

## CURRICULUM VITAE

### **PERSONAL DATA**

---

**NAME:** VOULA (PARASKEVI) VELISSARIOU  
**DATE OF BIRTH:** 1955  
**PLACE OF BIRTH:** Addis Ababa, Ethiopia  
**FAMILY STATUS:** Married, one child  
**NATIONALITY:** Greek

### **EDUCATION and TRAINING**

---

1973 Moraitis High School, Athens Honours (18.9/20)

1977 BSc Biology. Department of Biology, University of Athens. (8.8/10), Degree project: Control of gene expression-postranscriptional control in eucaryotic cells". Supervisor: Prof Fotis Kafatos.

1980 PhD Genetics. Department of Genetics, University of Cambridge, UK. Thesis: The cytogenetics of the salivary gland glue proteins of *Drosophila melanogaster*. Supervisor: Professor Michael Ashburner.

1980-1981 Postdoctoral research Cytogenetics. Department of Genetics, University of Cambridge. UK. Topic: Cytogenetic Mapping of Salivary Gland Glue Protein - 6 in *D. Melanogaster*.

1981-1982 Training in cytogenetic prenatal diagnosis methods. Department of Medical Genetics, Churchill Hospital, Oxford, UK.

Oct. 1986 Training in CVS culture techniques. Department of Medical Genetics, Churchill Hospital, Oxford UK.

May 1992 Training in FISH (fluorescence in situ hybridization). Department of Molecular Genetics, Guy's Hospital, London, UK.

Feb. 2001 Training in quantitative fluorescent PCR (QF-PCR).  
The Galton Laboratory, Department of Genetics and Biometry, University College London, London, UK.

### **PROFESSIONAL EXPERIENCE**

---

**2022-today** Scientific and Managing Director,  
InterGenetics Center for Medical Genetics and Genomics,  
a Medicover company, Greece

**2015-2022** Scientific Director and Head of Dept. of Genetics and Molecular Biology,  
Biotatriki Group of Health Services, Athens, Greece  
(Cytogenetics, Molecular Cytogenomics and Molecular Biology).

---

---

<b>2015-2022</b>	Consultant in Medical Genetics, NIPD Genetics, Cyprus.
<b>2013-2015</b>	Director of Cytogenetics, AlfaLab Center of Molecular Biology and Cytogenetics, Leto Hospital, Hygeia Group, Athens, Greece
<b>1998-2013</b>	Head of Department of Genetics and Molecular Biology, Mitera Maternity, Gynecological, Pediatric and General Hospital, Athens.
<b>1982-1998</b>	Department of Genetics, Alexandra Hospital, Athens. Head: Professor Constantinos Pangalos. Position: Senior Cytogeneticist Cytogenetic Prenatal Diagnosis, Cancer Cytogenetics
<b>1981- 1982</b>	Department of Genetics, 1 <sup>st</sup> Pediatric Clinic, University of Athens. Position: Cytogeneticist Cytogenetic Prenatal Diagnosis

---

## SCHOLARSHIPS

- IKY Studentship 1973-1977.
- Research Fellow, Girton College, Cambridge University, 1979-1981.

