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Executive Director, Linda Crnic Institute for Down Syndrome
Anna and John J. Sie Endowed Chair in Genomics
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includeds3.org
ds-connect.org

I. EDUCATION

1994 **B.S.** Biology. Universidad Nacional de Mar del Plata, Argentina.
1999 **Ph.D.** Biology. Universidad de Buenos Aires, Argentina.

II. ACADEMIC EMPLOYMENT & POSITIONS

1995-1999 **Doctoral Research Associate**
Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET)
Instituto de Investigaciones en Biología Molecular e Ingenieria Genética (INGEBI)
Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires.
Advisors: Dr. Mirtha M. Flawiá and Dr. Héctor N. Torres.

1999-2004 **Post-Doctoral Research Associate**
The Salk Institute for Biological Studies, La Jolla, CA, U.S.A.
Advisor: Dr. Beverly Emerson.

2000-2002 **The PEW Charitable Trusts Latin American Fellow.**

2003-2005 **The Leukemia and Lymphoma Society Special Fellow.**

2004-present 2004 - **Assistant Professor,**
2010 - **Associate Professor (with tenure),**
2015 - **Associate Professor (Visiting),**
2017- **Professor (Visiting)**,
Department of Molecular, Cellular and Developmental Biology
University of Colorado at Boulder (CU-Boulder), CO, U.S.A.

2008-2012 **Instructor,** Cold Spring Harbor Laboratories, course on Eukaryotic Gene Expression.

2009-2015 **Howard Hughes Medical Institute Early Career Scientist.**

2010-2020 **Co-Leader**, Molecular and Cellular Oncology Program, University of Colorado Cancer Center (UCCC).

2010-present **Director**, The Functional Genomics Facility at the University of Colorado.

2015-present **Professor (with tenure)**, Department of Pharmacology, University of Colorado School of Medicine (CU-SOM), Aurora, CO, U.S.A.

2015-2017 **Associate Director for Science,** Linda Crnic Institute for Down Syndrome, CU-SOM.

2017-present **Executive Director, Anna and John J. Sie Endowed Chair in Genomics**, Linda Crnic Institute for Down Syndrome, CU-SOM.

III. PROFESSIONAL MEMBERSHIPS

2005-present American Association for Cancer Research (AACR).
2005-present University of Colorado Cancer Center.
2015-present Trisomy 21 Research Society.
2018-present Human Immunology and Immunotherapy Initiative (HI3), CU-SOM.
2022-present Down Syndrome Medical Interest Group – USA.
2023-present American Society of Human Genetics.
2024-present The Cytokine Society.

IV. AWARDS

1995 Gold Medal. Universidad Nacional de Mar del Plata. Prize to Outstanding Students.
1996 Gold Medal. Rotary Club International. Prize to students graduating with best grades from Universidad Nacional de Mar del Plata, Argentina.
1995 Pre-Doctoral Fellowship. CONICET, Argentina.
1997 Advanced Pre-Doctoral Fellowship. CONICET, Argentina.
2000 The Pew Charitable Trusts Latin American Fellowship in the Biomedical Sciences.
2003 The Leukemia and Lymphoma Society Special Fellowship.
2005 The March of Dimes Basil O'Connor Award.
2007 The Mortar Board Society Teaching Award.
2009 Howard Hughes Medical Institute, Early Career Scientist Award.
2014 The James P. Holland Memorial Lecture, University of Indiana Bloomington.*
*Award recognizing faculty from under-represented minorities in the life sciences.
2018 Pueschel-Tjossem Memorial Research Award, National Down Syndrome Congress.

V. PUBLICATIONS

Publication metrics as of February 2026 (as per Google Scholars):

Total peer-reviewed publications: 144

Total citations: 14,172

h-Index: 56

i10-index: 115

As Doctoral Candidate:

1. The Nitric Oxide transduction pathway in *Trypanosoma cruzi*.
Paveto, C., Pereira, C., **Espinosa, J.M.**, Montagna, A., Farber, M., Flawiá, M.M., and Torres, H.N.
The Journal of Biological Chemistry, 270:16756-16579, **1995**.
URL: https://www.sciencedirect.com/science/article/pii/S0021925817468785?via%3Dihub

2. The control of *Trypanosoma cruzi* epimastigote motility through the nitric oxide pathway.
Pereira, C., Paveto, C., **Espinosa, J.**, Alonso, G., Flawiá, M.M. and Torres, H. N.
The Journal of Eukaryotic Microbiology, 44(2):155-156, **1997**.
URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1550-7408.1997.tb05952.x

3. Factors from *Trypanosoma cruzi* interacting with AP-1 sequences.
Espinosa, J.M., Martinetto, H., Portal, D., D'Angelo, M., Torres, H. and Flawiá, M.M.
The Journal of Eukaryotic Microbiology, 46:516-521, **1999**.
URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1550-7408.1999.tb06069.x

4. mRNA encoding a putative RNA Helicase of the DEAD-box gene family is up-regulated in trypomastigotes of *Trypanosoma cruzi*.

Diaz Anel, A., Rossi, S.M., **Espinosa, J.M.**, Guida, C., Freitas, F.A., Kornblihtt, A.R., Zingales, B., Flawiá, M.M., and Torres, H. N.
The Journal of Eukaryotic Microbiology, 47:555-60, **2000**.
URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1550-7408.2000.tb00089.x

5. *Trypanosoma cruzi* TcSRPK, the first protozoan member of the SRPK family, is biochemically and functionally conserved with metazoan SR protein-specific kinases.
Portal, D., Lobo, G.S., Kadener, S., Prasad, J., **Espinosa, J.M.**, Pereira, C.A., Tang, Z., Lin, R.J., Manley, J.L., Kornblihtt, A.R., Flawiá, M.M. and Torres, H.N.
Molecular and Biochemical Parasitology, 127(1):9-21, **2003**.
URL: https://www.sciencedirect.com/science/article/pii/S0166685102002992

6. An early ancestor in the evolution of splicing: a *Trypanosoma cruzi* serine-arginine-rich protein (TcSR) is functional in cis-splicing.
Portal, D., **Espinosa, J.M.**, Lobo, G.S., Kadener, S., Pereira, C.A., De La Mata, M., Tang, Z., Lin, R.J., Kornblihtt, A.R., Baralle, F.E., Flawiá, M.M. and Torres, H.N.
Molecular and Biochemical Parasitology, 127(1):37-46, **2003**.
URL: https://www.sciencedirect.com/science/article/pii/S0166685102003018

7. *Trypanosoma cruzi* Poly Zinc Finger Protein: a novel DNA/RNA-binding CCHC-Zinc Finger Protein.
Espinosa, J.M., Portal, D., Lobo, G.S., Pereira, C. A., Alonso, G.D., Gómez, E.B., Lan, G.H., Rivera Pomar, R.V., Flawiá, M.M., and Torres, H.N.
Molecular and Biochemical Parasitology, 131(1):35-44, **2003**.
URL: https://www.sciencedirect.com/science/article/pii/S0166685103001877

As Post-Doctoral Fellow:

8. Transcriptional regulation by p53 through intrinsic DNA/chromatin binding and site-directed cofactor recruitment.
Espinosa, J.M. and Emerson, B.M.
Molecular Cell, 8(1):57-69, **2001**.
***** Selected by Cell Press as 'Featured Article'.
****** Selected by Science magazine for its 'Editor's Choice' column.
*******Selected by Faculty of 1000 as 'Exceptional'.
URL: http://www.cell.com/molecular-cell/retrieve/pii/S1097276501002830

9. p53 functions through stress- and promoter-specific recruitment of transcription initiation components before and after DNA damage.
Espinosa, J.M., Verdún, R.E. and Emerson, B.M.
Molecular Cell, 12(4):1015-1027, **2003**.
* Selected by Faculty of 1000 as 'Must Read'.
URL: http://www.cell.com/molecular-cell/retrieve/pii/S1097276503003599

As Independent Investigator:

10. *S. pombe* mst2+ encodes a MYST-family histone acetyltransferase that negatively regulates telomere silencing.
Gómez, E.B., **Espinosa, J.M**., and Forsburg, S.L.
Molecular and Cellular Biology, 25(20):8887-903, **2005**.
URL: http://mcb.asm.org/cgi/reprint/25/20/8887

11. Gene-specific requirements for P-TEFb activity and RNA polymerase II phosphorylation within the p53 transcriptional program.
Gomes, N.P., Bjerke, G., Llorente, B., Szostek, S.A., Emerson, B.M. and **Espinosa, J.M.**
Genes and Development, 20(5):601-12, **2006**.
***** Selected by *Genes and Development* editors for a special 'Perspective' appearing in *Genes and Development*, 20(6):643-7.
****** Selected by Faculty of 1000 as 'Recommended'.

URL: http://genesdev.cshlp.org/content/20/5/601.long

12. CDK8 is a stimulus-specific positive coregulator of p53 target genes.
Donner, A.J., Szostek, S.A., Hoover, J.M. and **Espinosa J.M.**
Molecular Cell, 27(1):121-133, **2007**.
***** Selected by the ISI portal as one of the Top 50 articles in the Cell Cycle field in 2009.
URL**:** http://www.cell.com/molecular-cell/retrieve/pii/S1097276507003279

13. Doxazolidine induction of apoptosis by a topoisomerase II-independent mechanism.
Kalet, B.T., McBryde, M., **Espinosa, J.M.** and Koch, T.
Journal of Medicinal Chemistry, 50(18):4493-500, **2007**.
URL**:** http://pubs.acs.org/doi/full/10.1021/jm070569b?cookieSet=1

14. Stimulus-specific transcriptional regulation within the p53 network.
Donner, A.J., Hoover, J.M., Szostek, S.A., and **Espinosa J.M.**
Cell Cycle, 6(21):2594-8, **2007**.
URL**:** http://www.landesbioscience.com/journals/cc/article/4893/

15. RNA polymerase II pauses and associates with pre-mRNA processing factors at both ends of genes.
Glover-Cutter, K., Kim, S., **Espinosa, J.** and Bentley, D.L.
Nature Structural and Molecular Biology, 15(1):71-8, **2008**.
***** Selected by Faculty of 1000 as 'Recommended'.
URL: http://www.nature.com/nsmb/journal/v15/n1/full/nsmb1352.html

16. Mechanisms of regulatory diversity within the p53 transcriptional network *(invited review).*
Espinosa, J.M.
Oncogene, 27(29):4013-23, **2008**.
URL: http://www.nature.com/onc/journal/v27/n29/full/onc200837a.html

