Curriculum Vitae – Jennifer Martin

Education:

B.S, 1982, Environmental Toxicology, University of California, Davis
PhD, 1987, Pharmacology, University of Washington, Seattle

Academic Positions:

August 2011-	Senior Instructor, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO
August 2005-May 2011	Assistant Professor, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO
July 2004 - July 2005	Associate Research Professor, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO
October 1996 - June 2004	Assistant Research Professor, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO
August 1993 - September 1996	Assistant Professor, Department of Pharmacology, Purdue University, West Lafayette, IN

Fellowships, Awards, and Honors:

2006-2007	National Academies Education Fellow in the Life Sciences
1989-1992	NIH Postdoctoral Fellowship Leukemia Society of America Postdoctoral Fellowship American Cancer Society Fellowship (awarded but declined)
1988-1989	National Institutes of Health, Tumor Virology Training Grant (trainee)
1983-1987	National Institutes of Health Predoctoral Fellow

Grant Support*:

<u>Past support:</u>

ACS Junior Faculty Research Award
Principal Investigator: Jennifer M. Martin
Years of Award: 7/01/96 - 6/30/99
Total costs: $90,500 (stipend $79,500 for 3 years, institutional allowance $6000, supply allowance $5000
Title of the grant: Molecular basis of B cell immortalization by the LMP-1 oncoprotein of Epstein-Barr virus
Leukemia Research Foundation, New Investigator Award
Principal Investigator: Jennifer M. Martin
Years of Award: 7/01/94 - 6/30/96
Direct costs/year: $35,000

Title of the grant: Genetic Analysis of the Epstein-Barr virus transforming protein LMP-1

Purdue Research Foundation, Research Grant
Principal Investigator: Jennifer M. Martin
Years of Award: 5/01/95 - 4/30/97
Total costs: $10,200
Title of the grant: Isolation of Cellular Immortalizing Genes Induced by Epstein-Barr virus

ACS, Institutional Grant for Junior Faculty IRG-17-34
Principal Investigator: Jennifer M. Martin
Years of Award: 1/01/94 - 1/01/95
Total costs: $10,000
Title of the grant: "Genetic Analysis of the LMP-1 oncogene of Epstein-Barr virus"

NIH R-29, 1-R29-CA646610
Principal Investigator: Jennifer M. Martin
Years of Award: 7/1/95 - 6/30/01
Total costs: $524,850
Direct costs/year: $70,000
Title of the grant: "Human B cell transformation by Epstein-Barr virus"

NIH K02 1-K02-AI001537
Principal Investigator: Jennifer M. Martin
Years of Award: 4/01/98 - 3/31/03
Total costs: $337,781
Direct costs: $312760
Direct costs/year: $62,552
Title of the grant: "Human B cell transformation by Epstein-Barr virus"

Cancer League of Colorado
Co-Principal Investigators: Jennifer M. Martin and Hubert Yin
Years of Award: 7/01/08 - 6/30/09
Total direct costs: $60,000
Title of the grant: "Multidisciplinary approaches to investigate EBV activation"

NIH R-01-CA095043
Principal Investigator: Jennifer M. Martin
Years of Award: 2/28/04 - 2/28/09
Total costs:
Direct costs/year:
Title of the grant: "Activation of the LMP-1 protein of Epstein-Barr virus"

NIH R-21-CA13873
Co-Principal Investigators: Jennifer M. Martin and Hubert Yin
Years of Award: 4/10/09 - 4/9/11
Total costs: $186,795 (first year)
Direct costs/year:
Title of the grant: "Probing EBV-LMP-1's Transmembrane Activation Domain with Synthetic Peptides Antagonists"

supplements to NIH R-21-CA13873

NIH Research Supplement to Promote Diversity in Health Related Research; for Ryan Takeshita (supplement to R-21- CA13873)
Principal Investigator: Jennifer M. Martin
Years of Award: 4/10/09 - 4/9/11
Total costs:
Direct costs/year:
Title of the grant: "Probing EBV-LMP-1's Transmembrane Activation Domain with Synthetic Peptides Antagonists"

NIH Research Supplement to Promote Diversity in Health Related Research; for Miguel Gonzalez (supplement to R-21- CA13873)
Principal Investigator: Jennifer M. Martin
Years of Award: 4/10/09 - 4/9/11
Total costs:
Direct costs/year:
Title of the grant: "Probing EBV-LMP-1's Transmembrane Activation Domain with Synthetic Peptides Antagonists"

Teaching:

Non-classroom teaching:

Mentoring high school students in the laboratory:

Joey Baum 2006-2007, Science Research Seminar course
School: Boulder High School
Title of project: "Examining LMP-1 effects on Tyk2 phosphorylation in IL-12 induced signaling"
Awards: First place, Regional Science Fair, Boulder Valley School District