---

## PUBLICATIONS

1. **Velissariou V**, Ashburner M. 1980. The Secretory Proteins of the Larval Salivary Gland of *Drosophila Melanogaster*: Cytogenetic Correlation of a Protein and a Puff. *Chromosoma (Berl.* 77: 13-27.
2. **Velissariou V**, Ashburner M. 1981. Cytogenetic and Genetic Mapping of a Salivary Gland Secretion Protein in *Drosophila Melanogaster*. *Chromosoma (Berl.)*. 84:173-185.
3. Pangalos C, Velissariou V, Liacacos G. 1984. Ring-14 and Trisomy 14q in the Same Child. *Ann. Genet.* 27:28-40.
4. Tsita KP, Vallas OS, **Velissariou VJ**, Lyberatou-Moraitou EK. 1989. A case of prenatal diagnosis of a familiar satellited Yq chromosome. *Clinical Genetics*. 35: 70-74.
5. Lyberatou E, **Velissariou V**. 1991. Single cell structural abnormalities in couples with habitual abortions. *Iatriki*. 60:273-275.
6. Lyberatou E, **Velissariou V**, Kretsas G. 1991. Primary amenorrhea in a girl with Xq-. *Iatriki*. 60:498-500.
7. **Velissariou V**, Lyberatou E, Antonopoulou E, Polymilis C. 1993. "Chromosome Breakage in Individuals with Single-Cell Structural Aberrations and Habitual Abortions. *Gynec Obstet Invest.* 36:71-74.
8. **Velissariou V**, Lyberatou E, Grigori P, Kosmaidou Z, Mesogitis S, Antsaklis A. 1993. Chromosome Abnormalities Detected in Dysmorphic Fetuses During Routine Prenatal Diagnosis and in Pregnancies with Abnormal Ultrasound Findings: A study of 3128 Cases. *Dysmorphology and Genetics of Cardiovascular Disorders*. Eds C. Bartsokas and Peter Beighton.
9. Lyberatou E, **Velissariou V**, Kosmaidou Z, Grigori P, Tsita K, Valla O, Kammenou Z, Antsaklis A, Mesogitis S, Aravantinos D. 1993. Fetal blood chromosomal analysis as a method of prenatal diagnosis. *Iatriki*. 63:581-586.

10. Syrrou M, **Velissariou V**, Lyberatou E, Pagoulatos G. 1996. Application of fluorescence in situ hybridization (FISH) in three cases of patients with chromosomal abnormalities. *Iatriki*. 70:69-72.
11. **Velissariou V**, Grigori P, Agapitos M, Alexandrakis G, Lyberatou E. 1997. Holoprosencephaly in a fetus with de novo terminal deletion of the long arm of chromosome 7, del(7)(q32). *Iatriki*. 71:175-177.
12. Rizos D, Sarandakou A, **Velissariou V**, Liberatou E, Hassiakos D, Pirgiotis E, Phocas I. 1996. The Influence of hCG and uE<sub>3</sub> Population Statistical Parameters on Biochemical Screening for Chromosomal Anomalies in the Second Trimester of Pregnancy. *Chimika Chronika, New Series*. 25:134.
13. Marcoulatos P, Koussidis G, Mamuris Z, **Velissariou V**, Vamvakopoulos N. 1996. "Mapping Interleukin Enhancer Binding Factor 2 Gene (ILF2) to Human Chromosome 1 (1q11-qter and 1p11-p12) by Polymerase Chain Reaction Amplification of Human-Rodent Somatic Cell Hybrid DNA Templates". *J Interferon Cytokine Res*. 16:1035-1038.
14. Patsalis PC, Hadjimarcou MI, **Velissariou V**, Kitsiou-Tzeli S, Lyberatou E, Skordis N. 1997. "Supernumerary marker chromosomes (SMCs) in Turner syndrome are mostly derived from the Y chromosome". *Clin Genet*. 51:184-190.
15. Rizos D, **Velissariou V**, Phoka I, Sarandakou A, Lyberatou E, Kassanos D, Hasiakos D, Botsis D, Chrisikopoulos A. 1997. Biochemical prenatal screening for Down's syndrome in women older than 35 years with the double or triple test. *Hellen Obstet Gynecol*. 9:128-136.
16. **Velissariou V**, Andoniadi T, Patsalis P, Hajipouliou A, Christopoulou S, Donoghue J, Bakou K, Kaminoretros P, Athanassiou V, Petersen MB. 2001. Two rare *de novo* structural aberrations of the Y chromosome: cytogenetic and molecular analysis during prenatal diagnosis. *Prenat Diagn*. 21:484-487.
17. **Velissariou V**, Andoniadi T, Gyftodimou J, Bakou K, Grigoriadou M, Christopoulou S, Hatzipouliou A, Donoghue J, Karatzis P, Katsarou E, Petersen MB. 2002. Maternal uniparental disomy 20 in a fetus with trisomy 20 mosaicism: clinical, cytogenetic and molecular analysis. *Eur J Hum Genet*. 10:694-698.
18. Antoniadis T, Yiapitjakis C, Kaminopetros P, Makatsoris C, **Velissariou V**, Vassilopoulos D, Petersen MB. 2002. A simple and effective approach for detecting maternal cell contamination in molecular prenatal diagnosis. *Prenat Diagn*. 22:425-429.
19. **Velissariou V**. 2003. Uniparental Disomy (UPD): A consequence of non-disjunction and the implications in prenatal diagnosis. *BJMG*. 6:55-59.
20. Sifakis S, **Velissariou V**, Papadopoulou E, Petersen MB, Koumantakis E. 2004. Prenatal Diagnosis of Trisomy 2 Mosaicism: A Case Report. *Fetal Diagn Ther*. 19:488-490.
21. Mihalatos M, Apeessos A, Douwerse H, **Velissariou V**, Psychias A, Koliopanos, Petropoulos K, Triantafillidis JK, Danielidis I, Foutzilias G, Agnantis NJ, Nasioulas G. 2005. Rare mutations predisposing to familial adenomatous polyposis in Greek FAP patients. *BMC Cancer*. 5:40.
22. Karadimas C, Sifakis S, Valsamopoulos P, Makatsoris C, **Velissariou V**, Nasioulas G, Petersen MB, Koumantakis E, Hatzaki A. 2006. Prenatal Diagnosis of Hypochondroplasia: Report of Two Cases. *Am J Med Genet*. 140(9): 998-1003.
23. **Velissariou V**, Christopoulou S, Karadimas C, Pihos I, Kanaka -Gantenbein C, Kapranos N, Kallipolitis G, Hatzaki A. 2006. Rare XXY/XX mosaicism in a phenotypic male with Klinefelter syndrome: Case report. *Eur J Med Genet*. 49:331-337.
24. Karadimas C, Trouvas D, Haritatos G, Makatsoris C, Dedoulis E, **Velissariou V**, Antoniadis T, Hatzaki A, Petersen MB. 2006. Prenatal diagnosis of achondroplasia presenting with multiple-suture synostosis: a novel association. *Prenat Diagn*. 26(3):258-261.
25. **Velissariou V**, Sismani C, Christopoulou S, Kaminopetros P, Hatzaki A, Evangelidou, Koumbaris G, Bartsokas CS, Stylianidou G, Skordis N, Diakoumakos, Patsalis PC. 2007.

