# Curriculum vitae for Constantine A. Stratakis, MD, D(med)Sci, PhD(hc)

#### PERSONAL INFORMATION

Family name, First name: STRATAKIS, Constantine

Researcher unique identifier(s) ORCID iD: 0000-0002-4058-5520

Date of birth: November 5, 1965

Nationality: Greek, US (dual citizenship)

URL for web site: <a href="https://www.nichd.nih.gov/research/atNICHD/Investigators/stratakis">https://www.nichd.nih.gov/research/atNICHD/Investigators/stratakis</a>

https://www.nichd.nih.gov/research/atNICHD/Investigators/stratakis

#### **EDUCATION AND TRAINING**

1989	MD, Medical School, University of Athens, Athens, Greece
1994	Doctorate (DMSci), Medical School, University of Athens, Athens, Greece
1993, 1995	Peds (93), Ped. Endocrinology (95) Boards, Georgetown U., Washington, DC, USA
1996	Medical Genetics Boards, Georgetown University, Washington, DC, USA
2012	Executive Leadership, U Maryland School of Public Policy, MD, USA

## **CURRENT POSITION(S)**

2021-present: Special Volunteer (a position reserved for emeriti) Eunice Kennedy Shriver National Institute

of Child Health & Human Development (NICHD), NIH, Bethesda, MD, USA

2021–present: Executive Director (founding director) Research Institute & CSO, ELPEN, Athens, Greece 2021-present: Researcher A', Head, Human Genetics & Precision Medicine, Gene Regulation & Epigenetics

Department, Institute for Molecular Biology & Biotechnology (IMBB), Foundation for

Research & Technology Hellas (FORTH), Heraklion, Crete, Greece.

2021-present: Adj. Professor, Pediatrics, Endocrinology, Medical Genetics, Eur Un. Cyprus, Cyprus

## PREVIOUS POSITIONS

- 1990-1997: Department of Pediatrics, Georgetown University, Washington, DC, USA

- 1998–2002: **Investigator**, Head (tenure-track), Unit on Endocrinology & Genetics, DEB, NICHD, NIH

- 2002–2021: **Senior Investigator** (tenured), Section on Genetics & Endocrinology, NICHD, NIH

- 2002–2014: Director, Pediatric Endocrinology Training Program, NIH, Bethesda, MD

- 2003–2006: Chief, Heritable Disorders Branch (HDB), NICHD, NIH, Bethesda, MD

- 2007–2011: **Head, Program on Dev/ntal Endocrinology & Genetics**, NICHD, NIH

- 2008–2009: **Deputy Scientific Director**, NICHD, NIH

- 2009–2011: Acting Scientific Director, NICHD, NIH

- 2011–2020: Scientific Director & Act Director Population Health Research, NICHD, NIH

2020-2021: Senior Investigator and Chief, Genetics & Endocrinology, NICHD, NIH

- 2020-2021: Vis. Professor, Physiology Medicine, Univ Athens (EKPA), Medical School, Athens, Greece

# FELLOWSHIPS AND AWARDS

- 1990: Young Investigator Award "Sp. Pitoulis"; Greek Endocrine Society
- 1993: Diplomate, Am. Board of Pediatrics; Resident of the year, Georgetown University Hospital
- 1995: Diplomate, Am. Board of Pediatric Endocrinology; Awarded the Acad. Excellence Award, NIH
- 1996: Diplomate, Am. Board of Med. Genetics: Certification in Clinical Genetics & Dysmorphology
- 1999: Endocrine Society (USA)-Pharmacia Award for Excellence in Published Clinical Research
- 2000, -05, -07, -13, -14: National Institutes of Health Merit and Group Awards
- 2009: Endocrine Society, Ernst Oppenheimer Award
- 2015: NICHD Mentor of the Year Award & 2016: <u>Distinguished Physician Award</u>, NY Hell. Med. Soc.
- 2018: International Award 2018 by the European Society of Pediatric Endocrinology
- 2019: Dale Medal 2019 by the British Endocrine Society
- 2013 and 2018: Honorary **PhD**s from the University of Liege and Athens, respectively

## SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

1995–2021 Number of trainees: 183 / PhD: 82 / Other Students: 101. Among them, more than 50 now have faculty positions in USA and Europe including Greece

#### **TEACHING ACTIVITIES**

1995–2021: From various positions at Georgetown University and NIH, both undergraduate (Master, PhD) and graduate students, pediatrics, endocrinology and genetics trainees; Fellowship Program Director 2002-2014 for all of NIH/Georgetown Un. Pediatric Endocrinology Fellows

## ORGANISATION OF SCIENTIFIC MEETINGS

- 2004, 2008: 9th and 11th Multiple Endocrine Neoplasia Mtgs Bethesda, MD, USA & Delphi, Greece
- 2009, -11, -13, -15: International cAMP signaling and Phosphodiesterase (PDE) meetings

# INSTITUTIONAL RESPONSIBILITIES

1995-2021: Participated in a number of committees from the Institutional Review Board (IRB), to many oversight boards (on clinical research, regenerative medicine, LGBTQ research etc) and leadership committees of NIH (2011-2021).

# **REVIEWING ACTIVITIES (NIH-US)**

1990-2021: Participated in a number of commissions of trust to review grants (NIH Study sections and NCI program committees) including in 2011-2011 in the Intramural Clinical Research Steering Committee (ICRSC), NIH, and in 2015-2016, at the Adv. Board for Clinical Research (ABCR), at the NIH.

# **REVIEWING ACTIVITIES (WITHIN EU)**

Reviewed grants for various review bodies in the EU (MRC-UK, Italy, Hungary, Czech Republic, France and others). As a US government employee I was not able to participate previously in the ERC.

### **EDITORIAL ACTIVITIES**

2000-2005: Editor-in-Chief, *J. Endocr. Genet*: 2000-present: Editorial Boards in more than 5 journals currently; reviewer for >130 journals; 2010-2014: Deputy Editor, *J. Clin. Endocrinol. Metab*; 2015-2016, Associate Editor, *Endocrine Reviews*; 2015-present: co-Editor-in-Chief, *Hormone and Metabolic* Research; 2017-present: co-Editor, *Molecular & Cellular Endocrinology* 2018-present: Ass.Editor, *Endocr. Rel. Cancer* 

## MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Non-elected (proposed): Endocrine Society (ES, since 1989); Am Soc. Human Genetics (ASHG, since 1996) Elected to (year): Society for Pediatric Research (SPR, 2005); American Society for Clinical Investigation (ASCI, 2009); American Pediatric Society (APS, 2013); Association of American Physicians (AAP, 2018)

## MAJOR COLLABORATIONS

<u>Associate Investigators in this study:</u> Prof. <u>E. Xekouki</u>, Head, Endocrinology Univ of Crete Med. School; Prof. <u>A. Voutetakis</u>, Pediatrics, Endocrinology & Genetics, Univ of Athens and Thrace Med. Schools; <u>Dr. Edra London</u>, and <u>Dr. Chris McBain</u> at NICHD Neurosciences, NIH; <u>Dr. Fabio Faucz</u>, NICHD, NIH; <u>Dr. Anton Simeonov</u>, NCATS, NIH; <u>Prof. Sanford M. Simon</u>, The Rockefeller Univ

Other major collaborators around the world: Porf. Stefan Bornstein, Dresden Univ, Dresden, Germany; Prof. Jerome Berherat, Hospital Cochin, Paris, France; Prof. Albert Beckers, Univ Liege, Liege, Belgium; Prof. Charis Eng. Cleveland Clinic, Cleveland, OH, USA; Dr. A. Martinez and P. Val, Univ Clermont-Ferrand, France; Prof. Martin Reincke, Univ Munich, Germany; Dr. G. Trivellin, Milan, Italy, and many others.

