Principal Investigator

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Personal information

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Birthplace: Vic (Barcelona), Spain

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https://www.icrea.cat/
http://www.ciberned.es/en

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Summary

Miquel Vila is the group leader of the Neurodegenerative Diseases Research Group at the Vall d'Hebron Research Institute (VHIR, Barcelona, Spain), devoted to the elucidation of the molecular mechanisms of neurodegeneration in Parkinson's disease (PD). To date, he has co-authored 125 professional publications, with a current H-index of 63 and over 19,934 citations (Scopus, up to January 2024). Dr. Vila's work in experimental animal models, both genetic and neurotoxic, has shed light on molecular mechanisms underlying PD-linked neuronal dysfunction/degeneration, including mitochondrial alterations, alpha-synuclein (aSyn) aggregation, autophagy deficits, inflammatory changes and apoptotic pathways. He has originally created novel PD-relevant animal models, such as the one induced by injection of Lewy bodies (LB) isolated from PD brains or, more recently, the first genetic rodent model producing neuromelanin. Using the latter, his group has recently demonstrated that progressive, age-dependent intracellular neuromelanin accumulation above a specific pathogenic threshold ultimately compromises neuronal function and triggers pathological features typical of PD. Relevant to humans, he has also shown that neuromelanin levels reach this pathogenic threshold in PD patients and pre-symptomatic PD subjects. Importantly, they found that the lowering of intracellular neuromelanin levels below this pathogenic threshold was able to prevent the PD-related phenotype in these animals. These results, for which he received a SEN Award from the Spanish Society of Neurology (2019), indicate that strategies to maintain or decrease intracellular neuromelanin to levels below its pathogenic threshold may provide unprecedented therapeutic opportunities to prevent, halt or delay neuronal dysfunction and degeneration linked to PD and brain aging. Dr. Vila has also pioneered some of our current understanding of the potential pathogenic role of aSyn in PD by demonstrating, among other studies, a neuroprotective effect of aSyn gene ablation in animal PD models or a neurotoxic effect of aSyn aggregates isolated from PD postmortem brains when injected into mice and monkeys, a work for which he obtained in 2014 the "Paper of the Year" Awards from both the American Neurological Association (USA) and the Spanish Parkinson Federation (FEP). An important part of Dr. Vila's work was devoted

to decipher the pathogenic significance and molecular mechanisms of mitochondrial dysfunction in PD, including a detailed description of the apoptotic molecular cascade initiated at the level of the mitochondria in experimental PD models and PD brains. His early PhD work was devoted to the study of the functional consequences of dopaminergic neurodegeneration on the functioning of the basal ganglia, which contributed to identify the subthalamic nucleus as a major target for deep brain stimulation therapy in PD patients.

Miquel Vila received his medical degree from the University of Barcelona Medical School (Barcelona, Spain) and then moved to the laboratory of Experimental Neurology and Therapeutics, INSERM U289 (Prof. Yves Agid) at the Salpêtrière Hospital in Paris (France), where he obtained his Master degree (D.E.A.) and Ph.D. in Neuroscience from the Sorbonne University-Pierre et Marie Curie Campus (Paris, France), under the supervision of Dr. Etienne Hirsch. His Ph.D. work was devoted to the study of the functional consequences of dopaminergic neurodegeneration on the functioning of the basal ganglia. From 1998 to 2001, he worked as a postdoctoral researcher at the laboratory of Dr. Serge Przedborski at the Department of Neurology, Movement Disorders Division (Prof. Stanley Fahn), at Columbia University (New York, USA), focusing on the molecular mechanisms of neuronal death in PD. To continue his work, he obtained in 2001 a tenure-track position as an Assistant Professor of Neurology at Columbia University, the permanent residency of the USA ("outstanding researcher" category) and a 5-year $1M R01 research grant from the National Institutes of Health (NIH, USA). In 2006, he moved back to Barcelona as a Professor at ICREA (Catalan Institution for Research and Advances Studies) to develop a new research group on neurodegeneration at the Vall d'Hebron Research Institute, thanks to the support of a 1.2M€ European Commission's Marie Curie Excellence Grants program. Currently, his group hosts more than 25 researchers, including 3 senior researchers, 2 clinical investigators from the Movement Disorders Unit of the Vall d'Hebron University Hospital and several postdoctoral researchers, PhD students and technicians. The group is part of the Spanish Excellence Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED) and of the recently established Aligning Science Across Parkinson's Collaborative Research Network (USA).

Education

1993 M.D. (*Licenciatura en Medicina y Cirugía*),
University of Barcelona Medical School, Barcelona (Spain)

1994 M.S. (*Diplôme d'Etudes Approfondies*) in Neuroscience,
Sorbonne University-Pierre et Marie Curie Campus, Paris (France)

1998 Ph.D. (*Docteur de l'Université de Paris 6*), specialty Neuroscience,
Sorbonne University-Pierre et Marie Curie Campus, Paris (France)
Title: «Consequences of nigrostriatal denervation on the functioning of the basal ganglia»
Sponsor: Dr. Etienne Hirsch, INSERM U289 (Prof. Yves Agid), Hôpital de la Salpétrière,
Paris (France)

Current Positions

2005-present Professor, Group Leader,
Catalan Institution for Research and Advanced Studies (ICREA),
Vall d'Hebron Research Institute (VHIR), Barcelona (Spain)

2006-present Principal Investigator,
Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED),
Instituto de Salud Carlos III (Spain's National Institute of Health)

2008-present Associate Professor,
Department of Biochemistry and Molecular Biology,
Autonomous University of Barcelona (UAB), Spain

2021-present Coordinating Lead PI,
Aligning Science Across Parkinson's (ASAP) Collaborative Research Network,
Chevy Chase, MD, USA

Past positions and Employments

1993 Research Fellow,
Laboratory of Neurochemistry,
CSIC (Spanish National Council for Research), Barcelona (Spain)

1993-1998 Ph.D. candidate,
INSERM U289, Hôpital de la Salpêtrière, Paris (France)

1998-2001 Post-doctoral Research Fellow,
Department of Neurology, Movement Disorders Division-Neuroscience Research,
Columbia University, New York (USA)

2001-2005 Assistant Professor of Neurology,
Department of Neurology, Movement Disorders Division-Neuroscience Research,
Columbia University, New York (USA)

2006-2010 Adjunct Assistant Professor of Neurology,
Department of Neurology, Movement Disorders Division-Neuroscience Research,
Columbia University, New York (USA)

Fellowships

1993 Grant from the Spanish National Council for Research (CSIC, Spain),
for introduction to research

1993-1994 Fellowship from La Caixa Foundation (*Beques de la Caixa,* Barcelona, Spain),
to pursue a *D.E.A.* in France

1994-1997 Fellowship (*Allocation de Recherche*) from the French Ministry of Education (France),
to pursue a Ph.D. in France

1998 Fellowship from the Medical Research Foundation (France)
to finalize a Ph.D. in France

1999-2001 Long-Term Fellowship from the Human Frontier Science Program Organization,
to pursue post-doctoral training in the USA

Distinctions

2005 U.S. Permanent Residence, "*Outstanding researcher"* category

2005-2009 Marie Curie Excellence Grant (European Commission)

2006-present Principal Investigator at the Spanish Excellence Network in Neurodegeneratives Diseases (Center for Networked Biomedical Research on Neurodegenerative Diseases-CIBERNED), Instituto de Salud Carlos III (Spain's National Institute of Health)

2009	"Santiago Ramon y Cajal" Lecture Award, Spanish Society of Neurology (SEN)
2011	Among Top 50 Cited Parkinson's disease Investigators worldwide 2001-10 and Top 50 PD investigators worldwide with a most broad-impact citations (Sorensen & Weedon, 2011)
2014	"Paper of the Year" Annals of Neurology Award, American Neurological Association (ANA)
2014	"Paper of the Year" Award, Spanish Federation of Parkinson (FEP)
2019	Movement Disorders Award, Spanish Society of Neurology (SEN)

