

**Peristera Paschou**

**August 2021**

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## 1. GENERAL INFORMATION

Activities and accomplishments after joining Purdue (August 2016) are marked in blue.  
January 2020-May 2021 are shown in red.

### A. Education

- 2002-2005** **Diplomate of the American Board of Medical Genetics** (August 2005) - **Clinical Molecular Genetics Specialty**. Yale University School of Medicine, Department of Genetics - Medical Genetics Training Program
- 2002-2005** Postdoctoral Training, Yale University School of Medicine, Department of Genetics (Supervisor: Kenneth K. Kidd)
- 1999-2002** National University of Athens, **PhD in Human Genetics**  
Thesis: "Molecular Determinants of the Etiology and Pathogenesis of Insulin Dependent Diabetes"
- 2001** Institut Pasteur, Paris, training fellowship - Study of the genetics of Type 1 Diabetes Mellitus in Greek families
- 1999-2000** University of Oxford, "Wellcome Trust Centre for Human Genetics" – training fellowship - whole genome screening for the identification of disease loci
- 1997-1999** National University of Athens, Faculty of Nursing - MSc  
Dissertation: "Genetic Counseling in Type 1 Diabetes Mellitus"
- 1992-1997** National University of Athens, Faculty of Nursing – BSc

### B. Previous Positions

- 2016-2021** Associate Professor, Purdue University, Department of Biological Sciences
- 2018-2019** Inaugural Frederick Hovde Dean's Fellow, College of Science, Purdue University
- 2014-2016** Associate Professor of Population Genetics, Democritus University of Thrace, Department of Molecular Biology and Genetics (with Tenure)
- 2010-2014** Assistant Professor of Population Genetics, Democritus University of Thrace, Department of Molecular Biology and Genetics
- 2011** Adjunct Investigator, National Institute of Child Health and Human Development, Bethesda, USA
- 2005-2010** Lecturer in Population Genetics, Democritus University of Thrace, Department of Molecular Biology and Genetics
- 2007** Visiting Scientist, Center for Neurobehavioral Genetics, Medical School, University of California Los Angeles, USA (October 2007)
- 2006** Visiting Specialist, Institute for Human Genetics, University of California San Francisco, USA (June-August, 2006)
- 2003-2005** Postdoctoral Fellow, Department of Genetics, Yale University School of Medicine, USA
- 2002-2003** Postdoctoral Associate, Department of Genetics, Yale University School of Medicine, USA
- 1999-2002** Research Associate, National University of Athens - European Cooperation Project: "Diabetes Prediction and Prevention - DIPP DEMO Project"

**1997-1999** Research Associate, National University of Athens - European Cooperation Project: “Genomic map of Insulin Dependent Diabetes Mellitus (IDDM)”

### **C. Present Position**

**2021-today Professor, Department of Biological Sciences, Purdue University**

**2019-today Associate Dean, Purdue University, College of Science**

### **D. Awards and Honors**

**2019** Showalter Faculty Scholar ([Press release](#))

**2019** University Faculty Scholar, Purdue University (The University Faculty Scholars Program is intended to recognize outstanding mid-career faculty who are on an accelerated path for academic distinction)

**2015** Latsis Foundation Award – 2015 Scientific Studies by Young Researchers

**2014** Excellence Career Award – ARISTEIA II – co-funded by Greece and the European Union

**2010** Platform presentation award, 2010 Hellenic Society for Biochemistry and Molecular Biology meeting, Alexandroupoli, Greece

**2005** Hellenic Endocrine Society, 1<sup>st</sup> Research Grant Award

**2004** *Paschou et al. Am J Hum Genet 2004* – selected as one of the “Top Ten papers” in 2004 by the Centre of Excellence for Early Childhood Development in Canada

**1999** “EURODIAB TIGER: EUROpe and DIAbetes – Type 1 Genetic Epidemiology Resource” – Training scholarship – Wellcome Trust Centre for Human Genetics, University of Oxford

### **E. Professional and Scholarly Associations**

- American Society for Human Genetics
- International Society for Psychiatric Genetics
- European Society for the Study of Tourette Syndrome

### **F. Other items - Leadership Activities**

#### **Purdue University**

**2019-today** **Co-Chair Integrative Data Science Initiative Curriculum Committee**, Purdue University (campus-wide committee working on the development of a [Data Science Education Ecosystem](#) at Purdue – eg. [Applications in Data Science certificate](#)).

**2019-today** **Associate Dean for Online and Graduate Education**, College of Science

**2019-today** **Leadership Team Member**, Purdue Institute for Integrative Neuroscience

**2018-2019** **FLAIR Fellow**. [Faculty Leadership Academy for Interdisciplinary Research](#), Purdue EVPRP Office

**2018-2019** **Inaugural Frederick L. Hovde Dean’s Fellow**. The program is designed to provide leadership opportunities to selected faculty. As part of the College’s leadership team, Fellows design and complete projects to advance critical goals across the college. Dr

Paschou focused on facilitating the participation of the College in cross-campus Data Science education and research initiatives.

### **Boards of scientific societies**

- 2014-2017**     **Board Member** - European Society for the Study of Tourette Syndrome (ESSTS)  
**2011-2014**     **Chair** - European Society for the Study of Tourette Syndrome (ESSTS)  
**2011-2012**     **Treasurer** of the Board of Directors - Hellenic Association for Medical Genetics

### **Coordinator of international cooperation research programs**

**2017-today**     Chair of ENIGMA-TS Working Group: Enhancing Neuroimaging Genetics through meta-analysis for Tourette Syndrome. (<http://enigma.ini.usc.edu/ongoing/enigma-ts/>)

**2012-2016**     Coordinator of “[TS-EUROTRAIN](#): Interdisciplinary training network for Tourette Syndrome; structuring European Training capacities for neurodevelopmental disorders.” – Marie Curie Initial Training Network

**2011-2015**     Work package leader - «[EMTICS: European Multicenter Tics in Children Study](#)» FP7-HEALTH.

**2010-2014**     Chair of the “[European Network for the Study of Gilles de la Tourette Syndrome](#)” (Multidisciplinary consortium of investigators from 23 European countries – Funded by *COST – European Cooperation in Science and Technology*).

**2009-2014**     Steering Committee Member of the international research project «GGRI - Gilles de la Tourette Syndrome Genome Wide Association Study Replication Initiative» (PI: Dr Jeremiah Scharf, MGH, Funded by the *National Institute of Neurological Disorders and Stroke, USA*)

**2008-today**     Coordinator of the international research project «Tourette Syndrome Genetics. The Southern and Eastern Europe Initiative» (Scientific network of investigators from seven European countries – Funded by the *Tourette Syndrome Association, USA*) (<http://tsgenesec.mbg.duth.gr/>)

## **II. LEARNING**

### **A. Teaching Assignments at Purdue (last 5-7 years only)**

| Semester | Year | Course #   | Title, Credit, Type  | Enroll. | Student Classification. |
|----------|------|------------|--|---------|-------------------------|
| Fall     | 2019 | BIOL 69500 | Neurological and Neuropsychiatric Disorders<br>Lecture/Seminar (2cr) | 13      | Graduate                |
| Fall     | 2018 | BIOL 69500 | Neurological and Neuropsychiatric Disorders<br>Lecture/Seminar (2cr) | 18      | Graduate                |
| Fall     | 2018 | BIOL 44400 | Human Genetics (2cr),<br>Lecture                                     | 50      | Junior/Senior           |
| Fall     | 2017 | BIOL 44400 | Human Genetics (2cr),<br>Lecture                                     | 47      | Junior/Senior           |

## B. Selected Discussion of Courses

### Human Genetics - BIOL 44400

This is a fascinating time to be studying genetics. The first human genome took billions of dollars, a huge international team of scientists and technicians, and about eight years to complete in 2003. Today, a whole human genome can be sequenced for less than \$1,000 and in about one day. Given the computational and technical ability to handle all these data, our knowledge of human evolution, development and disease now grows by leaps and bounds every year. This course builds on students' foundations in genetics and extends into the study of human genetics. A detailed discussion of the modes of inheritance as well as pathophysiology and clinical phenotype for a broad range of human disorders is covered. Upon completion, students will be able to explain the molecular mechanisms by which genetic information is passed from person to person, how genetic information influences and is influenced by its environment, and how mutations occur and their implications. Students will also be able to discuss the genetics of a broad spectrum of human disorders and how genetic technologies and methods are employed in the diagnosis and treatment of disease as well as in genetics research. The course includes lectures by Prof Paschou as well as student presentations on assigned topics.

### Neurological and Neuropsychiatric Disorders Lecture/Seminar - BIOL 69500

The aim of this multidisciplinary course is to provide graduate students with an understanding of the neurobiological basis, treatment strategies and potential goals for future research for a broad range of disorders affecting the nervous system. Students have the opportunity to benefit from a broad range of expertise from faculty across the Purdue campus. Student presentations cover papers focusing on translational research. Students are exposed to state-of-the-art methodological approaches across different disciplines and fields ranging from biology and genetics to neuroimaging and biotechnology. The course was developed with the support of the Purdue Institute for Integrative Neuroscience.

## C. Course Evaluation

### 1. Student

|    |  | BIOL<br>44400<br>F17 | BIOL<br>44400<br>F18 | BIOL<br>69500<br>F18 | BIOL<br>69500<br>F19 |
|----|--|----------------------|----------------------|----------------------|----------------------|
| 1. | As a learning experience, this course was  | 3.7                  | 4.1                  | 4.1                  | 5                    |
| 2. | The amount that I learned in this course in proportion to the amount of work that I put into it was            | 4.0                  | 4.0                  | 4.3                  | 4.8                  |
| 3. | The availability of extra resources for this course (e.g., TA's, extra reading, handouts, A-T tapes, etc.) was | 3.6                  | 4.1                  | 4.0                  | 4.8                  |
| 4. | The professor's understanding of the subject was   | 4.9                  | 4.8                  | 4.3                  | 5                    |
| 5. | The professor's preparation and organization were  | 4.3                  | 4.3                  | 4.2                  | 5                    |
| 6. | The professor's availability to help students was  | 4.3                  | 4.1                  | 4.4                  | 5                    |
| 7. | Overall, this course was   | 3.8                  | 4.0                  | 4.2                  | 5                    |

|    |                                   | BIOL<br>44400<br>F17 | BIOL<br>44400<br>F18 | BIOL<br>69500<br>F18 | BIOL<br>69500<br>F19 |
|----|-----------------------------------|----------------------|----------------------|----------------------|----------------------|
| 8. | Overall, this professor was       | 3.9                  | 3.8                  | 4.3                  | 5                    |
|    | No. of Students/No. Participation | 47/19                | 49/16                | 18/13                | 12/4                 |

|    |                             | BIOL 44400 F17-<br>F18 |     | BIOL 69500 F18-19 |     |
|----|-----------------------------|------------------------|-----|-------------------|-----|
|    |                             | Range                  | Ave | Range             | Ave |
| 7. | Overall, this course was    | 3.8-4.0                | 3.9 | 4.2-5             | 4.6 |
| 8. | Overall, this professor was | 3.8-3.9                | 3.9 | 4.3-5             | 4.6 |

#### D. Other Teaching Experience:

##### Department of Molecular Biology and Genetics, Democritus University of Thrace, Greece

| Semester/Year  | Course             | Credit | Course<br>Organization | Enroll. |
|----------------|--------------------|--------|------------------------|---------|
| Fall 2011      | Population         | 5      | 13 three-hour          | 90      |
| Fall 2012      | Genetics           |        | lectures plus 13       |         |
| Fall 2013      | (undergraduate)    |        | two-hour lab           |         |
| Fall 2014      |                    |        | modules                |         |
| Fall 2015      |                    |        |                        |         |
| Spring 2011    | Genetics           | 6      | 13 three-hour          | 120     |
| Spring 2012    | (undergraduate)    |        | lectures plus 13       |         |
| Spring 2013    |                    |        | three-hour lab         |         |
| Spring 2014    |                    |        | modules                |         |
| Spring 2015    |                    |        |                        |         |
| Spring 2014    | Bioethics/Clinical | 2      | 10 50 min lectures     | 15      |
| Spring 2015    | Trials (Graduate   |        |                        |         |
| Spring 2016    | course)            |        |                        |         |
| Fall 2014-2015 | Genomics           | 2      | 10 50 min lectures     | 15      |
|                | (Graduate course)  |        |                        |         |

#### E. Other Contributions to Undergraduate Education

- As **Associate Dean at the College of Science**, Dr Paschou coordinates the development of [43 undergraduate courses to online format](#) with a goal to create an online version of the entire first year of curriculum for Science and Engineering students at Purdue University.
- As **Co-Chair of the Integrative Data Science Initiative Curriculum Committee**, Dr Paschou coordinated the [launch and update of the Applications in Data Science Undergraduate Certificate Program](#). This is a University-wide program aiming to provide foundational knowledge in Data and the opportunity to apply this knowledge in specific application domains.
- As **Associate Dean at the College of Science**, Dr Paschou helps coordinate discussions on revising the [Data Science Major Curriculum at Purdue](#). This includes integration of offerings across three different College of Science Departments (Computer Science, Mathematics and Statistics) and launching three different tracks for the program.
- As **Associate Dean at the College of Science**, Dr Paschou coordinated an agreement of partnership between [Purdue Dept of Computer Science and Egypt's Ministry of Communication](#),



Information and Technology to launch a Dual BS/MS degree program in Computer Science and Information Security (August 2020).

- Undergraduate thesis supervisor – 30 students at Democritus University of Thrace, Dept of Molecular Biology and Genetics (see also Undergraduate Students section)

### **III. DISCOVERY**

#### **A. Discussion of Research**

##### **Summary of most significant accomplishments**

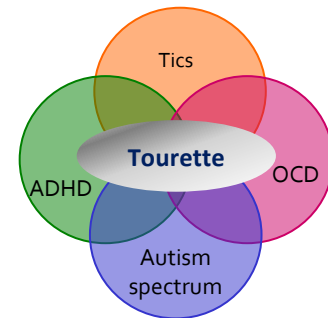
Dr Paschou works on the analysis of population genomics datasets aiming to disentangle population genetic relationships around the world and uncover the genetic background of complex disease. Throughout her academic career, she has established and led multiple large international research consortia and she has been an advocate for interdisciplinary research. Her work has led to discoveries that leverage the strength of genomics towards clinical translation and personalized medicine. Examples of Dr Paschou's most innovative and highest impact scientific contributions include: **(1)** The identification of the first definitive genes for Tourette Syndrome, a neuropsychiatric disorder of childhood that affects up to 1% of the population; **(2)** The development of a novel algorithmic framework that can dissect genetic structure and identify the ancestry and genetic relationships of human populations; **(3)** The discovery of the migration routes undertaken by our ancestors in the Neolithic period as they moved from the Middle East towards Europe bringing with them the knowledge of farming and a new way of life.

Dr Paschou's multidisciplinary research has led to 67 peer-reviewed scientific publications in Population Genetics and Genetic Epidemiology. Her work has been featured in multiple venues of the popular media, such as BBC and National Geographic. Her papers appear in widely recognized interdisciplinary journals such as Proceedings of National Academy of Sciences (PNAS), Nature Communications, Neuron, and Cell Reports and top ranked scientific journals in genetics such as Molecular Psychiatry, the American Journal of Human Genetics, PLOS Genetics, and Genome Research.

