

CURRICULUM VITAE

MARGARITA L. DUBOCOVICH, Ph.D.

Professor and Chair

Department of Pharmacology and Toxicology

Inaugural Senior Associate Dean for Inclusion and Cultural Enhancement

School of Medicine and Biomedical Sciences, University at Buffalo, SUNY, Buffalo, NY 14214

Professor Emerita

Molecular Pharmacology and Biological Chemistry

Northwestern University Feinberg School of Medicine, Chicago, Illinois 60611

EDUCATION

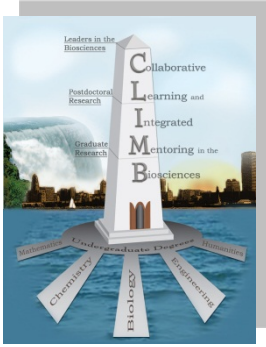
- 1971 **Bachelor in Sciences.** School of Chemistry and Natural Sciences, Buenos Aires University, Buenos Aires, Argentina
- 1972–1976 **Ph.D. in Pharmacology.** School of Chemistry and Natural Sciences, Buenos Aires University, Buenos Aires, Argentina.

POSITIONS

- 1970–1971 **Teaching Assistant in Organic Chemistry.** School of Chemistry and Natural Sciences, Buenos Aires University, Buenos Aires, Argentina
- 1971–1972 **Instructor in Biochemistry.** School of Chemistry and Natural Sciences, Buenos Aires University, Buenos Aires, Argentina
- 1972–1976 **Research Fellow** (1972–1974) and **Advance Research Fellow** (1974–1976) of the National Research Council. Instituto de Investigaciones Farmacologicas, Buenos Aires, Argentina
- 1973–1976 **Instructor of Pharmacology.** School of Medicine, Buenos Aires University, Argentina
- 1976–1977 **Pharmacologist.** Dept. of Pharmacology, Wellcome Research Laboratories, Langley Court, Beckenham, Kent BR3-3BS, England
- 1977–1980 **Project Leader.** Dept. of Biology, Synthelabo, 75013 Paris, France
- 1980–1982 **Research Associate of Pharmacology.** Dept. of Pharmacology, University of Colorado Health Science Center, Denver, CO 80262, USA
- 1983 (1 month) **Visiting Professor of Pharmacology.** Dept. of Pharmacology, Universidad del Pais Vasco, Lejona, Vizcaya, Spain
- 1982–1991 **Assistant Professor of Pharmacology** (1982–1986)
Associate Professor of Pharmacology (1986–1991) (1987 Tenured)
- 1991–10/2008 **Professor of Molecular Pharmacology and Biological Chemistry.** Dept. of Molecular Pharmacology and Biological Chemistry, Northwestern University Feinberg School of Medicine, Chicago, IL 60611
- 1999–10/2008 **Adjunct Professor – Department of Psychiatry and Behavioral Science.** Dept. of Psychiatry and Behavioral Science, Northwestern University Feinberg School of Medicine, Chicago, IL 60611
- 2007-10/2008 **Program Director - The Collaborative Learning and Integrated Mentoring in the Bioscience Program (The CLIMB Program).** Northwestern University, Chicago-Evanston, IL
- 11/2008-present **Professor Emeritus – Department of Molecular Pharmacology and Biological Chemistry.** Dept. of Molecular Pharmacology and Biological Chemistry, Northwestern University Feinberg School of Medicine, Chicago, IL 60611
- 11/2008-present **Professor and Chair – Department of Pharmacology and Toxicology, School of Medicine and Biomedical Science, University at Buffalo, SUNY, Buffalo, NY**
- 9/2009-present **Director The CLIMB Program at UB**
- 9/2009-present **Director The CLIMB UP (Undergraduate Program) Program at UB**
- 9/2009-present **Director The CLIMB NS (Next Step) Program at UB**
CLIMB: Collaborative Learning and Integrated Mentoring in the Bioscience
University at Buffalo, SUNY, Buffalo, NY
- 6/2012-present **Inaugural Senior Associate Dean for Inclusion and Cultural Enhancement,** School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY
- 1/2013-present **Co-Director of the Institute of Strategic Enhancement of Educational Diversity (iSEED) at UB.** University at Buffalo, Buffalo, NY
- 8/2013-present **Education and Diversity Director for the BioXFEL Center (NSF-Science Technology Center),** University at Buffalo (Head Institution), Buffalo, NY.

EDUCATIONAL AND DIVERSITY INITIATIVES

A. The Collaborative Learning and Integrated Mentoring in the Biosciences (CLIMB) Program at UB.



The CLIMB Program, originally instituted at Northwestern University in 2007 under the leadership of Dr. Margarita L. Dubocovich, was also launched at University at Buffalo in 2009. This is a professional development program to support and promote the development of talented students from all backgrounds to become leaders in the biosciences. Through collaborative effort, the program strives to promote learning and to provide mentoring to students and junior scientists at all levels of their careers. At UB, The CLIMB Program was expanded to use similar interventions to provide summer research experiences to undergraduates (CLIMB UP) and to mentor postdoctoral fellows and junior faculty (NEXT STEP) to facilitate their career paths towards leadership in research and education in the Biosciences.

B. Institute of Strategic Enhancement of Educational Diversity (iSEED). University at Buffalo, NY



The Institute in conjunction with seven participating (SMBS, CAS, SPPS, SEAS, SDM, SON, and SPHHP) will build a culturally and intellectually diverse and academically inclusive community of graduate students, postdoctoral fellows, and faculty focused on *excellence* in education, *engagement* in research, and *mentoring and enhancement* of professional development central to the UB mission. This will be accomplished through bridging and integrating successful pockets of diversity at UB, and will bring diversity *to the core of our institutional mission*. Strong institutional support, as well as UB-wide workshops to start dialogues and build momentum to enhance these initiatives, is vital for success.

C. Science and Technology Center (NSF-STC) – BioXFEL Center. University at Buffalo, NY



The STC on X-ray Free Electron Lasers (XFEL) in Biology will focus its scientific efforts on the use of the XFEL to determine structures, and to reveal dynamical behavior through snapshot imaging, of large macromolecular complexes and viruses not easily studied by other methods. The role of the Education and Diversity Officer will be to coordinate all educational and diversity efforts for the BioXFEL Center across participating institutions (UB, ASU, UWM, SU, RU, CU).

PROFESSIONAL DEVELOPMENT

7/2009- 4/2010 **Fellow of the Executive Leadership in Academic Medicine (ELAM) Program** of Drexel University College of Medicine

RESEARCH INTERESTS

Neuropharmacology of Melatonin Receptors: Drug Discovery and Circadian Rhythms

My lab's research seeks to understand the mechanism of action of the hormone melatonin at the MT₁ and MT₂ G-protein coupled receptors. We study these receptors in the brain and through the body with the goal of identifying ligands that exhibit useful binding affinity and therapeutic potential. Our team of undergraduate and graduate students, postdoctoral fellows, technicians and senior scientists work with each other and with expert co-investigators in medicinal chemistry to discover and develop novel molecules that can mimic or counteract the actions of melatonin. These molecules may help treat a variety of diseases and conditions including insomnia, circadian sleep disorders, depression, seasonal affective disorders, and cardiovascular disease.

Our laboratory pursues these investigations from several angles. We assess the localization of the melatonin receptors, examine their cellular and molecular signaling mechanisms, and investigate receptor fate following prolonged exposure to melatonin. We study the distinct roles of selective MT₁ and MT₂ melatonin receptor ligands in modulating circadian rhythms, methamphetamine's ability to induce both sensitization to prolonged exposure, and stimulation of the reward system. We also study cell proliferation, survival, and neurogenesis in the brain, and the changes in gene expression underlying all these processes.

Our research ultimately aims to discover novel drugs with differential actions at the MT₁ and MT₂ receptors. We use molecular-based drug design, computer modeling and medicinal chemistry to design and synthesize small molecules that target these receptors as agonists, inverse agonists and/or antagonists. We then pharmacologically and functionally characterize these molecules using cell-based assays and bioassays and test them in circadian and behavioral animal models.

RESEARCH SUPPORT (1982-Present)

ONGOING RESEARCH SUPPORT

Institutional Funds Dubocovich (PI)

11/01/2008-present

Funds are available to purchase equipment, supplies and to cover personnel costs from the start up account set up by the Dean when I joined the School of Medicine and Biomedical Science at UB.