17. Cooperative activity of cdk8 and GCN5L within Mediator directs tandem phosphoacetylation of histone H3.
Meyer, K.D., Donner, A.J., Knuesel, M.T., York, A.G., **Espinosa J.M.,** Taatjes, A.D.
EMBO Journal, 27(10):1447-57, **2008**.
URL: http://www.nature.com/emboj/journal/v27/n10/full/emboj200878a.html

18. BH3 activation overcomes Hdmx suppression of apoptosis and co-operates with Nutlin to induce cell death.
Wade, M., Rodewald, L.W., **Espinosa, J.M.** and Wahl, G.M.
Cell Cycle, 7(13): 1973-82, **2008**.
URL: http://www.landesbioscience.com/journals/6/article/6072/

19. Multiple p53-independent gene silencing mechanisms define the cellular response to p53 activation.
Paris, R., Henry, R.E., Stephens, S.J., McBryde, M. and **Espinosa, J.M.**
Cell Cycle 7(15):2427-33, **2008**.
URL: http://www.landesbioscience.com/journals/cc/article/6420/

20. Histone H2B ubiquitination: the cancer connection *(invited review).*
Espinosa, J.M.
Genes and Development, 22(20):2743-9, **2008**.
URL: http://genesdev.cshlp.org/content/22/20/2743.long

21. The human CDK8 subcomplex is a histone kinase that requires Med12 for activity and can function independently of Mediator.
Knuesel M.T., Meyer K.D., Donner A.J., **Espinosa J.M.**, Taatjes D.J.
Molecular and Cellular Biology, 29(3):650-61, **2009.**
URL: http://mcb.asm.org/cgi/content/full/29/3/650?view=long&pmid=19047373

22. A role for Chk1 in blocking transcriptional elongation of p21 RNA during the S phase checkpoint.

Beckerman, R., Donner, A.J., Mattia, M., Peart, M.J., Manley, J.M., **Espinosa, J.M.** and Prives, C.
Genes and Development, 23(11):1364-77, **2009.**
URL: http://genesdev.cshlp.org/content/23/11/1364.long

23. Differential regulation of p53 target genes: it's (core promoter) elementary *(invited review).*
Gomes, N.P. and **Espinosa, J.M.**
Genes and Development, 24(2):111-4, **2010.**
URL: http://genesdev.cshlp.org/content/24/2/111.long

24. CDK8 is a positive regulator of transcriptional elongation within the serum response network.
Donner, A.J., Ebmeier, CC, Taatjes, D.J. and **Espinosa, J.M.**
Nature Structural and Molecular Biology, 17(2):194-201, **2010.**
***** Selected for the cover of the February 2010 issue of Nature SMB.
** Selected by Faculty of 1000 as 'Recommended'.
URL: http://www.nature.com/nsmb/journal/v17/n2/full/nsmb.1752.html

25. The histone deacetylase Sirt6 regulates glucose homeostasis via HIF1a.
Zhong, L., D'Urso, A., Toiber, D., Sebastian, C., Henry, R.E., Vadysirisack, D.D., Guimaraes, A., Marinelli, B., Wikstrom,J.D., Nir, T., Clish, C.B., Vaitheesvaran, B., Iliopoulos, O., Kurland, I., Dor, Y., Weissleder, R., Shirihai, O.S., Ellisen, L.W., **Espinosa, J.M.** and Mostoslavsky, R.
Cell, 140(2):280-293, **2010.**
***** Selected by Faculty of 1000 as 'Must Read'.
URL: http://www.cell.com/retrieve/pii/S0092867409016274

26. Gene-specific repression of the p53 target gene PUMA via intragenic CTCF-Cohesin binding.
Gomes, N.P. and **Espinosa, J.M.**
Genes and Development, 24(10): 1022-34, **2010.**
* Selected by Nature Cancer Reviews for its 'Highlight' section.
****** Selected by Faculty of 1000 as 'Recommended'.
URL: http://genesdev.cshlp.org/content/24/10/1022.long

27. CDK8: a positive regulator of transcription *(invited review)*.
Galbraith, M.D., Donner, A.J. and **Espinosa, J.M.**
Transcription, 1(1):4-12, **2010.**
URL: http://www.landesbioscience.com/journals/transcription/article/12373/

28. Disparate chromatin landscapes and kinetics of inactivation impact on differential regulation of p53 target genes.
Gomes, N.P. and **Espinosa, J.M.**
Cell Cycle, 9(17):3428-3437, **2010.**
URL: http://www.landesbioscience.com/journals/cc/article/12998/

29. The meaning of pausing *(invited review)*.
Espinosa, J.M.
Molecular Cell, 40(4):507-8, **2010.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/21095581

30. Lessons on transcriptional control from the serum response network *(invited review)*.
Galbraith, M.D. and **Espinosa, J.M.**
Current Opinions in Genetics and Development, 21(2):160-6, **2011.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/21316215

31. A DR4:tBID axis drives the p53 apoptotic response by promoting oligomerisation of poised BAX.
Henry, R.E., Andrysik, Z., Paris, R., Galbraith, M.D. and **Espinosa, J.M.**
EMBO Journal, 13;31(5):1266-78, **2012.**
URL: http://www.nature.com/emboj/journal/vaop/ncurrent/full/emboj2011498a.html

32. Get Back TFIIF, Don't Let Me Gdown1 *(invited review)*.
Espinosa, J.M.

Molecular Cell, 45(1):3-5, **2012.**
URL: http://www.cell.com/molecular-cell/retrieve/pii/S1097276511009890

33. The p53 circuit board *(invited review)*.
Sullivan, K.D., Gallant-Behm, C.L., Henry, R.E., Fraikin, J.L. and **Espinosa, J.M.**
Biochimica et Biophysica Acta Reviews in Cancer, 1825(2):229-44*,* **2012.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/22333261

34. ATM and MET are synthetic lethal with non-genotoxic activation of p53.
Sullivan, K.D., Padilla-Just, N., Henry, R.E., Porter, C.C., Kim, J., Tentler, J.J., Eckhardt, S.G., Tan, A.C, DeGregori, J. and **Espinosa, J.M.**
Nature Chemical Biology, 8(7):646-54*,* **2012.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/22660439
*Selected by the HHMI bulletin for a special story entitled *'Cancer's Dead End'.*

35. CBX3 regulates efficient RNA processing genome-wide.
Smallwood, A., Hong, G.C., Jin, F., Henry, R.E., **Espinosa, J.M.** and Ren, B.
Genome Research, 22(8):1426-36*,* **2012.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/22684280

36. ΔNp63α represses anti-proliferative genes via H2A.Z deposition.
Gallant-Behm, C.L., Ramsey, M.R., Bensard, C.L., Nojek, I., Tran, J., Liu, M., Ellisen, L.W. and **Espinosa, J.M.**
Genes and Development, 26(20):2325-36, **2012.**
*Selected by the Cancer Discovery AACR publication for its Cancer News section.
URL: http://www.ncbi.nlm.nih.gov/pubmed/23019126

37. The impact of post-transcriptional regulation in the p53 network *(invited review)*.
Freeman, J.A. and **Espinosa, J.M.**
Briefings in Functional Genomics, 12(1):46-57, **2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23242178

38. ΔNp63α utilizes multiple mechanisms to repress transcription in squamous cell carcinoma cells.
Gallant-Behm, C.L. and **Espinosa, J.M.**
Cell Cycle, 12(3): 409-16, **2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23324337

39. How does ΔNp63α drive cancer? *(invited review).*
Gallant-Behm, C.L. and **Espinosa, J.M.**
Epigenomics, 5(1):5-7, **2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23414311

40. A genetic screen identifies TCF3/E2A and TRIAP1 as pathway-specific regulators of the cellular response to p53 activation.
Andrysik, Z., Kim, J., Tan, A.C. and **Espinosa, J.M.**
Cell Reports, 3:1-9, **2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23684607

41. HIF1A employs CDK8-Mediator to stimulate RNAPII elongation in response to hypoxia.
Galbraith, M.D., Allen, M.A., Bensard, C.L., Wang, X., Schwinn, M.K., Qin, B., Long, H.W., Daniels, D.L., Hahn, W.C., Dowell, R.D. and **Espinosa, J.M.**
Cell, 153(6):1327-39, **2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23746844

42. Tumor suppression by p53: is apoptosis important or not? *(invited review).*
Mellert, H. and **Espinosa, J.M.**
Cell Reports, 3(5):1335-6**, 2013.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/23726020

43. Mutual exclusivity of MED12/MED12L, MED13/13L, and CDK8/19 paralogs revealed within the CDK8-Mediator kinase module.
Daniels, D.L., Ford, M., Schwinn, M.K., Benink, H., Galbraith, M.D., Amunugama, R., Jones, R., Allen., D, Okazaki, N., Yamakawa, H., Miki, F., Nagase, T., **Espinosa, J.M.** and Urh, M.
Journal of Proteomics and Bioinformatics, S2:004, **2013.**
URL: http://dx.doi.org/10.4172/jpb.S2-004

44. ERK phosphorylation of MED14 in promoter complexes during mitogen-induced gene activation by Elk-1.
Galbraith, M.D., Saxton, J., Li, L., Shelton, S., Zhang, H., **Espinosa, J.M.** and Shaw, P.E.
Nucleic Acid Research, 41(22):10241-53, **2013**.
URL: http://nar.oxfordjournals.org/content/41/22/10241.long

45. Inhibition of telomerase recruitment and cancer cell death.
Nakashima, M., Nandakumar, J., Sullivan, K.D., **Espinosa, J.M.** and Cech, T.R.
Journal of Biological Chemistry, 288(46):33171-80, **2013.**
URL: http://www.jbc.org/content/288/46/33171.long

46. Back to bases: how a nucleotide biosynthetic enzyme controls p53 activation *(invited review)*.
Guarnieri, A. L. and **Espinosa, J.M.**
Molecular Cell, 53(3):365-367, **2014.**
URL: http://www.cell.com/molecular-cell/abstract/S1097-2765(14)00086-0

47. Transcriptional regulation by hypoxia inducible factors *(invited review)*.
Dengler, V.L., Galbraith, M. and **Espinosa, J.M.**
Critical Reviews in Biochemistry and Molecular Biology 49(1):1-15*,* **2014.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/24099156

48. Autophagy controls the kinetics and extent of mitochondrial apoptosis by regulating PUMA levels.
Thorburn, J., Andrysik, Z., Staskiewicz, L., Gump, J., Maycotte, P., Oberst, A., Green, D.R., **Espinosa, J.M.,** Thorburn, A.
Cell Reports, 7(1):45-52, **2014.**
URL: http://www.sciencedirect.com/science/article/pii/S2211124714001508