Mariah Colton 2007-2008, Science Research Seminar Course
School: Nederland High School
Title of project: "Role of LMP-1 dimerization in NFkB activation in B cells"
Awards: Second place, Roche Regional Science Fair, Boulder Valley School District; selected for presentation at Junior Science and Humanities Symposium, Laramie, Wyoming

Mariah Colton 2008-2009, Science Research Seminar Course
School: Nederland High School
Title of project: " Mechanism of Epstein-Barr virus suppression of Interferon Signaling"
Awards: Second place, Roche Regional Science Fair, Boulder Valley School District; selected for presentation at Junior Science and Humanities Symposium, Laramie, Wyoming

Mentoring undergraduates in the laboratory:

UNDERGRADUATE HONORS THESIS STUDENTS:

Golnar Vazirabadi 2002-2003 *Magna cum laude, "Immuno-localization of lyLMP-1 and lyLMP-1 proteins in Epstein-Barr virus infected lymphoblastoid cell lines"*

Kate Weinell 2004-2006 (UROP) *Suma cum laude "Identifying the contribution of Latent Membrane Protein 1 to Epstein-Barr virus life cycle"*

Shem Johnson (2007-2009) *cum laude "Elucidating a novel NFkB signaling pathway from Epstein-Barr virus Latent Membrane Protein 1"*

Christopher Stockburger 2007-2009 (UROP; Van Eck Award recipient 2009) *Suma cum laude "Characterization of the subcellular localization and its role in the function of LMP-1 and lyLMP-1"*

UCHSC SUMMER CANCER FELLOWSHIP STUDENTS:

Tyer Menge 2**008** "*Inactivation of the NF-κB Signaling Pathway by NIK and IKKB in 293T Cells Expressing the Epstein-Barr Virus-Encoded LMP-1"*

UNDERGRADUATE INDEPENDENT STUDIES STUDENTS (MCDB):

John Jeff Alvarado 1996-1997
Peter Barelka 1997-1998
Shawn Keil 1996-1997
Lauren Munsh 1999-2000
Neil Lipman 2000-2002
Kurt Davies 2002-2003
Rebecca Balderman 2002-2003
Ben Wallis 2003-2004
Caitlin Kettler 2006-2007 (UROP/BURST)
Christian Dean 2006-2007
Holly Arnold 2007-2008 (UROP) *"Functional consequence of cysteine-substitution in LMP-1"*
Mohammad Roostan 2009- (UROP) *" Role of Cellular Lipid Rafts in EBV induced LMP-1 Signaling"*

UNDERGRADUATE MINORITY STUDENTS:

Gerialisa Caesar 2008 Summer Multicultural Access to Research Training (SMART) program; *"Effects of FWLY substitution on LMP-1 function in EBV-infected B cells"*

Alfredo Cervantes 2008 McNair Scholar, CU Boulder; *"Chemical crosslinking studies to identify oligomeric states of LMP-1"*

EXCHANGE STUDENTS FROM REGENSBURG, GERMANY:

Birgit Bauer 1996-1997 *"Role of LMP-1's cytoplasmic amino-terminus in plasma membrane localization"*
Edwin Schiff 2002-2003 *"lyLMP-1 open reading frame in tumor virus isolates: lack of correlation between Met129 Status and EBV strain identiy"*
Sandra Balser 2003=2004 *"Biochemical characterization of native LMP-1 complexes"*
Theresa Knoblach 2004-2005 *"Molecular characterization of LMP-1 containing lipid rafts"*
Jakob Loschko 2005-2006 *"Contribution of the BNLF2 orf to EBV's lytic cycle"*
Steffi Hetzenecker 2006-2007 *"Activation of the Unfolded Protein Response by LMP-1"*

Lydia Kreuter 2008-2009 *"Analysis of CD40 complexes in nonactivated and activated conditions"*

Thesis mentor for PhD students

Kimberley D. Erickson 1994-2000 PhD 2000 "*Why does Epstein-Barr virus express a non-transforming truncated form of its oncoprotein LMP-1?"* currently, Dept of Molecular, Cellular and Developmental Biology, CU Boulder
Marloes Hoedt-Miller 1997-2000 MS 2000, currently, Division of Pulmonary Sciences and Critical Care Medicine, UCHSC
Timothy Geiger 2000-2006 PhD, 2006, *"Molecular characterization of the LMP-1 signaling complex*; currently Evela Medical
Aaron Robitaille 2006-2007 MS 2007, *"Lipid microdomain governance of signal transduction mechanisms;* currently attending Universität Basel, Biochemistr
Christopher Wrobel 2005- *"Molecular Characterization of EBV Latent Membrane Protein-1's Interferon alpha suppression phenotype"*
Ryan Takeshita 2005-2011 *"The constitutive activation of the latent membrane protein-1 of Epstein-Barr Virus: what is the contribution of homo-oligomerization and lipid raft-association?"*
Miguel Gonzalez 2007-2012*"Detailed structural analysis of LMP-1 oligomers and interacting proteins - a biochemical and crystallographic approach"*
Aaron Shapiro 2008-2009 *"The mechanism and specificity of host shutoff by the Epstein-Barr virus early lytic protein BGLF5"*
Stephanie Staugaard 2009-2010 *"The Role of the Viral Oncoprotein LMP-1 in the Induction of the Unfolded Protein Response Under Non-stress Conditions"*
Sarah McQuate 2009-2011 *"Biophysical studies of LMP-1 in living cells"*

