

# CURRICULUM VITAE

*Carlos Antonio Molina-Nazario*

Montclair State University  
Department of Biology  
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## EDUCATION:

### Undergraduate

1981-1985 B.S. (*Magna cum Laude*)  
Biology Department, School of Science  
University of Puerto Rico, Rio Piedras  
Puerto Rico  
Major: Biology  
Minor: Chemistry

### Graduate and Professional

1986-1989 M.S. (Advisor, Curtis Ashendel)  
Medicinal Chemistry Dept., School of Pharmacy  
Purdue University, West Lafayette, Indiana  
Major: Medicinal Chemistry  
Minor: Cancer Biology

1989-1991 Ph.D. (Advisor, Curtis Ashendel)  
Medicinal Chemistry Dept., School of Pharmacy  
Purdue University, West Lafayette, Indiana  
Major: Biochemistry  
Minor: Cancer Biology

### Postdoctoral Training

1992-1994 Post-Doctoral Fellow with Dr. Paolo Sassone-Corsi  
CNRS-LGME, Institut De Chimie Biologique  
Faculté De Medicine, University Louis Pasteur, Strasbourg, France  
The Role of cyclicAMP Responsive Element Modulator (CREM) in the process of  
signal transduction.

## UNIVERSITY APPOINTMENTS:

1994-1996 Assistant Professor (Co-Terminus)  
Department of Obstetrics and Gynecology

- 1996-2007 UMDNJ-New Jersey Medical School, Newark NJ  
Assistant Professor  
Department of Obstetrics, Gynecology and Women's Health  
UMDNJ-New Jersey Medical School, Newark NJ
- 1998-2007 Assistant Professor  
Department of Biochemistry and Molecular  
Biology  
UMDNJ-New Jersey Medical School, Newark NJ
- 2007-2017 Associate Professor (tenure)  
Department of Biology and Molecular Biology  
Montclair State University, Montclair NJ
- 2011-present Doctoral faculty, Montclair State University, Environmental Science and  
Management PhD program
- 2017-present Full Professor (tenure)  
Department of Biology  
Montclair State University, Montclair NJ
- 2020-present Adjunct Professor, Rutgers-NJ Medical School, Department of Cell Biology and  
Molecular Medicine, Newark, NJ.

#### **OTHER PROFESSIONAL POSITIONS AND MAJOR VISITING APPOINTMENTS:**

- 2013-2015 Director of the National Science Foundation-Funded, Louis Stokes Alliances for  
Minority Participation (LSAMP) program at MSU.
- 2000-2007 Founder and Director of the Transgenic Mouse Facility  
UMDNJ-New Jersey Medical School, Newark NJ
- Spring 2019 Sabbatical leave, Japan. Worked with: Drs. Koichi Kawakami and Noriyoshi Saka  
at the National Institute of Genetics (NIG), Mishima; Dr. Takashi Yoshimura at the  
Institute of Transformative Bio-Molecules (ITbM) at Nagoya University; and Dr.  
Kiyoshi Naruse at the National Institute of Basic Biology (NIBB), Okasaki.

#### **AWARDS AND HONORS:**

- 1983-85 NIH-MARC Honor Undergraduate Research Fellowship  
1984 MARC Summer Research Internship  
1985 Magna Cum Laude, University of Puerto Rico  
1986-90 National Institutes of Health-MARC Pre-Doctoral Fellowship  
1990 American Association for Cancer Research Travel Award  
1990-91 NIH Training Grant in Drug and Carcinogen-DNA Interaction  
1992-93 Ambassade de France Chateaubriand Fellowship, France  
1993 American Association for Cancer Research Travel Award  
1993-94 National Science Foundation International Research Fellowship  
1994 French Foundation for Medical Research Postdoctoral Fellowship  
1994 American Association for Cancer Research Travel Award  
1999 AACR Minority Scholar Award in Cancer Research

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| 2000    | The Cancer Institute of New Jersey Gallo Award  |
| 2001,02 | AACR Minority Scholar Award in Cancer Research  |
| 2016    | Faculty Service Award, College of Science and Mathematics, MSU                          |
| 2022,23 | Distinguished Scholar Award, Montclair State University                                 |
| 2023    | Best Mentor, The Mario Casabona Future Scientist Program,<br>Montclair State University |

## MAJOR COMMITTEE ASSIGNMENTS:

### National and Regional

2002, 03, 04, 05, 06 Member, Department of Defense, U.S. ARMY Medical Research and Materiel Command, Ovarian Cancer Research Program Study Section.

2004 Member, Minorities in Cancer Research Symposia Committee for the 95<sup>th</sup> annual meeting of the American Association for Cancer Research.

2005, 2006 Member, Department of Defense, U.S. ARMY Medical Research and Materiel Command, Prostate Cancer Research Program Study Section.

2005 Member, National Heart, Lung and Blood Institute, National Institute of Health, Study Section member.

2006 Member, NIH, National Institute of Aging, Study Section member.

2012 Reviewer for the Research and Development Council of New Jersey.

2014 Member, Puerto Rico Science, Technology and Research Trust.

### UMDNJ-New Jersey Medical School

1997-2000, NJMS Faculty Affairs Committee

1998-2004, NJMS Biomedical Research Support Committee

2001-02, NJMS Search Committee for Senior Associate Dean for Research

2001-02, NJMS Search Committee for Chairman of the Department of Cell Biology and Molecular Medicine

2001-2007, NJMS Institutional Biosafety Committee (IBC)

2003 Adhoc Investigator Disclosure Faculty Committee, NJMS

2004-2007, NJMS Institutional Animal Care and Use Committee

### Montclair State University

2007 Search Committee for Assistant Professor of Neurobiology for the Department of Biology and Molecular Biology, Montclair State University.

2007 Search Committee for Assistant Professor of Microbiology for the Department of Biology and Molecular Biology, Montclair State University.

2008 CSAM Interdisciplinary Council, Representative for the Department of Biology and Molecular Biology

2008 Steering committee for the 2008 Annual Meeting of The Metropolitan Association of College and University.

2009-2011, research advisor for GK-12 Fellows in the Middle 2009/2010 NSF-funded program.

2009-present, Doctoral Faculty of MSU.

2020-2021 University-wide Sabbatical Committee

2023-2024 University-wide Global Research Task Force

2024 Research Task Force Committee for CSAM

2025 Search Committee, Associate Dean of Research for CSAM

#### Editorial Boards

Reviewer for *Molecular and Cellular Biology*

Reviewer for *Fertility and Sterility*

Reviewer for *Molecular Endocrinology*

Reviewer for *Cancer Research*

Reviewer for *Oncogene*

Reviewer for *Cancer Immunology and Immunotherapy*

Reviewer for *International Journal of Gynecology & Obstetrics*.