49. Global analysis of p53-regulated transcription identifies its direct targets and unexpected regulatory mechanisms.
Allen, M.A., Andrysik, Z., Dengler, V.L., Mellert, H.S., Guarnieri, A., Freeman, J.A., Sullivan, K.D., Galbraith, M.D., Luo, X., Kraus, W.L., Dowell, R.D. and **Espinosa, J.M.**
eLIFE, 3:e02200, **2014.**
URL: http://elifesciences.org/content/3/e02200

50. ATM regulates cell fate choice upon p53 activation by modulating mitochondrial turnover and ROS levels.
Sullivan, K.D., Palaniappan, V.V. and **Espinosa, J.M.**
Cell Cycle, 14(1):56-63*,* **2015.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/25483068

51. p53 family members regulate phenotypic response to Aurora Kinase A inhibition in triple-negative breast cancer.
Diamond, J.R., Eckhardt, S.G., Ionkina, A., Tan, A.C., Newton, T.P., Pitts, T.M., Glogowska, M., Kabos, P., Sartorius, C., Sullivan, K.D., **Espinosa, J.M.**, Tentler, J.J.
Molecular Cancer Therapies, 14(5):1117-29*,* **2015.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/25758253

52. Human ACAP2 is a homolog of *C. elegans* CNT-1 that promotes apoptosis in cancer cells.
Sullivan, K.D., Nakagawa, A., Xue, D., **Espinosa JM**.
Cell Cycle, 14(12):1771-8, **2015.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/25853217

53. A signature for success *(invited review)*.
Sullivan, K.D., and **Espinosa JM**.
eLIFE, 4:e08773, **2015.**
URL: http://elifesciences.org/content/4/e08773

54. The crusade against mutant p53: does the COMPASS point to the Holy Grail? *(invited review).*
Abraham, C. and **Espinosa JM**.
Cancer Cell, 28(4):407-8, **2015.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/26461087

55. Role of the host restriction factor APOBEC3 on papillomavirus evolution.
Warren, C.J., van Doorslaer, K., Pandey, A., **Espinosa J.M**. and Pyeon, D.
Virus Evolution, 1(1):vev015, **2015.**
URL: https://www.ncbi.nlm.nih.gov/pubmed/27570633

56. The Six1 oncoprotein downregulates p53 via concomitant regulation of RPL26 and microRNA-27a-3p.
Towers, C.G., Guarnieri, A.L., Micalizzi, D.S., Harrell, J.C., Gillen, A.E., Kim, K., Wang, C.A., Oliphant, M.U.J., Drasin, D.J., Guney, M.A., Kabos, P., Sartorius, C.A., Tan, A.C., Perou, C.M., **Espinosa, J.M.** and Ford, H.L.
Nature Communications, 6:10077, **2015.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/26687066

57. NPM and BRG1 mediate transcriptional resistance to retinoic acid in acute promyelocytic leukemia.
Nichol, J.N., Galbraith, M.D., **Espinosa, J.M.** and Miller, W.H.
Cell Reports, 14(12):2938-49, **2016.**
URL: http://www.cell.com/cell-reports/fulltext/S2211-1247%2816%2930209-1

58. Revisiting lncRNAs: how do you know yours is not an eRNA? *(invited review).*
Espinosa, J.M.
Molecular Cell, 62(1):1-2. **2016.**
URL: http://www.ncbi.nlm.nih.gov/pubmed/27058782

59. TIP60 is a conserved coactivator of HIF1A.
Perez-Perri, J.I., Dengler, V.L, Audetat, A.K., Pandey, A., Bonner, E.A., Urh, M., Mendez, J., Daniels, D.L., Wappner, P., Galbraith, M.D., and **Espinosa, J.M.**
Cell Reports, 16(1):37-47, **2016.**
URL: http://www.sciencedirect.com/science/article/pii/S2211124716306957

60. The NSL chromatin-modifying complex subunit KANSL2 regulates cancer stem-like properties in glioblastoma that contribute to tumorigenesis.
Ferreyra-Solari, N., Belforte, F.S., Canedo, L., Videla-Richardson, G.A., **Espinosa, J.M.,** Rossi, M., Serna, E., Riuvadets, M.A., Martinetto, H., Sevlever, G. and Perez-Castro, C.
Cancer Research, 76(18):5383-94, **2016.**
URL: https://www.ncbi.nlm.nih.gov/pubmed/27406830

61. Trisomy 21 consistently activates the interferon response.
Sullivan, K.D., Lewis, H.C., Hill, A.A., Pandey, A., Jackson, L.P., Cabral, J.M., Smith, K.P., Liggett, L.A., Gomez, E.B., Galbraith, M.D., DeGregori, J., and **Espinosa, J.M**.
eLIFE, e16220, **2016**.
* Selected by eLife for subsequent Insight article.
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URL: https://pubmed.ncbi.nlm.nih.gov/37341347/

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Science Advances 10 eadq3073. **2024.**
*Co-corresponding authors.

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Annals of Clinical and Translational Neurology **2025***.*
*Co-corresponding authors

135. Harnessing p53 for cancer therapy: new advances and future directions.
Andrysik, Z., **Espinosa, J.M.**
Transcription 16(1):3-46, **2025.**

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Espinosa, J.M.
Transcription 16(1):1-2, **2025.**
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Genet Epidemiol. **2025** Jun;49(4):e70010. doi: 10.1002/gepi.70010.

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Eduthan, N.P., Donovan, M.G., Araya, P., Rachubinski, A.L., Sullivan, K.D., Galbraith, M.D., **Espinosa, J.M.**
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Sillau SH, Coughlan C, Ahmed MM, Nair K, Araya P, Galbraith MD, Ritchie A, Ching-Jung Wang A, Elos MT, Bettcher BM, **Espinosa JM**, Chial HJ, Epperson N, Boyd TD, Potter H.
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J Biomech. 2026 Jan;195:113103. doi: 10.1016/j.jbiomech.2025.113103. Epub 2025 Dec 6.

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Dunn LN, Niemeyer BF, Eduthan NP, Schade KA, Waugh KA, Brown C, Rachubinski AL, Timkovich AE, Orlicky DJ, Galbraith MD, **Espinosa JM**, Sullivan KD.Cell Rep. 2026 Jan 27;45(1):116835. doi: 10.1016/j.celrep.2025.116835. Epub 2026 Jan 14.

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Lubkin A, Lujan RA, Pontejo SM, Oikonomou V, Fellows AM, Dos Santos Dias L, Snarr BD, MacAlpine J, Sullivan KD, **Espinosa JM**, Hickman H, Lionakis MS.
mBio. 2026 Jan 26:e0387325. doi: 10.1128/mbio.03873-25. Online ahead of print.

VI. RESEARCH FUNDING (since independent appointment only)

Active support (ordered from newer to older):

National Heart Lung and Blood Institute (NHLBI) 09/2025-08/2030
Award number: 3U2CHL156291
PIs: Resnick (contact), Carroll, Digiovanna, Espinosa, Ferretti, Galbraith.
Total Costs: >$25,000,000
Title: *The INCLUDE Data Coordinating Center.*

National Institute of Child Health and Human Development (NICHD) 06/2025-06/2026
Award number: 3OT2HD117033-01S1
PI: Espinosa
Total Costs: $999,558
Title: *DS-Connect®: The Down Syndrome Connect Registry.*

National Institute of Aging (NIA) 09/2024-09/2029
Award Number: U24AG092191
PIs: Espinosa (contact), Head, Galbraith, Rachubinski
Total Costs: $27,145,424
Title: *The INCLUDE Project Down Syndrome Biorepository.*

National Institute of Child Health and Human Development (NICHD) 09/2024-08/2026
Award Number: U01HD116469
PIs: Espinosa (contact), Rachubinski, Fidler
Total Costs: $2,693,143
Title: *Human Trisome Project – Latin American Network.*

National Institute of Child Health and Human Development (NICHD) 09/2024-09/2029
Award Number: 1R01HD113720-01
PIs: Fidler (contact), Espinosa, Baumer
Total Costs: $4,052,716
Title: *Risk of profound/severe intellectual disability in Down syndrome.*

National Institute of Child Health and Human Development (NICHD) 07/2024-06/2027
Award Number: 4R33HD109748-03
PIs: Espinosa (contact), Santoro, Sannar
Total Costs: $2,685,197
Title: *Mechanistic investigation of therapies for Down syndrome Regression Disorder.*

Anschutz Acceleration Initiative + Anna and John J. Sie Foundation 07/2024-06/2029
Award number: N/A
PI: Espinosa
Total Costs: $8,400,000
Title: *Immunomodulatory therapy for Down syndrome.*

National Institute of Child Health and Human Development (NICHD) 06/2024-03/2029
Award Number: 1R25HD114950-01
PI: Espinosa
Total Costs: $2,906,453
Title: *Data Science for Developing Scholars in Down Syndrome Research (DS3).*

National Institute of Deafness and Communication Disorders (NIDCD) 05/2024-05/2029
Award Number: 1R01DC021819-01
PIs: Espinosa (contact), Steyger, Merchant.
Total costs: $5,061,910
Title: *Multidimensional investigation of auditory dysfunction in Down syndrome.*

National Institutes of Health – Office of the Director (NIH-OD) 09/2023-08/2027
Award Number: 5R24OD035579-02
PIs: Galbraith (contact), Espinosa, Sullivan
Total Costs: $2,906,453
Title: *Trisomy 21 Model Atlas.*

National Institute on Aging (NIA) 09/2019-08/2025
Award Number: R61AG066543
PI: Rafii
Role for Dr. Espinosa: co-Investigator and site PI
Total Costs: $4,649,674
Title: *Clinical trials to prevent Alzheimer's disease in Down syndrome.*

Completed Support *(ordered from older to newer):*

The Leukemia and Lymphoma Society 07/2004-06/2007
Award Number: 3407-04
PI: Joaquín M. Espinosa
Total Costs: $150,000
Title: *Mechanisms of transcriptional regulation by the tumor suppressor p53.*

Department of Defense 09/2005-09/2007
Award Number: CM050054
PI: Joaquín M. Espinosa
Total Costs: $150,000
Title: *Counteracting the oncogenic effects of Bcr-Abl by disrupting MDM2-p53 interactions in CML cells.*

Lung Cancer SPORE Pilot Grant – UCCC 07/2006-06/2007
PI: Joaquín M. Espinosa
Total Costs: $30,000
Title: *Non-genotoxic activation of p53 in lung cancer cells: a cellular and molecular analysis.*

Council on Research and Creative Work (CU-Boulder) 07/2006-06/2007
PI: Joaquín M. Espinosa
Total Costs: $5,000
Title: *Identification of genes mediating the response to a novel form of cancer therapy.*

March of Dimes 02/2006-01/2008
Award Number: 5-FY05-1217
PI: Joaquín M. Espinosa
Total Costs: $150,000
Title: *Mechanisms of transcriptional regulation by p63 transcription factors*