NSF 1231306 Lattman (PI)

09/01/2013-08/31/2018

National Science Foundation – Science and Technology Center (STC)

Total Direct Costs: \$ 25,000,000

Costs for Education and Diversity: Direct Costs: \$1,696,243

Biology with X-ray Free Electron Lasers (BioXFEL) Center

The STC on X-ray Free Electron Lasers (XFEL) in Biology will focus its scientific efforts on the use of the XFEL to determine structures, and to reveal dynamical behavior through snapshot imaging, of large macromolecular complexes and viruses not easily studied by other methods. My role will be to coordinate all educational and diversity efforts for the BioXFEL Center across participating institutions (UB, ASU, UWM, SU, RU, CU).

Role: Director Educational and Diversity (Key Personel).

PENDING RESEARCH SUPPORT

R21 ES 23684-01 (Co PIs Dubocovich/Rajnarayanan)

07/01/2014-06/30/2016

NIH/NIEHS (Percentile first review = 2%)

Total Costs: \$435,355; Direct Costs: \$275,000

Environmental Circadian Disruptors Increase Diabetes and Metabolic Disorders Risk

This proposal will investigate the potential of environmental circadian disruptors to induce obesity, metabolic syndrome and type 2-diabetes. This project is aimed at identifying environmental circadian disruptors that increase the risk of metabolic disorders and test the hypothesis that disrupted melatonin receptor signaling in the pancreas leads to altered insulin responsiveness and metabolic syndrome. These studies are potentially significant, as they may help at identifying potential environmental chemicals that act as MT receptor agonists/antagonists/inverse agonists and could provide some information on the relationship between drug structure and biological functions.

Role: Co-PI (Contact)

ONGOING RESEARCH EDUCATIONAL GRANTS

R25 GM 095459-01 Dubocovich (PI) NIH/NIGMS

03/28/2012-12/31/16

Total Costs: \$2,126,287; Direct Costs: \$1,981,751

IMSD: Initiative for Maximizing Student Development) Enabling Access to Cutting-Edge Biomedical and Behavioral Science.

One of the current goals at the University at Buffalo is to increase the number of underrepresented faculty, researchers, undergraduate, and graduate students in the biomedical and behavioral sciences. The main goal of this application is to increase the numbers of underrepresented students in biomedical and behavioral research, by broadening the opportunities to earn Ph.D. degrees and to increase their participation in academic, research, administrative and leadership positions in our country.

Zannoni Summer Undergraduate Research Fellowship Award Dubocovich (PI)

Summer 2010-2016

American Society for Pharmacology and Experimental Therapeutics

Total Direct Costs: \$27,000 Dubocovich (PI)

The purpose of this grant award is to introduce undergraduate students to pharmacology research in order to heighten interest in science as a career, with an emphasis on pharmacology graduate training to increase the number of young scientists entering the research discipline of pharmacology. Funds will support undergraduate students for summer research which will be administered by The CLIMB Program at UB.

iSEED – Institute of Strategic Enhancement of Educational Diversity

06/01/2013 – 05/30/2016

UB Office of the Provost-3E Fund (Co-Directors: Dubocovich/Colon)

Total Direct Costs: \$ 1,054,273

The Institute in conjunction with seven participating schools (SMBS, CAS, SPPS, SEAS, SDM, SON, and SPHHP) will build a culturally and intellectually diverse and academically inclusive community of graduate students, postdoctoral fellows, and faculty focused on *excellence* in education, *engagement* in research, and *mentoring and enhancement* of professional development central to the UB mission. This will be accomplished through bridging and integrating successful pockets of diversity at UB, and will bring diversity *to the core of our institutional mission*.

RECENTLY COMPLETED RESEARCH SUPPORT (2009-present)

1R01 DA021870-04 Dubocovich (PI) NIH/NIDA 07/01/07 – 9/30/13
Total Costs: \$1,146,760; **Direct Costs:** \$710,102

Modulation of Methamphetamine Action in the CNS

These studies are aimed to understand the mechanisms by which melatonin receptor activation counteracts psychostimulant-induced sensitization of locomotor activity and reward mechanisms. Furthermore they will provide information about potential mechanisms by which dopamine and melatonin receptor targets could participate in the entrainment of circadian rhythms alterations in humans induced by methamphetamine.

R01 MH-42922-18 Dubocovich (PI) NIH/NIMH (no cost extension) 04/01/04– 03/30/11
Total Direct Costs: \$1,000,000

Modulatory Role of Melatonin in CNS Function

The overall goal of this proposal is to identify the molecular determinants and mechanism(s) by which melatonin differentially regulates hMT₁ and hMT₂ receptors and affects signal transduction in the suprachiasmatic nucleus (SCN). Our hypothesis is that physiological concentrations of melatonin will rapidly internalize MT₂, but not MT₁ melatonin receptors and that this is the mechanism by which nocturnal melatonin release differentially regulates physiological responses in mammals.

1R21 NS 061068-02 Dubocovich (PI) NIH/NINDS (non-cost extension) 04/01/09–03/30/12
Total Direct Costs: \$ 275,000

Discovery of Selective MT₁ Melatonin Receptor Ligands for Sleep Disorders

This project was a collaboration between Dr. Margarita Dubocovich and Dr. Rajendram Rajnarayanan research groups. We will design and characterize ligands with high affinity and selectivity for MT₁ receptors employing bio-computational methodologies, structure activity relationships, and chemical synthesis. We determined the biological properties of these ligands, i.e., to assess their selectivity for MT₁ and MT₂ receptors as well as to determine their functional efficacy in *in vitro* bioassays and in vivo animals models.

MEMBERSHIP IN INSTITUTES, CENTERS AND GRADUATE PROGRAMS AT NORTHWESTERN Northwestern University

1982–1988 **Interdepartmental Graduate Program in Neuroscience** (Faculty)
 1989–2006 **Northwestern University Institute Neuroscience (NUIN)** (Charter Member)
 2006-2008 **Northwestern University Interdepartmental Neuroscience (NUIN) Program** (Core Faculty)
 1991–2008 **Robert H. Laurie Cancer Center** (Member)
 1992-2008 **Interdepartmental Program in the Life Science (IGP)** (Core Faculty)
 1992–2000 **Northwestern University Center for Biotechnology** (Member)
 1993–2008 **Asher Center for the Study and Treatment of Depressive Disorder** (Member)
 1995– 2008 **Buehler Center on Aging (BCA)** (Member)
 1996– 2008 **Center for Circadian Biology and Medicine (CCB&M)** (Core Faculty)
 1995–2004 **Northwestern Drug Discovery Program (NDDP)** (Core Faculty)
 2005–2008 **Center for Drug Discovery and Chemical Biology (CDCCB)** (Core Faculty)
 2007–2008 **Northwestern University Clinical and Translational Sciences (NUCATS) Institute** (Member, NUCATS Community Engagement and Research Center)
 2007-2008 **The Collaborative Learning and Integrated Mentoring in the Biosciences Program (The CLIMB Program)** (Director)

University at Buffalo

9/2009-present **The CLIMB Program at UB** (Director)
 9/2009-present **The CLIMB UP (Undergraduate Program) at UB** (Director)
 9/2009-present **The CLIMB NS (Next Step) Program at UB** (Director)
CLIMB: The Collaborative Learning and Integrated Mentoring in the Bioscience
 2009-present **Toxicology Research Center at UB** (Member)

AWARDS AND HONORS

1971–1974 **Research Fellow**, National Research Council of Argentina
 1974–1976 **Advance Research Fellow**, National Research Council of Argentina
 1981/1998 **American Society for Pharmacology and Experimental Therapeutics (ASPET) Travel Awards** to attend the VIII (Tokyo), IX (London), X (Sydney), XI (Amsterdam), XIII (Munich) IUPHAR (International Union of Pharmacology) Congresses.

