1994: University of Delaware, Newark, DE (2/11); University of Wisconsin-Milwaukee (3/21); Duke University, Durham, NC (4/28); University of Virginia, Charlottesville, VA (4/29); Northwestern University, Evanston, IL (9/22); Chiba University, Chiba, Japan (12/9); Academia Sinica – Beijing Inst of Chemistry, Beijing, China (12/19); Academia Sinica – Shanghai Inst of Organic Chemistry, Shanghai, China (12/23 & 26).

1995: Universidad Autonoma de México, Mexico City (1/30); Instituto Nacional Politecnico, Mexico City (2/1); Universidad Autonoma de Puebla, Puebla, Mexico (2/2); Illinois Institute of Technology (4/12); University of Chicago (8/28); Abbott Labs, CAPD, North Chicago, IL (9/18); Université de Bordeaux I, Talence, France (11/7); Université d'Aix-Marseille III, Marseille, France (11/9); Ecole Normale Supérieure, Paris (11/14); University of Missouri at Columbia, MO (11/17); Beckwith Symposium, Pacificchem, Honolulu, Hawaii (12/5).

1996: University of Illinois at Chicago, Medicinal Chemistry (1/19); Beckwith Symposium, Australian National University, Canberra, Australia (2/5); Hunter College, CUNY, NY, NY (3/8); University of Manchester Institute of Science and Technology, Manchester, UK (3/12); Université Claude Bernard, Lyon 1, Lyon, France (7/1); 32nd Therapeutic Chemistry Meeting, Marseille, France (7/5); Groupe d'Etudes de Chimie Organique, La Londe, France (8/30).

1997: Yale University, Newhaven, CT (2/19); RSC Carbohydrates Meeting, Galway, Ireland (3/25); Iowa State University, Ames, IA (5/2); ACS Great Lakes Meeting, Chicago, IL (5/28); GRC Free Radical Reactions, Plymouth, NH (7/14); Centre Jacques Cartier, CPE, Lyon, France (12/10).

1998: Perspectives on Chemistry of 21st Century, Kouru Atoll, Maldive Islands (2/24); Colorado State University, Fort Collins, CO (4/6); University of Utah, Salt Lake City (4/7); University of Sherbrooke, Sherbrooke, Canada (4/29); Stanford University, Stanford, CA (5/20); University College London (9/2); University of Minnesota, Minneapolis, MN (9/25); Merck Frosst Center for Therapeutic Research, Montréal, Canada (10/6); Rochester University, Rochester, NY (10/16).

1999: Wayne State University, Detroit, MI (1/20); University of Illinois at Chicago, Medicinal Chemistry (1/22); Medichem Research, Lemont, IL (1/29); University of California at Irvine (2/3); Western Michigan University, Kalamazoo, MI (2/15); Texas A & M University, College Station, TX (3/4); Princeton University, Princeton, NJ (3/11); Ohio State University (4/1); Vanderbilt University, Nashville, TN (5/5); Georgia Tech, Atlanta, GA (5/13); University of Alberta at Edmonton, Canada (5/17); Merck Frosst Center for Therapeutic research, Montréal, Canada (5/18); Canadian Chemical Society Meeting, Toronto, Canada (6/1); GRC Carbohydrates Meeting, Tilton, NH (6/20); Pharmacia-Upjohn, Kalamazoo, MI (8/4); University of California at San Diego, CA (10/4); University of Kansas, Lawrence, KA (10/29); University of Chicago (11/15).

2000: University of Alabama at Tuscaloosa, AL (2/3); Indiana University, Bloomington, IN (2/21); Oregon State University, Corvallis, OR (2/28); Université d'Orléans, Orléans, France (3/20); Université D'Aix-Marseille III, Marseille, France (3/23); Gomberg Symposium, Ann Arbor, MI (6/29); GRC Organic Reactions and Processes, Bristol, RI (7/18); Symyx Technologies, Santa Clara, CA (8/16); Pfizer Central Research, Groton, CT (9/14); Northwestern University, Evanston, IL (9/28); Centre Jacques Cartier,

Montréal, Canada (10/5); Manchester Institute of Science and Technology, Manchester, UK (10/31); Northern Illinois University, DeKalb IL (11/6); Parke Davis, Ann Arbor, MI (12/3); Pacificchem Symposium on Free Radicals, Honolulu, Hawaii (12/14).

2001: University of Iowa, Iowa City, IA (1/19); Abbott Labs, CAPD, North Chicago, IL (2/13); Dupont Pharmaceuticals, San Diego, CA (10/1); University of Missouri St Louis, MO (11/12).

2002: Case Western Reserve University, Cleveland, OH (1/17); Merck Research Labs, Rahway, NY (3/5); North Dakota State University, Fargo, ND (3/21); Illinois Institute of Technology, Chicago, IL (5/1); EUCHEM Conference on Free Radicals, York, UK (7/24); Tokyo University, Tokyo, Japan (7/31); Osaka Prefecture university, Osaka, Japan (8/1); Kansai Chemical Society, Conference on Robotic Chemistry, Osaka, Japan (8/2); Kyoto University, Kyoto, Japan (8/3); Okayama University of Science and Technology, Okayama, Japan (8/5); KAIST, Daejeon, Korea (8/7); Yonsei University, Seoul, Korea (8/8).

2003: University of Pennsylvania, Philadelphia, PA (1/13); University of New Orleans, LA (1/24); Marquette University, Milwaukee, WI (2/28); Michigan State University, East Lansing, MI (3/27); Emory University, Atlanta, GA (4/2); University of British Columbia, Vancouver, Canada (10/2).

2004: International Society for Organic Free Radicals Meeting, Porto Vecchia, Corsica, France (6/7); 22nd International Carbohydrate Symposium, Glasgow, UK (7/24); University of Toledo, OH (9/29); Florida State University, Tallahassee, FL (10/28); University of Connecticut, Storrs, CT (11/10).

2005: Duquesne University, Pittsburgh, PA (1/14); ACS San Diego Meeting, Carbohydrate Symposium, San Diego, CA (3/13); Tulane University, New Orleans, LA (4/18); GRC Free Radicals, Plymouth, NH (7/4); Schering Plough Research Inst, Kenilworth, NJ (9/21); Pacificchem Symposium on Carbohydrate Chemistry, Honolulu, Hawaii (12/20).

2006: Florida International University, Miami, FL (1/20); Indiana university Purdue University at Indianapolis, IN (2/15); ACS Spring Meeting, Atlanta, GA (3/27); University of Houston, Houston, TX (4/20); Université Paul Cézanne, Marseille, France (6/23); Wayne State University, Detroit, MI (7/17); 23rd International Carbohydrate Symposium Satellite Meeting, Vancouver, Canada (7/22); 23rd International Carbohydrate Symposium, Whistler, BC, Canada (7/24); Ecole Normale Supérieure, Paris, France (9/20); Université d'Orléans, Orléans, France (9/22); Université Pierre et Marie Curie, Paris, France (9/25); Université de Poitiers, Poitiers, France (9/26); ICSN, Gif-sur-Yvette, France (9/27); Osaka Prefecture University, Osaka, Japan (11/29); Kobe Pharmaceutical University, Kobe, Japan (11/30); Kyoto University, Katsura Campus, Kyoto, Japan (12/1); Yokohama City University, Yokohama, Japan (12/4); Tokyo University, Tokyo, Japan (12/5); RIKEN, Satoma, Japan (12/6); Keio University, Yokohama, Japan (12/7); Tokyo Institute of Technology, Yokohama, Japan (12/8); Chiba University, Chiba, Japan (12/9); Kanazawa university, Kanazawa, Japan (12/11); Gifu University, Gifu, Japan (12/12); Hokkaido University, Sapporo, Japan (12/14); Tokushima University, Tokushima, Japan (12/18); Kyoto University Institute of Chemical Research, Kyoto, Japan (12/19).

2007. ACS Chicago Meeting, Hudson-Sinay Symposium, Chicago, IL (3/25); Brigham Young University, Logan, UT (4/12); NIH Workshop on Carbohydrate Chemistry and Biology, Bethesda, MD (4/20); GRC Carbohydrate Chemistry and Biology, Tilton, NH (6/19); Andrews University, Behrien Springs, MI (11/8); Oakland University, Oakland, MI (11/14).

2008. Rutgers University, New Brunswick, NJ (4/11); Queens University, Kingston, ON, Canada (4/18); University of Virginia, Charlottesville, VA (4/25); 24th International Carbohydrate Symposium, Oslo, Norway (7/30); ACS Philadelphia Meeting, Carbohydrates Symposium (8/17); ACS Philadelphia Meeting, Fluorine Symposium (8/19).

2009. Universität Münster, Münster, Germany (2/12) ; Groupe Français de Peptides et de Protéines, Albé, France (5/11); Journée de Chimie Organique de la Montagne St. Gèneviève, Paris, France (6/4); French-German Chemical Society, Budapest, Hungary (6/22); International Conference on Heteroatom Chemistry, Oviedo, Spain (7/2); Glasgow University, UK (9/3) ; Schering Plough, Newhouse, UUK (9/4); University of Copenhagen, Denmark (10/23); University of Zurich, CH (10/27); Université Claude Bernard , Lyon, France (11/12); Institut Européen de Chimie et de Biologie, Talence, France (12/17).

2010. Ecole Normale Supérieure de Chimie de Rennes, Rennes, France (2/4) ; Laboratoire des Matériaux et Molécules en Milieu Amazonien, Cayenne, French Guyana (3/8); Ecole Polytechnique, Palaiseau, France (4/20); French American Chemical Society, Obernai, France (6/9); Rencontres Internationales de Chimie Thérapeutique, Reims, France (7/7); 24th International Symposium on Organo Sulfur Chemistry, Florence, Italy (7/26); Groupe d'Etudes de Chimie Organique, La Grande Motte, France (8/30); French-Indian Organic Synthesis Meeting, Villard de Lans, France (9/15); Université de la Méditerranée, Luminy, France (10/7); Jagellonian University, Krakow, Poland (10/11); Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan, Poland (10/13); Institute of Organic Chemistry, Polish Academy of Sciences, Warsaw, Poland (10/15).

2011. Indian Association for the Cultivation of Science, Jadavpur, India (2/4); India Institute of Technology, Kharagpur, India (2/7); Indian Institute of Technology, Kanpur, India (2/9); Central Drug Research Institute, Lucknow, India (2/11); National Chemical Laboratory, Pune, India (2/14); Pune University, Pune, India (2/15); Indian Institute of Technology, Bombay, Mumbai, India (2/16); IIS University, Jaipur, India (2/19); European Young Investigators Workshop on Carbohydrate Chemistry, Lyon, France (4/18); Univ Paris XI, School of Pharmacy, Chatenay-Malabry (4/21); 1st Mexican Meeting on Pure and Applied Chemistry, The National College, Mexico City (5/17); Gordon Research conference on Carbohydrate Chemistry and Biology, Colby College, Maine (6/22); CAOS 23, Hrádec Kralové, Czech Republic (6/28); Eurocarb 16, Sorrento, Italy (7/3); ACS Cope Scholar Symposium, Denver, CO (8/30); Schaap Symposium, Wayne State University, Detroit, MI (9/17); Graduate Glycoscience School, Konnevesi, Finland (9/28&29).

2012. SUNY-ESF, Syracuse, NY (2/10); USDA Peoria, Peoria, IL (3/2); Carbohydr Division Young Invest Symposium, ACS San Diego Meeting (3/25); Gin Symposium, ACS San Diego Meeting (3/27); Freie Universität, Berlin, Germany (4/17); National Taiwan Normal University, Taipei, Taiwan (5/2); Academia Sinica, Taipei, Taiwan (5/3); Cardiff Chemistry Symposium, Cardiff, UK (5/14); Tel Aviv University, Tel Aviv, Israel (5/20); Guelph University, Guelph, ONT (8/12); Beckwith Symposium, ACS Philadelphia Meeting (8/19); University of Missouri – St Louis (10/29); Southern Illinois University – Edwardsville (10/30).

2013. Detroit R&D, Detroit, MI (2/20); Univ Ottawa, Ottawa, ON, Canada (2/27); Tufts University, Medford, MA (4/2); L'Oréal R&I, Aulnay-sous-Bois, France (4/3); Carbohydr Division Horton Symposium, ACS New Orleans Meeting (4/9); Glycochemistry Symposium, Canadian Chem Soc Meeting, Quebec City, CA (5/30); Holland Research School on Molecular Chemistry, Summer School

on New Vista for Organic Chemistry, Maastricht, The Netherlands (7/4); University of Toledo, OH (9/23); Purdue University, IN (10/1); University of Toronto, Canada (10/29). Copenhagen University, Copenhagen, Denmark (12/11).

2014. International Carbohydrate Symposium, Bangalore, India (1/13). Louisiana State University, Baton Rouge, LA (2/28) ; New directions in Glycochemistry Symp, ACS Dallas Meeting (3/17); Royal Society of Chemistry, Carbohydrates Group Meeting, Bath, UK (5/1); Shanghai Institute of Organic Chemistry, Shanghai, China (5/13); Changzhou University, Changzhou, China (5/14); Wuhan University, Wuhan, China (5/16); Ocean University, Qingdao, China (5/23); Shandong University, Jinan, China (5/26); Tianjin University of Science and Technology, Tianjin, China (5/27); Peking University, Beijing, China, (5/28); Beijing Normal University, Beijing, China (5/29); Nankai University, Tianjin, China (5/30); IUPAC Int Conf Phys. Org. Chem., Ottawa, Canada (8/12); Cubist Pharmaceuticals, Lexington, MA (10/14).

2015. New York Univ (4/10); Carbohydrates GRC, West Dover, VT (6/15); Univ Wisconsin Madison, Pharmacy (9/24); Michigan State Univ (10/28); Pacifichem – Carbohydrates Symp (12/18).

2016. Univ Alabama Birmingham (2/25); Univ Arkansas (3/7); Hong Kong Univ (5/30); Chinese Univ Hong Kong (5/31); Huazhong Univ Science and Technology, Wuhan (6/6); Jiangnan Univ, Wuxi (6/8); Universität Konstanz, Germany (7/5); Universität Hannover, Germany (7/6); Universität Hamburg, Germany (7/7); Max Planck Institute for Colloids and Interfaces, Potsdam-Golm, Germany (7/8); University of Alberta, Edmonton, Alberta, Canada (11/29); Pharm Sci, Wayne State Univ (12/7).

2017. Texas A and M University, College Station, TX (2/3); University of Missouri St Louis, St Louis, MO (3/13); 253rd ACS Meeting, Carb Division Award Symposium, San Francisco, CA (4/2); 253rd ACS Meeting, Hudson Award Symposium, San Francisco, CA (4/3); Univ Iowa, Iowa City, IA (4/7); Macrolide Pharmaceuticals, Watertown, MA (4/11); Northeastern Univ, Boston, MA (4/12); Georgia State Univ. Atlanta, GA (4/21); Eurocarb 2017, Barcelona, Spain (7/6); Microbiol Dept, Wayne State Univ (9/26); Univ Colorado – Boulder, CO (10/23); CARBO XXXII, IIT Kharagpur, Kharagpur, India (12/18).

