

Charalampos Andreas Lazaris, MS, MBA, Ph.D.

✉ charalampos.lazaris@novartis.com

✉ clazaris@broadinstitute.org

🌐 <https://chlazaris.netlify.app>

🌐 <https://chlazaris.github.io>

in <https://goo.gl/XNxhu3>

ID <https://goo.gl/cAfwek>

g <https://goo.gl/5UoPR6>

R[®] <https://goo.gl/BqnPa2>

p <https://goo.gl/AD9ofc>

Contents

Recent Employment History	2
Research Experience	2
Education	2
Certifications	3
Research Interests	3
Publications	3
Submitted manuscripts	3
Published manuscripts	4
Referee/Editorial activity	6
Teaching/Mentoring	6
Training in teaching	6
Teaching Experience	7
Posters-Presentations	7
Work experience	9
Honors & Awards	10
Leadership	11
Professional Activities	11
Seminars, Conferences, Workshops & Courses	12

Charalampos (Harris) A. Lazaris 2

Skills 15

Competitions 16

Referees 17

Recent Employment History

May 2024 - today **Senior Expert I**, Oncology Data Science, Novartis Biomedical Research, Cambridge, MA

May 2022 - May 2024 **Expert II**, Oncology Data Science, Novartis Biomedical Research, Cambridge, MA

Research Experience

June 2020 - May 2022 **Associated Scientist.** Klarman Cell Observatory, Broad Institute of MIT and Harvard, Cambridge, MA

January 2020 - May 2022 **Bioinformatics Scientist.** Whitehead Institute for Biomedical Research, Cambridge, MA

January 2018 - December 2019 **Postdoctoral Scholar/Research Associate.** Precision Oncology. USC Norris Comprehensive Cancer Center, Keck School of Medicine, University of Southern California (USC)

Education

August 2018 - July 2019 **Master of Business Administration (MBA).** Quantic School of Business & Technology, Washington, DC.

August 2013 - January 2018 **Ph.D. in Biomedical Sciences-Specialization in Systems & Computational Biomedicine.** Graduate School of Arts & Science, New York University (NYU). **Cumulative GPA: 3.868/4.000.**

- August 2013 - September 2016 **MS in Biomedical Sciences-Specialization in Systems & Computational Biomedicine.** Graduate School of Arts & Science, New York University (NYU). **Cumulative GPA: 3.868/4.000.**
- September 2011 - August 2012 **MSc in Bioinformatics.** School of Science & Engineering, University of Edinburgh, Scotland, United Kingdom. **GPA: 73.06/100 (First Class Honors) (Awarded with Distinction).**
- October 2006- April 2009 **MSc in Molecular Biology-Biomedicine.** University of Crete & IMBB-FORTH, Heraklion, Crete, Greece. **GPA: 8.68/10.00 (Excellent).**
- October 2000- November 2005 **MSc in Biological Applications & Technologies.** University of Ioannina, Greece.(**GPA: 8.94/10.00, Excellent, Valedictorian).**

Certifications

- September 2025–November 2025 **HMX Pro Program (Harvard Medical School online learning platform) – Genetics-Genetic Testing and Sequencing Technologies.**
- January 2023–March 2023 **HMX Pro Program (Harvard Medical School online learning platform) – Pharmacology-Drug Discovery and Development.**

Research Interests

Transcriptional regulation, nuclear organization, cancer genomics & epigenetics

Publications

Submitted manuscripts

Vassiliki Theodoraki, **Charalampos Lazaris**, Athanasia Mouzaki, and Tassos Georgakopoulos. STAT3 acts as a suppressor of the transcription factor Ets-2 in activated T helper cells. (Under review).

Published manuscripts

Alessandra Dall'Agnese*, Jesse M. Platt*, Ming M. Zheng, Max Friesen, Giuseppe Dall'Agnese, Alyssa M. Blaise, Jessica B. Spinelli, Jonathan E. Henninger, Erin N. Tevonian, Nancy M. Hannett, **Charalampos Lazaris**, Hannah K. Drescher, Lea M. Bartsch, Henry R. Kilgore, Rudolf Jaenisch, Linda G. Griffith, Ibrahim I. Cisse, Jacob F. Jeppesen, Tong Ihn Lee, Richard A. Young. Insulin receptor condensates in insulin sensitivity and resistance. *Nature Communications* 2022 Dec 6;13(1):7522. doi:<https://doi.org/jpx2>, PMID: 36473871.