- 1989 **American Physiological Society (APS) Travel Award** to attend: XXXI International Congress Physiol. Sci., Helsinki, Finland.
- 1999–2004 **Minority Access to Research Careers (MARC) Visiting Scientist for Minority Institutions**
- 10/2005 **Award For Outstanding Scientific Contributions**, Latinoamerican Congress Pharmacology, Caracas, Venezuela.
- 6/2011 **2011 Distinguished Postdoctoral Mentor Award**. UB Postdoctoral Association, University at Buffalo, Buffalo, SUNY, NY
- 6/2011 **2011 Aaron B. Lerner Pioneer Award in Recognition of Outstanding Contributions to Melatonin Research**. Presented at the occasion of the FASEB Summer Research Conference on Melatonin Receptors: Actions and Therapeutics. Snowmass, Colorado, June 27-July 1, 2011.
- 10/2011 **2011 Recognition Award for Hispanics in the Medical and Health Care Fields from City of Buffalo Mayor Byron W. Brown** at the occasion of the Hispanic Heritage Month. City Hall, Buffalo, NY.
- 4/2012 **2012 PhARMA [Pharmaceutical Associate Research Manufactures Association] Foundation Award in Excellence in Pharmacology and Toxicology**. Presented at the ASPET Award Ceremony during the Experimental Biology meeting – April 21-25, 2012.
- 6/2013 **Dean’s Award, School of Medicine and Biomedical Sciences**, Presented at the Stockton Kimball Lecture, June 5, 2013

MEMBERSHIP IN PROFESSIONAL SOCIETIES

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|---|--|
| Argentine Society of Pharmacology (1973–1976) | American Heart Assoc - Chicago Area (1983–2000) |
| Argentine Society of Clinical Research (1974–1976) | Am Assoc Advancement of Science (1988–present) |
| Latinoamerican Assoc. of Pharmacology (1974–1976) | Catecholamine Club (1990–present) |
| British Pharmacological Society (1978–present) | European Pineal Society (1990–2009) |
| French Association of Pharmacology (1979–1989) | European Circadian Rhythms Society (2009–present) |
| Society for Neuroscience (1981–present) | International Society for Neurochem. (1991–present) |
| American Association of Dental Schools (1982–1984) | Melatonin Club (1994–2005) |
| Women in Neuroscience (1982–2010) | American College of Neuropsychopharmacology |
| Association for Research in Vision and Ophthalmology (1983–1987) | (ACNP) (1998–present) |
| American Society Pharmacology and Experimental Therapeutics (ASPET) (1983–present) | Society for Advancement of Chicanos and Native Americans in Science (SACNAS) (2002–present) |
| Sigma Xi (1983–present) | College International of Neuropharmacology (CINP) (2004–2008) |
| Serotonin Club (1987–present) | |

EDITORIAL SERVICE

Editorial Board Member

2006–present **Journal of Pineal Research**, Blackwell Publishing. (Editor in Chief: Dr. Russel Reiter)

Associate Editor

1991–2004 **Pharmacology Communications**. Harwood Academic Publishers, Switzerland

Special Issue Editor

- 1989–1991 **DUBOCOVICH, M.L.:** “Molecular and Cellular Neurobiology” Issues on “Retina,” Vol. I and II, Plenum Publishing Corporation, NY
- 1993 PANG, S.F., **DUBOCOVICH, M.L.** and BROWN, G.M.: “Biological Signals.” Issue on “Melatonin Receptors in Peripheral Tissues.” The Medical Scientific Publishers, Karger, Basel

Ad Hoc Reviewer of Scientific Journals (since 1983)

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| Journal of Pharmacology Experimental Therapeutics (1983) | Experientia (1986) |
| Life Science (1983) | Brain Research (1986) |
| Neuropharmacology (1984) | Alcohol and Drug Research (1986) |
| Journal of Neurochemistry (1985) | Experimental Eye Research (1987) |
| Biological Psychiatry (1985) | European Journal of Pharmacology (1988) |
| Journal of Cardiovascular Pharmacology (1986) | Neuroendocrinology (1989) |
| Neurochemistry International (1986) | Molecular and Cellular Neurobiology (1990) |
| Circulation Research (1986) | Neuroscience Letters (1990) |
| | Proceedings National Academy of Science (1990) |

Journal of Pineal Research (1990)
Journal of Endocrinology (1991)
American Journal of Physiology (1991)
Naunyn Schmiedebergs' Arch. of Pharmacology (1991)
Journal of Medicinal Chemistry (1992)
Investigative Ophthalmology & Visual Science (1993)
Biological Signals (1993)
Science (1994)
Psychopharmacology (1994)
Current Eye Research (1994)
Endocrinology (1995)
General and Comparative Endocrinology (1995)
Journal of Biological Rhythms (1997)
Trends in Neuroscience (1997)
Journal of Immunology (1997)
Molecular and Cell Biochemistry (1997) Pharmacological
Biochemistry and Behavior (1997)
Journal of Clinical Investigation (1997)
Bioorganic and Medicinal Chemistry (1997)
Molecular Pharmacology (1997)
Neuroendocrinology (1997)
Molecular Endocrinology (1998)
Pharmacology and Toxicology (1999)
Journal Neurological Sciences (1999)
Pharmacological Reviews (1999)
Neuroscience (2000); Tumor Biology (2002)
Chronobiology International (2006)
International Journal Neuropharmacology (2007)
Neuropharmacology International (2011)

CONSULTATION AND OTHER SERVICES OUTSIDE THE UNIVERSITY

Study Section Member

1988 **Grants-In-Aid Applications**, American Heart Association of Metropolitan Chicago
1989–1992 **Doctoral Fellowships in Biological Science**, Howard Hughes Medical Institute (Member)
1992–1996 **Neurochemistry and Neuropharmacology Review Committee**, NIMH (NIH) (Member)
2000–2003 **Special Emphasis Panel**, (Integrative Functional Cognitive Neuroscience 3) (IFCN-3) (CSR/NIH)
2002 **Site Visit / Special Emphasis Panel**, NINDS-2002/10 Council ZNS1 SRB-H (S2) (Member)
2003–2004 **Biological Rhythms and Sleep Study Section**, CSR/(NIH), (Member)
2005 **Special Emphasis Panel**, reviewing grant applications on Potential long term effects of stimulant ADHD treatments in non-human primates (Member) (03/09/05).
2006 **Special Emphasis Panel**, IFCN-D 02 (CSR/NIH) (Member) (07/25/06).
2009 **Neuropharmacology Study Section**, (CSR/NIH) (Consultant) (06/01/09)
2010 **NINDS R13/U13 Conference Grant Review** (12/2009) (Consultant)
2011 **NIH Summer Research Experience Programs: (ZMH1 ERB-X)**(Member)(10/20/11)
2012 **Special Emphasis Panel/Scientific Review Group: (ZGM1 MBRS-Y)** (Member)(03/13/12)

Workshop and Working Group Participant

1996 **Workshop on “Melatonin and Sleep.”** NIA (NIH)
1998 **EMF RAPID Science Review Symposium.** “Melatonin” April 6-9, 1998, Phoenix, Arizona.
1998 **EMF RAPID NIEHS Working Group Report** (Member). “Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields.” (The group was charged with preparing the EMF-RAPID final report for presentation to Congress). June 15–24, 1998, Minnesota.
1995–present **International Union of Pharmacology (IUPHAR) Subcommittee for Melatonin Receptor Nomenclature and Classification** (Chair)
2000–present **The Sigma and RBI Handbook of Receptor Classification and Signal Transduction Handbook.** Contributor to Melatonin Receptor Nomenclature and Signaling.
2000–present **British Journal of Pharmacology (BJP) Compendium** – Contributor to Melatonin Receptor Nomenclature.
2000 **Center for Scientific Review Advisory Committee** to evaluate peer review within the Integrative, Functional and Cognitive Neuroscience Integrated Review Group (IFCN IRG). Center for Scientific Review (CSR), NIH.
2006 **Workshop on “Circadian Rhythms in Human Health and Disorders,”** National Institute of Environmental Health Sciences (NIEHS), September 14–15, 2006, Georgetown, Washington, DC.

Ad Hoc Reviewer of Grants and Fellowships

1987–present **National Science Foundation**
1987–present **NIH Fogarty Fellowship Program**
1989 **BRSRG Grants for the University of Alaska**, Fairbanks, Alaska
1990–present **Allegheny-Singer Research Institute**, Pittsburgh, PA
1992–present **The Israel Science Foundation**, Jerusalem, Israel
1993–present **Medical Research Council (MRC)**, London, UK
1993–present **American Cancer Society**, Atlanta, GA
1994–present **Montana State University**, Bozeman, Montana

- 1995–present **Air Force Office of Scientific Research**
2000–present **Bank of Reviewers of the National Agency of Scientific and Technological Evaluations**, Medical Science, FONCYT, Buenos Aires, Argentina.
2000–present **NSERC Award**, Canada
2000–present **PSC-CUNNY 32 Research Award**, The City University of New York, NY.