2018. Ålto University, Helsinki, Finland (2/14); Åbo Akademi University, Turku, Finland (2/15); 255th ACS Meeting, Carb Division Award Symposium, New Orleans, LA (3/18); Washington State University, Pullman, WA (4/2); SUNY Albany, Albany, NY (4/10); University of Toledo, Toledo, OH (5/30);

PUBLICATIONS (Web of Science h-index: 58)

1. *New and Improved Methods for the Radical Decarboxylation of Acids* D. H. R. Barton, D. Crich and W. B. Motherwell, *J. Chem. Soc., Chem. Commun.*, 1983, 939-941.
2. *A Practical Alternative to the Hunsdiecker Reaction* D. H. R. Barton, D. Crich and W. B. Motherwell, *Tetrahedron Lett.*, 1983, **24**, 4979-4982.
3. *Conversion of Aliphatic and Alicyclic Carboxylic Acids into nor-Hydroperoxides, nor-Alcohols and nor-Oxo Derivatives using Radical Chemistry* D. H. R. Barton, D. Crich and W. B. Motherwell, *J. Chem. Soc., Chem. Commun.*, 1984, 242-244.
4. *Formation of Carbon-Carbon Bonds with Radicals derived from the Esters of Thiohydroxamic Acids* D. H. R. Barton, D. Crich and G. Kretzschmar, *Tetrahedron Lett.*, 1984, **25**, 1055-1058.
5. *Carbethoxyallylation using Radical Chemistry* D. H. R. Barton and D. Crich, *Tetrahedron Lett.*, 1984, **25**, 2787-2790.
6. *A New Method for the Radical Decarboxylation of Tertiary Alcohols* D. H. R. Barton and D. Crich, *J. Chem. Soc., Chem. Commun.*, 1984, 774-775.
7. *Formation of Quaternary Centres from Tertiary Alcohols by Free Radical Methods* D. H. R. Barton and D. Crich, *Tetrahedron Lett.*, 1985, **26**, 757-760.
8. *On the Mechanism of Reduction of Dithiocarbonates with Tributylstannane* D. H. R. Barton, D. Crich, A. Lobberding and S. Z. Zard, *J. Chem. Soc., Chem. Commun.*, 1985, 646-647.
9. *The Invention of New Radical Chain Reactions. Part VIII. Radical Chemistry of Thiohydroxamic Esters; A New Method for the Generation of Carbon Radicals from Carboxylic Acids* D. H. R. Barton, D. Crich and W. B. Motherwell, *Tetrahedron*, 1985, **41**, 3901-3924.
10. *The Free Radical Chemistry of Carboxylic Esters of 2-Selenopyridine-N-Oxide; A Convenient Synthesis of (L)-Vinylglycine* D. H. R. Barton, D. Crich, Y. Herve, P. Potier and J. Thierry, *Tetrahedron*, 1985, **41**, 4347-4357.

11. *Oxidation of Olefins With Pyridine Seleninic Anhydride* D. H. R. Barton and D. Crich, *Tetrahedron*, 1985, **41**, 4359-4364.
12. *On the Mechanism of the Decarboxylative Rearrangement of Thiohydroxamic Esters* D. H. R. Barton, D. Crich and P. Potier, *Tetrahedron Lett.*, 1985, **26**, 5943-5946.
13. *The Invention of New Radical Chain Reactions. Part IX. Further Radical Chemistry of Thiodydroxamic Esters; Formation of Carbon-Carbon Bonds* D. H. R. Barton, D. Crich and G. Kretzschmar, *J. Chem. Soc., Perkin Trans. 1*, 1986, 39-53.
14. *On the Mechanism of the Deoxygenation of Secondary Alcohols by the Reduction of their Methyl Xanthates by Tin Hydrides* D. H. R. Barton, D. Crich, A. Lobberding and S. Z. Zard, *Tetrahedron*, 1986, **42**, 2329-2338.
15. *The Invention of New Radical Chain Reactions. Part XI. A New Method for the Generation of tert Radicals from tert Alcohols* D. H. R. Barton and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1603-1611.
16. *The Invention of Radical Chain Reactions. Part XII. Improved Methods for the Addition of Carbon Radicals to Substituted Allylic Groups* D. H. R. Barton and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1613-1619.
17. *On the Mechanism of Cleavage of the Cholesterol Side Chain by the Gif System* D. H. R. Barton, J. Boivin, D. Crich and C. H. Hill, *J. Chem. Soc., Perkin Trans. 1*, 1986, 1805-1808.
18. *A New Method for the Synthesis of tert-Alkyl Chlorides from tert-Alcohols* D. Crich and S. M. Fortt, *Synthesis*, 1987, 35-37.
19. *The cis-5-Cyclooctenyl Radical is Reluctant to Rearrange* A. J. Bloodworth, D. Crich and T. Melvin, *J. Chem. Soc., Chem. Commun.*, 1987, 786-788.
20. *O-Acyl Thiohydroxamates: New and Versatile Sources of Alkyl Radicals for Use in Organic Synthesis* D. Crich, *Aldrichimica Acta*, 1987, **20**, 35-43.
21. *On the Effect of Ring Size in the Cyclization of Carbonyl and Vinyl Radicals onto Alkynes* D. Crich and S. M. Fortt, *Tetrahedron Lett.*, 1987, **28**, 2895-2898.

22. *Free Radical Reactions* D. Crich in 'Annual Reports B of the Chemical Society,' 1986, **83**, 65-76.
23. *Stereoselectivity in Free Radical Reactions* D. Crich and J. W. Davies, *Tetrahedron Lett.*, 1987, **28**, 4205-4208.
24. *Some Studies on syn-Elimination Reactions* D. Crich and L. B. L. Lim, *J. Chem. Res.*, 1987, 353-353.
25. *Some Studies on 6,7-Unsaturated Carbonyl Radical Cyclizations* D. Crich and S. M. Fortt, *Tetrahedron Lett.*, 1988, **29**, 2585-2588.
26. *Preparation of α -Amino Acids by Radical Addition to Dehydroalanine Derivatives* D. Crich, J. W. Davies, G. Negron and L. Quintero, *J. Chem. Res.*, 1988, 140-141.
27. *Preparation and Reactions of Some Cyclic Orthoester Derivatives* D. Crich and T. J. Ritchie, *Tetrahedron*, 1988, **44**, 2319-2328.
28. *Free Radical Reactions* D. Crich in 'Annual Reports B of the Chemical Society,' 1987, **84**, 81-91.
29. *A Concise Synthesis of 3-Deoxy-2-O-methyl-4,5,7-tri-O-benzyl-D-arabino-heptulosonic Acid and Related Compounds from 3,4,6-Tri-O-benzyl-D-glucal* D. Crich and T. J. Ritchie, *J. Chem. Soc., Chem. Commun.*, 1988, 985-986.
30. *Some Studies on Carbonyl Radical Cyclizations and on the Synthesis of 2-Deoxy- β -glucosides by Stereoselective Radical Reactions* D. Crich, S. M. Fortt and T. J. Ritchie in 'Free Radicals in Synthesis and Biology,' Ed. F. Minisci, Kluwer, Dordrecht, 1989, 135-143.
31. *Stereoselective Free Radical Reactions in the Preparation of 2-Deoxy- β -D-glucosides* D. Crich and T. J. Ritchie, *J. Chem. Soc., Chem. Commun.*, 1988, 1461-1463.
32. *On the Use of S-(4-Alkenyl)-Dithiocarbonates as Mechanistic Probes in the Barton-McCombie Radical Deoxygenation Reaction* D. Crich, *Tetrahedron Lett.*, 1988, **29**, 5805-5806.

33. *Carbonyl Radical Cyclizations: Preparation of Some Heterocyclic Ketones* D. Crich, K. A. Eustace and T. J. Ritchie, *Heterocycles*, 1989, **28**, 67-70.
34. *Some Observations on the Mechanism of the Mitsunobu Reaction* D. Crich, H. Dyker and R. J. Harris, *J. Org. Chem.*, 1989, **54**, 257-259.
35. *Dichotomous Reaction Pathways in the Reaction of Triarylphosphine Oxides with Meerwein's Salt* D. Crich and H. Dyker, *Tetrahedron Lett.*, 1989, **54**, 475-476.
36. *Preparation of 2-Deoxy- β -D-lyxo-hexosides (2-Deoxy- β -galactosides)* D. Crich and T. J. Ritchie, *Carbohydr. Res.*, 1989, **190**, c3-c6.
37. *A Facile Effective Example of Organic Photochemistry* T. Brown, C. J. Cooksey, D. Crich and A. Dronsfield, *J. Chem. Ed.*, 1990, **67**, 434-435.
38. *Radical Chemistry Associated with the Thiocarbonyl Group* D. Crich and L. Quintero, *Chem. Rev.*, 1989, **89**, 1413-1432.
39. *Free Radical Reactions* D. Crich in '*Annual Reports B of the Chemical Society*,' 1988, **85**, 71-82.
40. *Reaction of Tryptophan Derivatives with Phenylsulphenyl Chloride and Phenylselenenyl Bromide* D. Crich and J. W. Davies, *Tetrahedron Lett.*, 1989, **30**, 4307-4308.
41. *Free Radical Addition to Di- and Tripeptides containing Dehydroalanine Residues* D. Crich and J. W. Davies, *Tetrahedron*, 1989, **45**, 5641-5654.
42. *Silyl Migration and Formation of an Anhydro Derivative on Attempted Benzylation of 6-O-Tosyl-3-O-t-butyltrimethylsilyl-D-glucal* D. Crich and T. J. Ritchie, *Carbohydr. Res.*, 1990, **197**, 324-326.
43. *Synthesis of a 1 α ,25-Dihydroxyvitamin D₃ A Ring Model* D. Batty, D. Crich and S. M. Fortt, *J. Chem. Soc., Chem. Commun.*, 1989, 1366-1368.

44. *An Improved Procedure for the Formation of Se-Phenyl Selenoesters* D. Batty and D. Crich, *Synthesis*, 1990, 273-275.
45. *Asymmetric Synthesis of α -Alkylated Tryptophan Derivatives* D. Crich and J. W. Davies, *J. Chem. Soc., Chem. Commun.*, 1989, 1418-1419.
46. *Acyl Radical Cyclizations in Synthesis. Part 1. Substituent Effects on the Mode and Efficiency of Cyclization of 6-Heptenoyl Radicals* D. Crich and S. M. Fortt, *Tetrahedron*, 1989, **45**, 6581-6598.
47. *Diastereoselective Free Radical Reactions. Part 1. Preparation of 2-Deoxy- β -glycosides by Synthesis and Reductive Decarboxylation of 3-Deoxyulosonic Acid Glycosides* D. Crich and T. J. Ritchie, *J. Chem. Soc., Perkin Trans. 1*, 1990, 945-954.
48. *Acyl Radical Cyclizations in Synthesis. Part 2. Further Substituent Effects on the Mode and Efficiency of Cyclization of 6-Heptenoyl Radicals* D. Crich, K. A. Eustace, S. M. Fortt and T. J. Ritchie, *Tetrahedron*, 1990, **46**, 2135-2148.
49. *β -Trimethylsilylethoxymethyl Chloride as a Formaldehyde Equivalent in Aldol Type Reactions* D. Crich and L. B. L. Lim, *SynLett.*, 1990, **1**, 117-118.
50. *Acyl Radical Cyclizations in Synthesis. Part 3. Synthesis of ($\pm$)-trans-2-Methylene-3,5-bis(*t*-butyldimethylsiloxy)-cyclohexanone an 'A' Ring Model for 1 α ,25-Dihydroxyvitamin D₃* D. Batty, D. Crich and S. M. Fortt, *J. Chem. Soc., Perkin Trans. 1*, 1990, 2875-2879.
51. *Synthesis of 2-Deoxy- β -C-Glucosides by Diastereoselective Hydrogen Atom Transfer* D. Crich and L. B. L. Lim, *Tetrahedron Lett.*, 1990, **31**, 1897-1900.
52. *Cobaloximes as Vehicles for College Teaching* T. M. Brown, C. J. Cooksey, D. Crich and A. Dronsfield, *J. Chem. Ed.*, 1991, **67**, 973-974.
53. *Chemistry of the cis-Cyclo-oct-4-en-1-yl Radical including the Preparation of ¹⁸O₂-Labelled cis-Cyclo-oct-4-en-1-yl Hydroperoxide* A. J. Bloodworth, D. Crich and T. Melvin, *J. Chem. Soc., Perkin Trans. 1*, 1990, 2957-2961.

54. *Enantiospecific Synthesis with Amino Acids. Part 1. Tryptophan as a Chiron for the Synthesis of α -Substituted Tryptophan Derivatives* G. T. Bourne, D. Crich, J. W. Davies and D. C. Horwell, *J. Chem. Soc., Perkin Trans. 1*, 1991, 1693-1699.
55. *Diastereoselective Radical Reactions: β -Face Selective Quenching of the 1,2-Isopropylidene-3,4,6-tri-O-benzyl-D-glucopyranos-1-yl Radical* D. Crich and L. B. L. Lim, *Tetrahedron Lett.*, 1991, 2565-2568.
56. *Diastereoselective Free Radical Reactions. Part 2. Synthesis of 2-Deoxy- β -C-pyranosides by Diastereoselective Hydrogen Atom Transfer* D. Crich and L. B. L. Lim, *J. Chem. Soc., Perkin Trans. 1*, 1991, 2205-2208.
57. *Diastereoselective Free Radical Reactions. Part 3. The Methyl Glucopyranos-1-yl and the 1,2-Isopropylideneglucopyranos-1-yl Radicals: Conformational Effects on Diastereoselectivity* D. Crich and L. B. L. Lim, *J. Chem. Soc., Perkin Trans. 1*, 1991, 2209-2214.
58. *A Radical Cyclization Approach to 1 α ,25-Dihydroxyvitamin D₃* D. Batty and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1991, 2894-2895.
59. *The Kolbe-Schmitt Reaction Revisited* T. M. Brown, C. J. Cooksey, D. Crich and A. T. Dronsfield, *Ed. Chem.* 1992, 22.
60. *Preparation, Isolation and X-ray Crystallographic Structure Determination of a Stable, Crystalline Carbonic Anhydride of an N-Protected α -Amino Acid* C-O. Chan, C. J. Cooksey and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1992, 777-780.
61. *On the Use of Propargyl Bromide as a Reagent for the Introduction of the Pyruvate Moiety* C. Chen and D. Crich, *J. Chem. Soc., Chem. Commun.*, 1991, 1289-1290.
62. *The Hunsdiecker and Related Reactions* D. Crich, in '*Comprehensive Organic Synthesis*,' Ed. B. M. Trost, I. Fleming and S. V. Ley, Pergamon Press, Oxford, 1991, **7**, 717-734.
63. *An Acyl Radical Initiated Tandem 7-endo/5-exo Radical Cyclization Approach to Enantiomerically Pure Bicyclo[5.3.0]decan-2-ones* D. Batty and D. Crich, *Tetrahedron Lett.*, 1992, **33**, 875-878.

64. *Asymmetric Synthesis of a 1 α ,25-Dihydroxyvitamin D₃ A-Ring Synthon* C. Chen and D. Crich, *Tetrahedron Lett.*, 1992, **33**, 1945-1948.
65. *Enantiospecific Synthesis of Amino Acids: Preparation of (R) and (S)- α -Methylaspartic Acid from (S)-Tryptophan* C-O. Chan, D. Crich and S. Natarajan, *Tetrahedron Lett.*, 1992, **33**, 3405-3408.
66. *The Chemistry of Acyl Tellurides: Generation and Trapping of Acyl Radicals Including Aryltellurium Group Transfer* C. Chen and D. Crich, *J. Am. Chem. Soc.*, 1992, **114**, 8313-8314.
67. *Enantiospecific Synthesis with Amino Acids. 2. A Chemical and Computational Investigation of Cyclic Tryptophan Tautomers* C-O. Chan, D. Crich, J. W. Davies, S. Natarajan and J. G. Vinter, *J. Chem. Soc., Perkin Trans. 2*, 1992, 2233-2240.
68. *Conformationally Restricted Amino Acids: Diastereoselective Substitution at the β -Position of Tryptophan* M. Bruncko and D. Crich, *Tetrahedron Lett.*, 1992, **33**, 6251-6254.
69. *Homolytic Processes at Sulfur in Synthesis* D. Crich, in '*Organosulfur Chemistry*', Ed. P. Page, Academic Press, 1995, vol. 1, 49-88.
70. *Acyl Radical Cyclizations in Synthesis. Part 4. Tandem Processes: The 7-endo/5-exo Serial Cyclization Approach to Enantiomerically Pure Bicyclo[5.3.0]decan-2-ones* D. Batty and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1992, 3193-3204.
71. *Acyl Radical Cyclizations in Synthesis. Part 5. Further Tandem Processes: Formation of an α -Methylenecyclohexanone by a Cyclization-Fragmentation-Hydrogen Abstraction Sequence* D. Batty and D. Crich, *J. Chem. Soc., Perkin Trans. 1*, 1992, 3205-3209.
72. *The β -Phosphatoxyalkyl Radical Rearrangement* D. Crich and Q. Yao, *J. Am. Chem. Soc.*, 1993, **115**, 1165-1166.
73. *The Free Radical Chemistry of the Acyl Tellurides: Mechanistic Studies and Synthetic Applications* C. Chen and D. Crich, *Tetrahedron Lett.*, 1993, **34**, 1545-1548.