Panagoulas I, Charokopos N, Thomas I, Spantidea PI, de Lastic AL, Rodi M, Anastasopoulou S, Aggeletopoulou I, **Lazaris C**, Karkoulas K, Leonidou L, Georgopoulos NA, Markou KB, Mouzaki A. Shifting gears: Study of immune system parameters of male habitual marathon runners. *Front Immunol.* 2023 Jan 13;13:1009065. doi:<https://doi.org/10.3389/fimmu.2022.1009065>, PMID: 36713459.

Jonathan E. Henninger, Ozgur Oksuz, Krishna Shrinivas, Ido Sagi, Gary LeRoy, Ming Zheng, James Owen Andrews, Alicia V. Zamudio, **Charalampos Lazaris**, Nancy M. Hannett, Tong Ihn Lee, Phillip A. Sharp, Ibrahim I. Cissé, Arup K. Chakraborty, Richard A. Young. “RNA-mediated feedback control of transcriptional condensates”. *Cell* 2021 Jan 7;184(1):207-225.e24. doi:<https://doi.org/ghssr8>. Epub 2020 Dec 16. PMID: 33333019.

Kerry A. Geiler-Samerotte, Shuang Li, **Charalampos Lazaris**, Austin Taylor, Naomi Ziv, Chelsea Ramjeawan, Annalise B Paaby, Mark L Siegal. “Extent and context dependence of pleiotropy revealed by high-throughput single-cell phenotyping”. *PLOS Biology* 2020 Aug 17;18(8):e3000836. doi:<https://doi.org/frbb>. Online ahead of print. PMID: 32804946

Andreas Kloetgen*, Palaniraja Thandapani*, Panagiotis Ntziachristos*, Yohana Ghebrechristos, Sofia Nomikou, **Charalampos Lazaris**, Xufeng Chen, Hai Hu, Sofia Bakogianni, Jingjing Wang, Yi Fu, Francesco Boccalatte, Hua Zhong, Elisabeth Paietta, Thomas Trimarchi, Yixing Zhu, Pieter van Vlierberghe, Giorgio G Inghirami, Timothee Lionnet, Iannis Aifantis, and Aristotelis Tsirigos. “Three-dimensional chromatin landscapes in T cell acute lymphoblastic leukemia”. *Nature Genetics* 52, 388–400 (2020). doi:<https://doi.org/ggr3m8>. This article was featured in the April 2020 issue of *Nature Genetics*.

*Equal contribution

Charalampos Lazaris*, Iannis Aifantis, and Aristotelis Tsirigos. “On epigenetic plasticity and genome topology”. *Trends in Cancer* 6(3) (2020) 177-180. doi:<http://doi.org/dq9v>. Epub 2020 Feb 7.

*Corresponding author

Nikos Kourtis*, **Charalampos Lazaris***, Kathryn Hockemeyer, Juan Carlos Balandrán, Jasper Mullenders, Yixiao Gong, Thomas Trimarchi, Kamala Bhatt, Hai Hu, Liza Shrestha, Alberto Ambesi-Impiombato, Michelle Kelliher, Elisabeth Paietta, Gabriela Chiosis, Monica L. Guzman, Adolfo A. Ferrando, Aristotelis Tsirigos, and Iannis Aifantis. “Oncogenic hijacking of the proteotoxic stress response machinery in acute leukemia”. *Nature Medicine* 2018 Aug;24(8):1157–1166.

doi:<https://doi.org/gd3fbf>. Epub 2018 Jul 23.

This article was featured in the August 2018 issue of *Nature Medicine*.

*Equal contribution

Yixiao Gong*, **Charalampos Lazaris***, Theodore Sakellaropoulos, Aurelie Lozano, Prabhanjan Kambadur, Panagiotis Ntziachristos, Iannis Aifantis, and Aristotelis Tsirigos. “Stratification of TAD boundaries identified in reproducible Hi-C contact matrices reveals preferential insulation of super-enhancers by strong boundaries”. *Nature Communications* 2018 Feb 7;9(1):542. doi:<https://doi.org/gczf8p>.

*Equal contribution

Melania H. Fanok, Amy Sun, Laura K. Fogli, Vijay Narendran, Miriam Eckstein, Kasthuri Kannan, Igor Dolgalev, **Charalampos Lazaris**, Adriana Heguy, Mary E. Laird, Mark S. Sundrud, Cynthia Liu, Jeff Kutok, Rodrigo S. Lacruz, Jo-Ann Latkowski, Iannis Aifantis, Niels Ødum, Kenneth B. Hymes, Swati Goel, and Sergei B. Koralov. “Role of dysregulated cytokine signaling and bacterial triggers in the pathogenesis of Cutaneous T Cell Lymphoma”. *J Invest Dermatol.* 2017 Nov 8. pii: S0022-202X(17)33144-5. doi:<https://doi.org/gddzrv>.