Dr Paschou has been very successful in pursuing international collaborations. She has brought together scientists across different disciplines with an aim to understand the cause of neuropsychiatric disorders of childhood and has led several large-scale international consortia in this direction. For instance, funded by the European Union, she coordinated a COST Action (European Cooperation in Science and Technology) which led to the development of an interdisciplinary network of more than 200 researchers from 23 different countries aiming to elucidate the cause of Tourette Syndrome and identify novel therapies. This program fostered the growth of the European Society for the Study of Tourette Syndrome (ESSTS) and, in recognition of her contributions and strong leadership, Dr Paschou was elected ESSTS Chair and served on the Board of ESSTS Officers from 2010-2017.

### Elucidating the cause of childhood neurodevelopmental disorders

For more than 18 years, Dr Paschou has been leading efforts to elucidate the genetic basis of multifactorial disorders with a particular focus on neurodevelopmental phenotypes. She has pioneered investigations in the study of the genetic basis of Tourette Syndrome (TS) in multiple populations, implicating multiple novel candidate genes in the etiology of the disorder. TS is an inherited neuropsychiatric disorder of childhood onset, which is characterized by the occurrence of multiple motor and vocal tics and high comorbidity rates with attention deficit hyperactivity disorder and obsessive compulsive disorder. It has long been considered a model disorder to study the parts of the brain that function at the intersection of our traditional concepts of neurology and psychiatry. TS still remains severely underdiagnosed and recent studies report a prevalence of 0.4-1%. It has become clear that it involves a complex genetic background interacting with multiple environmental factors in order to lead to the onset of symptoms. In the Big Data era, novel technologies allow the interrogation of millions of genetic variants in thousands of individuals in order to unravel the genetic background of such complex disorders. Dr Paschou has established and continues to lead multiple large-scale collaborative efforts of multidisciplinary teams of experts aiming to understand the genetic basis of TS, including the most recently funded NINDS consortium aiming to perform a mega-GWAS on more than 12,000 patients. She has previously established the Tourette Syndrome Genetics Southern and Eastern Europe Initiative, the genomics Working Group of the EU-funded European Multicenter Tics in Children Study and the TS Working Group within the worldwide consortium ENIGMA (Enhancing Neuroimaging Genetics through meta-analysis).

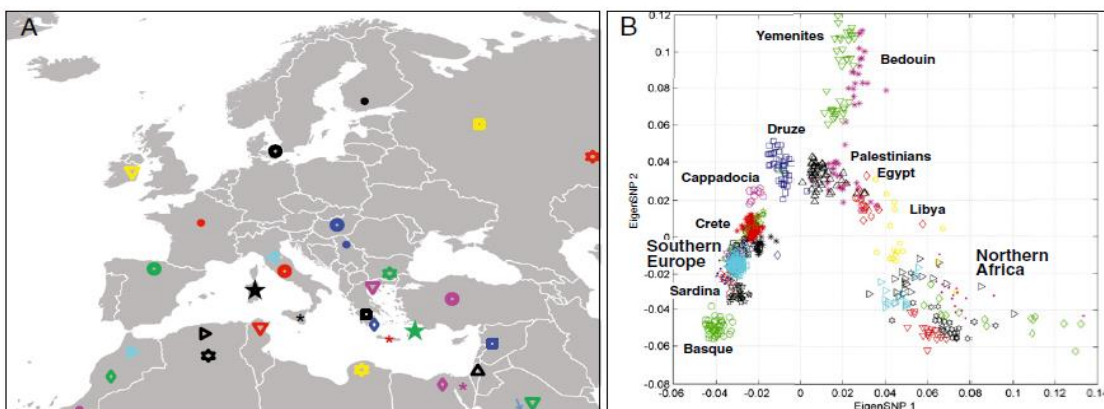


Dr Paschou pioneered studies of Tourette Syndrome, a model neurodevelopmental disorder.

Dr Paschou has played a leading role in establishing some of the largest biobanks for TS, including samples and clinical information from thousands of individuals from around the world. She then led genomic analysis of these samples, using genomewide genotyping and genomewide sequencing methods and this work led to the identification of the first definitive genes for TS. For instance, Dr Paschou was a lead author in work that appeared in 2019 in the American Journal of Psychiatry, presenting the largest GWAS for TS to date and the first genomewide significant hit (Yu et al. 2019). In 2017 she was also a leading author in work that appeared in Neuron, one of the most influential and relied upon journals in the field of neuroscience; the study reports the largest ever genome scan for TS interrogating copy number variants (CNVs - a type of structural genomic variation) and shows that approximately 1% of TS cases carry a CNV on one of the genes NRXN1 or CNTN6 (Huang et al. 2017). These genes are so-called cell adhesion molecules and play important roles in neural network formation. Another example of the high impact of her work on TS is a study that appeared in 2018 in Cell Reports, in which Dr Paschou led the whole-genome sequencing analysis of a sample of 800 nuclear families with TS identifying additional novel genes that underlie TS risk (Wang et al. 2018). This was the largest family sample for TS analyzed to date and its study uncovered non-inherited variants (new mutations) in a significant number of patients, implicating the biological

pathway that underlies cell polarity. The identified genes point to spatial differences in shape, structure, and function within a cell, and are fundamental for special functions such as the transmission of signals in one direction in neurons. In collaboration with colleagues from around the world, Dr Paschou continues to work towards the ultimate goal of identification of novel targets for drug treatment and psychotherapy in TS seeking to improve management of the disorder and increase the quality of life for patients and their families. She is currently leading an effort (NINDS R01 – MPI Paschou) to study an unprecedented sample of 12,000 patients with TS from around the world and she recently established the ENIGMA-TS working group with 15 collaborating sites aiming to bring together neuroimaging and genetic datasets in order to understand brain structure and function in TS.

### Uncovering ancient migration routes of human populations



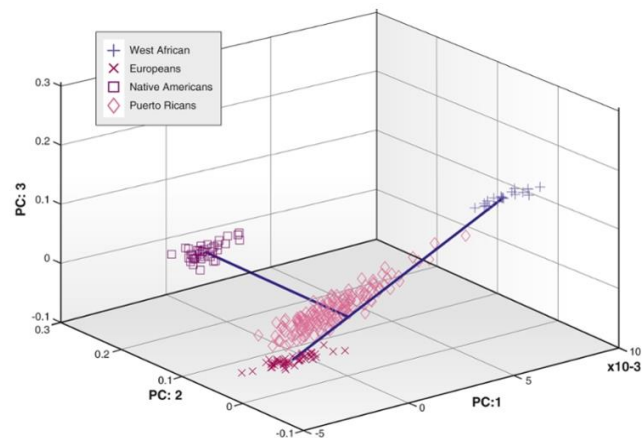
In Paschou et al 2014 (PNAS), Dr Paschou studied samples from 32 populations from around the Mediterranean basin (A) showing that the islands of the Aegean are a bridge that connects gene flow from Anatolia to Southern Europe (B. Projection on top principal components of 75,000 genetic markers from 32 populations). This was contrary to the common belief that our ancestors mainly migrated through land from the Near East towards Europe.

The study of population genetic structure can be applied to the discovery of disease genes as shown in the examples of Dr Paschou's research earlier here, but it can also elucidate the history of our species. Dr Paschou has worked together with renowned geneticist George Stamatoyannopoulos (who performed the first large-scale molecular geographical survey of a genetic trait, revealing the relationship between malaria and both thalassemia and sickle cell traits) to build an important biobank documenting population genetic diversity at a fine scale around the Mediterranean basin. Working at the intersection of genomics and data science, Dr Paschou analyzed genomewide data from this sample leading to high impact papers that attracted great publicity and were featured in multiple media outlets (e.g., NBC, BBC, National Geographic, Le Figaro). In work that appeared in Nature Communications (Hughey et al. 2013), using state of the art statistical methodologies, Dr Paschou contributed significantly in addressing the question of the origin of the ancient Minoan population by analyzing mitochondrial DNA from Minoan osseous remains found in a cave in Crete. Refuting the hypothesis of Sir Arthur Evans, who proposed a North African origin of the Minoans, the study showed that, in fact, the Minoans bear the greatest genetic relationship to Neolithic and modern populations from Europe. In work that appeared in the leading interdisciplinary journal

PNAS (again attracting considerable attention from the scientific community and the popular media), Dr Paschou addressed the long-debated question of the Neolithic colonization of Europe by farmers from the Near East (Paschou et al. 2014). Using sophisticated techniques, she observed a striking structure correlating genes with geography around the Mediterranean Sea and showed that the first farmers migrating from Anatolia (what is today Syria and Palestine) to Europe via a maritime route, with the Aegean islands acting as a bridge that connected Near East to Southern Europe.

### **Uncovering population genetic structure and individual ancestry**

In highly cited work, Dr Paschou led a series of papers on the selection of genetic markers that can be used to identify the origin of individuals and dissect population genetic structure. Her work has important impact in clinical studies, forensics and population genetics and has also been transferred to the fields of biotechnology, with possible use for instance in the study of economically important traits, breeding programs, efforts to conserve biodiversity, and the traceability of breed-specific



Top three principal components of genomewide data showing ancestry contributions in an admixed Puerto Rican population (Paschou et al PLoS Genetics, 2007). This figure is also used in Thompson & Thompson's Genetics in Medicine 8<sup>th</sup> edition, a classic reference textbook in the field.

branded products. For example, Dr Paschou's paper on PCA-correlated SNPs, which appeared in PLOS Genetics, is an example of interdisciplinary research, at the interface of Genetics and Computer Science (Paschou et al. 2007). Based on Principal Components Analysis Dr Paschou developed a novel algorithm that could be applied on genomewide datasets for the selection of a small subset of ancestry informative markers that can be used to discriminate different populations. Most recently, Dr Paschou, in collaboration with colleagues from Purdue Dept of Computer Science and in work that was led by a PhD student she co-advised (Co-Chair of committee) she published a novel software tool, TeraPCA, a C++ implementation of the Randomized Subspace Iteration method to perform Principal Component Analysis of large-scale datasets of millions of individuals over millions of genetic markers (Bose et al. 2019). Such tools are expected to become of extreme significance in the Big Data era allowing the biobank-scale analysis of genomic data.

### **Popular Press (selected press-releases discussing Dr Paschou's work)**

#### **Population genetic structure in India**

1. **January 2021 – [Purdue press release](#) – New study links India's genetic diversity to language not geography.**

2. January 2021 – Language – not Geography major force behind India’s gene flow – [Big THINK press release](#)

### **Investigating population genetic structure in a tera scale**

1. TeraPCA (a scalable, multi-threaded software package to compute the top principal components of terascale matrices). [Purdue press-release](#)

### **Understanding the genetic basis of Tourette Syndrome**

3. February 2021 – [Spectrum NEWS website](#) – Common variants link Tourette, autism, ADHD, and OCD.
4. June 2017 – [Purdue press-release](#): Tourette Syndrome risk increases in people with genetic copy variants
5. June 2017 – [NIH press release](#): Researchers uncover genetic gains and losses in Tourette Syndrome
6. June 2017 – [Boston Herald](#): Gene find may aid in Tourette treatment
7. July 2012 - [European Cooperation in Science and Technology - Newsroom](#): COST Action BM0905 underpins proposal for a Marie Curie Initial Training Network on Tourette Syndrome (TS)
8. October 2005 - [Bulletin of the Centre of Excellence for Early Childhood Development, Canada](#): How will Tourette Syndrome strike within a family next?

### **Population genetic structure in the Peloponnese**

9. March 2017 – [Vima Science](#): DNA contradicts Fallmerayer theory (one of the top newspapers in Greece – article in Greek).

### **Maritime route of colonization of Europe**

10. June 2014 - [New Scientist](#): Island-hopping odyssey brought civilisation to Europe
11. June 2014 - [Science](#): First farmers were also sailors
12. June 2014 - [National Geographic](#): Ancient Europe colonized by island hoppers?
13. June 2014 - [Le Figaro \(in French\)](#): Lire dans l’ADN l’histoire du peuplement
14. June 2014 - [Scinexx.de \(in German\)](#): Die ersten Bauern kamen über den Seeweg
15. June 2014 - [Le Scienze \(in Italian\)](#): La via insulare delle migrazioni neolitiche
16. June 2014 - [TO VIMA \(in Greek\)](#): Farming arrived to Europe by ship
17. June 2014 - [TA NEA \(in Greek\)](#): The Greek islands as a bridge of evolution

### **MIT Enterprise Forum Greece press-release**

18. September 2013 - FORTUNE Greece.com (article in Greek), [Entrepreneurship and Innovation in Genomics and Biotechnology](#)

### **Minoan genetic ancestry press-releases**

16. May 2013 - [Nature News](#): Minoan civilization was made in Europe
17. May 2013 - [BBC News](#): DNA reveals origin of Greece's ancient Minoan culture
18. May 2013 - [NBC News](#): Mysterious Minoans really were European, DNA finds
19. May 2013 - [Live Science](#): Mysterious Minoans were European

20. May 2013 - [USA Today](#): Europe's first civilization was home grown
21. May 2013 - [RPI News](#): DNA analysis unearths origins of Minoans
22. May 2013 - [TO VIMA \(in greek\)](#): Modern Cretans descended from the Minoans
23. May 2013 - [Proto Thema \(in greek\)](#): Cretans are descendants of the Minoans
24. May 2013 - [Kriti TV \(in greek\)](#): Minoans were the first Europeans

### **PCA-correlated SNPs and population structure press-releases**

25. April 2008 - [Yahoo! News](#): Computer program reveals anyone's ancestry
26. April 2008 - [LiveScience](#) and NSF: Computer program reveals anyone's ancestry
27. August 2008 – [ScienceDaily](#): Pinpointing genetic variations in European Americans
28. September 2007 - [ScienceDaily](#): Tracing your ancestry:
29. September 2007 – [Scitizen article](#): DNA markers and computer science methodology can be used to trace individual ancestry

### **B. Publications**

*Thirty (30) papers have been published since appointment at Purdue (Aug 2016) – 26 peer-reviewed (2 of which in press), 4 published as pre-prints and under peer-review;*

*\* indicates primary author, Paschou lab author codes: <sup>P</sup> Post-Doctoral; <sup>G</sup> Graduate student; <sup>U</sup> Undergraduate student; <sup>PC</sup> Pre-collegiate student.*

Dr. Paschou has published in the following journals listed in order of the most recent impact factor: *Science* (IF 37.2), *Cell* (IF:36.21), *Neuron* (IF: 13.97), *Am J Psychiatry* (IF: 13.4), *Mol Psychiatry* (IF: 13.20), *Nature Communications* (IF: 12.12), *Biological Psychiatry* (IF: 12.09), *Genome Research* (IF: 11.35), *Molecular Biology and Evolution* (IF: 11.06), *Annals of Neurology* (IF: 9.89), *Proceedings of the National Academy of Sciences USA* (IF: 9.66), *Am J Hum Genet* (IF: 9.02), *Neurology*. (IF:8.32), *Cell Reports* (IF: 8.28), *Neurosci Biobehav Rev* (IF: 8.23), *Nat Rev Dis Primers* (IF: 6.39), *PLoS Genetics* (IF: 6.10), *J Med Genet* (IF: 5.45), *Neurobiol Aging* (IF: 5.15), *Human Genetics* (IF: 4.64), *Am J Med Genet* (IF: 4.44), *Eur J Hum Genet* (IF: 4.35), *Pharmacogenomics* (IF: 3.85), *Genes Brain Behav* (IF: 3.74), *Front Neurosci* (IF: 3.56), *Front Psychiatry* (IF: 3.53), *Cytokine* (IF: 3.49), *Eur Child Adolesc Psychiatry* (IF: 3.34), *Diabetes Metab Res Rev.* (IF: 3.26), *Spine J* (IF: 3.02), *PLoS ONE* (IF: 2.80), *Diab Vasc Dis Res* (IF: 2.5), BMC Bioinformatics. (IF: 2.45), *Int J Legal Med.* (IF: 2.38), *Biological Journal of the Linnean Society*, (IF: 2.29), *Annals of Human Genetics* (IF: 1.66), *Int Urol Nephrol* (IF: 1.56), *Twin Res Hum Genet* (IF:1.31), *Behav Neurol* (IF: 1.31), *Journal of Pediatric Endocrinology and Metabolism* (IF: 1.23)