74. *Sequential Diastereoselective Free Radical Reactions: Synthesis of an Advanced Olivomycin A C-D Disaccharide* F. Hermann and D. Crich, *Tetrahedron Lett.*, 1993, **34**, 3385-3388.
75. *Asymmetric Synthesis of α -Alkylated Derivatives of 5-Hydroxytryptophan* D. Crich and L. B. L. Lim, *Heterocycles*, 1993, **36**, 1199-1204.
76. *Functionalization at C-3a of Tryptophan derived Hexahydro[2,3b]pyrroloindoles* M. Bruncko, D. Crich and R. Samy, *Heterocycles*, 1993, **36**, 1735-1738.
77. *The Cyclization Route to the Calcitriol A-ring: A Formal Synthesis of (+)-1 α ,25-Dihydroxy-vitamin D₃* C. Chen and D. Crich, *Tetrahedron*, 1993, **49**, 7943-7954.
78. *The β -Nitroxyalkyl and β -Sulfonatoxyalkyl Radical Rearrangements* D. Crich and G. Filzen, *Tetrahedron Lett.*, 1993, **34**, 3225-3228.
79. *A New C-C Bond Forming Free Radical Rearrangement* D. Crich and Q. Yao, *J. Chem. Soc., Chem. Commun.*, 1993, 1265-1267.
80. *The β -(Phosphatoxy)alkyl Radical Rearrangement. A Stereochemical Probe of Mechanism*, D. Crich and Q. Yao, *Tetrahedron Lett.*, 1993, **34**, 5677-5680.
81. *Generation and Trapping of Benzyl Radicals from Benzyl Iodides by Cobaloxime Mediated Iodine Atom Abstraction Reactions*, T. M. Brown, C. J. Cooksey, D. Crich, A. T. Dronsfield and R. Ellis, *J. Chem. Soc., Perkin Trans. 1*, 1993, 2131-2136.
82. *The Chemistry of Cyclic Tautomers of Tryptophan: Highly Diastereoselective Aldol Condensations*, D. Crich, I. Pastrama-Gress, J. Sandoval-Ramirez and L. Quintero-Cortes, *Heterocycles*, 1994, **38**, 719-724.
83. *Concise Synthesis of a Taxol A-Ring Synthon: Formation of a 1,2-Alkylidene Linkage via Acetylene Chemistry*, D. Crich and J. Z. Crich, *Tetrahedron Lett.*, 1994, **35**, 2469-2472.
84. *The β -(Phosphatoxy)-alkyl and β -(Acyloxy)-alkyl Radical Rearrangements: Evidence for Non-Dissociative Mechanisms*, D. Crich and Q. Yao, *J. Am. Chem. Soc.*, 1994, **116**, 2631-2632.

85. *Cyclic Tautomers of Tryptophan: Enantio- and Diastereoselective Synthesis of β - and α,β -Disubstituted Derivatives of Tryptophan*, M. Bruncko and D. Crich, *J. Org. Chem.*, 1994, **59**, 4239-4249.
86. *The Photoinduced Free Radical Chemistry of the Acyl Tellurides: Generation, Inter- and Intramolecular Trapping, and ESR Spectroscopic Identification of Acyl Radicals*, D. Crich, C. Chen, J.-T. Hwang, H. Yuan, A. Papadatos and R. I. Walter, *J. Am. Chem. Soc.*, 1994, **116**, 8937-8951.
87. *Antiovulatory Antagonists of LHRH Related to Antide*, G. Flouret, Z. S. Arnold, T. Majewski, N. H. Petousis, K. Mahan, F. Farooqui, K. A. Blum, D. Konopinska, S. Natarajan and D. Crich, *J. Pept. Sci.*, 1995, **1**, 89-105.
88. *Chemistry of Cyclic Tautomers of Tryptophan: Formation of a Quaternary Center at C3a and Total Synthesis of the Marine Alkaloid (+)-(ent)-Debromoflustramine B*, M. Bruncko, D. Crich and R. Samy, *J. Org. Chem.*, 1994, **59**, 5543-5549.
89. *Intramolecular Hydrogen Atom Abstraction in Carbohydrates and Nucleosides: Inversion of α - to β -Mannopyranosides and Generation of Thymidine C-4' Radicals*, J. Brunckova, D. Crich and Q. Yao, *Tetrahedron Lett.*, 1994, **35**, 6619-6622.
90. *Mechanism of the Rearrangement of 2-(Vinylloxy)alkyl to 4-Ketobutyl Radicals*, D. Crich and Q. Yao, *Tetrahedron*, 1994, **50**, 12305-12312.
91. *Stereocontrolled Formation of Quaternary Carbon Centers by Conjugate Addition of Lithium Enolates of Dioxanones to β -Bromoacrylates and β -Bromovinyl Sulfones: Dependence of Stereoselectivity on Alkene Geometry*, M. Bruncko and D. Crich, *J. Org. Chem.*, 1994, **59**, 7921-7923.
92. *Inhibition of Radical Rearrangements in Stannane Mediated Radical Reduction by Catalytic Quantities of Diphenyl Diselenide. An Example of Polarity Reversal Catalysis*, D. Crich and Q. Yao, *J. Org. Chem.*, 1995, **60**, 84-88.

93. *Synthesis of a Highly Functionalized Taxol AB-Ring System. Formation of the 8-Membered Ring by an Efficient 8-exo-tet Alkylation of an α -Sulfonyl Anion*, D. Crich and S. Natarajan, *J. Chem. Soc., Chem. Commun.*, 1995, 85-86.
94. *Conformational Analysis of Substituted Hexahydropyrrolo[2,3-b]indoles and Related Systems. An Unusual Example of Hindered Rotation about Sulfonamide S-N Bonds. An X-ray Crystallographic and NMR Study*, D. Crich, M. Bruncko, S. Natarajan, B. K. Teo, D. A. Tocher, *Tetrahedron*, 1995, **51**, 2215-2228.
95. *The Origin of the " β -Oxygen Effect" in the Barton Deoxygenation Reaction*, D. Crich, A. L. J. Beckwith, C. Chen, Q. Yao, I. G. E. Davison, R. W. Longmore, C. Anaya de Parrodi, L. Quintero-Cortes and J. Sandoval-Ramirez, *J. Am. Chem. Soc.*, 1995, **117**, 8757-8768.
96. *Chemistry of Cyclic Tautomers of Tryptophan: Total Synthesis of (+)-(ent)-Pseudophrynaminol*, D. Crich, A. Pavlovic and R. Samy, *Tetrahedron*, 1995, **51**, 6379-6384.
97. *An ^{18}O -Labelling Study of the β -(Nitroxy)alkyl and β -(Trifluoroacetoxy)alkyl Radical Migrations: Further Examples of a 1,2-Shift Mechanism*, D. Crich and G.F. Filzen, *J. Org. Chem.*, 1995, **60**, 4834-4837.
98. *Chemistry of Cyclic Tautomers of Tryptophan: Free Radical Reactions at C-2 Occur Preferentially on the Endo-Face of the Diazabicyclooctane Skeleton*, D. Crich and S. Natarajan, *J. Org. Chem.*, 1995, **60**, 6237-6241.
99. *Intramolecular Hydrogen Abstraction. The β -Oxygen Effect in the Norrish Type II Photoreaction*, J. Brunckova and D. Crich, *Tetrahedron*, 1995, **51**, 11945-11952.
100. *Radical Clock Reactions Under Pseudo-First Order Conditions Using Catalytic Quantities of Diphenyl Diselenide*, D. Crich, X.-Y. Jiao, Q. Yao, and J. S. Harwood, *J. Org. Chem.*, 1996, **61**, 2368-2373.
101. *Chemistry of 1-Alkoxy-1-glycosyl Radicals: the Manno- and Rhamnopyranosyl Series. Inversion of α - to β -Pyranosides and the Fragmentation of Anomeric Radicals*, D. Crich, S. Sun, and J. Brunckova, *J. Org. Chem.*, 1996, **61**, 605-615.

102. *Chemistry of β -(Phosphatoxy)alkyl and β -(Acyloxy)alkyl Radicals. Migration Reactions: Scope and Stereoselectivity of the β -(Phosphatoxy)alkyl Rearrangement. Mechanism of the β -(Phosphatoxy)alkyl and β -(Acyloxy)alkyl Migration*, D. Crich, Q. Yao, and G.F. Filzen, *J. Am. Chem. Soc.*, 1995, **117**, 11455-11470.
103. *Diastereoselective Cyclizations of 1,3-Dioxan-2-yl Radicals: Chiral Acyl Radical Equivalents*, M. P. Bertrand, D. Crich, R. Nouguier, R. Samy, and D. Stien, *J. Org. Chem.*, 1996, **61**, 3588-3589.
104. *Generation of Acyl Radicals from Thioesters by Intramolecular Homolytic Substitution at Sulfur*, D. Crich and Q. Yao, *J. Org. Chem.*, 1996, **61**, 3566-3570.
105. *Optimizing the 5-exo/6-endo Ratio of Vinyl Radical Cyclizations Through Catalysis with Diphenyl Diselenide*, D. Crich, J.-T. Hwang, and H. Liu, *Tetrahedron Lett.*, 1996, **37**, 3105-3108.
106. *Free Radical Chemistry of Lactones: Ring Contractions and Expansions*, D. Crich, A. L. J. Beckwith, G. F. Filzen, and R. W. Longmore, *J. Am. Chem. Soc.*, 1996, **118**, 7422-7423.
107. *Formation of β -Mannopyranosides of Primary Alcohols using the Sulfoxide Method*, D. Crich and S. Sun, *J. Org. Chem.*, 1996, **61**, 4506-4507.
108. *The β -(Phosphatoxy)alkyl Radical Rearrangement. Rate Constants, Arrhenius Parameters, and Structure Activity Relationships*, D. Crich and X.-Y. Jiao, *J. Am. Chem. Soc.*, 1996, **118**, 6666-6670.
109. *Chemistry of 1-Alkoxy-1-glycosyl Radicals: Formation of β -Mannopyranosides by Radical Decarboxylation and Decarbonylation of manno-Heptulosonic Acid Glycoside Derivatives*, D. Crich, J.-T. Hwang, and H. Yuan, *J. Org. Chem.*, 1996, **61**, 6189-6198.
110. *A Practical Method for the Removal of Organotin Residues from Reaction Mixtures*, D. Crich and S. Sun, *J. Org. Chem.*, 1996, **61**, 7200-7201.
111. *Solvent Effects in the β -(Phosphatoxy)alkyl Radical Migration as Revealed by Deuterium Labelling and ^1H -NMR Spectroscopy*, D. Crich, J. Escalante, and X.-Y. Jiao *J. Chem. Soc., Perkin 2*, 1997, 627-630.

112. *Vers la Synthèse du Taxol* in 'Actualités de Chimie Thérapeutique' Eds. J. Maldonado and P. Vanelle, Elsevier, Paris, 1997, vol. 23, pp 189-206..
113. *Designed Chiral Acyl Radical Equivalents. Preparation and Cyclizations of Disymmetrically Substituted 1,3-Dioxabicyclo[4.4.0]decane-2-yl Radicals*, D. Stien, R. Samy, R. Nouguier, D. Crich, and M. P. Bertrand, *J. Org. Chem.* 1997, **62**, 275-286.
114. *Nucleotide C3',4'-Radical Cations and the Effect of a 2'-Oxygen Substituent. The DNA/RNA Paradox*, D. Crich and X.-S. Mo, *J. Am. Chem. Soc.*, 1997, **119**, 249-250.
115. *Direct Synthesis of β -Mannospyranosides by the Sulfoxide Method*, D. Crich and S. Sun, *J. Org. Chem.*, 1997, **62**, 1198-1199.
116. *Asymmetric Synthesis of a Taxol C-Ring by Aldol Condensation and Radical Cyclization*, D. Crich, X.-Y. Jiao, and M. Bruncko, *Tetrahedron*, 1997, **53**, 7127-7138.
117. *Synthesis of the Taxol AB-System by Olefination of an A-Ring C1 Ketone and Direct B-Ring Closure*, D. Crich, S. Natarajan, and J. Z. Crich, *Tetrahedron*, 1997, **53**, 7139-7158.
118. *Generation and Cyclization of Acyl Radicals from Thiol Esters Under Non-Reducing, Tin Free Conditions*, D. Crich and X. Hao, *J. Org. Chem.*, 1997, **62**, 5982-5988.
119. *Nucleotide C4' Radical Fragmentation is Base-Dependent*, D. Crich and X.-S. Mo, *Tetrahedron Lett.*, 1997, **38**, 8169-8172.
120. *Are Glycosyl Triflates Intermediates in the Sulfoxide Glycosylation Method?, A Chemical and ^1H , ^{13}C , and ^{19}F -NMR Spectroscopic Investigation*, D. Crich and S. J. Am. Chem. Soc., 1997, **119**, 11217-11223.
121. *The Free Radical Chemistry of Esters: Radical and Radical Ionic Migrations and Fragmentations of Carbon-Oxygen Bonds*, A. L. J. Beckwith, D. Crich, P. J. Duggan, and Q. Yao, *Chem. Rev.*, 1997, **97**, 3273-3312.
122. *Free Radical Chemistry of Nucleosides and Nucleotides. Ring Opening of C4' Radicals*, D. Crich and Q. Yao, *Tetrahedron*, 1998, **54**, 305-318.

123. *Direct Synthesis of β -D-Xyl-(1-2)- β -D-Man-(1-4)- α -D-Glc-OMe: A Trisaccharide Component of the Hyriopsis Schlegelii Glcosylphingolipid*, D. Crich and Z. Dai, *Tetrahedron Lett.*, 1998, **39**, 1681-1684.
124. *Free Radical Chemistry of Lactones: Fragmentation of β -Lactones. The Beneficial Effect of Catalytic Benzeneselenol on Chain Propagation*, D. Crich and X.-S. Mo, *J. Org. Chem.*, 1997, **62**, 8624-8625.
125. *Steric Acceleration in the Reaction of Aryl Bromides with Tributylstannyl Radicals*, D. Crich and F. Recupero, *J. Chem. Soc., Chem. Commun.*, 1998, 189-190.
126. *Absence of Diffusively Free Radical Cation Intermediates in Reactions of β -(Phosphatoxy)alkyl Radicals*, S.-Y. Choi, D. Crich, J. H. Horner, X. Huang, F. N. Martinez, M. Newcomb, D. J. Wink, Q. Yao, *J. Am. Chem. Soc.*, 1998, **120**, 211-212.
127. *Direct Formation of β -Mannopyranosides and Other Hindered Glycosides from Thioglycosides*, D. Crich and S. Sun, *J. Am. Chem. Soc.*, 1998, **120**, 435-436.
128. *Synthesis of the 3a-(3-Indolyl)-1,2,3,3a,8,8a-hexahydropyrrolo[2,3-b]indole Core of Leptosins D-F*, D. Crich, E. Fredette, and W. J. Flosi, *Heterocycles*, 1998, **48**, 545-547.
129. *Stannane-Mediated Radical Addition to Arenes. Generation of Cyclohexadienyl Radicals and Increased Propagation Efficiency in the Presence of Catalytic Benzeneselenol*, D. Crich and J.-T. Hwang, *J. Org. Chem.*, 1998, **63**, 2765-2770.
130. *Direct Chemical Synthesis of β -Mannopyranosides and Other Glycosides via Glycosyl Triflates*, D. Crich and S. Sun, *Tetrahedron*, 1998, **54**, 8321-8348.
131. *Chiral Acyl Radical Equivalents: 5-exo Cyclization of Conformationally Constrained 1,3-Dioxolanyl Radicals*, D. Stien, D. Crich and M. P. Bertrand, *Tetrahedron*, 1998, **54**, 10779-10788.
132. *A Convenient Asymmetric Synthesis of 4'- α -Carboxylated Nucleosides*, D. Crich and X. Hao, *J. Org. Chem.* 1998, **63**, 3796-3797.