Cancer League of Colorado 07/2008-06/2009
PI: Joaquín M. Espinosa
Total Costs: $30,000
Title: *Mechanisms of cell fate choice to therapeutic activation of p53.*

Butcher Award 06/2010-06/2011
PIs: Joaquín M. Espinosa, Robin Dowell
Total costs: $100,000
Title: *p53 meets genomics: elucidating the p53 transcriptome by global run-on deep sequencing.*

National Cancer Institute (NCI) 02/2006-01/2012
Award Number: R01CA117907
PI: Joaquín M. Espinosa
Total Costs: ~$1,057,900
Title: *Stress- and promoter- specific mechanisms of transcriptional activation by p53.*

National Science Foundation (NSF) 04/2009-01/2013
Award Number: MCB-0842974
PI: Joaquín M. Espinosa
Total Costs: $453,957
Title: *Functional studies of the CDK-module of the human Mediator complex.*

The Leukemia and Lymphoma Society 10/2013-10/2014
Award Number: NIA #8996-14
PI: Joaquín M. Espinosa
Total Costs: $100,000
Title: *A systematic test of synthetic lethality in personalized cancer therapy.*

Linda Crnic Institute for Down Syndrome 03/2013-03/2015
PI: Joaquín M. Espinosa
Total Costs: $100,000
Title: *A genetic screen for synthetic lethal pathways with trisomy 21.*

Howard Hughes Medical Institute Early Career Award 09/2009-08/2015
PI: Joaquín M. Espinosa
Total Costs: >$2,000,000
Title: *Understanding how gene networks control cell behavior: the p53 paradigm.*

Cancer League of Colorado (CLC) 07/2015-06/2016
PIs: Andrew Thorburn, Joaquín M. Espinosa
Total Costs: $60,000
Title: *Selective targeting of drug-induced autophagy to improve cancer therapy.*

Head and Neck SPORE Pilot Grant – UCCC 09/2015-08/2016
PI: Joaquín M. Espinosa
Total costs: $50,000
Title: *Mechanisms of ΔNp63α addiction in HNSCC.*

National Cancer Institute (NCI) 04/2012-03/2017
Award Number: R01CA117907
PI: Joaquín M. Espinosa
Total Costs: $1,396,750
Title: *Mechanisms of gene-specific transcriptional regulation within the p53 network.*

National Science Foundation (NSF) 03/2013-02/2017
Award Numbers: MCB-1243522 and -1627615
PI: Joaquín M. Espinosa
Total Costs: $1,079,999
Title: *Functional specialization of the Mediator-associated kinases CDK8 and CDK19.*

Molecular Oncology Program Pilot Grant – UCCC 01/2017-12/2017
PI: Joaquín M. Espinosa
Total Costs: $25,000
Title: *Preclinical development of synthetic lethal with Nutlin treatment.*

Biogen Idec. Sponsored Research Agreement 07/2016-10/2018
Award number: WD-165055
PI: Joaquín M. Espinosa
Total Costs: $313,800
Title: *Epigenomic Analysis of Trisomy 21.*

Developmental Therapeutics Program Pilot Grant – UCCC 08/2017-07/2018
PIs: Espinosa, Villalobos, Sullivan
Total Costs: $50,000
Title: *Harnessing the power of p53 for sarcoma treatment.*

Golfers Against Cancer 09/2017-08/2018
PIs: Espinosa, Galbraith, Serkova, Old
Total Costs: $50,000
Title: *Identifying CDK8-based combinatorial therapeutic strategies.*

Wings of Hope Pancreatic Research Foundation 09/2017-08/2018
PIs: Espinosa, Pitts, Sullivan
Total costs: $50,000
Title: *Identification of therapeutic liabilities in the mutant p53 transcriptome.*

Fonfara-Larose Fund for Leukemia in Down Syndrome 01/2016-01/2018
PI: Joaquín M. Espinosa
Total Costs: $150,000
Title: *Studies of leukemia in Down syndrome.*

Dorothy Holder Liposarcoma Research Fund 07/2016-06/2018
PIs: Espinosa, Villalobos, Elias, Sullivan
Total Costs: $150,000
Title: *p53 based therapies in liposarcoma.*

National Center for Advancing Translational Sciences (NCATS) 09/2019-04/2020
Award number: UL1TR002535-02S1
PIs: Sokol, Espinosa
Total Costs: $775,700 (for support of the Human Trisome Project)
Title: *Accelerating Clinical Research on Down Syndrome at the CCTSI and Beyond.*

National Institute of General Medical Sciences (NIGMS) 08/2016-07/2020
Award number: R01GM120109
PI: Joaquín M. Espinosa
Total Costs: $1,536,000
Title: *Mechanisms of gene expression control during the cellular response to hypoxia.*

Human Immunology and Immunotherapy Initiative (HI3) 07/2018-06/2019
Award number: N/A
PI: Espinosa
Total Costs: $500,000
Title: *Immune dysregulation in Alzheimer's disease in Down syndrome.*

GI and Liver Innate Immune Program (GALIIP) 12/2018-11/2019
Award number: N/A
PI: Espinosa
Total Costs: $25,000
Title: *Role of interferon hyperactivity in the etiology of celiac disease in Down syndrome.*

Chancellor's Innovation Discovery Fund 04/2020-03/2021
PI: Joaquin M. Espinosa
Total Costs: $174,262
Title: *Repurposing baricitinib for the treatment of COVID-19.*

Fast Grants 08/2020-07/2021
Award Number: 2134
PI: Joaquin M. Espinosa
Total Costs: $100,000
Title: *Therapeutic strategies to attenuate the hyperinflammatory response caused by SARS-CoV-2.*

National Science Foundation (NSF) 08/2018-07/2022
Award Number: MCB-1817582
PI: Joaquin M. Espinosa
Total Costs: $1,200,000
Title: *Systematic analysis of context-specific functions of transcriptional CDKs in human cells*.

National Cancer Institute (NCI) 02/2018-01/2023
Award Number: R01CA117907
PI: Joaquin M. Espinosa
Total Costs: $1,661,905
Title: *Mechanisms of gene expression control in the p53 network.*

National Institute of Allergy and Infectious Diseases (NIAID) 09/2019-03/2024
Award Number: R01AI150305
PI: Espinosa
Total Costs: $2,830,725
Title: *Understanding Down Syndrome as an Interferonopathy**
*Competitive revision titled: *Interferon hyperactivity, Down syndrome, and COVID-19.*

National Institute of Allergy and Infectious Diseases (NIAID) 06/2019-05/2024
Award Number: R01AI141662
PI: Michael Yeager
Co-I: Joaquin M. Espinosa
Total Costs: $1,944,000
Title: *Persistent post-viral state of bacterial pneumonia susceptibility and severity in Down syndrome.*

National Institute of Child Health and Human Development (NICHD) 09/2022-06/2024
Award Number: R61HD109748
PIs: Espinosa (contact), Santoro, Sannar

Total Costs: $1,176,407
Title: *Mechanistic investigation of therapies for Down syndrome Regression Disorder.*

National Institute of Child Health and Human Development (NICHD) 09/2021-06/2024
Award Number: R01HD099150-03S1
PIs: Fidler, Espinosa
Total Costs: $373,423 (subaward to Espinosa)
Title: *Biosignatures of executive dysfunction in Down syndrome.*

National Institute of Child Health and Human Development (NICHD) 07/2022-07/2023
Award Number: X01HD110902
PI: Joaquin Espinosa
Total costs: Undefined, X01 grants support costs of DNA and RNA sequencing.
Title: *Epigenome analysis in the Human Trisome Project.*

National Cancer Institute (NCI) 02/2017-09/2024
Award Number: P30CA046934
PI: Schulick
Role for Dr. Espinosa: co-Investigator and Director of the Functional Genomics Shared Resource
Total Costs: $19,293,511
Direct Costs/year: $119,712 (for support of the Functional Genomics Shared Resource)
Title: *Cancer Center Support Grant for the University of Colorado Cancer Center.*

National Institute of Child Health and Human Development (NICHD) 06/2024-06/2025
Award number: 1OT2HD117033-01
PI: Espinosa
Total Costs: $1,428,725
Title: *DS-Connect®: The Down Syndrome Connect Registry.*

National Institute of Arthritis, Musculoskeletal and Skin Diseases (NIAMS) 08/2022-07/2025
Award Number: 5R33AR077495-05 + R33AR077495S1
PIs: Espinosa (contact), Bruckner, Gurnee, Rachubinski
Total Costs: $4,447,973
Title: *JAK inhibition in Down syndrome.*

National Heart, Lung, and Blood Institute (NHBLI) 09/2020-08/2025
Award Number: U2CHL156291
PIs: Resnick (contact), Espinosa, Carroll, DiGiovanna, Ferretti, Haendel
Total Costs: ~$23,800,000
Title: *Data Management and Portal for the INCLUDE (DAPI) Project.*

National Institute of Arthritis, Musculoskeletal and Skin Diseases (NIAMS) 09/2021-08/2025
Award Number: P30AR079369
PI: Holers
Role for Dr Espinosa: Member of Scientific Advisory Board
Total Costs: $3,755,788
Title: *Center for mucosal immunobiology and rheumatic disease pathogenesis.*

National Heart, Lung, and Blood Institute (NHBLI) 09/2024-08/2025
Award Number: 1X01HD117361-01
PIs: Espinosa (contact), Galbraith
Total Costs: Unknown, support in-kind data generation
Title: *Integrated multi-omics analysis in the Human Trisome Project.*

National Heart, Lung, and Blood Institute (NHBLI) 09/2024-08/2025
Award Number: 3U2CHL156291-05S2
PIs: Resnick (contact), Espinosa, Carroll, DiGiovanna, Ferretti, Haendel
Total Costs: ~$798,229

Title: *DCC supplement for Experimental Models Portal.*

National Heart, Lung, and Blood Institute (NHBLI) 09/2024-08/2025
Award Number: 3U2CHL156291-05S1
PIs: Resnick (contact), Espinosa, Carroll, DiGiovanna, Ferretti, Haendel
Total Costs: ~$200,259
Title: *Ensuring data compliance and security for the INCLUDE Data Coordinating Center in response to emerging NIH/NHLBI platform environment requirements.*

National Institute of Child Health and Human Development (NICHD) 09/2024-09/2025
Award Number: 3R01HD113720-02S1
PIs: Fidler (contact), Espinosa
Total Costs: $443,123
Title: *Autism in young children with Down syndrome.*

VII. TEACHING

Classroom teaching at CU-Boulder:

2006-2013 **Instructor.** Biology of the Cancer Cell (MCDB3150), >120 students.
2005-2013 **Co-Instructor.** Graduate Program CORE Course (MCDB5230), 10-20 students.
2009-2014 **Invited Lecturer.** Advanced Topics in Signal Transduction and Cell Cycle Regulation (CHEM5801), 10-20 students.
2011-2014 **Invited Lecturer.** Genetics (MCDB2150), >100 students.
2013-2020 **Invited Lecturer.** From Bench to Bedside (MCDB4201), ~20 students.

