

UNIVERSITY OF COLORADO SCHOOL OF MEDICINE  
*Curriculum vitae*

**1. Personal History**

**M. Cecilia Caino, Ph.D.**

Department of Pharmacology  
School of Medicine  
University of Colorado Anschutz Medical Campus  
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**2. Education**

- 2003 – 2004      **M.S. in Biology** (Molecular Genetics)  
Universidad Nacional de Mar del Plata, Facultad de Ciencias Exactas y Naturales, Mar del Plata, Argentina. Exchange Program with Fundacion Instituto Leloir, Buenos Aires, Argentina.  
G.P.A.: 9.19/10. *Cum laude*.
- 2005 – 2010      **Ph.D. in Cellular Biology**  
Universidad de Buenos Aires, Facultad de Farmacia y Bioquimica, Buenos Aires, Argentina.  
Exchange Program with the University of Pennsylvania School of Medicine, Philadelphia, PA.  
G.P.A.: 10/10. *Summa cum laude*.
- 2011 – 2016      **Postdoctoral training**  
The Wistar Institute, Philadelphia, PA.

**3. Academic Appointments**

- 2002              **Undergraduate Student**, Laboratory of Dr. Eduardo T. Canepa, Molecular Biology Department, University of Buenos Aires, Argentina.
- 2003 – 2004      **Graduate Student** (M.S. Candidate), Genetics & Molecular Physiology Group, Fundación Instituto Leloir, University of Buenos Aires, Argentina. Mentor: Dr. Pablo Wappner.  
  
M.S. Thesis: *Role for the oncogenic protein SPARC in migration during embryogenesis of the fruit-fly Drosophila melanogaster*. Research component performed at Fundación Instituto Leloir. Coursework, rotations and thesis defense components completed at University of Mar del Plata, School of Natural Sciences, Argentina.
- 08/2005 – 08/2010      **Visiting Graduate Student**, Pharmacology Department, University of Pennsylvania School of Medicine. Mentor: Dr. Marcelo G. Kazanietz.  
  
Ph.D. Thesis: *Protein kinase C isozyme-specific regulation of cancer cell biology using prostate cancer and lung cancer models*. Research component performed at University of Pennsylvania. Coursework, rotations and thesis defense components completed at University of Buenos Aires, School of Pharmacology and Biochemistry, Argentina.

- 09/2010 – 03/2011 **Postdoctoral fellow**, Pharmacology Department, University of Pennsylvania School of Medicine.  
Mentor: Dr. Marcelo G. Kazanietz.
- 04/2011 – 12/2016 **Postdoctoral fellow**, Prostate Cancer Discovery Program, The Wistar Institute  
Mentor: Dr. Dario C. Altieri.
- 09/2013 – 08/2016 **Ruth L. Kirschstein National Research Service Award Fellow**
- 01/2017 – 07/2017 **Staff Scientist**, Tumor Microenvironment and Metastasis Program, The Wistar Institute
- 08/2017 – present **Assistant Professor**, Department of Pharmacology, School of Medicine, University of Colorado  
Anschutz Medical Campus
- 2017 – present **Training Faculty Member**  
Pharmacology Graduate Program  
Biomedical Sciences Graduate Program  
Cancer Biology Graduate Program  
Cancer Research Summer Fellowship Program (UCCC)
- 12/2017 – 6/2021 **Mentored Member**, Molecular and Cellular Oncogenesis Program, University of Colorado  
Cancer Center
- 7/2021 – present **Member**, Molecular and Cellular Oncogenesis Program, University of Colorado Cancer Center

#### **4. Honors, special recognitions and awards**

- 1997 2<sup>nd</sup> Prize in Scientific Essay: “Ethics dilemmas in Genetics”, Fundacion Instituto Leloir, Argentina.
- 2005 Agencia Nacional de Promocion Cientifica y Tecnologica (ANPCyT) predoctoral fellow.
- 2005 Graduated *Cum laude* from the M.S. Program, Universidad Nacional de Mar del Plata, Argentina.
- 2005 Best GPA for M.S. in Biology. Rotary Club, Mar del Plata, Argentina.
- 2007 Travel Award for Students. Growth Factor Signal Transduction Committee, Iowa State University, Ames IA.
- 2010 Graduated *Summa cum laude* from the PhD Program, University of Buenos Aires, Argentina.
- 2013 National Research Service Awards (NRSA) for individual postdoctoral fellows (F32).
- 2015 Trainee Travel Award, Wistar Trainee Association, Philadelphia PA.
- 2019 Webb-Waring Biomedical Research Award, Boettcher Foundation, Denver CO.