133. *Free Radical Chemistry of β -Lactones. Arrhenius Parameters for the Decarboxylative Cleavage and Ring Expansion of 2-Oxetanone-4-ylcarbinyl Radicals. Facilitation of Chain Propagation by Catalytic Benzeneselenol*, D. Crich and X.-S. Mo, *J. Am. Chem. Soc.*, 1998, **120**, 8298-8304.
134. *β -(Phosphatoxy)alkyl and β -(Acyloxy)alkyl Radical Migrations Studied by Laser Flash Photolysis*, S.-Y. Choi, D. Crich, J. H. Horner, X. Huang, M. Newcomb, and P. O. Whitted, *Tetrahedron*, 1999, **55**, 3317-3326.
135. *Stereoselective Sulfoxidation of α -Mannopyranosyl Thioglycosides: the exo-Anomeric Effect in Action*, D. Crich, J. Mataka, S. Sun, K.-C. Lam, A. L. Rheingold and D. J. Wink, *J. Chem. Soc., Chem. Commun.*, 1998, 2763-2764.
136. *Synthesis of Fully-Substituted Eneidyne by the Corey-Winter Reaction*, D. Crich, A. B. Pavlovic and D. J. Wink, *Syn. Commun.*, 1999, **29**, 359-377.
137. *Convergent, Stereoselective Synthesis of the Caloporoside Disaccharide*, D. Crich and G. Barba, *Tetrahedron Lett.* 1998, **39**, 9339-9342.
138. *On the Stereochemistry of Vicinal Nucleophilic Substitution of β -(Phosphatoxy)alkyl Radicals*, D. Crich and S. Gastaldi, *Tetrahedron Lett.*, 1998, **39**, 9377-9380.
139. *One Pot Selective 5'-Oxidation/Olefination of 2'-Deoxynucleosides*, D. Crich and X.-S. Mo, *Synlett.*, 1999, 67-68.
140. *Direct Synthesis of β -Mannosides. Synthesis of β -D-Xyl-(1 $\rightarrow$ 2)- β -D-Man-(1 $\rightarrow$ 4)- α -D-Glc-)Me: a Trisaccharide Component of the Hyriopsis Schlegelii Glycosphingolipid. Formation of an Orthoester from a Xylopyranosyl Sulfoxide*, D. Crich and Z. Dai, *Tetrahedron*, 1999, **55**, 1569-1580.
141. *Free-Radical Ring Contraction of 6-, 7-, and 8-Membered Lactones Occurs by a 1,2-Shift Mechanism. A Kinetic and ^{17}O -NMR Spectroscopic Study*, D. Crich, X. Huang, and A. L. J. Beckwith, *J. Org. Chem.*, 1999, **64**, 1762-1764.
142. *Chemistry of Acyl Radicals*, C. Chatgililoglu, D. Crich, I. Ryu and M. Komatsu, *Chem. Rev.*, 1999, **99**, 1991-2070.

143. *Diverging Effects of Steric Congestion on the Reaction of Tributylstannyl Radicals with Areneselenols and Aryl Bromides and their Mechanistic Implications*, D. Crich, J.-T. Hwang, S. Gastaldi, F. Recupero, and D. J. Wink, *J. Org. Chem.* 1999, **64**, 2788-2794.
144. *Asymmetric Synthesis of C4' α -Carboxylated Nucleosides. Preparation of Oxetanone Derivatives and Influence of Solvent on Stereochemistry of Base Introduction*, D. Crich and X. Hao, *J. Org. Chem.* 1999, **64**, 4016-4024.
145. *Chemistry of 4,6-O-Benzylidene-D-glycopyranosyl Triflates: Contrasting Behavior between the Gluco- and Manno-Series*, D. Crich and W. Cai, *J. Org. Chem.* 1999, **64**, 4926-4930.
146. *On the Role of Neighboring Group Participation and Orthoesters in β -Xylosylation: ^{13}C NMR Observation of a Bridging 2-Phenyl-1,3-dioxalenium Ion*, D. Crich, Z. Dai and S. Gastaldi, *J. Org. Chem.* 1999, **64**, 5224-5229.
147. *Heterolytic Cleavage of a β -(Phosphatoxy)alkyl Radical Resulting in Phosphate Migration or Radical Cation Formation as a Function of Solvent Polarity*, P. O. Whitted, J. H. Horner, M. Newcomb, X. Huang, D. Crich, *Org. Lett.* 1999, **1**, 153-156.
148. *Synthesis of Tetrahydrofurans by a Tandem Hydrogen Atom Abstraction/Radical Nucleophilic Displacement Sequence*, D. Crich, X. Huang and M. Newcomb, *Org. Lett.* 1999, **1**, 225-228.
149. *Inhibition of Stannane-Mediated Radical Rearrangements by a Recoverable, Minimally Fluorous Selenol*, D. Crich, X. Hao and M. A. Lucas, *Org. Lett.* 1999, **1**, 269-272.
150. *Isolation and Identification of Poly- α -(1-4)-linked 3-O-Methylmannopyranose from a Hot Water Extract of *Mycobacterium vaccae**, X.-X. Tian, A. Li, I. V. Farrugia, X.-S. Mo, D. Crich., and M. J. Groves, *Carbohydr. Res.*, 2000, **324**, 38-44.
151. *On the Reaction of Tryptophan Derivatives with N-Phenylselenyl Phthalimide; the Nature of the Kinetic and Thermodynamic Hexahydropyrrolo[2,3-b]indole Products. Alkylation of Tryptophan with Inversion of Configuration*, D. Crich and X. Huang, *J. Org. Chem.*, 1999, **64**, 7218-7223.

152. *Chemistry of Glycosyl Triflates: Synthesis of β -Mannopyranosides*, D. Crich in *Glycochemistry: Principles, Synthesis and Applications*, P. G. Wang and C. R. Bertozzi Eds, Dekker, New York, 2001, 53-75.
153. *Highly Diastereoselective α -Mannosylation in the Absence of Participating Protecting Groups*, D. Crich, W. Cai and Z. Dai, *J. Org. Chem.* 2000, **65**, 1291-1297.
154. *β -Phosphatoxyalkyl Radical Reactions. Competing Phosphate Migration and Phosphoric Acid Elimination from a Radical Cation – Phosphate Anion Pair formed by Heterolytic Fragmentation*, M. Newcomb, J. H. Horner, P. O. Whited, D. Crich, X. Huang, Q. Yao, and H. Zipse, *J. Am. Chem. Soc.* 1999, **121**, 10685-10694.
155. *Design, Synthesis, Application and Recovery of a Minimally Fluorous Diaryl Diselenide for the Catalysis of Stannane-Mediated Radical Chain Reactions*, D. Crich, X. Hao and M. Lucas, *Tetrahedron*, 1999, **55**, 14261-14268.
156. *Direct Stereoselective Synthesis of β -Thiomannosides*, D. Crich and H. Li, *J. Org. Chem.*, 2000, **65**, 801-805.
157. *Inter and Intramolecular Pathways for the Formation of Tetrahydrofurans from β -(Phosphatoxy)alkyl Radicals. Evidence for a Dissociative Mechanism*, D. Crich, X. Huang and M. Newcomb, *J. Org. Chem.*, 2000, **65**, 523-529.
158. *Efficient One-Pot Conversion of Carbonyl Compounds to Their α,β -Unsaturated Derivatives Using a Recoverable, Minimally Fluorous Organoselenium Reagent*, D. Crich and G. R. Barba, *Org. Lett.*, 2000, **2**, 989-991.
159. *Reaction of Sodium Cyanide with 5-Bromobenzo-1-suberone: A Reappraisal*, D. Crich and S. Gastaldi, *New J. Chem*, 2000, 249-250.
160. *Laser Flash Photolysis Kinetic Studies of α -Methoxy- β -phosphatoxyalkyl Heterolysis Reactions. A Method for Alkoxyalkyl Radical Cation Detection*, M. Newcomb, N. Miranda, X. Huang and D. Crich, *J. Am. Chem. Soc.*, 2000, **122**, 6128-6129.

161. *An Unusual Example of Steric Buttressing in Glycosylation*, D. Crich and V. Dudkin, *Tetrahedron Lett.*, 2000, **41**, 5643-5646.
162. *Radical Rearrangement of Esters*, D. Crich in *Radicals in Organic Synthesis*, P. Renaud and M. P. Sibi, Eds, Wiley-VCH, Weinheim, 2001, 188-206.
163. *Efficient Diastereoselective Synthesis of a β -Mannosyl Phosphoisoprenoid*, D. Crich and V. Dudkin, *Org. Lett.* 2000, **2**, 3941-3943.
164. *Efficient Conversion of Vicinal Diols to Alkenes by Treatment of the Corresponding Dimesylates with a Catalytic, Minimally Fluorous, Recoverable Diaryl Diselenide and Sodium Borohydride*, D. Crich, S. Neelamkavil, and F. Sartillo-Piscil, *Org. Lett.* 2000, **2**, 4029-4031.
165. *2,4,6-Tri-tert-butylpyrimidine (TTBP): A Cost Effective, Readily Available Alternative to the Hindered Base 2,6-Di-tert-butylpyridine and its 4-Substituted Derivatives in Glycosylation and Other Reactions*, D. Crich, M. Smith, Q. Yao, and J. Picione, invited contribution, *Synthesis* 2001, 323-326.
166. *S-(4-Methoxyphenyl) Benzenethiosulfinate (MPBT)/Trifluoromethanesulfonic Anhydride; A Convenient System for the Generation of Glycosyl Triflates from Thioglycosides*, D. Crich and M. Smith, *Org. Lett.* 2000, **2**, 4067-4069.
167. *Product Studies and Laser Flash Photolysis on Alkyl Radicals Containing Two Different β -Leaving Groups are Consonant with the Formation of an Olefin Cation Radical*, B. C. Bales, J. H. Horner, X. Huang, M. Newcomb, D. Crich, and M. M. Greenberg, *J. Am. Chem. Soc.*, 2001, **123**, 3623-3629.
168. *Why Are the Hydroxy Groups of Partially Protected N-Acetylglucosamine Derivatives Such Poor Glycosyl Acceptors, and What Can Be Done About It? A Comparative Study of the Reactivity of N-Acetyl-, N-Phthalimido-, and 2-Azido-2-Deoxy-Glucosamine Derivatives in Glycosylation. 2-Picolinyl (Pic) Ethers as Reactivity Enhancing Replacements for Benzyl Ethers*, D. Crich and V. Dudkin, *J. Am. Chem. Soc.*, 2001, **123**, 6819-6825.
169. *Direct Synthesis of β -Mannans. A Hexameric [$\rightarrow$ 3]- β -D-Man-(1 $\rightarrow$ 4)- β -D-Man-(1)]₃ Subunit of the Antigenic Polysaccharides from *Leptospira biflexa* and the Octameric (1 $\rightarrow$ 2)-Linked β -D-Mannan of the *Candida albicans* Phospholipomannan. X-Ray Crystal Structure of a Protected*

Tetramer, D. Crich, H. Li, Q. Yao, D. J. Wink, R. D. Sommer, and A. L. Rheingold, *J. Am. Chem. Soc.*, 2001, **123**, 5826-5828.

170. *Generation and Reaction of Alkene Radical Cations under Non-Oxidizing Conditions; Synthesis of the Pyrrolizidine Nucleus*, D. Crich, K. Ranganathan and X. Huang, *Org. Lett.*, 2001, **3**, 1917-1919.

171. *An Oxyanion-Hole Selective Serine Protease Inhibitor in Complex with Trypsin*, J. Cui, F. Marankan, W. Fu, D. Crich, A. Mesecar and M. E. Johnson, *Bioorg. Med. Chem.*, 2002, **10**, 41-46.

172. *Direct Measurement of Enol Ether Radical Cation Reaction Kinetics*, M. Newcomb, N. Miranda, M. Sannigrahi, and D. Crich, *J. Am. Chem. Soc.*, 2001, **123**, 6445-6446.

173. *Fluorous Swern Reaction*, D. Crich and S. Neelamkavil, *J. Am. Chem. Soc.*, 2001, **123**, 7449-7450.

174. *1-Benzenesulfinyl Piperidine (BSP)/trifluoromethanesulfonic Anhydride: a Potent Combination of Shelf-Stable Reagents for the Low Temperature Conversion of Thioglycosides to Glycosyl Triflates and for the Formation of Diverse Glycosidic Linkages*, D. Crich and M. Smith, *J. Am. Chem. Soc.*, 2001, **123**, 9015-9020.

175. *On the Dynamics of Alkene Radical Cation/Phosphate Anion Pair Formation from Nucleotide C4' Radicals. The DNA/RNA Paradox Revisited*, D. Crich and W. Huang, *J. Am. Chem. Soc.*, 2001, **123**, 9239-9245.

176. *Synthesis of the Salmonella Type E₁ Core Trisaccharide as a Probe for the Generality of 1-Benzenesulfinyl Piperidine/Triflic Anhydride Combination for Glycosidic Bond Formation from Thioglycosides*, D. Crich and H. Li, *J. Org. Chem.*, 2002, **67**, 4640-4646.

177. *Synthesis of the Mannosyl Erythritol Lipid MEL A: Confirmation of the Configuration of the "meso-Erythritol"*, D. Crich, M. A. de la Mora and R. Cruz, *Tetrahedron*, 2002, **58**, 35-44.

178. *The Fluorous Swern and Corey-Kim Reactions: Scope and Mechanism*, D. Crich and S. Neelamkavil, *Tetrahedron*, 2002, **58**, 3865-3870.

179. *Confirmation of the Connectivity of 4,8,12,16,20-Pentamethylpentacosylphosphoryl β -D-Mannopyranoside, an Unusual β -Mannosyl Phosphoisoprenoid from mycobacterium avium, through Synthesis*, D. Crich and V. Dudkin, *J. Am. Chem. Soc.* 2002, **124**, 2263-2266.
180. *Stereoselective Formation of Glycosyl Sulfoxides and Their Subsequent Equilibration. Ring Inversion of an α -Xylopyranosyl Sulfoxide Dependent on the Configuration at Sulfur*, D. Crich, J. Mataka, L. N. Zakharov, A. L. Rheingold, and D. J. Wink, *J. Am. Chem. Soc.* 2002, **124**, 6028-6036.
181. *Rapid Assembly of Tetrahydrodibenzofurans and Tetrahydrocarbazoles from Benzene and o-Iodophenols and o-Iodoanilines: Reductive Radical Arylation of Benzene in Action*, D. Crich and M. Sannigrahi, *Tetrahedron*, 2002, **58**, 3319-3322.
182. *Radical Contraction of 1,3,2-Dioxaphosphepanes to 1,3,2-Dioxaphosphorinanes: a Kinetic and ^{17}O -NMR Spectroscopic Study*, D. Crich, F. Sartillo-Piscil, L. Quintero-Cortes, and D. J. Wink, *J. Org. Chem.*, 2002, **67**, 3360-3364.
183. *Solid Phase Synthesis of β -Mannosides*, D. Crich and M. Smith, *J. Am. Chem. Soc.*, 2002, **124**, 8867-8869.
184. *The Effect of the Base in the Fragmentation of Nucleotide C4' Radicals*, D. Crich, D.-H. Suk, and X. Hao, *Tetrahedron*, 2002, **58**, 5789-5801.
185. *Generation and Trapping of Alkene Radical Cations under Non-Oxidizing Conditions: Formation of Six-Membered Rings by exo- and endo-Mode Cyclizations*, D. Crich and S. Neelamkavil, *Org. Lett.* 2002, **4**, 2573-2575.
186. *Diastereoselectivity in the Cyclization of Alkene Radical Cations: Contact Ion Pairs and Memory Effects*, D. Crich and K. Ranganathan, *J. Am. Chem. Soc.* 2002, **124**, 12422-12423.
187. *Fluorous Dimethyl Sulfide: A Convenient, Odorless, Recyclable Borane Carrier*, D. Crich and S. Neelamkavil, *Org. Lett.* 2002, **4**, 4175-4177.
188. *Asymmetric Synthesis of Highly-Substituted β -Nitroalcohols and Enantiomerically-Enriched 4,4,5-Trisubstituted Oxazolidinones*, D. Crich, K. Ranganathan, S. Rumthao, and M. Shirai, *J. Org. Chem.* 2003, **68**, 2034-2037.