Aram S. Modrek, Danielle Golub, Themasap Khan, Jod Prado, Christopher Bowman, Jingjing Deng, Guoan Zhang, Pedro P. Rocha, Ramya Raviram, **Charalampos Lazaris**, James Stafford, Gary LeRoy, Michael Kader, Joravar Dhaliwal, N. Sumru Bayin, Joshua Frenster, Jonathan Serrano, Luis Chiriboga, Rabaa Baital-mal, Gouri Nanjangud, Andrew S. Chi, John G. Golfinos, Jing Wang, Matthias Karajannis, Richard A. Bonneau, Danny Reinberg, Aristotelis Tsirigos, David Zagzag, Matija Snuderl, Jane A. Skok, Thomas Neubert, and Dimitris G. Placantonakis. “Low-grade astrocytoma core mutations in IDH1, P53 and ATRX cooperate to block differentiation of human neural stem cells via epigenetic repression of SOX2”. *Cell Reports* 2017 21(5):1267-1280. Epub October 31 2017. doi:<https://doi.org/frbc>.

Alexandros Strikoudis, **Charalampos Lazaris**, Panagiotis Ntziachristos, Aristotelis Tsirigos, and Iannis Aifantis. “Opposing functions of H2BK120 ubiquitylation and H3K79 methylation in the regulation of pluripotency by the Paf1 complex”. *Cell Cycle* 2017 16(24):2315–2322. doi:<https://doi.org/frbd>.

Charalampos Lazaris, Stephen Kelly, Panagiotis Ntziachristos, Iannis Aifantis,

and Aristotelis Tsirigos. “HiC-bench: comprehensive and reproducible Hi-C data analysis designed for parameter exploration and benchmarking.” *BMC Genomics* 2017 18:22. doi:<https://doi.org/gf6h57>.

Alexandros Strikoudis, **Charalampos Lazaris**, Thomas Trimarchi, Antonio L. Galvao Neto, Yan Yang, Panagiotis Ntziachristos, Scott Rothbart, Shannon Buckley, Igor Dolgalev, Matthias Stadtfeld, Brian D. Strahl, Brian D. Dynlacht, Aristotelis Tsirigos, and Iannis Aifantis. “The PHD-finger protein Phf5a controls stemness and cell differentiation through the regulation of PolII transcriptional elongation.” *Nature Cell Biology* 2016 Nov;18(11):1127-1138. doi:[10.1038/ncb3424](https://doi.org/10.1038/ncb3424).

Bryan King, Moran-Crusio Kelly, Francesco Boccalatte, JingJing Wang, Xiaofeng Wu, Anna Lasorella, Elmar Wolf, Beatriz Aranda-Orgilles, **Charalampos Lazaris**, Clarise Kayembe, and Iannis Aifantis. “The ubiquitin ligase HUWE1 regulates hematopoietic stem cell maintenance and lymphoid commitment.” *Nature Immunology* 2016 Nov;17(11):1312-1321. doi:[10.1038/ni.3559](https://doi.org/10.1038/ni.3559).

Nikos Kourtis, Rana S. Moubarak, Beatriz Aranda-Orgilles, Kevin Lui, Iraz T. Aydin, Thomas Trimarchi, Farbod Darvishian, Christine Salvaggio, Judy Zhong, Kamala Bhatt, Emily I. Chen, Julide T. Celebi, **Charalampos Lazaris**, Aristotelis Tsirigos, Iman Osman, Eva Hernando, and Iannis Aifantis. “FBXW7 modulates cellular stress response and metastatic potential through HSF1 post-translational modification.” *Nature Cell Biology*, 2015 Mar;17(3):322-332. doi:[10.1038/ncb3121](https://doi.org/10.1038/ncb3121).

Referee/Editorial activity

Advisory Editorial Board: Translational Oncology

Reviewed articles for the following journals: *BMC Genomics*, *Bioinformatics*, *Genome Medicine*, *Blood*, *Nucleic Acids Research*, *PLOS One*, *Nature Communications*, *Cell Biology & Toxicology*, *Translational Oncology*, *STAR Protocols*.

Teaching/Mentoring

Training in teaching

Kaufman Teaching Certificate Program from the Teaching and Learning Lab at the Massachusetts Institute of Technology (MIT) (February-May 2021).

