

Charalampos (Harris) Andreas Lazaris

Current address

950 South Flower Street
Los Angeles
CA, 90015, USA

☎ (US) +18583361809

☎ (GR) +30 26930 71281

lazaris@nyu.edu

clazaris@usc.edu

<https://chlaris.github.io>

 <https://goo.gl/XNxhu3>

 <https://goo.gl/cAfwek>

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

 <https://goo.gl/BqnPa2>

 <https://goo.gl/AD9ofc>

Permanent address

Ano Alissos Dimis
Vrahneika
Patras
Postal code: 25002
Greece

Education

January 2018 - today

Postdoctoral Scholar. Precision Oncology. USC Norris Comprehensive Cancer Center
Keck School of Medicine
University of Southern California (USC)

August 2013 - January 2018

Ph.D. in Biomedical Sciences-Specialization in Computational & Systems 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 Computational & Systems 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, Ranked 1st**).

Research Interests

Transcriptional regulation, nuclear organization, bioinformatics, cancer, cancer genomics & epigenetics.

Publications

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: [10.1038/s41591-018-0105-8](https://doi.org/10.1038/s41591-018-0105-8). Epub 2018 Jul 23. This article was featured on the cover of the August 2018 issue of *Nature Medicine*.

*Equal contribution

Yixiao Gong*, **Charalampos Lazaris***, Theodore Sakellaropoulos, Aurelie Lozano, Prabhajan 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: [10.1038/s41467-018-03017-1](https://doi.org/10.1038/s41467-018-03017-1).

*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: [10.1016/j.jid.2017.10.028](https://doi.org/10.1016/j.jid.2017.10.028).

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 Baitalmal, 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: [10.1016/j.celrep.2017.10.009](https://doi.org/10.1016/j.celrep.2017.10.009).

Alexandros Strikoudis, **Charalampos Lazaris**, Panagiotis Ntziachristos, Aristotelis Tsiri-

gos, 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: [10.1080/15384101.2017.1295194](https://doi.org/10.1080/15384101.2017.1295194).

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: [10.1186/s12864-016-3387-6](https://doi.org/10.1186/s12864-016-3387-6).

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).

Manuscripts under review

Andreas Kloetgen*, Palaniraja Thandapani*, Panagiotis Ntziachristos*, **Charalampos Lazaris**, Xufeng Chen, Hai Hu, Sofia Bakogianni, Jingjing Wang, Thomas Trimarchi, Yixing Zhu, Iannis Aifantis, and Aristotelis Tsirigos. “Dynamic 3D chromosomal landscapes in acute leukemia”.

*Equal contribution

Reviews

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

Teaching/Mentoring

Training in teaching

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

“Dynamic 3D chromosomal landscapes in acute leukemia”

Palaniraja Thandapani, Andreas Kloetgen, **Charalampos Lazaris**, Xufeng Chen, Panagiotis Ntziachristos, Aristotelis Tsigos, 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 Tsigos & 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”

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

Keystone Symposia. Epigenetics and Human Disease: Progress from Mechanisms to Therapeutics (A9), January 29—February 2, 2017, Seattle, Washington, USA.

“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 Ets-2”, 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

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 covers 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 (2008).

Bodossakis Foundation Scholarship (gratefully declined) (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 (2001–2, 2002–3, 2004–5).

Professional Activities

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

NYAS Afterschool STEM Mentoring Fellow, January 2014–present.

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–present.

Member, Onassis Scholars Foundation, October 2008–present.

Conferences, Workshops & Courses Attended

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 UNIX/Linux command line.
Basic programming skills in Perl.
Advanced programming skills in Python & R.
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).
LaTeX.
Extensive use of software useful for Molecular Biology and figure preparation. Adobe Photoshop (versions CS2, CS4, CS5), Adobe Illustrator (CS4 and CS5), sequence analysis software (MacVector, VectorNTI), bibliography management software (BibTex, BibDesk, Endnote, Sente, Papers).
Use of online tools available to Molecular Biologists (Primer3, Ensembl database, UniProt).
Greek (native speaker).
English (fluent) (Proficiency in English as a foreign language, University of Michigan, 2003 and IELTS 7.5/9.0, April 2009).

Languages

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

1. Dr. Iannis Aifantis

Professor and Chair

Department of Pathology

NYU School of Medicine

522 First Ave., SRB 1304

New York, NY 10016

Phone: 212 263 9898

Fax: 212 263 36729

E-mail: Iannis.Aifantis@nyulangone.org

<http://aifantislab.com>

2. Dr. Aristotelis Tsirigos

Associate Professor

NYU Langone Medical Center

Department of Pathology,

240 East 38th Street,

Room 22-61, New York, NY 10016

Center for Health Informatics

and Bioinformatics,

227 East 30th Street, Room 730,

New York, NY 10016

Phones: (646)501-2693, (646)501-9202

E-mail: Aristotelis.Tsirigos@nyulangone.org

<http://www.tsirigos.com/>

3. Stephen B. Gruber, MD, PhD, MPH

Jane & Kris Popovich Chair in Cancer Research

USC Norris Comprehensive Cancer Center

Professor of Medicine

Professor of Preventive Medicine

University of Southern California

1441 Eastlake Ave,

Suite 4436 Topping Tower

Los Angeles,

CA 90089-9181

O: 323-865-0816

F: 323-865-0102

E-mail: sgruber@usc.edu

Note: Other references can be available upon request.

Last updated: February 1, 2019