- Loss of the Y chromosome PAR2 region and additional rearrangements in two familial cases of satellited Y chromosomes: Cytogenetic and molecular analysis. *Eur J Med Genet.* 50:291-300.
26. Kitsiou-Tzeli S, Sismani C, Karkaletsis M, Florentin L, Anastassiou A, Koumbaris G, Evangelidou P, Agapitos E, Patsalis P, **Velissariou V**. 2008. Prenatal diagnosis of a de novo partial trisomy 10p12.1-12.2 pter originating from an unbalanced translocation onto 15qter and confirmed with array CGH. *Prenat Diagn.* 28:770-772.
  27. Sifakis S, Karkaletsis M, Christopoulou S, Donoghue J, Kaminopetros P, Konstantinidou T, **Velissariou V**. 2008. Distinctive pattern of first trimester maternal serum biochemical markers in trisomy 22 pregnancies. *Prenat Diagn.* 28:1174-1176.
  28. Sifakis S, Koukoura O, Mantas N, **Velissariou V**, Koumantakis E. 2008. Hydrops fetalis, thickened placenta, and other sonographic findings in a low-level trisomy 21 mosaicism: a case report. *Fetal Diagn Ther.* 24:310-312.
  29. Konstantinidou AE, Agrogiannis G, Sifakis S, Karantanis A, Harakoglou V, Kaminopetros P, Hatzaki A, Petersen MB, Karadimas C, **Velissariou V**, Velonis S, Papantoniou N, Antsaklis A, Patsouris E. 2009. Genetic skeletal disorders of the fetus and infant: pathologic and molecular findings in a series of 41 cases. *Birth Defects Res A Clin Mol Teratol.* 85:811-821.
  30. Christopoulou S, Christopoulou G, Hatzaki A, Hatzipouliou A, Donoghue J, Karkaletsis M, Kaminopetros P, Sifakis S, **Velissariou V**. 2009. The replacement of cytogenetic analysis by direct chorionic villi sampling preparation with quantitative fluorescence PCR. *Gynecol Obstet Invest.* 68:255-261.
  31. Sifakis S, Staboulidou I, Maiz N, **Velissariou V**, Nicolaides KH. 2010. Outcome of pregnancies with trisomy 2 cells in chorionic villi. *Prenat Diagn.* 30:329-332.
  32. Chrissouli S, Pratsinis H, **Velissariou V**, K Letsas D. 2010. Human amniotic fluid stimulates the proliferation of human fetal and adult skin fibroblasts: The roles of bFGF and PDGF and the ERK and Akt signaling pathways. *Wound Repair Regen.* 18(6):643-54.
  33. Evangelidou P, Sismani C, Ioannides M, Christodoulou C, Koumbaris G, Kallikas I, Georgiou I, **Velissariou V**, Patsalis PC. 2010. Clinical application of whole-genome array CGH during prenatal diagnosis: Study of 25 selected pregnancies with abnormal ultrasound findings or apparently balanced structural aberrations. *Mol Cytogenet.* 26;3:24. PMID:21110858.
  34. Papageorgiou EA, Karagrigoriou A, Tsaliki E, **Velissariou V**, Carter NP, Patsalis PC. 2011. Fetal- specific DNA methylation ratio permits noninvasive prenatal diagnosis of trisomy 21. *Nat Med.* 17(4):510-3.
  35. Christopoulou G, Tzetis M, Konstantinidou AE, Tsezou A, Kanavakis E, Kitsiou-Tzelli S, **Velissariou V**. 2011. 12.59 Mb and 4.22 Mb deletions in chromosomal bands 10p15.3→p14 and 10q26.3, respectively, in a fetus with talipes equinovarus, macrocephaly, stubby nose, hypertelorism, micrognathia and syndactyly of both hands and feet. 2012. *Eur J Med Genet.* 55(1):75-9.
  36. Tsaliki E, Papageorgiou EA, **Velissariou V**, Patsalis PC. 2012. MeDIP real-time qPCR of maternal peripheral blood reliably identifies trisomy 21. 2012. *Prenat Diagn.* 32(10): 996-1001.
  37. Patsalis PC, Tsaliki E, Koumbaris G, Karagrigoriou A, **Velissariou V**, Papageorgiou EA. 2012. A new non-invasive prenatal diagnosis of Down syndrome through epigenetic markers and real-time qPCR. *Expert Opin Biol Ther.* 2012 Jun;12 Suppl 1: S155-61. doi: 10.1517/14712598.2012.674108. Epub 2012 Apr 14.
  38. Evangelidou P, Alexandrou A, Moutafi M, Ioannides M, Antoniou P, Koumbaris G, Kallikas I, **Velissariou V**, Sismani C and Patsalis P. 2013. Implementation of high resolution whole genome array CGH in the prenatal clinical setting. Advantages,