Mentor for rotation students:

Ken Li 1995 Purdue University
Rosalind Forbes 1997 MCDB, CU Boulder
April Livengood 1997 MCDB, CU Boulder
Michelle Emrick 1998 Dept of Biochemistry, CU Boulder
Eric Hague 1999 MCDB, CU Boulder
Jamie Sheren 2000 MCDB, CU Boulder
Evan Trudeau 2002 MCDB, CU Boulder
Chandra Kilburn 2003 MCDB, CU Boulder
Aaron Donner 2003 MCDB, CU Boulder (2003)
Caleb Richter 2003 MCDB, CU Boulder
Kalin Swain 2004 MCDB, CU Boulder
Chris Wrobel 2004 MCDB, CU Boulder
Kasey Hammond 2004 Dept of Biochemistry, CU Boulder
Ryan Takeshita 2005 MCDB, CU Boulder
Rebecca Nix 2005 MCDB, CU Boulder
Julie Weidner 2005 MCDB, CU Boulder
Aaron Robitaille 2006 MCDB, CU Boulder
Josh Myatt 2006 MCDB, CU Boulder
Indrani Rebbapragada 2006 MCDB, CU Boulder
Jessica Stockburger 2006 MCDB, CU Boulder
Julia Cope 2007 MCDB, CU Boulder
Aaron Shapiro 2007 MCDB, CU Boulder

Sarah McQuate 2008 Dept of Biochemistry, CU Boulder
Stephanie Staurgaard 2009 MCDB, CU Boulder

Thesis committee membership:

Burnley Jaklevic (MCDB, CU Boulder)
PJ Bennet (MCDB, CU Boulder)
Laura Chromy (UCHSC)
Jennifer Voegli (UCHSC)
Matt McNatt (MCDB, CU Boulder; head of committee)
Rebecca Nix (MCDB, CU Boulder)
Julie Weidner (MCDB, CU Boulder)
Maengjo Kim (MCDB, CU Boulder)
Dan Nickerson (MCDB, CU Boulder, head of committee)
Caleb Richter (MCDB, CU Boulder; head of committee)
Megan Wemmer (MCDB, CU Boulder)
Xin Geng (MCDB, CU Boulder)
Josh Myatt (MCDB, CU Boulder, head of committee)

Classroom teaching:

Medicinal Chemistry 600 **1993** "Chemical Pharmacology" graduate course, Acetylcholine and acetylcholine receptors, 3 lectures,. 15 students, Purdue University

Pharmacology 570 **1994** Developed new graduate course "Principles of Pharmacology", Membrane pharmacology and signal transduction, 6 lectures, 15 students, Purdue University

Biology 516 **1995** "Molecular Biology of Cancer", Epstein-Barr virus, 1 lecture, 50 students, Purdue University

Pharmacology 441 **1995** Undergraduate Pharmacology course for Pharmacy School, Autonomic pharmacology, 12 lectures, 100 students, Purdue University

Pharmacology 672 **1996** "Molecular Carcinogenesis" course director, graduate level course, Tumor Virology, 5 lectures, 15 students, Purdue University

MCDB 5520 **1997 "**Molecular Genetics" grad course, 3 lectures, 15 students, CU Boulder

MCDB 4750 **1998 "**Animal Virology", cotaught with K. Danna, 28 students, CU Boulder

MCDB 4750 **2000** Animal Virology; whole course, 30 students; CU Boulder

MCDB 5230 **2000 "**Gene Expression", grad course, 3 lectures; 15 students, CU Boulder

MCDB 4750 **2001 "**Animal Virology" whole course, 30 students, CU Boulder

MCDB 5230 **2001 "**Gene Expression", grad course, 3 lectures, 15 students, CU Boulder

MCDB 4750 **2002 "**Animal Virology", whole course, 30 students, CU Boulder

MCDB 5230 **2002 "**Gene Expression", grad couurse, 3 lectures, CU Boulder

MCDB 4750 **2003 "**Animal Virology", whole course, 30 students, CU Boulder

MCDB 5230 **2003 "**Gene Expression", grad course, 3 lectures, 15 students, CU Boulder