189. *Chemistry of Glycosyl Triflates: Synthesis of β -Mannopyranosides*, D. Crich, *J. Carbohydr. Chem.* 2002, **21**, 663-686.
190. *A Short Synthesis of the Trisaccharide Building Block of the N-Linked Glycans*, V. Y. Dudkin and D. Crich, *Tetrahedron Lett.* 2003, **44**, 1787-1789.
191. *Direct Synthesis of the β -L-Rhamnopyranosides*, D. Crich and J. Picione, *Org. Lett.* 2003, **5**, 781-784.
192. *Oxazolidinone Protection of N-Acetylglucosamine Confers High Reactivity on the 4-Hydroxy Group in Glycosylation*, D. Crich and A. U. Vinod, *Org. Lett.* 2003, **5**, 1297-1300.
193. *Design and Synthesis of Highly Constrained Factor Xa Inhibitors: Amidine-Substituted Bis(benzoyl)-[1,3]-diazpan-2-ones and Bis(benzylidene)-bis(gem-dimethyl)cycloketones*, J. Cui, D. Crich, D. Wink, M. Lam, A. L. Rheingold, D. A. Case, W. T. Fu, Y. Zhou, M. Rao, A. J. Olson, and M. E. Johnson, *Bioorg. Med. Chem.*, 2003, **11**, 3379-3392.
194. *The 4,6-O-[α -(2-(2-Iodophenyl)ethylthiocarbonyl)-benzylidene] Protecting Group: Stereoselective Glycosylation, Reductive Radical Fragmentation, and the Synthesis of β -D-Rhamnopyranosides and Other Deoxy Sugars*, D. Crich and Q. Yao, *Org. Lett.* 2003, **5**, 2189-2191.
195. *Highly Diastereoselective Radical Cyclization of a Glucose-Derived Enol Ether Radical Cation/Phosphate Anion Pair*, D. Crich, D.-H. Suk and S. Sun, *Tetrahedron: Asymmetry* 2003, **14**, 2861-2864.
196. *Tandem Polar/Radical Crossover Sequences for the Formation of Fused and Bridged Bicyclic Nitrogen Heterocycles Involving Radical Ionic Chain Reactions, and Alkene Radical Cation Intermediates, Performed under Reducing Conditions: Scope and Limitations*, D. Crich, K. Ranganathan, S. Neelamkavil and X. Huang, *J. Am. Chem. Soc.* 2003, **125**, 7942-7947.
197. *1-Benzenesulfinyl Piperidine (BSP)/Triflic Anhydride: an Effective Combination for the Hydrolysis of Dithioacetals*, D. Crich and J. Picione, *Synlett* 2003, 1257-1258.

198. *Recyclable Oxidation Reagents*, D. Crich and Y. Zou in *Handbook of Fluorous Chemistry*, J. A. Gladysz, I. T. Horváth, and D. P. Curran, Eds, Wiley-VCH, Weinheim, 2004, 202-222.
199. *Borane-Fluorous Dialkyl Sulfide. Preparation and Application to the Hydroboration of β -Pinene*, D. Crich, M. Patel, and S. Neelamkavil in *Handbook of Fluorous Chemistry*, J. A. Gladysz, I. T. Horváth, and D. P. Curran, Eds, Wiley-VCH, Weinheim, 2004, 475-477.
200. *Branched Aliphatic Alkanes with Quaternary Substituted Carbon Atoms in Modern and Ancient Geologic Samples*, F. Kenig, D.-J. H. Simons, D. Crich, J. P. Cowen, G. T. Ventura, T. Rehbein-Khalily, T. C. Brown, and K. B. Anderson, *Proc. Natl. Acad. Sci.* 2003, **100**, 12554-12558.
201. *The β -Acyloxy)alkyl Radical Rearrangement Revisited*, D. Crich and D.-H. Suk, *Can. J. Chem.* 2004, **82**, 75-79.
202. *Influence of the 4,6-O-Benzylidene, 4,6-O-Phenylboronate, and 4,6-O-Polystyrylboronate Protecting Groups on the Stereochemical Outcome of Thioglycoside-Based Glycosylations Mediated by 1-Benzenesulfinyl Piperidine/Triflic Anhydride and N-Iodosuccinimide/Trimethylsilyl Triflate*, D. Crich, M. de la Mora, A. U. Vinod, *J. Org. Chem.* 2003, **68**, 8142-8148.
203. *The 3,4-O-Carbonate Protecting Group as a β -Directing Group in Rhamnopyranosylation in both Homogeneous and Heterogeneous Glycosylations as Compared to the Chameleon-Like 2,3-O-Carbonates*, D. Crich, A. U. Vinod, and J. Picione, *J. Org. Chem.* 2003, **68**, 8453-8458.
204. *Enantioselective Cyclization of Alkene Radical Cations*, D. Crich, M. Shirai, and S. Rumthao, *Org. Lett.* 2003, **5**, 3767-3769.
205. *Cyclofunctionalization of Unsaturated Alcohols, Phenols, Acids, and Sulfonamides with 1-Benzenesulfinyl Piperidine and Trifluoromethanesulfonic Anhydride*, D. Crich, B. Surve, and M. Sannigrahi, *Heterocycles*, 2004, **62**, 827-830.
206. *Synthesis of Carbazomycin B by Radical Arylation of Benzene*, D. Crich and S. Rumthao, *Tetrahedron*, 2004, **60**, 1513-1516.
207. *Catalytic Allylic Oxidation with a Recyclable, Fluorous Seleninic Acid*, D. Crich and Y. Zou, *Org. Lett.* 2004, **6**, 775-777.

208. *The Intramolecular Asymmetric Pauson-Khand Cyclization as a Novel and General Stereoselective Route to Benzindene Prostacyclins: Synthesis of UT-15 (Treprostinil)*, R. M. Moriarty, N. Rani, L. A. Enache, M. S. Rao, H. Batra, L. Guo, R. A. Penmasta, J. P. Staszewski, S. M. Tuladhar, O. Prakash, D. Crich, A. Hirtopeanu, and R. Gilardi, *J. Org. Chem.* 2004, **69**, 1890-1902.
209. *Glycosylation with Sulfoxides and Sulfinates as Donors or Promoters*, D. Crich and L. B. L. Lim, *Org. React.* 2004, **64**, 115-251.
210. *Endo-Selective Quenching of Hexahydropyrrolo[2,3-b]indole-based N-Acyliminium Ions*, R. L. Meza-León, D. Crich, S. Bernès, and L. Quintero, *J. Org. Chem.* 2004, **69**, 3976-3978.
211. *The Benzyldene Acetal Fragmentation Route to 6-Deoxy Sugars: Direct Reductive Cleavage in the Presence of Ether Protecting Groups Permitting the Efficient, Highly Stereocontrolled Synthesis of β -D-Rhamnosides from D-Mannosyl Glycosyl Donors. Total Synthesis of α -D-Gal-(1 $\rightarrow$ 3)- α -D-Rha-(1 $\rightarrow$ 3)- β -D-Rha-(1 $\rightarrow$ 4)- β -D-Glu-OMe, the Repeating Unit of the Antigenic Lipopolysaccharide from *Escherichia hermannii* ATCC 33650 and 33652*, D. Crich and Q. Yao, *J. Am. Chem. Soc.* 2004, **126**, 8232-8236.
212. *Structure and Distribution of Branched Aliphatic Alkanes with Quaternary Carbon Atoms in Cenomanian and Turonian Black Shales of Pasquia Hill (Saskatchewan, Canada)*, F. Kenig, D.-J. H. Simons, D. Crich, J. P. Cowen, G. T. Ventura and T. Rehbein-Khalily, *Organic Geochem.* 2005, **36**, 117-138.
213. *Direct Chemical Synthesis of the β -D-Mannans: the β -(1 $\rightarrow$ 2)- and β -(1 $\rightarrow$ 4)-Series*, D. Crich, A. Banerjee and Q. Yao, *J. Am. Chem. Soc.* 2004, **126**, 14930-14934.
214. *Direct Chemical Synthesis of the β -Mannans: Linear and Block Syntheses of the Alternating β -(1 $\rightarrow$ 3)- β -(1 $\rightarrow$ 4)-Mannan Common to *Rhodotorula glutinis*, *Rhodotorula mucilaginosa*, and *Leptospira biflexa**, D. Crich, W. Li and H. Li, *J. Am. Chem. Soc.* 2004, **126**, 15081-15086.
215. *Design, Synthesis and Evaluation of Oxyanion-Hole Selective Inhibitor Substituents for the S1 Subsite of Factor Xa*, S. Rumthao, O. Lee, Q. Sheng, W.T. Fu, D. C. Mulhearn, D. Crich, A. D. Mesecar, and M. E. Johnson. *Bioorg. Med. Chem. Lett.* 2004, **14**, 5165-5170.

216. *Mechanism of 4,6-O-Benzylidene Directed β -Mannosylation as Determined by α -Deuterium Kinetic Isotope Effects*, D. Crich and N. S. Chandrasekera, *Angew. Chem. Int. Ed. Engl.* 2004, **43**, 5386-5389.
217. *Direct Synthesis of Heterobiaryls by Radical Addition to Pyridine: Expeditious Synthesis of Chelating Ligands*, D. Crich and M. Patel, *Heterocycles* 2004, **64**, 499-504.
218. *Disarming, Non-participating 2-O-Protecting Groups in Manno- and Rhamnopyranosylation: Scope and Limitations of Sulfonates, Vinylogous Esters, Phosphates, Cyanates, and Nitrates*, D. Crich, T. K. Hutton, A. Banerjee, P. Jayalath, and J. Picione, *Tetrahedron: Asymmetry* 2005, **16**, 105-119.
219. *6-O-Benzyl and 6-O-Silyl-N-acetyl-2-amino-2-N,3-O-carbonyl-2-deoxyglucosides: Effective Glycosyl Acceptors in the Glucosamine 4-OH Series. Effect of Anomeric Stereochemistry on the Removal of the Oxazolidinone Group*, D. Crich and A. U. Vinod, *J. Org. Chem.* 2005, **70**, 1291-1296.
220. *Synthesis of a 4,6-Disubstituted Dibenzofuran β -Sheet Initiator by Reductive Radical Arylation of Benzene*, D. Crich and D. Grant, *J. Org. Chem.* 2005, **70**, 2384-2386.
221. *Catalytic Oxidation Adjacent to Carbonyl Groups and at Benzylic Positions with a Fluorous Seleninic Acid in the Presence of Iodoxybenzene*, D. Crich and Y. Zou, *J. Org. Chem.* 2005, **70**, 3309-3311.
222. *Synthesis and Stereoselective Glycosylation of D- and L-glycero- β -D-manno-Heptopyranoses*, D. Crich and A. Banerjee, *Org. Lett.* 2005, **7**, 1395-1398.
223. *2-O-Propargyl Ethers: Readily-Cleavable, Minimally-Intrusive Protecting Groups for β -Mannosyl Donors*, D. Crich and P. Jayalath, *Org. Lett.* 2005, **7**, 2277-2280.
224. *Improved Synthesis of 1-Benzenesulfinyl Piperidine and Analogs for the Activation of Thioglycosides in Conjunction with Trifluoromethanesulfonic Anhydride*, D. Crich, A. Banerjee, W. Li, and Q. Yao, *J. Carbohydr. Chem.* 2005, **24**, 415-424.

225. *Stereochemical Memory Effects in Alkene Radical Cation - Anion Contact Ion Pairs: Effect of Substituents, and Models for Diastereoselectivity*, D. Crich and K. Ranganathan, *J. Am. Chem. Soc.* 2005, **127**, 9924-9929.
226. *Stereocontrolled Formation of β -Glucosides and Related Linkages in the Absence of Neighboring Group Participation: Influence of a trans-Fused 2,3-O-Carbonate Group*, D. Crich and P. Jayalath, *J. Org. Chem.* 2005, **70**, 7252-7259.
227. *Facile Dearomatizing Radical Arylation of Furan and Thiophene*, D. Crich and M. Patel, *Org. Lett.* 2005, **7**, 3625-3628.
228. *Approximate $^{\circ}\text{H}_5$ Ring Conformation of 2,3-O-Carbonate Protected α - and β -L-Rhamnopyranosides as Confirmed by X-Ray Crystallography*, D. Crich, A. U. Vinod, J. Picione, and D. J. Wink, *ARKIVOC* 2005, (**vi**), 339-344.
229. *Is There a Homolytic Substitution Chemistry ($\text{S}_{\text{H}}2$) of Sulfones?* D. Crich, T. K. Hutton, and K. Ranganathan, *J. Org. Chem.* 2005, **70**, 7672-7678.
230. *Stereocontrolled Glycosylation: Recent Advances. β -D-Rhamnopyranosides and β -D-Mannans*, D. Crich. *ACS Symposium Series* 2007, Vol. 960, 60-72.
231. *Generation of Alkene Radical Cations by Heterolysis of β -Substituted Radicals: Mechanism, Stereochemistry, and Applications in Synthesis*, D. Crich, F. Brebion, and D.-H. Suk, *Top. Curr. Chem.* **2006**, 263, 1-38.
232. *Enantioselective Alkene Radical Cation Reactions*, D. Crich, M. Shirai, F. Brebion, and S. Rumthao, *Tetrahedron* **2006**, 62, 66501-6518.
233. *Allylic Selenosulfide Rearrangement: A Method for Chemical Ligation to Cysteine and Other Thiols*, D. Crich, V. Krishnamurthy, and Thomas K. Hutton, *J. Am. Chem. Soc.* 2006, **128**, 2544-2545.
234. *Efficient Glycosidation of A Phenyl Thiosialoside Donor With Diphenyl Sulfoxide And Triflic Anhydride In Dichloromethane*, D. Crich and W. Li, *Org. Lett.* 2006, **8**, 959-962.

235. 4,6-O-[1-Cyano-2-(2-iodophenyl)ethylidene] Acetals. *Improved Second Generation Acetals for the Stereoselective Formation of β -D-Mannopyranosides and Regioselective Reductive Radical Fragmentation to β -D-Rhamnopyranosides. Scope and Limitations*, D. Crich and A. A. Bowers, *J. Org. Chem.* 2006, **71**, 3452-3463.
236. *Enhanced Diastereoselectivity in β -Mannopyranosylation through the Use of Sterically Minimal Propargyl Ether Protecting Groups*, D. Crich, P. Jayalath, and T. K. Hutton, *J. Org. Chem.* 2006, **71**, 3064-3070.
237. *On the Regioselectivity of the Hanessian-Hullar Reaction in 4,6-O-Benzylidene Protected Galactopyranosides*, D. Crich, Q. Yao, and A. A. Bowers, *Carbohydr. Res.* **2006**, 341, 1748-1752.
238. *On the Nitrile Effect in L-Rhamnopyranosylation*, D. Crich and M. Patel, *Carbohydr. Res.* **2006**, 341, 1467-1475.
239. *Expedient Two Step Synthesis of Phenolic Cyclitols from Benzene*, D. Crich, D. Grant, and D. J. Wink *J. Org. Chem.* 2006, 71, 4521-4524.
240. *Stereocontrolled Synthesis of the D- and L-glycero- β -D-mannoheptopyranosides and their 6-Deoxy Analogs. Synthesis of Methyl α -L-Rhamnopyranosyl-(1 $\rightarrow$ 3)-D-glycero- β -D-mannoheptopyranosyl-(1 $\rightarrow$ 3)-6-deoxy-glycero- β -D-manno-heptopyranosyl-(1 $\rightarrow$ 4)- α -L-rhamnopyranoside, a Tetrasaccharide Subunit of the Lipopolysaccharide from *Plesimonas shigelloides**, D. Crich and A. Banerjee, *J. Am. Chem. Soc.* **2006**, 128, 8078-8086.
241. *Radical Dearomatization of Benzene Leading to Phenanthridine and Phenanthridinone Derivatives Related to ($\pm$)-Pancratistatin*, D. Crich and V. Krishnamurthy, *Tetrahedron*, **2006**, 62, 6830-6840.
242. *Homolytic Substitution at the Sulfur Atom as a Tool for Organic Synthesis*, D. Crich, *Helv. Chim. Acta*, **2006**, 89, 2167-2182.
243. *Total Synthesis and Structural Verification of Some Novel Branched Alkanes with Quaternary Carbons (BAQC's) Isolated from Diverse Geological Sources*, D. Crich, H. Xu, and F. Kenig, *J. Org. Chem.*, **2006**, 71, 5016-5019.

