CURRICULUM VITAE

Name: David Michael Gilbert, Ph.D.

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EDUCATION

B.A., 1982 University of California at San Diego: Revelle College
Major: Biochemistry/Cell Biology; Minor: Philosophy
Undergraduate Honors Thesis Advisor: Dr. Immo Scheffler
Thesis title: "Enzyme Induction in a Temperature Sensitive Chinese Hamster Cell Mutant Deficient in RNA Metabolism."

Ph.D., 1989 Stanford University Department of Genetics
Thesis advisor: Dr. Stanley N. Cohen
Thesis title: "Temporal Order of DNA Replication in Mammalian Cells: Its Relationship to Gene Expression."

POSTDOCTORAL TRAINING

1990 - 1991 Post-doctoral training, C.N.R.S.
Faculté de Médecine, Strasbourg, FRANCE
Subject of research: Mechanism of transcriptional induction by the human estrogen receptor expressed in yeast.
Laboratory: Dr. Pierre Chambon

1991 - 1994 Roche Institute of Molecular Biology
Subject of Research: Initiation of DNA Replication in Mammalian Cells.
Laboratory: Dr. Melvin DePamphilis

PROFESSIONAL EXPERIENCE

1994 - 1998 Assistant Professor
Department of Biochemistry and Molecular Biology
State University of New York Health Sciences Center (SUNY HSC)

1998-2003 Associate Professor
Department of Biochemistry and Molecular Biology
State University of New York Upstate Medical University (formerly SUNY HSC)

2003-present Professor
Department of Biochemistry and Molecular Biology
State University of New York Upstate Medical University

2006-present J. Herbert Taylor Distinguished Professor of Molecular Biology
Department of Biological Science
Florida State University

ACADEMIC HONORS

2005 Selected to compete in Phase II of the NIH Director's Pioneer Award (NDPA)
2004 Nominated as a Howard Hughes Medical Institute Investigator
2004 NIH Career Enhancement (K18) Award for Stem Cell Research
2002 SUNY Upstate President’s Award for Excellence in Research by a Young Investigator

1991 - 1994 Roche Institute of Molecular Biology Post-Doctoral Fellow
1989 - 1991 European Molecular Biology Organization Post-Doctoral Fellow
1990 NATO Post-Doctoral Fellowship Award, declined
1982 Honors with Distinction, University of California

HISTORY OF EXTRAMURAL FUNDING

COMPLETED

"Assembly of the Replication Initiation Complex"
Principle Investigator: David M. Gilbert, PhD
Agency: Milheim Foundation
Type: Research Grant (95-28)
Period: 7/1/95 – 6/30/96 Total Costs: $10,000
The overall objective of this project was to determine what governs the assembly of DNA replication initiation complexes in mammalian cells.

"Nuclear Structure and Metazoan Origins of Replication"
Principle Investigator: David M. Gilbert, PhD
Agency: National Science Foundation
Type: Research Project Grant (MCB-9505907)
Period: 9/15/95 - 8/31/98 Total Costs: $390,000
This project examined the requirements for site-specific initiation of replication in *Xenopus* egg extracts.

"Developmental Regulation of DNA Replication"
Principle Investigator: David M. Gilbert, PhD
Agency: March of Dimes
Type: Research Grant
Period: 7/01/96 - 5/31/00 Total Costs: $204,000
The goal of this project was to determine whether the temporal order of DNA replication is maintained when mammalian cell nuclei are introduced into *Xenopus* egg extract.

"Nuclear Structure and Metazoan Origins of Replication"
Principle Investigator: David M. Gilbert, PhD
Agency: NIH
Type: RO1 (R01GM57233-01)
Period: 9/01/98 - 8/31/02 Total Costs: $881,044
The overall objective of this grant was to achieve a description of replication-relevant changes in nuclear architecture that take place as the nucleus matures during early G1-phase. This grant also developed various cell biological tools to examine the assembly of replication factories.

"The Mammalian Origin Recognition Complex"
Principle Investigator: David M. Gilbert, PhD
Agency: American Cancer Society
Type: Research Project Grant (CCG-85791)
Period: 7/01/00 - 6/30/04 Total Costs: $915,000.00
This project studied the assembly and activities of the origin recognition complex proteins.

"Establishment of a Replication Timing Program in Mammalian Cells"
Principle Investigator: David M. Gilbert, PhD
Agency: National Science Foundation
Type: Research Grant (MCB-0078152)
Period: 9/01/00 - 8/31/04 Total Costs: $400,000.00
This project examined how the replication timing program is established in mammalian cells.

“Developmental Regulation of DNA Replication”
Principle Investigator: David M. Gilbert, PhD

Agency: Hendrick's Foundation
Type: Institutional Pilot Project Grant
Period: 1/1/03-12/31/03 Total Costs: $15,000
This was a pilot grant to purchase equipment and supplies necessary to study the developmental control of DNA replication during the differentiation of pluripotent mouse embryonic stem (ES) cells.

"DNA Replication During Differentiation of ES Cells"
Principle Investigator: David M. Gilbert, PhD
Agency: NIH
Type: K18
Period: 07/01/04-08/31/05 Total Costs: $250,324
This was a Career Enhancement Award for Stem Cell Research; the aim of which was for Dr. Gilbert to obtain training in the culture and differentiation of human and mouse ES cells during his sabbatical.

Completed Extra-Mural Post-Doctoral Support

"Development of Promoter Shut-Off for the Study of Essential Mammalian Genes"
Post-doctoral Scientist: Dr. Takayo Sasaki
Agency: New York State Department of Health Breast Cancer Initiative
Type: Post-doctoral award
Period: 1/01/02 – 12/31/03
This project studied ways to develop genetic tools in cultured mammalian cells to study the origin recognition complex subunits.