Ad Hoc Reviewer Promotion Committee

- 1989 **National Institute of Mental Health** (Bethesda, MA); committee chair Dr. R.M. Cohen
1993 **National Institute of Mental Health** (Bethesda, MA); committee chair Dr. J.M. Saavedra
1994 **Instituto Venezolano Investigaciones Cientificas** (Caracas, Venezuela); committee chair Dr. A. Soyano
1997 **Massachusetts Institute of Technology** (Cambridge, MA); committee chair Dr. E. Bizzi
1999 **The University Texas, Health Science Center at San Antonio** (TX); committee chair by Dr. Mifflin
1999 **University of Aberdeen, King's College** (Scotland, UK); requested by Professor D. Houlihan (Dean)
2001 **University of Adelaide** (Australia); Australian National Health and Medical Research Council (NHMRC).
2003 **University of Adelaide**; Australian National Health and Medical Research Council (NHMRC).
2004 **University of Adelaide**; Australian National Health and Medical Research Council (NHMRC).

Ad Hoc Reviewer of Symposium Proposals

- 1986–present **New York Academy of Science**

Scientific Consultant

- 1985–1986 **Nutrasweet Division**, G.D. Searle, Skokie, Illinois
1985–1989 **Nelson Research**, Irvine, CA
1989–1990 **Interneuron Pharmaceuticals Inc.**, Cambridge, Massachusetts.
1990–1995 **Glaxo, Ware**, Great Britain.
1996 **Interneuron Pharmaceuticals**, Dallas, Texas.
1995–1997 **Glaxo-Wellcome**, Stevenage, Great Britain.
1997 **The Wilkerson Group**, New York, NY. .
1997 **The Illinois Coalition**, Chicago, IL. .
1999 **Eli Lilly and Company**.
1999 **Strategic Consultants International**.
1999–2002 **Institute de Recherches Internationales Servier**, Curbevoie, France.
2002 **Inspire Pharmaceuticals, Inc.**, Durham, NC.
2003 **Pfizer**, Ann Arbor, Michigan.
2004 **Shire Pharmaceuticals Group**, UK.
2005 **Johnson & Johnson Pharmaceutical Research & Development**, Titusville, NJ.
2006 **Vanda Pharmaceuticals**, Rockville, MD.
2006 **Takeda Pharmaceuticals North America**, Lincolnshire, IL.
2006 **Takeda Pharmaceutical Company Limited**, Osaka, Japan, Ramelteon Global Roundtable Discussion. .
2006 **Takeda Pharmaceutical Co. Limited**, Kyoto, Japan. Key Opinion Leaders (KOL) Meetings (Discussant) .
2006 **Novartis Pharmaceuticals**, New York, NY. Sleep and Mood Disorders Panel, Advisory Board Meeting
2007 **Forest Pharmaceuticals**, Deerfield, IL.
2007 **Takeda Pharmaceutical Co. Limited**, Osaka, Japan.
2008 **Takeda Pharmaceuticals North America**, Lincolnshire, IL.
2009 **Adolor**, Exon, Pennsylvania, PA.
2010-2011 **Takeda Pharmaceuticals North America**, Lincolnshire, IL

Officer, Scientific Societies

- 1985-1996 **Society for Neuroscience Chicago Chapter**, Chicago, IL
Councillor (1985–1989), **Secretary-Treasurer** (1989–1990), **Treasurer** (1990–1993).
President Elect (1993–1994), **President** (1994–1995), **Past President** (1995–1996).
1990–1992 **Division of Neuropharmacology of ASPET** (Executive Committee)
1993–1994 **Local Organizing Committee**, 3rd IUPHAR Satellite Meeting on “SEROTONIN”, July 30–August 3, 1994, Chicago, IL (Member)
1996–present **Catecholamine Society** (2011-present); **Catecholamine Club** (1996-2011) (Councillor)
1997–1998 **Catecholamine Club** (President)
1997–1998 **Fundraising Subcommittee**, Society for Neuroscience, Chicago, IL

- 1998–2006 **Melatonin Club** (President)
1999–2006 **ASPET Committee on Minorities Affairs** [Member (1999–2002); **Chair** (2002–2005); **Past Chair** (2005–2006)]
2001–2005 **Division of Pharmacology Education of ASPET** (Executive Committee Member)
2002 **Society for Research In Biological Rhythms** (Executive Advisory Committee)
2002–2005 **ASPET Women in Pharmacology Committee** (Member)
2002–2006 **IUPHAR Neuropharmacology Section** (Secretary-Treasurer)
2004–2005 **International Organizing Committee of Latinoamerican Congress of Pharmacology**, Caracas, Venezuela (October 2005) (Member)
2004–2006 **International Organizing Committee**. College International Neuropsychopharmacology (CINP) Meeting, Chicago, USA (July 2006) (Member)
2005–2007 **Great Lake Chapter – ASPET**, (Councillor)
2006–2010 **ASPET Neuropharmacology Division**, Secretary-Treasurer: Elect (2006); Active (2007-2010).
2008-2009 **Diversity In Neuroscience** (DIN) Committee. Society for Neuroscience (Member)
2009-2011 **Professional Development Committee**. Society for Neuroscience (Member)
2010-present **Founder (2010), President (2012) and Past President (2013) of the Upstate New York Pharmacology Society (ASPET Chapter)**

Scientific Advisory Board Member

- 1989–1990 **Interneuron Pharmaceuticals Inc.**, Cambridge, Massachusetts
1990–2005 **Croatian Institute for Brain Research**, Zagreb, Croatia

MEDIA INTERVIEWS AND ARTICLES

- 09/1990 **USA Today**
07/11/95 **USA Today**
08/03/95 **Channel 2 Evening News**, Interview with Dr. Breener
08/05/95 **Channel 5 Morning News**, Interview with Wendy Telerico
08/25/95 **American Bar Association Journal**, Phone Interview with Barbara Buchholz
08/25/95 **Radio France International**, Interview in English and Spanish with Carol Pineau
08/31/95 **Channel 2 News**, Interview with Martha Lebau
09/15/95 **NU News/NU Actuality Services**, Radio Interview with Chelsea & Mary Jane
09/26/95 **News Week Magazine**, Phone Interview with Karen, Chicago Bureau
03/1996 **Men's Journal Magazine**, Interview
08/1996 **American Drugist Magazine**, Interview with Laura Klepacki
03/1997 **Channel 2 Evening News**, Interview with Dr. Breener
07/1998 **Work Safety Magazine**, Interview on Electric Magnetic Fields (EMF) Working Group Meeting
10/1998 **Chicago Tribune**, Interviewed and quoted on article on Electric Magnetic Fields (EMF)
03/1999 **Chicago Tribune**, Interviewed and quoted on article on Sleep in adolescents (March 28, 1999)
04/1999 **Channel 5 Evening News**, Interviewed by R. L. Ray for TV show on Sleep (Aired May 15–16, 1999)
11/1999 **Channel 2 Evening News**, Interview with Dr. Breener
06/2005 **Channel 2, 9 and CLTV evening news**. Feature in JAMA, Science Magazine, Chicago Tribune, La Nacion (Argentina) and other international newspapers on the paper by Hansen et al., 2005 on “*The Impact of School Daily Schedule on Adolescent Sleep*”.

SPECIAL DISTINCTIONS AND ACTIVITIES

Chair of Scientific Sections, Symposia and Conferences.