Reviewer for *Proceeding of the National Academy of Sciences of the United State of America*

Reviewer for *Journal of Environmental Science and Technology*

#### **MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:**

The American Society for Cell Biology

The Metropolitan Association of College and University Biologists.

#### **GRANT HISTORY:**

##### **UMDNJ-NJMS**

Completed:

UMDNJ-Foundation Grant (#37-96)

"Role of cAMP Response Element Modulator in Endocrine Cell Cycle". Amount Funded: \$25,000. July 1, 1995 - June 30, 1996. PI

The New Jersey State Commission on Cancer Research Grant Award (796-023) "Transcriptional Repressor ICER1g and Cell Transformation". Amount Funded: \$88,000. July 1, 1996 - June 30, 1998. PI

NIH R29 CA69316 "The Role of ICER in Normal and Neoplastic Cell Growth".

Amount Funded: \$559,890. July 1, 1996-November 1, 2002. PI

The New Jersey State Commission on Cancer Research (00-67-CCR-S-1) "Regulation of Prostate Cancer Cell Growth by ICER" Amount Funded: \$74,071. June 15, 2000 - June 14, 2002. PI

US Department of Defense through The Dean and Betty Gallo Prostate Cancer Foundation, Cancer Institute of New Jersey (DAMD17-01-1-0755) "Regulation of the Putative Tumor

Suppressor ICER in Prostate Cancer by PTEN and PI3K Signaling" Amount Funded: \$60,000 July 1, 2002-June 30, 2004. PI

UMDNJ-Foundation Grant "Non-mutational Deactivation of ICER in Prostate Cancer" Amount Funded: \$17,500. June 1, 2003 - June 30, 2004. PI

The New Jersey State Commission on Cancer Research (03-1096-CCR-E0) "Ras-mediated Degradation of ICER in Melanomas" Amount Funded: \$98,865. June 1, 2003 - May 5, 2005. PI

NIH R03HD045503 "Inducible cAMP Early Repressor in Ovarian Function" Amount Funded: \$100,000. December 16, 2003 - November 30, 2005. PI

UMDNJ-New Jersey Medical School Cancer Center "A Mouse Model for the Study of Prostate Cancer associated with Testicular Malfunctions." Amount Funded: \$50,000. 07/01/06-06/30/07

R01 DK55369 "Placental Glucose Transport in Diabetic Pregnancies" Principal Investigator: Nicholas P. Illsley, D. Phil. Amount Funded: \$873,116. July 1, 2000-June 30, 2004. Co-Investigator

R01 CA89868 "Breast Cancer-Bone Marrow Stromal Interactions" Principal Investigator: Pranela Rameshwar, Ph.D. Amount Funded: \$873,116. July 1, 2000-June 30, 2004. Co-Investigator

### **Montclair State University:**

National Science Foundation, USA. Award Number (FAIN): 2505377 "IRES: Neurobiology of Tetrachromatic Vision and Behavioral Responses in Zebrafish and Medaka: A Research Experience in Japan" September 1, 2025-August 31, 2028. \$444,843.

National Science Foundation, USA. Award Number (FAIN): 1952513 "IRES Track 1: US-Japan study of novel genetic elements regulating seasonal behavior of medaka fish" September 1, 2020-August 31, 2023. \$300,000.

National Institute of Health/National Institute of General Medical Sciences, USA. SC1GM125583 "Post-translational Regulation of Inducible cAMP Early Repressor and its Implications in Cancer" May 1, 2018 – April 30, 2023. \$1,297,953.

Shred Out Cancer Foundation. "Role of Inducible cAMP Early Repressor in Cancer". October 2018. \$5,000.

Public Service Enterprise Group Institute for Sustainability Studies (Principal Investigator) "A Quick, Sensitive, and Economical Genomic Diagnostic for the Surveillance of Pharmaceutical and Heavy Metals Contamination." \$6,000. Summer 2016

Short-term visit award to Graz University in Austria. "Molecular models to determine how protein modifications affect the structure of transcription factors." 1,360 EUROS. Summer 2015.

U.S. Department of State/Partners of the Americas Foundation (Principal Investigator) “A Reciprocal Approach to Promoting Study Abroad in STEM: Montclair State University, USA and Universidad Mayor Chile” \$25,000 (direct funds) July 1, 2014-June 30, 2015

National Science Foundation-Louis Stokes Alliances for Minority Participation (MSU director)  
The purpose of the LSAMP program is to address the national shortage of STEM-trained professionals by increasing participation among members of underrepresented minority groups. \$361,218 (directs funds) September 1, 2014 to August 31, 2019

The Margaret and Herman Sokol Institute for Pharmaceutical Life Sciences “Binding of ICER to its Own Promoter as a Mode of Cooperative Regulation” Dr. Carlos A. Molina, co-Principal investigator with Dr. Hans Schelvis \$100,000 September 1, 2008-August 31, 2012.

Sokol Faculty/Student Research Program Award of the College of Science and Mathematics at Montclair State University. “Development of transgenic zebrafish” \$1,700 June 1, 2010-June 30, 2011.

Summer Grant Development Award Program of Montclair State University. “Development of transgenic zebrafish” \$4,000 June 1, 2010-June 31, 2011.

The Margaret and Herman Sokol Faculty/Student Research Grant Program “Ubiquitination and subcellular localization of ICER” \$1,700 July 1, 2011-June 30, 2012.

## **MAJOR TEACHING EXPERIENCE:**

### **Rutgers-Graduate School of Biomedical Science:**

GSBS 5160 Biology of Human Tumors  
BIOC 5240 Molecular Biology of the News  
PATH 5070 Laboratory Animal Science.  
MSBS 5100 Current Molecular Techniques.  
BIOC 5170 Analytical Methods in Biochemistry  
GSND 520A Molecular and Cellular Biology  
BIOC 508A Current Topics in Biochemistry  
CELL 5020 Developmental Biology  
PHPY 5011 Graduate endocrinology

### **Montclair State University:**

Biology 112 Principles of Biology  
Biology 230 Cell and Molecular Biology  
Biology 409 Externship Bio Research-COOP ED  
Biology 418 Biology Independent Research  
Biology 434 Molecular Biology I  
Biology 435 Molecular Biology II  
Biology 548 Experimental Molecular Biology  
Biology 549 Topics in Developmental Biology  
Biology 562 Short Topics Molecular Biology

