

STEFANOS SMYRNIOTIS – CV

EDUCATION

2023 - today	NKUA, School of Medicine / BSRC “Alexander Fleming”, Athens, Greece PhD Candidate <i>“Extracellular Matrix Homeostasis and Fibroblast Activation in Fibroproliferative Diseases”</i> Prof. Antonios Chatzigeorgiou / Dr. Vassilis Aidinis
2015 –2020	University of Ioannina, Faculty of Health Sciences, Greece Department of Biological Applications & Technology 5-year Integrated Master’s Degree, 300 ECTS Diploma Thesis (09/2019 – 06/2020) <i>«The role of mitochondrial unfolded protein response in cancer»</i> Grade: 10/10 NCSR Demokritos, Institute of Biosciences and Applications, Laboratory of Molecular Carcinogenesis and Rare Disease Genetics, Dr. Gerassimos Voutsinas

EXPERIENCE

2020 – 2022	Research Assistant, NCSR Demokritos, Athens, Greece Institute of Biosciences and Applications Laboratory of Molecular Carcinogenesis and Rare Disease Genetics Dr. Gerassimos Voutsinas, Project: <i>“The LonP1 protein in cancer”</i>
2020	Two-week Western Blot Training, BRFAA, Athens, Greece Laboratory of Molecular Genetics of Aging, Dr. Popi Syntichaki
2019	Two-month Internship, Hellenic Pasteur Institute Medical Microbiology Lab, Dr. Dionyssios Sgouras Internship Program “NSRF”

LANGUAGE SKILLS

English	Excellent (C2 Level), Michigan State University
German	Good (B2 Level), Goethe Institut – Zertifikat B2

TECHNICAL SKILLS

DNA&RNA	Isolation, PCR, Reverse Transcription, RT-qPCR, Electrophoresis
Protein	Expression, Isolation, Quantification, Western blot analysis
Cell Culture	<i>ex vivo</i> lung models, Isolation of primary murine lung fibroblasts, hepatocytes and hepatic stellate cells, Organoids, Immortalized cell lines (handling, expansion, freezing), Transfection (siRNA, pDNA), Cytotoxicity (MTT), Scratch wound healing assay, pharmacological treatments
Animals	Handling of laboratory mice, Induction of Lung (bleomycin) and Liver (CCL4) fibrosis
Mol Cloning	Oligonucleotide selection, Restriction enzyme digestion, Bacterial transformation
Histology	Immunohistochemistry and Immunofluorescent Tissue Staining
Microscopy	Light, Fluorescent

AWARDS & PRIZES

2024	Travel grant from the Hellenic Society of Biochemistry and Molecular Biology (HSBMB) for attending the 74th National Congress of HSBMB.
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PUBLICATIONS

1. Taouktsi E, Kyriakou E, **Smyrniotis S**, Borbolis F, Bondi L, Avgeris S, Trigazis E, Rigas S, Voutsinas GE, Syntichaki P. Organismal and Cellular Stress Responses upon Disruption of Mitochondrial LonP1 Protease. *Cells*. 2022 Apr 16;11(8):1363.
2. **Smyrniotis S**, Kanellopoulou P, Magkrioti C, Aidinis V. An optimized protocol for generating fibrotic murine precision-cut lung slices. *STAR Protoc*. 2025 Jun 20;6(2):103711.
3. Kanellopoulou P, Barbayianni I, Fanidis D, Samiotaki M, Katsouli E, Nastos D, **Smyrniotis S**, Shira M, Galaris A, Rinotas V, Stylianaki EA, Grammenoudi S, Magkrioti C, Tomos I, Martinez Blanco A, Tremi I, Vamvakaris I, Gavara N, Havaki S, Gorgoulis V, Watanabe H, Aidinis V. Versican expression from lung fibroblasts is an autologous fibrotic brake. *Nat Commun*. 2026 Jan 21; 17(1):1676
4. Matralis AN[#], Stylianaki EA[#], Ladopoulou EM[#], Kanellopoulou P[#], **Smyrniotis S**[#], Magkrioti C[#], Papavasileiou KD, Willems S, Rincon Pabon JP, Nastos D, Galaras A, Moro C, Dedos SG, Kaffe E, Hatzis P, Osman-Ponchet H, Merk D, Politis A, Afantitis A, Tseti I, Antoniou KM, Wells AU, Aidinis V. An aerosolised dual-action Autotaxin inhibitor - PPAR γ agonist for the treatment of pulmonary fibrosis. *Cell Rep Med*. 2026 May 19;7(5):102778
5. Avgeris SN, Fostira F, Apostolou P, Delimitsou A, **Smyrniotis S**, Yannoukakos D, Stravopodis DJ, Syntichaki P, Voutsinas GE. Molecular Characterization of TSC1 and TSC2 Variants in a Greek Cohort of Tuberous Sclerosis Complex Patients. *Hum Mutat*. 2026 Aug 10;2026:4508699.