Classroom teaching at the CU Anschutz Medical Campus (CU-AMC):

2017-2020 **Invited Lecturer.** Cancer Biology (CANB7600), ~20 students.

Membership in graduate training programs at CU-AMC, CU-Boulder, and CU Denver campuses since 2017:

- Pharmacology (AMC)
- Cancer Biology (AMC)
- Immunodermatology (AMC)
- Human Medical Genetics and Genomics (AMC)
- Biomedical Sciences (AMC)
- Rheumatology (AMC)
- Medical Scientist Training Program (AMC)
- IQ Biology (Boulder)
- Integrative Physiology (Denver)

Non-classroom teaching at CU:

1. **Mentor for undergraduate students in the laboratory (57 total):** Meagan McBryde (2005-2007), Megan Ash (2005-2007), Glen Bjerke (2005-2006), Jennifer Hoover (2005-2008), Jenna Rose (2005), Jeffrey Ahn (2005), Sarah Stephens (2006-2008), Grant Weaver (2006), Max Ederer (2007), Vadim Tsvankim (2007), Jason Gotzinger (2006), Rachel Rice (2007-2008), Sarah Baldridge (2007-2008), Leif Nietzel (2007-2008), Rishi Rawat (2008), Rakel Salamander (2008), Christopher Potts (2008-2010), Marybeth Sechler (2008-2009), Federico Unglaub (2008-2009), Whitney Haseman (2009-2010), Amy Raucher (2009-2010), Sophia Pelecanos (2009-2010), Jace Burton (2009-2010), Max Renner (2010), Jenny Sims (2010-2011), Nuria Padilla Just (2010-2011), Jack Tran (2010-2012), Claire Bensard (2011-2012), Uri Bulow (2011-2012), Tom White (2012), Matthew Smelser (2012-2013), Dave Myers (2012-2013), Aubrey Pierce (2011-2012), Justin Freeman (2011), Amber Johnson (2012-2013), Emily Dohm (2013-2014), Nicole Michael (2013-2015), Joseph Cabral (2013), Kyle Tucker (2013-2014), Zane Gibbs (2014-2015), Samantha Gumbin (2014-2015), Caitlin Ritz (2014-

2015), Madeline Brown (2014-2015), Elizabeth Bonner (2015), Adam Chalek (2016), Vienna Benavidez (2016), Alex Ho (2016), Kilye Vanhoesen (2016), Adnan Syen (2016), Jennyvette Trinidad Pineiro (2017), Sweta Boopatiraju (2017), Suyoun Kim (2017) Aimee Bui (2017-2019), Kristen Drew (2017-2019), Shiema Elhussen (2017-2020), Teagan Glass (2018), Emily Adams (2018-2022).

2. **Mentor for Ph.D. students (8 total):** Aaron Donner (graduated in 2010), Nathan Gomes (graduated in 2010), Ryan Henry (graduated in 2012), Katherine Audetat (graduated in 2017), Roni Dengler (2014-2015), Paula Araya (graduated in 2019), Roubina Tatavosian (graduated in 2022), Cristina Lau (2024-present).
3. **Mentor for Post-Doctoral Fellows (28 total):** Ramiro Paris (2006-2008), Ignacio Nojek (2006-2008), Zdenek Andrysik (2009-2015), Lindsay Levkoff (2009), Kelly Sullivan (2009-2015), Mathew Galbraith (2009-2015), Corrie Gallant-Behm (2009-2013), Renee Paulsen (2010-2011), Mary Allen (2010-2014), Hestia Mellert (2011-2015), Jean-Luc Fraikin (2011-2012), Jessica Nichol (2012), Anna Guarnieri (2013-2019), Rose Byrne (2013-2014), Chris Abraham (2014-2018), Katherine Waugh (2015-2023), Donald Evans (2015-2018), Heather Bender (2017-2020), Katherine Tuttle (2017-2020), Maria Szwarc (2018-2023), Paula Araya (2019-2023), Micah Donovan (2021-present), Brian Niemeyer (2022-present), Erika Chelales (2023-present), Karen Rossmassler (2023-present), Jose Velez (2023-present), Petra Conaway (2023-present), Sara Sherman (2024-present).
4. **Mentor for Rotation Students (29 total):** Megan Wemmer (2004), Ben Barthel (2005), Nick Farina (2005), Becky Nixx (2006), Aileen Spindler (2007), Dan Adams (2007), Kent Riemondy (2008), Jessica Vera (2009), Justin Holt (2009), Kate Goldfarb (2011), Minghua Liu (2011), Brian Huiton (2011), Andre Hersan (2011), Eli Geron (2012), Roni Dengler (2012), Marie Balboa (2012), Ariel Hernandez (2013), Joshua Wheeler (2013), Russell Burke (2013), John Nardini (2014), Laura White (2016), Matthew Svalina (2016), Marlie Fisher (2017), Britanny Truong (2017), Madeline Kane (2018), Mariah Meyer (2018), Ian Shelton (2021), Susana Lopez Ignacio (2024), Kayla Medina (2024).
5. **Member of Ph.D. thesis committee (24 total):** Annita Whichmann, Travis Hughes, Brady Culver, Nick Farina, Mary Allen, Allyson Schaaff, Alfonso Garrido-Lecca, Kent Reimondy, Jessica Vera, Li Wang, Joel Basken, Christopher Bennet (MCD Biology, CU-Boulder). Jeff Beckman, Darren Bates, Brian Kalet, Matthew Knuesel, Krista Meyer, Chris Ebmeier and Zachary Poss (Chemistry and Biochemistry, CU-Boulder). Pippa Cosper, Doug Micalizzi, Christina Garlington, Brent Fitzwalter, and Lucas Gillenwater (UCD-SOM).
6. **Mentor of Undergraduate Honor Thesis (6 total):** Meagan McBryde (2007), Jennifer Hoover (2008), Sarah Stephens (2008), Claire Bensard (2012), Amber Johnson (2013), Nicole Michael (2014).
7. **Mentor for Junior Faculty and Medical Fellows (14 total).** Brian Dedecker (MCD Biology 2010-2015) James Orth (MCD Biology, 2013-2015), Jennifer Diamond (CU-SOM, 2014-2020), Kelly Sullivan (2015-present), Zdenek Andrysik (2015-present), Matthew Galbraith (2015-present), Joshua Black (CU-SOM, 2016-present), Holly Pacenta (2016-2018), Angela Rachubinski (2017-present), Lindsay Wheeler (2017-2020), Michael Yeager (2018-present), Marisa Stahl (2019-present), Lina Patel (2022-present), Ryan Kammeyer (2023-present).
8. **Mentor for post-graduate Professional Research Assistants (55 total).** Jessica Baxter, Claire Bensard, Elizabeth Bonner, Douglas Burch, Eric Butcher, Joseph Cabral, Kendra DeHay, Emily Dohm, Hannah Dougherty, Huy Duc, Justin Freeman, Ross Granrath, Leisa Jackson, Amber Johnson, Ashley Knox, Madison Laird, Hannah Lewis, Morgan MacBeth, Ross Minter, Ahwan Pandey, Colin Sempeck, Elizabeth Terhune, Kayleigh Worek, Petros Yoon, Patricia Zornio, Natalie Briones, Belinda Enriquez Estrada, Amanda Hill, Maria Hoh, Santosh Khanal, Kohl Kinning, Michael Ludwig, Neetha Eduthan, Kyndal Schade, Jessica Shaw, Keith Smith, Leonard Maroun, Eleanor Britton, Hannah Lyfford, Pamela Navarrete, Belina Guerra, Ashley Snell, Madeline Hipp, Rachel Shropshire, Maci Cameron, Heather Becker, Sitlali Flores, Travis Broneske, Kenny Ngo, Srija Chillamcherla, Pierrette Lo, Zenitha Sundararajan.

Teaching beyond the University of Colorado:

2008-2012 **Instructor.** Cold Spring Harbor Laboratory, Summer Course on Eukaryotic Gene Expression.

2006-2019 **PhD Thesis Committee Member outside of CU:** Melissa Mattia and Rachel Beckerman (Department of Biological Sciences, Columbia University, New York) and Manuel de la Mata (Departamento de Biología, Universidad de Buenos Aires).

2011 **Instructor.** The American Society for Cell Biology (ASCB), Africa Teaching Team.

2016 **Instructor.** Universidad de Concepción, Chile. Post-graduate course on Hallmarks of Cancer.

2022- **Course Director**. Data Sciences for Diverse Scholars in Down Syndrome Research (DS3), Summer Course funded by NICHD hosted at the CU-Boulder campus for 25 national and international students.

VIII. INVITED TALKS, LECTURES & SEMINARS.

2001 American Association for Cancer Research (AACR) Annual Meeting, New Orleans, LA, U.S.A.

2002 PEW Annual Meeting, Member of the Organizing Committee and Chair of the Cell Cycle Session, Puerto Vallarta, México.

2003 Gene Expression and RNA Processing Symposium organized by International Centre for Genetic Engineering and Biotechnology (ICGEB), Iguazú Falls, Argentina.
Federation for American Societies for Experimental Biology (FASEB) meeting, Snowmass, CO, U.S.A.

2004 The Leukemia and Lymphoma Society Annual Meeting, Denver, CO. U.S.A.
Department of Biochemistry, University of Washington, Seattle, WA, U.S.A.
Comprehensive Cancer Center, University of California at San Francisco, U.S.A.
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Bethesda, MD, U.S.A.
National Institute of Environmental Health Sciences, Triangle Research Park, NC, U.S.A.

2005 University of Colorado Health Sciences Center, Molecular Biology Seminar Series, Denver, CO, U.S.A.

2006 SPORE in Lung Cancer Program, UCCC, Aurora, CO, U.S.A.
Laboratorio de Fisiología y Biología Molecular, Universidad de Buenos Aires, Argentina.
Instituto de Investigaciones en Biología Molecular e Ingeniería Genética, Buenos Aires, Argentina.
Instituto Leloir, Buenos Aires, Argentina.
Annual Meeting of the Congressionally Directed Medical Research Program in Chronic Myelogenous Leukemia, Orlando, FL. U.S.A.
American Society for Biochemistry and Molecular Biology (ASBMB) Meeting on Transcriptional Regulation by Chromatin and RNA polymerase II, Kiawah Island, SC, U.S.A.