#### **5. Memberships in Professional Organizations**

- 2010 – present Member, The American Association for Cancer Research (AACR)
- 2010 – present Member, AACR Women in Cancer Research
- 2010 – present Member, AACR Minorities in Cancer Research

#### **6. Major Committee and Service Responsibilities**

##### Thesis Committees

- 2017-present Cassandra Smith (Structural Biology and Biochemistry)
- 2017 Irene Bertolini (University of Milan, Italy, *Thesis Committee/Thesis Reviewer*)
- 2019-2021 Sean Korpela (Pharmacology)
- 2020-present Kathleen O’Neill (Cancer Biology)

2021-present Ashley Wu (Cancer Biology)  
2021-present Michael Orman (Pharmacology)  
2021-present Phoebe Cao (Cancer Biology)

### Research Advisory Committees

2020-2021 Christina Towers (postdoctoral fellow, K99)  
2021-present Jordan Speidel (postdoctoral fellow, T32 Cancer Biology)

### Other service

2017 – present Poster judge, Student Research Day, Pharmacology Program  
2017 – present Poster judge, Cancer Biology Program Retreat  
2018 Department of Pharmacology IT specialist Recruitment  
2018 – present Poster judge, Cancer Biology Postdoctoral Day  
2018 – present Pharmacology Department Seminar Committee member  
2018, 2019 Co-Chair of the Organizing Committee, Pharmacology Annual Retreat  
2018 – present Faculty Senator, Faculty Senate University of Colorado Anschutz Medical Campus  
2020 Recruitment committee member, Cancer Research Experience for Undergraduates (CREU)  
2021 – present Recruitment committee member, Biomedical Sciences Graduate Program  
2021, 2022 Co-Chair of the Organizing Committee, Cancer Biology Program Annual Retreat

## **7. Inventions, Intellectual Property and Patents held or pending**

Methods and Compositions for Inhibiting Mitochondrial Trafficking. Publication number: 20170000804. Type: Application. Filed: June 24, 2016. Publication date: January 5, 2017. Inventors: Dario C. Altieri, Maria Cecilia Caino. <https://patents.justia.com/patent/20170000804>.

Abstract: Methods for reducing, inhibiting or preventing cancer metastasis comprise blocking the movement of mitochondria within a cancer cell. Other methods involve interrupting or preventing oxidative phosphorylation pathways or respiration pathways in the cancer cell. In one embodiment, mitochondrial movement is induced by contact of the cell with PI3K inhibitors or antagonists. Methods for treating cancer involve a regimen of treating a subject with a PI3K inhibitor or antagonist and treating the subject with a composition that blocks the movement of mitochondria within the subject's cells.

## **8. Review and Referee Work**

### Grant review committees and study sections

2018 – Argentinean National Cancer Institute, Argentina.  
2018 – Chilean National Science and Technology Commission, Chile.  
2019 – Medical Research Council, UK Research and Innovation, United Kingdom.  
2019 – Pew-Stewart Scholars Program for Cancer Research, University of Colorado Cancer Center, Aurora, CO.  
2019 – Wings of Hope, University of Colorado Cancer Center, Aurora, CO.  
2019 – Worldwide Cancer Research, United Kingdom.  
2020 – Early Career Reviewer (ECR), Tumor Cell Biology (TCB) study section, Center for Scientific Review, NIH.  
2020 – UCCC/NORC Metabolism Grants, University of Colorado, Aurora, CO.  
2021 – *Ad hoc* member, Tumor Cell Biology (TCB) study section, Center for Scientific Review, NIH.

### Ad-hoc Journal reviewer

Molecular Carcinogenesis (1), PLoS ONE (1), Oncotarget (1), Breast Cancer Research (1), Oncogenesis (1), Nature Methods (1), Journal of Experimental & Clinical Cancer Research (1), Molecular Cancer Research (1), Molecular Therapy (1).