- 1984 **FASEB**. 68th Annual Meeting, St. Louis, MO. Chair Slide Section on “Catecholamines”
1984 **9th International Congress of Pharmacology**. London, England. Cochair Slide Section on “Dopamine uptake, release, receptor regulation, and D1 and D2 receptors and behavioral correlates of neuroleptic activity”
1984 **14th Annual Meeting Society for Neuroscience**. Anaheim, CA. Organizer with Dr. L.X. Cubeddu of Plenary Section on: “Autoreceptors and Modulation of Neurotransmitter Release”
1987 **Annual Meeting Society for Neuroscience Chicago Chapter**. Chicago, IL. Organizer of Workshop on: “New Approaches to the Study of Dopamine Receptors”
1987 **“Molecular Biology Approach to the Study of Neuroreceptors and Ion Channels Symposium.”** Northwestern University Medical School, Chicago, IL. Chair Slide Section
1987 **International Satellite Meeting “Dopamine 87.”** Hunter Valley, New South Wales, Australia. Co-chair of Section on: “Functional interactions between D-1 and D-2 dopamine receptor”

- 1988 **Annual Meeting Society for Neuroscience Chicago Chapter.** Chicago, IL. Organizer of “Graduate Student Symposium”
- 1989 **Annual Meeting Society for Neuroscience Chicago Chapter.** Chicago, IL. Organizer of “Graduate Student Symposium”
- 1989 **19th Annual Meeting Society for Neuroscience.** Phoenix, AZ. Organizer with Dr. D.K. Krause of Plenary Section on: “Melatonin: New Light on CNS Mechanism of Action”
- 1990 Member of the International Advisory Board of the “**Symposium on Presynaptic Receptors and Neuronal Transporters.**” Satellite Symposium to IUPHAR 1990. Chairman: S.Z. Langer and J. Costentin, Rouen, France, June 26–29, 1990
- 1990 **ASPET.** Milwaukee, WI. Cochair of Section on “Receptors”
- 1991 **24th Winter Conference on Brain Research.** Vail, CO. Organizer of Panel on “Melatonin: New Light on an Old Subject”.
- 1991 **Gordon Conference on “Pineal Cell Biology.”** August 11-15, 1991. Practor Academy, New Hampshire, USA. Discussion Leader of Section on “Melatonin Receptors”.
- 1992 **“Melatonin and the Pineal Gland from Basic to Clinical Applications.”** September 6–9, 1992. Paris France. Chair of Section on “Receptors and Mechanisms of Action of Melatonin”.
- 1994 **Gordon Research Conference on “Pineal Cell Biology.”** January 23–28, 1994. Casa Sirena, CA. Discussion Leader of Section on “Melatonin/Suprachiasmatic Nucleus Interactions”
- 1994 **Third IUPHAR Satellite Meeting on Serotonin.** July 30-August 3, 1994. Chicago, IL. Organizer of Symposium on “Regulation of Circadian Rhythms by Melatonin”
- 1994 Panel on **“Promotions and Tenure at Northwestern University.”** Organized by “The Women Organization Association” at Northwestern University, October 1995
- 1995 **7th European Pineal Society Colloquium.** March 28–31, 1996. Sitges, Barcelona. Co-Chair of Symposium on “Pharmacology of Melatonin Agonists and Antagonists”
- 1996 **Member of the International Scientific Committee** of the 2nd Locarno Meeting on “Neuroendocrinology. Therapeutic Potential of the Pineal Neurohormone Melatonin.” May 5–8, 1996. Organizers G.J.M. Maestroni, A. Conti and R.R.J. Reiter, Locarno, Switzerland
- 1997 **“International Congress of Chronobiology.”** September 7–11, 1997. Paris, France. Co-chair of Section on “Melatonin Receptors and Agonists”
- 1998 **EMF RAPID Science Review Symposium on Clinical and In vivo Laboratory Findings.** Rapporteur of a Breakout Group on “Melatonin.” April 6–9, 1998, Phoenix, Arizona.
- 1998 **Fourth IUPHAR Satellite Meeting on Serotonin.** July 26–31, 1998. Rotterdam, Amsterdam. Organizer of Symposium on “Melatonin Receptors as Therapeutic Targets”
- 1998 **Fourth IUPHAR Satellite Meeting on Serotonin.** July 26–31, 1998. Rotterdam, Amsterdam. Co-chair of Slide Section.
- 1998 **American College of Neuropsychopharmacology 1998 Annual Meeting.** December 13–18, 1998. Las Croabas, Puerto Rico. Organizer and Chair of Panel on “Mechanisms of Melatonin’s Action Relevant for Psychiatric and Neurological Disorders”
- 1999 **Kynote Lecture at the 15th Annual Meeting of the Ohio Physiological Society.** November 12, 1999. Miami University, Oxford, OH.
- 2000 **ASBMB/ASPET 2000.** June 4–8, 2000. Boston, MA. Organizer and co-Chair of Symposium on “Melatonin Receptors: Role in the Regulation of Sleep and Mood Disorders”.
- 2002 **Gordon Research Conference on “Pineal Cell Biology.”** February 9–15, 2002. Ventura, CA. Discussion Leader of Section on “Melatonin Actions II”
- 2002 **EB/ASPET 2002.** April 20–24, 2002. New Orleans, LA. Organizer/Chair of Minisymposium on “*How to prepare for a Career in Science*”, Sponsored by the ASPET Committee on Minority Affairs. Participants were all minorities: senior researchers, Junior faculty and postdoctoral fellows.
- 2002 **SACNAS 2002.** September 26–29, 2002. Anaheim, CA. Attended SACNAS as representative of the American Society for Pharmacology and Experimental Therapeutics (ASPET) and Northwestern University.
- 2003 **SACNAS 2003.** October 2–5, 2003. Albuquerque, New Mexico. Attended SACNAS as representative of the American Society for Pharmacology and Experimental Therapeutics (ASPET) and Northwestern University.
- 2004 **EB/ASPET 2004.** April 17–21, 2004. Washington, DC. Organizer/Co-Chair of Minisymposium on “*Careers in Science: “The Specifics of How to Get Where You Want to Be,”*” Sponsored by the ASPET Committee on Minority Affairs and Women in Pharmacology.
- 2004 **SACNAS 2004.** October 21–23, 2004. Austin, Texas. Attended SACNAS as representative of the American Society for Pharmacology and Experimental Therapeutics (ASPET) and Northwestern University.

- 2006 **EB/ASPET 2006**. April 1–5, 2006. San Francisco, CA. Organizer/Co-Chair of Minisymposium on “Bridges to Success in Academia: From Undergraduate Student to Professor and Beyond”. Sponsored by the ASPET Committee on Minority Affairs and Women in Pharmacology.
- 2007 Panel on “**Promotions and Tenure at Northwestern University.**” Organized by the Northwestern University Feinberg School of Medicine Office of Faculty Affairs, February 2007.
- 2008 **FASEB Research Summer Conference**. August 10-15, 2008. Snowmass Village, Colorado. Organizer/Chair of FASEB Summer Research Conference on “Melatonin Receptors: Actions and Therapeutics.”
- 2008 **American College of Neuropsychopharmacology**. December 7-11, 2008. Scottsdale, Arizona. Discussant on panel on “Central and Peripheral Circadian Clocks: Links to Sleep and Metabolism”.
- 2009 **XI Congress of the European Biological Rhythms Society**. August 22-28, 2009. Strasbourg, France. Chairperson of Symposium entitled “Melatonin: Modes of Action, Part I.”
- 2009 **Why Academia? Workshop** at the Society for Neuroscience Annual Meeting, October 17, 2009. Chicago, IL. Chair. Professional Development Workshop, sponsored by the Diversity in Neuroscience Committee.
- 2010 **Why Academia? Workshop** at the Society for Neuroscience Annual Meeting, November 16, 2010. San Diego, CA. Professional Development Workshop, sponsored by the Diversity in Neuroscience Committee.
- 2010 **University at Buffalo Welcome Speaker** for the Graduate School Visit at the **16th Annual McNair Research Conference**: July 15, 2010.
- 2011 **Discussion Panel** Mentoring Philosophy, Mentoring Style, And Examples Of Mentoring Successes And Strategies That Have Worked. Faculty Council of the School of Public Health and Health Professions (SPHHP), SUNY-Buffalo.
- 2011 **Interviewing for an Academic Position: The Do's and Don'ts**. The University at Buffalo Office of Postdoctoral Scholars. March 9, 2011.
- 2012 **Interviewing for an Academic Position: The Do's and Don'ts**. The University at Buffalo Office of Postdoctoral Scholars. March 21, 2012.
- 2013 **Chair Session on** “Melatonin Receptors and Signaling“, FASEB SRC - Melatonin Biology: Actions & Therapeutics. July -12, 2013, Niagara Falls, NY.