2007 Department of Biological Sciences, Columbia University, New York, U.S.A.
Oncology Fellows Program, University of Colorado Health Sciences Center, Denver, CO, U.S.A.
Mechanisms and Models of Cancer Meeting, The Salk Institute for Biological Studies, La Jolla, U.S.A.
Cold Spring Harbor Laboratories meeting on Mechanisms of Eukaryotic Transcription, NY, U.S.A.
Gene Expression and RNA Processing Symposium (ICGEB), Bariloche, Argentina.

2008 Federation for American Societies for Experimental Biology (FASEB) meeting, Snowmass, CO, U.S.A.
Massachusetts General Hospital Cancer Center, Boston, MA, U.S.A.
Helsinki Biomedical Student Symposium, Helsinki, Finland.
Center for Genomic Regulation (CRG), Barcelona, Spain.
International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy.

American Medical Student Association (AMSA), Colorado Chapter, Boulder, CO, U.S.A.
ASBMB Meeting on Transcriptional Regulation by Chromatin and RNAPII, Lake Tahoe, CA, U.S.A.
Louisiana State University Health Sciences Center, Shreveport, LA, U.S.A.

2009 Novartis Institute for Biomedical Research, Boston, MA, U.S.A.
Colorado State University Animal Cancer Center, Fort Collins, CO, U.S.A.
University of Colorado Health Science Center, Aurora, CO, U.S.A.
Keystone Symposia on Deregulation of Transcription in Cancer, Kerry, Ireland.
Cold Spring Harbor Laboratories meeting on Mechanisms of Eukaryotic Transcription, NY, U.S.A.
Kittredge Honors Program, University of Colorado at Boulder, CO, U.S.A.
National Institutes of Diabetes, Digestive and Kidney Diseases (NIDDK), Bethesda, MD, U.S.A.
Colorado State University, Department of Cell and Molecular Biology, Fort Collins, CO, U.S.A.
Howard Hughes Medical Institute, Janelia Farm Research Campus, MD, U.S.A.
Columbia University, Department of Biological Sciences, New York, NY, U.S.A.

2010 McGill University Graduate Student Symposium, Montreal, Canada.
UCCC Bi-annual Retreat, Westminster, CO, U.S.A.
ASBMB Annual Meeting, Session on Chromatin and Transcription, Anaheim, CA, U.S.A.
SomaLogic, Boulder, CO, U.S.A.
Department of Immunology Annual Retreat, UCDHSC, Glenwood Springs, CO, U.S.A.
Max Planck Society Meeting on P-TEFb and Elongation Control, Munich, Germany.
The 15th International p53 Workshop, Philadelphia, PA, U.S.A.
UC Denver Medical School, Molecular Biology Program, Aurora, CO, U.S.A.
ASBMB Meeting on Transcriptional Regulation by Chromatin and RNAPII, Lake Tahoe, CA, U.S.A.
Mount Sinai School of Medicine, New York, NY, U.S.A.
University of Arizona, Tucson, AZ, U.S.A.

2011 Tufts University, Genetics Program, Boston, MA, U.S.A.
Gordon Research Conference on Cell Growth and Proliferation, Biddeford, ME, U.S.A.
Cold Spring Harbor Laboratories Meeting on Mechanisms of Eukaryotic Transcription, NY, U.S.A.
Symposium on Chromatin Changes during Differentiation and Malignancies, Giessen, Germany.
Gene Expression and RNA Processing Symposium (ICGEB), Iguazú Falls, Argentina.
VI MDM2 International Workshop, New York Academy of Sciences, NY, U.S.A.
Howard Hughes Medical Institute, Janelia Farm Research Campus, MD, U.S.A.
Butcher Symposium, Westminster, CO, U.S.A.

2012 The John H. Baffler Lecture Series, M.D. Anderson Cancer Center, Houston, TX, U.S.A
The University of Illinois at Chicago, Department of Medicine, IL, U.S.A.
Promega Corporation, Madison, WI, U.S.A.
Banbury Meeting on Transcription and Cancer, Cold Spring Harbor Laboratories, NY, U.S.A.
ASBMB Annual Meeting, Session on Transcriptional Regulation during Growth and Development, San Diego, CA, U.S.A.
Program in Reproductive Sciences, Department of Obstetrics and Gynecology, UCD-SOM, CO, U.S.A.
University of California at San Francisco, Department of Biochemistry and Biophysics, CA, U.S.A.
The Science Coalition Congressional Briefing, Washington D.C., U.S.A.
FASEB Meeting on Transcriptional Regulation during Cell Growth, Differentiation and Malignancy, Snowmass, CO, U.S.A.
ASBMB Meeting on Transcriptional Regulation by Chromatin and RNAPII, Snowbird, Utah, U.S.A.
Ponce School of Medicine, Ponce, Puerto Rico.
Colorado College at Colorado Springs, CO, U.S.A.

2013 The Stowers Institute, Kansas City, KS, U.S.A.
Department of Biochemistry, University of Washington, Seattle, WA, U.S.A.

Universite de Sherbrooke, Sherbrooke, Quebec, Canada.
Cold Spring Harbor Laboratories Summer Course on Eukaryotic Gene Expression, NY, U.S.A.
FASEB Summer Research Conference on Transcription, Chromatin & Epigenetics, Bahamas.
Howard Hughes Medical Institute, Chevy Chase Headquarters, MD, U.S.A.
Annual Biomedical Research Conference for Minority Students, Nashville, TN, U.S.A. (*)

2014 Keystone Symposia on Hypoxia Signaling, Breckenridge, CO, U.S.A.
Keystone Symposia on Transcriptional Regulation and Cancer Epigenetics, Santa Fe, NM, U.S.A.
The PEW Charitable Trust Program in Biomedical Sciences Meeting, Jaco Beach, Costa Rica.
Department of Genetics, University of Georgia at Athens, GA, U.S.A.
Biomedical Sciences Graduate Program, Association of Multicultural Scientists (AMS) at the University of Michigan, Ann Arbor, MI, U.S.A.(*)
Department of Chemical and Systems Biology, Stanford University, CA, U.S.A.
p53 International Workshop, Stockholm, Sweden.
EMBL meeting on Transcription and Chromatin, Heidelberg, Germany.
Department of Biochemistry, Vanderbilt University, Nashville, TN, U.S.A.
Annual meeting of the Chilean Society of Biochemistry and Molecular Biology, Puerto Varas, Chile.
James H. Holland Lecture, Department of Biology, Indiana University, Bloomington, IN, U.S.A (*)
Annual meeting of the Argentine Society of Biochemistry and Molecular Biology, Rosario, Argentina.
European Institute of Oncology, Milan, Italy.
University of Trento, Trento, Italy.
University of Massachusetts at Worcester, Diversity Interest Group, Department of Cell and Developmental Biology. MA, U.S.A.(*)

2015 Department of Oncological Sciences, Huntsman Cancer Institute, Salt Lake City, UT, U.S.A.
Department of Biochemistry and Molecular Genetics, University of Alabama at Birmingham, AL, U.S.A.
HHMI EXROP Symposium, Keynote Speaker, Chevy Chase, MD, U.S.A.(*)
HHMI Annual Meeting, Janelia Farm, VA, U.S.A.
National Down Syndrome Congress Convention, Phoenix, AZ, U.S.A.
Cold Spring Harbor Laboratories Meeting on Mechanisms of Eukaryotic Transcription, NY, U.S.A.
Cold Spring Harbor Laboratories Summer Course on Eukaryotic Gene Expression, NY, U.S.A.
p53 Isoforms Workshop, Aix-en-Provence, France.
VIII MDM2 International Workshop, New Orleans, LA, U.S.A.
National Institute of Environmental Health Sciences, Research Triangle Park, NC, U.S.A.

2016 Keystone Symposia on Transcription and Metabolism, Snowbird, UT, U.S.A.
Keystone Symposia on Down Syndrome, Santa Fe, NM, U.S.A.
Cold Spring Harbor Laboratories, NY, U.S.A.
Down Syndrome Affiliates in Action, Charlotte, NC, U.S.A.
American Association for Cancer Research Annual Meeting, New Orleans, LA, U.S.A.
Universidad of Buenos Aires, Buenos Aires, Argentina.
Promega Corporation, Madison, WI, U.S.A.
National Down Syndrome Congress Convention, Orlando, FL, U.S.A.
Department of Immunology, CU-SOM, Aurora, CO, U.S.A.
Department of Biomedical Research, National Jewish Health, Denver, CO, U.S.A.
ASBMB Meeting on Transcriptional Regulation by Chromatin and RNAPII, Snowbird, UT, U.S.A.
University of Texas Southwestern Medical Center, Dallas, TX, U.S.A.
Fred Hutchinson Cancer Research Center, Seattle, WA, U.S.A.

2017 UCCC Seminar Series, Denver, CO, U.S.A.
Stupka Undergraduate Symposium, Iowa State University, IA, U.S.A.*
Keystone Symposia on Interferon, Banff, Canada.

Trisomy 21 Research Society, Chicago, IL, U.S.A.
p53 Isoforms Workshop, Bergen, Norway.
Institute Pasteur, Paris, France.
Neovacs Inc, Paris, France.
Elena Regina Cancer Institute, Rome, Italy.
p53 International Workshop, Singapore.
National Down Syndrome Congress, Sacramento, CA, U.S.A.
Society of Pediatric Pathology, Denver, CO, U.S.A.
Molecular Biosystems Conference, Puerto Varas, Chile.

2018 Down Syndrome Affiliates in Action (DSAIA), Denver, U.S.A.
Barbara Davis Center, CU-AMC, Denver, CO, U.S.A..
Department of Pathology Grand Rounds, CU-AMC, Denver, CO, U.S.A..
Keystone Symposia on Therapeutic Targeting of Hypoxia-Sensitive Pathways, Oxford, England.
National Down Syndrome Congress (NDSC), Dallas, TX, U.S.A.
MDM2 International Workshop, Tampa, FLA, U.S.A.

2019 Conference on Alzheimer's Disease in Down Syndrome, Washington D.C., U.S.A.
Down Syndrome Affiliates in Action, Saint Louis, Missouri, U.S.A.
National Down Syndrome Congress, Pittsburgh, Pennsylvania, U.S.A.
Personalized Medicine Symposium, CU-SOM, Denver, CO, U.S.A.
Keynote Lecture, Massachusetts Institute of Technology, Symposium on Translational Science in Down Syndrome, Cambridge, MA, U.S.A.
Human Immunology and Immunotherapy Initiative, CU-SOM, Denver, CO, U.S.A.