**Based on Google Scholar Report February 9, 2021:**

**Total number of citations: 3,502**

**h-index: 30**

**i10-index: 45**

**Complete list of published work available on PubMed in MyBibliography (use link below)**

<https://pubmed.ncbi.nlm.nih.gov/?term=paschou+p&sort=date>

**1. Refereed (papers since joining Purdue are shown in blue – After Jan 2020 shown in red)**

1. Bose A<sup>g</sup>, Platt DE, Parida L, Drineas P, **Paschou P\*** (2021). Integrating Linguistics, Social Structure, and Geography to Model Genetic Diversity within India. *Mol Biol Evol* in press.
2. Tsetos F<sup>p</sup>, Yu D, Sul JH, ..., **Paschou P\*** (2021). Synaptic processes and immune-related pathways implicated in Tourette syndrome. *Transl Psychiatry* 11(1):56.
3. Tsetos F<sup>p</sup>, Roumeliotis A<sup>g</sup>, Tsekmekidou X<sup>g</sup>, Alexouda S, Roumeliotis S, Theodoridis M, Thodis E, Panagoutsos S, Papanas N, Papazoglou D, Kotsa K, Yovos JG, Maltezos E, Passadakis P, **Paschou P**, Georgitsi M (2020). Genetic variation in CARD8, a gene coding for an NLRP3 inflammasome-associated protein, alters the genetic risk for diabetic nephropathy in the context of type 2 diabetes mellitus. *Diab Vasc Dis Res* 17(6):1479164120970892.
4. Kidd KK, Pakstis AJ, Donnelly MP, Bulbul O, Cherni L, Gurkan C, Kang L, Li H, Yun L, **Paschou P**, Meiklejohn KA, Haigh E, Speed WC (2020). The distinctive geographic patterns of common pigmentation variants at the OCA2 gene. *Sci Rep*. 2020 Sep 22;10(1):15433.
5. Pagliaroli L, Vereczkei A, Padmanabhuni SS, Tarnok Z, Farkas L, Nagy P, Rizzo R, Wolanczyk T, Szymanska U, Kapisyzi M, Basha E, Koumoula A, Androutsos C, Tsironi V, Karagiannidis I, **Paschou P**, Barta C (2020). Association of Genetic Variation in the 3'UTR of LHX6, IMMP2L, and AADAC With Tourette Syndrome. *Front Neurol*;11:803.
6. Addabbo F, Baglioni V, Schrag A, Schwarz MJ, Dietrich A, Hoekstra PJ, Martino D, Buttiglione M; Emtics Collaborative Group (2020). Anti-dopamine D2 receptor antibodies in chronic tic disorders. *Dev Med Child Neurol* 62(10):1205-1212.
7. ENIGMA Consortium (2020). ENIGMA and global neuroscience: A decade of large-scale studies of the brain in health and disease across more than 40 countries. *Transl Psychiatry* 10(1):100. **(IF: 5.18)**
8. Tsekmekidou X<sup>g</sup>, Tsetos F<sup>g</sup>, Koufakis T, Karras SN, Georgitsi M, Papanas N, Papazoglou D, Roumeliotis A, Panagoutsos S, Thodis E, Theodoridis M, Pasadakis P, Maltezos E, Paschou P, Kotsa K (2020). Association between CUBN gene variants, type 2 diabetes and vitamin D concentrations in an elderly Greek population. *J Steroid Biochem Mol Biol* 198:105549. **(IF: 3.78)**
9. Cross-Disorder Group of the Psychiatric Genomics Consortium (2019). Genomic Relationships, Novel Loci, and Pleiotropic Mechanisms across Eight Psychiatric Disorders. *Cell* 179(7):1469-1482. **(IF: 36.21)**
10. Yu D\*, Sul JH\*, Tsetos F\*<sup>g</sup>, ..., Paschou P#, Coppola G#, Mathews CA#, Scharf JM# (2019). Interrogating the genetic determinants of Tourette syndrome and other tic disorders through genome-wide association studies. *American Journal of Psychiatry* 176(3):217-227. **(IF: 13.4) \*equal contribution first authors, #equal contribution senior corresponding authors**
11. Raveane A, Aneli S, Montinaro F, Athanasiadis G, Barlera S, Birolo G, Boncoraglio G, Di Blasio AM, Di Gaetano C, Pagani L, Parolo S, **Paschou P**, et al. (2019). Population structure of modern-day Italians reveals patterns of ancient and archaic ancestries in Southern Europe. *Sci Adv* 4;5(9): eaaw3492. **(IF: 12.80)**
12. Drineas P, Tsetos F<sup>g</sup>, Plantinga A, Lazaridis I, Yannaki E, Razou A, Kanaki K, Michalodimitrakis M, Perez-Jimenez F, De Silvestro G, Renda MC, Stamatoyannopoulos JA, Kidd KK, Browning BL, **Paschou P\***, Stamatoyannopoulos G (2019). Genetic history of the population of Crete. *Ann Hum Genet* 83(6):373-388. **(IF: 1.52) \*corresponding author**
13. Bose A<sup>g</sup>, Kalantzis AV, Kontopoulou Eg, **Elkadi M<sup>g</sup>**, **Paschou P\***, Drineas P. (2019). TeraPCA: a fast and scalable software package to study genetic variation in tera-scale genotypes. *Bioinformatics* 35(19):3679-3683. **(IF: 5.61) \*corresponding author**

14. Mufford M, Cheung J, Jahanshad N, van der Merwe C, Ding L, Groenewold N, Koen N, Chimusa ER, Dalvie S, Ramesar R, Knowles JA, Lochner C, Hibar DP, **Paschou P**, et al (2019). Concordance of genetic variation that increases risk for tourette syndrome and that influences its underlying neurocircuitry. *Transl Psychiatry* 9(1):120. (IF: 5.18)
15. Alexander J<sup>§</sup>, Ströbel T, Georgitsi M, Hönigschnabl S, Reiner A, Fischer P, Tsifintaris M<sup>u</sup>, **Paschou P\***, and Kovacs GG\*. Neuropathology-driven Whole-genome Sequencing Study Points to Novel Candidate Genes for Healthy Brain Aging. *Alzheimer's Disease and Associated Disorders*, 33(1):7-14.\***equal contribution, co-corresponding authors**
16. Wang S, Mandell JD, **Kumar Y<sup>p</sup>**, Sun N, Morris MT, Arbelaez J, Nasello C, Dong S, Duhn C, Zhao X, **Yang Z<sup>g</sup>**, **Padmanabhuni SS<sup>p</sup>**...**P Paschou\***, Willsey JA\*, State MA\* (2018). De Novo Sequence and Copy Number Variants are Strongly Associated with Tourette Disorder and Implicate Cell Polarity in Pathogenesis. *Cell Reports* 24(13):3441-3454 (IF: 8.28) \***equal contribution senior corresponding authors**
17. Brainstorm Consortium (2018). Analysis of shared heritability in common disorders of the brain. *Science*: 360(6395). (IF 37.2)
18. Schrag A, Martino D, Apter A, Ball J, Bartolini E, Benaroya-Milshtein N, Buttiglione M, Cardona F, Creti R, Efstratiou A, Gariup M, Georgitsi M, Hedderly T, Heyman I, Margarit I, Mir P, Moll N, Morer A, Müller N, Müller-Vahl K, Münchau A, Orefici G, Plessen KJ, Porcelli C, **Paschou P**, Rizzo R, Roessner V, Schwarz MJ, Steinberg T, Tagwerker Gloor F, Tarnok Z, Walitza S, Dietrich A, Hoekstra PJ; EMTICS Collaborative Group (2018). European Multicentre Tics in Children Studies (EMTICS): protocol for two cohort studies to assess risk factors for tic onset and exacerbation in children and adolescents. *Eur Child Adolesc Psychiatry* in press (IF: 3.34)
19. **Tsekmekidou XA<sup>g</sup>**, Kotsa KD, **Tsetsos FS<sup>g</sup>**, Didangelos TP, Georgitsi MA, Roumeliotis AK, Panagoutsos SA, Thodis ED, Theodoridis MT, Papanas NP, Papazoglou DA, Pasadakis PS, Eustratios MS, **Paschou PI**, Yovos JG (2018). Assessment of association between lipoxigenase genes variants in elderly Greek population and type 2 diabetes mellitus. *Diab Vasc Dis Res* 15(4):340-343. (IF: 2.5)
20. **Paschou P\***, Müller-Vahl K (2017). Editorial: The Neurobiology and Genetics of Gilles de la Tourette Syndrome: New Avenues through Large-Scale Collaborative Projects. *Front Psychiatry*. 8:197 (**Research Topic Editor - The neurobiology and genetics of Gilles de la Tourette Syndrome: new avenues through large-scale collaborative projects** – 33 articles included) (IF: 3.53)
21. Huang AY, Yu D, Davis LK, Sul JH, **Tsetsos F<sup>g</sup>**, Ramensky V, Zelaya I, Ramos EM, Osiecki L, Chen JA, McGrath LM, Illmann C, Sandor P, Barr CL, Grados M, Singer HS, Nöthen MM, Hebebrand J, King RA, Dion Y, Rouleau G, Budman CL, Depienne C, Worbe Y, Hartmann A, Müller-Vahl KR, Stuhmann M, Aschauer H, Stamenkovic M, Schloegelhofer M, Konstantinidis A, Lyon GJ, McMahon WM, Barta C, Tarnok Z, Nagy P, Batterson JR, Rizzo R, Cath DC, Wolanczyk T, Berlin C, Malaty IA, Okun MS, Woods DW, Rees E, Pato CN, Pato MT, Knowles JA, Posthuma D, Pauls DL, Cox NJ, Neale BM, Freimer NB, **Paschou P\***, Mathews CA\*, Scharf JM\*, Coppola G\*; Tourette Syndrome Association International Consortium for Genetics (TSAICG); Gilles de la Tourette Syndrome GWAS Replication Initiative (GGRI) (2017). Rare Copy Number Variants in NRXN1 and CNTN6 Increase Risk for Tourette Syndrome. *Neuron* Jun 21;94(6):1101-1111. (IF: 13.97) \***equal contribution senior authors**
22. Bulbul O, Pakstis AJ, Soundararajan U, Gurkan C, Brissenden JE, Roscoe JM, Evsanaa B, Togtokh A, **Paschou P**, Grigorenko EL, Gurwitz D, Wootton S, Lagace R, Chang J, Speed WC,



- Kidd KK (2017). Ancestry inference of 96 population samples using microhaplotypes. *Int J Legal Med.* In press . (IF: 2.38)
23. Roumeliotis AK, Roumeliotis SK, Panagoutsos SA, **Tsetsos F<sup>g</sup>**, **Georgitsi MP**, Manolopoulos V, **Paschou P**, Passadakis PS (2017). Association of ALOX12 gene polymorphism with all-cause and cardiovascular mortality in diabetic nephropathy. *Int Urol Nephrol* in press. (IF: 1.56)
  24. **Alexander J<sup>g</sup>**, **Mantzaris DP**, **Georgitsi MP**, Drineas P, **Paschou P** (2017). Variant Ranker: a web-tool to rank genomic data according to functional significance. *BMC Bioinformatics.* 18(1):341. (IF: 2.45)
  25. **Liva E<sup>g</sup>**, Panagiotou I, **Palikyras S<sup>u</sup>**, Parpa E, Tsilika E, **Paschou P**, Mystakidou K. Candidate gene investigation of spinal degenerative osteoarthritis in Greek population. *Spine J.* 2017 Dec;17(12):1881-1888. (IF: 3.02)
  26. Stamatoyannopoulos G, **Bose A<sup>g</sup>**, Teodosiadis A, **Tsetsos F<sup>g</sup>**, Plantinga A, Psatha N, Zogas N, Yannaki E, Zalloua P, Kidd KK, Browning BL, Stamatoyannopoulos J, **Paschou P**, Drineas P (2017). Genetics of the peloponnesean populations and the theory of extinction of the medieval peloponnesean Greeks. *Eur J Hum Genet* 25(5):637-645. (IF: 4.35)
  27. Robertson MM, Eapen V, Singer HS, Martino D, Scharf JM, **Paschou P**, Roessner V, Woods DW, Hariz M, Mathews CA, Črnčec R, Leckman JF (2017). Gilles de la Tourette syndrome. *Nat Rev Dis Primers* Feb 2;3:16097. (Invited review) (IF: 6.39)
  28. Le Guennec K, Quenez O, Nicolas G, Wallon D, Rousseau S, Richard AC, **Alexander J<sup>g</sup>**, **Paschou P**, Charbonnier C, Bellenguez C, Grenier-Boley B, Lechner D, Bihoreau MT, Olaso R, Boland A, Meyer V, Deleuze JF, Amouyel P, Munter HM, Bourque G, Lathrop M, Frebourg T, Redon R, Letenneur L, Dartigues JF, Martinaud O, Kaley O, Mehrabian S, Traykov L, Ströbel T, Le Ber I, Caroppo P, Epelbaum S, Jonveaux T, Pasquier F, Rollin-Sillaire A, Génin E, Guyant-Maréchal L, Kovacs GG, Lambert JC, Hannequin D, Champion D, Rovelet-Lecrux A (2017). 17q21.31 duplication causes prominent tau-related dementia with increased MAPT expression. *Mol Psychiatry.* 22(8):1119-1125. (IF: 13.20)
  29. **Padmanabhuni SS<sup>g</sup>**, **Houssari R<sup>g</sup>**, Esserlind AL, Olesen J, Werge TM, Hansen TF, Bertelsen B, **Tsetsos F<sup>g</sup>**, **Paschou P**, Tümer Z (2016). Investigation of SNP rs2060546 Immediately Upstream to NTN4 in a Danish Gilles de la Tourette Syndrome Cohort. *Front Neurosci* 10:531. (IF: 3.56)
  30. **Alexander J<sup>g</sup>**, **Potamianou H<sup>u</sup>**, Xing J, Deng L, **Karagiannidis I<sup>g</sup>**, **Tsetsos F<sup>g</sup>**, Drineas P, Tarnok Z, Rizzo R, Wolanczyk T, Farkas L, Nagy P, Szymanska U, Androutsos C, Tsironi V, Koumoula A, Barta C; TSGeneSEE, Sandor P, Barr CL, Tischfield J, **Paschou P**, Heiman GA, **Georgitsi MP** (2016). Targeted Re-Sequencing Approach of Candidate Genes Implicates Rare Potentially Functional Variants in Tourette Syndrome Etiology. *Front Neurosci* 10:428. (IF: 3.56)
  31. Forde NJ, Kanaan AS, Widomska J, **Padmanabhuni SS<sup>g</sup>**, Nespoli E, **Alexander J<sup>g</sup>**, Rodriguez Arranz JI, Fan S, Houssari R, Nawaz MS, Rizzo F, Pagliaroli L, Zilhão NR, Aranyi T, Barta C, Boeckers TM, Boomsma DI, Buisman WR, Buitelaar JK, Cath D, Dietrich A, Driessen N, Drineas P, Dunlap M, Gerasch S, Glennon J, Hengerer B, van den Heuvel OA, Jespersgaard C, Möller HE, Müller-Vahl KR, Openneer TJ, Poelmans G, Pouwels PJ, Scharf JM, Stefansson H, Tümer Z, Veltman DJ, van der Werf YD, Hoekstra PJ, Ludolph A, **Paschou P\*** (2016). TS-EUROTRAIN: A European-Wide Investigation and Training Network on the Etiology and Pathophysiology of Gilles de la Tourette Syndrome. *Front Neurosci.* 10:384. (IF: 3.56)