INVITED SYMPOSIA AND CONFERENCES

1. **DUBOCOVICH, M.L.**: “Pharmacological Differences Between the Alpha Presynaptic Adrenoceptors in the Peripheral and the Central Nervous Systems.” IUPHAR Satellite Symposium on “Presynaptic Receptors.” Paris, France, 1978.
2. **LANGER, S.Z.** and **DUBOCOVICH, M.L.**: “Physiological and Pharmacological Relevance of Presynaptic Beta-adrenoceptors in Modulating Transmitter Release.” IUPHAR Satellite Symposium on “Recent Advances in the Pharmacology of Adrenoceptors.” Manchester, England, 1978.
3. **DUBOCOVICH, M.L.**: “Modulation of Dopaminergic Neurotransmission Through Activation of D2 Receptors in the Isolated Rabbit Retina.” “First Annual Neurosymposium” of the Rocky Mountain Region Neuroscience Group. Denver, CO, USA, 1981.
4. **DUBOCOVICH, M.L.**: “Pharmacological Differences Between Dopamine Receptors of the D-1 and D-2 Subtypes in the Rabbit Retina.” VII Annual Congress of the Brazilian Society of Biophysics. Rio de Janeiro, Brazil, 1982.
5. **DUBOCOVICH, M.L.**: “Modulation of Dopamine Release from Rabbit Retina.” Symposium on “Catecholamines and Indoleamines in Retina.” FASEB. Chicago, IL, USA, 1983.
6. **DUBOCOVICH, M.L.**: “Presynaptic Alpha Adrenoceptors in Central Nervous System.” Symposium on “Presynaptic Modulation of Postsynaptic Receptors in Mental Diseases” commemorating Dr. Sidney Hess. New York Academy of Sciences. New York, NY, USA, 1983.
7. **DUBOCOVICH, M.L.**: “Modulation of Dopamine Release by Catecholamines and Indoleamines in the Retina.” Plenary Section on “Autoreceptors and Modulation of Neurotransmitter Release.” 14th Annual Meeting of the Society for Neuroscience. Anaheim, CA, USA, 1984.
8. **DUBOCOVICH, M.L.** and **EELLS, J.T.**: “Pyrethroid-Evoked Release of Dopamine and Acetylcholine From Mammalian Brain Slices.” Symposium on Mechanisms of Neurotoxicity, sponsored by the National Research Service Award Institutional Training Grant awarded jointly to the Departments of Pharmacology and Pathology, Northwestern University Medical School. Chicago, IL, USA, 1985.
9. **DUBOCOVICH, M.L.**: “Selective Inhibition of Dopamine Release by Melatonin in Retina.” Symposium on “Pineal and Retinal Relationship.” Sarasota, FL, USA, 1985.
10. **DUBOCOVICH, M.L.**: “Modulation of Neurotransmitter Release in the Central Nervous System.” Biennial FASEB Conference on Neurotransmitters. Saxton Rivers, Vermont, NE, USA, 1985.

11. **DUBOCOVICH, M.L.:** “Neuropharmacology of Dopamine-Containing Neurons in the Central Nervous System.” Symposium on “Current Trends and Future Directions in Parkinsonism” sponsored by the Department of Neurology of Northwestern University Medical School and the American Parkinson Disease Association, Northwestern University Medical School. Chicago, IL, USA, 1985.
12. **DUBOCOVICH, M.L.:** “Functional Characterization of D-1 and D-2 Dopamine Receptor Subtypes in the CNS.” Symposium on “New Approaches for the Study of Dopamine Receptors in the CNS.” Annual Meeting of the Society for Neuroscience Chicago Chapter. Chicago, IL, USA, 1987.
13. **DUBOCOVICH, M.L.:** “Pharmacology and Function of Melatonin Receptors in the Central Nervous System.” Satellite to IUPHAR Congress of Pharmacology: Serotonin. September 4–6, 1987, Heron Island, Australia.
14. **DUBOCOVICH, M.L.:** “Pasado, Presente y Futuro de los Adrenoceptores Alpha-2.” Symposium on “Farmacologia y Repercusion Terapeutica de los Adrenoceptores Alpha-2.” XII Reunion Nacional, Sociedad Española de Farmacologia. September 29–October 1, 1987, Leioa (Vizcaya), Spain.
15. **DUBOCOVICH, M.L.:** “Role of Presynaptic Receptors in the Modulation of Neurotransmitter Release in the Central Nervous System.” XIX Annual Meeting of the American Society for Neuroscience. March 6–11, 1988, New Orleans, LA, U.S.A.
16. **DUBOCOVICH, M.L.:** “Receptores de la Melatonina en el Sistema Nervioso Central.” Symposium on “Receptores.” XII Congreso Latinoamericano de Farmacologia y el III Congreso Interamericano de Farmacologia y Terapeutica. October 2–7, 1988, Caracas, Venezuela.
17. **DUBOCOVICH, M.L.:** “Retinal melatonin: Biochemistry and Pharmacology.” Round Table on: “Recent Advances in Retinal Neurochemistry.” 12th ISN Biennial Meeting of the International Society for Neurochemistry. April 23–28, 1989, Algarve, Portugal.
18. **DUBOCOVICH, M.L.:** “Pharmacology and Function of Melatonin Receptors.” Symposium Speaker at the International Study on Tryptophan Research. May 9–12, 1989, Baltimore, Maryland, U.S.A.
19. **DUBOCOVICH, M.L.:** “Melatonin Receptors: Pharmacological and Physiological Function in the CNS.” Symposium on “Pineal Gland and Melatonin.” XXXI International Congress of Physiological Sciences. July 9–14, 1989, Helsinki, Finland.
20. **DUBOCOVICH, M.L.:** “Melatonin Receptors: Biochemical Pharmacology.” Section on “Melatonin Receptors.” Gordon Conference on Pineal Cell Biology. August 14–18, 1989. Plymouth State College, New Hampshire, U.S.A.
21. **DUBOCOVICH, M.L.:** “Structure-activity Relationships, Pharmacology, and Function of Melatonin Receptors.” Lecture at the 7th Noordwijkerhout-Camerino Symposium on Trends in Drug Research. September 5–9, 1989, Leeuwenhorst, The Netherlands.
22. **DUBOCOVICH, M.L.:** “Melatonin Receptors in the CNS.” Symposium on “Pineal Hormones: Sites of Action and Physiological Effects.” September 28–30, 1989, Poznan, Poland.
23. **DUBOCOVICH, M.L.:** “Pharmacology and Function of Melatonin Receptors.” Plenary Section on “Melatonin: New Light on CNS Mechanism of Action.” 18th Annual Meeting of the Society for Neuroscience. October 29–November 3, 1989, Phoenix, AZ, USA.
24. **DUBOCOVICH, M.L.:** “Presynaptic Receptors and the Visual System.” Symposium on “Presynaptic Receptors and the Question of Regulation of Transmitter Release.” New York Academy of Science. December 4–5, 1989, Philadelphia, PA, USA.
25. **DUBOCOVICH, M.L.:** “Presynaptic Melatonin Heteroreceptors in the CNS.” Satellite 1990 IUPHAR Symposium on “Presynaptic Receptors and Neuronal Transporters.” Symposium to IUPHAR 1990. June 26–29, 1990, Rouen, France.
26. **DUBOCOVICH, M.L.:** “Presynaptic Modulation of Catecholamine Release.” Gordon Conference on “Catecholamines.” July 29–August 3, 1990, Practor Academy, New Hampshire, USA.
27. **DUBOCOVICH, M.L.:** “Pharmacological Classification of Melatonin Binding Sites.” Symposium on Melatonin Receptors.” European Pineal Study Group. September 2–7, 1990, University of Surrey, Guildford, England.
28. **DUBOCOVICH, M.L.:** “Melatonin Agonists and Antagonists: Future in Pharmacology.” Plenary Lecture. European Pineal Study Group. September 2–7, 1990, University of Surrey, Guildford, Surrey, England.
29. **DUBOCOVICH, M.L.:** Speaker on a Panel on: “Melatonin: New Light on an Old Subject.” 24th Annual Winter Conference on Brain Research. January 26–February 2, 1991, Vail, Colorado, USA.
30. **DUBOCOVICH, M.L.:** “Melatonin Receptors in the CNS.” Symposium on “Melatonin Receptors: Current Views.” 1991 Pineal Satellite Symposium to the International Neurochemistry Meeting. July 21–24, 1991, Bowral Heritage Park Resort, Bowral, Australia.
31. **DUBOCOVICH, M.L.:** Discussion leader on Section on “Melatonin Receptors.” Gordon Conference on “Pineal Cell Biology.” August 11–15, 1991, Practor Academy, New Hampshire, USA.