Teaching Certificate in Higher Education from the Derek Bok Center for Teaching and Learning at Harvard University (October 2018-January 2019)

New York Academy of Sciences Afterschool Mentoring Fellow (January 2014–December 2018)

Attended “Inspiring Teaching Conference”, Edinburgh University Students Association, Teviot Row House, Edinburgh, 25 January 2012.

Attended “Powerful teaching statements for STEM educators: An interactive workshop for scientists and teachers”, New York Academy of Sciences (NYAS), 09 November 2013.

Teaching Experience

Mentor for Dr. Felitsiya Shakola in R/shell scripting and Bioinformatics analysis (January 2017–July 2017). Dr. Shakola has now successfully completed formal training in Bioinformatics and works as Bioinformatician at the Center of Molecular Medicine in Sofia, Bulgaria.

University of Crete & Institute of Molecular Biology & Biotechnology (IMBB), Greece–Lab assistant in the undergraduate lab of “Biochemistry and Microbiology”, Spring 2008.

University of Crete & Institute of Molecular Biology & Biotechnology (IMBB), Greece–Lab assistant in the undergraduate lab of “Biochemistry and Microbiology”, Winter 2008.

Posters-Presentations

“RNA Polymerase II Meningioma Mutations Dysregulate Transcriptional Pause-Release and Exhibit Susceptibility to CDK9 Inhibition”

Victoria Clark, **Charalampos Lazaris**, Richard A. Young. Annual Scientific Meeting of the American Association of Neurological Surgeons (AANS), August 2021.

“Insights from the 2020 annual NextGen trainee survey”

Elena Torlai Triglia, Victoria Beja-Glasser, Lisa Cervia, Nasim Jamali, Sean Moran, **Charalampos Lazaris**, Angela Florentino. Broad Institute Sixteenth Annual Retreat, December 14–17, 2020.

“RNA mediated feedback control of transcriptional condensates”

Jonathan E. Henninger, Ozgur Oksuz, Krishna Shrinivas, Ido Sagi, Gary LeRoy, Ming Zheng, James Owen Andrews, Alicia V. Zamudio, **Charalampos Lazaris**, Nancy M. Hannett, Tong Ihn Lee, Phillip A. Sharp, Ibrahim I. Cissé, Arup K. Chakraborty, Richard A. Young. Presented by Dr. A. K. Chakraborty at the meeting on “Biological Physics of Chromosomes”. UC Santa Barbara Kavli Institute for Theoretical Physics, Jun 15, 2020–Jul 17, 2020.

“RNA-mediated feedback control of transcriptional condensates”

Ozgur Oksuz, Jonathan Henninger, Krishna Shrinivas, Nancy M. Hannett, Ido Sagi, Ming Zheng, James O. Andrews, Alicia V. Zamudio, Gary LeRoy, **Charalampos Lazaris**, Tong I. Lee, Ibrahim I. Cissé, Phillip A. Sharp, Arup K. Chakraborty, Richard A. Young. Presented by Dr. Ozgur Oksuz at the CSHL Meeting on “Regulatory & Non-Coding RNAs” (virtual), 12–15 May 2020.

“Three-dimensional chromatin landscapes in T cell acute lymphoblastic leukemia”

A. Kloetgen, P. Thandapani, P. Ntziachristos, Y. Ghebrechristos, S. Nomikou, **Charalampos Lazaris**, Xufeng Chen, Hai Hu, Sofia Bakogianni, Jingjing Wang, Thomas Trimarchi, Yixing Zhu, Iannis Aifantis and Aristotelis Tsirigos. Presented by Dr. Thandapani at the CSHL Meeting on “Nuclear Organization and Nuclear Function” (virtual), 28 April – May 1, 2020.

“Tumor infiltrating lymphocytes, immunoSeq, and CMS classification in the molecular epidemiology of colorectal cancer study”

Melas M, **Lazaris C**, Schmit S, Maoz A, Pamplona R, Qu C, Greenson J, Kuick R, Lejbkowitz F, Rennert H, Walker C, Bowen C, Da Silva D, Kast W, Idos G, McDonnell K, Moreno V, Rennert G, Gruber S. Proceedings of the 110th Annual Meeting of the American Association for Cancer Research; 2019 Mar 29–Apr 3; Atlanta, GA. Philadelphia (PA); AACR; 2019. Abstract nr 2332.

“Dynamic 3D chromosomal landscapes in acute leukemia”

Palaniraja Thandapani, Andreas Kloetgen, **Charalampos Lazaris**, Xufeng Chen, Panagiotis Ntziachristos, Aristotelis Tsirigos, Iannis Aifantis.[abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2018; 2018 Apr 14-18; Chicago, IL. Philadelphia (PA): AACR; Cancer Res 2018;78(13 Suppl):Abstract nr 2998.