MCDB 4750 **2004 "**Animal Virology", whole course, 30 students, CU Boulder

MCDB 5230 **2004 "**Gene Expression", grad course, 3 lectures, 15 students, CU Boulder

MCDB 4750 **2005 "**Animal Virology", whole course, 30 students, CU Boulder

MCDB 5230 **2005 "**Gene Expression", grad course, 3 lectures, CU Boulder

MCDB 1150 **2005 "**Introduction to Cell and Molecular Biology", 6 lectures, 350 students, CU Boulder

MCDB 1150 **2006 "**Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 5230 **2006 "**Gene Expression", grad course, 2 lectures, 15 students, CU Boulder

MCDB 1150 **2007 "**Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 5210 **2007 "**Cell Structure and Function", grad course; Organizer of Signaling Section, 3 lectures, 15 students, CU Boulder

MCDB 1150 **2008 "**Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 5210 **2009 "**Cell Structure and Function", Organizer of Signaling Section; 2 lectures, 15 students, CU Boulder

MCDB 1150 **2010** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 5210 **2010 "**Cell Structure and Function", Organizer of Signaling Section; 2 lectures, 15 students, CU Boulder

FALL 2011:

MCDB 1150 **Fall 2011 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 1150 **Fall 2011 (section 2)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder

MCDB 4444 **Fall 2011** "Cellular Basis of Disease", 25 students, CU Boulder

SPRING 2012:

MCDB 1150 **Spring 2012** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 1152 **(section 1 and section 2) Spring 2012** “Problem Solving in Introductory Molecular and Cellular Biology”, 40 students, CU Boulder

MCDB 4444 **Spring 2012** "Cellular Basis of Disease", 27 students, CU Boulder

FALL 2012:

MCDB 1150 **Fall 2012 (section 1)** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 300 students, CU Boulder

MCDB 1150 **Fall 2012 (section 2)** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 86 students, CU Boulder

MCDB 4444 **Fall 2012** "Cellular Basis of Disease", 27 students, CU Boulder

SPRING 2013:

MCDB 1150 **Spring 2013** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 1152 **Spring 2013 (section 1, 2 and 3)** “Problem Solving in Introductory Molecular and Cellular Biology” 45 students, CU Boulder

MCDB 4444 **Spring 2013** "Cellular Basis of Disease", 33 students, CU Boulder

FALL 2013:

MCDB 1150 **Fall 2013 (section 1)** “Introduction to Cell and Molecular Biology” (~75% of lectures (team taught with Nancy Guild), 300 students, CU Boulder

MCDB 1150 **Fall 2013 (section 2)** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 86 students, CU Boulder

MCDB 4444 **Fall 2013** “Cellular Basis of Disease”, 30 students, CU Boulder

SPRING 2014:

MCDB 1150 **Spring 2014** “Introduction to Cell and Molecular Biology” (~ 75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder
MCDB 1152 **Spring 2014 (Sections 1, 2 and 3)** “Problem Solving in Introductory Molecular and Cellular Biology” CU Boulder
MCDB 4444 **Spring 2014** "Cellular Basis of Disease", 28 students, CU Boulder

FALL 2014:

MCDB 1150 **Fall 2014 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 240 students, CU Boulder

MCDB 1150 **Fall 2014 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 106 students, CU Boulder

MCDB 4444 **Fall 2014** "Cellular Basis of Disease", 30 students, CU Boulder

SPRING 2015:

MCDB 1150 **Spring 2015** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 1152 **Spring 2015 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder

MCDB 4444 **Spring 2015** "Cellular Basis of Disease", 30 students, CU Boulder

FALL 2015:

MCDB 1150 **Fall 2015 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 240 students, CU Boulder

MCDB 1150 **Fall 2015 (section 2)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 106 students, CU Boulder

MCDB 4444 **Fall 2015** "Cellular Basis of Disease", 30 students, CU Boulder

SPRING 2016:

MCDB 1150 **Spring 2016** "Introduction to Cell and Molecular Biology" (~% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 1152 **Spring 2016 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder

MCDB 4444 **Spring 2016** "Cellular Basis of Disease", 33 students, CU Boulder

FALL 2016:

MCDB 1150 **Fall 2016 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 300 students, CU Boulder

MCDB 1150 **Fall 2016 (section 2)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 106 students, CU Boulder

MCDB 4444 **Fall 2016** "Cellular Basis of Disease", 30 students, CU Boulder

SPRING 2017:

MCDB 1150 **Spring 2017** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder

MCDB 1152 **Spring 2017 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder

MCDB 4444 **Spring 2017** "Cellular Basis of Disease", 30 students, CU Boulder

FALL 2017:

MCDB 1150 **Fall 2017 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 300 students, CU Boulder

MCDB 1150 **Fall 2017 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 106 students, CU Boulder