Biology 594 Signal Transduction  
Biology 597 Research: Biological Literature  
Biology 598 Selective Techniques in Molecular Biology  
Biology 599 Introduction to Biological Research  
Biology 698 Master's Thesis  
ENVR 531 Independent Study:Environmental STDS  
ENVR 704 Special Topics  
EAES 792 Special Topics

**Research Advisor at UMDNJ:**

Postdoctoral Fellows:

- 1) Elisabeth Memin Ph.D., 2000-2006.
- 2) Ghassan Yehia Ph.D., 1997-2003.
- 3) Ratnakar V.A.L. Pillarisetty Ph.D., 2001-2003

Doctoral Students:

- 1) Megan Fredricks, 2000-2004
- 2) Marlene Healey , 2000-2004
- 3) Luis Muñiz, 2001-2006 (F31 NIH fellowship)

Master Students:

- 1) Reza Razavi, 1996-2001
- 2) Florence Schlotter, 1997-2000
- 3) Lorraine Ampaw, 2005-2006

Medical Students:

- 1) Juan Carlos Ramos, 1996-1999 (Bristol-Myers Squibb, Fellowship).
- 2) Stephen E. Nygård, 1999-2000. (NIH Fellowship)
- 3) Christian Castillo, 2000-2001 (NIH Fellowship).

Residents (Ob/Gyn)

- 1) Maria R. Keanchong M.D., 1996
- 2) Barbara A. Hessel M.D., 1997
- 3) Barbara Mercado M.D., 1997, 98, 99
- 4) Diana Scott M.D., 2000-2001
- 5) Tracy Pipkin, M.D., 2001-2002
- 6) Dilek Cermik, M.D., 2002-2003
- 7) Abha Gupta, M.D., 2003-2005
- 8) Mamta Purohit, M.D., 2005-2007

**Research Advisor at Montclair State University:**

Thesis Master Students:

- 1) Goce Bogdanoski, 2007-2008

- 2) Craig Stephen Queenan, 2007-2008
- 3) Caitlin M. Ament, 2009-2011 NSF GK-12 Fellow
- 4) Dipika B. Patel, 2010-2011
- 5) Marni S. Crow, 2011-2012
- 6) Theodora Tsatsos, 2012-2013
- 7) Rohini Rajendran, 2013-2014
- 8) Riham Makhoul, 2013-2014
- 9) Fanaye B. Woldeamanuel, 2014-2015
- 10) Cory Haluska, 2014-2015
- 11) Joseph Bulatowicz, 2015-present
- 12) Dina Edani, 2015-2016
- 13) Christopher Thomas Greig, 2016-2017
- 14) Paula Hernandez, 2016-2017
- 15) Manohar Katara, 2017
- 16) James Reilly, 2017-2018
- 17) Jena Bedard, 2017-2018
- 18) Justin Wheelan, 2017-2018
- 19) Rosalina Caba, 2019-2021
- 20) Melissa Cabrales, 2019-2021
- 21) Douglas Job, 2020-2022
- 22) Karem Rivera, 2021-2022
- 23) Abdulkader Hallak, 2021-2022
- 24) Samantha Moscoso, 2022-2023
- 25) Melissa Spigelman, 2023-2025
- 26) Maria Fiuk, 2024-2025
- 27) Thodore Paz, 2023-2025
- 28) Mayra Matos Diaz, 2025-present
- 29) Dexter Matthews, 2025-present
- 30) Julie Duarte, 2025-present

Doctoral Students:

- 1) Justin Wheelan, 2019-2025

**ARTICLES** (peer-reviewed):

1. Candelas, G.C., Ortiz, A., and **Molina, C.A.**: The Cylindrical or Tubiliform Glands of *Nephila Clavipes*. *The Journal of Experimental Zoology* 237, 281-285, (1986).
2. **Molina, C.A.** and Ashendel, C.L.: Tumor Promoter 12-0-Tetradecanoylphorbol-13-Acetate And Sn-1, 2-Dioctanoylglycerol Increase The Phosphorylation of Protein Kinase C In Cells. *Cancer Research* 51, 4624-4630, (1991).
3. **Molina, C.A.**, Foulkes, N.S., Lalli, E., and Sassone-Corsi, P.: Inducibility And Negative Autoregulation of CREM: An Alternative Promoter Directs The Expression of ICER, An Early Response Repressor. *Cell* 75, 875-886, (1993).
4. Stehle, J.H., Foulkes, N.S., **Molina, C.A.**, Simonneaux, V., Pevet, P., and Sassone-Corsi, P.: Adrenergic Signals Direct Rhythmic Expression of Transcriptional Repressor CREM In

- the Pineal Gland. *Nature* 365, 314-320, (1993).
5. Desdouets, C., Matesic, G., **Molina, C.A.**, Foulkes, N.S., Sassone-Corsi, P., Brechot, C. and Sobczak-Thépot, J. Cell Cycle Regulation of Cyclin A Expression by the Cyclic AMP-Responsive Transcription Factors CREB and CREM. *Mol. Cell. Biol.* 15:3301-3309, (1995).
  6. Lamas, M., **Molina, C.A.**, Foulkes, N.S., Jansen, E. and Sassone-Corsi, P. Ectopic ICER Expression in Pituitary Corticotroph AtT20 Cells: Effects on Morphology, Cell Cycle and Hormonal Production. *Mol. Endocrinol.* 11:1425-1434 (1997).
  7. Razavi, R., Ramos, J.C., Yehia, G., Schlotter, F. and **Molina, C.A.** ICER-IIg is a Tumor Suppressor that Mediates the Antiproliferative Activity of cAMP. *Oncogene* 17:3015-3019 (1998).
  8. Maronde, E., Pfeffer, M., Olcese, J., **Molina, C.A.**, Schlotter, F., Dehghani, Korf, H.W. and Stehle, J.H. Transcription Factors in Neuroendocrine Regulation: Rhythmic Changes in pCREB and ICER Levels Frame Melatonin Synthesis. *J. Neuroscience* 19:3326-3336 (1999).
  9. Pfeffer, M., Maronde, E., **Molina, C.A.**, Korf H.W.- and Jörg H. Stehle. Inducible Cyclic AMP Early Repressor Protein in Rat Pinealocytes: A Highly Sensitive Natural Reporter for Regulated Gene Transcription. *Mol. Pharmacology* 56:279-289 (1999).
  10. Santiago, F., Clark, E., Chong, S., **Molina, C.A.**, Mozafari, F., Mahieux, R., Fujii, M., Azimi, N., and Kashanchi F. Transcriptional Up-regulation of Cyclin D2 Gene and Acquisition of New CDK Partners in Human T-Cell Leukemia Virus Type 1-Infected Cells. *J. Virology* 73:9917-9927 (1999).
  11. Santoro, N., Goldsmith, L.T., Heller, D., Illsley, N., McGovern, P., **Molina, C.A.**, Peters, S., Skurnick, J.H., Forst, C., and Weiss, G. Luteal Progesterone Relates to Histological Endometrial Maturation in Fertile Women. *Journal of Clinical Endocrinology & Metabolism.* 85:4207-4211 (2000).
  12. Qian, J., Yehia, G., **Molina C.A.**, Fernandes, A., Donnelly, R.J., Anjaria, D.J. Gascon, P., and Rameshwar, P. Cloning of Human Preprotachykin-I Promoter and the Role of Cyclic Adenosine 5'-Monophosphate Response Elements in Its Expression by IL-1 Stem Cell Factor. *J. Immunology* 166:2553-2561 (2001).
  13. Yehia, G., Razavi, R., Memin, E., Schlotter, F., and **Molina, C.A.** The Expression of Inducible cAMP Early Repressor (ICER) is Altered in Prostate Cancer Cells and Reverses the Transformed Phenotype of the LNCaP Prostate Tumor cell line. *Cancer Research* 61: 6055-6059 (2001).
  14. Yehia, G., Schlotter, F., Razavi, R., Alessandrini, A. and **Molina, C.A.** MAP Kinase Phosphorylates and Targets Inducible cAMP Early Repressor to Ubiquitin-Mediated Destruction. *J. Biol. Chem.* 276: 35272-35279 (2001).