"Analysis of the relationship between developmental regulation of DNA replication timing and gene expression in mammalian cells"
Post-doctoral Scientist: Dr. Ichiro Hiratani
Agency: Japan Society for the Promotion of Science
Type: Post-doctoral award
Period: 4/01/04 - 3/31/06

"Specification of Mammalian Replication Origins"
Principle Investigator: David M. Gilbert, PhD
Agency: NIH
Type: RO1 (2 R01GM57233-05)
Period: 9/01/02 - 8/31/06 Total Costs: $1,060,000.00
The goal of this grant is to test the hypothesis that the Origin Decision Point (ODP) is a point of global origin specification in mammalian cells, during which specific pre-RCs are selected for initiation of replication.

"Mapping Replication Origins in Human ES cells"
Principle Investigator: David M. Gilbert, PhD
Agency: NIH
Type: Administrative Supplement to RO1 (2 R01GM57233-05)
Period: 09/01/03 – 08/31/06 Total Costs: $340,000
The goal of this supplement is to map replication origins in human ES cells.

"Nuclear Organization and Stem Cell Commitment"
Principle Investigator: David M. Gilbert, PhD
Agency: American Cell Therapy Research Foundation/Stem Cell Research Foundation (SCRF)
Type: Research grant (S2005-053)
Period: 04/01/05 – 03/31/07 Total Costs: $100,000
The goal of this grant is to test the hypothesis that heritable changes in chromosome domain structure are established through changes in sub-nuclear position and replication timing that take place at key stages of cell commitment.

ACTIVE

"Genome Plasticity During ES Cell Differentiation to Neural Lineages"
Principle Investigator: David M. Gilbert, PhD
Agency: NIH

Type: RO1 (1R01GM083337-01A1)
Period: 9/30/07 - 8/31/11
The major goals of this project are to investigate epigenetic change during mouse ES neural differentiation. In particular, to examine chromatin changes at the Ptn/Chrm2 domain during the commitment to neural lineages and the role of the G9a histone methyltransferase in forming sub-nuclear compartments.

Active Extra-Mural Post-Doctoral Support

"Differentiation-coupled replication timing switches in embryonic stem cells"
Post-Doctoral Scientist: Dr. Tomoki Yokochi
Agency: Leukemia and Lymphoma Society
Type: Special Fellow
Period: 7/1/05-6/30/08

“The Effect of MeCP2 Deficiency on Epigenetic Regulation in Neuronal Lineages”
Post-Doctoral Scientist: Dr. Ichiro Hiratani
Agency: Rett Syndrome Research Foundation (RSRF)
Period: 10/1/2006 – 9/30/2008

SELECTED OR INVITED SPEAKER at MEETINGS

October, 1994	Montreal Eukaryotic DNA Replication Meeting (selected)
Sept. 1995	Cold Spring Harbor: "Eukaryotic DNA Replication" (selected)
May 1997	Buffalo DNA Replication Symposium (selected)
June 1997	CNRS Jacques Monod Conference: "Regulation of DNA Replication in Prokaryotes and Eukaryotes: Molecular Aspects", Aussois, France (selected)
April, 1998	Keystone: "The Nuclear Matrix" (invited)
May, 1998	Buffalo DNA Replication Symposium (selected)
July, 1998	Gordon Conference: "Biological Regulatory Mechanisms" (invited)
August, 1998	Chair: Session on Initiation of DNA Replication at the XVIIIth International Congress of Genetics, Beijing, China (invited)
May, 1999	HUGO Workshop on Genome Organization, Edinburgh (invited)
May, 2000	Michigan State University Genetics Symposium (invited)
Sept., 2000	Salk Institute: Eukaryotic DNA Replication (selected)
Dec., 2000	Japanese Molecular Biology Society (invited)
June, 2001	Buffalo DNA Replication Symposium (selected)
Oct. 2001	AACR: "Cancer and Chromosomal Organization" (invited)
Feb. 2002	23rd Lorne Genome Conference, Australia (invited)
June, 2002	Buffalo DNA Replication Symposium (selected)
August, 2002	Salk Institute: Eukaryotic DNA Replication (selected)
Sept., 2002	Cold Spring Harbor: "Dynamic Structure of the Nucleus" (selected)
Oct. 2002	5th International Symposium of Molecular Medicine, Crete, Greece (invited)
Oct. 2002	FASEB: 52nd Ann. Mtg. of the Am. Soc. of Hum. Gen. (invited)
Jan. 2003	Keystone Chromatin Meeting (invited)
April, 2004	Marie Curie Research Institute Workshop on Chromatin and DNA Replication (invited)
April, 2004	Eastern Great Lakes Molecular Evolution VIII (selected)
Oct. 2004	EMBO workshop on Nuclear organization; Elmau (invited)
Dec., 2004	Japanese Molecular Biology Society (invited)
June, 2005	Buffalo DNA Replication Symposium (selected)
June, 2005	FASEB Meeting on Nuclear Structure and Cancer (invited)
Sept. 2005	Session Chair, Cold Spring Harbor: “Eukaryotic Chromosome Replication” (invited)
Sept., 2005	Session Co-chair, EMBO Conf.: Nuclear Structure and Dynamics, Montpellier (invited)
Oct. 2005	Cell-cycle Symposium, Tokyo (invited)
Aug., 2006	Session Chair, Salk Institute: DNA Replication and Genome Integrity (invited)
Sept., 2006	Session Chair, Cold Spring Harbor: “Dynamic Structure of the Nucleus” (invited)
Feb. 2007	Workshop on Epigenetics and Evolution (co-organizer)
April, 2007	eIMBL Workship on DNA Replication, Tokyo University (invited)

