## **INTERNATIONAL EXPERTISE, TEACHING EXPERIENCE, & SOFT SKILLS**

- 1. Accomplished Researcher with 15 years of research experience in immunology, developmental, molecular, and cellular biology in renowned academic laboratories
- 2. Long-standing expertise in several model systems (Drosophila, zebrafish, mouse and tissue culture)
- 3. Conception, design, and implementation of entire research projects, eventuating in **publication of highimpact scientific papers**
- 4. Long-standing experience in molecular mechanisms of human disease (ocular developmental abnormalities, respiratory and renal diseases, microcephalic dwarfism)

## WORK HISTORY

01/2022-present 12/2021-05/2022	Senior scientist, Institute of Molecular Biology and Biotechnology (IMBB), Crete Scientific editor at Spandidos Publications
01/2020-11/2021	Senior scientist, Institute of Genetics and Cancer (IGC), MRC Human Genetics Unit
	(HGU), University of Edinburgh, UK.
11/2018-01/2020	Maternity Leave
02/2014-11/2018	Postdoctoral researcher, Max-Planck Institute of Molecular Cell Biology and
	Genetics, Dresden, Germany. Supervisor: Prof. Elisabeth Knust
06/2011-02/2014	Postdoctoral researcher, Department of Molecular Biosciences, University of
	Stockholm, Sweden. Supervisor: Prof. Christos Samakovlis
08/2009-07/2011	Postdoctoral Researcher, Albert-Ludwigs University of Freiburg, Germany.
	Supervisor: Prof. Gerd Walz
03/2006-07/2009	PhD, Albert-Ludwigs University of Freiburg, Germany. Supervisor: Prof. Gerd
	Walz; <u>Summa Cum Laude</u>
09/2002-03/2006	Diploma in Biology, University of Crete, Greece. Grade: 10/10; Diploma Thesis
	Supervisor: Prof. Irene Athanassakis-Vassiliadis

## **ACCOMPLISHMENTS**

#### During my postdoctoral research

1. Dissection of the role of mammalian CRB1 on eye diseases such as Retinitis pigmentosa and Leber Congenital Amaurosis

2. Discovery of novel growth control mechanisms of the YAP1 oncoprotein in non-dividing, respiratory epithelial cells

3. Identification of novel regulators controlling the intracellular trafficking of Crumbs (a determinant of apical epithelial polarity) in the respiratory system

4. Study of the molecular mechanism of interaction of DONSON (mutations of which cause microcephalic dwarfism) with the replication fork

5. Understanding of how transcription factors control their own concentration and dampen their cell-cell variability during development

6. Characterization of a novel function of cytoplasmic YAP1 in maintaining tight junctions and controlling their turnover

7. Identification of the Hox transcription factor, Drosophila Sex combs reduced (Scr) to function as a homodimer to increase its transcriptional specificity

#### During my PhD research

7. Identification of a novel role of the Hippo growth control pathway in zebrafish pronephros development 8. Dissection of a novel role of PRKCSH in polycystic kidney disease

9. Identification of Diversin, as a molecular switch that blocks beta-catenin dependent and promotes betacatenin independent Wnt signalling.

#### **SUPERVISION (7)**

Masters students	4
Visiting (summer) students	2
Technical Assistants	1

#### **RESEARCH FUNDING** (a total of €157,529 for my research from external funders)

2006-2009	PhD fellowship, Graduiertenkolleg (GRK) 1104, University of Freiburg, Germany; €52,650
2011-2014	Wenner-Gren Foundation Postdoctoral Fellowship; €54,853
2018-2019	Orphan Disease Center of Pennsylvania (ODC) MDBR Pilot Grant award for research on CRB1
	related degenerative retinal diseases (co-applicant); €41,293
2020	IGC Early Career Award for research on Understanding CRB1-associated pathogenesis through
	extracellular protein interaction mapping; €3,318
2020	CMVM Research Adaptation Funding for research on Understanding CRB1-associated
	pathogenesis through extracellular protein interaction mapping; €5,415

#### LANGUAGES:

English: Full professional proficiency (work in the UK);German: Intermediate level (work in Germany);Spanish: Advanced level (studies in Spain);Greek: Mother tongue; full professional proficiency (studies in Greece)

# <u>PUBLICATIONS</u> [11 articles, of which: 6 as a first/co-first author; 3 as a corresponding author; 357 citations (March 2022); h-index 8]

1. Haribaskar R, Pütz M, Schupp B, <u>Skouloudaki K</u>, Bietenbeck A, Walz G, Schäfer T (2009). The planar cell polarity (PCP) protein Diversin translocates to the nucleus to interact with the transcription factor AF9. *Biochem Biophys Res Commun*;387(1);212-7.

2. <u>Skouloudaki K</u>, Puetz M, Simons M, Courbard JR, Boehlke C, Hartleben B, Engel C, Moeller MJ, Englert C, Bollig F, Schäfer T, Ramachandran H, Mlodzik M, Huber TB, Kuehn EW, Kim E, Kramer-Zucker A, Walz G (2009). Scribble participates in Hippo signaling and is required for normal zebrafish pronephros development. *Proc Natl Acad Sci U S A*;106(21);8579-84. >>[This article was selected by the Faculty of 1000 Biology]

3. Gao H, Wang Y, Wegierski T, <u>Skouloudaki K</u>, Pütz M, Fu X, Engel C, Boehlke C, Peng H, Kühn EW, Kim E, Kramer-Zucker A, Walz G (2010). PRKCSH/80K-H, the protein mutated in polycystic liver disease, protects polycystin-2/TRPP2 against HERP-mediated degradation. *Hum Mol Genet*;19(1);16-24.