244. *Radical Dearomatization of Arenes and Heteroarenes*, D. Crich and M. Patel, *Tetrahedron*, **2006**, 62, 7824-7837.
245. *Allylic Disulfide Rearrangement and Desulfurization: Mild, Electrophile-Free Thioether Formation From Thiols*, D. Crich, F. Brebion, and V. Krishnamurthy, *Org. Lett.*, **2006**, 8, 3593-3596.
246. *Expedient Synthesis of syn- β -Hydroxy- α -amino Acid Derivatives: Phenylalanine, Tyrosine, Histidine and Tryptophan*, D. Crich and A. Banerjee, *J. Org. Chem.* **2006**, 71, 7106-7109.
247. *Synthesis of a β -(1 $\rightarrow$ 3)-D-Rhamnotetraose by a One-Pot, Multiple Radical Fragmentation*, D. Crich and A. A. Bowers, *Org. Lett.*, **2006**, 8, 4327-4330.
248. *On the Influence of the C2-O2 and C3-O3 Bonds in the 4,6-O-Benzylidene-Directed β -Mannopyranosylation and α -Glucopyranosylation*, D. Crich and O. Vinogradova, *J. Org. Chem.* **2006**, 71, 8473-8480.
249. *1-Naphthylpropargyl Ether Group: A Readily Cleaved and Sterically Minimal Protecting System for Stereoselective Glycosylation*, D. Crich and B. Wu, *Org. Lett.*, **2006**, 8, 4879-4882.
250. *Sigmatropic Rearrangements as Tools for Amino Acid and Peptide Modification: Application of the Allylic Sulfur Ylide Rearrangement to the Preparation of Neoglycoconjugates and Other Conjugates*, D. Crich and Y. Zou, *J. Org. Chem.* **2006**, 71, 9172-9177.
251. *Chemistry of the Hexahydropyrroloindoles: Configuration, Conformation, Reactivity, and Applications in Synthesis*, D. Crich and A. Banerjee, *Acc. Chem. Res.* **2007**, 40, 151-161.
252. *On the Use of 3,5-Di-O-benzylidene and 3,5-Di-O-(di-tert-butylsilylene)-2-O-benzylarabinofuranosides and their Sulfoxides as Glycosyl Donors for the Synthesis of β -Arabinofuranosides: Importance of the Activation Method*, D. Crich, C. M. Pedersen, A. A. Bowers, and D. J. Wink, *J. Org. Chem.* **2007**, 72, 1553-1565.
253. *4,6-O-Benzylidene-Directed β -Mannopyranosylation and α -Glucopyranosylation: the 2-Deoxy-2-fluoro- and 3-Deoxy-3-fluoro- Series of Donors and the Importance of the O2-C2-C3-O3 Interaction*, D. Crich and L. Li, *J. Org. Chem.* **2007**, 72, 1681-1690.

254. *O-Sialylation with N-Acetyl-5-N,4-O-Carbonyl Protected Thiosialoside Donors in Dichloromethane; Facile and Selective Cleavage of the Oxazolidinone Ring*, D. Crich and W. Li, *J. Org. Chem.* **2007**, 72, 2387-2391.
255. *Facile Oxidative Cleavage of 4-O-Benzyl Ethers with Dichlorodicyanoquinone in Rhamno and Mannopyranosides*, D. Crich and O. Vinogradova, *J. Org. Chem.* **2007**, 72, 3581-3584.
256. *Catalysis of Stannane-Mediated Radical Chain Reactions by Benzeneselenol*, D. Crich, D. Grant, V. Krishnamurthy, and M. Patel, *Acc. Chem. Res.* **2007**, 40, 453-463.
257. *Stereocontrolled Glycoside and Glycosyl Ester Synthesis. Neighboring Group Participation and Hydrogenolysis of 3-(2'-Benzyloxyphenyl)-3,3-dimethylpropanoates*, D. Crich and F. Cai., *Org. Lett.* **2007**, 9, 1613-1615.
258. *β -Selective Glucosylation in the Absence of Neighboring Group Participation: Influence of the 3,4-O-Bisacetal Protecting System*, D. Crich, V. Subramanian, and T. K. Hutton, *Tetrahedron* **2007**, 63, 5042-5049.
259. *Sulfoxides, Sulfimides, and Sulfones*. D. Crich and A. A. Bowers In *Handbook of Chemical Glycosylation: Advances in Stereoselectivity and Therapeutic Relevance*, A. V. Demchenko, Ed., Wiley, Weinheim, 2008, pp 303-329.
260. *Direct Stereocontrolled Synthesis of 3-Amino-3-deoxy- β -mannopyranosides: Importance of the Nitrogen Protecting Group on Stereoselectivity*, D. Crich and H. Xu, *J. Org. Chem.* **2007**, 72, 5183-5192.
261. *Dechalcogenative Allylic Selenosulfide And Disulfide Rearrangements: Complementary Methods For The Formation Of Allylic Sulfides In The Absence Of Electrophiles. Scope, Limitations, And Application To The Functionalization Of Unprotected Peptides In Aqueous Media*, D. Crich, V. Krishnamurthy, F. Brebion, M. Karatholuvhu, V. Subramanian, and T. K. Hutton, *J. Am. Chem. Soc.* **2007**, 129, 10282-10294.
262. *Synthesis of the antigenic tetrasaccharide side chain from the major glycoprotein of *Bacillus anthracis* exosporium*, D. Crich and O. Vinogradova, *J. Org. Chem.* **2007**, 72, 6513-6520.

263. *Synthesis and Glycosylation of a Series of 6-Mono-, Di-, and Trifluoro S-Phenyl 2,3,4-Tri-O-benzyl-thiorhamnopyranosides. Effect of the Fluorine Substituents on Glycosylation Stereoselectivity*, D. Crich and O. Vinogradova, *J. Am. Chem. Soc.* **2007**, 129, 11756-11765.
264. *Convergent Synthesis of a β -(1 $\rightarrow$ 3)-Mannohexaose*, D. Crich, B. Wu, and P. Jayalath, *J. Org. Chem.* **2007**, 72, 6806-6815.
265. *Native Chemical Ligation at Phenylalanine*, D. Crich and A. Banerjee, *J. Am. Chem. Soc.* **2007**, 129, 10064-10065.
266. *Electrochemical Generation of Glycosyl Triflate Pools*, T. Nokami, A. Shibuya, A., H. Tsuyama, S. Suga, A. A. Bowers, D. Crich, and J.-i. Yoshida, *J. Am. Chem. Soc.* **2007**, 129, 10922-10928.
267. *α -Selective Sialylations at -78 °C in Nitrile Solvents with a 1-Adamantanyl Thiosialoside*, D. Crich and W. Li, *J. Org. Chem.* **2007**, 72, 7794-7797.
268. *Amino Acid and Peptide Synthesis and Functionalization by the Reaction of Thioacids with 2,4-Dinitrobenzenesulfonamides*, D. Crich, K. Sana, and S. Guo, *Org. Lett.* **2007**, 9, 4423-4426.
269. *Revisiting the Armed-Disarmed Concept: The Importance of Anomeric Configuration in the Activation of S-Benzoxazolyl Glycosides*, D. Crich and M. Li, *Org. Lett.* **2007**, 9, 4115-4118.
270. *Heterobivalent Library Expansion by "Living Radical" Processes. Thiocarbonyl Addition Elimination, and Nitroxide-Based Reactions with Fluorous Deconvolution*, D. Crich, D. Grant, and A. A. Bowers, *J. Am. Chem. Soc.* **2007**, 129, 12106-12107.
271. *Cyclic Thioanhydrides: Linchpins for Multicomponent Coupling Reactions Based on the Reaction of Thioacids with Electron-Deficient Sulfonamides and Azides*, D. Crich and A. A. Bowers, *Org. Lett.* **2007**, 9, 5323-5325.
272. *CD1c Presentation of Synthetic Glycolipid Antigens with Foreign Alkyl Branching Motifs*, A. de Jong, E. C. Arce, T.-Y. Cheng, R. P. van Summeren, B. L. Feringa, V. Dudkin, D. Crich, I. Matsunaga, A. J. Minnaard, D. B. Moody, *Chem. & Biol.* **2007**, 14, 1232-1242.

273. *Imposing the trans/gauche Conformation on a Sialic Acid Donor with a 5-N,7-O-Oxazinanone Group: Effect on Glycosylation Stereoselectivity*, D. Crich and B. Wu, *Tetrahedron* **2008**, 64, 2042-2047.
274. *Intramolecular Homolytic Aromatic Substitution of Alkyl 2-Benzimidazolyl Sulfones as a Means of Entry into Alkyl Radicals for Organic Synthesis*, D. Crich and D. Grant, *Tetrahedron Lett.* **2008**, 49, 2999-3003.
275. *A Stable, Commercially Available Sulfenyl Chloride for the Activation of Thioglycosides in Conjunction with Silver Trifluoromethanesulfonate*, D. Crich, F. Cai, and F. Yang, *Carbohydr. Res.* **2008**, 343, 1858-1862.
276. *Application of the 4-Trifluoromethylbenzenepropargyl Ether Group as an Unhindered, Electron Deficient Protecting Group for Stereoselective Glycosylation*, D. Crich and M. S. Karatholuvhu, *J. Org. Chem.* **2008**, 73, 5173-5176.
277. *Block Synthesis of Tetra- and Hexasaccharides (β -D-glycero-D-manno-Hepp-(1 $\rightarrow$ 4)-[α -L-Rhap-(1 $\rightarrow$ 3)- β -D-glycero-D-manno-Hepp-(1 $\rightarrow$ 4)] n - α -L-Rhap-OMe ($n = 1$ and 2) Corresponding to Multiple Repeat Units of the Glycan from the Surface-Layer Glycoprotein from *Bacillus thermoaerophilus**, D. Crich and M. Li, *J. Org. Chem.* **2008**, 73, 7003-7010.
278. *Synthesis of Neoglycoconjugates by the Desulfurative Rearrangement of Allylic Disulfides*, D. Crich and F. Yang, *J. Org. Chem.* **2008**, 73, 7017-7027.
279. *Stereoselective Iterative One Pot Synthesis of N-Glycoylneuraminic Acid-Containing Oligosaccharides*, D. Crich and B. Wu, *Org. Lett.* **2008**, 10, 4033-4035.
280. *Stereocontrolled Synthesis of Mannans and Rhamnans*, F. Cai, B. Wu, and D. Crich, *Adv. Carbohydr. Chem. Biochem.* **2009**, 62, 251-309..
281. *Is Donor-Acceptor Hydrogen Bonding Necessary for 4,6-O-Benzylidene-directed β -Mannopyranosylation? Stereoselective Synthesis of β -C-Mannopyranosides and α -C-Glucopyranosides*, D. Crich and I. Sharma, *Org. Lett.* **2008**, 10, 4731-4734.

282. *Does Neighboring Group Participation by Non-Vicinal Esters Play a Role in Glycosylation Reactions? Effective Probes for the Detection of Bridging Intermediates*, D. Crich, T. Hu, and F. Cai, *J. Org. Chem.* **2008**, 73, 8942-8953.
283. *Bacillus anthracis o-succinylbenzoyl-CoA synthetase: reaction kinetics and a novel inhibitor mimicking its reaction intermediate*, Y. Tian, D.-H. Suk, F. Cai, D. Crich, and A. D. Mesecar, *Biochemistry* **2008**, 47, 12434-12447.
284. *Dimethylthexylsilyl 2-acetamido-3-O-allyl-2-deoxy-6-O-(4-methoxybenzyl)- β -D-glucopyranoside, dimethylthexylsilyl 3,4,6-tri-O-benzyl- β -D-mannopyranosyl-(1 $\rightarrow$ 4)-2-acetamido-3-O-allyl-2-deoxy-6-O-(4-methoxybenzyl)- β -D-glucopyranoside, and dimethylthexylsilyl 2-O-(benzylsulfonyl)-3,4,6-tri-O-benzyl- β -D-mannopyranosyl-(1 $\rightarrow$ 4)-2-acetamido-3-O-allyl-2-deoxy-6-O-(4-methoxybenzyl)- β -D-glucopyranoside: synthesis of authentic samples*, D. Crich, M. Li, and P. Jayalath, *Carbohydr. Res.* **2009**, 344, 140-144.
285. *Stereocontrolled Synthesis of D- and L- β -Rhamnopyranosides with 4-O-6-S- α -Cyanobenzylidene-Protected 6-Thiorhamnopyranosyl Thioglycosides*, D. Crich and L. Li, *J. Org. Chem.* **2009**, 74, 773-781.
286. *The 4-(tert-Butyldiphenylsiloxy)-3-fluorobenzyl Group: A New Alcohol Group, Fully Orthogonal with the p-Methoxybenzyl Group and Removable under Desilylation Conditions*, D. Crich, L. Li, and M. Shirai, *J. Org. Chem.* **2009**, 74, 2486-2493.
287. *One-Pot Syntheses of Dissymmetric Diamides Based on the Chemistry of Cyclic Monothioanhydrides. Scope and Limitations and Application to the Synthesis of Glycodipeptides*, D. Crich, K. Sasaki, Md. Y. Rahaman, and A. A. Bowers, *J. Org. Chem.* **2009**, 74, 3886-3893.
288. *Epimerization-Free Block Synthesis of Peptides from Thioacids and Amines with the Sanger and Mukaiyama Reagents*, D. Crich and I. Sharma, *Angew. Chem. Int. Ed.* **2009**, 48, 2355-2358.
289. *S_N2-Type Nucleophilic Opening of β -Thiolactones (Thietan-2-ones) as a Source of Thioacids for Coupling Reactions*, D. Crich and K. Sana, *J. Org. Chem.* **2009**, 74, 3389-3393.
290. *Reaction of Thioacids with Isocyanates and Isothiocyanates: A Convenient Amide Ligation Process*, D. Crich and K. Sasaki, *Org. Lett.* **2009**, 11, 3514-3517.