May, 2007 Buffalo DNA Replication Symposium (selected)
Sept., 2007 Cold Spring Harbor: “Eukaryotic Chromosome Replication” (selected)

INVITED SEMINAR ENGAGEMENTS (host)

10/95 U. of Buffalo (Ron Berezney)
11/95 Syracuse University (Saul Honigberg)
5/96 Roswell Park (Joel Huberman)
1/97 SUNY HSC, Cell Biology Dept. (Chris Turner)
6/97 Heidelberg (Peter Lichter)
10/97 UMDNJ - Newark (Carol Newlon)
1/98 Cornell (Bik Tye)
8/98 RIKEN, Tokyo (Fumio Hanaoka)
3/99 Dartmouth (Steve Fiering)
4/99 NYU (Jim Borowiec)
4/99 Albert Einstein (Carl Schildkraut)
5/99 ICRF, London (John Diffley)
5/99 CRC, Cambridge (Ron Laskey)
5/99 U. Dundee (Chris Hutchison)
11/99 U. Texas, San Antonio (Wen-Hwa Lee)
3/00 NIH, NIDDK (Brian Oliver)
10/00 U. Conn. (Sandra Weller)
12/00 Osaka University, Japan (Hisao Masukata)
5/01 U. of Cincinnati (Erik Knudsen)
11/01 U. of Rochester (Dave Goldfarb)
12/02 Roslin Institute, Edingburgh (Prim Singh)
3/03 Yale University (Mazin Qumsiyeh)
3/03 Univ. Oregon Health Science Center (Matt Thayer)
4/03 U. Arizona, Tuscon (Vicki Chandler)
6/03 Vanderbilt University (Kathy Friedman / graduate students)
10/03 U. Washington, Seattle (Brian Kennedy)
11/03 Cornell U. (Bik Tye)
2/04 U.N.C., Chapel Hill (David Kaufman)
2/04 U. Florida (Jorg Bungert)
3/04 Medical College of Wisconsin (Ming Lei)
3/04 U. Virginia, Charlottesville (Joyce Hamlin)
4/04 Sanger Institute, UK (Nigel Carter)
6/04 Istituto di Genetica Molecolare, Pavia, Italy (Giuseppe Biamonti)
6/04 ICGEB, Trieste, Italy (Arturo Falaschi)
7/04 Institute of Medical Biochemistry, Vienna (E. Muellner and T. Jenuwein)
7/04 Max Delbrück Centrum Für Molekulare Medizin, Berlin (M.C. Cardoso)
7/04 Inst. of Experimental Medicine,Charles University in Prague (I. Raska)
7/04 Friedrich-Miescher-Institute for Biomedical Research, Basel (D. Shubeler)
7/04 Institute of Human Genetics, Montpellier (P. Pasero and M. Mechali)
7/04 University of Geneva (S. Gasser)
8/04 MRC Clinical Sciences Centre, Hammersmith Hospital, London (N. Brockdorff and A. Fisher)
11/04 University of Southern California (J. Rice)
11/04 Geron Corporation (J. Lebkowski)
12/04 Boston University (B. Sullivan)
12/04 Waseda University (Toru Higashinakagawa)
3/05 U. of Adelaide (J. Rathjen)
12/05 U. of Tokyo (H. Masai)
3/06 Wistar Institute, U. Penn. (P. Liebermann)
3/06 Florida State University (T. Moerland)
8/06 Florida State University (M. Hurt) Grand Rounds Seminar
11/06 Florida State University Molecular Biophysics Program (B. Chase)
12/06 Roswell Park Institute of Cancer Research (J. Huberman)

5/07	University of Texas, Austin (D. Stein)
10/07	Duke University (D. MacAlpine)
11/07	U. Alabama, Birmingham (I. Chesnokov)
3/08	Institute of Bioengineering and Nanotechnology, Singapore (D. Zink)

MEMBERSHIP ON GRANT PEER REVIEW COMMITTEES

1995-98	National Science Foundation (ad hoc)
1995-98	US Army Breast Cancer Research Program (Molecular Genetics)
1998-04	American Cancer Society (Cell-Cycle and Growth Control)
99-00	NIH RO1 (Biochemistry) and PPG
98-00	Wellcome Trust
99	HFSP International Projects
00-present	Cancer Research Campaign: 5yr. reviews / Infrastructure grants / Project grants
01	The Israel Science Foundation
01	Istituto Pasteur-Fondazione Cenci Bolognetti
03	NIH (CDF-2)
04-05	Sabbatical
07	NIH ENCODE special emphasis panel
07-present	NIH (MGB)

TEACHING AND COMMITTEE ASSIGNMENTS

Teaching:

1995 – 2001: Selected by Medical students as the most effective teacher for Cell and Molecular Biology.