15. Huening, M., Yehia, G., **Molina, C.A.**, and Christakos, S. Evidence for a Regulatory Role of Inducible Cyclic Adenosine 3'5'-Monophosphate Early Repressor (ICER) in Protein Kinase A Enhancement of Vitamin D Receptor Expression and Modulation of Hormone Action. Michel Huening, Ghassan Yehia, Carlos A. Molina, and Sylvia Christakos. *Mol. Endocrinol.* 16:2052-2064 (2002).
16. Memin, E., Yehia, G., Razavi, R. and **Molina, C.A.** ICER Reverses Tumorigenesis of Rat Prostate Tumor Cells without Affecting Cell Growth. *Prostate* 53: 225-231 (2002).
17. Nervina, J.M. Tetradis, S., Huang, Y.-F., Harrison D., **Molina, C.A.**, and Kream, B.E. Expression of Inducible cAMP Early repressor is coupled to the cAMP-protein kinase A signaling pathway in osteoblasts. *Bone*, 32: 483-490 (2003).
18. Yamamoto, S., Hong, C., Zablocki, D., Liu, J., Kim, S-J., Soler, S., Yang, G., Yehia, G., **Molina, C.A.**, Vatner, S.F., and Sadoshima, J. Activation of Mst1 causes dilated cardiomyopathy by stimulating apoptosis without compensatory ventricular myocyte hypertrophy. *J. Clin Invest.* 111: 1463-1474 (2003).
19. Tomita, H., Nazmy, M., Kajimoto, K., Yehia, G., **Molina, C.A.**, and Sadoshima, J., Inducible cAMP early repressor (ICER) is a negative feedback regulator of cardiac hypertrophy and an important mediator of cardiac myocyte apoptosis in response to b-adrenergic receptor stimulation. *Circ Res.* 93:12-22 (2003).
20. Huang, H.F.S., Wang, S., **Molina, C.A.**, Ottenweller, J.E. Preservation of spermatogenesis in spinal cord injured rats with exogenous testosterone. Relationship with serum testosterone levels and cellular localization of cAMP responsive element modulator. *Journal of Andrology* 25:95-103, (2004).
21. Kell, C.A., Dehghani, F., Wicht, H., **Molina, C.A.**, Korf, H.-W., and Stehle, J.H. Distribution of transcription factor ICER (Inhibitory cyclicAMP Early Repressor) in rodent brain and pituitary. *Journal of Comparative Neurology* 478:379-394, (2004).
22. Ding, B., Abe, J., Wei, H., Huang, Q., Walsh, R.A., **Molina C.A.**, Zhao, A., Sadoshima, J., Blaxall, B.C., Berk, B.C., and Yan, C. Functional Role of Phosphodiesterase 3 in cardiomyocyte apoptosis Implication in Heart Failure. *Circulation Research* 111:2469-2476 (2005).
23. Ding, B., Abe, J., Wei, H., Che W., Aizawa, T., **Molina C.A.**, Sadoshima, J., Blaxall, B.C., Berk, B.C., and Yan, C. A Positive Feedback Loop of Phosphodiesterase 3 (PDE3) and Inducible cAMP Early Repressor (ICER) Leads to Persistent ICER Induction and Cardiomyocyte Apoptosis. *Proceeding of National Academy of Science* 102:14771-14776 (2005).
24. Muñiz, L. Yehia, G., Mémin, E., Pillarisetty, R., and **Molina, C.A.** Transcriptional Regulation of Cyclin D2 by the PKA Pathway and Inducible cAMP Early Repressor (ICER) in Granulosa Cells. *Biology of Reproduction* 75:279-288 (2006).