4. <u>Skouloudaki K</u>, Walz G (2012). YAP1 recruits c-Abl to protect angiomotin-like 1 from Nedd4mediated degradation. *PLoS One*;7(4);e35735.

5. Papadopoulos DK\*, <u>Skouloudaki K\*</u>, Adachi Y, Samakovlis C, Gehring WJ (2012). Dimer formation via the homeodomain is required for function and specificity of Sex combs reduced in Drosophila. *Dev Biol*;367(1);78-89. \*equal contribution

6. Reynolds JJ, Bicknell LS, Carroll P, Higgs MR, Shaheen R, Murray JE, Papadopoulos DK, Leitch A, Murina O, Tarnauskaitė Ž, Wessel SR, Zlatanou A, Vernet A, von Kriegsheim A, Mottram RM, Logan CV, Bye H, Li Y, Brean A, Maddirevula S, Challis RC, <u>Skouloudaki K</u>, Almoisheer A, Alsaif HS, Amar A,

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Prescott NJ, Bober MB, Duker A, Faqeih E, Seidahmed MZ, Al Tala S, Alswaid A, Ahmed S, Al-Aama JY, Altmüller J, Al Balwi M, Brady AF, Chessa L, Cox H, Fischetto R, Heller R, Henderson BD, Hobson E, Nürnberg P, Percin EF, Peron A, Spaccini L, Quigley AJ, Thakur S, Wise CA, Yoon G, Alnemer M, Tomancak P, Yigit G, Taylor AM, Reijns MA, Simpson MA, Cortez D, Alkuraya FS, Mathew CG, Jackson AP, Stewart GS (2017). Mutations in DONSON disrupt replication fork stability and cause microcephalic dwarfism. *Nat Genet*;49(4);537-549.

7. <u>Skouloudaki K\*</u>, Papadopoulos DK, Tomancak P & Knust E (2019). The apical protein Apnoia interacts with Crumbs to regulate tracheal growth and inflation. *PLoS Genet*; 15(1);e1007852. \*corresponding author

8. <u>Skouloudaki K\*</u>, Christodoulou I, Khalili D, Tsarouhas V, Samakovlis C, Tomancak P, Knust E, Papadopoulos DK (2019). Yorkie controls tube length and apical barrier integrity during airway development. *J Cell Biol*;218(8):2762-2781. \*corresponding author

9. Papadopoulos DK, <u>Skouloudaki K</u>, Engstrom Y, Terenius L, Rudolf R, Vukojevic V, Zechner C & Tomancak P (2019) Control of Hox transcription factor concentration and cell-to-cell variability by an auto-regulatory switch. *Development*;146(12).

>>[Most read article in *Development* in 2019]

10. Auer JMT, Stoddart JJ, Christodoulou I, Lima A, <u>Skouloudaki K</u>, Hall HN, Vukojević V, Papadopoulos DK (2020). Of numbers and movement-understanding transcription factor pathogenesis by advanced microscopy. *Dis Model Mech*;13(12):dmm046516.

11. <u>Skouloudaki K\*</u>, Papadopoulos DK, Hurd TW (2020). The molecular network of YAP/Yorkie at the cell cortex and their role in ocular morphogenesis. *Int J Mol Sci*;21(22):8804. \*corresponding author

## **CONFERENCES**

- 2008 Michael Pütz, <u>Kassiani Skouloudaki</u>, Gerd Walz SFB 592: "Signalmechanismen in Embryogenese und Organogenese" & "The Role of PCP signaling in pronephros development"
- 2008 <u>Kassiani Skouloudaki</u>, Michael Pütz, Christina Engel, Gerd Walz Graduiertenkolleg 1104 "From cells to organs: Molecular mechanisms of Organogenesis"; "Scribble links Fat1 to the Hippo signaling cascade during zebrafish pronephros development"
- 2009 <u>Kassiani Skouloudaki</u>, Michael Pütz, Christina Engel, Gerd Walz "Cells into Organs Symposium" on "Tissue Specification and Organogenesis", Lisbon, Portugal; "Scribble links Fat1 to the Hippo signaling cascade during zebrafish pronephros development"
- 2013 "Yorkie controls trachea maturation in *Drosophila melanogaster*", École Polytechnique Fédérale de Lausanne (EPFL) (invited oral presentation)
- 2013 "Hippo signaling components in epithelial morphogenesis and beyond: From water to air", ETH Zurich, Switzerland (invited oral presentation)
- 2014 "Hippo signaling components in epithelial morphogenesis and beyond: From water to air", MPI-CBG, Dresden, Germany (invited oral presentation)
- 2016 <u>Kassiani Skouloudaki</u>, Elisabeth Knust " German Drosophila meeting", Cologne, Germany; "Apnoia, a new Crumbs regulator for proper breathing in flies"
- 2017 <u>Kassiani Skouloudaki</u>, Elisabeth Knust " 58<sup>th</sup> Annual Drosophila meeting", San Diego, USA; "Apnoia, a new Crumbs regulator for proper breathing in flies"
- 2017 "Apnoia, a new Crumbs regulator for proper breathing in flies", UCLA, Los Angeles, USA (invited oral presentation)
- 2018 Kassiani <u>Skouloudaki</u>, Dimitrios Papadopoulos, Elisabeth Knust. 70<sup>th</sup> Anniversary of the British Society of Developmental Biology (BSDB), Warwick, UK; "Apnoia, a new Crumbs regulator for

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proper breathing in flies