MCDB 4444 **Fall 2017** "Cellular Basis of Disease", 30 students, CU Boulder

Spring 2018:

MCDB 1150 **Spring 2018** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder

MCDB 1152 **Spring 2018 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder

MCDB 4444 **Spring 2018** "Cellular Basis of Disease", 30 students, CU Boulder

FALL 2018:

MCDB 1150 **Fall 2018 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 1150 **Fall 2018 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 4444 **Fall 2018** "Cellular Basis of Disease", 30 students, CU Boulder

Spring 2019:

MCDB 1150 **Spring 2019** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder
MCDB 1152 **Spring 2019 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder

MCDB 4444 **Spring 2019** "Cellular Basis of Disease", 30 students, CU Boulder

FALL 2019:

MCDB 1150 **Fall 2019 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 1150 **Fall 2019 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 4444 **Fall 2019** "Cellular Basis of Disease", 30 students, CU Boulder

Spring 2020:

MCDB 1150 **Spring 2020** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder **REMOTE**

MCDB 1152 **Spring 2020 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder **REMOTE**

MCDB 4444 **Spring 2020** "Cellular Basis of Disease", 30 students, CU Boulder **REMOTE**

FALL 2020:

MCDB 1150 **Fall 2020(section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder **REMOTE**

MCDB 1150 **Fall 2020 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder **REMOTE**

MCDB 4444 **Fall 2020** "Cellular Basis of Disease", 30 students, CU Boulder **REMOTE**

Spring 2021:

MCDB 1150 **Spring 2021** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder **REMOTE**

MCDB 1152 **Spring 2021 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder **REMOTE**

MCDB 4444 **Spring 2021**"Cellular Basis of Disease", 30 students, CU Boulder **REMOTE**

FALL 2021:

MCDB 1150 **Fall 2021 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder **REMOTE**

MCDB 1150 **Fall 2021 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder **REMOTE**

MCDB 4444 **Fall 2018** "Cellular Basis of Disease", 30 students, CU Boulder **REMOTE**

Spring 2022:

MCDB 1150 **Spring 2022** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 120 students, CU Boulder **In person/remote hybrid**

MCDB 1152 **Spring 2022 (Sections 1, 2 and 3)** "Problem Solving in Introductory Molecular and Cellular Biology" CU Boulder **In person/remote hybrid**

FALL 2022:

MCDB 1150 **Fall 2022 (section 1)** "Introduction to Cell and Molecular Biology" (~ 75% of lectures (team taught with Nancy Guild), 350 students, CU Boulder

MCDB 1150 **Fall 2022 (section 2)** "Introduction to Cell and Molecular Biology" (~75% of lectures (team taught with Nancy Guild), 100 students, CU Boulder

MCDB 4444 **Fall 2022** "Cellular Basis of Disease", 30 students, CU Boulder

Attendance and Presentations at Scientific Meetings:

September 7-11, 1994 Cold Spring Harbor Conference on Cancer Cells: 7th International Conference on Epstein-Barr virus and Associated Diseases, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY. *"The cytoplasmic N-terminus of LMP-1is essential for function and serves as a topological domain"* Erickson, K. D. and **Martin, J. M.**

July 29-August 1st, 1995 20th International Herpesvirus Workshop, University of Groningen, Groningen, The Netherlands. Talk. *"The lytic LMP-1 protein in present in the EBV virion and is carried into the B-cell upon infection"* Kimberly Erickson and **J. Martin**

July 27th - August 2nd, 1996 21st Herpesvirus Workshop, Northern Illinois University, DeKalb, Illinois. poster. *"B-ATF is a cellular target of regulation by the EBV transactivator protein EBNA-1"* L. M. Johansen, H, Tai, K. D. Erickson, **J. M. Martin** and EJ Taparowsky

August 2-8, 1997 22nd International Herpesvirus Workshop, University of California, San Diego, La Jolla, CA. poster. *"Characterization of the biochemical and biological properties of the lyLMP-1 protein of Esptein-Barr virus"* K. D. Erickson and **J. M. Martin**

June 11-16, 1998 International Symposium on Tumor associated Herspesviruses, Stockholm, Sweden, Poster. *"Contribution of LMP-1's cytoplasmic amino-terminus to biogenesis and function"* **J. M. Martin,** Coffin, W.F., Erickson, K.D.E., Hoedt-Miller, M.