“Dynamic 3D chromosomal landscapes in acute leukemia.”

Andreas Kloetgen, Palaniraja Thandapani, **Charalampos Lazaris**, Panagiotis Ntziachristos, Aristotelis Tsirigos & Iannis Aifantis. Keystone Symposia “Chromatin Architecture and Chromosome Organization (X5)”, British Columbia, Canada, March 23–27, 2018.

“The mechanisms underlying the impact of NSD2 overexpression on gene regulation in multiple myeloma”

Priscillia Lhoumaud, Sana Badri, Andreas Kloetgen, **Harris Lazaris**, MacIntosh Cornwell, Gunjan Sethia, Deirdre Greenridge, Karina Ray, Sourya Bhattacharyya, Aris Tsirigos, Ferhat Ay, Richard Bonneau & Jane Skok. Keystone Symposia “Chromatin Architecture and Chromosome Organization (X5)”, British Columbia, Canada, March 23–27, 2018.

“Pleiotropic genetic effects on cell morphology are mediated by underlying relationships among single-cell morphological features.”

Kerry Geiler-Samerotte, Austin Taylor, **Harris Lazaris**, Chelsea Ramjeawan, Naomi Ziv, Mark Siegal.

Society of Molecular Biology & Evolution, June 29 2017, Austin, Texas, USA.

“De novo PATRR-mediated t(3;8) balanced translocation associated with clear cell renal cell carcinoma”

Marilena Melas, Kevin J. McDonnell, Chris K. Edlund, Sarah J. Tash, Duveen Y. Sturgeon, **Charalampos Lazaris**, Chenxu Qu, Peter J. Gruber, Thomas W. Glover, Beverly S. Emanuel, Stephen B. Gruber.

AACR Annual Meeting, April 1–April 5 2017, Washington D.C., USA.

“Chromatin organization alterations in critical oncogenic loci in leukemia” (selected for talk given by Dr. Aristotelis Tsirigos).

Charalampos Lazaris, Panagiotis Ntziachristos, Nikolaos Kourtis, Stephen Kelly, Iannis Aifantis & Aristotelis Tsirigos.

Gordon Research Conference on Cancer Epigenetics: Mutations, Functions and Therapies, April 23–28 2017, Lucca (Barga), Italy

“HiC–bench: a computational pipeline for Hi–C analysis, parameter exploration & benchmarking”.

Charalampos Lazaris, Stephen Kelly, Panagiotis Ntziachristos, Iannis Aifantis and Aristotelis Tsirigos

Nuclear Organization and Function Meeting, May 3-7 2016, Cold Spring Harbor Laboratory, NY, USA

“The PHD-finger protein Phf5a controls stemness through the regulation of Paf1 complex function”.

Alexandros Strikoudis, **Charalampos Lazaris**, Thomas Trimarchi, Aristotelis Tsirigos and Iannis Aifantis.

HHMI Science Meeting, June 9-11, 2015, HHMI-Janelia Research Campus, VA, USA

Work experience

(January 2013 - July 2013) Staff Research Associate I - Section of Ecology, Behavior and Evolution, Division of Biological Sciences, University of California, San Diego, USA. Worked on yeast aging under the supervision of Assistant Professor Scott A. Rifkin.

(May 2012- August 2012) MSc thesis, “Evolutionary analysis of the GAL network

in yeast". Completed under the supervision of Prof. P.S. Swain at the Centre of Systems & Synthetic Biology, University of Edinburgh, Scotland, UK.

(July 2007- October 2008) MSc thesis, "Single-cell analysis of heat-shock protein expression in *Saccharomyces cerevisiae*", IMBB-FORTH, Heraklion, Crete, Greece.

(September 2005- September 2006) Voluntary work, "Regulation of IL-2 transcriptional repression by ETS2", Laboratory of Hematology, Medical School, University of Patras, Patras, Greece.

(March 2005- August 2005) Undergraduate thesis, "Chemokine expression in human ovarian cancer", University of Pennsylvania Medical School, Philadelphia, USA.

Honors & Awards

Full Scholarship to attend eKeystone Symposia "Higher-Order Chromatin Architecture in Time and Space", November 15-17, 2021.

National Institute of General Medical Sciences Scholarship to partly cover tuition for the CSHL course on "Scientific Writing", Cold Spring Harbor Laboratory, NY, USA (400 US dollars) (awarded in October 2019).