32. **Georgitsi MP**, Willsey AJ, Mathews CA, State M\*, Scharf JM\*, **Paschou P\*** (2016). The Genetic Etiology of Tourette Syndrome: Large-Scale Collaborative Efforts on the Precipice of Discovery. *Front Neurosci* 10:351. **(IF: 3.56)**
33. **Tsetos F<sup>g</sup>**, **Padmanabhuni SS<sup>g</sup>**, **Alexander J<sup>g</sup>**, **Karagiannidis I<sup>g</sup>**, **Tsifintaris M<sup>u</sup>**, **Topaloudi A<sup>u</sup>**, **Mantzaris D<sup>p</sup>**, Georgitsi M, Drineas P, **Paschou P\*** (2016). Meta-Analysis of Tourette Syndrome and Attention Deficit Hyperactivity Disorder Provides Support for a Shared Genetic Basis. *Front Neurosci* 10:340. **(IF: 3.56)**
34. **Paschou P\*** (2016). Comment: Dissecting the genetic architecture of Tourette syndrome into subphenotypes. *Neurology*. 2016 Aug 2;87(5):503. **Invited comment (IF:8.32)**
35. **Karagiannidis I<sup>g</sup>**, **Tsetos F<sup>g</sup>**, **Padmanabhuni SS<sup>g</sup>**, **Alexander J<sup>g</sup>**, Georgitsi M, **Paschou P\*** (2016). The Genetics of Gilles de la Tourette Syndrome: a Common Aetiological Basis with Comorbid Disorders? *Current Behavioral Neuroscience Reports* 3: 218-231.
36. **Alexander J<sup>g</sup>**, Kalev O, Mehrabian S, Traykov L, Raycheva M, Kanakis D, Drineas P, Lutz MI, Ströbel T, Penz T, Schuster M, Bock C, Ferrer I, **Paschou P\***, Kovacs GG\* (2016). Familial early-onset dementia with complex neuropathologic phenotype and genomic background. *Neurobiol Aging* 42:199-204. **(IF: 5.15)**
37. Zilhão NR, **Padmanabhuni SS<sup>g</sup>**, Pagliaroli L, Barta C; BIOS Consortium, Smit DJ, Cath D, Nivard MG, Baselmans BM, van Dongen J, **Paschou P\***, Boomsma DI\* (2015). Epigenome-Wide Association Study of Tic Disorders. *Twin Res Hum Genet* 18(6):699-709. **(IF:1.31)**
38. Bertelsen B, Stefánsson H, Riff Jensen L, Melchior L, Mol Debes N, Groth C, Skov L, Werge T, **Karagiannidis I<sup>g</sup>**, Tarnok Z, Barta C, Nagy P, Farkas L, Brøndum-Nielsen K, Rizzo R, Gulisano M, Rujescu D, Kiemeny LA, Tosato S, Nawaz MS, Ingason A, Unnsteinsdottir U, Steinberg S, Ludvigsson P, Stefansson K, Kuss AW, **Paschou P**, Cath D, Hoekstra PJ, Müller-Vahl K, Stuhmann M, Silahatoglu A, Pfundt R, Tümer Z (2015). Association of AADAC Deletion and Gilles de la Tourette Syndrome in a Large European Cohort. *Biol Psychiatry* 79(5):383-391. **(IF: 11.21)**
39. **Paschou P\***, Yu, D, Gerber G, Evans P, **Tsetos F<sup>g</sup>**, Davis LK, **Karagiannidis I<sup>g</sup>** et al. Genetic association signal near NTN4 in Tourette Syndrome (2014). *Annals of Neurology*, 76:310-315 **(IF: 9.89)**.
40. **Paschou P**, Drineas P, Yannaki E, Razou A, Kanaki K, **Tsetos F<sup>g</sup>**, **Padmanabhuni SS<sup>g</sup>**, Michalodimitrakis M, Renda MC, Pavlovic S, Anagnostopoulos A, Stamatoyannopoulos JA, Kidd KK, Stamatoyannopoulos G (2014). A maritime route of colonization of Europe. *Proceedings of the National Academy of Sciences USA*, 111:9211-9216 **(IF: 9.66)**
41. Bertelsen B, Melchior L, Jensen L, Groth C, Glenthøj B, Rizzo R, Mol Debes N, Skov L, Brøndum-Nielsen K, **Paschou P**, Silahatoglu A, Tümer Z (2014). Intragenic deletions affecting two alternative transcripts of the *IMMP2L* gene in patients with Tourette syndrome. *European Journal of Human Genetics*, in press **(IF: 4.35)**
42. **Vogiatzi E<sup>g</sup>**, Kalogianni E, Zimmerman B, Giakoumi S, Barbieri R, **Paschou P**, Magoulas A, Tsaparis D, Poulakakis N, Tsigenopoulos CS. (2014). Reduced genetic variation and strong genetic population structure in the freshwater killifish *Valencia letourneuxi* (Valenciidae) based on nuclear and mitochondrial markers. *Biological Journal of the Linnean Society*, 111: 334-349. **(IF: 2.29)**
43. Hughey JR, **Paschou P**, Drineas P, Mastropaolo D, Lotakis DM, Navas PA, Michalodimitrakis M, Stamatoyannopoulos JA, Stamatoyannopoulos G (2013). A European Population in the Minoan Bronze Age Crete. *Nature Communications*, 4: 1861. **(IF: 12.12)**

44. **Karagiannidis I<sup>§</sup>**, Dehning S, Sandor P, Tarnok Z, Rizzo R, Wolanczyk T, Madruga-Garrido M, Hebebrand J, Nöthen MM, Lehmkuhl G, Farkas L, Nagy P, Szymanska U, Anastasiou Z, Stathias V, Androutsos C, Tsironi V, Koumoula A, Barta C, Zill P, Mir P, Müller N, Barr C, **Paschou P\*** (2013). Support of the histaminergic hypothesis in Tourette syndrome: association of the histamine decarboxylase gene in a large sample of families. *J Med Genet* 50(11):760-764. (IF: 5.45) **Editor's choice**
45. **Paschou P\*** (2013). The genetic basis of Gilles de la Tourette Syndrome. *Neurosci Biobehav Rev*, 37(6):1026-39. (IF: 8.23)
46. Rickards HE, **Paschou P**, Rizzo R, Stern JS (2013). A brief history of the European Society for the Study of Tourette Syndrome. *Behav Neurol*, 27(1):3-5. (IF: 1.31)
47. **Stathias V<sup>u</sup>**, **Sotiris G<sup>u</sup>**, **Karagiannidis I<sup>§</sup>**, Bourikas G, Martinis G, Papazoglou D, Tavridou A, Papanas N, Maltezos E, Theodoridis M, Vargemezis V, Manolopoulos VG, Speed WC, Kidd JR, Kidd KK, Drineas P, **Paschou P\*** (2012). Exploring genomic structure differences and similarities between the Greek and European HapMap populations; implications for association studies. *Annals of Human Genetics*, 76(6): 472-483. (IF: 1.66)
48. **Paschou P\***, **Stylianopoulou E<sup>§</sup>**, **Karagiannidis I<sup>§</sup>**, Rizzo R, Tarnok Z, Wolanczyk T, Hebebrand J, Nöthen MM, Lehmkuhl G, Farkas L, Nagy P, Szymanska U, **Lykidis D<sup>p</sup>**, Androutsos C, Tsironi V, Koumoula A, Barta C, **Klidonas S<sup>u</sup>**, Ypsilantis P, Simopoulos C, See T, Skavdis G, Grigoriou M\* (2012). Evaluation of the LIM homeobox genes LHX6 and LHX8 as candidates for Tourette Syndrome. *Genes Brain Behav*, 11 (4): 444-451 (IF: 3.74)
49. **Karagiannidis I<sup>§</sup>**, Rizzo R, Tarnok Z, Wolanczyk T, Hebebrand J, Noethen MM, Lehmkuhl G, Farkas L, Nagy P, Barta C, Szymanska U, **Panteloglou G<sup>u</sup>**, Miranda DM, Feng Y, Sandor P, Barr C, **Paschou P\***. The most common worldwide haplotype across SLITRK1 is associated with Tourette Syndrome in a large sample of families. *Molecular Psychiatry* 17(7): 665-668 (IF: 13.20)
50. Iordanidou M, Paraskakis E, Tavridou A, **Paschou P**, Chatzimichael A, Manolopoulos VG (2012). G894T polymorphism of eNOS gene is a predictor of response to combination of inhaled corticosteroids with long-lasting  $\beta(2)$ -agonists in asthmatic children. *Pharmacogenomics* 13(12):1363-1372 (IF: 3.85)
51. Donnelly MP, **Paschou P**, Grigorenko E, Gurwitz D, Barta C, Lu RB, Zhukova OV, Kim JJ, Siniscalco M, New M, Li H, Kajuna S, Manolopoulos VG, Speed WC, Pakstis AJ, Kidd JR, Kidd KK (2012). A global view of the OCA2-HERC2 region and pigmentation. *Human Genetics* 131(5): (683-696) (IF: 4.64)
52. **Javed A<sup>§</sup>**, Drineas P, Mahoney MW, **Paschou P\*** (2011). Efficient genomewide selection of PCA-correlated tSNPs for genotype imputation. *Annals of Human Genetics* 75(6):707-722 (IF: 1.66)
53. **Lewis J<sup>§</sup>**, Abas Z, Dadousis C, **Lykidis D<sup>p</sup>**, **Paschou P**, Drineas P (2011). Tracing Cattle Breeds With PCA-based Ancestry Informative SNPs. *PLoS ONE* 6(4):e18007. (IF: 2.80)
54. Müller-Vahl KR, Cath DC, Cavanna AE, Dehning S, Porta M, Robertson MM, Visser-Vandewalle V; ESSTS Guidelines Group (2011). European clinical guidelines for Tourette syndrome and other tic disorders. Part IV: deep brain stimulation. *Eur Child Adolesc Psychiatry* 20(4):209-217. (IF: 3.34)
55. Verdellen C, van de Griendt J, Hartmann A, Murphy T; ESSTS Guidelines Group (2011). European clinical guidelines for Tourette syndrome and other tic disorders. Part III: behavioural and psychosocial interventions. *Eur Child Adolesc Psychiatry* 20(4):197-207. (IF: 3.34)

56. Roessner V, Plessen KJ, Rothenberger A, Ludolph AG, Rizzo R, Skov L, Strand G, Stern JS, Termine C, Hoekstra PJ; ESSTS Guidelines Group (2011). European clinical guidelines for Tourette syndrome and other tic disorders. Part II: pharmacological treatment. *Eur Child Adolesc Psychiatry* 20(4):173-196. (IF: 3.34)
57. Cath DC, Hedderly T, Ludolph AG, Stern JS, Murphy T, Hartmann A, Czernecki V, Robertson MM, Martino D, Munchau A, Rizzo R; ESSTS Guidelines Group (2011). European clinical guidelines for Tourette syndrome and other tic disorders. Part I: assessment. *Eur Child Adolesc Psychiatry* 20(4):155-171. (IF: 3.34)
58. **Paschou P\***, **Lewis J<sup>g</sup>**, **Javed A<sup>g</sup>**, Drineas P (2010). Ancestry informative markers for fine-scale individual assignment to worldwide populations. *Journal of Medical Genetics* 47, 835-847. (IF: 5.45) **Editor's choice**
59. Drineas P, **Lewis J<sup>g</sup>**, **Paschou P\***. Inferring Geographic Coordinates of Origin for Europeans using Small Panels of Ancestry Informative Markers. *PLoS ONE* 5(8): e11892. (IF: 2.80)
60. **Paschou P\***, Kukuvtis A, Yavropoulou M, **Dritsoula A<sup>u</sup>**, Giapoutzidis V, Anastasiou O, Kazakos K, Yovos JG (2010). Genetic variation in the visfatin (PBEF1/NAMPT) gene and type 2 diabetes in the Greek population. *Cytokine*, 51, 25-27. . (IF: 3.49)
61. Donnelly MP, **Paschou P**, Grigorenko E, Gurwitz D, Mehdi SQ, Kajuna SL, Barta C, Kungulilo S, Karoma NJ, Lu RB, Zhukova OV, Kim JJ, Comas D, Siniscalco M, New M, Li P, Li H, Manolopoulos VG, Speed WC, Rajeevan H, Pakstis AJ, Kidd JR, Kidd KK (2010). The distribution and most recent common ancestor of the 17q21 inversion in humans. *Am J Hum Genet* 86, 161-171. (IF: 9.02)
62. **Lewis J<sup>g</sup>**, Abas Z, Dadousis C, **Lykidis D<sup>p</sup>**, **Paschou P**, Drineas P. Tracing The Origin Of Cattle Breeds With PCA-based Ancestry Informative SNPs. 9th World Congress on Genetics Applied to Live Stock Production, August 2010
63. **Paschou P\***, Drineas P, **Lewis J<sup>g</sup>**, Nievergelt CM, Nickerson DA, Smith JD, Ridker PM, Chasman DI, Krauss RM, Ziv E (2008). Tracing sub-structure in the European American population with PCA-informative markers. *PLoS Genetics* 4:e1000114. (IF: 6.10)
64. **Paschou P\***, Ziv E, Burchard EG, Choudry S, Rodriguez-Cintron W, Mahoney MW, Drineas P (2007). PCA-correlated SNPs for structure identification in worldwide human populations. *PLoS Genetics* 3, e160. . (IF: 6.10)
65. **Paschou P\***, Mahoney M, Pakstis A, Kidd JR, Kidd KK, Drineas P (2007). Inter- and intrapopulation genotype reconstruction from tagging SNPs. *Genome Research* 17, 96-107. (IF: 11.35)
66. **Javed A<sup>g</sup>**, **Paschou P**. Extracting tagging SNPs from genome-wide datasets. Data Mining for Biomedical Informatics, workshop held in conjunction with 7th SIAM Conference on Data Mining, April 2007.
67. **Paschou P\***, Feng Y, Pakstis AJ, Speed WC, DeMille MM, Kidd JR, Jaghori B, Kurlan R, Pauls DL, Sandor P, Barr CL, Kidd KK (2004). Indications of linkage and association of Gilles de la Tourette syndrome in two independent family samples: 17q25 is a putative susceptibility region. *Am J Hum Genet* 75,545-560. (IF: 9.02)
68. Palmatier MA, Pakstis AJ, Speed W, **Paschou P**, Goldman D, Odunsi A, Okonofua F, Kajuna S, Karoma N, Kungulilo S, Grigorenko E, Zhukova OV, Bonne-Tamir B, Lu RB, Parnas J, Kidd JR, DeMille MM, Kidd KK (2004). COMT haplotypes suggest P2 promoter region relevance for schizophrenia. *Mol Psychiatry* 9, 859-870. (IF: 13.20)

70. **Paschou P**, Malamitsi A, Bozas E, Havarani B, Dokopoulou M, Bartsocas CS (2004). HLA alleles and Type 1 Diabetes in low disease incidence populations of Southern Europe; a comparison of Greeks and Albanians. *Journal of Pediatric Endocrinology and Metabolism* 17, 173-182. (IF: 1.23)
71. Hermann R, Bartsocas CS, Soltesz G, Vazeou A, **Paschou P**, Bozas E, Malamitsi-Puchner A, Simell O, Knip M, Ilonen J (2004). Genetic screening for individuals at high risk for type 1 diabetes in the general population using HLA Class II alleles as disease markers. A comparison between three European populations with variable rates of disease incidence. *Diabetes Metab Res Rev* 20,322-329. (IF: 3.26)
72. Ilonen J, Sjoroos M, Knip M, Veijola R, Simell O, Akerblom HK, **Paschou P**, Bozas E, Havarani B, Malamitsi-Puchner A, Thymelli J, Vazeou A, Bartsocas CS (2002). Estimation of genetic risk for type 1 diabetes. *Am J Med Genet* 115, 30-36. (IF: 4.44)

## 2. In Press

73. **Yang Z<sup>§</sup>, Wu H<sup>§</sup>, ..., PGC neurodevelopmental disorders working group, Paschou P\***. Cross-disorder GWAS meta-analysis for Attention Deficit/Hyperactivity Disorder, Autism Spectrum Disorder, Obsessive Compulsive Disorder, and Tourette Syndrome. *Biological Psychiatry* in press.