## 9. Invited Lectures, Presentations and Visiting Professorships

- 2007 16th Annual Growth Factor Signal Transduction Symposium in Senescence, Aging and Cancer. Ames, Iowa.
- 2009 FASEB Summer Research conferences: Lipid signaling pathways in Cancer. Carefree, Arizona.
- 2015 Farestaie Institute Retreat. Mar del Plata, Buenos Aires (Argentina).
- 2017 Spotlight Session on Cancer Metabolism on the ASBMB 2017 Annual Meeting. Chicago, Illinois.
- 2017 Cancer Biology Graduate Program, University of Colorado Anschutz Medical Campus.
- 2018 Endocrine Research Conference, University of Colorado Anschutz Medical Campus.
- 2018 Chalk Talk Workshop, Cancer Biology Postdoctoral Symposium.
- 2019 Hematology Division, University of Colorado Anschutz Medical Campus.
- 2019 Chalk Talk Workshop, T32 Training grant seminar series, Cancer Biology Program.
- 2021 Expectations of Basic Science Faculty, T35 Career Development Series, Cancer Biology Program.
- 2021 Cancer Biology Program seminar series, University of Pittsburgh, Hillman Cancer Center.

## 10. Teaching Records

### Major presentations

- 2009 **Teaching Assistant**, DNA Damage Checkpoints (CAMB 650). University of Pennsylvania, School of Medicine. 36 hours per semester.
- 2017-2019 **Lecturer**, Frontiers in Pharmacology (PHCL 7600). University of Colorado, School of Medicine. 2 hours per semester.
- 2018-present **Lecturer** on Cell Signaling, and Lecturer on Cell Motility, Foundations in Biomedical Sciences (IDPT 7806). University of Colorado, School of Medicine. Two lectures and 2 paper discussions per semester, 8 hours per semester.
- 2018-present **Faculty Facilitator** for Cancer Biology Journal Club (CANB 7613). University of Colorado, School of Medicine. 2 hours per semester.
- 2018-2020 **Lecturer** on Responsible Authorship, Responsible Conduct of Research (PHCL 7605). University of Colorado, School of Medicine. 2 hours per semester.
- 2018-2020 **Group discussion leader**, Responsible Conduct of Research (PHCL 7605). University of Colorado, School of Medicine. Six discussion meeting dates, 12 hours per semester.
- 2019-present **Lecturer** on Mitochondrial Signaling Pathways, Lecturer on Introduction to Cell Signaling, Receptors and Cell Signaling (PHCL 7606). University of Colorado, School of Medicine. Two lectures and 2 paper discussions per semester, 8 hours per semester.

### Key administrative positions

- 2018-2020 **Course Co-Director** for Responsible Conduct of Research (PHCL 7605). University of Colorado, School of Medicine. Fall, 40 hours per semester.
- 2020-present **Course Co-Director** for Receptors and Cell Signaling (PHCL 7606). University of Colorado, School of Medicine. Spring, 60 hours per semester.
- 2022- **Facilitator** for Mentor Training. Molecular Biology, Pharmacology, Cell and Developmental Biology and Medical Scientist Training Programs, University of Colorado.

### Trainees and mentees

#### During mentored phase of my career:

- 2004 Juan Manuel Gomez, Undergraduate student, Fundacion Instituto Leloir, Argentina.
- 2005 Agustina Bertolin, Undergraduate student, Fundacion Instituto Leloir, Argentina.
- 2007-2009 Vivian Von Burstin, Visiting graduate student, University of Pennsylvania.
- 2008-2010 Mahlet Abera, Graduate Student from Pharmacology, University of Pennsylvania.

2009-2011 Rachana Garg, Postdoctoral fellow, University of Pennsylvania.  
2012 Noreen Petrash, Summer undergraduate student, The Wistar Institute.  
2016-2017 Yuan Wang, Postdoctoral fellow, The Wistar Institute.  
2017 Ekta Agarwal, Postdoctoral fellow, The Wistar Institute.

During independent phase of my career:

2018 – present Madison Furnish, Graduate student from Pharmacology, University of Colorado.  
2018 Mitchell Ellinwood, Summer undergraduate student, University of Colorado Cancer Center.  
2019 – present Dillon Boulton, Graduate student from Pharmacology, University of Colorado.  
2021 – present Denisa Grofova, Graduate student from Modern Human Anatomy, University of Colorado.  
2021 Sarah Kate Connor, Summer undergraduate student, University of Colorado Cancer Center.