Regeneron Scholarship to partly cover tuition for the CSHL course on "Single Cell Analysis", Cold Spring Harbor Laboratory, NY, USA (1750 US dollars) (awarded April 2019).

Howard Hughes Medical Institute (HHMI) stipend to partly cover tuition for the CSHL course on "Bioinformatics for Cancer Genomics", Cold Spring Harbor Laboratory, NY, USA (875 US dollars) (awarded Feb. 2018).

Award for Best Poster Presentation. 1st Annual Cancer Genome Dynamics Retreat. March 27th 2017. New York University, USA.

Award for Outstanding Poster Presentation. 6th Annual Helen L. and Martin S. Kimmel Center for Stem Cell Biology Symposium. March 9th 2017. New York University, USA.

Howard Hughes Medical Institute (HHMI) stipend to partly cover tuition for the CSHL course on "High-Throughput Biology: From Sequence to Networks", Cold Spring Harbor Laboratory, NY, USA (1000 US dollars) (awarded Feb. 2017).

Sackler Travel Award to attend CSHL course on "High-Throughput Biology: From Sequence to Networks", Cold Spring Harbor Laboratory, NY, USA (awarded Feb. 2017).

Gerondelis Foundation Scholarship, Lynn, MA, USA, 2016 (awarded in June 2016).

Dean's Travel Award for Poster presentation at the upcoming Cold Spring Harbor Laboratory Meeting on "Genome Organization and Function" (May 2016) (awarded in March 2016).

Sackler Travel Award to attend 1st Summer Institute in Statistics for Big Data, University of Washington, Seattle, USA (July 2015).

Scholarship (fully covered tuition) to attend 1st Summer Institute in Statistics for Big Data, University of Washington, Seattle, USA (July 2015).

Sackler Dean's Scholarship and full Sackler PhD Scholarship. NYU School of Medicine, Sackler Institute (2013).

AAAS/Science Excellence in Science Award (2013).

MSc awarded with Distinction, MSc in Bioinformatics, University of Edinburgh (2012).

Award from the Student Awards Agency for Scotland (SAAS) and MSc Top Bursary from the University, to cover a large part of tuition fees for the MSc in Bioinformatics at the University of Edinburgh (2011).

Alexander Onassis Foundation Scholarship (academic year 2007-2008).

Bodossakis Foundation Scholarship (gratefully declined) (academic year 2007-2008).

EMBO Fellowship to cover registration at the EMBO Workshop on "Gene Transcription in Yeast", Sant Feliu de Guixols, Spain, 21-26 June 2008.

Scholarship to complete undergraduate thesis at the University of Pennsylvania, Philadelphia, USA (2005).

Greek National Scholarships Foundation scholarships for undergraduate performance (2000–1, 2002–3, 2003–4, 2004–5).

Leadership

December 2022–today: President, New York University Graduate School of Arts and Sciences Doctoral Alumni Association.

October 2020–May 2022: Vice-Chair on the NextGen Association for Postdocs and Graduate Students, Broad Institute of MIT and Harvard.

Professional Activities

Broad Institute Campus Ambassador, October 2020–present.

Member, The Epigenetics Society, October 2020–present.

ELife Early-Career Researcher (ECR) Ambassador, April 2019–June 2020.

Assistant Member, Cancer Epigenetics Society (CES), May 2017–present.

Associate Member, American Association for Cancer Research (AACR), September 2015–present.

NYAS Afterschool STEM Mentoring Fellow, January 2014–December 2017.

F1000 Specialist, November 2013–present.

Member, American Association for the Advancement of Science (AAAS), September 2013–present.

Member, New York Academy of Sciences, September 2013–December 2017.

Member, Alexander S. Onassis Foundation Scholars Association, October 2008–present.

Seminars, Conferences, Workshops & Courses

Bringing Chemistry to Medicine Symposium, St. Jude Children's Research Hospital (Virtual), Memphis, TN, October 2–3, 2025.

Variant to Function (V2F) Symposium, Novo Nordisk Foundation Center for Genomic Mechanisms of Disease, Broad Institute of MIT and Harvard, Cambridge, MA, USA, September 23, 2025.

The 23rd Annual Koch Institute Symposium on "Antibody Drug Conjugates: Targeted Cancer Therapies at the Intersection of Chemistry, Biology, and Engineering", Massachusetts Institute of Technology, Cambridge, MA, USA, June 27, 2025.

Keystone Symposia-Epigenetics in Development and Disease (Joint with: Interplay of Chromatin Architecture and Transcription Regulation). Banff, AB, Canada, March 30–April 2, 2025.