1998 17th Annual Meeting of the American Society for Virology, poster. *"Characterization of the biochemical and biological properties of lyLMP-1 of Epstein-Barr virus"* Erickson, K.D.E. and **Martin, J. M.**

July 17-23, 1999 24th International Herpesvirus Workshop, Cambridge, MA. poster. *"The 'ATG' encoding the initiating methionine for the lyLMP-1 of Epstein-Barr virus is found in primary virus isolates but not in tumor cell isolates"* Erickson, K. D. E., and **Martin, J. M.**

September 20-25th, 2004 Eleventh International Symposium on EBV and Associated Diseases, Regensburg, Germany. *"Regulation of LMP-1 Singaling by lyLMP-1 and TRAF molecules"* Geiger T, Coffin W, Erickson K, **Martin J**

July 8-12, 2006, 12th Biennial Conference of the International Association for Research on Epstein-Barr Virus and Associated Diseases, Boston/Cambridge MA Talk. *"The EBV-encoded LMP-1 Protein Blocks IFNa Signaling by Interacting with Tyk2 and Inhibiting its Phosphorylation"* . Geiger, T. and **Martin, J. M.**

November 7-10th, 2008 The 13th Biennial Conference of the Intl. Assoc. for Research on Epstein-Barr Virus and Associated Diseases, Guangzhou, China *" A study of LMP-1 complexes: oligomerization, lipid raft association, and complex hererogeneity"* Poster. Takeshita, R. A., Robitaille, A. M., Knight, J., Palmer, A., Yin, H. and **Martin, J. M.**

December 5-7, 2008 Special American Association for Cancer Research (AACE) conference "Infection and Cancer: Biology, Theraputics, and Prevention", Hong Kong Academy of Medicine, Hong Kong, SAR China *"Role of Epstein-Barr Virus Latent Membrane Protein-1 (LMP-1) Transmembrane Domains in Inhibition of Interferon Alpha Signaling"* Poster. Wrobel, C. M. and **Martin, J. M.**

Invited Seminars:

October, 1995 Department of Chemistry, Purdue University,*"Transformation by the LMP-1 oncogene of Epstein-Barr virus"*

October, 1995 Department of Pharmacology, University of Massachusetts Medical School, *"The LMP-1 protein of EBV resembles a ligand-independent growth factor receptor in its signaling"*

March, 1997 Department of Microbiology, University of Colorado Health Sciences Center, *"Contribution of the Latent Membrane Proteins of Epstein-Barr virus to B cell immortalization"*

October 2001 Rocky Mountain Virology Meeting, Pingree Park, Colorado, *"Contribution of viral latent membrane proteins to the life cycle of Epstein-Barr virus in infected B cells"*

March, 2005 University of Colorado, Health Sciences Center – Cancer Center Symposium *"Signal Transduction by the LMP-1 Transforming Protein of Epstein-Barr Virus"*

March, 2005 Department of Microbiology, University of Iowa, *"Regulation of B cell signal transduction by the LMP-1 Protein of Epstein-Barr Virus"*

June, 2006 McArdle Laboratory for Cancer Research University of Wisconsin, Madison, *"Molecular Characterization of the LMP-1 Signaling Complex"*

May, 2008 School of Biological Sciences, University of Northern Colorado *"Regulation of B cell signaling by the LMP-1 proteins of Epstein-Barr virus"*

Attendance and Presentations at Science Education Meetings/Workshops:

June 25-30, 2006 Summer Institute on Undergraduate Biology Education, HHMI Workshop; University of Wisconsin, Madison WI

January 29-30, 2007 Summer Institute on Undergraduate Biology Education, Follow up meeting; HHMI, Chevy Chase MD

March 20-22, 2009 Biology Leadership Conference 6, Tucson AZ *(Invited meeting*); "*Transformation of an Introductory Cell and Molecular Biology course from a large lecture-based format into an interactive student-centered environment"* Jia Shi, Jennifer K. Knight, William B. Wood, Nancy A. Guild, and **Jennifer M. Martin**

Service:

Department

Purdue University:

MCMP (Department of Med Chemistry and Mol. Pharmacology) Search committee for Assistant Professor position **1995-1996**
MCMP Chair Search committee **1995-1996**
PCTX (Department of Pharmacology and Toxicology) Graduate admissions; **1994-1995**
MCMP Graduate admissions committee **1993-1996**
PCTX Graduate curriculum committee **1993-1995**
PCTX Preliminary Examination committee **1995-1996**
MCMP Graduate curriculum committee **1995-1996**
BMB (Biochemistry and Molecular Biology Program) Curriculum committee, **1995**
BMB Temporary Advisory Committee **1995**

MCDB, CU Boulder:

MCDB Undergraduate Honors Thesis Committee **1996**
MCDB Committee on Graduate Student Affairs (COGSA) **1997-2000**
MCDB Comprehensive Examining Committee **1998-2001**
MCDB Pathogenesis Search Committee **2001**
MCDB Comprehensive Examining Committee **2003**
MCDB Admissions Committee **2002-2003**
MCDB Committee on Graduate Student Affairs (COGSA) **2003-2006**
MCDB Molecular Biology Search Committee **2003-2004**
MCDB Graduate Admissions **2004 - 2005**
MCDB Graduate Admissions - HEAD **2005-2008**
MCDB Departmental Honors **2004-2007**
MCDB Junior Faculty Search Committee **2005-2006**
MCDB Comprehensive Examining committee *Brady Culver* **2006**
MCDB Comprehensive Examining Committee *Rebecca Nix* **2007**
MCDB Comprehensive Examining Committee *Nick Farina* **2007**
MCDB Comprehensive Examining Committee *Kimberly Ross* **2007**