Scientific and Editorial Boards

2002-2005	National Institutes of Health (NIH) "Cell death and injury in neurodegeneration" Study Section (USA)
2009-2014	Associate Editor, Journal of Neuroscience
2011-2012	Local Organizing Committee, 8th FENS Forum of Neuroscience, Barcelona (2012)
2011-2013	Program Committee Member, World Parkinson Congress 2013 (Montreal, Canada)
2012	Vice-chair, Marie Curie Initial Training Networks (European Commission)
2015-2017	Congress Scientific Program Committee Member, The International Parkinson and Movement Disorders Society (MDS)
2015-present	Editorial Board Member, Neurobiology of Disease
2016-present	Scientific Advisory Board, Transversal Program on Ageing, INSERM (France)
2017-present	EATRIS Neurodegenerative Disease Working Group (European Commission)
2017	Organizing Committee, α-Synuclein and Parkinson's disease Conference (Barcelona, Spain)
2018-present	Scientific Committee Member, Fondation de France (France)
2019	Target Advancement Program Review Committee Member, Michael J. Fox Foundation (USA)
2019-2023	Steering Committee Member, World Parkinson Congress Coalition (USA)
2019-2023	Co-Chair Local Organizing Committee, World Parkinson Congress 2023 (Barcelona, Spain)
2019-2023	Basic Science Program Committee Member, World Parkinson Congress 2023 (Barcelona, Spain)
2020-present	Scientific Advisory Board, Neurological Tissue BioBank University of Barcelona (Spain)
2020-present	Steering Committee Member, Basic Science Special Interest Group, MDS
2023	Co-Director, MDS-ES Course Controversies in Parkinson's disease Research (Bordeaux, France)
2023-present	Special Issue Editor, Neurobiology of Disease
2023-present	Co-Chair Basic Science Program Committee, World Parkinson Congress 2026 (USA)

Teaching responsibilities

Annual teaching:

1. Master in Neuroscience, Autonomous University of Barcelona
2. Master in Translational Biomedical Research, Vall d'Hebron Research Institute
3. Master in Neuroimmunology, Multiple Sclerosis Center of Catalonia (CEMCat, Barcelona)
4. Master in Movement Disorders, University of Murcia

5. Master in Experimental Biomedical Research, International University of Catalonia
6. Master in Biochemistry, Molecular Biology and Biomedicine, Complutense University of Madrid (2023).

PhD Supervision:

1. PhD in Neuroscience, Autonomous University of Barcelona, Ariadna Recasens Ibabe (2011-2014)
2. PhD in Neuroscience, Autonomous University of Barcelona, Sandra Franco Iborra (2014-2018)
3. PhD in Neuroscience, Autonomous University of Barcelona, Albert Torra Talavera (2014-2018)
4. PhD in Neuroscience, Autonomous University of Barcelona, Oriol de Fàbregues-Boixar Nebot (2014-2016)
5. PhD in Neuroscience, Autonomous University of Barcelona, Joan Compte Barrón (2018-2022)
6. PhD in Neuroscience, Autonomous University of Barcelona, Núria Peñuelas Peñarroya (2018-2023)
7. PhD in Neuroscience, Autonomous University of Barcelona, Camille Guillard-Sirieix (2021-present)
8. PhD in Neuroscience, Autonomous University of Barcelona, Alba Nicolau Vera (2021-present)
9. PhD in Neuroscience, Autonomous University of Barcelona, Marina Lorente Picón (2021-present)
10. PhD in Neuroscience, Autonomous University of Barcelona, Gerard Roch Alba (2022-present)
11. PhD in Neuroscience, Autonomous University of Barcelona, Joana Cladera Sastre (2023-present)

Master Thesis Supervision:

1. Master in Neuroscience, University of Barcelona, Ariadna Recasens Ibabe (2010)
2. Master in Biomedical Engineering, Universitat Politècnica de Catalunya, Lucía Pérez Otín (2012)
3. Master in Molecular Biotechnology, University of Barcelona, Ariadna Pascual Velázquez (2013)
4. Master in Neuroscience, University of Barcelona, Albert Torra Talavera (2014)
5. Master in Neurobiology, University of Montpellier (France), Anne Paillier (2016)
6. Master in Biomedicine, University of Barcelona, Laura Solanelles Farré (2016)
7. Master in Neuroscience, University of Barcelona, Núria Peñuelas Peñarroya (2017)
8. Master in Developmental Biology, Sorbonne University-Pierre et Marie Curie (France), Alice Bressand (2017)
9. Master in Translational Biomedical Research, Vall d'Hebron Research Institute, Camille Guillard-Sirieix (2019)
10. Master in Translational Biomedical Research, Vall d'Hebron Research Institute, Alba Nicolau Vera (2019)
11. Master in Neuroscience, Autonomous University of Barcelona, Júlia Valor Blanquer (2020)
12. Master in Pharmacy, Utrecht University (Netherlands), Ricky Wassink (2024)
13. Master Neurobiology, University of Pavia (Italy), Dana Morato

Bachelor's Thesis Supervision:

1. Biotechnology, Universitat Rovira i Virgili, Ariadna Recasens Ibabe (2009)
2. Biomedicine, University of Lleida, Albert Torra Talavera (2013)
3. Nanotechnology, Autonomous University of Barcelona, David Martínez Pérez (2014)
4. Biotechemistry, Universitat Rovira i Virgili, Sara Porta López (2019)
5. Biomedicine, University of Lleida, Gemma Pujol Alboquers (2020)
6. Biomedicine, University of Lleida, Ada Gay Rúa (2022)
7. Biomedical Engineering, Universitat Rovira i Virgili, Alba Rodriguez Omenac (2024)
6. Medical & Pharmaceutical Biotechnology, University of Applied Sciences (Austria), Julia Drescher (2024)

Competitive research grants

A. International Research Grants

1. *Activity and connectivity drive neuronal vulnerability and disease progression in Parkinson's disease*
Role: Lead PI & Coordinator (Co-PIs: J.A. Obeso, Ciberned, Spain; G. Halliday, University of Sydney, Australia; M. Prigge, Leibniz Institute for Neurobiology, Germany; N. Mercuri, University of Rome Tor Vergata, Italy)
Agency: Aligning Science Across Parkinson's (ASAP, USA)
Grant Period: 2021-24; Total funding: $10,975,371 (Vila group: $1,485,066).

2. *Targeting neuromelanin-linked neuronal dysfunction and degeneration in ageing and Parkinson's disease using a combined imaging and brain stimulation approach*
Role: Lead PI & Coordinator (Co-PIs: S. Lehericy, Brain & Spine Institute-Salpetriere Hospital, France; M. Prigge, Leibniz Institute for Neurobiology, Germany; M. Betts, Institute for Cognitive Neurology and Dementia, Otto-von-Guericke-University Magdeburg, Germany)
Agency: EU Joint Programme Neurodegenerative Disease Research (JPND)
Period: 2021-23; Total funding: 729,980 € (Vila group: 249,986 €)

3. *Sex-based modulation of neuromelanin-linked Parkinson's disease pathology*
Role: Principal Investigator
Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Period: 2021-23; Total funding: $200,000

4. *Characterization of a novel neuromelanin-producing transgenic mouse model: relevance to Parkinson's disease and brain aging*.
Role: Principal Investigator
Agency: Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Period: 2020-22; Total funding: $200,000

5. *Focused ultrasound modulation of neuromelanin accumulation in a humanized rat model of Parkinson's disease*
Role: Principal Investigator (Co-applicant: S. Leheryci, I Brain & Spine Institute-Salpetriere Hospital, Paris, France)
Agency: Network of Centres of Excellence in Neurodegeneration (CoEN)
Grant Period: 2018-19; Total funding: 456,488 € (Vila group: 182,097.52 €)

6. *Pathogenic Role of Neuromelanin in Parkinson's disease and Brain Aging: Molecular Mechanisms in a Novel Humanized Pre-clinical in Vivo Model*
Role: Principal Investigator
Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Grant period: 2018-19; Total funding: $98,450

7. *Targeting a novel transcriptional pathway to reduce alpha-synuclein expression*;
Role: Co-Principal Investigator (PI: S. Desagher, CNRS-Institute of Molecular Genetics Montpellier, France)
Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Grant Period: 2016-17; Total funding: 91,400 € (Vila group: 31,728 €)

8. *Generation of humanized mouse models to study the role of neuromelanin in Parkinson Disease*
Role: Principal Investigator
Agency: Parkinson's UK (U.K.)
Grant Period: 2015; Total funding: £34,113

9. *Targeting the transcriptional regulator of autophagy LMX1B for Parkinson's disease therapeutic development*
Role: Collaborator (PI: A. Laguna, researcher at Dr. Vila's group)

Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Grant Period: 2015-16; Total funding: 91,400 €