Year	Assignment
1995	6 lectures in the Advanced Cell and Molecular Biology (Graduate Students)
1995	2 lectures in Cell and Molecular Biology (Medical Students)
1995	7 conference sections in Cell and Molecular Biology (Medical Students)
1996	2 lectures in Principles of Biotechnology (Graduate Students)
1996	6 lectures in Advanced Cell and Molecular Biology (Graduate Students)
1996	4 sessions in Special Topics in Biochemistry (Graduate Students)
1996	4 lectures in Cell and Molecular Biology (Medical Students)
1996	7 conference sections in Cell and Molecular Biology (Medical Students)
1997	4 lectures in Principles of Biotechnology (Graduate Students)
1997	6 lectures in Advanced Cell and Molecular Biology (Medical Students)
1997	Co-organizer of CMB journal club (Graduate Students)
1997	3 credit hour Advanced Biochemistry (Graduate Students)
1997	4 lectures in Cell and Molecular Biology (Medical Students)
1997	4 lectures in Graduate Biochemistry (Graduate Students)
1997	7 conference sections in Cell and Molecular Biology (Medical Students)
1998	4 lectures in Cell and Molecular Biology (Medical Students)
1998	3 lectures in Graduate Biochemistry (Graduate Students)
1998	7 conference sections in Cell and Molecular Biology (Medical Students)
1999	8 lectures in Advanced Biochemistry (Epigenetics) (Graduate Students)
1999	4 lectures in Cell and Molecular Biology (Medical Students)
1999	3 lectures in Graduate Biochemistry (Graduate Students)
1999	7 conference sections in Cell and Molecular Biology (Medical Students)
2000	4 lectures in Cell and Molecular Biology (Medical Students)
2000	6 lectures in Graduate Biochemistry (Graduate Students)
2000	7 conference sections in Cell and Molecular Biology (Medical Students)
2001	8 lectures in Advanced Biochemistry (Epigenetics) (Graduate Students)
2001	4 lectures in Molecular Foundations of Medicine (Medical Students)
2001	6 lectures in Graduate Biochemistry (Graduate Students)
2001	2 conference sections in Cell and Molecular Biology (Medical Students)
2001	2 Clinical Problems Sessions (Medical Students)
2002	6 lectures in Graduate Biochemistry (Graduate students)

2002	2 Lectures in Molecular Medicine and Genetics (PhD students)
2002	4 lectures in Molecular Foundations of Medicine (Medical Students)
2002	2 Clinical Problems Sessions (Medical Students)
2003	6 lectures in Graduate Biochemistry (Graduate students)
2003	8 Lectures in Advanced Biochemistry (Epigenetics) (Graduate Students)
2003	4 lectures in Molecular Foundations of Medicine (Medical Students)
2003	2 Clinical Problems Sessions (Medical Students)
2004	sabbatical
2005	4 lectures in Molecular Foundations of Medicine (Medical Students)
2005	2 Clinical Problems Sessions (Medical Students)
2005	3 lectures in Graduate Biochemistry (Graduate students)
2005	1 lecture in Ethics (Stem Cell Research; Graduate students)
2006	1 lecture in Epigenetics for Genetics course (Graduate students)

Florida State

BSC 5900	Fall 2006, Spring, 2007
BSC 5932	Fall, 2006, Spring 2007
BSC4900	Spring 2007
Spring 2008	PCB5938: Chromosome Structure and Function (Graduate Students)

Administrative and Committee Assignments:

Year	Assignment
1995	Coordinated demonstrations and purchase of Phosphorimager
1995-**present**	Supervise use of Phosphorimager (currently Typhoon Imager)
1995-97	Graduate program committee (Biochem.)
1996	David Choi's qualification committee (Microbiology)
1996	Jamie Meyer's qualification committee (Anatomy)
1996-00	Cell and Molecular Biology program graduate admissions committee
1996	Sumita Kumar's qualification committee (Syracuse U.)
1996-98	Medical College Assembly representative
1996	Seminar Committee for CMB
1996-98	Institutional Biosafety Committee member
1996	Coordinating revisions of the www site for Biochem Dept.
1996	Committee to revise CMB conference for Medical Students
1996	Eric Finkelstein's qualification committee (CMB/Anatomy)
1996	Bin Shi's thesis committee (Shillitoe)
1996	Jamie Meyer's thesis committee (Anatomy)
1996-2004	Director: Summer Undergraduate Fellowship (SURF) Program
1997-**present**	Director: Biochemistry Department Graduate Program
1997	Sumita Kumar's thesis committee (Syracuse U.)
1998	Coordinating revisions of the www site for Biochem Dept.
1998	Bin Shi's thesis committee (Shillitoe)
1998	Kip West's qualification committee (CMB)
1998	Coordinating Asbestos abatement for Biochem. Department
1998	Biochemistry Department Space committee
1998	Institutional Resource Allocation Committee-Research
1998	MD-PhD Admissions committee
1998	Charisse Schleuter's Thesis Committee
1998	Laboratory Animal Resources director search committee
1998-00	Faculty search committee
1998-**present**	Flow Cytometry core facility committee
1999	Mike Laiosa's qualification committee
1999	Jack Webster's qualification committee
1999-00	Committee to unify the graduate admissions process
2000-**present**	DNA core facility committee
2000-2001	Chair: Recruitment committee for Biomedical Sciences Program
2001	Chair, Junior Faculty Review committee

2001-2004 Recruitment committee for Biomedical Sciences Program
2001 Shannon Taylor's qualification exam committee
2001 Adam Tripp's qualification exam committee
2002 Jeff Mills' qualification exam committee
2002 Stephanie Whittaker's qualification exam committee
2002-**present** UNIcor Proteomics committee
2002 Mike Laiosa's Thesis Defense Committee
2002-2004 Stephanie Whittaker's thesis advisory committee
2002-2004 Shannon Taylor's thesis advisory committee
2002-2004 Adam Tripp's thesis committee
2002 Chen Gao's qualification exam committee
2002 Shelly Kummer's qualification exam committee
2003 Blaine Bettinger's qualification exam committee
2003-2005 Chen Gao's thesis advisory committee
2003-present Blaine Bettinger's thesis advisory committee
2003 Stacy Leisenfelder's qualification exam
2004 Stephanie Whittaker's thesis defense
2004 Adam Tripp's thesis defense
2004 Shannon Taylor's thesis defense
2004-present Stacy Leisenfelder's thesis committee
2005 Chen Gao's thesis comittee
2005 Maggie Panning's qualification exam
2005 Chair, faculty search committee