## 3. Submitted

74. **Bose A<sup>§</sup>, Burch MC, Chowdhury A, Paschou P, Drineas D**. CluStrat: a structure informed clustering strategy for population stratification (available in BioRxiv)

## 4. Book Chapters

1. **Tsetsos F<sup>p</sup>, Drineas P, Paschou P\*** (2019). Genetics and Population Analysis. In Elsevier Encyclopedia Of Bioinformatics and Computational Biology, Oxford: Elsevier.
2. **Paschou P**, Fernandez TV, Sharp F, Heiman GA, Hoekstra PJ (2013). Genetic susceptibility and neurotransmitters in Tourette syndrome. *Int Rev Neurobiol* 112:155-177.
3. **Paschou P\***, Hoekstra P, Heiman GA (2015). Genetics of Tourette Syndrome. In LeDoux M. Movement Disorders: Genetics and Models, Academic Press Elsevier, p. 713-731, Academic Press Elsevier.
4. Georgitsi M, **Paschou P\*** (2016). Chapter 5.3: The role of genetics in Type 2 Diabetes Mellitus, in: Diabetes Mellitus- Current Views (ed. Kazakos Kyriakos, 1<sup>st</sup> ed., Broken Hill Publishers LTD, Nicosia, Cyprus (in Greek).
5. Vazaiou A, **Paschou P**, Bartsocas CS (2001). Prediction of Type 1 Diabetes. In Melidonis A. Predicting Diabetes and its complications, p 21-62, Athens (in Greek).

## Textbooks - scientific editing (Greek editions)

1. Scientific editor of Greek edition - iGenetics. A Mendelian Approach. P.J. Russell. Academic Publishing 2009
2. Scientific editor of Greek edition - Pharmacogenomics: Social, Ethical, and Clinical Dimensions. M.A. Rothstein. Parisianos Scientific Publishing 2008

3. Scientific editor of Greek edition - Evolution. N.H. Barton, D.E.G. Briggs, J.A. Eisen, D.B. Goldstein, N.H. Patel. Utopia Publishing (in press)

## 5. Abstracts

1. **Topaloudi A<sup>g</sup>, Tsetsos F<sup>g</sup>, Zagoriti Z, Kleopa K, Lagoumintzis G, Zamba-Papanicolaou E, Christou Y, Poulas K, Tzartos S, Georgitsi M<sup>p</sup>, Paschou P.** Identifying the genetic basis of myasthenia gravis through analysis of genome-wide data. Poster presented at: Annual Meeting of the American Society of Human Genetics; 2019 Oct 15-19; Houston, TX
2. **Yang Z<sup>g</sup>, Bose A<sup>g</sup>, Drineas P, Paschou P.** Methods for genotype-based risk prediction for complex neuropsychiatric disorders. 68<sup>TH</sup> Annual Meeting of The American Society of Human Genetics, October 2018, San Diego, California
3. **Yang Z<sup>g</sup>, Tsetsos F<sup>g</sup>, Paschou P.** Identifying a shared regulatory background for neurodevelopmental disorders through meta-analysis of genomewide association studies. 67th Annual Meeting of The American Society of Human Genetics, October 2017, Orlando, Florida
4. **Bose A<sup>g</sup>, Kalantzis V, Kontopoulou E, Elkady M<sup>g</sup>, Paschou P, Drineas P.** TeraPCA: A fast and scalable method to study genetic variation in tera-scale genotypes. October 20, 2017. 67th Annual Meeting of the American Society of Human Genetics, Orlando, Florida.
5. **Bose A<sup>g</sup>, Platt DE, Parida L, Paschou P, Drineas P.** Genetic Variation reveals migrations into the Indian subcontinent and its influence on the Indian society. 66th Annual Meeting of the American Society of Human Genetics, Vancouver, Canada.
6. **Tsetsos F<sup>g</sup>, Koukousi D<sup>u</sup>, Mpampali M<sup>u</sup>, Padmanabhuni SS<sup>g</sup>, Alexander J<sup>g</sup>, Karagiannidis I<sup>g</sup>, Mantzaris D<sup>p</sup>, Georgitsi M<sup>p</sup>, Drineas P, and Paschou P.** “A common genetic basis between neurodevelopmental disorders of childhood”. Annual Meeting of the American Society of Human Genetics. Vancouver, Canada, Oct. 18–22, 2016.
7. **Tsetsos F<sup>g</sup>, Padmanabhuni SS<sup>g</sup>, Alexander J<sup>g</sup>, Karagiannidis I<sup>g</sup>, Tsifintaris M<sup>u</sup>, Topaloudi A<sup>g</sup>, Mantzaris D<sup>p</sup>, Georgitsi M<sup>p</sup>, Drineas P, and Paschou P.** “Meta-analysis of Tourette Syndrome and Attention Deficit Hyperactivity Disorder provides support for a shared genetic basis”. 9th European Conference on Tourette Syndrome and Tic Disorders. Warsaw, Poland, June 8–11, 2016.
8. **Alexander J<sup>g</sup>, Potamianou H<sup>u</sup>, Xing J, Deng L, Sandor P, Barr C, Tischfield J, Georgitsi M<sup>p</sup>, Drineas P, Heiman GA, and Paschou P.** “Variant Ranker: a Web-Tool to Rank Genomic Data According to Functional Significance; Application on a Tourette Syndrome Next Generation Sequencing Dataset”. 9th European Conference on Tourette Syndrome and Tic Disorders. Warsaw, Poland, June 8–11, 2016.
9. **Houssari R<sup>u</sup>, Padmanabhuni SS<sup>g</sup>, Bertelsen B, Esserlind AL, Olesen J, Werge T, Hansen TF, Tsetsos F<sup>g</sup>, Paschou P, Tumer Z.** “Investigation of SNP rs2060546 immediately upstream to NTN4 in a Danish Gilles de la Tourette syndrome cohort”. 9th European Conference on Tourette Syndrome and Tic Disorders. Warsaw, Poland, June 8–11, 2016.
10. **Tsetsos F<sup>g</sup>, Alexander J<sup>g</sup>, Yu D, Sul JH, Coppola G, Zelaya I, Drineas P, GGRI, TSAICG, Mathews C, Scharf JM, and Paschou, P.** “Pathway analysis of genome-wide SNP data for Gilles de la Tourette Syndrome shows enrichment in genes expressed in nervous system tissues”. World Congress of Psychiatric Genetics. Toronto, Canada, Oct. 16–20, 2015.
11. **Tsetsos F<sup>g</sup>, Alexander J<sup>g</sup>, Yu D, Sul JH, Coppola G, Zelaya I, Drineas P, GGRI, TSAICG, Mathews C, Scharf JM, and Paschou, P.** “Pathway analysis of genome-wide SNP data for Gilles de la Tourette Syndrome shows enrichment in genes expressed in nervous system tissues”.

- Annual Meeting of the American Society of Human Genetics. Baltimore, MD, USA, Oct. 6–10, 2015.
12. Scharf JM, TSAICG, GGRI, and TIC Genetic. “An international, collaborative genome-wide association study of Tourette Syndrome in 14,000 individuals identifies a non-coding RNA expressed early in human brain development as a TS susceptibility gene”. Annual Meeting of the American Society of Human Genetics. Baltimore, MD, USA, Oct. 6–10, 2015.
  13. Plantinga AM, **Tsetsos F<sup>g</sup>**, **Paschou, P**, Drineas P, Browning BL, Stamatoyannopoulos G. “Identity by descent analysis reveals fine-scale population structure in Crete”. Annual Meeting of the American Society of Human Genetics. Baltimore, MD, USA, Oct. 6–10, 2015.
  14. Plantinga AM, **Tsetsos F<sup>g</sup>**, **Paschou, P**, Drineas, P, Browning, BL, Stamatoyannopoulos G. “Identity by descent analysis reveals fine-scale population structure in Crete”. Joint Statistical Meeting. Seattle, WA, USA, Aug. 8–13, 2015.
  15. **Tsetsos F<sup>g</sup>**, **Alexander J<sup>g</sup>**, **Yu D**, Sul, JH, Coppola G, Zelaya I, Drineas P, GGRI, TSAICG, Mathews C, Scharf JM, and **Paschou, P**. “Pathway Analysis on Genome-wide data for Tourette Syndrome Shows Enrichment in Genes expressed in Nervous System Tissues”. 1st World Congress on Tourette Syndrome and Tic Disorders. London, UK, June 24–26, 2015.
  16. Kovacs GG , **Alexander J<sup>g</sup>**, Kalev O, Mehrabian S, Drineas P, Ströbel T, **Paschou P**. Early onset familial alzheimer-type dementia associated with tauopathy and TDP-43 proteinopathy. 12th International Congress on Alzheimer’s and Parkinson’s Diseases, Nice, March 18-22, 2015.
  17. **Tsetsos F<sup>g</sup>**, Yu D, Sul J H, TSAICG, GGRI Consortium, Coppola G, **Paschou P**, Mathews C, Scharf J. A Second Genome Wide Association Study for Tourette Syndrome. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  18. **Karagiannidis I<sup>g</sup>**, Yu D, GGRI Consortium, **Paschou P**, Mathews C, Scharf J. The Gilles de la Tourette Syndrome GWAS Replication Initiative reveals significant signal of genetic association near the Netrin 4 gene. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  19. **Alexander J<sup>g</sup>**, **Karagiannidis I<sup>g</sup>**, **Potamianou H<sup>u</sup>**, **Georgitsi M<sup>p</sup>**, Xing J<sup>3</sup>, Sun N, Nasello C, Sandor P, Barr C, Tischfield J, **Paschou P**, Heiman G. Targeted re-sequencing approach of TS candidate genes implicates potentially functional variants in TS etiology. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  20. **Padmanabhuni SS<sup>g</sup>**, Ander BP, Sharp F, Drineas P, **Paschou P**. Gene expression studies in TS. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  21. Arranz I, Bertelsen B, Jensen L J, **Paschou P**, Tümer Z. CNV analysis in a large cohort of Tourette syndrome patients from Denmark. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  22. Bertelsen B, Melchior L, Jensen L R, Groth C, Glenthøj B Y, Rizzo R, Mol Debes N , Skov L, Brøndum-Nielsen K, **Paschou P**, Silaharoglu A, Tümer Z. Intragenic deletions affecting two alternative IMMP2L transcripts in patients with Tourette syndrome. Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, April 25-26, 2014.
  23. **Karagiannidis I<sup>g</sup>**, **Potamianou H<sup>u</sup>**, Heiman G, Deng L, Xing J, Sun N, Nasello C, Sandor P, Barr C, **Paschou P**. Investigating the role of the Histidine Decarboxylase Gene in Tourette Syndrome etiology. . Annual Meeting of the American Society of Human Genetics, Washington, October 22-26, 2013.

24. **Karagiannidis I<sup>g</sup>, Tsetsos F<sup>g</sup>, Athousaki A<sup>u</sup>, Papagiannakopoulou E<sup>u</sup>, Paschou P.** The genetic structure of Tourette syndrome associated genomic regions in worldwide populations. Annual Meeting of the European Society for the Study of Tourette Syndrome, Athens, April 26-27, 2013.
25. **Tsetsos F<sup>g</sup>, Trivyzakis G<sup>u</sup>, Karaiskos S<sup>u</sup>, Ioannou M,** Gkantouna V, Papachatzopoulou A, Patrinos G, Tzimas I, Tsakalidis A, Drineas P, **Paschou P.** Investigating the Genetic Architecture of Diabetes Mellitus Type 2 on a worldwide level: Implications for future research. 64<sup>th</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, 6-8 December 2013.
26. **Karaiskos S<sup>u</sup>, Tsetsos F<sup>g</sup>, Karagiannidis I<sup>g</sup>, Alexander J<sup>g</sup>, Georgitsi M<sup>p</sup>, Paschou P.** Examining genetic ancestry and demographic history among HapMap phase III populations. 64<sup>th</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, 6-8 December 2013.
27. **Potamianou H<sup>u</sup>, Karagiannidis I<sup>g</sup>, Georgitsi M<sup>p</sup>, Alexander J<sup>u</sup>, Karaiskos S<sup>u</sup>,** Heiman G, Deng L, Xing J, Sun N, Nasello C, Sandor P, Barr C, Tischfield J, **Paschou P.** Investigating the role of the Histidine Decarboxylase Gene in Tourette Syndrome etiology. 64<sup>th</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, 6-8 December 2013.
28. **Tsetsos F<sup>g</sup>, Tsekmekidou X<sup>g</sup>,** Kotsa K, Papanas N, Theodoridis M, Papazoglou D, Maltezos E, Vargemezis V, Yovos J, **Paschou P.** The CDKAL1 gene in relation to type 2 diabetes in Greece and the rest of the world. 1<sup>st</sup> Panhellenic Conference of Hellenic Association of Medical Geneticists, 30-31 May, 1 June 2013 (***Best Poster Award***).
29. **Karagiannidis I<sup>g</sup>, Anastasiou Z<sup>u</sup>, Stathias V<sup>u</sup>, Ligda P<sup>u</sup>,** Sandor P, Dehning S, Zill P, Hebebrand J, Noethen M, Lehmkuhl G, Tarnok Z, Barta C, Madruga-Garrido M, Mir P, Szymanska U, Wolanczyk T, Rizzo R, Mueller N, Barr C, **Paschou P.** The Histidine Decarboxylase Gene is associated with Gilles de la Tourette Syndrome in a large sample of trios. XXth World Congress on Psychiatric Genetics, Hamburg, October 14-18, 2012 (***selected as one of the top three poster presentations***).
30. **Trivizakis G<sup>u</sup>, Karagiannidis I<sup>g</sup>,** Papanas N, Theodoridis M, Papazoglou D, Maltezos E, Vargemezis V, **Paschou P.** Worldwide variation across TCF7L2; Implications for Type 2 Diabetes susceptibility around the world. 63<sup>rd</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Heraklion, November 9-11, 2012.
31. **Athousaki A<sup>u</sup>, Liva E<sup>g</sup>, Palikyras S<sup>u</sup>, Potamianou H<sup>u</sup>, Ligda P<sup>u</sup>, Karagiannidis I<sup>g</sup>,** Panagiotou I<sup>u</sup>, Mystakidou K, **Paschou P.** Investigation of the Growth/Differentiation Factor 5 gene in association with osteoarthritis of the spine in the Greek population. 63<sup>rd</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Heraklion, November 9-11, 2012.
32. **Anastasiou Z<sup>u</sup>, Stathias V<sup>u</sup>, Karagiannidis I<sup>p</sup>, Ligda P<sup>u</sup>,** Mir P, TSGeneSEE Consortium, **Paschou P.** Investigation of the HDC gene in association with Gilles de la Tourette Syndrome in populations from Southern and Eastern Europe. 34<sup>th</sup> Conference of the Hellenic Society for Biological Sciences, Trikala, May 17-19, 2012.
33. **Sotiris G<sup>u</sup>, Aslanidou P<sup>u</sup>, Grigoriou E<sup>u</sup>, Papatotiriou S<sup>u</sup>, Stathias V<sup>u</sup>, Karagiannidis I<sup>g</sup>,** **Paschou P.** The genetic structure of schizophrenia associated genes in 11 HapMap populations. 34<sup>th</sup> Conference of the Hellenic Society for Biological Sciences, Trikala, May 17-19, 2012.