# **BIBLIOGRAPHY**

734 PubMed publications (23-8-2021), more than 100 additional book chapters and monographs, 3 books (the latest at: <a href="https://www.elsevier.com/books/gigantism-and-acromegaly/stratakis/978-0-12-814537-1">https://www.elsevier.com/books/gigantism-and-acromegaly/stratakis/978-0-12-814537-1</a>); h-Index: **85** at Scopus, **105** at Google Scholar with **41492 citations**, as of 23-8-2021.

# **MAJOR ACHIEVEMENTS**

(a)Clinical and molecular elucidation of diseases (presentation, diagnosis and molecular investigations) involving the adrenal and pituitary glands; found genes for Carney complex, gigantism, among many others; (b)Molecular investigations and animal models of the c-AMP-dependent protein kinase (PKA); developed the first human PKA mutation database (<a href="https://prkar1a.nichd.nih.gov/hmdb/prkar1a.html">https://prkar1a.nichd.nih.gov/hmdb/prkar1a.html</a>); (c)Molecular elucidation of diseases (from clinical presentation to diagnosis and molecular investigations) caused by succinate dehydrogenase (SDH) defects; described the Carney-Stratakis syndrome.

# **FUNDING:**

# **On-going grants**

Project Title	Funding source	Amount (Euros)	Peri od	Role of the PI	
NICHD Z01 HD008920 Molecular genetics of endocrine tumors and related disorders	NIH	2,000,000/year	2011 - 2021	*This grant was the main one funding Dr. Stratakis as PI at the NIH. With his retirement from NIH the grant ended February 28, 2021 with a grace period for orderly shut-down until February 28, 2022.	
ANR-18-CE14-0012-02 PI: A. Martinez	Agence Nationale pour la Recherch e (ANR), France	Approx. 50,000/year	2018 - 2022	Associate Investigator	
Pegvisomant for children with gigantism	Pfizer, Inc./NIH	Approx. 150,000/year	2019 - 2024	Associate Investigator	

# **Completed:**

Project Title	Funding source	Amount (Euros)	Peri od	Role of the PI	Relation to current
NICHD  Z01HD000642:  Molecular genetics of adrenocortical tumors and related disorders	NIH	1,000,000/year	1998 - 2011	Principal Investigator	
ANR-14-CE12-0007-01 PI: A. Martinez	Agence Nationale pour la Recherch e (ANR), France	Approx. 50,000/year	2014 - 2018	Associate Investigator	

#### A.BIBLIOGRAPHY

There have been 393 publications in PubMed with Dr. Constantine Stratakis as one of the authors in the last 10 years (since March 2012). The table below shows the number of publications per year in PubMed in the last 10 years. Google scholar shows 415554 citations overall, of which 18253 since 2016 (next table):

2021 = 33 $2020 = 53$ $2019 = 37$ $2018 = 39$ $2017 = 54$ $2016 = 71$ $2015 = 58$ $2014 = 40$ $2013 = 23$	2021 = 2692 citations (up to 23-8-2021) 2020 = 3509 2019 = 2954 2018 = 3132 2017 = 2958 2016 = 2903 2015 = 2660 2014 = 2502 2013 = 2098	h - Index = 105 (64 since 2016)
2013 = 23 2012 = 43	2012 = 1921	

The 10 most cited orig. research (no reviews) papers for which Dr. Stratakis is either first or senior author in the last 10 years (2012-2021) are (in parenthesis their **citations**, per Google Scholar):

