Curriculum Vitae

Konstantina Chanoumidou

Assistant Professor of Pharmacology

School of Medicine

University of Crete

1. Personal Information

Surname: Chanoumidou

Name: Konstantina

Date of Birth: 17-11-1989

Nationality: Greek

Work Address: School of Medicine, University of Crete, Voutes, Heraklion, Greece

Tel: 2810 394521

E-mail: k.chanoumidou@uoc.gr

2. Current Positions

2026 -today Assistant Professor of Pharmacology, School of Medicine, University of Crete

2026 -today External Collaborator, Institute of Pharmaceutical Research and Technology (IFET)

2025 -today Scientific Advisor, Reneurocell Therapeutics

3. Education

2013 - 2017 **Ph.D.,** Department of Molecular Biology & Genetics, Democritus University of Thrace
Supervisor: Prof. M. Grigoriou, Thesis title: “Chromatin dynamics and gene function in embryonic stem cells”, Grade: Excellent

2007 - 2012 **B.Sc. in Biology,** Department of Biology, School of Science, Aristotle University of Thessaloniki, Grade: Excellent (8.68/10)

2004 - 2007 **High School Diploma,** Assiros High School, Thessaloniki Grade: Excellent (19.5/20)

4. Previous Research Positions

2019 - 2026 **Postdoctoral Researcher**
Laboratory of Pharmacology, School of Medicine, University of Crete & Institute of Molecular Biology and Biotechnology (IMBB-FORTH), Heraklion, Greece
Supervisors: Prof. I. Charalampopoulos, Prof. A. Gravanis

2025	**EMBO Fellow** Molecular and Functional Neurobiology, Luxembourg Centre for Systems Biomedicine, University of Luxembourg, Luxembourg Supervisor: Anne Grünewald
2017 - 2019	**Postdoctoral Researcher** Neuropathology Institute, Universitätsklinikum Münster (UKM), Münster University, Germany Supervisor: Prof. T. Kuhlmann
2013 - 2017	**Ph.D. Candidate** Department of Molecular Biology & Genetics, Democritus University of Thrace, Alexandroupolis & Institute of Molecular Biology and Biotechnology (IMBB-FORTH), Heraklion, Crete, Greece Supervisors: Prof. M. Grigoriou & Dr. A. Kretsovali (IMBB-FORTH)
2016	**EMBO Fellow** Lund Stem Cell Centre, Lund University, Sweden Supervisor: Dr. Henrick Ahlenius
2011-2012	**Erasmus Fellow** Institute of Animal Cell Technology and Systems Biology, BOKU University, Austria Supervisor: Prof. Nicole Borth
2011	**Internship** Department of Histopathology, Theagenio Anticancer Hospital
2010 - 2011	**Undergraduate Thesis** Department of Biology, Aristotle University of Thessaloniki Supervisor: Prof. E. Panteris

5. Teaching

Undergraduate Courses	- **Pharmacology A** (5th Semester), School of Medicine, University of Crete - **Pharmacology B** (6th Semester), School of Medicine, University of Crete - **Cell Communication and Human Diseases** (6th Semester), School of Medicine, University of Crete - **Biology B** (2nd Semester), School of Medicine, University of Crete - **Pharmacology B** (6th Semester), English-taught Program, School of Medicine, University of Crete
Postgraduate Courses	- **Neuroregenerative Pharmacology**, Master's Program in **Neurosciences**, University of Crete

6. Research Grants

2024-2025	"Neuroinflammation on a chip", funded by the Institute of Pharmaceutical Research and Technology (IFET) Institute of Molecular Biology and Biotechnology (IMBB-FORTH), Heraklion	Partner
2022-2024	"The effect of hyperglycemia-driven neuroinflammation on the human diabetic brain: studying the role and therapeutic potential of the p75 neurotrophin receptor in a 3D human Brain-on-a-Chip platform", funded by the Bodossaki Foundation School of Medicine, University of Crete	Coordinator
2021-2022	Member of the Pharmacology research team in the project "Deciphering the role of the p75 neurotrophin receptor in adult hippocampal neurogenesis as a novel innovative therapeutic approach for Alzheimer's disease," within the framework of the "1st Call for HFRI Research Projects for the support of Faculty Members and Researchers." School of Medicine, University of Crete	Team Member
2019-2021	Member of the Pharmacology Laboratory research team in the project "Research–Create–Innovate DINNESMIN, MIS 5032840, T1EDK-03186" School of Medicine, University of Crete Institute of Molecular Biology and Biotechnology (IMBB-FORTH), Heraklion	Team Member
2012-2015	Member of the research team in the project "miREG: MicroRNAs and Transcription Factor Networks in the Regulation of Cell Differentiation, Aging and Tumorigenesis," National Strategic Reference Framework (NSRF) – THALES Institute of Molecular Biology and Biotechnology (IMBB-FORTH), Heraklion	Team Member