- challenges and review of the literature. *Bio Med Research International*. Volume 2013 (2013), Article ID 346762.
39. Kyriakou S, Kypri E, Spyrou C, Tsaliki E, **Velissariou V**, Papageorgiou EA, Patsalis PC. 2013. Variability of cfDNA in maternal plasma does not prevent correct classification of trisomy 21 using MeDIP qPCR methodology. *Prenat Diagn*. 33(7):650-5.
  40. Christopoulou G, Sismani C, Sakellariou M, Saklamaki M, Athanassiou V, **Velissariou V**. 2013. Gene Clinical and molecular description of the prenatal diagnosis of a fetus with a maternally inherited microduplication 22q11.2 of 2.5Mb. *Gene*. Mar 16. Doi:10.1016
  41. Sismani C, Donoghue J, Alexandrou A, Karkaletsis M, Christopoulou S, Konstantinidou AE, Livanos P, Patsalis PC, **Velissariou V**. 2013. A prenatally ascertained, maternally inherited 14.8 Mb duplication of chromosomal bands Xq13.2-q21.31 associated with multiple congenital abnormalities in a male fetus *Gene*. Aug 22. doi:pii: S0378-1119(13)01062-710.1016/j.gene.2013.08.032.
  42. Nazaryan L, Stefanou EG, Hansen C, Kosyakova N, Bak M, Sharkey FH, Mantziou T, Papanastasiou AD, **Velissariou V**, Liehr T, Syrrou M, Tommerup N. 2013. The strength of combined cytogenetic and mate-pair sequencing techniques illustrated by a germline chromothripsis rearrangement involving FOXP2. *Eur J Hum Genet*. Jul 17. doi: 10.1038/ejhg.2013.147.
  43. Patsalis PC, Christopoulou G, **Velissariou V**. 2013. Technical concerns on the clinical validation of the NIFTY test. *Prenat Diagn*. Apr 26. doi: 10.1002/pd.4146.
  44. Konstantinidou AE, Tassoulas I, Kallipolitis G, Gasparatos S, **Velissariou V**, Paraskevskou H. 2013. Mandibulofacial dysostosis (Treacher-Collins syndrome) in the fetus: novel association with pectus carinatum in a molecularly confirmed case and review of the fetal phenotype. *Birth Defects Res A Clin Mol Teratol* Nov 29. doi: 10.1002/bdra.23202
  45. Sismani C, Christopoulou G, Alexandrou A, Evangelidou P, Donoghue J, Konstantinidou AE, **Velissariou V**. 2015. A Prenatally Ascertained *De Novo* Terminal Deletion of chromosomal bands 1q43q44 associated with multiple congenital abnormalities in a female fetus. *Case Reports in Genetics*. Article ID 517678 6 pages <http://dx.doi.org/10.1155/2015/517678>.
  46. Christopoulou G, Papageorgiou EA, Patsalis PC, **Velissariou V**. 2015. Review. Comparison of next generation sequencing-based and methylated DNA immunoprecipitation-based approaches for fetal aneuploidy non-invasive prenatal testing. *World Journal Med Genet*, Vol 5(2). DOI: 10.5496/wjmg
  47. Koumbaris G, Kypri E, Tsangaras K, Achilleos A, Mina P, Neofytou M, **Velissariou V**, Christopoulou G, Kallikas I, Gonza A, Benusiene E, Latos-Bielenska A, Marek P, Santana A, Nagy N, Papageorgiou EA, Ioannides M, and Patsalis PC. 2016. Cell-Free DNA Analysis of Targeted Genomic Region in Maternal Plasma for Non-Invasive Prenatal Testing of Trisomy 21, Trisomy 18, Trisomy 13 and Fetal Sex. *Clin Chemistry* 62:6
  48. **Velissariou V** and Patsalis PC. 2016. Non-invasive Cell- Free DNA Prenatal Testing for Fetal Aneuploidy in Maternal Blood. *Molecular Diagnostics, Third Edition*, Chapter 27. Elsevier. Eds. Patrinos GP, Danielson P and Anson WJ.
  49. Roumelioti FM, Louizou E, Karras S, Neroutsou R, **Velissariou V**, Gagos S. Unbalanced X;9 translocation in an infertile male with de novo duplication Xp22.31p22.33. 2019. *Journal of Assisted Reproduction and Genetics*. <https://doi.org/10.1007/s10815-019-01405-0>
  50. Kypri E, Ioannides M, Touvana E, Neofytou I, Mina P, **Velissariou V**, Vittas S, Santana A, Alexidis F, Tsangaras K, Achilleos A, Patsalis P and Koumbaris G. Non-invasive prenatal testing of fetal chromosomal aneuploidies: validation and clinical performance of the veracity test. 2019. *Molecular Cytogenetics* 12:34. <https://doi.org/10.1186/s13039-019-0446-0>