34. **Paschou P, Karagiannidis I<sup>g</sup>, Aslanidou P<sup>u</sup>, Grigoriou E<sup>u</sup>, Papisotiriou V<sup>u</sup>, Stathias V<sup>u</sup>** and the Tourette Syndrome Genetics Southern and Eastern Europe Initiative. Investigating the genetic basis of Tourette Syndrome in European populations. A multinational initiative. XIXth World Congress on Psychiatric Genetics, Washington, September 10-14, 2011.
35. Horvath A, Alexandre RB, Saloustros E, Wassif C Manning A, **Paschou P**, Briasoulis P, Sigh S, Epstein J, Levi I, Neimela J, Oliveira JB, Carney JA, Porter FD, Stratakis CA. Tumor exome sequencing in patients with isolated bilateral Micronodular Adrenocortical Disease identifies pathogenic somatic and germline mutations. 12th International Congress of Human Genetics, Montreal, October 11-15, 2011.
36. Bowen BMP, Kosmaczewski S, Powers N, **Paschou P**, Speed WC, Gruen JR, Kidd KK. Haplotype Diversity and Linkage Disequilibrium of the Dyslexia Candidate Gene *DCDC2* in 90 Populations: Patterns for Alphabetic and Logographic Languages. 12th International Congress of Human Genetics, Montreal, October 11-15, 2011.
37. **Sotiris G<sup>u</sup>, Karagiannidis I<sup>g</sup>, Stylianopoulou E<sup>g</sup>**, Skavdis G, Grigoriou M, **Paschou P**. The genetic structure of LIM-homeobox genes LHX6 and LHX8 in 11 HapMap populations. 62<sup>nd</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, December 9-11, 2011.
38. **Aslanidou P<sup>u</sup>, Grigoriou E<sup>u</sup>, Stathias V<sup>u</sup>, Papisotiriou S<sup>u</sup>, Karagiannidis I<sup>g</sup>, Paschou P**. Investigation of linkage disequilibrium patterns in schizophrenia susceptibility genes in eleven human populations from around the world. 62<sup>nd</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, December 9-11, 2011.
39. **Karagiannidis I<sup>g</sup>, Tsirigoti A<sup>u</sup>, Stamboliou A<sup>u</sup>, Papadopoulou V<sup>u</sup>**, Manolopoulos VG, Martinis G, Kidd JR, Kidd KK, **Paschou P**. The genetic structure of the Greek population in comparison with the European reference populations from the HapMap project. 61<sup>st</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Alexandroupolis, October 15-17, 2010 (*Platform Presentation Award*).
40. **Paschou P, Karagiannidis I<sup>u</sup>, Tsirigoti A<sup>u</sup>, Stampoliou A<sup>u</sup>, Papadopoulou V<sup>u</sup>**, Manolopoulos VG, Kidd JR, Kidd KK, Drineas P. Evaluation of the HapMap dataset as reference for the Greek population. 60<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Washington, November 2-6, 2010.
41. **Paschou P** and the Tourette Syndrome Genetics Southern and Eastern Europe Initiative. Pan-European Initiatives for the study of the genetics of Tourette Syndrome. XVIIIth World Congress on Psychiatric Genetics, Athens, October 3-7, 2010.
42. Tsirigoti A, Karagiannidis I, Papadopoulou V, Stampoliou A, Papanas N, Yavropoulou M, Yovos I, Vargemezis V, **Paschou P**. Studying the genetic basis of type 2 diabetes mellitus in the Greek population. 60<sup>th</sup> Pan-Hellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology, Athens, November 20-22, 2009.
43. **Paschou P, Lewis J<sup>g</sup>**, Drineas P. Accurate inference of individual ancestry geographic coordinates within Europe using small panels of genetic markers, 59<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Honolulu, October 20-24, 2009.
44. **Paschou P, Lewis J<sup>g</sup>, Javed A<sup>g</sup>**, Drineas P. Using principal components analysis to identify candidate genes for natural selection, 58<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Philadelphia, November 11-15, 2008.

45. **Paschou P**, Ziv E, Burchard EG, Choudry S, Rodriguez-Cintron W, Mahoney MW, Drineas P. PCA-correlated SNPs for structure identification in worldwide human populations. 57<sup>th</sup> Annual Meeting of the American Society of Human Genetics, San Diego, October 23-27, 2007.
46. **Paschou P**, Mahoney M, Pakstis A, Kidd JR, Kidd KK, Drineas P. Inter- and intrapopulation genotype reconstruction from tagging SNPs. 56<sup>th</sup> Annual Meeting of the American Society of Human Genetics, New Orleans, October 9-13, 2006.
47. Rivière JB, Díaz-Anzaldúa a, Joobert R, Dion Y, Lespérance P, Richer F, Chouinard S, **Paschou P**, Rouleau GA. Replication of association between Tourette Syndrome and 17q25 in the French Canadian population. XIIIth World Congress of Psychiatric Genetics, Boston October 14-18, 2005.
48. **Paschou P**, Feng Y, Pakstis AJ, Speed WC, DeMille MM, Kidd JR, Jaghori B, Kurlan R, Pauls DL, Sandor P, Barr CL, Kidd KK. 17q25 is a candidate susceptibility region for TS: a study of two independent family samples. 54<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Toronto, October 26-30, 2004.
49. **Paschou P**, Feng Y, Pakstis AJ, Speed WC, DeMille MM, Kidd JR, Jaghori B, Kurlan R, Pauls DL, Sandor P, Barr CL, Kidd KK. 17q25 implicated in Tourette syndrome susceptibility: a study of two independent family samples. TSA Fourth International Scientific Symposium, Cleveland, June 25-27, 2004.
50. Mukherjee N, **Paschou P**, de Mille M et al. Out of Africa hypothesis supported by variation at CD4 and DM1. *Am J Hum Genet* 73 (Supplement), 2003: 188.
51. **Paschou P**, Pakstis AJ, De Mille M et al. Fine mapping of 17q25 as a candidate susceptibility region for Tourette Syndrome. *Am J Hum Genet* 73 (Supplement), 2003: 535.
52. **Paschou P**, Pakstis AJ, De Mille M et al. 17q25 is supported as a candidate susceptibility locus for Gilles de la Tourette Syndrome. *Am J Med Genet (Neuropsychiatric Genetics)* 122B, 2003: 156.
53. Ilonen J, Sjöroos M, Nejejtsev S, Knip M, Simell O, **Paschou P** et al. Genetic screening for type 1 diabetes risk in Finnish and Greek populations – stepwise typing for three class II HLA loci. *Diabetes Metabolism Research and Reviews* 17 (Suppl 1), 2001: S25.
54. Bartsocas CS, Malamitsi-Puchner A, Sjöroos M, **Paschou P** et al. Greek and Albanian cord blood comparison of IDDM related DQB1 alleles. *Ped Res* 49, 2001: 309.
55. **Paschou P**, Malamitsi-Puchner A, Vazeou A et al. Genetic markers of Type 1 Diabetes and frequency differences in three European populations. 7<sup>th</sup> Panhellenic Diabetology Conference, Heraklion, 29 March- 1 April, 2001.
56. Bozas E, Sjöroos M, **Paschou P** et al. The genetic basis of IDDM incidence differences in Greece and Finland. 22<sup>nd</sup> Conference of the Hellenic Society for Biological Sciences, Skiathos, 25-28 May, 2000.

### **C. Invited Lectures**

#### **1. National and International Meetings:**

1. *Population Genetic Structure in the Mediterranean*. 4th National Congress of Gene Therapy & Regenerative Medicine, Athens, Greece, May 2019.
2. *The genetic etiology of Tourette Syndrome*. 2018 Annual Meeting of the European Society for the Study of Tourette Syndrome, Copenhagen, Denmark, June 2018

3. *Dissecting the etiology of Tourette Syndrome through large-scale genome, epigenome and transcriptome studies and cross-disorder analysis*. Talk in invited symposium. XXVth World Congress of Psychiatric Genetics, Orlando, USA, October 2017
4. *The genetic basis of Tourette Syndrome: Updates from large scale collaborative efforts*. Invited talk – 9<sup>th</sup> European Conference on Tourette Syndrome and Tic Disorders. Warsaw, Poland, June 2016.
5. *Studying the genetic history of Greek populations: Focus on Crete*. Invited talk - International Meeting «Ancient DNA analysis: A new view in the past», Heraklio, Greece, May, 2016.
6. *Studying the genetic basis of multifactorial disorders*. Invited talk – 66<sup>th</sup> Congress of the Hellenic Society for Biochemistry and Molecular Biology, Athens, 2015.
7. *The genetic etiology of Tourette Syndrome; Updates from large scale collaborative projects*. Plenary talk – 1<sup>st</sup> World Congress on Tourette Syndrome, London, 2015.
8. *Analyzing the genetic structure of Greeks*. 9<sup>th</sup> Panhellenic Conference of Bioscience, Athens, Greece, 2014.
9. *Opportunities and challenges for genomics research in Greece*. MIT Enterprise Forum Greece: Entrepreneurship and Innovation in Genomics and Biotechnology, Athens, Greece, 2013
10. *The genetic basis of Gilles de la Tourette Syndrome*. 2012 Annual Meeting of the European Society for the Study of TS, Catania, Italy, 2012.
11. *Investigating the genetic basis of Tourette Syndrome in European Populations. A multinational initiative*. World Congress for Psychiatric Genetics, Washington DC, 2011.
12. *The genetic structure of the Greek population in comparison with the European reference populations from the HapMap project*. Hellenic Society for Biochemistry and Molecular Biology, Alexandroupoli, Greece, 2010.
13. *The genetic basis of Gilles de la Tourette Syndrome*. XLIII Congress of Polish Psychiatrists, Poznan, Poland, 2010.
14. *Pan-European (and global) initiatives for the study of Tourette Syndrome*. 3rd meeting of the European Society for the Study of Tourette Syndrome, Dresden, Germany, 2009.
15. *An update on the genetics of Tourette Syndrome*. 2nd meeting of the European Society for the Study of Tourette Syndrome, Budapest, Hungary, 2009.
16. *Genetics of Gilles de la Tourette Syndrome*. 6th Panhellenic Conference of Child Psychiatry, Athens, Greece, 2009.
17. Paschou P, Mahoney M, Pakstis A, Kidd JR, Kidd KK, Drineas P. *Inter- and intrapopulation genotype reconstruction from tagging SNPs*. 56th Annual meeting of the American Society of Human Genetics, New Orleans, USA, 2006.
18. *Selection of genetic markers for complex trait association studies in worldwide populations*. 1st International Congress of Clinical and Molecular Genetics, Alexandroupoli, Greece, 2006.

## **2. Regional Meetings and Workshops**

1. *The genetics of Mediterranean populations*. Invited talk at G. Stamatoyannopoulos Symposium, Seattle, September 17, 2019
2. *Data Science in Population Genetics*. Workshop on Algorithmic, Mathematical, and Statistical Foundations of Data Science and Applications, Purdue University, April 12-13, 2019
3. *The genetics of Tourette Syndrome*. Invited speaker at Greater Indiana Society for Neuroscience meeting, March 22, 2019

4. *Genetics of Type 2 Diabetes. Current updates*, 26<sup>th</sup> Annual Conference of the Diabetology Society of Northern Greece, Thessaloniki, Greece, 2012
5. *Genetic mapping of multifactorial disease*. Genetics Symposium, National University of Athens, Athens, Greece, 2000.

### 3. Universities and Other Institutions

1. *Tourette Genetics 2019*. Invited talk at Washington University St Louis, April 29, 2019
2. *Large scale collaborative studies for Tourette Syndrome*. Invited talk at Tourette Association of America Annual Meeting, April 8, 2019
3. *Studying human genomic variation: from population history to health and disease*. Invited speaker - Purdue Ecolunch Seminar Series, West Lafayette, USA, February 2017.
4. *The genetic basis of Gilles de la Tourette Syndrome: Current updates*. Invited talk – University of Catania, School of Medicine, Catania, April, 2016.
5. *Genomic approach to human brain ageing*. Medical University of Vienna, Austria, 2014.
6. *Genetics of Gilles de la Tourette*. Sismanoglio Hospital of Attica, Athens, Greece, 2009.
7. *Population structure via Principal Components Analysis*. University of California Los Angeles, Los Angeles, USA, 2007.
8. *PCA-correlated SNPs for structure identification in human worldwide populations*. Biomedical Research Foundation, Academy of Athens, Athens, Greece, 2007.
9. *Studying Human Genetic Variation*. Dept. of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupoli, Greece, 2005.
10. *Urea Cycle Disorders*. Clinical Genetics Rounds, Department of Genetics, Yale University, New Haven, USA, 2004.

#### D. Other Presented Papers

**Bose A<sup>‡</sup>**, Burch MC, Chowdhury A, **Paschou P**, Drineas P, CluStrat: a structure informed clustering strategy for population stratification, International Conference on Research in Computational Molecular Biology (**RECOMB**), Lecture Notes in Computer Science (volume 12074), 2020.

#### E. Other Professional Activities

See Leadership Activities – page 5.

#### F. Interdisciplinary Activities

Dr Paschou’s research lies at the intersection of genomics, statistics and data analysis. She has worked with Computer Scientists to transfer algorithms from theoretical computer science to the analysis of genomic data in order to uncover population genetic structure (eg Paschou et al 2007, Paschou et al 2008, Bose et al 2020). Dr Paschou has also established and led several large-scale international multi-disciplinary consortia aiming to understand the cause of neuropsychiatric disorders of childhood. She established the TSGeneSEE Initiative (Tourette Syndrome Genetics Southern and Eastern Europe Initiative) with participation of researchers and clinicians from seven countries aiming to understand the genetic cause of TS. She also established and coordinated the “European Network for GTS”, a COST Action (European Cooperation in Science and Technology), an interdisciplinary network of more than 200 researchers from 23 different countries aiming to elucidate the cause of Tourette Syndrome and identify novel therapies. Most recently, as part of one

of the central NIH Data Science initiatives, the B2DK (Big Data to Knowledge) ENIGMA consortium, Dr Paschou established an interdisciplinary working group aiming to bring together worldwide datasets in brain imaging and genomics in order to understand brain structure and function in Tourette Syndrome. Already, 15 different research sites from eight countries have signed the Memorandum of Understanding to join this effort and the initial analysis is underway. Finally, Dr Paschou seeks opportunities to integrate interdisciplinarity into student education. For instance, she has coordinated TS-EUROTRAIN, a Marie Curie Initial Training Network aiming to train 12 PhD students, the next generation of experts in genetics and neuroimaging for TS, with the participation of 10 sites from academia and industry. At Purdue, she also developed a multidisciplinary seminar course on Neurological and Neuropsychiatric Disorders (BIOL 69500), supported by the Purdue Institute for Integrative Neuroscience and aiming to expose graduate students to diverse aspects of neurological disease under the frame of a broad range of expertise from Purdue faculty and preparing the student to immerse into primary literature from multiple fields.