2020 Down Syndrome Affiliates in Action. Online webinar.
Global Down Syndrome Foundation. Online webinar.
National Down Syndrome Congress. Online webinar.
Human Immunology and Immunotherapy Initiative, CU-SOM. Online webinar.
NIH INCLUDE Project Clinical Trials Workshop. Online webinar.
Alzheimer's Association. Online webinar.
JAK Inhibitor Drug Development Summit. Online webinar.
National Down Syndrome Congress. Online webinar.
NIH INCLUDE Basic Science to Cohort Development Workshop. Online webinar.
The COVIDome Project, CU-AMC. Online Webinar.
University of Vermont School of Medicine Grand Rounds. Online webinar.
Gilead Sciences Inc. Immunity and Inflammation Group. Online webinar.
Alzheimer's Biomarkers Consortium in Down Syndrome. Online webinar.
Department of Dermatology, CU-SOM. Online Webinar.

2021 Down Syndrome Affiliates in Action. Online webinar.
Benaroya Research Institute. Online webinar.
Trisomy 21 Research Society. Online webinar.
Instituto de Investigaciones Bioquimicas, Universidad Nacional de Mar Del Plata, Argentina. Online webinar.
Down syndrome Medical Interest Group. Online webinar.
National Down Syndrome Congress. Online webinar.
Instituto de Ingenieria Genética and Biologia Molecular, Buenos Aires, Argentina. Online webinar.
Ventus Pharmaceuticals. Online webinar.
NIH INCLUDE Project Workshop. Online webinar.
American Speech Language Hearing Association. Online webinar.
European Brain Research Area – Trisomy 21 cluster. Online webinar.
Sociedad Argentina de Ingeniería Genética y Bioquímica. Online webinar.
Global Down Syndrome Foundation. Online webinar.

2022 Cincinnati's Children Hospital. Online webinar.

Pulmonary and Critical Care Medicine Educational Series, University of Colorado. Online webinar.
National Institutes of Health Down Syndrome Consortium. Online webinar.
ImpacT21 Research Conference. Online webinar.
Pharmacogenomics Global Research Network. Aurora, Colorado, USA
Down Syndrome Medical Interest Group. Online webinar.
National Down Syndrome Congress. New Orleans, Louisiana, USA.
Trisomy 21 Research Society, Long Beach, California, USA.
Down Syndrome Diagnosis Network Conference, Washington DC, USA.
Gabriella Miller Kids First Program. Keynote lecture, online webinar.
US Senate. Briefing on Down syndrome Research, Washington DC, USA.
INCLUDE Investigator Workshop. Online webinar.
Global Down Syndrome Foundation. Online webinar.

2023 Gordon Research Conference on Insulin and IGF1 Signaling, Ventura, CA, USA.
Keystone Symposia on Hypoxia: from mechanisms to emerging therapies, Killarney, Ireland.
European Society of Human Genetics, Glasgow, Scotland.
Global Down Syndrome Foundation, Orlando, Florida, USA.
National Down Syndrome Congress, Orlando, Florida, USA.
Down Syndrome Medical Interest Group, Orlando, Florida, USA.
Black Down Syndrome Association, online webinar, USA.
Down syndrome Diagnosis Network, San Antonio, Texas, USA.
Annual Symposium, Linda Crnic Institute for Down Syndrome, Texas.
Kansas University Medical Center, Kansas City, Missouri, USA.
Lejeune Institute, Paris, France, USA.
NIH Office of Data Science and Sharing, online webinar, USA.

2024 NIH INCLUDE Project Investigators Meeting, Bethesda, MD, USA.
Children's National Hospital, Washington, DC, USA.
NIH INCLUDE Project Spring 2024 Webinar (online webinar).
EURONDD, Ithaca Network on Neurodevelopmental Disorders, Lisbon, Portugal, USA.
Global Down Syndrome Foundation, Spring online webinar (in Spanish)*.
Lejeune Institute's Workshop on Infantile Spasms and Regression, Paris, France, USA.
Trisomy 21 Research Society biannual conference, Rome, Italy.
Global Down Syndrome Foundation Medical Care and Research Roundtable, Phoenix, Arizona, USA.
National Down Syndrome Congress, Phoenix, Arizona, USA.
Down Syndrome Medical Interest Group, Phoenix, Arizona, USA.
Crnic Institute Annual Symposium, Aurora, Colorado, USA.
Emory University, Georgia, USA.
10th Down Syndrome Conference of Nuevo Leon, Monterrey, México.*
National Institute of Allergy and Infectious Disease (NIAID), Council Meeting, Bethesda, MD, USA.
Down Syndrome Diagnosis Network (DSDN) Annual Conference, Las Vegas, Nevada, USA.
NIH INCLUDE Project Spring Fall 2024 Webinar (online webinar).
Global Down Syndrome Foundation, Fall online webinar.
Hospital Israeli Albert Einstein, Sao Paulo, Brazil.
Instituto Maria, Olinda School of Medicine, Olinda, Brazil.
Trisomy 21 Research Society, online webinar.
Universidad Católica de Argentina, Buenos Aires, Argentina.
US Congress Briefing on the INCLUDE Project, Washington DC, USA.

2025 INCLUDE Project Clinical Data Management Workshop, online workshop.
Instituto Nacional de Pediatría, México City, México.
NICHD Trainee Workshop, online webinar.
Emory University, Down Syndrome Family Conference, Atlanta, Georgia, USA.

Down Syndrome Institute, Sydney, Australia.
Flinders University + Charles Darwin University, Darwin, Australia.
University of Queensland + Translational Research Institute + Mater Hospital, Brisbane, Australia.
INCLUDE Data Coordinating Center, Spring 2025 webinar.
Texas A&M University, College Station, Texas, USA.
Global Down Syndrome Foundation, Spring 2025 online webinar.
Saint Jude Children's Research Hospital, Memphis, Tennessee, USA.
National Advisory Child Health and Human Development Council, online presentation.
Birth Defects and Prevention Research Conference, Denver, Colorado, USA.
Global Down Syndrome Foundation Medical Care and Research Roundtable, Dallas, Texas, USA.
National Down Syndrome Congress, Dallas, Texas, USA.
American Society of Human Genetics (ASHG), Boston, Massachusetts, USA.
Sociedad Argentina de Genética, Argentina, online presentation.
Italian Trisomy 21 Task Force Conference, Napoli, Italy, online presentation.
Global Down Syndrome Foundation, Fall 2025 Online Webinar.
Clinical Immunology Society, online webinar.
National Down Syndrome Congress, online webinar in Spanish.
Alzheimer's Therapeutics Research Institute, San Diego, CA, USA.

2026 Dutch Down Syndrome Assoication, online webinar.
Senolytics in Down Syndrome Workshop, Los Angeles, CA, USA.

* These seminars involve outreach activities for recruitment of underrepresented minorities into the life sciences.

IX. SERVICE

CU-Boulder:

2005-2008	Member of the Committee on Graduate Students Affairs (COGSA).
2006	Member of the Chair Search Committee.
2006	Member of the Junior Faculty Search Committee.
2007-2009	Member of the Seminars Committee.
2007-	Member of MCD Biology Bi-Annual Retreat Organizing Committee.
2008-2012	Member of the Junior Faculty Search Committee.
2011	Member of the Graduate Student Admissions Committee.
2012	Member of the Committee on Graduate Students Affairs (COGSA).
2012-2015	Faculty Associate, Faculty Teaching Excellence Program (FTEP) at CU-Boulder.
2013	Member of Undergraduate Committee (UGCOM).

CU-SOM:

2018-present	Chair, Department of Pharmacology Promotions Committee.
2019	Member of Search Committee for Chair of the Department of Biochemistry and Molecular Genetics.
2021-present	Research Productivity and Space Committee.

University of Colorado system:

2005-present	Member of the Faculty Advisory Board for the Biosciences Initiative (BSI).
2010-2020	Co-Leader, Molecular and Cellular Oncology Program, UCCC.
2010-present	Director, University of Colorado Functional Genomics Facility, UCCC.
2010-2017	Task Force Member, The BioFrontiers Institute, CU-Boulder.

Review for Scientific Journals:

2004-present Scientific reviewer for the peer-reviewed journals:

- Cell
- Science
- Nature
- Genes and Development
- Molecular Cell
- Cancer Cell
- eLIFE
- Nature Review Cancers
- Nature Structure and Molecular Biology
- Nature Communications
- Nature Chemical Biology
- Proceedings of the National Academy of Sciences
- Developmental Cell
- Cell Reports
- Nucleic Acids Research
- Molecular and Cellular Biology
- Cell Death and Differentiation
- EMBO Journal
- EMBO Reports
- Oncogene
- Cancer Research
- Molecular Cancer
- Human Molecular Reproduction
- Molecular Carcinogenesis
- Journal of Biological Chemistry
- Epigenetics
- Genome Biology
- Transcription
- Critical Reviews in Biochemistry and Molecular Biology
- Cell Systems
- Journal of Visualized Experiments
- Cell Reports Medicine
- Frontiers in Immunology

Grant review activity:

National:

2005-2006	The Cancer League of Colorado.
2008-2015	Ohio Cancer Research Foundation.
2009	National Science Foundation (NSF), Gene and Genomes Cluster.
2010-2011	NIH, Molecular Genetics A Study Section (MGA).
2010	Colorado Clinical and Translational Sciences Institute (CCTSI).
2011-2013	NIH, Cancer Molecular Pathology Study Section (CAMP).
2011	NSF, Gene Regulation and Epigenetics Cluster.
2011	HHMI, International Pre-Doctoral Fellowship Program.
2012	The Butcher Foundation Awards.
2012	NIH-NCI, Site Visit Reviewer, Cancer and Cell Biology laboratories
2012	NIH Special Emphasis Panel, Genetic Variation and Evolution Study Section.
2013-2014	NSF, Genetic Mechanisms Review Cluster.
2015-present	Linda Crnic Institute for Down Syndrome, Grand Challenges Grant Program.
2016	NSF, Gene Expression Panel.

2016-2017 The Cancer League of Colorado.
2016- RNA Bioscience Institute, CU-SOM.
2017-2018 Golfers Against Cancer.
2017-2018 Wings of Hope Pancreatic Cancer Research Foundation
2019 NIH, RM1 Collaborative Program Grant for Multidisciplinary Teams.
2020 NIH, Ruth L. Kirschstein National Research Service Awards.
2020 NSF, Directorate of Mathematical and Physical Sciences, Division of Physics.
2022 NIH, Ad Hoc reviewer for Transformative R01 awards.
2023 AB Nexus Grants, University of Colorado.
2024 NIAID, ad hoc Council Member.
2025 NIH Center for Scientific Review, ad hoc reviewer.