## **11. Grant Support**

### **Active**

***Title: Understanding the MIRO2/GCN1 Signaling Axis for Therapeutic Gain in Lethal Prostate Cancer***

***Principal Investigator:*** Caino

***Award Number:*** W81XWH-21-1-0408

***Time commitments:*** 2.4 calendar

***Supporting agency:*** Department of Defense

***Period of performance:*** 07/01/21 – 06/30/24

***Project goals:*** This is a PCRP Idea Development Award for New Investigators.

***Specific aims:*** i) Examine the impact of MIRO2/GCN1 signaling on aggressiveness of metastatic prostate cancer (mPC). ii) Identify molecular vulnerabilities of mPC, focusing on the MIRO2 network.

***Title: Regulation of mitochondrial dynamics pathways in mammalian cells***

***Principal Investigator:*** Caino

***Award Number:*** R35 GM142774

***Time commitments:*** 6 calendar

***Supporting agency:*** National Institute of General Medical Sciences (NIGMS)

***Period of performance:*** 06/15/21 – 04/30/26

***Project goals:*** This is a Maximizing Investigator's Research Award (MIRA) for Early Stage Investigators

***Specific aims:*** The overall goal is to reach a comprehensive understanding on the mechanisms that govern mitochondrial dynamics and the interplay between mitochondrial transport with other aspects of mitochondrial and cellular biology.

***Title: A novel mitochondrial signaling pathway regulates tumor cell metastasis***

***Principal Investigator:*** Caino

***Award Number:*** AWD-193249

***Time commitments:*** 1.2 calendar

***Supporting agency:*** Boettcher Foundation

***Period of performance:*** 07/01/19 – 06/30/22

***Project goals:*** This is a Webb-Waring Biomedical Research Award for Early Stage Investigators.

***Specific aims:*** i) Examine the universality of MIRO2's regulation of tumor cell-intrinsic phenotypes. ii) Study the mechanisms by which MIRO2 regulates tumor cell biology. iii) Dissect the contribution of MIRO2's functional domains to cellular signaling cascades in melanoma.

## Completed

### ***Title: Mitochondrial Hsp90s Regulation of Tumor Bioenergetics and Metastasis***

*Principal Investigator:* Caino

*Award Number:* F32 CA177018

*Effort:* 12 calendar months

*Supporting agency:* National Cancer Institute

*Period of performance:* 09/23/13-09/22/16

*Project goals:* This is a NIH National Research Service Award (NRSA) fellowship for postdoctoral fellows.

*Specific aims:* The major goals of this project were: i) to elucidate the molecular requirements for mtHsp90s modulation of the autophagy initiating complex in FAK activation and tumor cell motility under metabolic stress; ii) to study the involvement of the UPR in mtHsp90s-mediated regulation of cytoskeletal dynamics in tumor cells; and iii) to validate the role of mtHsp90s in animal models of metastasis *in vivo*.

### ***Title: Metabolic Reprogramming in Prostate Cancer Therapy***

*Principal Investigator:* Altieri

*Award Number:* Challenge Award

*Effort:* 12 calendar months

*Supporting agency:* Prostate Cancer Foundation

*Address:* 1250 Fourth Street, Santa Monica, CA 90401

*Period of performance:* 08/01/2015-07/31/2017

*Project goals:* This is a Challenge award for a team of 3 senior investigators (Altieri, Languino, Gabrilovich) and 1 junior investigator (Caino).

*Specific aims:* Project 4 (Caino) aimed to determine how mitochondria travel along the cytoskeletal network in tumor cells, and characterize the role of the cytoskeletal protein, Syntaphilin (SNPH) as a putative novel metastasis suppressor gene in prostate cancer.

### ***Title: Institutional Research Grant***

*Principal Investigator:* Richer/Tentler

*Award Number:* IRG-16-184-56

*Time commitments:* 0.6 calendar each PI, no salary support requested

*Supporting agency:* American Cancer Society

*Period of performance:* 1/1/2017 – 12/31/2020

*Project goals:* The purpose of this grant program is to support the development of exceptional research projects that will help lead to the conquest of cancer and further the objectives of the CU Cancer Center.

*Period of performance for Dr. Caino's seed grant:* 1/1/2018 – 12/31/2018

*Project goals for Dr. Caino's seed grant:* Elucidate the Role of mitochondrial Rho GTPases (MIROs) in prostate cancer invasion.