10. *Pharmacokinetic and pharmacodynamic characterization of a novel therapy to silence selectively alpha-synuclein in monoaminergic neurons of rat.*
Role: Collaborator (PI: R. Revilla, nLife Therapeutics S.L., Spain)
Agency: The Michael J. Fox Foundation for Parkinson's Research-Therapeutic Pipeline Program (USA)
Grant Period: 2014-16; Total funding: $258,171 (Vila group: $28,722.63)

11. *Prion-like dissemination of synuclein pathology: a non-human primate study*
Role: Collaborator (PI: E. Bezard, Université de Bordeaux, France)
Agency: The Michael J. Fox Foundation for Parkinson's Research (USA)
Grant Period: 2013-16; Total funding: $374,375 (Bezard group)

12. *Targeting programmed cell death in Parkinson's disease*
Role: Principal Investigator
Agency: Marie Curie Excellence Grant (European Commission)
Grant Period: 2005-09; Total funding: 1,151,879 €

13. *Targeting programmed cell death as a new therapeutic strategy for Parkinson's disease*
Role: Principal Investigator
Agency: Marie Curie International Reintegration Grant (European Commission)
Grant Period: September 2005-2007; Total funding: 80,000 €

14. *Caspase-3-independent programmed cell death in the MPTP mouse model of Parkinson's disease.*
Role: Principal Investigator
Agency: The National Parkinson Foundation-Parkinson's Disease Foundation (USA)
Grant Period: 2003-04; Total funding: $35,000

15. *Mechanisms of Bax activation in the MPTP mouse model.*
Role: Principal Investigator (Co-PI as of 2006)
Agency: National Institutes of Health - National Institute on Aging (USA)
Grant Period: 2003-08; Total funding: $1,000,000

16. *Role of Bax-dependent cell death molecular pathways in the MPTP model of Parkinson's disease.*
Role: Principal Investigator
Agency: Department of Defense of the U.S.A.
Grant Period: 2003-05; Total funding: $240,000

17. *Chronic blockade of mitochondrial function and experimental models of Parkinson's disease.*
Role: Principal Investigator
Agency: American Parkinson's Disease Association (USA)
Grant Period: 2002-03; Total funding: $35,000

18. *Role of the molecular pathways of apoptosis in the death of dopaminergic neurons in the MPTP model of Parkinson's disease.*
Role: Co-Principal Investigator (PI: Stanley Fahn)
Agency: Lowenstein Foundation (USA)
Grant Period: 2001-03; Total costs: $162,000

B. National Research Grants

1. *Molecular mechanisms of neuromelanin-linked neurodegeneration in Parkinson's disease and brain aging*
Role: Principal Investigator
Agency: Spanish Ministry of Science and Innovation (MICINN, Spain)
Period: 2021-24; Total funding: 332,750 €

2. *Neurodegeneration linked to neuromelanin in Parkinson's disease: mechanistic, diagnostic and therapeutic implications*
Role: Lead PI & Coordinator (Co-PIs: J.L. Lanciego, Centro de Investigación Médica Aplicada; R. Trullàs, University of Barcelona; J.L. Labandeira, Universidad de Santiago de Compostela: M. Calero, Instituto de Salud Carlos III)
Agency: CIBERNED Collaborative Projects
Period: 2021-23; Total funding: 315,000 € (Vila group: 63,000 €)

3. *Support to Consolidated Research Groups*
Role: Principal Investigator
Agency: Agència de Gestió d'Ajuts Universitaris i de la Recerca (AGAUR, Spain)
Grant Period: 20121-24; Total funding: 40,000 €

4. *Modulation of age-dependent neuromelanin accumulation as a novel therapeutic strategy for Parkinson disease and brain aging*.
Role: Principal Investigator
Agency: "la Caixa" Banking Foundation Health Research (Spain)
Grant Period: 2018-21; Total funding: 466,004 €

5. *SYNUCLEAN-D: A novel molecule to cure Parkinson's disease*
Role: Collaborator (PI: S. Ventura, Autonomous University of Barcelona, Spain)
Agency: CaixaImpulse, "la Caixa" Banking Foundation (Spain)
Grant period: 2018-19; Total funding: 100,000 € (Ventura group)

6. *Role of neuromelanin in Parkinson's disease and brain aging: therapeutic potential using novel humanized pre-clinical in vivo models*
Role: Principal Investigator
Agency: Spanish Ministry of Economy, Industry and Competitiveness (MINECO, Spain)
Grant Period: 2017-20; Total funding: 363,000 €

7. *Identification of pathophysiological biomarkers in the prodromal/preclinical phase of Parkinson's disease*
Role: Principal Investigator/Coordinator
Agency: Collaborative projects, Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED, Spain)
Grant Period: 2017-18; Total funding: 280,000 € (Vila group: 70,000 €)

8. *Support to Consolidated Research Groups*
Role: Principal Investigator
Agency: Agència de Gestió d'Ajuts Universitaris i de la Recerca (AGAUR, Spain)
Grant Period: 2017-19; Total funding: 35,200 €

9. *A precise approach for nucleoside-based therapy of neuromuscular disorders with defects in mitochondrial DNA*
Role: Co-Principal Investigator (Coordinator: M.A. Martín, Hospital 12 de Octubre, Madrid, Spain)
Agency: Instituto de Salud Carlos III-Fondo Europeo de Desarrollo Regional (Spain National Institute of Health)
Grant Period: 2016-19; Total funding: 806,223 € (Vila group: 58,000 €)

10. *Transcriptional profiling in prodromal subgroups of Parkinson's disease*

Role: Collaborator (PI: A. Laguna, researcher at Dr. Vila's group)
Agency: Fundación Tatiana Pérez de Guzmán el Bueno (Spain)
Grant Period: 2015-17; Total funding: 40,000 €

11. *Role of neuromelanin and alpha-synuclein in the initiation and extension of Parkinson's disease: therapeutic and diagnosis potential in novel pre-clinical models*
Role: Principal Investigator
Agency: Instituto de Salud Carlos III (Spain National Institute of Health)
Grant Period: 2014-16; Total funding: 142,780 €

12. *Role of the cellular prion protein as "cross-talk" protein between alpha-syn/LRRK2 and p-Tau in sporadic and familiar Parkinson´s disease*
Role: Collaborator (PI: J.A. del Río, The Institute for Bioengineering of Catalonia, Spain)
Agency: Marató de TV3 Foundation (Spain)
Grant Period: 2014-17; Total funding: 195,646.25 € (Dr. del Río group)

13. *Nuevas estrategias terapéuticas para el tratamiento de sinucleinopatías*
Role: Collaborator (PI: R. Revilla, nLife Therapeutics S.L., Spain)
Agency: Retos-Colaboración, Ministerio de Economía y Competitividad (Spain)
Grant Period: 2014-17; Total funding: 1,971,513 € (Vila group: 368,114 €)

14. *Support to Consolidated Research Groups*
Role: Co-Principal Investigator (Coordinator: J.X. Comella, VHIR, Spain)
Agency: Agència de Gestió d'Ajuts Universitaris i de la Recerca (AGAUR, Spain)
Grant Period: 2014-16; Total funding: 30,000 €;

15. *Regenerating dopaminergic neurons in Parkinson's disease via cell-fusion-mediated reprogramming*
Role: Co-Principal Investigator (Coordinator: Pia Cosma, CRG, Barcelona)
Agency: Marató de TV3 Foundation (Spain)
Grant Period: 2013-15; Total funding: 300,000 € (Vila group: 150,000 €)

16. *Mitochondrial dynamics and mitophagy as therapeutic targets in Parkinson's disease and Hungtington's disease*
Role: Co-Principal Investigator (Coordinator: E. Soriano, University of Barcelona, Spain)
Agency: Collaborative projects, Center for Networked Biomedical Research on Neurodegenerative Diseases (CIBERNED, Spain)
Grant Period: 2013-15; Total funding: 280,000 € (Vila group: 56,000 €)

17. *Initiation, progression and extension of Parkinson's disease: role of neuromelanin, α- synuclein and Lewy bodies*
Role: Principal Investigator
Agency: Instituto de Salud Carlos III (Spain National Institute of Health)
Grant Period: 2011-13; Total funding: 198,000 €

18. *Generation of induced pluripotent stem cells (iPSC)-derived DA neurons from patients with familial and sporadic PD*
Role: Co-Principal Investigator (Coordinator: Eduardo Tolosa, Hospital Clínic, Barcelona)
Agency: Spanish Network of Excellence in Neurodegeneratives Diseases (CIBERNED, Spain)
Grant Period: 2010-13; Total funding: 350,000 € (Vila group: 70,000 €)