Florida State

2006-present Rodgers Eminent Scholar search committee for College of Medicine
2006-present Genotype-Phenotype cluster hire search committee (8 faculty)
2007-present Nimblegen micro-array facility on campus / PI of internal grant application

Off Campus Teaching and Committee:

1997 2 lectures at Syracuse Univ. BIO622 (Graduate Students)
1997/98 Syracuse Univ. undergraduate honors thesis (Lauren Brinkac)
2001-2003 Steve Angus's thesis advisory committee (U. Cinn. Medical Ctr., Eric Knudsen)

Post-Doctoral Scientists Mentored

1994-1997 Jia-Riu Wu – Vice President, Shanghai University
1996-2001 Daniela Dimitrova – Research Associate, Babraham Institute, Cambridge
1996-1997 Guanhua Yu – Research Associate, U. of Toronto
1996-1998 Masako Izumi – Research Associate, RIKEN, Tokyo
1998-2001 Yukiko Okuno – Research Assistant Professor, Osaka University
200-2003 Feng Li – Research Associate, NIH
2003-2005 Sunita Ramanathan – Post-doc, Joel Huberman, Roswell Park Cancer Center
2002-present Takayo Sasaki - current
2003-present Ichiro Hiratani - current
2004-present Tomoki Yokochi – current
2007-present Yoav Lubelsky - current

Graduate Students Mentored

Susan Keezer, PhD 2002 - Development Scientist, Cell Signaling Technology, Inc.
Latha Archibold, M.D. 2004 – Medical Resident, U. Texas
Adrian McNairn, PhD, 2004 – Post-Doc, Stowers Institute
Rong Wu, PhD, 2005 - unknown
Chiharu Kumagai, M.S. 2005 – Technician, SUNY Upstate
Seemab Shaikh, M.S. 2005 – Technician, Bristol-Meyers Squibb, Syracuse

Florida State

Junjie Lu, current PhD student
Tyrone Ryba, current PhD student
Marjorie Kuipers, current PhD student

Undergraduate Students Mentored

1995 – 97	Stephanie Lawlis (SURF, NSF fellow); Binghamton University
1996	Albert Gall (SURF); Binghamton Univ.
1996-97	Lauren Brinkac (Honor's Thesis); Syracuse University
1998	Marisa Foehr (NSF Fellow); SUNY Geneseo
1998	Heidi Schwartz (SURF); LeMoyne College
1999	Mandip Singh Kalsi (volunteer); New York University
2000	Johanna Hansen (SURF); Vassar College
2001	Laddaphone Douangnouanexay (lab course credit); Syracuse University
2001-02	Douglas Weck (NSF Fellow); Syracuse University
2001-02	Margaret Panning (SURF, NSF Fellow); LeMoyne College
2002	Michelle Crandall (SURF); SUNY Geneseo
2002-03	Anna Terry (sandwich student); University of Bath
2003	Aubrey Smartt (SURF); Carroll College
2003-04	Dan Trinkaus (lab course credit); Syracuse University
2002-04	Jessica Tranchell (NSF fellow); Rutgers University
2003	Briana Niessen (NSF Fellow); Michigan Technical University
2003-04	Michelle Hawkins (sandwich student); University of Bath
2004-05	Jackie Magnusson (Honor's Thesis); Syracuse University
2004	Jeff Rubino (NSF fellow); Hamilton College
2004-05	Diego Motta (McNair fellow; minority science fellowship): Syracuse University
2005-present	Chris Tarolli (Honor's thesis): Syracuse University
Post-move to Florida State	
2007	Gina Obmana (Directed Independent Study): Florida State University
2007-08	Noemi LeFranc, Florida State University
2007-09	James Shirley, Florida State University
2007-09	Brandi Geisbert, Florida State University

Undergraduate Recruitment Seminars

1996	Rochester Institute of Technology
1999	Colgate University
2002	LeMoyne College
2004	Clarkson College

COMMUNITY SERVICE

Layperson Speaking Engagements

1998 Autism Society of Syracuse - The Genetics of Autism
2000 Man to Man of Central New York - "Where Does the Money Go?" - lecture on basic cancer research to individuals affected by prostate cancer
2004 Frontiers of Science, Public Awareness Lecture – "The Future of Human Embryonic Stem Cell Research"
2004 Project Advance: Discussion with 35 Central New York State advance placement biology teachers on the future of molecular medicine
2006 Midnight Lecture, Syracuse University – "The Non-Sensationalized Promise of Embryonic Stem Cells."

Non-Profit Organizations

1987-present Founder of "Eyes of the World Foundation" (California non-profit organization supporting education in East Palo Alto)

2005-present	Co-Director of the Manlius Greenspace Coalition http://www.manliusgreenspace.org
2005-present	Chair of the Land Preservation Committee for the Manlius Greenspace Coalition
2005-present	Grant writer for Town of Manlius Open Space Preservation Committee
2005-present	Member of the Town of Manlius Open Space Inventory Committee

Basketball Coaching and Coordination

1995-present	Fayetteville-Manlius Recreational Basketball (Boys and Girls, grades 2-10)
1996-2003	Annual benefit game fund-raiser for Mott Road Elementary School

Pro-bono musical events and fundraisers (The Residues; http://www.theresidues.com)