*Specific aim for Dr. Caino's seed grant:* The goal of this project was to study MIRO 1 and 2 as part of a “neuronal” network responsible for mitochondria trafficking and tumor cell invasiveness.

## **12. Bibliography**

1. **Caino MC**, Oliva JL, Jiang H, Penning TM, Kazanietz MG. “Benzo[a]pyrene-7,8-dihydrodiol promotes checkpoint activation and G2/M arrest in human bronchoalveolar carcinoma H358 cells”. *Mol Pharmacol*. 2007 Mar;71(3):744-50.
2. Oliva JL\*, **Caino MC\***, Senderowicz AM, Kazanietz MG. “S-Phase-specific activation of PKC alpha induces senescence in non-small cell lung cancer cells.”. *J Biol Chem*. 2008 Feb 29;283(9):5466-76. **\*, equally contributed to this work.**

3. Xiao L\*, **Caino MC** \*, et al. "Phorbol ester-induced apoptosis and senescence in cancer cell models". *Methods Enzymol.* 2008;446:123-39. **\*, equally contributed to this work.**
4. **Caino MC**, Meshki J and Kazanietz MG. "Hallmarks of senescence in carcinogenesis: novel signaling players". *Apoptosis.* 2009 Apr;14(4):392-408. Review.
5. Griner EM, **Caino MC**, Sosa MS, Colón-González F, Chalmers MJ, Mischak H, Kazanietz MG. "A novel cross-talk in diacylglycerol signaling: the Rac-GAP {beta}2-chimaerin is negatively regulated by PKC{delta} mediated phosphorylation". *J Biol Chem.* 2010 Mar 24. PMID: 20335173. PMCID:PMC2878072.
6. Meshki J\*, **Caino MC\***, von Burstin VA, Griner E, Kazanietz MG. "Regulation of prostate cancer cell survival by protein kinase Cepsilon involves bad phosphorylation and modulation of the TNFalpha/JNK pathway". *J Biol Chem.* 2010 Aug 20;285(34):26033-40. PMID: 20566643. PMCID:PMC2924002. **\*, equally contributed to this work.**
7. Filone CM, Hanna SL, **Caino MC**, Bambina S, Doms RW, Cherry S. "Rift valley fever virus infection of human cells and insect hosts is promoted by protein kinase C epsilon". *PLoS One.* 2010 Nov 24;5(11):e15483. PMID: 21124804. PMCID:PMC2991366.
8. **Caino MC**, von Burstin VA, Lopez-Haber C, Kazanietz MG. "Differential regulation of gene expression by protein kinase C isozymes as determined by genome-wide expression analysis". *J Biol Chem.* 2011 Apr 1;286(13):11254-64. PMID: 21252239. PMCID:PMC3064181.
9. **Caino MC**, Lopez-Haber C, Kim J, Mochly-Rosen D, Kazanietz MG. "Protein kinase Cepsilon is required for non-small cell lung carcinoma growth and regulates the expression of apoptotic genes". *Oncogene.* 2012 May 17;31(20):2593-600. PMCID: PMC3432976.
10. **Caino MC**, Lopez-Haber C, Kissil JL, Kazanietz MG. "Non-small cell lung carcinoma cell motility, rac activation and metastatic dissemination are mediated by protein kinase C epsilon". *PLoS One.* 2012;7(2):e31714. PMID: 22384062. PMCID:PMC3288050.
11. Chae YC, **Caino MC**, Lisanti S, Ghosh JC, Dohi T, Danial NN, Villanueva J, Ferrero S, Vaira V, Santambrogio L, Bosari S, Languino LR, Herlyn M, Altieri DC. "Control of tumor bioenergetics and survival stress signaling by mitochondrial Hsp90s". *Cancer Cell.* 2012 Sep 11;22(3):331-44. PMID:22975376. PMCID: PMC3615709.
12. **Caino MC**, Chae YC, Vaira V, Ferrero S, Nosotti M, Martin NM, Weeraratna A, O'Connell M, Jernigan D, Fatatis A, Languino LR, Bosari S, Altieri DC. "Metabolic stress regulates cytoskeletal dynamics and metastasis of cancer cells". *J Clin Invest.* 2013 Jul;123(7):2907-20. PMID:23921130. PMCID: PMC3998961.
13. Garg R\*, **Caino MC\***, Kazanietz MG. "Regulation of transcriptional networks by PKC isozymes: identification of c-Rel as Key transcription factor for PKC-regulated genes". *PLoS One.* 2013 Jun 27;8(6):e67319. PMID:23826267. PMCID: PMC3694964. **\*, equally contributed to this work.**
14. Ghosh JC, Siegelin MD, Vaira V, Favarsani A, Tavecchio M, Chae YC, Lisanti S, Rampini P, Giroda M, **Caino MC**, Seo JH, Kossenkov AV, Michalek RD, Schultz DC, Bosari S, Languino LR, Altieri DC. "Adaptive mitochondrial reprogramming and resistance to PI3K therapy". *J Natl Cancer Inst.* 2015 Feb 3;107(3). pii: dju502. PMID:25650317. PMCID: PMC4565533.
15. **Caino MC**, Ghosh JC, Chae YC, Vaira V, Rivadeneira DB, Favarsani A, Rampini P, Kossenkov AV, Aird KM, Zhang R, Webster MR, Weeraratna AT, Bosari S, Languino LR, Altieri DC. et al. "PI3K therapy reprograms mitochondrial trafficking to fuel tumor cell invasion". *Proc Natl Acad Sci U S A.* 2015 Jul 14;112(28):8638-43. PMID: 26124089. PMCID: PMC4507184.