MCDB Comprehensive Examining Committee *Josh Myatt* **2007**
MCDB Comprehensive Examining Committee *Jennifer Bernet* **2007**
MCDB Comprehensive Examining Committee *Therese Schideler* **2009**
MCDB Executive Committee (Junior Faculty Representative **2007**
MCDB Departmental Retreat Organizer (co-organizer with J. Espinosa) **2007**
MCDB Departmental Retreat Organizer (co-organizer with J. Espinosa) **2009**
MCDB Committee on Graduate Student Affairs **2008-2011**
MCDB Undergraduate Curriculum Committee **2012-2014**
MCDB Comprehensive Exam committee **2013**
MCDB Departmental Honors **2011-**
MCDB Outreach **2015-**
MCDB Teaching Evaluation Committee **2018-**
MCDB Departmental Honors, Chair **2018-**
MCDB Primary Unit Evaluation Committee for Dr. Christy Fillman, Chair **2018**
MCDB Senior Advisor **2018-**

University

CU Boulder:

CU Boulder: Preprofessional Advisory Committee (PAC) **2004-2005**
CU Boulder: Task Force on Instructors and Research Faculty **2007-2008**
CU Boulder: Task Force for Introductory Biology Reform **2007- 2008**
CU Boulder: Task Force for Introductory Biology Reform **2008-2009**
CU Boulder: Innovative Seed Grant Review Panel **2008**
CU Boulder: Learning Management System Task Force **2008**
CU Boulder: Arts and Sciences Curriculum Committee **2011-2017**
CU Boulder: Institutional Biosafety Committee **2009-**

Scientific community

Peer review for scientific journals:

Journal of Virology
Virology
Journal of Biological Chemistry
Virus Research
Cytokine
Blood
Experimental Cell Research

Peer review of grant applications:

Cancer League of Colorado, Scientific Advisory Board **1999-2002**
Innovative Grant Program, CU Boulder **2007**
UCHSC Summer Cancer Research Fellowships **2006-2009**

Publications:

Peer Reviewed:

Pfaffinger, P.J., **J.M. Martin**, D.D. Hunter, N.M. Nathanson and Bertil Hille (1985) GTP-binding proteins couple cardiac muscarinic receptors to a K channel. Nature 317:536-538.

Martin, J.M., D.D. Hunter and N.M. Nathanson (1985) Islet activating protein inhibits physiological responses evoked by cardiac muscarinic acetylcholine receptors. Role of guanosine triphosphate binding proteins in regulation of potassium permeability. Biochemistry 24:7521-7525.

Martin, J.M., E.S. Subers, S.W. Halvorsen and N.M. Nathanson (1987) Functional and physical properties of chick atrial and ventricular GTP-binding proteins: Relationship to muscarinic acetylcholine receptor-mediated responses. J. Pharmacol. Exp. Ther. 240:683-688.
Martin, J.M., W.C. Liles, C.W. Luetje and N.M. Nathanson (1987) Modification of neuronal muscarinic receptor-mediated responses by islet activating protein. Brain Res. 455:370-376.

Luetje, C.W., **J.M. Martin**, W.C. Liles and N.M. Nathanson (1988) Neuronal and cardiac muscarinic acetylcholine receptors: Regulation and development. In: *Voltage-Sensitive Ion Channels: Modulation by Neurotransmitters and Drugs*. Symposia in Neuroscience, Vol. 6. Fidia Research Series.

Martin, J.M. and B. Sugden (1991) Transformation by the LMP onco-protein correlates with its rapid turnover, membrane localization, and cytoskeletal association. J. Virol 65(6):3246-3258.

Martin, J.M. and B. Sugden (1991) The LMP onco-protein resembles growth factor receptors in its properties of turnover. Cell Growth and Differentiation 2:653-660.

Middleton, T., T. Gahn, **J.M. Martin** and B. Sugden (1991) Epstein-Barr viral genes involved in immortalization of human B-lymphocytes. Advances in Virus Research, Vol. 40:19-55..

Habecker, B., **J.M. Martin** and N.M. Nathanson (1993) Isolation and characterization of a cDNA which identifies both neural specific and ubiquitously expressed novel G_{sa} mRNAs. J. Neurochem. 61(2):712-717.

Martin, J.M., D. Veis, S.J. Korsmeyer and B. Sugden (1993) Latent membrane protein (LMP) of Epstein-Barr virus induces cellular phenotypes independently of expression of Bcl-2. J. Virol. 67(9):5269-5278.