32. **DUBOCOVICH, M.L.:** Cellular and Molecular Pharmacology of Melatonin Receptors in the Central Nervous System. Workshop on "Pineal Gland: Physiology and Function." October 8–10, 1991, Brazilian Society of Pharmacology and Experimental Therapeutics. Universidad de Sao Paulo, Sao Paulo, Brazil.
33. **DUBOCOVICH, M.L.:** Study group on "The Neuropsychopharmacology of Melatonin." American College of Neuropsychopharmacology (ACNP). San Juan, Puerto Rico, Dec. 9–13, 1991. (unable to attend due to illness).
34. **DUBOCOVICH, M.L.:** "Cellular and Molecular Pharmacology of Melatonin Receptor Subtypes." Western Pharmacological Society Meeting. January 12–17, 1992, Asilomar Conference Center. Pacific Grove, CA, USA.
35. **DUBOCOVICH, M.L., NORTH, P.C., OAKLEY, N.R., and HAGAN, R.M.:** "Novel Naphtalenic Melatonin Receptor Agonist." International Symposium on Melatonin and the Pineal Gland. Sept. 6–9, 1992, Paris, France.36.
36. **DUBOCOVICH, M.L.:** "Role of Melatonin Receptors in Regulating Circadian and Seasonal Rhythms." Symposium on "Cellular Basis Cell Communication." XXXV Annual Meeting of the Chilean Society of Biology. November 25–28, 1992, Puyehue, Chile (unable to attend).
37. **DUBOCOVICH, M.L.:** "The Neurobiology of Melatonin." Plenary Lecture. XXXV Annual Meeting of the Chilean Society of Biology. November 25–28, 1992, Puyehue, Chile (unable to attend).
38. **DUBOCOVICH, M.L.:** "Melatonin Receptors: Structure Activity Relationships of Novel Melatonin Analogues." Lecture at the 9th Noordwijkerhout-Camerino Symposium on Trends in Drug Research. May 23–27, 1993, Leevwenhorst, The Netherlands.
39. **DUBOCOVICH, M.L.:** "Development of Novel Melatonin Analogues for Melatonin Receptors." Symposium on "Melatonin Receptors." 6th Colloquium of the European Pineal Society. July 23–27, 1993, Copenhagen, Denmark.
40. **DUBOCOVICH, M.L.:** "Molecular Pharmacology of Melatonin Receptors." Gordon Research Conference in "Pineal Cell Biology." January 23–28, 1994, Casa Sirena, CA.
41. **DUBOCOVICH, M.L.:** "Melatonin Receptor Analogues: Pharmacology and Circadian Activity." Cold Spring Harbor Conference Series, "Melatonin: Mechanisms and Actions." The Banbury Center Conference. April 10–13, 1994, Cold Spring Harbor, NY.
42. **DUBOCOVICH, M.L.:** "Localization and Physiological Role of Melatonin Receptors in the Visual System." Lecture at the 35th Advance Research Workshop on "The Pineal Gland and Its Hormones Fundamentals and Clinical Perspectives." June 6–13, 1994, Erice, Italy.
43. **DUBOCOVICH, M.L.:** "Melatonin Receptors in the Mammalian Suprachiasmatic Nucleus." Third IUPHAR Satellite Meeting on Serotonin. July 30–August 3, 1994, Chicago, IL.
44. **DUBOCOVICH, M.L.:** "Melatonin Receptors in the Visual and Circadian System." Lecture at the International Symposium on "Eye-Pineal Relationships." September 21–25, 1994, Lodz, Poland (unable to attend).
45. **DUBOCOVICH, M.L.:** "Melatonin Receptor Subtypes: Molecular and Functional Studies." International Symposium on "Melatonin-A photoperiodic Signal." September 18–20, 1995, Hong Kong (unable to attend).
46. **DUBOCOVICH, M.L.:** "Melatonin Receptor Subtypes." Gordon Research Conference on "Pineal Cell Biology." February 4–8, 1996, Ventura, CA.
47. HAGAN, R.M., BERESFORD, I.J.M., NORTH, P.C., BROWN, J., OAKLEY, N.R., FOORD, S.M., STARKEY, S., and **DUBOCOVICH, M.L.:** "GR196429, a non-indolic agonists at high affinity melatonin (ML-1) receptors." 7th European Pineal Society Colloquium. March 28–31, 1996, Sitges, Barcelona.
48. KRAUSE, D.N. and **DUBOCOVICH, M.L.:** "Plasticity of Melatonin Receptors in the Avian Brain." VI International Symposium on Avian Endocrinology. March 31–April 5, 1996, Chateau Lake Louise, Canada.
49. **DUBOCOVICH, M.L.:** "Functional and Molecular Melatonin Receptors Subtypes." 2nd Locarno Meeting on Neuroendocrinology. Therapeutic Potential of the Pineal Neurohormone Melatonin. May 5–8, 1996, Locarno, Switzerland.
50. **DUBOCOVICH, M.L.:** "Molecular Pharmacology and Function of Melatonin Receptors." Workshop on "Melatonin and Sleep." National Institute of Health (NIH). Washington, DC, August 12–13, 1996.
51. **DUBOCOVICH, M.L.:** "Melatonin and Its Receptors Subtypes." Study group on "Melatonin: Current Issues and Controversies." American College of Neuropsychopharmacology (ACNP). San Juan, Puerto Rico, December 9–13, 1996.
52. KRAUSE, D.N., GEARY, G.G., EDVINSSON, L., **DUBOCOVICH, M.L.,** and DUCKLES, S.P.: "Melatonin Receptors in Rat and Human Cerebral Arteries: Contractile Effects and mRNA Expression." XVIIIth International Symposium on Cerebral Blood Flow and Metabolism . June 15–19, 1997, Baltimore, Maryland.
53. **DUBOCOVICH, M.L., DELPEDRO, A. and MASANA, M.I.:** "The Efficacy Of Melatonin Receptor Analogues Is Dependent On The Level Of Human Melatonin Receptor Subtype Expression." International Congress of Chronobiology. September 7–11, 1997, Paris, France.