51. Gadsbøll K, Petersen OB, Gatinois V, Strange H, Jacobsson B, Wapner R, Robert Vermeesch J, Vogel I ; NIPT-map study group: Shand A, Nowakowska B, Peterlin B, Machtejeviene E, Sethna F, Stipoljev F, Szirko F, Romana Grati F, Minarik G, Duncombe G, Helmer H, Hardardottir H, Lebedev I, Dickinson J, Melo JB, Edwards L, Hui L, Srebniak MI, de Alba MR, Vedmedovska N, Calda P, Celec P, Muller P, Patsalis P, Popp R, Liehr T, Moe Eggebø T, Stefanovic V, **Velissariou V**. 2020. Current use of noninvasive prenatal testing in Europe, Australia and the USA: A graphical presentation. *Acta Obstet Gynecol Scand*. 2020 Mar 16. doi: 10.1111/aogs.13841.
52. Carolina Sismani, Stamatia-Maria Rapti, Pavlina Iliopoulou, Anastasia Spring, Rozalia Neroutsou, Magdalini Lagou, Marianna Robola, Efstathios Tsitsopoulos, Ludmila Kousoulidou, Angelos Alexandrou, Ioannis Papaevripidou, Athina Theodosiou, Maria Syrrou, Sigrid Fuchs, Maja Hempel, Dagmar Huhle, Thomas Liehr, Monika Ziegler, Max Duesberg, **Voula Velissariou**. 2020. Novel pericentric inversion inv(9)(p23q22.3) in unrelated individuals with fertility problems in the Southeast European population. *Journal of Human Genetics* <https://doi.org/10.1038/s10038-020-0769-z>.
53. **Velissariou V**, Sachinidi F, Christopoulou S, Florentin L, Liehr T, Efthymiadou A, Angelopoulou E, Chrysis D, Stefanou EG. 2020. Low-Level Trisomy 14 Mosaicism: A Carrier of an Isochromosome 14 and a Supernumerary Marker Chromosome 14. *Cytogenet Genome Res*. Nov 17:1-7. doi: 10.1159/000511549. PMID: 33202412.