16. Rivadeneira D, **Caino MC**, Seo JH, Angelin A, Wallace D, Altieri DC. “Mitochondrial respiration controlled by Survivin directs positional organelle trafficking and tumor cell invasion”. *Sci Signal*. 2015 Aug 11;8(389):ra80. doi: 10.1126/scisignal.aab1624. PMID: 26268608. PMCID: PMC4539531.
17. **Caino MC** and Altieri DC. “Cancer cells exploit adaptive mitochondrial dynamics to increase tumor cell invasion”. *Cell Cycle* 2015;14(20):3242-7. doi: 10.1080/15384101.2015.1084448. PMID: 26317663. PMCID: PMC4825634.
18. **Caino MC** and Altieri DC. “Disabling mitochondrial reprogramming in cancer”. *Pharmacol Res* 2015 Sep 10. pii: S1043-6618(15)00201-7. doi: 10.1016/j.phrs.2015.08.022. PMID: 26365877. PMCID: PMC4684442.
19. **Caino MC** and Altieri DC. “Molecular Pathways: Mitochondrial Reprogramming in Tumor Progression and Therapy”. *Clin Cancer Res*. 2016 Feb 1;22(3):540-5. doi: 10.1158/1078-0432.CCR-15-0460. PMID: 26660517. PMCID: PMC4738153.
20. Seo JH, Rivadeneira D, **Caino MC**, Speicher DW, Tao HY, Vaira V, Bosari S, Kossenkov AV, Languino LR, Altieri DC. “The mitochondrial unfoldase-peptidase ClpXP complex controls oxidative stress and metastasis”. *PLoS Biol*. 2016 Jul 7;14(7):e1002507. doi: 10.1371/journal.pbio.1002507. PMID: 27389535. PMCID: PMC4936714.
21. Chae YC, Vaira V, **Caino MC**, Tao HY, Kossenkov AV, Ottobriani L, Martelli C, Lucignani G, Bertolini I, Locatelli M, Bryant KG, Ghosh JC, Lisanti S, Ku B, Bosari S, Languino LR, Speicher DW, Altieri DC. “Mitochondrial Akt regulation of hypoxic metabolic reprogramming”. *Cancer Cell*. 2016 Aug 8;30(2):257-72. doi: 10.1016/j.ccell.2016.07.004. PMID: 27505672. PMCID: PMC5131882.
22. **Caino MC**, Seo JH, Aguinaldo A, Wait E, Bryant KG, Kossenkov AV, Hayden JE, Vaira V, Morotti A, Ferrero S, Bosari S, Gabrilovich DI, Languino LR, Cohen AR, Altieri DC. “A neuronal network of mitochondrial dynamics regulates metastasis”. *Nat Commun* 2016 7, 13730 doi: 10.1038/ncomms13730. PMID: 27991488. PMCID: PMC5187409.
23. Behera R., Kaur A, Webster MR, Kim S, Ndoye A, Alicea GM, Kugel CH, Wang JX, Ghosh K, Cheng PF, Lisanti S, Marchbank K, Dang V, Levesque MP, Dummer R, Xu X, Herlyn M, Aplin AE, Roesch A, **Caino MC**, Altieri DC, Weeraratna AT. “Inhibition of age-related therapy resistance in melanoma by rosiglitazone-mediated induction of Klotho”. *Clin Cancer Res* 2017 Jun 15;23(12):3181-3190. doi: 10.1158/1078-0432.CCR-17-0201. PMID: 28232477. PMCID: PMC5474161.
24. **Caino MC**, Seo JH, Wang Y, Rivadeneira DB, Gabrilovich DI, Kim ET, Weeraratna AT, Languino LR, Altieri DC. “Syntaphilin controls a mitochondrial rheostat for proliferation-motility decisions in cancer”. *J Clin Invest*. 2017 Sep 11. pii: 93172. doi: 10.1172/JCI93172. PMID: 28891816. PMCID: PMC5617650.