19. *Mechanisms of propagation and progression of Parkinson's disease: role of Lewy bodies*
Role: Principal Investigator
Agency: Explora Program-Spanish Ministry of Science and Innovation (MICINN, Spain)
Grant Period: 2010-11; Total funding: 35,000 €

20. *Support to Emerging Research Groups*
Role: Principal Investigator
Agency: Agència de Gestió d'Ajuts Universitaris i de la Recerca (AGAUR, Autonomous Government of Catalonia, Spain)
Grant Period: 2009-13; Total funding: 42,640 €

21. *Mechanisms and significance of Lewy body formation in Parkinson's disease*
Role: Principal Investigator
Agency: Instituto de Salud Carlos III (Spain National Institute of Health)
Grant Period: 2007-10; Total funding: 217,679 €

22. *Role of mitochondrial dysfunction in Parkinson's disease neurodegeneration*
Role: Principal Investigator
Agency: la Caixa Foundation (Spain)
Grant Period: 2006-09; Total funding: 90,000 €

Contracts with Industry

1. *Restoration of GBA activity with small-molecular chaperons in a Parkinson/Gaucher disease neuronal in vitro model*
Company: Gain Therapeutics (Spain)
Period: 2018; Total funding: 35,547.13 €

2. *Neuroprotective potential of novel autophagy-inducing molecules in experimental models of Parkinson's disease*
Company: Prous Institute for Biomedical Research (Spain)
Period: 2015-2017; Total funding: 26.444 €

3. *Assessment of autophagy-inducing properties of novel pharmacological compounds*
Company: Prous Institute for Biomedical Research (Spain)
Period: 2015-2017; Total funding: 14.641 €

4. *Innovative solutions to accelerate the identification and development of new drugs for the treatment of diseases of the nervous system*
Company: nLife Therapeutics (Spain); Programa de Consorcios Estratégicos Nacionales en Investigación Técnica (CENIT)
Period: 2010-2013; Total funding: 364,665 € (Vila group: 213,965 €)

5. *Suppression of alpha-synuclein expression and PDE10 as a new therapeutic strategy to Parkinson disease and improvement of cognitive dysfunctions*
Company: nLife Therapeutics (Spain); INNPACTO program, European Regional Development Fund (EU)
Period: 2013-2015; Total funding: 737,875 € (Vila group: 35.000 €)

Patents

1. *Compositions and methods for selective delivery of oligonucleotide molecules to specific neuron types*
Inventors/authors: Andrés Pablo MONTEFELTRO; Gabriel ALVARADO URBINA; Analia BORTOLOZZI BIASSONI; Francesc ARTIGAS PÉREZ; Miquel VILA BOVER
Number: P20110101361, 2011244321, BR1120120264710, 9471/DELNP/2012, MX/a/2012/012214, 13/066,590
Regions: Argentina/Australia/Brasil/India/México/Estados Unidos de América

2. *Compositions and methods for the treatment of parkinson disease by the selective delivery of oligonucleotide molecules to specific neuron types*

Inventors/authors: Andrés Pablo MONTEFELTRO; Gabriel ALVARADO URBINA; Analia BORTOLOZZI BIASSONI; Miquel VILA BOVER; Maria del Carmen CARMONA OROZCO
Number: EP12382414.6
Regions: European Union

3. *Humanized neuromelanin-containing rodent*
Inventors/authors: Miquel VILA BOVER, Iria CARBALLO CARBAJAL, Ariadna LAGUNA TUSET, Jordi BOVÉ BADELL, Thais CUADROS ARASA
Number: PCT/EP2015/073909/EP14189038.4
Regions: European Union/International

Publications

A. Original Research Articles:

1. Compte J, Tible M, Cuadros T, Nicolau A, Romero-Gimenez J, Laguna A, Aubry JF, Dumont E, Constans C, Tiennot T, Santin MD, Lehericy S, Vila M. Non-ablative Disease-modifying Effects of MRI-guided Focused Ultrasound in Neuromelanin-producing Parkinsonian Rodents (bioRxiv, 2023)

2. Laguna A, Peñuelas N, Gonzalez-Sepulveda M, Nicolau A, Arthaud S, Guillard-Sirieix C, Lorente-Picón M, Compte J, Miquel-Rio L, Xicoy H, Liu J, Parent A, Cuadros T, Romero-Giménez J, Pujol G, Giménez-Llort L, Fort P, Bortolozzi A, Carballo-Carbajal I, Vila M. Modelling human brain-wide pigmentation in rodents recapitulates age-related multisystem neurodegenerative deficits (bioRxiv, 2023)

3. Chocarro J, Rico AJ, Ariznabarreta G, Roda E, Honrubia A, Collantes M, Peñuelas I, Vázquez A, Rodríguez-Pérez AI, Labandeira-García JL, Vila M, Lanciego JL. Neuromelanin accumulation drives endogenous synucleinopathy in non-human primates. **Brain** (2023) 146(12): 5000-5014

4. Teil M, Dovero S, Bourdenx M, Arotcarena ML, Darricau M, Porras G, Thiolat ML, Trigo-Damas I, Perier C, Estrada C, Garcia-Carrillo N, Herrero MT, Vila M, Obeso JA, Bezard E, Dehay B. Cortical Lewy body injections induce long-distance pathogenic alterations in the non-human primate brain. **NPJ Parkinson's Disease** (2023) 9(1):135

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B. Review articles

1. de Fàbregues O, Sellés M, Ramos-Vicente D, Roch G, Vila M, Bové J. Relevance of tissue-resident memory CD8 T cells in the onset of Parkinson's disease and examination of its possible etiologies: infectious or autoimmune? **Neurobiology of disease** (2023) 187:106308

2. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition) **Autophagy** (2022) 17(1):1-382

3. Tolosa E, Vila M, Klein C, Rascol O. LRRK2 in Parkinson disease: challenges of clinical trials. **Nature Reviews Neurology** (2020) 16(2):97-107

4. Vila M. Neuromelanin, aging and neuronal vulnerability in Parkinson's disease. **Movement Disorders** (2019) 34(10): 1440-1451

5. Vila M, Laguna A, Carballo-Carbajal I. Intracellular crowding by age-dependent neuromelanin accumulation disrupts neuronal proteostasis and triggers Parkinson disease pathology. **Autophagy** (2019) 15(11):2028-2030

6. Blesa J, Vila M, Obeso JA. Parkinson disease, substantia nigra vulnerability and calbindin expression: enlightening the darkness? **Movement Disorders** (2019) 34(2):161-163

7. Franco-Iborra S, Vila M*, Perier C*. Mitochondrial Quality Control in Neurodegenerative Diseases: Focus on Parkinson's disease and Huntington's disease. **Frontiers in Neuroscience** (2018) 12:342 (**co-corresponding Authors*)

8. Dehay B, Vila M, Bezard E, Brundin P, Kordower JH. Alpha-synuclein propagation: New insights from animal models. **Movement Disorders** (2016) 31(2):161-8

9. Franco-Iborra S, Vila M, Perier C. The Parkinson disease mitochondrial hypothesis: where are we at? **Neuroscientist** (2016) 22(3):266-77

10. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). **Autophagy** (2016) 12(1):1-222

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15. Perier C, Vila M. Mitochondrial biology and Parkinson's disease. **Cold Spring Harbor Perspectives in Medicine** (2012) 2(2):a009332

16. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy. **Autophagy** (2012) 8(4):445-544

17. Dehay B, Martinez-Vicente M, Ramirez A, Perier C, Klein C, Vila M, Bezard E. Lysosomal dysfunction in Parkinson disease: ATP13A2 gets into the groove. **Autophagy** (2012) 8(9):1389-91

18. Vila M. Oligomeric α-synuclein is toxic in vivo. **Movement Disorders** (2011) 26(9):1616

19. Vila M, Bové J, Dehay B, Rodríguez-Muela N, Boya P. Lysosomal membrane permeabilization in Parkinson's Disease. **Autophagy** (2011) 7(1):98-100 [Highlighted as the Journal cover]

20. Bové J, Martínez-Vicente M, Vila M. Fighting neurodegeneration with rapamycin: mechanistic insights. **Nature Reviews Neuroscience** (2011) 12(8):437-52

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25. Vila M. Neurodegeneration: what does it mean? (Editorial) **Neurología** (2004) 19(3):89-91

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33. Przedborski S, Vila M, Jackson-Lewis V. Neurodegeneration: what is it and where are we? **Journal of Clinical Investigation** (2003) 111(1):3-10