25. Yan, C., Ding, B., Shishido, T., Woo, C-H., Itoh, S., Jeon, K-I., Liu, W., Xu, H., McClain, C., **Molina, C.A.**, Blaxall, B.C., Abe J. Activation of ERK5 reduces cardiac apoptosis and dysfunction via inhibition of a PDE3A-ICER feedback loop. *Circulation Research* 100:510-519 (2007).
26. Harzenetter, M.D., Novotny, A.R., Gais, P., **Molina, C.A.**, Altmayr, F., and Holzmann, B. Negative regulation of TLR responses by the neuropeptide CGRP is mediated by the transcriptional repressor ICER. *The Journal of Immunology* 179:607-615 (2007).
27. Corcoran, K.E., Malhotra, A., **Molina, C.A.** and Rameshwar, P. Stromal-derived factor-1 $\alpha$  induces a non-canonical pathway to activate endocrine-linked *Tac1* gene in non-tumorigenic breast cells. *Journal of Molecular Endocrinology* 40:113-123 (2008).
28. Shishido, T., Woo, C-H., Ding, B., McClain, C., **Molina, C.A.**, Yan, C., Yang, J., and Abe, J. Effect of MEK5/ERK5 association on Small Ubiquitin-Related Modification of ERK5: Implications for diabetic ventricular dysfunction after myocardial infarction. *Circulation Research* 102:1416-1425 (2008).
29. Woo, C-H., Le, N-T., Shishido, T., Chang, E., Lee, H., Heo, K-S., Mickelsen, D.M., Lu, Y., McClain, C., Spangenberg, T., Yan, C., **Molina, C.A.**, Yang, J., Patterson, C. and Abe, J. Novel role of C terminus of Hsc70-interacting protein (CHIP) ubiquitin ligase on inhibiting cardiac apoptosis and dysfunction *via* regulating ERK5-mediated degradation of inducible cAMP early repressor. *FASEB J.* 24: 4917-4928 (2010).
30. Mémin, E., Genzale, M., Crow, M and **Molina C.A.** Evidence that phosphorylation by the mitotic kinase Cdk1 promotes ICER monoubiquitination and nuclear delocalization. *Experimental Cell Research* 317: 2490-2502 (2011).
31. Le, N-T., Takei, Y., Shishido, T., Woo, C-H., Chang, E., Heo, K-S., Lee, H., Lu, Y., Morrell, C., Oikawa, M., McClain, C., Wang, X., Tournier, C., **Molina, C.A.**, Vorobjikina, D., Cohen, M.S., Serafimova, I.M., Taunton, J., Fujiwara, K., Yan, C., Patterson, C., Yang, J., and Abe, J. p90RSK targets the ERK5-CHIP ubiquitin E3 ligase activity in diabetic hearts and promotes cardiac apoptosis and dysfunction. *Circulation Research* 110: 536-550 (2012).
32. Healey, M., Crow, M.S., **Molina, C.A.** Ras-induced Melanoma transformation is associated with the proteasomal degradation of the tumor-suppressor ICER. *Molecular Carcinogenesis* 52:692-704 (2013).
33. Muniz, L. and **Molina, C.A.** The transcriptional repressor ICER binds to multiple loci throughout the genome. *Biochemical and Biophysical Research Communications* 478:1462-1465 (2016).
34. Greco, S.J., Yehia, G., Potian, J.A., **Molina, C.A.** and Rameshwar, P. Constitutive Expression of Inducible Cyclic Adenosine Monophosphate Early Repressor (ICER) in Cycling Quiescent Hematopoietic Cells: Implications for Aging Hematopoietic Stem Cells.

*Stem Cell Rev.* 13:116-126 (2017).

35. Cirinelli, A., Wheelan, J., Grieg, C. and **Molina, C.A.** Evidence that the transcriptional repressor ICER is regulated via the N-end rule for ubiquitination. *Experimental Cell Research* 414 (2022) 113083 (<https://doi.org/10.1016/j.yexcr.2022.113083>)
36. Munakata M., Lim S.S. and **Molina, C.A.** A Model for International Summer Research Experiences for STEM Students. *Journal of College Science Teaching* Published online: 19 Aug 2024 <https://doi.org/10.1080/0047231X.2024.2390691>
37. Muñiz, L.C., Reilly, J., Spigelman, M. and **Molina C.A.** Hyper-ovulation in an ovarian-specific transgenic mouse model bioRxiv 2025.02.21.639591; doi: <https://doi.org/10.1101/2025.02.21.639591>
38. Wheelan J., Spigelman, M., Cirinelli, A., Reilly J., and **Molina C.A.** Phosphorylation Deficient Inducible cAMP Early Repressor (ICER) Modulates Tumorigenesis and Survival in a Transgenic Zebrafish (*Danio rerio*) Model of Melanoma *Biol Open.* 2025 Aug 15;14(8). <https://doi.org/10.1242/bio.061904>.

### BOOKS, MONOGRAPHS AND CHAPTERS (Authored)

1. Delmas, V., **Molina, C.A.**, Lalli, E., de Groot, R., Foulkes, N.S., Masquillier, D., and Sassone-Corsi, P.: Complexity And Versatility of The Transcription Response To cAMP *Reviews of Physiology, Biochemistry and Pharmacology*, Springer-Verlag 124, 2-28, (1993).
2. Masquillier, D., Laoide, B.M., Delmas, V., de Groot, R., Foulkes, N.S., Benusiglio, E., **Molina, C.A.**, Schlotter, F., and Sassone-Corsi, P.: Transcription Factor CREM: A Key Element of The Nuclear Response To cAMP. *New Development in Lipid-Protein Interactions and Receptor Function*, NATO ASI Series, Eds. K.W.A. Wirtz, L. Packer, J.A. Gustafsson, A.E. Evangelopoulos and J.P. Changeux, Plenum Press 246, 139-152, (1993).
3. Lalli, E., Lee, J.S., Masquillier, D., Schlotter, F., Foulkes, N.S., **Molina, C.A.**, and Sassone-Corsi, P.: Nuclear Response To Cyclic AMP: Central Role of Transcription Factor Cyclic-AMP-Responsive-Element Modulator. *Biochemical Society Transactions* 21, 912-917, (1993).
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  91. **Bupathi, S.**, Sebasco, E., McClain, A. and **Molina, C.A.** Mapping ubiquitination sites on the transcriptional repressor ICER using site-directed mutagenesis. Fifth Annual Student Research Symposium at Montclair State University. Page 10 (A32). April 16, 2011.
  92. **DeMilio, M.D.**, Paulino, F.E., **Molina, C.A.**, and Schelvis, J.P.M. FRET analysis of ICER binding to double-stranded DNA. Fifth Annual Student Research Symposium at Montclair State University. Page 11 (A44). April 16, 2011.
  93. **Rambal, A.**, Sarkar, D., and **Molina, C.A.** Study and characterization of pharmaceuticals in the environment (PIE) using Zebrafish as a vertebrate model. Gordon Conference on Cellular &

Molecular Mechanisms of Toxicity: Understanding Innovative Mechanistic Toxicology in the Post-Genomic Era. ExxonMobil Travel Award. August 7-12, 2011.