[#] equal contribution

REVIEWER OF INTERNATIONAL SCIENTIFIC JOURNALS

Nature Communications, Cell Biology and Toxicology, STAR Protocols

ABSTRACTS IN CONFERENCES

- **Smyrniotis S.**, Kanellopoulou P., Magkrioti C., Aidinis V. “Precision-cut lung slices (PCLS) as a novel *ex vivo* model for pulmonary fibrosis research and drug screening”. 74th Conference of the Hellenic Society of Biochemistry and Molecular Biology, December 13-15, 2024, Thessaloniki, Greece.
- Matralis A.N., Stylianaki E., Ladopoulou E., Kanellopoulou P., Nastos D., **Smyrniotis S.**, Papavasileiou K.D., Merk D., Afantitis A., Magkrioti C., Aidinis V. “An aerosolised dual-action ATX inhibitor-PPAR γ agonist for the treatment of pulmonary fibrosis”. 74th Conference of the Hellenic Society of Biochemistry and Molecular Biology, December 13-15, 2024, Thessaloniki, Greece.
- **Smyrniotis S.**, Magkrioti C., Aidinis V. “Versican V1 Upregulation in Murine Hepatic Fibrosis”. 73rd Conference of the Hellenic Society of Biochemistry and Molecular Biology, December 1-3, 2023, Athens, Greece.
- Taouktsi E., Verganelakis D., Voulgaraki E., Kyriakou E., **Smyrniotis S.**, Voutsinas G.E., Syntichaki P. “Crosstalk between mitochondrial LONP1 and stress surveillance mechanisms”. International Symposium: Integration in Biological Signalling, Centre for Integrative Biological Signalling Studies, Freiburg im Breisgau, Germany.
- **Smyrniotis S.**, Bondi L., Avgeris S., Kyriakou E., Taouktsi E., Borbolis F., Syntichaki P., Voutsinas G.E. “LONP1 disruption triggers mitochondrial and cytoplasmic stress responses interfering with cell survival and motility in cancer cells”. 71st Conference of the Hellenic Society of Biochemistry and Molecular Biology, November 26 – 28, 2021, Athens, Greece (Oral presentation).
- E. Taouktsi, E. Kyriakou, F. Borbolis, **S. Smyrniotis**, L. Bondi, S. Avgeris, G.E. Voutsinas, P. Syntichaki. “Organismal and cellular stress responses to disruption of mitochondrial LONP1 protease”. ISANH Paris Redox World Congress 2021 – October 13 – 15, 2021 – Interactive Online Congress.
- E. Taouktsi, E. Kyriakou, F. Borbolis, **S. Smyrniotis**, L. Bondi, S. Avgeris, G.E. Voutsinas, P. Syntichaki. “Disruption of LONP1 mitochondrial protease initiates a stress responsive cross-talk between mitochondrial and cytoplasmic proteostatic mechanisms in *Caenorhabditis elegans* and human cancer cells”. 45th FEBS Congress, 3-8 July 2021, Ljubljana, Slovenia (virtual).