### **Purdue Interdisciplinary Program Memberships:**

- Purdue University Interdisciplinary Life Sciences Graduate Program (PULSe)
- Computational Life Sciences (CIGP) Graduate Program

### **G. Patents - None**

### **H. Funding**

#### **1. Discussion of Support**

Dr Paschou has been very successful in pursuing international collaborations and attracting funding to support large-scale multi-disciplinary research. For instance, she has brought together scientists across different disciplines with an aim to understand the cause of neuropsychiatric disorders of childhood and has led several large-scale international consortia in this direction. She has been supported by the NSF, the NIH, the European Union, and private research foundations. Since she joined Purdue in August 2016, Dr Paschou was very rapidly successful in getting funding from NSF as PI and Co-PI as well as a large-scale multi-site RO1 from NINDS as MPI. The NIH recently adopted the multi-PD/PI option which presents an important opportunity for investigators seeking support for projects or activities that require a team science approach. The overarching goal is to maximize the potential of team science efforts in order to be responsive to the challenges and opportunities of the 21st century. MPIs all play an equal role in the leadership of the project and collaborate as equals.

Dr Paschou's R01 grant from NINDS is of tremendous significance for the Tourette Syndrome field. The three MPIs manage to bring together all major consortia in Europe and the US, working on elucidating the genetic basis of this disorder. The project focuses on a mega-analysis of more than 12,000 patients. Dr Paschou will lead the SNP and pathway analysis as well as the correlation of the mega-GWAS findings to neuroimaging x genetics GWAS results from the ENIGMA consortium.

The unprecedented sample size of this project is expected to lead to important discoveries that will increase our understanding of the neurobiology of Tourette Syndrome and help identify novel targets for therapies.

Prior to joining Purdue, Dr Paschou already had a long track-record of gaining external funding to support collaborative research. She is recognized as a leader in TS genetics based on her research findings and great contributions in bringing together researchers from multiple disciplines and multiple sites in order to understand this disorder. In 2008, supported by the Tourette Association of America, she established the TSGeneSEE Initiative (Tourette Syndrome Genetics Southern and Eastern Europe Initiative) with participation of researchers and clinicians from seven countries aiming to understand the genetic cause of TS. This sparked the establishment of the “European Network for GTS”, an EU-funded COST Action (European Cooperation in Science and Technology) which Dr Paschou coordinated leading to the development of an interdisciplinary network of more than 200 researchers from 23 different countries aiming to elucidate the cause of Tourette Syndrome and identify novel therapies. The collaborative work and the success of this network of researchers further expanded to attract 10 million USD in additional support from the European Union, in order to support EMTICS (European Multicenter Tics in Children Study) where Dr Paschou runs the genomics Work Package and TS-EUROTRAIN, a Marie Curie Initial Training Network coordinated by Dr Paschou, and aiming to train 12 PhD students, the next generation of experts in genetics and neuroimaging for TS, with the participation of 10 sites from academia and industry (including the multinational pharmaceutical company BI Pharma).

Dr Paschou is currently working on the development of additional research proposals focusing on the understanding of Tourette Syndrome. One of her pending proposals aims to bring together neuroimaging and genetics datasets in order to understand brain structure and function in Tourette Syndrome. This proposal is already supported by 15 worldwide sites that have signed a memorandum of understanding for data sharing. She is also preparing a grant that will aim to study Tourette Syndrome in populations of non-European ancestry and a special focus on African Americans.

## 2. Funding

### Current Awards:

1. NINDS/ R01: [\*Large-scale collaborative genetic and epigenetic studies of Tourette Syndrome\*](#)  
Duration of Funding: 4/1/2019- 3/31/2024  
Total amount of award: **\$3,928,325**  
Role: **Principal Investigator (MPI)**  
**Purdue subcontract: \$440,000**  
**Taken from NIH website:** The multi-PD/PI option presents an important opportunity for investigators seeking support for projects or activities that require a team science approach. The overarching goal is to maximize the potential of team science efforts in order to be responsive to the challenges and opportunities of the 21st century. The goal is to encourage collaboration among equals

when that is the most appropriate way to address a scientific problem. Specific features of the Multiple PD/PI Option include the following:

- All PD/PIs share the responsibility and authority for leading and directing the project
- Being named contact PD/PI does not imply any particular role within the leadership team
- All PD/PIs will be listed on the Notice of Award (NoA)
- The role type, “co-PI” is not used by the NIH

2. NSF CISE/IIS/III Core - III: Small. *Randomized Matrix-Sketching Approaches for Estimating Missing Heritability in Massive Population Genetics Datasets*

Duration of Funding: 9/1/2020-8/31/2023

Total amount of award: **\$500,000**

Role: **Principal Investigator**

3. NSF CISE/IIS/III Core - III: Small / *Novel Statistical Data Analysis Approaches for Mining Human Genetics Datasets*

Duration of Funding: 9/1/2017-8/31/2021

Total amount of award: **\$500,000**

Role: **Co-Principal Investigator**

If Co-PI, for how much of the total funding are you directly responsible: **\$300,000**

**Pending proposals:**

4. NIMH/ R01: *International collaborative study on genetics and neuroimaging of Tourette Syndrome*

Total amount of award: **\$3,101,185**

Role: **Principal Investigator**

**Past Awards:**

1. European Committee FP7-HEALTH, Cooperation / *EMTICS: European Multicentre Tics in Children Study*

Duration of Funding: 2011-2018

Total amount of award: **€6,000,000**

Role: **Work Package Leader**

If Co-PI, for how much of the total funding are you directly responsible: **€746,941**

2. European Committee FP7-PEOPLE, Marie Curie Initial Training Network / *TS-EUROTRAIN: Interdisciplinary training network for Tourette Syndrome; structuring European Training capacities for neurodevelopmental disorders*

Duration of Funding: 2012-2016

Total amount of award: **€3,000,000**

Role: **Principal Investigator**

3. CAREER EXCELLENCE AWARD - ARISTEIA II – Co-funded by Greece and the European Union - *GENOMAP.GR: A genomic reference map of Greece.*

Duration of Funding: 2014-2015

Total amount of award: **€165,000**

Role: **Principal Investigator**

4. Greece-France Bilateral Cooperation Program – Co-funded by Greece and the European Union, NSRF / *TSGeneExpress: Investigating the role of the histaminergic pathway in the etiology of Gilles de la Tourette Syndrome.*

Duration of Funding: 2014-2015

Total amount of award: **€30,000**

Role: **Principal Investigator**

5. THALIS program, Co-funded by Greece and the European Union, NSRF / *The genetic architecture of Type 2 Diabetes Mellitus in the Greek Population*.  
Duration of Funding: 2012-2015  
Total amount of award: **€599,800**  
Role: **Principal Investigator**
6. COST office – European Cooperation in Science and Technology / *Network for the Study of Gilles de la Tourette Syndrome*  
Duration of Funding: 2010-2014  
Total amount of award: **€400,000**  
Role: **Principal Investigator**
7. Tourette Syndrome Association Research Grant Award / TSGeneSEE: *Genetics of Tourette Syndrome. The Southern and Eastern Europe initiative*  
Duration of Funding: 2009-2010  
Total amount of award: **\$74,970**  
Role: **Principal Investigator**
8. Tourette Syndrome Association Research Grant Award / TSGeneSEE: *Genetics of Tourette Syndrome. The Southern and Eastern Europe initiative*  
Duration of Funding: 2008-2009  
Total amount of award: **\$74,655**  
Role: **Principal Investigator**
9. European Commission, Seventh Framework Program / “*Strengthening regional bio research potential in Greece. Department of Molecular Biology and Genetics in Thrace*”  
Duration of Funding: 2008-2012  
Total amount of award: **€1,000,000**  
Role: **Work-Package Deputy Leader**
10. Tourette Syndrome Association Research Grant Award / *Fine mapping of 17q25 and other candidate susceptibility regions for Tourette Syndrome*  
Duration of Funding: 2004-2005  
Total amount of award: **\$73,308**  
Role: **Principal Investigator**
11. Tourette Syndrome Association Fellowship Award / *Fine mapping of 17q25 and other candidate susceptibility regions for Tourette Syndrome*  
Duration of Funding: 2003-2004  
Total amount of award: **\$40,000**  
Role: **Principal Investigator**

#### **I. Evidence of Involvement in Graduate Research Program**

1. Number of M.S. (1) and Ph.D. (5) Students Graduated
2. Current Graduate Students (5), Post doctorates (0)
3. Current Undergraduate Students (4)

| <u>Current Graduate Students</u> | <u>Degree/ Date Entered</u> | <u>Past Graduate Students</u> | <u>Date Graduated/ Degree</u> |
|----------------------------------|-----------------------------|-------------------------------|-------------------------------|
| <b>Major Professor:</b>          |                             |                               |                               |



| <u>Current Graduate Students</u> | <u>Degree/ Date Entered</u> | <u>Past Graduate Students</u> | <u>Date Graduated/ Degree</u> |
|----------------------------------|-----------------------------|-------------------------------|-------------------------------|
| Yin Jin                          | PhD/2019                    | Aritra Bose (Purdue student)  | 2019/PhD                      |
| Pritesh Jain                     | PhD/2018                    | Shanmukha Padmanabhuni        | 2017/PhD                      |
| Apostolia Topaloudi              | PhD/2017                    | John Alexander                | 2016/PhD                      |
| Zhiyu Yang                       | PhD/2016                    | Fotis Tsetsos                 | 2017/PhD                      |
| Hanrui Wu                        | MS/2016                     | Iordanis Karagiannidis        | 2017/PhD                      |
|                                  |                             | Emmanuella Vogiatzi           | 2012/PhD                      |
| <b>Member, Committee:</b>        |                             |                               |                               |
| Shawna Cook (Purdue)             | PhD                         | Xanthi Tsekmekidou (AUTH)     | 2020/PhD                      |
| Madeline Carpenter (Purdue)      | PhD                         | Electra Stylianopoulou (DUTH) | 2015/PhD                      |
| Mai Elkady (Purdue)              | PhD                         | Jamey Lewis (RPI)             | 2010/PhD                      |
| Aashish Jain (Purdue)            | PhD                         | Chrysi Tsirikoni              | 2009/PhD                      |
| Myson Burch                      | PhD                         | Asif Javed (RPI)              | 2008/PhD                      |
| Eleni Liva (NKUA)                | PhD                         | Loukas Damianos (DUTH)        | 2007/PhD                      |
| Matina Symeonidi (NKUA)          | PhD                         |                               |                               |

| <u>Current Postdocs</u> | <u>Past Postdocs</u>            |
|-------------------------|---------------------------------|
| Fotis Tsetsos           | Shanmukha Padmanabhuni (Purdue) |
|                         | Yogesh Kumar (Purdue)           |
|                         | Dimitris Mantzaris (DUTH)       |
|                         | Marianthi Georgitsi (DUTH)      |

| <u>Current Undergraduates</u> | <u>Degree/ Date Entered</u> | <u>Past Undergraduates</u> | <u>Date Graduated/ Degree</u> |
|-------------------------------|-----------------------------|----------------------------|-------------------------------|
| Melanie Martinez              |                             | Zaid Al Haddadin           | 2020                          |
| Sydney Pedigo                 |                             | Cameron Locker             | 2018                          |
| Lauren Holly Price            |                             | Marguerite Stonier         | 2018                          |
| Alyssa Flint                  |                             | Bailey Kamp                | 2018                          |
|                               |                             | Kate Phelps                | 2018                          |

### **Undergraduate Diploma Thesis Supervisor**

1. Athina Dritsoula, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2008)
2. Petros Fragoulis, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2008)
3. George Papachristodoulou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2008)

4. Aggeliki Tsirigoti, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2009)
5. Iordanis Karagiannidis, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2009)
6. Vasiliki Papadopoulou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2009)
7. Albiona Stamboliou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2009)
8. Georgia Pantidou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2010)
9. Grigorios Panteloglou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2010)
10. Athina Gianakkara, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2010)
11. Chronis Kemos, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2010)
12. Sotiris Kleidonas, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2011)
13. Zachos Anastasiou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2011)
14. George Sotiris, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2011)
15. Panagiota Ligda, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2011)
16. Eleni Grigoriou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2012)
17. Paraskevi Aslanidou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2012)
18. Spyros Papatiriou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2012)
19. Vasilis Stathias, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2012)
20. Papagiannakopoulou Eleana, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2013)
21. Asimena Athousaki, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2013)
22. Leyla Basgül – *Erasmus Program – Istanbul Technical University, Dept. of Molecular Biology and Genetics* (2013)
23. Spyros Palikyras, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2013)
24. Hera Potamianou, Dept. of Molecular Biology and Genetics Democritus University of Thrace; co-supervision (2013)
25. Trivyakis George, Dept. of Molecular Biology and Genetics Democritus University of Thrace; co-supervision (2013)
26. Stylianos Laparidis, Dept. of Molecular Biology and Genetics Democritus University of Thrace; co-supervision (2014)

27. Spyros Karaiskos, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2014)
28. Kalliopi Ioumpa, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2014)
29. Xanthippi Tsimourtakidou, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2014)
30. Melina Mitsiogianni, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2014)

***Student Awards:***

**Graduate Student Awards**

1. Shanmukha Padmanabhuni - 2018 Purdue Postdoctoral Mentoring Award - Honorable Mention
2. Zhiyu Yang, 2018 Purdue Institute for Integrative Neuroscience Travel Grant to present at the American Society for Human Genetics Annual Meeting
3. Apostolia Topaloudi, 2018 Gerondelis Foundation Scholarship
4. Fotis Tsetsos - 2018 WHBA Fellowship, Fellowship to attend the 7th World Hellenic Biomedical Association Summer School
5. Fotis Tsetsos - 2016 ASHG Travel Award, Travel Award for the 2016 HackSeq Genomics Hackathon in Vancouver, sponsored by ASHG.
6. Fotis Tsetsos - 2016 Fulbright Fellowship, Fellowship for Greek students pursuing graduate studies in the US, The Fulbright Foundation in Greece and U.S.A.
7. Fotis Tsetsos - 2016 WHBA Fellowship, Fellowship to attend the 5th World Hellenic Biomedical Association Summer School
8. Fotis Tsetsos - 2016 Best poster award, Tsetsos et al "Meta-analysis of Tourette Syndrome and Attention Deficit Hyperactivity Disorder provides support for a shared genetic basis", 9th European Conference on Tourette Syndrome and Tic Disorders, Warsaw, Poland.
9. Iordanis Karagiannidis - 2015 Early Career Investigator Award, Award and Travel Grant, International Society of Psychiatric Genetics, Toronto, Canada
10. John Alexander - 2015 Best poster award, Alexander et al "Network analysis on Tourette Syndrome associated genes using genomewide data", 1st World Congress on Tourette Syndrome & Tic Disorders, London, United Kingdom.
11. Karagiannidis I, Anastasiou Z, Stathias V, Ligda P, Sandor P, Dehning S, Zill P, Hebebrand J, Noethen M, Lehmkuhl G, Tarnok Z, Barta C, Madruga-Garrido M, Mir P, Szymanska U, Wolanczyk T, Rizzo R, Mueller N, Barr C, Paschou P. The Histidine Decarboxylase Gene is associated with Gilles de la Tourette Syndrome in a large sample of trios. XXth World Congress on Psychiatric Genetics, Hamburg, October 14-18, 2012 (selected as one of the top three poster presentations).
12. Fotis Tsetsos - 2014 Second best poster award, Tsetsos et al "Investigating the genetic architecture of Diabetes Mellitus type 2 on the Greek population: Implications for future

research”, 65th Conference of the Hellenic Society of Biochemistry and Molecular Biology, Thessaloniki, Greece.