94. Patel, D. and **Molina, C.A.** Characterization of human ICER promoter and comparative studies of its activity in different human cancer cells. 44<sup>th</sup> Annual meeting of the Metropolitan Association of College and University Biologists. October 29, 2011 Seton Hall University.
95. Sebasco, E., McClain, A. and **Molina, C.A.** Mapping ubiquitination sites on the transcriptional repressor ICER using site-directed mutagenesis. 44<sup>th</sup> Annual meeting of the Metropolitan Association of College and University Biologists. October 29, 2011 Seton Hall University.
96. Crow, M., Healey, M. and **Molina, C.A.** The proteasomal degradation of ICER is implicated in melanoma transformation where Ras is mutated. 44<sup>th</sup> Annual meeting of the Metropolitan Association of College and University Biologists. October 29, 2011 Seton Hall University.
97. Crow, M., Muniz, L. and **Molina, C.A.** ICER binds to multiple loci throughout the genome. Sixth Annual Student Research Symposium at Montclair State University. April 14, 2012.
98. Crow, M., Woldeamanuel, F.B. and **Molina, C.A.** Does ICER impart its antioncogenic function by eliciting cell death? Gordon Conference on Cell Death. July 15-20, 2012 Lucca, Italy.
99. Woldeamanuel, F.B. and **Molina, C.A.** Does ICER impart its antioncogenic function by eliciting cell death? National Science Foundation LSAMP Annual Meeting. October 5, 2012 Rutgers University.
100. Woldeamanuel, F.B. and **Molina, C.A.** Does ICER impart its antioncogenic function by eliciting cell death? 45<sup>th</sup> Annual meeting of the Metropolitan Association of College and University Biologists. October 27, 2012 Adelphi University.
101. Crow, M., and **Molina, C.A.** The putative tumor suppressor protein ICER may be an important strategy for target therapy of various malignancies. Poster presentation for Bristol-Myers Squibb Company. November 29, 2012.
102. Tsatsos, T., and **Molina, C.A.** Generation of a Transgenic Zebrafish Expressing the Transcriptional Repressor Inducible cAMP Early Repressor (ICER). Seventh Annual Student Research Symposium at Montclair State University. April 13, 2013.
103. Woldeamanuel, F.B., Alvarez, C. and **Molina, C.A.** Mapping the ubiquitination sites on the transcriptional repressor ICER. Seventh Annual Student Research Symposium at Montclair State University. April 13, 2013.
104. Hasani, A., Sebasco, E. and **Molina, C.A.** Making a transgenic Zebrafish for the expression of ICER in melanocytes as a model for relapsing melanomas. Seventh Annual Student Research Symposium at Montclair State University. April 13, 2013.
105. Woldeamanuel, F.B., Sebasco, E., Crow, M. and **Molina, C.A.** Mapping the ubiquitination sites on the transcriptional repressor ICER. New Jersey Academy of Sciences Annual Symposium. May 4, 2013 Kean University.
106. Hasani, A. and **Molina, C.A.** Making a transgenic zebrafish for the expression of ICER in melanocytes as a model for relapsing melanomas and knock out of ICER in Zebrafish. Eighth Annual Student Research Symposium at Montclair State University. April 12, 2014.
107. Woldeamanuel, F.B., and **Molina, C.A.** Identification of the ubiquitination sites of inducible cAMP early repressor using site-directed mutagenesis and western blot analysis. Eighth Annual Student Research Symposium at Montclair State University. April 12, 2014.
108. Makhoul, R., Rajendran, R. and **Molina, C.A.** Generation and characterization of ovarian specific promoter sequences in Zebrafish (*Danio rerio*). Eighth Annual Student Research Symposium at Montclair State University. April 12, 2014.
109. Aftab, T., Uddin, S. and **Molina, C.A.** Examining the effects of eating habits on circadian rhythm

- and body weight: A link between humans and zebra fish. Eighth Annual Student Research Symposium at Montclair State University. April 12, 2014.
110. Woldeamanuel, F.B., Alvarez, C. and **Molina, C.A.** Mapping the ubiquitination sites on the transcriptional repressor ICER. Experimental Biology Conference, April 26-30, 2014 San Diego, CA.
  111. Gnanasekar, M., Hasani, A. and **Molina, C.A.** Knock out of Inducible cAMP Early Repressor in zebrafish cell lines through the use of the CRISPR/Cas9 system. Special Meeting of the Federation of American Societies for Experimental Biology on Genome Engineering-Cutting-Edge Research and Applications. Nassau, Bahamas. June 22-27, 2014.
  112. Tsatsos, T., Makhoul, R., Rajendran, R. and **Molina, C.A.** Using ovarian-specific transgenic zebrafish to study the molecular mechanisms of ovulation. Cold Spring Harbor Asia Conferences on Genetics, genomics and Phenomics of Fish. October 20-24, 2014. Suzhou, China.
  113. Jumbo, P., Kim, L., Olmos, A., Slebos, S. and **Molina, C.A.** CRISPR/Cas-based Systems and their Potential Applications in Microbiology. Minisymposium for Partners of the Americas Foundation Grant at Universidad Mayor, Santiago de Chile, Center for Genomics and Bioinformatics, January 13, 2015.
  114. Ali, B. Vercellino, J., Gomez, M.T. and **Molina, C.A.** Using CRISPR/Cas9 gene editing in Cancer Biology. Minisymposium for Partners of the Americas Foundation Grant at Universidad Mayor, Santiago de Chile, Center for Genomics and Bioinformatics, January 13, 2015.
  115. Walker, S. Fuentes, A., Labra, V. and **Molina, C.A.** Can CRISPR/Cas9 gene editing be use for Neurological Conditions? Minisymposium for Partners of the Americas Foundation Grant at Universidad Mayor, Santiago de Chile, Center for Genomics and Bioinformatics, January 13, 2015.
  116. Jaronsky, N., Ferrara, N., Villacreses, J. and **Molina, C.A.** Improving plant crops using CRISPR/Cas9 gene editing. Minisymposium for Partners of the Americas Foundation Grant at Universidad Mayor, Santiago de Chile, Center for Genomics and Bioinformatics, January 13, 2015.
  117. Young, M. and **Molina, C.A.** CRISPR/Cas System in genome engineering. Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  118. Vercellino, J., Ali, B., Gomez, M.T., and **Molina, C.A.** The application of the CRISPR/Cas9 system in cancer. Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  119. Walker, S., Labra, V., Fuentes, A. and **Molina, C.A.** CRISPRCas9 in neuroscience. Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  120. Ferrara, N., Jaronsky, N., Villacreses, J., and **Molina, C.A.** CRISPR/Cas9 plant genome editing. Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  121. Jumbo, P., Olmos, A., Slevo, S. and **Molina, C.A.** CRISPRCas systems and their potential applications in microbiology. Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  122. Haluska, C and **Molina, C.A.** Utilizing CRISPRCas9 gene editing technique to eliminate target sequence from ICER promoter in Zebrafish (*Danio rerio*). Nine Annual Student Research Symposium at Montclair State University. April 26, 2015.
  123. Haluska, C and **Molina, C.A.** Utilizing CRISPR-Cas9 Gene Editing Technique to Eliminate Target Sequence from ICER Promoter in Zebrafish (*Danio rerio*). 48th Annual meeting of the Metropolitan Association of College and University Biologists. November 7, 2015 Montclair State University.
  124. Bulatowicz, J., Edani, D., Nunez, R. **Molina, C.A.** Lysine Knockouts of Inducible cAMP Early