7. Fellowships

2025	EMBO Scientific Exchange Grant, No. 11143 Molecular and Functional Neurobiology, Luxembourg Centre for Systems Biomedicine, University of Luxembourg, Luxembourg
2022-2024	Postdoctoral Fellowship, Bodossaki Foundation Laboratory of Pharmacology, School of Medicine, University of Crete

2016 EMBO Short-Term Fellowship, No. 543 (2015)
Department of Experimental Medical Science, Faculty of Medicine, Lund University, Sweden

8. Publications

1. **Chanoumidou K.**, Zota I., Papadopoulou M., Konstantinou C., Tsimpolis A., Tsagliotis A., Tziortziou M., Ntarntani K., Grunewald A., Lavigne M.D., Gravanis A., Charalampopoulos I., "Elucidating the neurodegenerative and neuroinflammatory effects of hyperglycemia on human dopaminergic neurons: the role of p75NTR", Stem Cell Res Ther. 2026 Mar 21. doi: 10.1186/s13287-026-04965-y
2. Papadopoulou M., **Chanoumidou K**., Peteinareli M., Tsaglioti E., Michalaki K., Lavigne M.D., Charalampopoulos I., "p75 Neurotrophin Receptor Shapes the Dynamics of Adult Hippocampal Neurogenesis in Alzheimer's Disease", Alzheimers Res & Ther. 2026 Feb 20;18(1):68. doi: 10.1186/s13195-026-01989-7.
3. Zota I., Calogeropoulou T., **Chanoumidou K**., Charalampopoulos I., Gravanis A., "Synthetic Microneurotrophins: neurotrophin receptor modulators for therapeutics of neurodegenerative diseases", **British Journal of Pharmacology**, 2025, *Br J Pharmacol. 2025 Oct;182(19):4466-4489. doi: 10.1111/bph.70143.*
4. Zota I., **Chanoumidou K.**, Gravanis A. and Charalampopoulos I., Stimulating myelin restoration with BDNF: a promising therapeutic approach for Alzheimer's disease, ***Front Cell Neuroscience***, 2:18:1422130. doi:10.3389/fncel.2024.1422130
5. Zota I., **Chanoumidou K**., Charalampopoulos I., Gravanis A., "Dynamics of myelin deficits in the 5xFAD mouse model for Alzheimer's disease and the protective role of BDNF", ***Glia***, 2024 Jan 11. doi: 10.1002/glia.24505
6. Papadopoulou M, Rogdakis T., Charou D., Peteinareli M., Ntarntani K., Gravanis A**., Chanoumidou K.** and Charalampopoulos I., "Neurotrophin analog ENT-A044 activates the p75 neurotrophin receptor, regulating neuronal survival in a cell-context dependent manner", ***IJMS***, 2023, 24(14), 11683, doi: 10.3390/ijms241411683.
7. **Chanoumidou K.,** Hernandez-Rodriguez B., Windener F., Stehling M. , Schöler H, Mozafari S., Albrecht S., Ottoboni L., Antel J., Kim KP., Velychko S., Cui Q., Xu Y., Martino G., Winkler J., Scholer H., Evercooren AB., Boespflug-Tanguy O., VaquerizasJM, Ehrlich M., Kuhlmann T., "One-step reprogramming of human fibroblasts into Oligodendrocyte-like cells by Sox10, Olig2 and NKX6.2", ***Stem Cell Reports***, 2021, Apr 13;16(4):771-783, doi: 10.1016/j.stemcr.2021.03.001