International:

2007 Ireland Research Board.
2008 Cancer Research United Kingdom.
2011 Netherlands Organization for Scientific Research.
2011 Ministerio de Education, Ciencia y Tecnología, Argentina.
2012 Agence National du Recherche, France.
2014 Israel Science Foundation.
2015 Cancer Research United Kingdom.
2015 Netherlands Organization for Scientific Research.
2017 Irish National Children's Research Centre.
2018 Chair, Site Review Committee for Terry Fox Research Institute, Toronto, Canada.
2019 Diabetes UK.
2024 Jerome Lejeune Institute, Post-doctoral Fellowships.

Editorial Boards:

2009-2017 *Molecular and Cellular Biology* (American Society for Microbiology).
2011-present Co-Editor in Chief, *Transcription* (Taylor and Francis).
2011-present *Cell Reports* (Cell Press).
2012-2022 *eLIFE* (HHMI / Welcome Trust / Max Planck Society).
2015-present *Trends in Cancer* (Cell Press).

X. OUTREACH ACTIVITIES (select)

Science Blogger, The Huffington Post:

Cancer is About Relationships, Get Personal.
http://www.huffingtonpost.com/joaquin-m-espinosa/personalized-medicine-cancer_b_1967939.html

Which President will Cure Cancer?
http://www.huffingtonpost.com/joaquin-m-espinosa/which-president-will-cure_b_2019305.html

One Less Cancer to Worry About (if Only)
http://www.huffingtonpost.com/joaquin-m-espinosa/one-less-cancer-to-worry-_b_2634331.html

Funding Cancer Research: the Danger of Brightly Colored Ribbons.
http://www.huffingtonpost.com/joaquin-m-espinosa/funding-cancer-research_b_4612230.html

Does the Study of Down Syndrome Hold a Possible Cancer Cure?
http://www.huffingtonpost.com/joaquin-m-espinosa/does-study-of-down-syndro_b_5979458.html

Supreme Court Justice for the Chromosome Rights Movement -- the Next Frontier
http://www.huffingtonpost.com/joaquin-m-espinosa/supreme-court-justice-for_b_7694366.html

Why we should all celebrate World Down Syndrome Day

http://www.huffingtonpost.com/joaquin-m-espinosa/why-we-should-all-celebrate_b_9513624.html

The Science Coalition, participated in promotional short film and panel with members of Congress staff.
http://innovators.sciencecoalition.org/video.php?id=337

Advocacy efforts in Washington D.C., including personal meetings with various members of the U.S. Congress to discuss science policy, including Rep. Cathy McMorris-Rodgers (WA), Rep. Jared Polis (CO), Rep. Mike Coffman (CO), Rep. Pete Sessions (TX), Sen. Chris Van Hollen (MD), Sen. Jerry Moran (KS), Sen. Michael Bennet (CO), Rep. Diana DeGette (CO), Sen. Cory Gardner (CO), Rep. Tom Cole (OK), Rep. Mike Simpson (ID), Rep. Steve Womack (AR), Rep. Chuck Fleischmann (TN), Rep. Andy Harris (MD), Rep. Martha Roby (AL), Rep. Jaime Herrera Beutler (WA), Rep. John Moolenaar (MI), Rep. Rosa DeLauro (CT), Rep. Lucille Roybal-Allard (CA), Rep. Barbara Lee (CA), Rep. Mark Pocan (WI), and Rep. Katherine Clark (MA).

Science Columnist, Down Syndrome World Magazine.
http://downsyndromeworld.org

TV Appearances:

CCTV America. *"Down syndrome cases studied to reduced solid cancers".*
http://www.cctv-america.com/2015/12/31/down-syndrome-cases-studied-to-reduce-solid-cancers

Denver Channel 7 News. "*Studying Down syndrome to fight cancer: Denver's Crnic Institute looking at genes that battle tumors".*

Denver Channel 9 News. *"Down syndrome might prevent cancer".*

Denver Channel 9 News. *"Be Beautiful, Be Yourself Fashion Show".*
http://www.9news.com/mobile/article/life/be-beautiful-be-yourself-fashion-show-in-denver/490011254

Denver CW2. *"Global Down Syndrome Foundation - Be Beautiful Be Yourself Fashion Show".*
https://youtu.be/zzey5LFkh30

Telemundo. *"Dia mundial del Sindrome de Down".*
https://www.telemundodenver.com/noticias/D_a-Mundial-del-S_ndrome-de-Down_TLMD---Denver-477581803.html

Voice of America. *"Hyper immune system may be key to Down syndrome symptoms".*
https://www.voanews.com/episode/hyper-immune-system-may-be-key-down-syndrome-symptoms-4294181

WFMZ Allentown. *"Health Beat: Life-changer for Down syndrome: Going beyond skin deep".*
https://www.wfmz.com/health/health-beat/health-beat-life-changer-for-down-syndrome-going-beyond-skin-deep/article_361ec5cc-e178-11ea-a939-7f1a76e45fd7.html

CBS4 News. *"'Should Be Top Priority': Scientist Says Those With Down Syndrome Should Receive Vaccine Soon".*
https://denver.cbslocal.com/2021/02/17/down-syndrome-covid-colorado-denver/

PBS – The Aaron Harber Show
https://www.pbs.org/video/michelle-sie-whitten-and-joaquin-espinosa-6uiotc/

Radio and Podcast Interviews:

KGNU – How on Earth. "*Down syndrome and inflammation*".
http://howonearthradio.org/archives/6751

National Public Radio – WBUR Here and Now. "*Individuals With Down Syndrome Should Get Vaccinated For COVID-19 Early, CDC Recommends*".
https://www.wbur.org/hereandnow/2021/01/15/down-syndrome-coronavirus

National Public Radio – KUNC Health. "*Light At The End Of The Pandemic Tunnel Still Dim For Families Of Immunocompromised Children*".
https://www.kunc.org/health/2021-03-25/light-at-the-end-of-the-pandemic-tunnel-still-dim-for-families-of-immunocompromised-children

Health Science Radio – University of Colorado Anschutz Medical Campus. *"Seeing a Regressive Form of Down Syndrome From All Sides".*
https://news.cuanschutz.edu/news-stories/podcast-seeing-a-regressive-form-of-down-syndrome-from-all-sides.

Down Syndrome Podcasts – Host: Dr. Kishore Vellody. *"Down syndrome and inflammation"*.
https://downsyndromecenter.libsyn.com/dsc

Newspapers, Print, and Online Media Coverage:

BizWest Boulder Valley. "*Findings could impact treatment of cancer*".
https://bizwest.com/2013/06/21/findings-could-impact-treatment-of-cancer/#

CU Boulder Today. "*New University of Colorado study illuminates how cancer-killing gene may actually work*".
https://www.colorado.edu/today/2014/05/27/new-university-colorado-study-illuminates-how-cancer-killing-gene-may-actually-work

Denver Post. "*Collaboration — and fruit flies — suggest potential strategy for colon cancer in CU study*".
http://www.denverpost.com/2016/07/29/fruit-flies-colon-cancer/

CU Cancer Center. "*P53 'master switch' remains top target in gene signaling network controlling cancer suppression*".
https://coloradocancerblogs.org/p53-master-switch-remains-top-target-gene-signaling-network-controlling-cancer-suppression/

Colorado Politics. "*Colorado's work on Down syndrome research headed to D.C.*"
https://www.coloradopolitics.com/news/colorados-work-on-down-syndrome-research-headed-to-d-c/article_65898791-690d-5199-b527-9ac45362643b.html

Denver Post. "*People with Down syndrome get fewer cancers, but CU researchers need more funding to understand why*".
http://www.denverpost.com/2017/10/25/university-of-colorado-anschutz-down-syndrome-cancer-research/

Westword Denver. "*CU Uncovers a 'Game-Changing Discovery' in Down Syndrome*".
https://www.westword.com/news/linda-crnic-institute-uncovers-a-game-changing-discovery-in-down-syndrome-9845183

American Scientist. "*Down Syndrome, the Immune System Disorder*".
https://www.americanscientist.org/article/down-syndrome-the-immune-system-disorder

CU Anschutz Today. "*Star-studded event raises $2.4 million*".
https://news.cuanschutz.edu/news-stories/down-syndrome-event-raises-2-4-million-toward-research-at-cu-anschutz

CU Anschutz Today. "*CU Anschutz at the forefront of breakthroughs in Down syndrome research*".
https://news.cuanschutz.edu/news-stories/cu-anschutz-at-the-forefront-of-breakthroughs-in-down-syndrome-research

CU Anschutz Today. "*Fashion Show Raises $2.5 Million for Down Syndrome Research*".
https://news.cuanschutz.edu/news-stories/fashion-show-raises-2.5-million-for-down-syndrome-research

CU Anschutz Today. "*New Down Syndrome Study Goes Beyond Skin Deep*".
https://news.cuanschutz.edu/news-stories/new-down-syndrome-study-goes-beyond-skin-deep

Found in Translation - Colorado Clinical and Translational Sciences Institute. "*CU Anschutz is the new epicenter of Down syndrome research in the nation*". https://cctsi.cuanschutz.edu/news/updates/foundintranslation/cu-anschutz-is-the-new-epicenter-of-down-syndrome-research-in-the-nation

CU Anschutz Today. "*CU Scientists Secure $1 Million to Explore COVID-19 and Down Syndrome*". https://news.cuanschutz.edu/news-stories/cu-scientists-secure-1-million-to-explore-covid-19-and-down-syndrome

CU Anschutz Today. "*State of Research Address Heralds Rapid Collective Response to Pandemic*". https://news.cuanschutz.edu/news-stories/state-of-research-address-heralds-rapid-collective-response-to-pandemic

CU Anschutz Today. "*CU Anschutz COVIDome Project Aimed at Speeding Lifesaving Treatment*". https://news.cuanschutz.edu/news-stories/cu-anschutz-covidome-project-aimed-at-speeding-lifesaving-treatment

CU Cancer Center. "*CU Cancer Center Researcher Reveals New Effects of Oxygen Deprivation in Cancer Cells*". https://news.cuanschutz.edu/cancer-center/oxygen-deprivation-cancer-cells

The Washington Post (cover article). *"A mystery illness stole their kids' personalities. These moms fought for answers".* https://www.washingtonpost.com/wellness/2024/05/12/down-syndrome-regression-disorder-mothers-support/

XI. PATENTS

Patent US20030228627 A1: *Assay for p53 function in cells,* Beverly M. Emerson and Joaquín M. Espinosa.

U.S. Provisional Patent Application Serial No. 62/992,855 entitled '*JAK1 Inhibition For Modulation Of Overdrive Anti-Viral Response To COVID-19*'.

U.S. Provisional Patent Application Serial No. 62/993,749 entitled '*Compounds and Methods for Inhibition or Modulation of Viral Hypercytokinemia*'.