- Repressor (ICER) are Strongly Localized to the Nucleus of Transfected PAC2 Zebrafish Fibroblasts. 48th Annual meeting of the Metropolitan Association of College and University Biologists. November 7, 2015 Montclair State University. Awarded Best Poster for Master Student.
125. Szpernoga, A. and **Molina, C.A.** Screening transgenic Zebrafish (*Danio rerio*) expressing EGFP under an ovarian specific promoter. Tenth Annual Student Research Symposium at Montclair State University. April 15, 2016.
  126. Edani, D. and **Molina, C.A.** Functional Consequences of ICER Ubiquitination. Tenth Annual Student Research Symposium at Montclair State University. April 15, 2016.
  127. Haluska, C., Gnanasekar, M., Hasani, A., and **Molina, C.A.** Employing the CRISPR/Cas9 system to delete Inducible cAMP Early Repressor using an isoforms-specific approach. Keystone Symposia on Precision Genome Engineering. Breckenridge, Colorado, January 8-12, 2017.
  128. Grieg, C and **Molina, C.A.** Identifying the exact ubiquitination site of ICER in melanoma cells. First Annual Wehner Research Symposium at Montclair State University. February 10, 2017.
  129. Hernandez, P., Grinberg, M., and **Molina, C.A.** Characterization of ovarian specific promoter sequences of a transgenic zebrafish. First Annual Wehner Research Symposium at Montclair State University. February 10, 2017.
  130. Grieg, C and **Molina, C.A.** Identifying the exact ubiquitination site of ICER in melanoma cells. Eleventh Annual Student Research Symposium at Montclair State University. April 28, 2017.
  131. Grinberg, M., Hernandez, P. and **Molina, C.A.** Zebrafish as a Model Organism for Ovarian Specific Expression of Transgenes. Eleventh Annual Student Research Symposium at Montclair State University. April 28, 2017.
  132. Cirinelli, A. and **Molina, C.A.** ICER Knockout. Eleventh Annual Student Research Symposium at Montclair State University. April 28, 2017.
  133. Grinberg, M., Hernandez, P. and **Molina, C.A.** Zebrafish as a Model Organism for Ovarian Specific Expression of Transgenes. Endocrine Society Annual Meeting, March 17, 2018. Poster #: SAT-240.
  134. Grinberg, M., Hernandez, P. and **Molina, C.A.** Zebrafish as a Model Organism for Ovarian Specific Expression of Transgenes. Eleventh Annual Student Research Symposium at Montclair State University. April 27, 2018.
  135. Grinberg, M. Let's Feed the World and Have More Babies. Mario M. Casabona Future Scientists Awards Competition, College of Science and Mathematics, Montclair State University. April 18, 2018. First Place.
  136. Cirinelli, A., Lange K., and **Molina, C.A.** Transmembrane Transport of an Inducible cAMP Early Repressor and E6apbd Chimera as a Possible Treatment for Cancers. Keystone Symposia on Delivering Therapeutics Across Biological Barriers (E1) May 6-9, 2019. Royal Dublin Society, Dublin, Ireland.
  137. Cirinelli, A. Transmembrane Transport of an Inducible cAMP Early Repressor (ICER) and E6apBD Protein Chimera as a Possible Treatment for Cancers. Casabona Future Scientists Awards Competition, College of Science and Mathematics, Montclair State University. April 10, 2019. First Place.
  138. Turano, P Coconut Oil Contributes to Nonalcoholic Fatty Liver Disease (NAFLD) In A Gender Dependent Manner. Casabona Future Scientists Awards Competition, College of Science and Mathematics, Montclair State University. April 21, 2021. Second Place and Audience Favorite Award.
  139. **Molina, C.A.**, Spigelman, M., Reilly, J., Cirinelli, A., and Wheelan, J. Is ICER, a protein with antitumor functions, paradoxically eliciting refractory tumors? Cell Symposia: Overcoming

- Therapy Resistance in Cancer (Online). November 8-10, 2021. P2.01.
140. Spigelman, M. The Role of ICER in Melanoma: A Survival Study in Zebrafish. Casabona Future Scientists Awards Competition, College of Science and Mathematics, Montclair State University. November 10, 2021. Second Place and Audience Favorite Award.
  141. **Molina, C.A.**, Wheelan, J., Cirinelli, A., Reilly, J., Spigelman, M., and Pallen, M. Is ICER, a protein with antitumor functions, paradoxically eliciting refractory tumors? Cell Symposia: Hallmarks of Cancer. October 30-November 1, 2022. San Diego CA. P1.025
  142. **Molina, C.A.**, Cirinelli, A., Wheelan, J., and Grieg, C. The transcriptional repressor ICER is regulated via the N-end rule for ubiquitination. Keystone Symposia on Ubiquitin Biology. November 6-9, 2022. Vancouver, Canada. P2005.
  143. Munakata, M., Lim, S.S and **Molina, C.A.** The Impact of an International Research Experience on Undergraduate and Graduate Students' Understandings about Science. National Association for Research in Science Teaching Annual Meeting. April 18-21, 2023.
  144. Spigelman, M., Pallen, M., Reilly, J., and **Molina, C.A.** Investigating the Link between the ICER Protein and Ovulation in Zebrafish Models. Montclair State University Student Research Symposium, April 26, 2023.
  145. Homsy, K., Wheelan, J., Cirinelli, A. Reilly, J., Spigelman, M. and **Molina, C.A.** Is ICER, a protein with anti tumor functions, paradoxically eliciting refractory tumors? Montclair State University Student Research Symposium, April 26, 2023.
  146. Rodriguez, M., Spigelman, M., Reilly, J., Wheelan, J. and **Molina, C.A.** How modifying of the ICER protein could create ER stress and trigger the misfolded protein response. 15 th Annual GS-LSAMP/NNJ-B2B STEM Research Conference. October 13, 2023.
  147. Islas, W.E., Spigelman, M., Reilly, J., Wheelan, J. and **Molina, C.A.** Investigating the Link Between Elevating levels of the ICER protein and its Effects on Ovulation. 15th Annual GS-LSAMP/NNJ-B2B STEM Research Conference. October 13, 2023
  148. Kermah, A.,Wooten, D., Spigelman, M., Reilly, J., Wheelan, J. and **Molina, C.A.** Melanoma's Resistance to ICER and Clytia Hemisphaerica's Role as A Potential Vector Of ICER In Future Study. C.A.15 th Annual GS-LSAMP/NNJ-B2B STEM Research Conference. October 13, 2023
  149. Spigelman, M., Salas, W.E. and **Molina, C.A.** Like Sushi, you're going to like this! Casabona Future Scientists Awards Competition, College of Science and Mathematics, Montclair State University. November 28, 2023. First Place Award.
  150. Spigelman, M., and **Molina, C.A.** A New Model for Studying Melanoma. 8th Annual Darwin Day and Wehner Research Symposium. Montclair State University. February 14, 2024.
  151. Wheelan, J and **Molina, C.A.** Characterization of Transgenic Zebrafish (Danio rerio) Lines Expressing Variants of ICER (Inducible cAMP Response Element); Implications for Melanoma Pathogenesis. Montclair State University Student Research Symposium, April 26, 2024.
  152. Spigelman, M. and **Molina, C.A.** Tet-On Twist: A Game-Changer in Melanoma Treatment Discovery. Montclair State University Student Research Symposium, April 26, 2024.
  153. Spigelman, M. and **Molina, C.A.** Tet-On Twist: A Game-Changer in Melanoma Treatment Discovery. International Zebrafish Society, Madison WI July 9-13, 2025.
  154. Spigelman, M. and **Molina, C.A.** Phosphorylation deficient inducible cAMP early repressor modulates tumorigenesis and survival in a transgenic model of melanoma. The Connecticut Valley Zebrafish Meeting. Dartmouth College, New Hampshire, September 5, 2025.