8. **Chanoumidou K.,** Mozafari S., Baron-Van Evercooren A., Kuhlmann T, "Stem cell derived oligodendrocytes to study myelin diseases", ***Glia***, 2019;1–16, doi: 10.1002/glia.23733
9. **Chanoumidou K**., Hadjimichael C., Athanasouli P., Ahlenius H., Drakos E., Kostouros A., Stratidaki I., Grigoriou M., Kretsovali A., "Groucho related gene 5 (GRG5) is involved in embryonic and neural stem cell state decisions", ***Scientific Reports***, 2018, 13;8(1):13790. doi: 10.1038/s41598-018-31696-9
10. Hajimichael C., **Chanoumidou K**., Nikolaou C., Klonizakis A., Theodosi G., Makatounakis T., Papamatheakis J., Kretsovali A., "Promyelocytic Leukemia Protein is an essential regulator of Stem Cell pluripotency and somatic cell reprogramming", ***Stem Cell Reports***, 2017, 9;8(5):1366-1378, doi:10.1016/j.stemcr.2017.03.006
11. **Chanoumidou K**., Hadjimichael C., Vogiatzoglou A., Kretsovali A., "Dissecting the Role of Sox2 in Stemness Regulation and Regenerative Medicine" ***Journal of Stem Cell Research and Transplantation***, 2017, 4(1):1026
12. Hadjimichael C., **Chanoumidou K.,** Papadopoulou N., Arabatzi N., Kretsovali A., "Common regulators of Embryonic Stem Cells and Cancer Stem Cells", ***WJSC***, 2015, 26;7(9):1150-84, doi: 10.4252/wjsc.v7.i9.1150
13. Klanert G., Jadhav V., **Chanoumidou K.**, Grillari J., Borth N., Hackl M. "Endogenous MicroRNA Clusters Outperform Chimeric Sequence Clusters in Chinese Hamster Ovary Cells", ***Biotechnol J***,2013, doi: 10.1002/biot.201300216
14. Panteris E., Adamakis I-D. S., **Chanoumidou K**., "The distribution of TPX2 in dividing leaf cells of the fern Asplenium nidus", ***Plant Biology***, 2012, 15(1):203-9, doi: 10.1111/j.1438-8677.2012.00615.x.

9. Invited Oral Talks

1. 17th Meeting of the Hellenic Society of Basic and Clinical Pharmacology, May 17, 2025, Athens Title: "The multicellular etiology of glucose neurotoxicity in the dopaminergic system: the role of p75NTR receptor"
2. 7th Panhellenic Conference of the Hellenic Society of Gene Therapy and Regenerative Medicine, May 24–26, 2024, Thessaloniki Title: "Studying glucose neurotoxicity in a human iPSC-based model to unravel the therapeutic benefits of p75NTR targeting"
3. 30th Conference of the Hellenic Society for Neuroscience (EEN), November 24–26, 2023, Athens, Greece Title: "Harnessing a human iPSC-based model to study the effects of hyperglycemia on neurodegeneration and inflammation; the involvement of p75NTR"
4. Research in Myelin Netzwerk, February 2019, Kassel, Germany Title: "Direct conversion of human fibroblasts into oligodendrocytes"

5. SymBioSE Conference, July 2012, Hungary, Title: “The function of cgr-miR-15b/16-2 in CHO cells”
6. 33rd Conference of the Hellenic Society for Biological Sciences (HSBS), May 2011, Edessa, Greece,Title: “The distribution of TPX2 in dividing leaf cells of the fern *Asplenium nidus*”

10. Poster presentations

1. K. Chanoumidou, C. Konstantinou, M. A. Papadopoulou, A. Tsimpolis, A. Grünewald, A. Gravanis, I. Charalampopoulos, “Neurodegenerative and neuroinflammatory effects of hyperglycemia on the dopaminergic neurons: the role of p75NTR receptor”, 5th Immunology Workshop for Clinicians, 30 May - 01 June 2025, Heraklion, Greece
2. M. Papadopoulou, K. Chanoumidou, I. Charalampopoulos ''Unraveling the Role of p75 Neurotrophin Receptor in Adult Neurogenesis under Alzheimer's Disease: Insights from Rodent and Human Neural Stem Cells'' Gordon Research Seminar & Conference on Neurotrophic Mechanisms in Health and Disease, 31 May 2025 – 6 June 2025, Rhode Island, United States
3. K. Chanoumidou, C. Konstantinou, I. Zota, M. A. Papadopoulou, A. Tsimpolis, M. Tziortziou, I. Charalampopoulos, Studying the direct and glial-cell mediated effects of hyperglycemia on human dopaminergic neurons, ISSCR Neural Stem Cell Symposium, 3-4 April 2025, Athens, Greece
4. K. Chanoumidou, I. Zota, M. Papadopoulou, C. Konstantinou, I. Charalampopoulos, Modelling glucose neurotoxicity in a human ipsc-based model unravels the neuroprotective effect of p75ntr targeting, 30th European Cell Death Organization (ECDO) Conference, 9-11 October, 2024, Belval, Luxembourg
5. K. Chanoumidou, I. Zota, M. Papadopoulou, C. Konstantinou, I. Charalampopoulos, Modelling glucose neurotoxicity using human iPSC-derived cells to unravel the therapeutic potential of p75NTR targeting, ISSCR Annual Meeting, 10-13 July 2024, Hamburg, Germany
6. M. Papadopoulou, K. Chanoumidou, I. Charalampopoulos ''Unraveling the Role of p75 Neurotrophin Receptor in Adult Neurogenesis under Alzheimer's Disease: Insights from Rodent and Human Neural Stem Cells'' 5th Meeting of Adult Neurogenesis in Physiology and Disease – Eurogenesis, 12 -14 June 2024, Bordeaux, France
7. Konstantina Chanoumidou, Katerina Ntarntani, Ioanna Zotta, Marianna Papadopoulou, Ioannis Charalampopoulos, Dissecting the role of p75 pan-neurotrophin receptor in the hyperglycemia induced neuropathology in a human brain model, 10th Hellenic Academy of Neuroimmunology (Helani) Congress, 14-17 December 2023, Thessaloniki, Greece
8. K. Chanoumidou, K. Ntarntani, I.Zota, M. A. Papadopoulou, I.Charalampopoulos, Dissecting the role of p75 pan-neurotrophin receptor in the hyperglycemia-driven neuroinflammation and neurodegeneration in human brain XVI European Meeting in Health and Disease, 8-11 July 2023, Berlin, Germany