CSHL Genome Organization & Nuclear Function, Cold Spring Harbor Laboratory, NY, USA, April 30–May 4, 2024.

Keystone Symposia Epigenetic Mechanisms and Cancer Treatment (virtual), Santa Fe, NM, USA, February 4–7, 2024.

Keystone Symposia in Epigenetics, Chromatin, Development and Disease (joint with Chromatin Architecture in Development and Human Health), Victoria, BC, Canada, March 12–15, 2023.

CSHL Biological Data Science Meeting, Cold Spring Harbor Laboratory, NY, November 9–12, 2022 (online).

20th Annual Cancer Research Symposium, Ten Years at the Koch Institute, Kresge Auditorium, MIT, June 17, 2022.

FMI NIBR Mini-Symposium on "Spatial and Single Cell Transcriptomics - from Basic Biology to Drug Discovery", June 13, 2022.

Seminar: Adam Durbin, MD, Ph.D. "Targeting Transcriptional Addiction in High-risk Pediatric Cancers", St. Jude Childhood Cancer Speaker Series, April 6, 2022.

Cell Press Webinar on "Spatial Biology and Cancer", March 8, 2022.

Gene Regulation and Epigenetics Conference for Early Career Scientists, January 18–19, 2022 (online; organized by QMUL Epigenetics Hub and supported by Dove-tail Genomics).

17th Annual Broad Institute Retreat. Broad Institute of MIT and Harvard, December 13–16, 2021 (served as Poster judge).

4th Annual Next Generation in Biomedicine Symposium (Virtual), Broad Institute of MIT and Harvard, November 17, 2021.

"Keystone eSymposia: Higher-Order Chromatin Architecture in Time and Space". November 15–17, 2021.

"9th Annual Broad Institute-ISF Symposium". October 25–28, 2021.

"14th Annual BIDMC Cancer Center Symposium". Dana-Farber Cancer Institute/Harvard Cancer Center, October 26th, 2021.

"BroadE Workshop: Introduction to Terra: A scalable platform for biomedical research". October 13th, 2021.

"Mechanisms of Eukaryotic Transcription" Meeting (Virtual), Cold Spring Harbor Laboratory (CSHL), August 31st–September 3rd 2021.

"Bringing Chemistry to Medicine" Symposium (Virtual), St. Jude Children's Research Hospital, July 22–23 2021.

Fox Chase Cancer Center Cancer Epigenetics Institute Virtual Symposium: From Nucleic Acids to 3D Genomes to Therapeutics (Virtual), March 2nd, 2021.

2021 Broad Institute Next Generation in Biomedicine Symposium (Virtual), January 27–28 2021.

Interdisciplinary School of 3D Genomics: From Experiments to Models and Back (Virtual), November 23–26, 2020.

Enhancers, Gene Regulation and Genome Organization, National Cancer Institute (Virtual), November 16–17, 2020.

The 26th Advanced School in Life Sciences: Condensates and Phase Separation in Biology, IAS (Virtual), November 3–4, 2020.

ENCODE 2020 Research Applications & Users Meeting (Virtual), September 30–October 2, 2020.

"Exploring the Physical Genome" by Dr. William Greenleaf, San Diego Chromatin

Club (Virtual), July 10, 2020.

Variant-to-Function (V2F) Symposium (Virtual), Broad Institute of MIT and Harvard, June 23, 2020.

NSF-Funded MIT Genome Architecture and Function Virtual Workshop, June 15–18, 2020.

Encyclopedia of DNA Elements (ENCODE) Data Utilization Workshop, Broad Institute of MIT and Harvard (Virtual), May 20 – 21, 2020.

CSHL “Genome Organization & Nuclear Function”, Virtual Meeting, April 28 – May 1, 2020.

American Association for Cancer Research (AACR) Virtual Annual Meeting I, April 27 – 28, 2020.

CSHL “Systems Biology: Global Regulation of Gene Expression”, Virtual Meeting, March 11 – March 13, 2020.

CSHL “Scientific Writing Retreat”, Cold Spring Harbor Laboratory, NY, USA, November 13 – November 17, 2019.

6th Annual Symposium on Epigenetics & Gene Dynamics. Blavatnik Institute, Harvard Medical School, Boston, MA, USA, September 26, 2019.

CSHL Course on “Single Cell Analysis”, Cold Spring Harbor Laboratory, NY, USA, June 28 – July 13, 2019.

Annual Meeting of the American Society of Human Genetics (ASHG), San Diego, CA, USA (October 16–October 20 2018).

CSHL Course on “Bioinformatics for Cancer Genomics”, Cold Spring Harbor Laboratory, NY, USA (March 12–March 18 2018).