Since starting at the University of Colorado:

25. Williams M, **Caino MC**. “Mitochondrial Dynamics in Type 2 Diabetes and Cancer”. *Front Endocrinol*. 2018 Apr 27;9:211. doi: 10.3389/fendo.2018.00211. eCollection 2018. Review. PMID: 29755415. PMCID: PMC5934432.
26. Seo JH, Agarwal E, Bryant KG, **Caino MC**, Kim ET, Kossenkov AV, Tang HY, Languino LR, Gabrilovich DI, Cohen AR, Speicher DW, Altieri DC. “Syntaphilin Ubiquitination Regulates Mitochondrial Dynamics and Tumor Cell Movements”. *Cancer Res*. 2018 Aug 1;78(15):4215-4228. doi: 10.1158/0008-5472.CAN-18-0595. Epub 2018 Jun 13. PMID: 29898993. PMCID: PMC6072605.
27. Wheeler LJ, Watson ZL, Qamar L, Yamamoto TM, Sawyer BT, Sullivan KD, Khanal S, Joshi M, Ferchaud-Roucher V, Smith H, Vanderlinden LA, Brubaker SW, **Caino CM**, Kim H, Espinosa JM, Richer JK, Bitler BG. “Multi-Omic Approaches Identify Metabolic and Autophagy Regulators Important in Ovarian Cancer Dissemination”. *iScience*. 2019 Aug 6;19:474-491. PMID: 31437751. PMCID: PMC6710300.



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32. Towers CG, Wodetzki D, Thorburn J, Smith KR, **Caino MC**, Thorburn A. “Mitochondrial-derived vesicles compensate for loss of LC3-mediated mitophagy”. *Dev Cell*. 2021 Jun 24;S1534-5807(21)00481-0. PMID: 34171288.
33. Furnish M, Boulton DP, Genter V, Ellinwood ML, Romero L, Lucia MS, Cramer SD, **Caino MC**. “MIRO2 regulates prostate cancer cell growth via GCN1-dependent stress signaling”. *Pre-print (under revision)*. bioRxiv May 21, 2021. <https://www.biorxiv.org/content/10.1101/2021.05.20.444992v1>. *Manuscript under revision*.
34. Ghosh JC, Perego M, Agarwal E, Bertolini I, Wang Y, Goldman AR, Tang HY, Kossenkov AV, Jang GH, Wilson JM, Notta F, Libby CA, Languino LR, Plow EF, Morotti A, Ottobrini L, Speicher DW, **Caino MC**, Cassel J, Salvino JM, Robert ME, Vaira V, Altieri DC. “Programmable GCN2-Akt adaptation titrates acute mitochondrial damage to enable metastasis”. *Manuscript under revision*.
35. Boulton DP, **Caino MC**. “Targeting mitochondrial dynamics in metastatic cancer”. *Frontiers Cell Dev Biol*. *Invited review, manuscript in preparation*. Anticipated publication date Dec 2021.
36. Gama V, **Caino MC**. “Mitochondrial dynamics and mitochondrial vesicle formation”. *Invited Book chapter* for Elsevier book “Modern Concepts and Methods in Bioenergetics”, Edited by Ryan Mailloux. Anticipated publication date May 2022.