34. Przedborski S, Jackson-Lewis V, Vila M, Wu DC, Teismann P, Tieu K, Choi DG, Cohen O. Free radicals and nitric oxide toxicity in Parkinson's disease. **Advances in Neurology** (2003) 91:83-94

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40. Przedborski S, Vila M. The last decade in Parkinson's disease research: basic sciences. **Advances in Neurology** (2001) 86:177-186

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Invited Talks/Seminars

A. International

1. "Neuronal vulnerability in Parkinon's disease", Biophysical Seminars Series, Yusuf Hamied Department of Chemistry, University of Cambridge, U.K. (2024)
2. "Neuromelanin, aging and neuronal vulnerability in Parkinson's disease", Neuroscience seminar series, University of Helsinki, Finland (2023)
3. "Neuronal vulnerability in Parkinson's disease: Beyond alpha-synuclein", International Congress on Neurodegenerative Diseases, XVII CIBERNED Scientific Forum, Málaga (2023)
4. "Role of alpha-synuclein and Lewy bodies", 6th World Parkinson Congress, Barcelona, Spain (2023)
5. "Role of anti-synuclein therapies", 6th World Parkinson Congress, Barcelona, Spain (2023)
6. "Intrinsic Neuronal Vulnerability Drives Neurodegeneration in Parkinson's", International Parkinson and Movement Disorder Society (MDS)-European Section Course, Controversies in Parkinsons's Disease Research, Bordeaux, France (2023)
7. "Neuronal vulnerability in Parkinson's disease: beyond alpha-synuclein", Karolinska Institutet, Stockholm, Sweden (2023)
8. "Melanin in Parkinson's disease", Parkinson's Disease & Cancer/Melanoma Symposium: Investigating Links to Advance Therapies/Houston, Texas, USA (2023)
9. "Aging, neuromelanin and neuronal vulnerability in Parkinson's disease", Sci 2: Aging and Progression Working Group, Aligning Science Across Parkinson's (ASAP), Virtual (2022)
10. "Animal Models of Parkinson's Disease", International Parkinson and Movement Disorders Society (MDS)-Pan American Section (PAS) Course, Neuroscience of Parkinson's Disease and Movement Disorders, San Diego, USA (2022)
11. "Aging, neuromelanin and neuronal vulnerability in Parkinson's disease", GoPD Meeting, University Medical Center Goettingen, Germany (virtual, 2022)
12. "Characterization of a novel neuromelanin-producing transgenic mouse model Relevance to Parkinson's disease and brain aging", Michael J. Fox Foundation Parkinson's Disease Research Exchange (virtual, 2022)
13. "Activity and connectivity drive neuronal vulnerability and disease progression in Parkinson's disease", Midbrain dopaminergic neurons session, Aligning Science Across Parkinson's Collaborative Research Network (virtual, 2022)
14. "Animal Models for Parkinson's Disease", International Parkinson and Movement Disorders Society (MDS) Basic Science Special Interest Group Webinar Series (virtual, 2022)
15. "Molecular substrates of Parkinson's disease: beyond alpha-synuclein", Alector Seminar Series (virtual, 2021)
16. "Role of alpha-synuclein in Parkinson's disease", Webinars on Neuroprotection, Accure Therapeutics (virtual, 2021)
17. "The role of neuromelanin in locus coeruleus degeneration", Locus Coeruleus Imaging Meeting, Magdeburg, Germany (2019)

18. "Molecular substrate of premotor Parkinson disease", Parkinson's Progression Markers Initiative (PPMI), Barcelona, Spain (2019)
19. "Role of neuromelanin in Parkinson's disease", XIIIth IBAGS Meeting, Biarritz, France (2019)
20. "Role of neuromelanin in Parkinson's disease", VI International Congress on Research and Innovation in Neurodegenerative Diseases (CIIIEN) & 12th CIBERNED Scientific Forum, Santiago de Compostela, Spain (2018)
21. "Forthcoming disease-modifying drugs in idiopathic REM Sleep Behavior Disorder", SINBAR (Sleep Innsbruck Barcelona) Group Meeting, Barcelona, Spain (2018)
22. "Role of alpha-synuclein in Parkinson's disease", Congreso Internacional Médico-Quirúrgico (CIMQ) 2017: Mentes que cambian el mundo, Santiago de Compostela, Spain (2017)
23. "Does alpha-synuclein pathology spread in the brain?" 2nd FALAN Congress (Federation of Latin American and Caribbean Neuroscience Societies), Buenos Aires, Argentina (2016)
24. "Does alpha-synuclein pathology spread in the brain?" Oxford Parkinson's Disease Center (OPDC), Oxford University, Oxford, U.K. (2016)
25. "Molecular mechanisms of neurodegeneration in Parkinson's disease", Plymouth University Schools of Medicine and Dentistry, U.K. (2015)
26. "Role of mitochondria in Parkinson's disease", EMBO Workshop on Mitochondrial DNA and Neurodegeneration, Sitges, Spain (2015)
27. "Pathogenic lysosomal impairment in Parkinson's disease", Alpha-synuclein and the lysosomes in Parkinson's disease: a complicated relationship, Athens, Greece (2015)
28. "Alpha-synuclein spreading in in Parkinson's disease", Alpha-synuclein and the lysosomes in Parkinson's disease: a complicated relationship, Athens, Greece (2015)
29. "Use of human-derived protein as seeds", Parallel session "Models to study proteinopathies", 19th International Congress of Parkinson's disease and Movement Disorders, San Diego, USA (2015)
30. "Mitochondrial dysfcuntion and programmed cell death in Parkinson's disease", Atelier de recherche translationnelle en neurosciences, French Society of Neurosciences, Montpellier, France (2015)
31. "Do proteinopathies spread in the brain?", 18th International Congress of Parkinson's disease and movement disorders, Stockholm, Sweden (2014)
32. "Alpha-synuclein spreading in Parkinson's disease", Annual Meeting of the French Society of Neurology (President's Day), Paris, France (2014)
33. "Role of alpha-synuclein in Parkinson's disease", 2nd International Parkinson's disease Symposium (From Systems Neuroscience to Neurology: The Road Ahead), Munsbach, Luxembourg (2014)
34. "Averting an energy crisis: the vital role of mitochondria in Parkinson's disease", World Parkinson Congress (WPC) Scientific Update: Parkinson's Pipeline Umbrella (Webcast) (2014)
35. "Neuroprotection in Parkinson's disease", 11th International Summer School of Neuroscience, Innovation in CNS drug discovery: from small molecules to biologic therapies, University of Catania, Catania, Italy (2013)

36. "Role of mitochondria in Parkinson's disease", 47th Annual Scientific Meeting of the European Society for Clinical Investigation (ESCI), Albufeira, Portugal (2013)
37. "Latest advances in Neurology: neurodegenerative diseases", European Neurological Society-European Association of Young Neurologists and Trainees, Barcelona, Spain (2013)
38. "Mitochondrial defect in PD: myth or reality?", 3rd World Parkinson Congress, Montreal, Canada (2013)
39. "Molecular mechanisms of neurodegeneration in Parkinson's disease", CNC Seminar (Center for Neuroscience and Cell Biology, University of Coimbra), Coimbra, Portugal (2012)
40. "Molecular mechanisms of neurodegeneration in Parkinson's disease", Institut des Neurosciences de Bordeaux: monthly conferences, Bordeaux, France (2011)
41. "Alpha-synuclein and Parkinson's disease: lessons from toxin-based models", Satellite Meeting of the 23rd ISN Biennial Meeting: From genes to pathogenesis: The evolving spectrum of syncleinopathies, Naxos, Greece (2011)
42. "Pathogenic lysosomal depletion in Parkinson's disease", Gordon Research Conference on Lysosomal Diseases, Galveston, USA (2011)
43. "Mitochondria and neuronal death", 14th International Congress of Parkinson's disease and movement disorders, Buenos Aires, Argentina (2010)
44. "In vitro experimental models of Parkinson's disease", 3rd Scientific Conference on Neurological Restoration, La Habana, Cuba (2009)
45. "Role of mitochondrial dysfunction in Parkinson's disease", 3rd Scientific Conference on Neurological Restoration, La Habana, Cuba (2009)
46. "Mecanismos moleculares de la degeneración neuronal dopaminérgica", II Congreso Iberoamericano sobre Enfermedad de Parkinson, Cuzco, Perú (2009)
47. "Mechanisms of cell death in Parkinson's disease", IV International Symposium on Parkinson's disease and Movement Disorders, London, U.K. (2008)
48. "Broadening your research field: sell your research, disseminate and foster creative collaboration with other scientific fields", Euroscience Open Forum (ESOF), Marie Curie Conference, Barcelona, Spain (2008)
49. "Targeting programmed cell death in experimental Parkinson's disease", University of Aberdeen, Aberdeen, UK (2008)
50. "Targeting programmed cell death in experimental Parkinson's disease", LIMPE Seminars: Experimental models in Parkinson's disease, Sardinia, Italy (2007)
51. "Etiopathogenesis of nigral cell death in Parkinson's disease", First "Ramon y Cajal" French-Spanish Summer Course on Neurodegenerative Diseases, Paris, France (2007)
52. "Role of Bcl-2 protein familiy in Parkinson's disease", 1st World Parkinson Congress, Washington DC, USA (2006)
53. "Targeting Programmed Cell Death in Parkinson's Disease", Hôpital de la Salpêtrière, Paris, France (2006)
54. "Targeting programmed cell death in Parkinson's disease", Octavo Taller Argentino de Neurociencias, Córdoba, Argentina (2006)