## TEACHING EXPERIENCE

---

Tutorial lessons in Developmental Biology to 1<sup>st</sup> year Medical School students, University of Cambridge.  
Laboratory instructor in Developmental Biology, University of Cambridge.

Laboratory instructor in Genetics, University of Cambridge.

Visiting Assistant Professor in Medical Genetics, University of Thessalia, Medical School (1995-1998).

Postdoctoral seminars in Medical Genetics, University of Athens, University of Ioannina, University of Thraki.

Participation in teaching during the course "Principles of operation of Diagnostic Laboratories: from Theory to Practice", University of Athens.

## COMPLEMENTARY

---

Founding and elected member of the board of the Panhellenic Association of Medical Geneticists (SIGE) 2005-2007 and 2022-today.

Elected Vice President (2022-2024) of the Panhellenic Association of Medical Geneticists (SIGE).

Elected Representative of Panhellenic Association of Medical Geneticists (SIGE) on advisory board of European Cytogeneticists Association (ECA) since 2006.

Appointed assessor of genetics clinical laboratories in Greece and Cyprus by ESYD (The Hellenic Accreditation System) and CyAQ (Cyprus Association for Quality).

Invited Member of the Faculty for 1<sup>st</sup> course in Prenatal and Postnatal Clinical Cytogenetics, 12-15 February 2005, Beirut, Lebanon organized by the European School of Genetic Medicine.

Member of European Society of Human Genetics.

Reviewer: Prenatal Diagnosis, Molecular Cytogenetics, Fertility and Sterility, *European J Medical Genetics*, *European Journal of Obstetrics & Gynecology* and *Reproductive Biology*, *Genetics Research*, *J Assisted Reproductive Genetics*, *Human Genomics*.

Member of the Scientific Committee of Mitera Hospital 2009-2011, Hygeia Group.

Member of the Scientific Board of NIPD Genetics, Cyprus.

---

Member of the Scientific Board BIOIATRIKI HEALTHCARE GROUP, Greece.  
Appointed member by Panhellenic Association of Medical Geneticists (SIGE) and the Greek Ministry of Health of the committee for the Laboratory Genetics specialty in Greece 2019.

---

## **LANGUAGES**

English, French.