291. *Thiomaleic Anhydride: A Convenient Building Block for the Synthesis of α -Substituted γ - and δ -Lactones through Free Radical Addition, Nucleophilic Ring Opening and Subsequent Thiocarboxylate Manipulation*, D. Crich and Md. Y. Rahaman, *J. Org. Chem.* **2009**, 74, 6792-6796.
292. *Solid Phase Synthesis of Peptidyl Thioacids Employing a 9-Fluorenylmethyl Thioester-Based Linker in Conjunction with Boc Chemistry*, D. Crich and K. Sana, *J. Org. Chem.* **2009**, 74, 7383-7388.
293. *Triblock Peptide and Peptide Thioester Synthesis With Reactivity-Differentiated Sulfonamides and Peptidyl Thioacids*, D. Crich and I. Sharma, *Angew. Chem. Int. Ed.* **2009**, 48, 7591-7594.
294. *Phenylthiomethyl Glycosides: Convenient Synthons for the Formation of Azidomethyl and Glycosylmethyl Glycosides and Their Derivatives*, D. Crich and F. Yang, *Angew. Chem. Int. Ed.* **2009**, 48, 8896-8899.
295. *Silver-Mediated Allylic Disulfide Rearrangement for Conjugation of Thiols in Protic Media*, D. Crich, V. Subramanian, and M. Karatholuvhu, *J. Org. Chem.* **2009**, 74, 9422-9427.
296. *Highly Stereoselective Synthesis of α -D-Mannopyranosyl Phosphosugars*, D. Crich and S. Picard, *J. Org. Chem.* **2009**, 74, 9576-9579.
297. *Efficient, Highly Stereoselective Synthesis of α -Keto-deoxy-D-glycero-D-galacto-nonulosonic Acid (KDN) Glycosides by Means of the 4,5-O-Carbonate Protecting Group*, D. Crich and C. Navuluri, *Angew. Chem. Int. Ed.* **2010**, 49, 3049-3052.
298. *Double Diastereoselection, Regioselectivity, and the Importance of Donor-Acceptor Complementarity in the Stereoselectivity of Glycosylation Reactions*, L. Bohé and D. Crich, *Trends Glycosci. Glycotech.* **2010**, 22, 1-15.
299. *Dihydro-3-(triphenylphosphoranylidene)-2,5-thiophendione: A Convenient Synthon for the Preparation of Substituted 1,4-Thiazepin-5-ones and Piperidinones via the Intermediacy of Thioacids*, D. Crich and Md. Y. Rahaman, *Tetrahedron*, **2010**, 66, 6383-6390.

300. *A Propos of Glycosyl Cations and the Mechanism of Chemical Glycosylation*, L. Bohé and D. Crich, *Comptes Rendus Chimie*, **2011**, 14, 3-16.
301. *Mechanism of a Chemical Glycosylation*, D. Crich, *Acc. Chem. Res.* **2010**, 43, 1144-1153.
302. *Synthesis of N-Acyl-5-Aminopenta-2,4-dienals via Base-Induced Ring-Opening of N-Acylated Furfurylamines: Scope and Limitations*, C. Ouairy, P. Michel, B. Delpech, D. Crich and C. Marazano, *J. Org. Chem.* **2010**, 75, 4311-4314.
303. *Cyclic Peptide Synthesis with Thioacids*, K. Sasaki and D. Crich, *Org. Lett.* **2010**, 12, 3254-3257.
304. *Influence of Protecting Groups on the Reactivity and Selectivity of Glycosylation: Chemistry of the 4,6-O-Benzylidene Protected Mannopyranosyl Donors and Related Species*, S. Aubry, K. Sasaki, I. Sharma, and D. Crich, *Top. Curr. Chem.* **2011**, 301, 141-188.
305. *One-pot Formation of Piperidine- and Pyrrolidine-Substituted Pyridinium Salts via Addition of 5-Alkylaminopenta-2,4-dienals to N-Acyliminium Ions. Application to the Synthesis of (±)-Nicotine and Analogs*, S. Peixoto, T. M. Nguyen, D. Crich, B. Delpech, and C. Marazano, *Org. Lett.* **2010**, 12, 4760-4763.
306. *Influence of the O3 Protecting Group on Stereoselectivity in the Preparation of C-Mannopyranosides with 4,6-O-Benzylidene Protected Donors*, D. Crich and I. Sharma, *J. Org. Chem.* **2010**, 75, 8383-8391.
307. *Chemistry with and Around Thioacids*, K. Sasaki, S. Aubry and D. Crich, *Phos. Sulfur, Silicon, Rel. Elements*, **2011**, 186, 1005-1018.
308. *Synthesis of the β-Rhamnopyranosides and the 6-Deoxy-β-mannoheptopyranosides*, S. Picard and D. Crich, *Chimia*, **2011**, 65, 59-64.
309. *Synthetic Approaches to Bioactive Carbohydrates*, X. Guinchard, S. Picard and D. Crich in *Modern Chemoselective Tools for the Synthesis of Complex Bioactive Molecules*, Eds. S. Arseniyadis and J. Cossy, Wiley, Hoboken, **2012**, 395-432.

310. *Protecting Group-Free Glycoligation by the Desulfurative Rearrangement of Allylic Disulfides as a Means of Assembly of Oligosaccharide Mimetics*, V. Subramanian, M. Moumé-Pymbock, T. Hu and D. Crich, *J. Org. Chem.* **2011**, 76, 3691-3709.
311. *Facile Amide Bond Formation from Carboxylic Acids and Isocyanates*, K. Sasaki and D. Crich, *Org. Lett.* **2011**, 13, 2256-2259.
312. *Radical Rearrangements; Ester-Substituted Radicals and Hydrogen Atom Migrations*, K. Sasaki, I. Cumpstey, and D. Crich, in *Handbook of Radical Chemistry and Biology*, Eds C. Chatgililoglu and A. Studer, Wiley, Chichester, **2012**, 125-146.
313. *Photoinitiated Glycosylation at 350 nm*, I. Cumpstey and D. Crich, *J. Carbohydr. Chem.* **2011**, 30, 469-485.
314. *Concise Construction of Sarain A Core according to a Biosynthetic Proposal: Cyclization through an Intramolecular Mannich-type Reaction involving an Endocyclic N-Acyliminium ion*, S. Peixoto, M.-T. Martin, D. Crich, B. Delpech, and C. Marazano, *Chem. Eur. J.* **2011**, 17, 9907-9910.
315. *Direct Fmoc-Chemistry-Based Solid-Phase Synthesis of Peptidyl Thioesters*, I. Sharma and D. Crich *J. Org. Chem.* **2011**, 76, 6518-6524.
316. *Exploring the Potential of the β -Thiolactones in Bioorganic Chemistry*, S. Aubry, K. Sasaki, L. Eloy, G. Aubert, P. Retailleau, T. Cresteil, and D. Crich, *Org. Biomol. Chem.* **2011**, 9, 7134-7143.
317. *Methodology Development and Physical Organic Chemistry: A Powerful Combination for the Advancement of Glycochemistry*, D. Crich, *J. Org. Chem.* **2011**, 76, 9193-9209.
318. *Synthesis and Structural Verification of the Xylomannan Antifreeze Substance from the Freeze-Tolerant Alaskan Beetle *Upis ceramboides**, D. Crich and Md Y. Rahaman, *J. Org. Chem.* **2011**, 76, 8611-8620.
319. *Practical Synthesis of 2-Keto-3-deoxy-D-glycero-D-galactononulosonic acid (KDN)*, D. Crich and C. Navuluri, *Org. Lett.* **2011**, 13, 6288-6291.

320. *Asymmetric Synthesis of Polyhydroxylated N-Alkoxypiperidines by Ring Closing Double Reductive Amination; Facile Preparation of Isofagomine and Analogues*, G. Malik, X. Guinchard, and D. Crich, *Org. Lett.* **2012**, 14, 596-599.
321. *Synthesis and Biological Investigation of the β -Thiolactone and β -Analogues of Tetrahydrolipstatin*, S. Aubry, G. Aubert, T. Cresteil, and D. Crich, *Org. Biomol. Chem.* **2012**, 10, 2629-2632.
322. *Stereoselective, Electrophilic α -C-Sialidation*, A. Noel, B. Delpech, and D. Crich, *Org. Lett.* **2012**, 14, 1342-1345.
323. *Influence of Protecting Groups on the Anomeric Equilibrium; Case of the 4,6-O-Benzylidene Acetal in the Mannopyranose Series*, I. Sharma, L. Bohé, and D. Crich, *Carbohydr. Res.* **2012**, 357, 126-131.
324. *Dissecting the Mechanisms of a Class of Chemical Glycosylation Using Primary ^{13}C Kinetic Isotope Effects*, M. Huang, G. E. Garrett, N. Birlirakis, L. Bohé, D. A. Pratt, and D. Crich, *Nature Chemistry* **2012**, 4, 663-667.
325. *Comparison of the Reactivity of β -Thiolactones and β -Lactones Toward Ring-opening by Thiols and Amines*, A. Noel, B. Delpech, and D. Crich, *Org. Biomol. Chem.* **2012**, 10, 6480-6483.
326. *Synthesis, Characterization and Coupling Reactions of Six-membered Cyclic P-Chiral Ammonium Phosphonite-boranes; Reactive H-Phosphinate Equivalents for the Stereoselective Synthesis of Glycomimetics*, A. Ferry, X. Guinchard, P. Retailleau, and D. Crich, *J. Am. Chem. Soc.* **2012**, 134, 12289-12301.
327. *2-(Selenocyanatomethyl)-2-propenol. A Convenient Synthon for Ligation via the Deselenative Allylic Rearrangement of Allyl Selenosulfides: Preparation, Functional Group Compatibility and Application*, D. Lachkar, C. Boudet, X. Guinchard, and D. Crich, *Can. J. Chem.* **2012**, 90, 944-953.
328. *The Chemistry and Biology of the β -Thiolactones*, A. Noel, B. Delpech, and D. Crich, *J. Sulfur Chem.* **2013**, 34, 104-141.

329. *Highly Stereoselective Synthesis of Primary, Secondary and Tertiary α -S-Sialosides under Lewis Acidic Conditions*, A. Noel, B. Delpech, and D. Crich, *Org. Lett.* **2012**, *14*, 4138-4141.
330. *Dissecting the Influence of Oxazolidinones and Cyclic Carbonates in Sialic Acid Chemistry*, P. K. Kancharla, C. Navuluri, and D. Crich, *Angew. Chem. Int. Ed.* **2012**, *51*, 11105-11109.
331. *Cation Clock Permits Distinction Between the Mechanisms of α - and β -O- and β -C-Glycosylation in the Mannopyranose Series; Evidence for the Existence of a Mannopyranosyl Oxocarbenium Ion*, M. Huang, P. Retailleau, L. Bohé, and D. Crich, *J. Am. Chem. Soc.* **2012**, *134*, 14746-14749.
332. *N-O Bond as a Glycosidic Bond Surrogate; Synthetic Studies Toward Polyhydroxylated N-Alkoxy piperidines*, G. Malik, A. Ferry, X. Guinchard, T. Cresteil, and D. Crich, *Chem. Eur. J.* **2013**, *19*, 2168-2179.
333. *Stereoselective C-Glycoside Formation with 2-O-Benzyl-4,6-O-benzylidene Protected 3-Deoxy Gluco- and Mannopyranoside Donors: Comparison with O-Glycoside Formation*, M. Moumé-Pymbock and D. Crich, *J. Org. Chem.* **2012**, *77*, 8905-8912.
334. *Synthesis of β -Hydroxy O-Alkyl-Hydroxylamines from Epoxides Using a Convenient and Versatile Two-Step Procedure*, G. Malik, A. Ferry, X. Guinchard, and D. Crich, *Synthesis* **2013**, *45*, 65-74.
335. *Exploration Of An Imide Capture/N,N-Acyl Shift Sequence For Asparagine Native Peptide Bond Formation*, R. Mhidia, E. Boll, F. Fécourt, M. Ermolenko, N. Ollivier, K. Sasaki, D. Crich, B. Delpech, and O. Melnyk, *Bioorg. Med. Chem.* **2013**, *21*, 3479-3485.
336. *Recent Advances in the Stereocontrolled Synthesis of Sialic Acid Glycosides*, C. Navuluri and D. Crich in *Glycochemical Synthesis: Strategies and Applications*, Ed S.-C. Hung, Wiley, Hoboken, **2016**, in press.
337. *Improved Methods for the Stereoselective Synthesis of Mannoheptosyl Donors and Their Glycosides: Toward the Synthesis of the Trisaccharide Repeating Unit of the Campylobacter jejuni RM1221 Capsular Polysaccharide*, S. Picard and D. Crich, *Tetrahedron* **2013**, *69*, 5501-5510.

338. *Phenyl 4,6-O-Benzylidene-1-thio- α -D-mannopyranoside*, M. Huang, H.-A. Tran, L. Bohé, and D. Crich, in *Carbohydrate Chemistry: Proven Methods*, Eds., G. van der Marel and J. D. C. Codée, CRC Press, Boca Raton, **2014**, 2, 175-184.
339. *Synthesis of β -(1 $\rightarrow$ 3)-Mannobiose*, S. Picard, M. Thomas, A. G. Volbeda, X. Guinchard and D. Crich, in *Carbohydrate Chemistry: Proven Methods*, Eds., G. van der Marel and J. D. C. Codée, CRC Press, Boca Raton, **2014**, 2, 161-174.
340. *Exploration of the Oxazolidinthione Protecting System for the Synthesis of Sialic Acid Glycosides*, S. Rajender and D. Crich, *J. Carbohydr. Chem.* **2013**, 32, 324-335.
341. *Synthesis and Evaluation of 3-Deoxy and 3-Deoxy-3-Fluoro- Gluco- and Mannoimidazole Glycosidase Inhibitors*, C. Ouairy, T. Cresteil, B. Delpech, and D. Crich, *Carbohydr. Res.* **2013**, 377, 35-43.
342. *Alternative Synthesis of P-Chiral Phosphonite-borane Complexes; Application to the Synthesis of Phostone-Phostone Dimers*, A. Ferry, G. Malik, X. Guinchard, P. Retailleau, and D. Crich, *J. Org. Chem.* **2013**, 78, 6858-6967.
343. *Se-(9-Fluorenylmethyl) Selenoesters; Preparation, Reactivity and Use as Convenient Synthons for Selenoacids*, F. Fécourt, B. Delpech, O. Melnyk, and D. Crich, *Org. Lett.* **2013**, 15, 3758-3761.
344. *The Hunsdiecker and Related Reactions*, D. Crich and K. Sasaki, in *Comp. Org. Synth 2nd Edition*, Eds. P. Knochel and G. Molander, Elsevier, Amsterdam, **2014**, 7, 818-836.
345. *Synthesis of Glycosides*, L. Bohé and D. Crich, in *Comp. Org. Synth 2nd Edition*, Eds. P. Knochel and G. Molander, Elsevier, Amsterdam, **2014**, 6, 1-33.
346. *Chemical Diversification of Sialic Acid Glycosides by Stereospecific, Chemoselective Deamination*, C. Navuluri and D. Crich, *Angew. Chem. Int. Ed.* **2013**, 52, 11549-11552.
347. *Probing the Influence of a 4,6-O-Acetal on the Reactivity of Galactopyranosyl Donors: Verification of the Disarming Influence of the trans-gauche Conformation of C5-C6 Bonds*, M. Moumé-Pymbock, T. Furukawa, S. Mondal, and D. Crich, *J. Am. Chem. Soc.* **2013**, 135, 14249-14255.

348. *Biosynthesis of 4-Aminoheptose 2-Epipimers, Core Structural Components of the Septacidins and Spicamycins*, N. J. P. Price, T. Furukawa, F. Cheng, J. Qi, W. Chen, and D. Crich, *J. Antibiotics*, **2014**, 67, 405-414.
349. *Influence of Side Chain Conformation and Configuration on Glycosyl Donor Reactivity and Selectivity as Illustrated by Sialic Acid Donors Epimeric at the 7-Position*, P. K. Kancharla and D. Crich, *J. Am. Chem. Soc.* **2013**, 135, 18999-19007.
350. *Probing the Influence of Protecting Groups on the Anomeric Equilibrium in Sialic Acid Glycosides with the Persistent Radical Effect*, P. K. Kancharla, T. Kato, and D. Crich, *J. Am. Chem. Soc.* **2014**, 136, 5472-5480.
351. *Synthesis, Antiribosomal and Antibacterial Activity of 4'-O-Glycopyranosyl Paromomycin Aminoglycoside Antibiotics*, W. Chen, T. Matsushita, D. Shcherbakov, H. Boukari, A. Vasella, E. C. Böttger, and D. Crich, *MedChemCommun*, **2014**, 5, 1179-1187.
352. *Chemistry of the β -Thiolactones: Substituent and Solvent Effects on Thermal Decomposition and Comparison with the β -Lactones*, A. Noel, B. Delpech and D. Crich, *J. Org. Chem.* **2014**, 79, 4068-4077.
353. *Importance of the 6'-Hydroxy Group and its Configuration for Apramycin Activity*, A. R. Mandhapati, D. Shcherbakov, S. Duscha, A. Vasella, E. C. Böttger, and D. Crich, *ChemMedChem*, **2014**, 9, 2074-2083.
354. *A Propos of Glycosyl Cations and the Mechanism of Chemical Glycosylation; the Current State of the Art*, L. Bohé and D. Crich, *Carbohydr. Res.*, **2015**, 403, 48-59.
355. *Identification and Evaluation of Improved 4'-O-(Alkyl) 4,5-Disubstituted 2-Deoxystreptamines as Next Generation Aminoglycoside Antibiotics*, S. Duscha, H. Boukari, D. Shcherbakov, S. Salian, S. Silva, A. Kendall, T. Kato, R. Akbergenov, D. Perez-Fernandez, B. Bernet, S. Vaddi, P. Thommes, J. Schacht, D. Crich, A. Vasella, and E. C. Böttger, *MBio*, **2014**, 5, 10.1128/mBio.01827-14.