55. "Mechanisms of programmed cell death in experimental parkinsonism", Neurology Grand Rounds, Columbia University, New York, USA (2004)

56. "Bax-dependent recruitment of the mitochondrial apoptotic pathway in the MPTP mouse model of Parkinson's Disease", Symposium "Parkinson's disease: the life cycle of the dopamine neuron", New York Academy of Science Conference, Princenton, USA (2002)

57. "The pro-apoptotic protein Bax induces dopaminergic neurodegeneration in the MPTP mouse model of Parkinson's disease", 30th Annual Meeting of the Society for Neuroscience, Symposium "Parkinson's disease: MPTP", New Orleans, USA (2000)

National

1. "Parkinson's disease and cardiovascular risk: a complex association", Cardiology Department, Vall d'Hebron University Hospital, Barcelona, Spain (2023)

2. "Role of alpha-synuclein in PD neurodegeneration. Is it the main actor?", LXXV Annual Meeting of the Spanish Society of Neurology (SEN), Valencia, Spain (2023)

3. "Pathogenic spreading of alpha-synuclein: new clues", VIII National Symposium on Parkinson's disease, Gran Canaria, Spain (2023)

4. "Neuronal vulnerability in Parkinson's disease: beyond alpha-synuclein", LXXIV Reunión Anual de la Sociedad Española de Neurología (SEN), Club Español de Neuropatología (2022)

5. "Aging, neuromelanin and neuronal vulnerability in Parkinson's disease", IDIBELL Seminars, Barcelona, Spain (2022)

6. "Modulation of age-dependent neuromelanin accumulation as a novel therapeutic strategy for Parkinson's disease and brain aging", 1st CaixaResearch Health Meeting, Cap Roig, Spain (2022)

7. "Brain tyrosinase overexpression implicates age-dependent neuromelanin production Parkinson's disease pathogenesis", 14th Scientific Day Vall d'Hebron, Barcelona, Spain (2020)

8. "Role of neuromelanin in Parkinson's disease", Stem Cell and Neurodegeneration Retreat, Barcelona, Spain (2019)

9. "Albinism and Parkinson's disease", XIII ALBA Conference on albinism, Spanish Albinism Association, Sevilla, Spain (2019)

10. "Parkinson's: new therapeutic approaches", Esteve Pharmaceuticals S.A., Barcelona, Spain (2019)

11. "Neuromelanin, aging and neuronal vulnerability in Parkinson's disease", Achucarro-Basque Center for Neuroscience, Bilbao, Spain (2018)

12. "Neuromelanin, aging and neuronal vulnerability in Parkinson's disease", Reunión Grupo de Estudio de Trastornos del Movimiento Asociación Madrileña de Neurología-Clínica Universidad de Navarra, Madrid, Spain (2018)

13. "Role of neuromelanin in Parkinson's disease", Neurometab-CM (Comunidad de Madrid)-Advances in the Knowledge of Neurodegenerative Diseases, Madrid, Spain (2018)

14. "Alpha-synuclein, neuromelanin and neurodegeneration in Parkinson's disease, XVII Ciclo de Seminarios, Instituto de Biomedicina de Sevilla (IBiS)/Hospital Universitario Virgen del Rocío (HUVR), Sevilla, Spain (2018)

15. "Alpha-synuclein, neuromelanin and neurodegeneration in Parkinson's disease", CNS Exeltis Day, Madrid, Spain (2018)
16. "New mechanisms of neurodegeneration in Parkinson's disease", 3rd Scientific Retreat, Vall d'Hebron Research Institute, Seva (Barcelona), Spain (2017)
17. "Lysosomal dysfunction and Parkinson's disease", XII Congreso Nacional de Errores Congénitos del Metabolismo, Las Palmas de Gran Canaria, Spain (2017)
18. "Mechanisms of neurodegeneration in Parkinson's disease: 200 years later", CINAC (Centro Integral de Neurociencias AC), Hospital Universitario HM Puerta del Sur, Madrid, Spain (2017)
19. "New models of neurodegeneration in Parkinson's disease", Sinaptica-Neurology Management Meeting, Barcelona, Spain (2017)
20. "Regenerating dopaminergic neurons in Parkinson's disease via cell fusion-mediated reprogramming", 18th Symposium Fundació La Marató de TV3, Barcelona, Spain (2017)
21. "Role of Neuromelanin in Parkinson's disease", XII Neurofarmacología y terapéutica en trastornos del movimiento, Madrid, Spain (2017)
22. "Mechanisms of neurodegeneration in Parkinson's disease", Universidad de Castilla-La Mancha Medical School (UCLM), Ciudad Real, Spain (2017)
23. "Role of neuromelanin in Parkinson's disease", VII Seminario Nacional de Enfermedad de Parkinson, Las Palmas de Gran Canaria, Spain (2017)
24. "Mechanisms of neurodegeneration in Parkinson's disease: 200 years later", IDIBAPS Winter Seminars, Barcelona, Spain (2017)
25. "Autoimmunity meets neurodegeneration: different pathways for similar brain dysfunctions", 74th ICREA Colloquium, Barcelona, Spain (2017)
26. "Role of neuromelanin in Parkinson's disease", Movement Disorders Unit-Hospital Clinic, Barcelona, Spain (2016)
27. "Role of alpha-synuclein in Parkinson disease", V Scientific Conferences-Institut de Neurociències, Universitat Autònoma de Barcelona, Barcelona, Spain (2016)
28. "Role of alpha-synuclein in Parkinson's disease", 9th Scientific Session of the Vall d'Hebron Research Institute, Barcelona, Spain (2015)
29. "Role of alpha-synuclein in Parkinson's disease", IBMB-IRB Seminars, Molecular Biology Institute of Barcelona-Institute for Research in Biomedicine, Barcelona, Spain (2015)
30. "Role of alpha-synuclein in Parkinson's disease", Department of Neurology, Hospital Clínic de Barcelona, Spain (2015)
31. "Molecular mechanisms of neurodegeneration in Parkinson's disease", Universidad de Castilla-La Mancha, Facultad de Medicina de Ciudad Real, Spain (2015)
32. "Role of alpha-synuclein in Parkinson's disease", Neuropharmacology and Therapeutics of Movement Disorders, Madrid, Spain (2015)
33. "Temas candentes en Enfermedad de Parkinson y trastornos del movimiento", Mesa de discusión, IV Encuentro Científico Forum UCB, Madrid, Spain (2014)