Knecht, H., C. McQuain, **J. Martin**, S. Rothenberger, H.G. Drexler, C. Berger, E. Bachmann, E.L.W. Kittler, B.F. Odermatt and P.J. Quesenberry (1996) Expression of the LMP1 oncoprotein in the EBV negative Hodgkin's disease cell line L-428 is associated with Reed-Sternberg cell morphology. Oncogene 13:947-953.

Erickson, K. and **Martin, J. M.** (1997) Early detection of the lytic LMP-1 protein in EBV-infected B-cells suggests its presence in the virion. Virology, 234:1-13.

Knecht, H., Berger, C, McQuain, C., Rothenberger, S., Bachmann, E., **Martin, J.**, Esslinger, C., Drexler, H. G., Cai, Y. C., Quesenberry, P. J., and Odermatt, B. F. (1999) Latent membrane protein 1 associated signaling pathways are i mportant in tumor cells of Epstein-Barr virus negative Hodgkin's disease. Oncogene 18:7161-7167.

Erickson, K. D. and **Martin, J. M.** (2000) The late lytic LMP-1 protein of Epstein-Barr Virus can negatively regulate LMP-1 signaling. J. Virol. 74(2): p. 1057-1060.

Coffin III, W. F., Erickson, K. D., Hoedt-Miller, M., and **Martin, J. M.** (2001) The cytoplasmic amino-terminus of the Latent Membrane Protein-1 of Epstein-Barr virus: Relationship between transmembrane orientation and effector functions of the carboxy-terminus. Oncogene 20: 5313-5330.

Erickson, K. D., E. Schiff, W.F. Coffin, III, Berger , C., D. M. Walling, and **J. M. Martin**. (2003) Unexpected Absence of the Epstein-Barr Virus (EBV) lyLMP-1 Open Reading Frame in Tumor Virus Isolates: Lack of Correlation between Met129 Status and EBV Strain Identity. J. Virol. 77:4415-4422.

Coffin III, W. F., T. Geiger, and **J. M. Martin**. (2003) Transmembrane domains 1 and 2 of the latent membrane protein 1 (LMP-1) of Epstein-Barr virus contain a lipid raft targeting signal and play a critical role in cytostasis. J. Virol. 77:3749-3758.

Johansen, L.M., Deppmann, C.D., Erickson, K.D., Coffin III, W.F., Thornton, T.M., Humphrey, S.E., **Martin, J.M.**, Taparowsky, E.J. (2003) EBNA-2 and Activated Notch Induce Expression of BATF. J. Virol. 77:6029-6040.

Vazirabadi, G., Geiger, T., Coffin III, W.F., **Martin, J.M.** (2003) Epstein-Barr virus LMP-1 and lyLMP-1 localization in plasma membrane-derived extracellular vesicles and intracellular virions. J. Gen. Virol. 84, 1997-2008.

Geiger, T., and **Martin, J.M.** (2006) The Epstein-Barr virus-encoded LMP-1 oncoprotein negatively affects Tyk2 phosphorylation and interferon signaling in human B cells. J. Virol. 80:11638.

Shi, J., Wood, W. B., **Martin, J. M.**, Guild, N. A., Vicens, Q., and Knight, J. K. A Diagnostic Assessment for Molecular and Cell Biology (2010). CBE-Life Sci. Educ. Vol. 9, 453-461.

Sammond DW, Joce C, Takeshita R, McQuate S, Ghosh N, **Martin JM**, Yin H.; Transmembrane peptides used to investigate the homo-oligomeric interface and binding hot-spot of latent membrane protein 1 (2011). Biopolymers, Vol 95, 772-784

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Karen N. Pelletreau[1*], Tessa Andrews[2], Norris Armstrong[2], Mary A. Bedell[2], Farahad Dastoor[1], Neta Dean[3], Susan Erster[3], Cori-Fata Hartley[4], Nancy Guild[5], Hamish Greig [1], David Hall[2], Jennifer K. Knight[5], Donna Koslowsky[4], Paula P. Lemons[6], **Jennifer Martin[5]**, Jill McCourt[6], John Merrill[4], Rosa Moscarella[7], Ross Nehm[8], Robert Northington[1], Brian Olsen[1], Luanna Prevost[9], Jon Stoltzfus[10], Mark Urban-Lurain[8], Michelle K. Smith[1]. "A clicker-based case study that untangles student thinking about the processes in the central dogma". (2017) CourseSource, *in press.*

Shi, J, Knight, K. J., Chun, H., Guild, N. A., and **Martin, J. M**.; "Using Pre-assessment and in-class Questions to Change Student Understanding of Molecular Movements" (2017) Journal of Microbiology & Biology Education, Vol 18(1) 1-9.