356. *Synthesis and Evaluation of Di- and Trimeric Hydroxylamine-Based β -(1 $\rightarrow$ 3)-Glucan Mimetics*, A. Ferry, G. Malik, X. Guinchard, V. Vetvicka, and D. Crich, *J. Am. Chem. Soc.* **2014**, *136*, 14852-14857.
357. *The Isothiocyanato Moiety. An Ideal Protecting Group for Stereoselective Sialic Acid Glycoside Synthesis and Subsequent Diversification*, A. Mandhapat, S. Rajender, J. Shaw, and D. Crich, *Angew. Chem. Int. Ed.* **2015**, *54*, 1275-1278.
358. *Anomerism of T-2 Toxin Glucoside: Masked Mycotoxin in Cereal Crops*, S. P. McCormick, T. Kato, C. M. Maragos, M. Busman, V. M. T. Lattanzio, G. Galaverna, C. Dall-Asta, D. Crich, N. P. J. Price, and C. P. Kurtzman, *J. Agr. Food Chem.* **2015**, *63*, 731-738.
359. *Fluorine-Decoupled Carbon Spectroscopy (FDCS) for the Determination of Configuration at Fully Substituted, Trifluoromethyl and Perfluoroalkyl Bearing Carbons. Comparison with 19F-1H Heteronuclear Overhauser Effect Spectroscopy (HOESY)*, A. R. Mandhapat, T. Kato, T. Matsushita, B. Ksebati, A. Vasella, E. C. Böttger, and D. Crich, *J. Org. Chem.* **2015**, *80*, 1754-1763.
360. *Influence of 4'-O-Glycoside Constitution and Configuration on Ribosomal Selectivity of Paromomycin*, T. Matsushita, W. Chen, R. Juskeviciene, Y. Teo, D. Shcherbakov, A. Vasella, E. C. Böttger, and D. Crich, *J. Am. Chem. Soc.* **2015**, *137*, 7706-7717.
361. *Cation Clock Reactions for the Determination of Relative Reaction Kinetics in Glycosylation Reactions: Applications to Gluco- and Mannopyranosyl Sulfoxide and Trichloroacetimidate Type Donors*, P. O. Adero, T. Furukawa, M. Huang, D. Mukherjee, P. Retailleau, L. Bohé, and D. Crich, *J. Am. Chem. Soc.* **2015**, *137*, 10336-10345.
362. *Synthesis and Antiribosomal Activities of 4'-O-, 6'-O-, 4''-O-, 4',6'-O- and 4'',6''-O-Derivatives in the Kanamycin Series Indicate Differing Target Selectivity Patterns Between the 4,5- and 4,6-Series of Disubstituted 2-Deoxystreptamine Aminoglycoside Antibiotics*, T. Kato, G. Yang, Y. Teo, R. Juskeviciene, D. Perez-Fernandez, H. M. Shinde, S. Salian, B. Bernet, A. Vasella, E. C. Böttger, and D. Crich, *ACS Infect. Dis.* **2015**, *1*, 479-486.
363. *Selective Protection of Secondary Amines as the N-Phenyl Triazenes. Application to Aminoglycoside Antibiotics*, A. Sonousi and D. Crich, *Org. Lett.* **2015**, *17*, 4006-4009.

364. *Facile Synthesis of 3N-Alkyl Pyrimidin-2,4-diones from N-Sulfonyloxy Maleimides and Amines*, G. C. Sati and D. Crich, *Org. Lett.* **2015**, 17, 4122-4124.
365. *Alternative Synthesis and Antibacterial Evaluation of 1,5-Dideoxy-1,5-imino-L-rhamnitol*, S. Dharuman, Y. Wang, and D. Crich, *Carbohydr. Res.* **2016**, 419, 29-32.
366. *Glycosylation with Glycosyl Sulfonates*, L. Bohé and D. Crich in *Selective Glycosylations – Synthetic Methods and Catalysts*, Ed C. S. Bennett, Wiley, Hoboken, **2017**, pp 115-133.
367. *Protecting Group Strategies for Sialic Acid Derivatives*, H. Amarasekara, S. Buda, A. R. Mandhapati, and D. Crich in *Protecting Groups – Strategies and Applications in Carbohydrate Chemistry*, Ed S. Vidal, Wiley-VCH, Weinheim, **2018**, in press.
368. *Absence of Stereodirecting Participation by 2-O-Alkoxycarbonylmethyl Ethers in 4,6-O-Benzylidene-Directed Mannosylation*, P. Wen and D. Crich, *J. Org. Chem.* **2015**, 80, 12300-12310.
369. *Oxidative Deamination of N-Acetyl Neuraminic Acid: Substituent Effects and Mechanism*, S. Buda and D. Crich, *J. Am. Chem. Soc.* **2016**, 138, 1084-1092..
370. *Determination of the Influence of Side Chain Conformation on Glycosylation Selectivity Using Conformationally Restricted Donors*, S. Dharuman and D. Crich, *Chem. Eur. J.* **2016**, 22, 4535-4542.
371. *Synthesis of N,N,O-Trisubstituted Hydroxylamines By Stepwise Reduction and Substitution of O-Acyl N,N-Disubstituted Hydroxylamines*, S. Dhanju and D. Crich, *Org. Lett.* **2016**, 18, 1820-1823.
372. *Further Studies on Cation Clock Reactions in Glycosylation: Observation of a Configuration Specific Intramolecular Sulfenyl Transfer and Isolation and Characterization of a Tricyclic Acetal*, M. Huang, T. Furukawa, P. Retailleau, D. Crich and L. Bohé, *Carbohydr. Res.* **2016**, 427, 21-28.
373. *Synthesis and Intramolecular Glycosylation of Sialyl Mono-esters of o-Xylylene Glycol. The Importance of Donor Configuration and Nitrogen Protecting Groups on Cyclization Yield and Selectivity; Isolation and Characterization of a N-Sialyl Acetamide Indicative of Participation by Acetonitrile*, H. Amarasekara and D. Crich, *Carbohydr. Res.* **2016**, 435, 113-120.

374. *Stereoselective Synthesis of 5-Epi- α -Sialosides Related to the Pseudaminic Acid Glycosides. Reassessment of the Stereoselectivity of the 5-Azido-5-deacetamidodialyl Thioglycosides and Use of Triflate as Nucleophile in the Zbiral Deamination of Sialic Acids*, B. Dhakal and D. Crich, *J. Org. Chem.* **2016**, 81, 10617-10630.
375. *Dissecting the Influence of Two Structural Substituents on the Differential Neurotoxic Effects of Methamphetamine and Mephedrone on Dopamine Nerve Endings with the Use of 4-Methylmethamphetamine and Methcathinone*, J. H. Anneken, M. Angoa-Perez, G. C. Sati, D. Crich, and D. M. Kuhn, *J. Pharmacol. Expt. Therap.* **2017**, 360, 417-423.
376. *N6', N6'', and O4'-Modifications to Neomycin Affect Ribosomal Selectivity Without Compromising Antibacterial Activity*, G. C. Sati, D. Shcherbakov, S. Hobbie, A. Vasella, E. C. Böttger, and D. Crich, *ACS Infect. Dis.* **2017**, 3, 368-376.
377. *Blue Light Photocatalytic Glycosylation without Electrophilic Additives*, P. Wen and D. Crich, *Org. Lett.* **2017**, 19, 2402-2405.
378. *Synthesis of Trialkylhydroxylamines by Stepwise Reduction of O-Acyl N,N-Disubstituted Hydroxylamines. Substituent Effects on the Reduction of O-(1-Acyloxyalkyl)hydroxylamines and on the Conformational Dynamics of N-Alkoxypiperidines*, S. Dhanju, B. W. Blazejewski, and D. Crich, *J. Org. Chem.* **2017**, 82, 5345-5353.
379. *Stereospecific Synthesis of Methyl 2-Amino-2-deoxy-(6S)-deuterio- α,β -D-glucopyranoside and Methyl 2,6-Diamino-2,6-dideoxy-(6R)-deuterio- α,β -D-glucopyranoside: Side Chain Conformations of the 2-Amino-2-deoxy and 2,6-Diamino-2,6-Dideoxyglucopyranosides*, T. Kato, A. Vasella, and D. Crich, *Carbohydr. Res.* **2017**, 448, 10-17.
380. *Stereoselective Synthesis of the Equatorial Glycosides of Legionaminic Acid*, O. Popik, B. Dhakal, and D. Crich, *J. Org. Chem.* **2017**, 82, 6142-6153.
381. *Hydrogenolytic Cleavage of Naphthylmethyl Ethers in the Presence of Sulfides*, P. O. Adero, D. R. Jarois, and D. Crich, *Carbohydr. Res.* **2017**, 449, 11-16.

382. *Assessing the role of Dopamine in the Differential Neurotoxicity Patterns of Methamphetamine, Mephedrone, Methcathinone and 4-Methylmethamphetamine*, J. H. Anneken, M. Angoa-Perez, G. C. Sati, D. Crich, and D. M. Kuhn, *Neuropharmacology*, **2018**, 134A, 46-56.
383. *Trifluoromethanesulfonate Anion as Stoichiometric and Catalytic Nucleophile in Organic Chemistry*, B. Dhakal, L. Bohé, and D. Crich. *J. Org. Chem.* **2017**, 82, 9263-9269.
384. *Structure-Based Design and Synthesis of Apramycin-Paromomycin Analogues. Importance of the Configuration at the 6'-Position and Differences Between the 6'-Amino and Hydroxy Series*, A. R. Mandhapati, G. Yang, T. Kato, D. Shcherbakov, S. N. Hobbie, A. Vasella, E. C. Böttger, and D. Crich. *J. Am. Chem. Soc.* **2017**, 139, 14611-14619.
385. *Synthesis of Conformationally-Locked cis- and trans-Bicyclo[4.4.0] Mono-, Di- and Trioxadecane Modifications of Galacto- and Glucopyranose. Experimental Limiting $^3J_{H,H}$ Coupling Constants for the Estimation of Carbohydrate Side Chain Populations and Beyond*, H. Amarasekara, S. Dharuman, T. Kato, and D. Crich, *J. Org. Chem.* **2018**, 83, 881-897.
386. *Allylic Strain as a Stereocontrol Element in the Hydrogenation of 3-Hydroxymethyl-cyclohex-3-en-1,2,5-triol Derivatives. Synthesis of the Carbasugar Pseudo-2-deoxy- α -D-glucopyranose*, P. Wen and D. Crich, *Tetrahedron* **2018**, 74, 0000-0000 (DHR Barton Centennial Issue).
387. *The Experimental Evidence in Support of Glycosylation Mechanisms at the S_N1 - S_N2 Interface*, P. O. Adero, H. Amarasekara, P. Wen, L. Bohé, and D. Crich, *Chem. Rev.* **2018**, 118, 0000-0000 (DOI: 10.1021/acs.chemrev.8b00083).
388. *Effects of the 1-N-(4-Amino-2S-hydroxybutyryl) and 6'-N-(2-Hydroxyethyl) Substituents on Ribosomal Selectivity, Cochleotoxicity and Antibacterial Activity in the Sisomicin Class of Aminoglycoside Antibiotics*, A. Sonousi, V. A. Sarpe, M. Brilkova, J. Schacht, A. Vasella, E. C. Böttger, and D. Crich, *ACS Infect. Dis.* **2018**, 4, 000-000 (DOI: 10.1021/acsinfecdis.8b00052).

Patent Applications

Apramycin Derivatives, D. Crich, A. Sonousi, V. A. Sarpe, P. Rajasekaran, S. N. Hobbie, E. C. Böttger and A Vasella, PCT/US filed May 1, 2018.

Neomycin and Paromomycin Derivatives, D. Crich, G. C. Sati, A. Sonousi, G. Yang, A. Mandhapati, T. Kato, M. Pirrone, V. A. Sarpe, S. N. Hobbie, E. C. Böttger and A Vasella. PCT/US18/26547 (2018).

Multicomponent coupling and glycopeptide synthesis with cyclic thioanhydrides. Crich, D., Bowers, A. A. U.S. Pat. Appl. 2009163697, A1 20090625.

Dechalcogenative methods for the preparation of allylic sulfides. Crich, D.; Karatholuvhu, M.; Krishnamurthy, V.; Hutton, T. K.; Brebion, F.; Subramanian, V. PCT Int. Appl. WO 2008134058, A1 20081106.

Methods for the preparation of functionalized peptides, proteins and carbohydrates and their conjugates. Crich, D.; Guo, S.; Yang, F.; Sana, K. PCT Int. Appl. WO 2008066816, A2 20080605.

Preparation of S-allylic cysteinyl peptides and related compounds by disulfide rearrangement and desulfurization, Crich, D.; Brebion, F.; Krishnamurthy, V. U.S. Pat. Appl. 2007260041, A1 20071108.

Preparation of recyclable fluoros borane-sulfides and their use in the large-scale hydroboration of alkenes or alkynes and reduction of organic functional groups. Crich, D.; Neelamkavil, S. PCT Int. Appl. WO 2004011472, A2 20040205.

Method of forming glycosidic bonds from thioglycosides using an N,N-dialkylsulfonamide. Crich, D.; Smith, M. PCT Int. Appl. 20040019198, A1 20040129.

Improved method of oxidizing primary and secondary alcohols by Swern or Corey-Kim oxidation using a recyclable fluoros sulfoxide as the oxidizing agent. Crich, D.; Neelamkavil, S. PCT Int. Appl. WO 2003002526, A1 20030109.

Antifungal compounds and uses therefor. Markham, P. N.; Crich, D.; Jaber, M.-R.; Johnson, M. E.; Mulhearn, D. C.; Neyfakh, A. A.; Xuan, Y. (Influx, Inc., USA). PCT Int. Appl. WO 2002036203,

A2 20020510.

Bactericidal antimicrobial methods and compositions using acyl hydrazides, oxyamides, and 8-hydroxyquinolines as antibiotic potentiators for treatment of Gram-positive infections. Markham, P. N.; Klyachko, E. A.; Crich, D.; Jaber, M.-R.; Johnson, M. E.; Mulhearn, D. C.; Neyfakh, A. A. (Influx, Inc., USA). PCT Int. Appl. WO 2001070213, A2 20010927.

Inhibitors of multidrug transporters for enhancing the action of antibacterial and antifungal agents. Markham, P. N.; Mulhearn, D. C.; Neyfakh, A. A.; Crich, D.; Jaber, M.-R.; Johnson, M. E. (Influx, Inc., USA). PCT Int. Appl. WO 2000032196, A2 20000608.

Carbon-containing free radicals and their uses in organic synthesis and in radical polymerization. Barton, D. H. R.; Crich, D.; Motherwell, W. B. (Centre National de la Recherche Scientifique, Fr.). Fr. Demande (1985), FR 2551054, A1 19850301.