34. "Conferència Ramon y Cajal: Mecanismes moleculars de neurodegeneració en la malaltia de Parkinson", XVII Reunió Anual de la Societat Catalana de Neurologia, Sitges, Spain (2013)
35. "Disfunción mitocondrial en la Enfermedad de Parkinson", Avances en el conocimiento de la Enfermedad de Parkinson, Universidad del País Vasco, San Sebastian, Spain (2013)
36. "Molecular mechanisms of neuronal death in animal models of Parkinson's disease", 15º Congreso de la Sociedad Española de Neurociencia (SENC), Oviedo, Spain (2013)
37. "Lewy Body-enriched Nigral Fractions from Patients with Parkinsons Disease Initiate alpha-synuclein dependent Neurodegeneration in Mice and Monkeys", 7º Foro Científico CIBERNED, Madrid, Spain (2013)
38. "Molecular mechanisms of dopaminergic cell death in Parkinson's disease", XV Congress of the Spanish Society for Cell Biology (SEBC), Madrid, Spain (2013)
39. "Molecular mechanisms of neurodegeneration in Parkinson's disease", Monthly Neuroscience Seminars-Vall d'Hebron Hospital, Barcelona, Spain (2011)
40. "Mecanismos moleculares de muerte neuronal en la Enfermedad de Parkinson", IV Foro Anual CIBERNED, Santander, Spain (2010)
41. "Mitochondrial alterations in Parkinson's disease as as potential therapeutic target", XV Meeting of the Spanish Basal Ganglia Club, LXII Annual Meeting of the Spanish Society of Neurology, Barcelona, Spain (2010)
42. "Formacion de Cuerpos de Lewy y su significado en la muerte neuronal y progresión de la enfermedad de Parkinson", III Simposio sobre deterioro cognitivo en la enfermedad de Parkinson, Pamplona, Spain (2010)
43. "Role of alpha-synuclein in the pathogenesis of Parkinson's disease", II Tutorial del Banco de Tejidos Neurologicos: Sinucleionopatias. Aspectos clinicos y neurobiologicos. University of Barcelona, Spain (2009)
44. "In vitro and invertebrate experimental models of Parkinson's disease", Workshop CIBERNED: Modelos experimentales y desarrollo de nuevas terapias para la enfermedad de Parkinson. Santa Cruz de Tenerife, Spain (2009)
45. "Anti-apoptotic therapies for Parkinson's disease", Workshop CIBERNED: Modelos experimentales y desarrollo de nuevas terapias para la enfermedad de Parkinson. Santa Cruz de Tenerife, Spain (2009)
46. "Molecular mechanisms of neurodegeneration in Parkinson's disease", CIMA-Universidad de Navarra, Pamplona, Spain (2009)
47. "Formas de muerte neuronal", Enfermedades neurodegenerativas: aspectos neurocientíficos y sociales/Reto biomédico del siglo XXI, Universidad Internacional Menéndez Pelayo (UIMP), Santander, Spain (2009)
48. "Mecanismos de muerte celular en la enfermedad de Parkinson", XIX Curso avanzado sobre receptores para neurotransmisores, Palma de Mallorca, Spain (2009)
49. "Conferencia Plenaria "Dr. Santiago Ramón y Cajal Neurodegeneración Dopaminérgica en la Enfermedad de Parkinson, ¿es posible detenerla?", LXI Reunión Anual de la Sociedad Española de Neurología, Barcelona, Spain (2009)

50. "Mecanismos de neurodegeneración en la Enfermedad de Parkinson", III Reunión latinoamericana de enfermedades del sistema nervioso y mentales. Avances científicos y terapeúticos y repercusión social, Universidad Internacional del Mar, Universidad de Murcia, Murcia, Spain (2008)
51. "Pathogenesis of Parkinson's disease", Hospital Clínic-IDIBAPS, Barcelona, Spain (2008)
52. "Apoptosis in neurodegeneration", Tendencias en Neurociencias, Universidad del Pais Vasco, Bilbao, Spain (2008)
53. "Molecular pathways of apoptosis in experimental parkinsonism", 1er Foro CIBERNED, Barcelona, Spain (2007)
54. "Apoptosis and Neurodegeneration in Parkinson's disease", Hospital Universitari Arnau de Vilanova, Lleida, Spain (2007)
55. "Apoptosis in Parkinson's disease", Facultat de Medicina, Campus de Bellvitge, Universitat de Barcelona, Barcelona, Spain (2007)
56. "Molecular mechanisms of neurodegeneration in Parkinson's disease", Universitat de Vic, Barcelona, Spain (2007)
57. "Mecanismes moleculars de neurodegeneracio en la malaltia de Parkinson experimental", Seminaris de l'Institut de Recerca-Hospital Universitari Vall d'Hebron, Barcelona, Spain (2006)
58. "Mecanismes moleculars de Neurodegeneracio en la Malaltia de Parkinson", Institut de Recerca Oncologica-Hospital Duran i Reynals, Barcelona, Spain (2006)
59. "Mecanismes moleculars de neurodegeneracio en models experimentals de malaltia de Parkinson", Centre de Biotecnologia i Terapia Genica (CBATEG), Universitat Autonoma de Barcelona, Barcelona, Spain (2006)
60. "Mecanismes moleculars de mort neuronal en la malaltia de Parkinson experimental", Institut de Biomedicina de València-CSIC, Valencia, Spain (2006)
61. "Experimental models of Parkinson's disease", Trastornos neurodegenerativos asociados al parkinsonismo: perspectiva clínica, social y científica, Universidad Internacional Menendez Pelayo (UIMP), Valencia, Spain (2006)
62. "Targeting Programmed Cell Death in Experimental Parkinson's Disease", Symposium Experimental Neurobiology of the Catalan Society for Biology, Barcelona, Spain (2005)
63. "Marie Curie Actions to create and consolidate new research Teams", Symposium Marie Curie Actions, Health Department of the Autonomous Government of Catalonia, Barcelona, Spain (2005)
64. "Anti-apoptotic strategies in experimental models of Parkinson's Disease", II Forum on Parkinson's disease, Symposium "Symptomatic vs curative treatments in Parkinson's disease: bounds and perspectives", Lanzarote, Spain (2002)
65. "Alpha-Synuclein and animal models of Parkinson's disease", Symposium "Neurodegenerative disorders associated to alpha-synuclein pathology", University of Barcelona Medical School, Barcelona, Spain (2001)
66. "Mechanisms of neurodegeneration in Parkinson's disease", Symposium "Neuroimaging and Neurodegeneration", University of Navarra, Pamplona, Spain (2000)

67. "Apoptosis and Neurodegeneration", LI Annual Meeting of the Spanish Society of Neurology, Symposium "Neuronal death in Parkinson's disease: mechanisms and therapetics", Barcelona, Spain (1999)

Invited Chair

1. Session: Dopamine neuron vulnerability, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, London (2023)
2. Session: Non-dopaminergic players in the progression and pathophysiology of PD, 6th World Parkinson Congress, Barcelona, Spain (2023)
3. Session: Day wrap-up panel, 6th World Parkinson Congress, Barcelona, Spain (2023)
4. Session: Role of neuromelanin in Parkinson's disease, World Parkinson Congress Research Spotlight (Virtual, 2021)
5. Session: The role of aging in Parkinson's disease, World Parkinson Congress 2019, Kyoto, Japan (2019)
6. Session: Promises of Induced Pluripotent Stem Cells: From Modeling to Therapy, 21st International Congress of Parkinson's Disease and Movement Disorders, Vancouver, Canada (2017)
7. Session: Alpha-synuclein physiology and pathogenesis, Barcelona Parkinson Conference: Alpha-synuclein and Parkinson's disease, lessons from the last 20 years, Barcelona, Spain (2017)
8. Discussion panel: EATRIS Neurodegenerative Diseases Working Group, Translational Medicine 2017, Prague, Czech Republic (2017)
9. Session: Oral communications on Neurodegenerative Disorders-I, X Simposi de Neurobiologia-Societat Catalana de Biologia, Barcelona, Spain (2016)
10. Session: Role of mitophagy in movement disorders, 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany (2016)
11. 2nd year reports from PhD students: Translational research in neurological disease, 5th INc Scientific Conferences, Institut de Neurociències-Universitat Autònoma de Barcelona, Barcelona, Spain (2016)
12. Session: Models to Study Proteinopathies, 19th International Congress of Parkinson's disease and Movement Disorders, San Diego, USA (2015)
13. Discussion panel: Temas candentes en Enfermedad de Parkinson y trastornos del movimiento, IV Encuentro Científico Forum UCB, Madrid, Spain (2014)
14. Session: Preclinical models of PD, New Therapeutic Avenues in Parkinson's disease and Related Disorders; Bordeaux, France (2013)
15. Tour Leader for the Guided Poster Tour on Basic Science, 13th International Congress of Parkinson's disease and Movement disorders - Movement Disorders Society, Paris, France (2009)