- 1 F Beuschlein\*, M Fassnacht\*, G Assié\*, D Calebiro\*, <u>CA Stratakis\*</u>, A Osswald, et al Constitutive activation of PKA catalytic subunit in adrenal Cushing's syndrome. *New England Journal of Medicine* 370 (11), 1019-1028, 2014 (310) (\*all first authors with equal contribution)
- **2** G Trivellin, AF Daly, FR Faucz, B Yuan, L Rostomyan, DO Larco, ... <u>CA Stratakis\*\*</u>. Gigantism and Acromegaly Due to Xq26 Microduplications and GPR101 Mutation. *New England Journal of Medicine* 371 (25), 2363-2374, 2014 (**247**)
- **3** P Xekouki, K Pacak, M Almeida, CA Wassif, P Rustin, M Nesterova, ... <u>CA Stratakis\*\*</u>. Succinate Dehydrogenase (SDH) D Subunit (SDHD) Inactivation in a Growth-Hormone-Producing Pituitary Tumor: A New Association for SDH? *Journal of Clinical Endocrinology & Metabolism* 97 (3), E357-E366, 2012 **(149)**
- **4** T Palumbo, FR Faucz, M Azevedo, P Xekouki, D Iliopoulos, <u>CA Stratakis\*\*</u>. Functional screen analysis reveals miR-26b and miR-128 as central regulators of pituitary somatomammotrophic tumor growth through activation of the PTEN–AKT pathway. *Oncogene* 32 (13), 1651-1659, 2013 **(139)**
- **5** FR Faucz, M Zilbermint, MB Lodish, E Szarek, G Trivellin, N Sinaii, ... <u>CA Stratakis\*\*</u>. Macronodular Adrenal Hyperplasia due to Mutations in an Armadillo Repeat Containing 5 (ARMC5) Gene: A Clinical and Genetic Investigation. *Journal of Clinical Endocrinology & Metabolism* 99 (6), E1113-E1119, 2014 (**121**)
- **6** A Beckers, MB Lodish, G Trivellin, L Rostomyan, M Lee, FR Faucz, ... <u>CA Stratakis</u>\*\*. X-linked acrogigantism syndrome: clinical profile and therapeutic response. *Endocrine-related cancer* 22 (3), 353-367, 2015 (117)
- 7 P Xekouki, E Szarek, P Bullova, A Giubellino, M Quezado, ...<u>CA Stratakis</u>\*\* Pituitary adenoma with paraganglioma/pheochromocytoma (3PAs) and succinate dehydrogenase defects in humans and mice. *Journal of Clinical Endocrinology & Metabolism* 100 (5), E710-E719, 2015 (108)
- 8 M Zilbermint, P Xekouki, FR Faucz, A Berthon, A Gkourogianni, ... <u>CA Stratakis</u>\*\*. Primary Aldosteronism and ARMC5 Variants. *The Journal of Clinical Endocrinology & Metabolism* 100 (6), E900-E909, 2015 (78) 9 FR Faucz, A Tirosh, C Tatsi, A Berthon, LC Hernández-Ramírez, N Settas, ... <u>CA Stratakis</u>\*\*. Somatic USP8 Gene Mutations Are a Common Cause of Pediatric Cushing Disease. *Journal of Clinical Endocrinology & Metabolism* 102 (8), 2836-2843, 2017 (67)
- **10** SA Boikos, P Xekouki, E Fumagalli, FR Faucz, M Raygada, E Szarek, ... <u>CA Stratakis</u>\*\*. Carney triad can be (rarely) associated with germline succinate dehydrogenase defects. *European Journal of Human Genetics* 24 (4), 569-573, 2016 **(53)** [\*\*Dr. Stratakis is the senior author (references 2-10)]