12/96:	SUNY Health Science Center Graduate Student Organization Christmas party
2/97:	SUNY Health Science Center Chinese New Years Party
6/97:	Robeson retirement party
12/97:	SUNY Health Science Center Graduate Student Organization Christmas party
12/98:	Cornell Biotech. Building Christmas party
12/98:	SUNY Health Science Center Graduate Student Organization Christmas party
2/99:	SUNY Health Science Center 1st annual Medical Student Talent Show
6/99:	Fayetteville-Manlius Club end of the year party
12/99:	Cornell Biotech. Building Christmas party
12/99:	SUNY Health Science Center Graduate Student Organization Christmas party
4/7/00:	SUNY Health Science Center 2nd annual Medical Student Talent Show
6/10/00:	Fayetteville-Manlius Club end of the year party
10/06/01:	Business Expo: Manlius Village Center
7/13/02:	Benefit Block Party for Dick Peters fight against brain cancer
3/29/03	Benefit for the Community Learning and Information Center (CLIC) of Manlius
6/14/03	Fayetteville-Manlius Club end of the year party
5/23/04	Raise the Roof Fund Raiser for the Children's Hospital of Syracuse
6/04	Fayetteville-Manlius Club end of the year party
6/05	Block Party to Benefit the Manlius Volunteer Fire Department
7/05	Benefit for the Autism Society of America
4/06	Benefit for the Red Cross

PUBLICATIONS

1. **Gilbert, D.M.** (1986) Temporal order of replication of *Xenopus laevis* 5S ribosomal RNA genes in somatic cells. **PROC. NAT. ACAD. SCI.** USA 83, 2924-2928.

2. **Gilbert, D.M.** and Cohen, S.N. (1987) Bovine papilloma virus plasmids replicate randomly in mouse fibroblasts throughout S-phase of the cell cycle. **CELL** 50, 59-68.

3. Hertel-Wulff, B., Lindsten, T., Schwadron, R., **Gilbert, D.M.**, Davis, M. and Strober, S. (1987) Rearrangement and expression of T-cell receptor genes in cloned murine natural suppressor cell lines. **J. EXP. MED.** 166, 1168-1173.

4. **Gilbert, D.M.** and Cohen, S. N. (1988) Autonomous replication in mouse cells. **CELL** 56, 143-144.

5. **Gilbert, D.M.** and Cohen, S.N. (1990) Position effects on the timing of replication of chromosomally integrated simian virus 40 molecules in chinese hamster cells. **MOL. CELL. BIOL** 10, 4345-4355.

6. Ten-Hagen, K., **Gilbert, D.M.**, Willard, H. and Cohen, S.N. (1990) Replication timing of DNA sequences associated with human centromeres and telomeres. **MOL. CELL. BIOL.** 10, 6348-6355.

7. **Gilbert, D.M.**, Hernandez, R. and Cohen, S.N. (1992) Mouse genomic DNA sequences homologous to sea urchin TU elements are genetically stable polydispersed repeats useful for analysis of multiple RFLP's. **GENOMICS** 12, 357-362.

8. Ravnan, J. B., **Gilbert, D.M.**, Ten Hagen, K., and Cohen, S.N. (1992) Random-choice replication of extrachromosomal bovine papillomavirus (BPV) molecules in heterogeneous, clonally derived BPV-infected cell lines. **J. VIROLOGY** 66, 6946-6952.

9. **Gilbert, D.M.**, Losson, R. and Chambon, P.C. (1992) Ligand dependence of estrogen receptor induced changes in chromatin structure. **NUCL. ACIDS RES.** 20, 4525 - 4531.

10. **Gilbert D.M.**, Heery, D.M., Losson, R., Chambon, P. and Lemoine, Y. (1993) Estradiol-inducible squelching and cell growth arrest by a chimeric VP16-estrogen receptor expressed in *Saccharomyces cerevisiae*: suppression by an allele of PDR1. **MOL. CELL. BIOL.** 13, 462-472.

11. **Gilbert, D.M.**, Miyazawa, H., Nallaseth, F.S., Ortega, J.M., Blow, J.J. and DePamphilis, M.L. (1993) Site-specific initiation of DNA replication in metazoan chromsomes and the role of nuclear organization. **COLD SPRING HARBOR SYMP. QUANT. BIOL.** 58, 475-485.

12. **Gilbert, D.M.**, Neilson, A., Miyazawa, H., DePamphilis, M. L. and Burhans, W. C. (1995) Mimosine arrests DNA synthesis at replication forks by inhibiting deoxyribonucleotide metabolism, **J. BIOL. CHEM.** 270, 9597-9606.

13. **Gilbert, D.M.**, Miyazawa, H. and DePamphilis, M.L. (1995) Site-specific initiation of DNA replication in *Xenopus* egg extracts requires nuclear structure. **MOL. CELL. BIOL.** 15, 2942-2954.

14. Wu, J.W. and **Gilbert, D. M.** Rapid DNA preparation for 2D gel analysis of replication intermediates. (1995) **NUCL. ACIDS RES**. 23: 3997-3998.

15. Wu, J.W. and **Gilbert, D. M.** (1996) A Distinct G1 Step Required to Specify A Mammalian Replication Origin **SCIENCE** 271: 1270-1272.

16. Lawlis, SJ, Keezer, S.M., Wu, J.-R. and **Gilbert, DM.** (1996) Chromosome Architecture Can Dictate Site-specific Initiation of DNA Replication in *Xenopus* Egg Extracts **J. CELL BIOL.** 135: 1207-1218.

17. Wu, J.-W. and **Gilbert, DM** (1997) The Replication Origin Decision Point is a Mitogen Independent, 2-Aminopurine Sensitive, G1-Phase Event That Precedes Restriction Point Control. **MOL. CELL. BIOL.**17: 4312-4321.

18. Wu, J.-W., Yu, G. and **Gilbert, D.M.** (1997) Origin-Specific Initiation of Mammalian Nuclear DNA Replication in a *Xenopus* Cell-Free System. **METHODS, A Companion to Methods In Enzymology** 13:313-324

19. **Gilbert, D.M.** (1998) Replication origins in yeast versus metazoa: separation of the haves and the have nots. **CURR. OPIN. GEN. DEV**. 8: 194-199.