9. M. Papadopoulou, K. Chanoumidou, I.Charalampopoulos, Deciphering the role of p75 neurotrophinreceptor in adult neurogenesis: a potential pharmacological target against Alzheimer's Disease. FENS, 9-13 July 2022, France-Paris
10. K. Chanoumidou, M. Papadopoulou, I. Charalampopoulos, Modulation of the p75 pan-neurotrophin receptor alters adult neurogenesis and constitutes a therapeutic target in Alzheimer's Disease. ISSCR Annual Meeting, 15-18 June 2022, San Francisco
11. K. Chanoumidou, M. Papadopoulou, I. Charalampopoulos, Dissecting the neurogenic properties of p75NTR in Alzheimer's Disease, From Stem Cells to Human Development, 11-14 September 2022, UK
12. M. Papadopoulou, K. Chanoumidou, I. Charalampopoulos, p75 in adult neurogenesis: deciphering its role for exploiting its pharmacological use against Alzheimer's disease. 15th Scientific Conference of the Hellenic Society of Basic and Clinical Pharmacology, 23 October 2021, Athens, Greece
13. Zota, K. Chanoumidou, I. Charalampopoulos, A. Gravanis, Oligodendrocyte Progenitor Cells as a potential therapeutic target in Alzheimer's Disease, 29th Meeting of the Hellenic Society for Neuroscience, 8-10 October 2021, Heraklion, Greece
14. K. Chanoumidou, B. Hernandez-Rodriguez, M. Stehling, H. R. Schöler, J. Vaquerizas, M. Ehrlich, T. Kuhlmann, Direct conversion of human fibroblasts into oligodendrodytes: A new technology for evaluation of remyelinative compounds. Novartis Multiple Sclerosis Research Day, 25-26 January 2019, Berlin, Germany
15. C. Hadjimichael, K. Chanoumidou, P. Topalis, J. Papamatheakis, A. Kretsovali, The role of PML in regulating embryonic stem cell self-renewal and pluripotency, Stem Cell Biology, Coldspring harbor laboratory, 7 – 11 October 2015, New York, USA
16. K. Chanoumidou, C. Hadjimichael, A. Kretsovali, GRG5 role in neural differentiation of ESC and NSC, ISSCR Annual Meeting, 2015, Stocholm, Sweden
17. K. Chanoumidou, C. Hadjimichael, A. Kretsovali, GRG5: A new player in neural commitment?, Stem Cell Epigenetics, 20-22 September 2015, Sitges, Spain
18. K. Chanoumidou, A. Kretsovali, ''Association between localization and expression of core pluripotency markers in mouse Embryonic Stem Cells'', Summer School in Medical and Biosciences Research and Management, 17-25 May 2014, Mani Laconias, Greece
19. K. Chanoumidou, C. Hadjimichael, A. Kretsovali, '' Intranuclear localization of core pluripotency factors' loci in murine ES cells'', 64o National Conference of the society of Biochemistry and Molecular Biology, 6-8 December 2013, Athens, Greece

11. Reviewing Activities

Nature Communications

IJMS, MDPI

Pharmaceutics, MDPI

Stem Cell Research, Elsevier

Scientific Reports, Nature

12. Research Profiles

Orcid ID: 0000-0002-4573-0643
Scopus ID: 55509262400
Google Scholar profile:
https://scholar.google.com/citations?user=bJTLeSoAAAAJ&hl=en

13. Other Certifications

Good Clinical Practice GCP Certificate, NIDA Clinical Trials Network