CSHL Course on “High-Throughput Biology: From Sequence to Networks”, Cold Spring Harbor Laboratory, NY, USA (March 20–March 26 2017).

Nuclear Organization and Function Meeting, Cold Spring Harbor Laboratory, NY, USA, May 3-7 2016.

1st NYGC Epigenomics Symposium, New York Genome Center, New York, May 4th 2015.

Workshop on Academic Writing, NYU School of Journalism, Spring 2015 (Instructor: Stephan Hall).

Selected to attend the Summer Course in “Modeling in Systems Biology” held at the Centre for Genomic Regulation, Barcelona, Spain in early July 2012 (12 external participants were selected among the applicants).

EMBO Workshop on the Operon Model and its impact on modern molecular biology, Paster Institute, Paris, France, 17-20 May 2011.

School of Biological Sciences/University of Cambridge Workshop: “Learning Programming with Perl”, Instructor: Paul Weston, 01-03 June 2011.

School of Biological Sciences/University of Cambridge Workshop: “Learning Programming with Perl”, Instructor: Paul Weston, 02-04 June 2010.

School of Biological Sciences/University of Cambridge Workshop: “A beginner’s guide to R”, 17-18 May 2010.

European Bioinformatics Institute/University of Cambridge Workshop: “Browsing Genes and Genomes with Ensembl”, 11-12 February 2010.

European Bioinformatics Institute/University of Cambridge Workshop: “Introduction to Bioinformatics at EBI”, 3-4 December 2009.

European Molecular Biology Organization (EMBO) Workshop: “Gene Transcription in Yeast”, Sant Feliu de Guixols, Spain, 21-26 June 2008.

Skills

Lab skills

Standard molecular biology techniques (DNA purification, cloning, RNA isolation, RT-PCR, Western blot, DNA and protein electrophoresis).
Standard PCR, Real-time PCR.
Immunoprecipitation, Immunofluorescence.
Imaging: light microscopy, epifluorescence microscopy, confocal microscopy.
Cell culture: yeast and mammalian cell culture.

Computing

Proficient in the UNIX/Linux command line.

Proficient in R

Proficient in Nextflow

Programming skills in Python, Julia, and SQL.

Proficient in \LaTeX

□ Proficient in using High-Performance Computing (HPC) environments.

Extensive use of PCs and Macintosh Computers.

Some use of computers running Linux versions (Fedora, Ubuntu).

Extensive use of Microsoft Office (Word, Excel, Powerpoint) and iWork (Pages, Numbers, Keynote).

Use of packages to prepare databases especially for lab organization purposes (Filemaker).

Extensive use of software useful for Molecular Biology and figure preparation. Adobe Photoshop (versions CS2, CS4, CS4), Adobe Illustrator (CS4 and CS5), sequence analysis software (MacVector, VectorNTI), bibliography management software (BibTex, BibDesk, Endnote, Sente, Papers, Sciwheel).

Use of online tools available to Molecular Biologists (Primer3, Ensembl database, UniProt).

Languages

Greek (native speaker).

English (fluent) (Proficiency in English as a foreign language, University of Michigan, 2003 and IELTS 7.5/9.0, April 2009).

Competitions

The Wellcome Trust Science Prize 2011 Competition. Participated with the article “Three, two, one...cooperate” which was on the role of cooperation in survival and evolution.

Biotechnology YES UK National Competition 2010. Participated as “Operations Director” of the team “Thrombotics”, representing the Babraham Institute, University of Cambridge, UK.

Referees

Dr. Iannis Aifantis
Professor and Chair
Department of Pathology
NYU Grossman School of Medicine
522 First Ave., SRB 1304
New York, NY 10016
Phone: 212 263 9898
Fax: 212 263 36729
E-mail: Ioannis.Aifantis@nyulangone.org
<http://aifantislab.com>

Dr. Matthew D. Shirley
Senior Expert II, Oncology Data
Science
Novartis BioMedical Research
250 Massachusetts Avenue
Cambridge, MA 02139
E-mail: matt_d.shirley@novartis.com

Dr. Aristotelis Tsirigos
Professor of Pathology, Institute for Com-
putational Medicine
Director, Applied Bioinformatics Laborato-
ries, NYU Grossman School of Medicine
Science Building
435 East 30th Street, Room 800
New York, NY 10016
Phone: (646) 501-2693
E-mail: Aristotelis.Tsirigos@nyulangone.org
<http://www.tsirigos.com>

Note: More references are available upon request.

Last updated: November 13, 2025