20. Wu, J.-W. and **Gilbert, D.M.** (1998) Transformation Abrogates an Early G1-Phase Arrest Point Required for Specification of the Chinese Hamster DHFR Replication Origin **EMBO J.** 17: 1810 - 1818.

21. Dimitrova, D.S and **Gilbert, D.M.** (1998) Regulation of Mammalian Replication Origin Usage in *Xenopus* Egg Extract. **J. CELL SCI.** 111: 2989-2998.

22. Yu, G, Wu, J.-W. and **Gilbert, D.M.** (1998) Analysis of mammalian origin specification in ORC-depleted *Xenopus* egg extracts. **GENES TO CELLS** 3: 709-721.

23. *****Dimitrova, D.S., Todorov, I.T., Melendy, T. and **Gilbert, D.M.** (1999) Mcm2, But Not RPA, is a Component of the Mammalian Early G1-Phase pre-Replication Complex. **J. CELL BIOL.** 146: 1-14.

24. Dimitrova, D.S. and **Gilbert, D. M.** (1999) The spatial position and replication timing of chromosomal domains are both established in early G1-phase. **MOL. CELL** 4: 983-993.

25. Dimitrova, D.S. and **Gilbert, D.M.** (1999) DNA replication and nuclear organization: prospects for a soluble in vitro system. **CRIT. REV. GENE EXP.** 9: 353-361.

26. Izumi, M and **Gilbert, D.M**. (1999) Homogeneous Tetracycline-Regulatable Gene Expression in Mammalian Fibroblasts, **J. CELLULAR BIOCHEM**. 76: 280-289.

27. Dimitrova, D.S. and **Gilbert, D.M**. (2000) Stability and nuclear distribution of mammalian RPA heterotrimeric complex. **EXP. CELL RES.** 254: 321-327.

28. Dimitrova, D.S. and **Gilbert, D.M.** (2000) Temporally Coordinated Assembly/Disassembly of Replication Factories in the Absence of DNA Synthesis, **NATURE CELL BIOLOGY** 2: 686-694.

29. Wu, J.-W., Wang, J.-W. and **Gilbert, D.M.** (2000) Initiation Of DNA Replication In *Saccharomyces Cerevisiae* G1-Phase Nuclei By *Xenopus* Egg Extract, **J. CELLULAR BIOCHEM**. 80: 73-84.

30. Izumi, M, Whitfield, W. G. F., Hutchison, C. J. and **Gilbert, D.M**. (2000) Head and/or CaaX domain deletions of lamin proteins can disrupt pre-formed lamin A/C but not lamin B structure in mammalian cells, **MOL. BIOL. CELL.** 11: 4323-4337.

31. Wu, J.-W. and **Gilbert, D.M.** (2000) Lovastatin Arrests CHO Cells Between the Origin Decision Point and the Restriction Point, **FEBS LETTERS** 484: 108-112.

32. **Gilbert, D. M.** (2001) Nuclear Position Leaves its Mark on Replication Timing, **J. CELL BIOL.** 152: F11-F15.

33. Li, F., Chen, J., Izumi, M., Butler, M.C., Keezer, S. M. and **Gilbert, D.M.** (2001) The Replication Timing Program of the Chinese Hamster -Globin Locus is Established Coincident With its Association With Peripheral Heterochromatin in Early G1-Phase, **J. CELL BIOL**. 154: 283-292.

34. Okuno, Y., McNairn, A.J., den Elzen, N., Pines, J. and **Gilbert, D.M.** (2001) Stability, Chromatin-Association and Functional Activity of Mammalian Pre-Replication Complex Proteins During the Cell-Cycle, **EMBO J.** 20: 4263-4277.

35. Feijoo, C., Hall-Jackson, C., Wu, R., Jenkins, D., Leitch, J., **Gilbert, D.M.** and Smythe, C (2001) Activation of mammalian Chk1 during DNA replication arrest: a role for Chk1 in the intra S-phase checkpoint monitoring replication origin firing. **J. CELL BIOL**. 154: 913-923.

36. **Gilbert, D. M.** (2001) Making Sense of Eukaryotic Origins of Replication, **SCIENCE** 294: 96-100.

37. Dimitrova, D.S., Prokhorova, T.A., Blow, J.J., Todorov, I. and **Gilbert, D.M.** (2002) Mammalian Nuclei Become Licensed for DNA Replication During Telophase, **J. CELL SCI.** 115: 51-59.

38. Keezer, S.M. and **Gilbert, D.M.** (2002) Sensitivity of the Origin Decision Point to Specific Inhibitors of Cellular Signaling and Metabolism, **EXP. CELL RES.** 273: 54-64.

39. *****Keezer, S.M. and **Gilbert, D.M.** (2002) Evidence for a Pre-Restriction Point Cdk3 Activity, **J. CELLULAR BIOCHEM.** 85: 545-552

40. Cowell, I.G., Aucott, R., Mahadevaiah, S., Burgoyne, P.A., Huskisson, N., Bongiorni, S., Prantera, G., Fanti, L., Pimpinelli, S., Wu, R., **Gilbert, D.M**., Shi, W., Fundele, R., Morrison, H., Jeppesen, P. and Singh, P.B. (2002) Heterochromatin, HP1 and methylation at lysine 9 of histone H3 in animals, **CHROMOSOMA** 111: 22-36.

41. **Gilbert, D.M.** (2002) Replication timing and transcriptional control: beyond cause and effect. **CURR. OPIN. CELL BIOL.** 14: 377-383.

42. **Gilbert, D.**M. (2002) The Evolution of Replication Timing. **NATURE GENETICS** 32:336-337.