54. **DUBOCOVICH, M.L.**, MASANA, M.I., HUDSON, R.L., KRAUSE, D.N. and BENLOUCIF, S.: "Melatonin Receptor Subtypes In Mammals: Pharmacology, Regulation And Function." Second International Oxidative Stress and Brain Damage Symposium. September 26–28, 1997, Chicago, Illinois.
55. **DUBOCOVICH, M.L.**: Symposium on Biological Rhythms: Depression Treatment Implications. American Psychological Association Annual Meeting. May 30–June 4, 1998, Toronto, Ontario, Canada. APA Symp. 179–180, 1998.
56. **DUBOCOVICH, M.L.**: "Melatonin Receptors as Therapeutic Targets." Fourth IUPHAR Satellite Meeting on Serotonin. July 26–31, 1998, Munich, Germany.
57. **DUBOCOVICH, M.L.**: "Function of Melatonin Receptor Subtypes in Mammals." Hanseatic Endocrine Conference on Melatonin After Four Decades: An Assessment of its Potential. August 27–30, 1998. Hamburg, Germany.
58. **DUBOCOVICH, M.L.**: "Melatonin Receptors as Targets for Circadian Rhythm Modulation." American College of Neuropsychopharmacology 1998 Annual Meeting. December 13–18, 1998. Las Croabas, Puerto Rico.
59. **DUBOCOVICH, M.L.**, HUNT, A.E., AL-GHOUL, W.M. and GILLETTE, M.U.: "MT₂ melatonin receptor activation stimulates Protein Kinase C (PKC) signaling and phase advances the circadian clock in the rat SCN slice". 8th Meeting of the European Pineal Society, France, July 3–7, 1999.
60. **DUBOCOVICH, M.L.**: "Cellular Expression, Signaling and Function of Neuronal Melatonin Receptors." Kynote Lecture at the 15th Annual Meeting of the Ohio Physiological Society. November 12, 1999. Miami University, Oxford, OH.
61. **DUBOCOVICH, M.L.**: "Molecular Pharmacology and Function of Melatonin Receptors." Symposium on "Melatonin Receptors: Role in the Regulation of Sleep and Mood Disorders" ASBMB/ASPET 2000. June 4–8, 2000. Boston, MA.
62. **DUBOCOVICH, M.L.**: "Why Academia." Minisymposium Sponsored by the ASPET Committee on Minority Affairs: Career Opportunities in Industry and Academy. ASBMB/ASPET 2000. June 4–8, 2000. Boston, MA.
63. **DUBOCOVICH, M.L.**: "New Insights into the Pharmacology and Function of Melatonin Receptors". The Gordon Research Conference on "Pineal Cell Biology", August 27–September 1, 2000. The Queens College, Oxford, UK.
64. **DUBOCOVICH, M.L.**: Molecular Pharmacology and Function of Melatonin Receptors. Latinoamerican Congress of Pharmacology. Symposium on "Melatonin Receptors and Function". September 13–17, 2000. Aguas de Lindoas, Brazil.
65. MSEEH, F., GERDIN, M. and **DUBOCOVICH, M.L.**: Molecular Structural Features of the MT₂ Melatonin Receptor. Latinoamerican Congress of Pharmacology. Symposium on "Melatonin Receptors and Function". September 13–17, 2000. Aguas de Lindoas, Brazil.
66. **DUBOCOVICH, M.L.**: "MT₁ and MT₂ mammalian melatonin receptors: Expression, function and cellular trafficking." Symposium on "Melatonin and Biological Rhythms", Adelaide, Australia, 21–23 August, 2001.
67. **DUBOCOVICH, M.L.**: Discussion leader. Section on "Melatonin Actions II," Gordon Research Conference on "Pineal Cell Biology." February 9–15, 2002, Ventura, CA.
68. **DUBOCOVICH, M.L.**: "My Journey Towards Excellence in Research and Academy." Minisymposium sponsored by the ASPET Committee on Minority Affairs: "How to Prepare For a Career in Science." ASBMB/ASPET 2002. April 20–24, 2002. New Orleans, LA.
69. **DUBOCOVICH, M.L.**: "Melatonin Receptor Biology." Minisymposium on "Melatonin and Reproductive Function." Universidad Paulista, Sao Paulo, Brazil, 2002
70. **DUBOCOVICH, M.L.**: "Clinical Uses of Melatonin." MiniSymposium on "Melatonin and Reproductive Function." Universidad Paulista, Sao Paulo, Brazil, 2002
71. **DUBOCOVICH, M.L.**: "Use of Melatonin in Treating Circadian and Sleep Disorders." Course on "Melatonin Physiology and Melatonin Receptors." American Physiological Sleep Society (APSS). Seattle, Washington, June 8–13, 2002.
72. **DUBOCOVICH, M.L.**: "Physiological Concentrations Of Melatonin Desensitize MT₂ Melatonin Receptors In The Suprachiasmatic Nucleus." International Congress of Chronobiology, Sapporo, Japan. September 9–12, 2003.
73. **DUBOCOVICH, M.L.**: "Modulation of Circadian Phase Through Activation of MT₂ Melatonin Receptors." Gordon Research Conference on "Pineal Cell Biology." August 29–September 3, 2004, Oxford, UK.
74. **DUBOCOVICH, M.L.**, HUDSON, R.L. "Are both MT₁ AND MT₂ receptors involved in melatonin-mediated phase shifts of circadian rhythms?" EPSBR Meeting, Frankfurt, Germany, August 30–September 4, 2005.
75. **DUBOCOVICH, M.L.**: "Melatonin receptors as targets for modulation of circadian rhythms and antidepressant-like responses." Panel on "Clock Genes, Melatonin And Affective Disorders." American College of Neuropsychopharmacology (ACNP), Waikaloa, Hawaii, December 10–15, 2005.

76. **DUBOCOVICH, M.L.** “Melatonin receptor signaling and circadian rhythms.” Gordon Research Conference on “Pineal Cell Biology.” Santa Ines, CA, January 15–20, 2006 (did not attend due to illness).
77. **DUBOCOVICH, M.L.** “Melatonin Receptors” Speaker at Workshop on “Circadian Rhythms in Human Health and Disorders,” National Institute of Environmental Health Sciences (NIEHS), Georgetown, Washington, DC, September 14–15, 2006.
78. **DUBOCOVICH, M.L.** “Melatonin Receptors as Therapeutic Targets.” Takeda Pharmaceuticals North America, Lincolnshire, IL, September 21, 2006.
79. **DUBOCOVICH, M.L.** “Expanding Our Current Understanding on the Role of the SCN in Sleep-Wake Regulation: The Roles of MT₁ and MT₂ Receptors.” Ramelteon Global Roundtable Discussion (RTD) and Key Opinion Leaders (KOL) Meetings (Osaka and Kyoto, Japan), October 16–18, 2006.
80. **DUBOCOVICH, M.L.** “Melatonin receptors as targets for modulation of antidepressant-like responses” Southwestern Pharmacology Society, School of Pharmacy, University of Mississippi, University, MS, November 5–7, 2006.
81. **DUBOCOVICH, M.L.** “Melatonin Receptors as Targets for Drug Discovery.” Speaker at a minisymposium organized at Tougaloo College by Northwestern University and Tougaloo. Tougaloo, MS, November 13–14, 2007.
82. HANSEN, M. and **DUBOCOVICH, M.L.** “Sleep patterns in high school students.” IMBES Summer Institute workshop on Chronoeducation, Erice, Italy, May 22–26, 2007.
83. **DUBOCOVICH, M.L.** “The MT₁ and MT₂ melatonin receptors as potential targets for the treatment of sleep and circadian disorders.” Worldsleap07: 5th World Congress of the World Federation of Sleep Research and Sleep Medicine Societies, Cairns, Australia, September 2–6, 2007.
84. **DUBOCOVICH, M.L.** “Melatonin Receptors as Targets for Modulation of Circadian Rhythms and Antidepressant Responses.” 2nd World Congress on Chronobiology, Tokyo, Japan, November 4–6, 2007.
85. **DUBOCOVICH, M.L.** “Towards Understanding the Role of MT₁ and MT₂ Melatonin Receptors in the Modulation of Circadian Rhythms by Ramelteon.” Scientific, Medical and Research Topics (SMART) Lecture. Takeda Pharmaceuticals North America, Lincolnshire, IL.
86. **DUBOCOVICH, M.L.** “MT₁ and MT₂ Melatonin Receptors in the Regulation of Circadian Rhythms.” FASEB Summer Research Conference on “Melatonin Receptors: Actions and Therapeutics.” Snowmass, CO, August 10–15, 2008.
87. **DUBOCOVICH, M.L.** “Melatonin Receptors as Targets for the Regulation of Circadian Rhythms by Endogenous Melatonin”. XI Congress of the European Biological Rhythms Society. Strasbourg, France, August 10–15, 2009.
88. **DUBOCOVICH, M.L.** “Interviewing for an Academic Position: The Do’s and Don’ts”. Professional Development Programs for Graduate Students and Postdoctoral Scholars at University at Buffalo. March 9, 2011.
89. **DUBOCOVICH, M.L.** “Regulation of Circadian Rhythms by Endogenous Melatonin” FASEB Summer Research Conference on “Melatonin Receptors: Actions and Therapeutics.” Snowmass, CO, June 24–July 1, 2011.
90. **DUBOCOVICH, M.L.** “Role of Melatonin in the Entrainment of Circadian Sleep Disorders”. Nursing School Research Day. University at Buffalo. Buffalo, NY, March 22, 2013.
91. **DUBOCOVICH, M.L.** (2013) The Molecule of Darkness: From Discovery to its Target Receptors. Keynote Speaker at the FASEB SRC - Melatonin Biology: Actions & Therapeutics. July -12, 2013, Niagara Falls, NY.
91. **DUBOCOVICH, M.L.**, LIU, J., SOMERA-MOLINA, S.M. “Melatonin-Mediated Potentiation of Physical Activity- Induced Neurogenesis in the Dentate Gyrus Of The C3H/Hen Mouse”, Panel on “Melatonin and its Receptors: Important Players in Major Depressive Disorder”. American College of Neuropsychopharmacology (ACNP), Hollywood, Florida, December 7-12, 2013.

PATENTS

1. **DUBOCOVICH, M.L.** (Patent # 5,093,352): “Antidepressants Agents.” U.S. Patent and Trademark Office, filed 8/17/87. Issued: March 3, 1992.
2. HORN, A.S. and **DUBOCOVICH, M.L.** (Patent # 5,151,446): “2-Amidotetralines as Melatonin Agonists and antagonists.” U.S. Patent and Trademark Office, filed 9/26/89. Issued: September 29, 1992.
3. **DUBOCOVICH, M.L.**, RAJADHYAKSHA, V.J., PECK, J.V., and HELMY, A.A. (Patent #5,283,343): “2-Aryl Substituted Nacetyltryptamines and Process of Preparing Such.” U.S. Patent and Trademark Office, filed 8/17/87. Issued: February 1994.

PUBLICATIONS IN REFEREED JOURNALS

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