13. Fotis Tsetsos - 2013 Best poster award, Tsetsos et al "The CDKAL1 gene in association with Diabetes Mellitus Type 2 in Greece and Worldwide", 1st Conference of the Hellenic Association of Medical Geneticists, Athens, Greece.
14. Fotis Tsetsos - 2013 Bodossaki Foundation Scholarship for Doctoral Studies, The Bodossaki Foundation scholarship aims to aid outstanding students, undergraduates and postgraduates, carry on their postgraduate studies in Greece or abroad in various academic fields.
15. John Alexander - 2013 Fellowship by the European Society of Human Genetics, in collaboration with the European School of Genetic Medicine for the Course in Next Generation Sequencing, European Society of Human Genetics
16. Iordanis Karagiannidis - 2012 Early Career Investigator Award, Award and Travel Grant, International Society of Psychiatric Genetics, Hamburg, Germany
17. Iordanis Karagiannidis - 2011 Short Term Scientific Mission Award: COST Action BM0905: “European Network for the Study of Gilles de la Tourette Syndrome”, Investigation of the implication of candidate CNVs in the etiology of Tourette Syndrome.
18. Iordanis Karagiannidis - 2010 ESHG Travel Fellowship: Course of the European Society of Human Genetics: Introduction to the Genetic Epidemiology of Complex Diseases, CHU du Kremlin Bicêtre, Faculté de Médecine Paris-Sud, Paris, France

#### **Undergraduate Student Awards**

1. Anagnostou Foteini - 2014 Third best poster award, Anagnostou et al "Investigating ancient DNA and its implications in the modern human genomic landscape", 65th Conference of the Hellenic Society of Biochemistry and Molecular Biology, Thessaloniki, Greece.
2. Papagiannakopoulou Eleana, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2013) - Short Term Scientific Mission Fellowship (COST Action) to visit the Dept. of Medical Chemistry, Molecular Biology and Pathobiochemistry, Semmelweis University, Hungary
3. Asimena Athousaki, Dept. of Molecular Biology and Genetics Democritus University of Thrace (2013) – Short Term Scientific Mission Fellowship (COST Action) to visit Applied Human Molecular Genetics Center, Kennedy Center, Denmark

#### **Placements of former graduate students/postdocs**

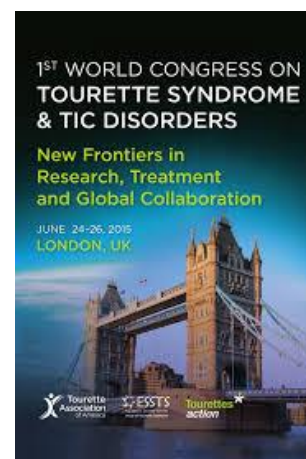
1. Aritra Bose – Postdoctoral Associate, Computational Genomics Group at the IBM TJ Watson Research Center.
2. Shanmukha Padmanabhuni – Postdoctoral Associate, University of Pennsylvania, USA
3. Yogesh Kumar – Postdoctoral Associate, Monash University, Australia
4. John Alexander – Postdoctoral Researcher, Sheffield University, UK

5. Fotis Tsetsos – Postdoctoral Researcher, Democritus University of Thrace, Greece
6. Emmanuela Vogiatzi –Hellenic Center for Marine Research, Greece
7. Marianthi Georgitsi – Assistant Professor, Aristotle University of Thessaloniki, Greece

#### IV. ENGAGEMENT

##### A. Discussion of Service

**Raising public awareness about Tourette Syndrome:** Dr Paschou has led multiple efforts aiming to raise awareness for Tourette Syndrome (TS), educate the general public and professionals and combat stigmatization of TS patients. Funded by the European Union, she coordinated a COST Action (European Cooperation in Science and Technology) which led to the development of an interdisciplinary network of more than 200 researchers from 23 different countries aiming to elucidate the cause of Tourette Syndrome and identify novel therapies. This program fostered the growth of the European Society for the Study of Tourette Syndrome (ESSTS) and, in recognition of her contributions and strong leadership, Dr Paschou was elected ESSTS Chair and served on the Board of ESSTS Officers from 2010-2017. From this position, she led from 2010-2017 the organization of the annual meeting of ESSTS, the largest annual scientific and networking event for Tourette Syndrome. She was also one of the initiators of the 1<sup>st</sup> World Congress for Tourette Syndrome which was held in London in 2015, bringing together researchers from the European Society for the Study of Tourette Syndrome with counterparts from the USA, Canada, and Asia. As Chair of the European Society for the Study of Tourette Syndrome she organized multiple training schools, seminars and educational workshops targeting neuroscientists, but also clinicians. She was involved in the organization of several events aiming to promote the standardization and harmonization of practices for the study and clinical management of TS across Europe. Such events led to the publication of best practice guidelines for the diagnosis and management of Tourette Syndrome. From the position of ESSTS Chair, she also launched the annual international meeting of Tourette Syndrome Support and Advocacy Groups bringing together patient groups from across Europe. As coordinator of the Marie Curie Initial Training Network TS-EUROTRAIN she was the editor of a quarterly newsletter providing updates on TS research to the general public. Importantly, she was among the inspirers of the European Tourette Day, celebrated to motivate TS awareness on June 7 of every year.



Dr Paschou was an inspirer and Co-Chair of the Steering Committee for the 1<sup>st</sup> World Congress on Tourette Syndrome and Tic Disorders

**Engagement activities at Purdue:** At Purdue University, Dr Paschou continues to participate in and indeed lead multiple service and engagement activities. She participates in multiple departmental committees and supports efforts to engage with the local community. For instance, she was a speaker at an event organized by the Department of Biological Sciences aiming to present to students from local high schools, opportunities for careers in the Biological Sciences. In 2018, she was named the inaugural Frederick L. Hovde Dean’s Fellow, working under the Dean’s and Associate Deans’ mentorship at the Purdue College of Science in order to carry forward initiatives of strategic importance. As part of the Data Science Initiative Dr Paschou coordinated the development of the online Data Science Connector Modules, a core of eight fundamental data science courses which will be delivered online with a scope to prepare graduate students across Purdue and beyond in order to be able to leverage Big Data and undertake Data Science related research as part of their graduate studies. She was appointed by the Provost’s Office as Co-Chair of the Integrative Data Science Initiative Curriculum committee, bringing together representatives from all Purdue Colleges in order to discuss how to expand the Data Science Education Ecosystem within Purdue. As part of this program, she coordinated the launch of an updated “Applications in Data Science” undergraduate certificate program, aiming to provide students across Purdue with foundational skills in Data Science and provide opportunities to apply this knowledge in different domains. These efforts are part of Purdue’s strategic plan to promote Data Science literacy and foster a training environment for Citizen Data Scientists within Purdue.

## **B. Department**

**2019-2020** Faculty Search Committee – College of Science cluster hire – Data Science/Applications in the Life Sciences  
**2017-2018** Search Committee – Vector Ecologist position  
**2016-today** Inclusion Diversity and Equity Committee  
**2017-today** Honors Committee  
**2016-today** Promotions Primary Committee  
**2016-today** Neurobiology & Physiology Research Area  
**2016-today** Structural and Computational Biology and Biophysics Research Area

## **C. College of Science**

**2019-2020** Faculty Search Committee – College-wide Data Science cluster hire  
**2017-2019** Elected Faculty Council Member  
**2018-2019** Undergraduate Curriculum Committee  
**2017-today** Graduate Curriculum and Academic Policy

## **D. University Committee Service**

**2018-2019** Showalter Research Awards Reviewer  
**2019-ongoing** IDSI Curriculum Committee Co-Chair

## **E. Professional**

### **1. Grant Review**

**2020** Reviewer – General Health and Disease Study Section, [NINDS](#)

- 2019** Reviewer - [NINDS Special Emphasis Panel \(SEP\)](#) - R13 conference grant applications
- 2014** Reviewer - [European Commission](#), call Horizon 2020-PHC-2014-two-stage-Stage 1
- 2014** Reviewer - [European Commission](#), call Horizon 2020-PHC-2014-two-stage-Stage 2
- 2015** Reviewer - [European Commission](#), call Horizon 2020-PHC-2015-two-stage-Stage 1

## **2. Editorial Boards**

- 2015** Editor – [Frontiers Research Topic: The Genetic Basis and Neurobiology of Tourette Syndrome \(33 articles included\)](#)
- 2012-today** Academic Editor - [PLOS ONE](#)
- 2011-today** Review Editor - [Frontiers in Evolutionary and Population Genetics](#)
- 2009-2015** Academic Editor - [Journal of Medical Genetics](#)

## **3. Reviewed Manuscripts for the following journals:**

1. American Journal of Human Genetics
2. Journal of Medical Genetics
3. Molecular Biology and Evolution
4. PLOS ONE
5. Annals of Human Genetics
6. American Journal of Medical Genetics
7. Journal of Human Genetics
8. American Journal of Psychiatry
9. Bioinformatics
10. Briefings in Bioinformatics
11. Molecular Ecology Resources
12. Archives of Oral Biology
13. British Journal of Clinical Pharmacology
14. European Child and Adolescent Psychiatry Journal
15. Frontiers in Neuroscience
16. Frontiers in Psychiatry

## **F. Diversity Activities**

From the position of Associate Dean for Graduate Education, Dr Paschou coordinates activities across the College of Science aiming to increase diversity within the graduate student population as well as promote inclusion and equity. She has coordinated the organization of the Graduate Diversity Visitation Program, with students from under-represented minorities visiting the College of Science. She also coordinates an effort across all College of Science Depts to increase the pool of applicants from under-represented groups across our graduate programs through targeted recruitment efforts. She launched a series of workshops on Intercultural Competence (World-Wise) for graduate students at the College of Science. She is participating in the first Purdue cohort in the USC Institutes of Equity Training Program, undertaking discussions on diversity, equity and inclusion with the entire College of Science leadership team. Dr Paschou has also served on the Diversity Committee of the Dept of Biological Sciences since 2016. From this position she participates in all efforts trying to coordinate diversity activities at the Department and coordinate with other such diversity activities at the College of Science. Dr Paschou also participates as a Faculty Mentor in the Horizons Program. Purdue Horizons is a federally funded TRIO Program that was authorized by the Higher Education

Amendments of 1968. The name TRIO stands for the original three programs that were initiated by the U.S. Department of Education and were the first national college access and retention programs to address the serious social and cultural barriers to education in America. Dr Paschou has mentored three female graduate students as a major professor and she is currently co-advising an African American student at Purdue, who recently won an NSF Graduate Research Fellowship. At her previous institution (Democritus University of Thrace) she was the first professor to recruit international students in the graduate program of the Department of Molecular Biology and Genetics. Dr Paschou has mentored 23 female undergraduate students (at Purdue and Democritus University of Thrace). From the position of Chair of the European Society for the Study of Tourette Syndrome, she has provided multiple travel awards in order to allow students from low income countries to attend the annual ESSTS meeting as well as educational workshops.

## **G. Other Engagement Activities**

### **Public Engagement**

- 2011-2017** Established (in 2011) and co-organized in 2011-2017 the Annual International meeting of Tourette Syndrome Support and Advocacy Groups with participation of TS patient groups from around the world
- 2011** Establishment of European Tourette Syndrome Awareness Day (June 7) (from the position of Chair of European Society for the Study of Tourette Syndrome)
- 2010-2014** As Chair of the EU-funded COST Action European Network for the Study of Tourette Syndrome, organized multiple workshops for the education of health professionals in Tourette Syndrome diagnosis, assessment and management in several European countries (Greece, France, Italy, Poland, UK, Spain)
- 2012-2016** Together with PhD students from the EU-funded TS-EUROTRAIN Training Program, published a semi-annual newsletter highlighting research developments in Tourette Syndrome research
- 2010-2017** Established and maintained website for the European Society for the Study of Tourette Syndrome

### **Scientific meetings – organizing committees**

- 2017** Proposer and Co-Chair of Symposium at XXVth World Congress for Psychiatric Genetics: Genetics of Gilles de la Tourette Syndrome: Accelerating discoveries through large-scale collaborative efforts. Orlando, USA, October 2017
- 2017** Member of the Program and Organizing Committee, Annual Meeting of the European Society for the Study of Tourette Syndrome, Seville, Spain, 2017
- 2016** Member of the Program and Organizing Committee, Annual Meeting of the European Society for the Study of Tourette Syndrome, Warsaw, Poland, 2016
- 2015** Co-Chair of Scientific Committee, 1<sup>ST</sup> World Congress on Tourette Syndrome and Tic Disorders, 2015
- 2014** Chair of the Program and Organizing Committee, Annual Meeting of the European Society for the Study of Tourette Syndrome, Paris, France, 2014



- 2013** Chair of the Program and Organizing Committee, Annual Meeting of the European Society for the Study of Tourette Syndrome, Athens, Greece, 2013
- 2012** Chair of the Program and Organizing Committee, Annual Meeting of the European Society for the Study of Tourette Syndrome, Catania, Italy, 2012
- 2011** Chair of Program and Organizing Committee, International workshop on “Planning the future of Tourette Syndrome Genetics Studies”, Amsterdam, December 14, 2001
- 2008** Program Committee Chair – International workshop “The Genetic basis of Gilles de la Tourette Syndrome”, Athens, November 18, 2008
- 2001** Organizing Committee Member – 11<sup>th</sup> International Clinical Genetics Seminar: ”The genetics of Diabetes Mellitus”, Heraklion, June 9-14 2001.

## **V. Mentoring**

### **A. Undergraduate Students**

Dr Paschou strongly supports early involvement in research at the undergraduate level and has already supervised 30 undergraduate students in their diploma thesis at the Department of Molecular Biology of Genetics, Democritus University of Thrace. At Purdue she has already trained nine undergraduate students and she participates as a mentor in the Horizons Program and the Beering program. She also offers opportunities for undergraduate students to present their work at national and international conferences (ten undergraduate students who trained with Dr Paschou have presented their work at national and international conferences as lead authors). Six of Dr Paschou’s published peer-reviewed journal papers include undergraduate researchers as co-authors.

### **B. Graduate Students**

Dr Paschou currently serves as Associate Dean for Graduate Education at Purdue University and from this position she oversees programs and facilitates discussions on mentoring graduate students across Purdue College of Science. From this position, she also works with Graduate Chairs across the College of Science departments in order to develop training and mentoring programs across the College. Dr Paschou has a long track record in supporting and mentoring graduate students prior to joining Purdue. She coordinated TS-EUROTRAIN, a Marie Curie Initial Training Network funded by the EU with 3,000,000 Euros and aiming to train 12 PhD students hosted by ten partners from academia and industry to pursue studies on the neurobiology and genetics of TS. In her own lab, she has mentored five graduate students who have already graduated and is currently supervising four graduate students at Purdue University. 23 of Dr Paschou’s research papers have a graduate student supervised by her as first author. Dr Paschou has taught classes at both the undergraduate and graduate levels and she has served on the Master’s Program Organizing Committee at her previous institution.

## **Training and Mentoring Programs**

- 2012-2016** *Training Grant Coordinator:* TS-EUROTRAIN: Interdisciplinary training network for Tourette Syndrome; structuring European Training capacities for neurodevelopmental disorders.” – Marie Curie Initial Training Network

- 2010-2014** From the position of Chair of the EU-funded COST Action European Network for the Study of TS, Dr Paschou coordinated numerous training workshops as well as short-term scientific missions (training visits/exchanges) of young investigators across different European countries
- 2017-2019** Purdue Horizons Program Faculty Mentor
- 2018-2020** Purdue Beering Scholars Faculty Mentor