# B.INVITED LECTURES – selected out of a total of more than 60 in the last 5 years (10)

- 1. DALE MEDAL LECTURE: 11/8/2019. Society for Endocrinology, Brighton, UK. "From Carney complex to gigantism and Cushing disease: an insight in the genetics of pituitary tumors."
- 2. BAYLOR SCHOOL OF MEDICINE: 9/12/2019. Texas Children's Hospital Grand Rounds, Houston, Texas. "A Clinical & Molecular update on Cushing Syndrome" and "Discovering New Genetic Syndromes Seeing Patients: what it takes to identify new diseases (and treatments)"
- 3. CLEVELAND CLINIC: 6/27/2019. Cleveland Clinic Visiting Professors Series, Cleveland, OH. "Update on the genetics of Cushing syndrome"
- 4. JAPAN PEDIATRIC SOCIETY & TOKYO MEDICAL SCHOOL: 4/19/2019. 122nd Annual Meeting of the Japan Pediatric Society (JPS2019), Kanazawa, Japan. "New genes and syndromes in pediatric endocrine oncology: from clinical to bedside and back"
- 5. VANDERBILT UNIVERSITY: 6/6/2018. Dr. David N. Orth Lectureship 2018, Nashville, Tennessee "Adrenal Medicine: Advance in Cortical and Medullary Tumors and the Future"
- 6. CEDARS SENAI MEDICAL CENTER: 3/27/2018. Grand Rounds at Cedars-Sinai Medical Center, Los Angeles, CA. "New endocrine tumor syndromes: lessons for clinicians and links to basic science"
- 7. UNIVERSITY OF COLORADO VIS, PROFESSOR: 2/22/2017. Endocrine Grand Rounds and Research Conference, University of Colorado School of Medicine, Aurora, CO. "Genetics of pituitary tumors: a clinical and molecular update", and "cAMP-signaling defects and endocrine (and other) tumors"
- 8. GORDON RESEARCH CONFERENCES (GRC): 2/9/2017. GRC on Neural Crest & Cranial Placodes, Ventura Beach, California. "GPR101 and Pituitary Tumors"
- 9. CHINESE UNIVERSITY OF HONK-KONG: 10/9-13/2016. CUHK Medicine 35<sup>th</sup> Anniversary Distinguished Lecture Series, Hong Kong. "Cyclic AMP signaling defects and endocrine (and other) tumor formation", and "Research in the genetics of pituitary tumors; an update on GPR101.
- 10. DUKE UNIVERSITY-NATIONAL UNIV SINGAPORE (NUS): 12/12-16/2015. Duke-NUS Vis Professor. (1) Updates on the Genetics of Pituitary and Adrenocortical Tumors: Beyond MENs and Carney Complex; (2) Clinical and Molecular Genetics of Cushing Syndrome; (3) DICER1; (4) Clinical and Molecular Genetics of cAMP-signaling Related Tumors: Human Diseases and Animal Studies; & (5) An Update on Succinate Dehydrogenase Defects, Carney-Stratakis Syndrome & Carney Triad.

## C.HONORS-AWARDS (selected)

- 2013, 2014 NIH Group Awards: Intramural-Extramural Collaborations; Support of DSD Research
- 2013, **Honorary PhD**, University of Liege, Liege, Belgium
- 2015 NICHD Mentor of the Year Award, NICHD, NIH
- 2015, 2016 Nominated, Distinguished Clinical Teacher of the Year Award, CRC, NIH
- 2015 Society for Endocrinology Endocrine-Related Cancer, Published Author of the Year Award
- 2016 Distinguished Physician 2016 Award, Hellenic Medical Society of New York
- 2017 <u>Honorary Member</u> Hellenic Society of Cardiology, Athens, Greece
- 2018 International Award 2018 by the European Society of Pediatric Endocrinology
- 2018 Honorary PhD, University of Athens, Athens, Greece
- 2019 Honorary Member, Hellenic Endocrine Society, Athens, Greece
- 2019 <u>Dale Medal 2019</u> by the British Endocrine Society, UK
- 2019 NICHD Director's Award, NICHD Strategic Plan 2020-24 Leadership Committee, NIH

**D.PATENTS:** (2 in the last 10 years, 5 overall) (1) U.S. Provisional Patent Application No. 62/078,517 filed on 12 Nov 2014 entitled "METHOD FOR TREATMENT OF HORMONAL DISORDERS OF GROWTH USING ANTAGONISTS AND AGONISTS OF THE ORPHAN G-PROTEIN COUPLED RECEPTRO (GPCR), GPR101" and (2) U.S. Patent Application No. PCT/US2015/060442, filed on 12 Nov 2015 entitled "TREATMENT OF HORMONAL DISORDERS OF GROWTH".

**E. MAJOR CONTRIBUTIONS TO EARLY CAREERS OF EXCELLENT INVESTIGATORS:** More than 30 in the last 10 years out of a total of more than 110 trainees (2012-2021).