43. Cheutin, T., McNairn, A.J., Jenuwein, T., **Gilbert, D.M.**, Singh, P.B., Misteli, T. (2003) Maintenance of stable heterochromatin domains by dynamic HP1 binding. **SCIENCE** 299: 721-725.

44. Li, F., Chen, J. Solessio, E., and **Gilbert, D.M.** (2003) Spatial distribution and specification of mammalian replication origins during G1-phase. **J. CELL BIOL.** 161:257-266.

45. McNairn, A.J. and **Gilbert, D.M.** (2003) Epigenomic Replication: linking epigenetics to DNA replication. **BIOESSAYS** 25(7): 647-56.

46. Okuno, Y., Hahn, P.J. and **Gilbert, D.M.** (2004) Structure of a Palindromic Amplicon Junctin Implicates Microhomology-Mediated End Joining as a Mechanism of Sister Chromatid Fusion During Gene Amplification. **NUCL. ACIDS RES.** 32: 749-756.

47. Bettinger, B., **Gilbert, D.M.** and Amberg, D.C. (2004) Actin Up in the Nucleus., **NATURE REV. MOL. CELL BIOL.** 5: 410-415.

48. **Gilbert, D.M.** (2004) The Future of Human Embryonic Stem Cell Research: Addressing Ethical Conflict with Responsible Scientific Research. **MED. SCI. MON.** 10: 99-103.

49. Kourmouli, N., Jeppesen, P., Mahadevhiah, S., Burgoyne, P., Wu, R., **Gilbert, D.M.,** Bongiorni, S., Prantera, G., Fanti, L., Pimpinelli, S., Shi, W., Fundele, R. and Singh, P.B. (2004) Heterochromatin and *tri*-methylated lysine 20 of histone H4 in animals. **J. CELL SCI.** 117: 2491-2501.

50. Angus, S.P, Mayhew, C.N., Solomon, D.A., Markey, M.P., Okuno, Y., Bartek, J., Cardoso, M.C., **Gilbert, D.M** and Knudsen E.S. (2004) RB reversibly inhibits DNA replication via two temporally distinct mechanisms. **MOL. CELL. BIOL.** 24: 5404-5420.

51. **Gilbert, D.M.** (2004) In Search of the Holy Replicator **NATURE REV. MOL. CELL BIOL.** 5:1-8.

52. Hiratani, I., Leskovar, A., **Gilbert D.M.** (2004) Differentiation-Induced Replication Timing Changes are Restricted to AT/LINE-rich Isochores. **PROC. NAT. ACAD. SCI.** 101: 16861-6.

53. Panning, M.M. and **Gilbert, D.M.** (2005) Spatio-temporal organization of DNA replication in murine embryonic stem, primary, and immortalized cells. **J. CELL. BIOCHEM.** 95: 74-82.

54. Wu, R., Terry, A.V., Singh, P.B., and Gilbert, D.M. (2005) Differential Sub-nuclear Localization and Replication Timing of Histone H3 Lysine 9 Methylation Sites. **MOL. BIOL. of the CELL** 16: 2872-2881.

55. McNairn, A.J., Okuno, Y.O., Misteli, T. and **Gilbert, D.M.** (2005) Chinese Hamster ORC Subunits Dynamically Associate With Chromatin Throughout the Cell Cycle. **EXP. CELL RES.** 308:345-56.

56. McNairn, A.J. and **Gilbert, D.M.** (2005) Over-expression of ORC Subunits and Increased ORC-Chromatin Association in Transformed Mammalian Cells. **J. CELL. BIOCHEM.** 96: 879-887

57. **Gilbert, D.M.** (2005) Origins Go Plastic, **MOL. CELL** 20:657-658.

58. Wu, R., Terry, A. and **Gilbert, D.M.** (2006) Observing Nuclear Structure/Chromatin Changes with Fluorescently labeled Antibodies. **METHODS IN MOL. BIOL.** 325:139-148

59. Takayo Sasaki, Sunita Ramanathan, Yukiko Okuno, Chiharu Kumagai, Seemab S. Shaikh and **Gilbert**, **D.M.** (2006) The Chinese Hamster DHFR Replication Origin Decision Point Follows Activation of Transcription and Confines Initiation to the Intergenic Region, **MOL. CELL. BIOL.** 26:1051-1062.

60. **Gilbert, D.M.** and Gasser, S.M. (2006) Nuclear Structure and DNA Replication. In: **DNA replication and human disease. CSH Press** (ed. M. L. DePamphilis), Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York: 175-196

61. Wu, R., Singh, P.B. and **Gilbert, D.M.** (2006) Uncoupling Global and Fine-Tuning Replication Timing Determinants for Mouse Peri-Centric Heterochromatin. **J. CELL BIOL.,** 174: 185-194.

62. **Gilbert, D.M.** (2007) Replication Origin Plasticity, Taylor-Made: inhibition vs. recruitment of new origins under conditions of replication stress. **CHROMOSOMA,** 116: 341-347.

63. Sasaki, T. and **Gilbert, D.M.** (2007) The Many Faces of the Origin Recognition complex. **CURR. OPIN. CELL BIOL.,** 19:337-343.

64. **Gilbert, D.M.** and Zink, D. (2007) Nuclear Structure of Normal and Cancer Cells. **GENOME BIOLOGY** 8:312.

65. **Lu J**, Gilbert DM. (2007) Proliferation-Dependent and Cell-Cycle Regulated Transcription of Mouse Pericentric Heterochromatin. **J. CELL BIOL.** 179: 411-421.

66. Yokochi, T. and **Gilbert, D.M.** (2007) Methods for Visualizing Replication Origins in Mammalian Cells. **CURRENT PROTOCOLS**. In press.

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