**INVITED SPEAKER:**

1. April 1994, Hinterzartener Kreis für Krebsforschung, Starzach, Germany.
2. May 1995, University of Connecticut, Department of Pharmacy, Storrs, CT.
3. September 1995, Purdue University, Biochemistry and Molecular Biology Program, West Lafayette, IN.
4. April 1996, Serono International Meeting on "Cell Death in Reproductive Physiology", Chicago IL.
5. June 1996, University of Colorado, Cancer Center, Denver, CO.
6. February 1997, New Jersey Medical School, Department of Biochemistry and Molecular Biology, Newark, NJ.
7. September 1997, New Jersey Medical School, Department of Microbiology and Genetics, Newark, NJ.
8. March 1998, Hunter College, Department of Biological Sciences, NY, NY.
9. April 1999, University of Puerto Rico Medical School, Departments of Biochemistry, Physiology, Pharmacology, and the MBRS Program, San Juan, PR.
10. May 1999, Veterans Administration Medical Center, East Orange, NJ.
11. July 1999, Summer Research Program, Purdue University West Lafayette, IN.
12. July 1999, Summer Research Program, NJMS.
13. July 2000, invited speaker, Summer Research Program, NJMS.
14. December 2000, New Jersey Medical School, Department of Surgery Newark, NJ.
15. February 2001, Cancer Institute of New Jersey, New Brunswick, NJ.
16. February 2001, University of Puerto Rico, Department of Biology, Rio Piedras, PR.
17. March 2001, University of Puerto Rico, School of Sciences, Cayey, PR.
18. December 2001, GPCC Scientific Retreat, Piscataway, NJ
19. September 2001, University of Puerto Rico, School of Sciences, Cayey, PR.
20. March 2002, University of Puerto Rico, School of Sciences, Cayey, PR.
21. May 2002, Indiana University School of Medicine Cancer Center, Indianapolis IN
22. May 2002, Purdue University Cancer Center, West Lafayette, IN.
23. October 2002, University of Puerto Rico, School of Sciences, Cayey, PR.
24. March 2003, University of Puerto Rico, School of Sciences, Cayey, PR.
25. March 2003, University of Minnesota Cancer Center, Minneapolis MN,
26. April 2004, University of Puerto Rico, School of Sciences, Cayey, PR.
27. April 2005, University of Puerto Rico, School of Sciences, Cayey, PR.
28. May 2005, New Jersey Commission for Cancer Research Annual meeting, Session Chair, UMDNJ-Piscataway, NJ.
29. April 2006, Workshop at University of Puerto Rico, School of Sciences, Cayey, PR.
30. May 2006, New Jersey Commission for Cancer Research Annual meeting, Session Chair, UMDNJ-Piscataway, NJ.
31. April 2009, invited speaker. Department of Biology, Saint Peter's College, Jersey City, NJ.
32. March 11, 2010, invited speaker. Department of Biology, Essex County College, Newark, NJ.
33. March 13, 2010, invited lecturer. Teachers As Scholars Program of Montclair State University.
34. June 4, 2010, invited speaker. GK-12 STEM Math and Science Day, Montclair State University.
35. August 15-20, 2010 invited speaker for a Gordon Conference on "Reproductive Tract Biology".
36. March 3, 2011 invited speaker for The Department of Biology and Molecular Biology Seminar

- Series at Montclair State University.
37. March 4, 2011 invited speaker for The Department of Pharmacology and Toxicology Seminar Series at The University of Connecticut.
  38. April 5, 2011 invited speakers for Sokol Institute for Pharmaceutical Life Sciences Research Symposium. Montclair State University.
  39. May 6, 2011, invited lecturer. Teachers As Scholars Program of Montclair State University.
  40. May 7, 2011 invited speaker and workshop director, Weston Science Prep Day. Montclair State University.
  41. June 3, 2011 invited speaker. GK-12 STEM Math and Science Day, Montclair State University.
  42. July 20, 2011 invited speaker. Biology and Cell Biology Molecular Biology Programmes, The Chinese University of Hong Kong.
  43. February 22, 2012. Department of Biological Sciences, Seton Hall University, South Orange, NJ.
  44. November 1, 2012 invited speaker. Department of Biology, Saint Peter's College, Jersey City, NJ.
  45. December 11, 2012 invited speaker, MSU Sustainability Series Earth and Environmental Studies, CSAM.
  46. October 16, 2014, invited speaker. University of Macau, China. Faculty of Health Sciences.
  47. January 6, 2015, invited speaker. Universidad Mayor, Santiago de Chile, Center for Genomics and Bioinformatics.
  48. March 10, 2015, invited speaker. Institute of Molecular Biosciences, University of Graz, Austria.
  49. September 16, 2015, invited speaker. The Center for Quantitative Obesity Research. Montclair State University.
  50. October 23, 2015, invited speaker. Dunworkin Club. Montclair, NJ.
  51. February 16, 2016, invited speaker. The MSU Sustainability Seminar Series.
  52. April 4, 2016, invited speaker. βββ Xi Honor Society, New Jersey City University.
  53. January 30, 2020, invited speaker. Department of Cell Biology and Molecular Medicine, Rutgers Medical School, Newark NJ.
  54. October 6, 2023, invited speaker. RISE Program at College of Natural Sciences, University of Puerto Rico, Rio Piedras Campus, San Juan Puerto Rico.
  55. February 26, 2024, invited speaker. Department of Pharmacology and Toxicology, University of Puerto Rico, Medical School, San Juan Puerto Rico.

As of Jan 23, 2026