Abstracts/posters

1. Functional changes of nigral dopamine neurons in a neuromelanin-producing rat model of Parkinson's disease, Society for Neuroscience 2023, Washignton D.C., USA, 2023
2. Dynamics of pathogenic alterations after injection of patient-derived α-synuclein extracts in non-human primates, Society for Neuroscience 2023, Washignton D.C., USA, 2023
3. Behavioral and mitochondrial characterization of a rat model thatoverexpresses human tyrosinase in substantia nigra , Society for Neuroscience 2023, Washignton D.C., USA, 2023
4. Blaming Neuromelanin for Parkinson's Disease: Time-dependent Tyrosinase Overexpression Drives Endogenous Synucleinopathy in Nonhuman Primates, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, London, 2023
5. MRI-Guided Transcranial Focused Ultrasound Reduce Neuromelanin Levels and Attenuates Parkinson-like Features in Neuromelanin-Producing Parkinsonian Rats, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, London (2023)
6. Male Sex Bias in Parkinson's Disease Is Linked to an Accelerated Age-Dependent Neuromelanin Accumulation, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, London (2023)
7. Crosstalk Between Alpha-Synuclein and Neuromelanin Exacerbates Parkinson's Disease Pathology in Melanized Tyrosinase-Expressing Rodents, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, San Diego, 2023
8. Non-cell Autonomous Effects of Neuromelanin on Parkinson's Disease Pathogenesis, Aligning Science Across Parkinson's (ASAP) Collaborative Meeting, San Diego, 2023
9. Modelling human brain-wide pigmentation induces Parkinson-like pathology and transcriptomic alterations in vivo, 6th World Parkinson Congress, Barcelona, 2023
10. Modulation of the gut microbiota modifies Parkinson's disease-like pathology in transgenic neuromelanin-producing mice, 6th World Parkinson Congress, Barcelona, 2023
11. Parkinson Disease in women: How does sex affect motor and non-motor symptoms? 6th World Parkinson Congress, Barcelona, 2023
12. Non-cell autonomous effects of neuromelanin on Parkinson's disease pathogenesis, 6th World Parkinson Congress, Barcelona, 2023
13. Aged periventricular microglia contribute to CSF-borne aggregated αSyn spreading, 6th World Parkinson Congress, Barcelona, 2023
14. Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation, 6th World Parkinson Congress, Barcelona, 2023
15. Crosstalk between alpha-synuclein and neuromelanin exacerbates Parkinson's disease pathology in melanized tyrosinaseexpressing rodents, 6th World Parkinson Congress, Barcelona, 2023
16. Reduction of age-dependent neuromelanin accumulation by cerium oxide as a potential therapy for Parkinson's disease, 6th World Parkinson Congress, Barcelona, 2023
17. Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation, 16a Jornada Científica de Vall d'Hebron, Barcelona, Spain, 2022

18. The gut-brain axis in a novel humanized transgenic mouse model for Parkinson's disease and brain aging, 16a Jornada Científica de Vall d'Hebron, Barcelona, Spain, 2022
19. Crosstalk between alpha-synuclein and neuromelanin exacerbates Parkinson's disease pathology in melanized tyrosinase-expressing rodents, 16a Jornada Científica de Vall d'Hebron, Barcelona, Spain, 2022
20. Quantitative multiparametric neuromelanin-MRI for imaging of Parkinson's disease pathogenesis in the AAV-hTyr rat model, NeurATRIS Translational Neuroscience Day, Paris, France, 2022
21. Transcriptomic changes linked to age-dependent neuromelanin accumulation in transgenic neuromelanin-producing parkinsonian mice, 51st Annual Meeting of the Society for Neuroscience, San Diego, USA, 2022
22. Brain-wide age-dependent neuromelanin accumulation in tyrosinase-expressing transgenic mice recapitulates multisystem motor and non-motor features of Parkinson's disease, 51st Annual Meeting of the Society for Neuroscience, San Diego, USA, 2022
23. Blaming neuromelanin for Parkinson's disease: time-dependent tyrosinase overexpression drives endogenous synucleinopathy in nonhuman primates, 51st Annual Meeting of the Society for Neuroscience, San Diego, USA, 2022
24. Multisystem Parkinson-like features by modelling brain pigmentation in vivo, 2nd ASAP Celebration of Scientific Achievement (COSA), virtual, 2022
25. In vivo reduction of age-dependent neuromelanin accumulation mitigates features of Parkinson's disease, 2nd ASAP Celebration of Scientific Achievement (COSA), virtual, 2022
26. Transcranial focused ultrasounds reduce neuromelanin levels and attenuates Parkinson-like pathology in neuromelanin-producing parkinsonian rats, 2nd ASAP Celebration of Scientific Achievement (COSA), virtual, 2022
27. The gut-brain axis in a novel humanized transgenic mouse model for Parkinson's disease and brain aging, 2nd ASAP Celebration of Scientific Achievement (COSA), virtual, 2022
28. Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation, IX INc-UAB Scientific Conferences, St Feliu de Guíxols, Spain, 2022
29. Crosstalk between alpha-synuclein and neuromelanin exacerbates Parkinson's disease pathology in melanized tyrosinase-expressing rodents, IX INc-UAB Scientific Conferences, St Feliu de Guíxols, Spain, 2022
30. The gut-brain axis in a novel humanized transgenic mouse model for Parkinson's disease and brain aging, IX INc-UAB Scientific Conferences, St Feliu de Guíxols, Spain, 2022
31. Blaming neuromelanin for Parkinson's disease: time-dependent tyrosinase overexpression drives endogenous synucleinopathy in nonhuman primates, International Congress of Parkinson's disease and Movement Disorders, Madrid, Spain, 2022
32. Evolution of the sleep-waking cycle in transgenic mice with an age-dependent accumulation of neuromelanin in catecholaminergic neurons, a new humanized model of Parkinson's Disease, FENS Forum, Paris, France, 2022
33. Blaming neuromelanin for Parkinson's disease: time-dependent tyrosinase overexpression drives endogenous synucleinopathy in nonhuman primates, FENS Forum, Paris, France, 2022

34. In vivo reduction of age-dependent neuromelanin accumulation mitigates features of Parkinson's disease, XII Simposi de Neurobiologia, Societat Catalana de Biologia, Barcelona, Spain, 2022
35. Crosstalk between alpha-synuclein and neuromelanin exacerbates Parkinson's disease pathology in melanized tyrosinase-expressing rodents, XII Simposi de Neurobiologia, Societat Catalana de Biologia, Barcelona, Spain, 2022
36. The gut-brain axis in a novel humanized transgenic mouse model for Parkinson´s disease and brain aging, XII Simposi de Neurobiologia, Societat Catalana de Biologia, Barcelona, Spain, 2022
37. Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation, XII Simposi de Neurobiologia, Societat Catalana de Biologia, Barcelona, Spain, 2022
38. The gut-brain axis in a novel humanized transgenic mouse model for Parkinson's disease and brain aging, 16th International Conference on Alzheimer's and Parkinson's Disease (AD/PD), Barcelona, Spain, 2022
39. Gene therapy with VMAT2 reduces age-dependent neuromelanin accumulation and prevents Parkinson's disease-like motor symptoms in neuromelanin-producing rats, Annual Meeting of the Society for Neuroscience, virtual, 2021
40. Male sex bias in Parkinson's disease is linked to an accelerated age-dependent neuromelanin accumulation, 19th Meeting Sociedad Española de Neurociencia (SENC), Lleida, Spain, 2021
41. Age-dependent multisystem parkinsonian features in a novel neuromelanin-producing transgenic mouse model, 19th Meeting Sociedad Española de Neurociencia (SENC), Lleida, Spain, 2021
42. Alpha-synuclein interacts with neuromelanin to enhance Lewy body formation and neurodegeneration in neuromelanin-producing parkinsonian rodents, 19th Meeting Sociedad Española de Neurociencia (SENC), Lleida, Spain, 2021
43. The Gut-Brain Axis in a novel humanized transgenic mouse model for Parkinson´s disease and brain aging, 19th Meeting Sociedad Española de Neurociencia (SENC), Lleida, Spain, 2021
44. Gene therapy with VMAT2 reduces age-dependent neuromelanin accumulation and prevents Parkinson's disease phenotype in neuromelanin-producing rats, 19th Meeting Sociedad Española de Neurociencia (SENC), Lleida, Spain, 2021
45. VMAT2 overexpression reduces intracellular neuromelanin levels and attenuates Parkinson-like pathology in neuromelanin-producing parkinsonian rats, International Congress of Parkinson's Disease and Movement Disorders (MDS) Virtual Congress, 2021
46. Age-dependent multisystem parkinsonian features in a novel neuromelanin-producing transgenic mouse model, International Congress of Parkinson's Disease and Movement Disorders (MDS) Virtual Congress, 2021
47. VMAT2 overexpression reduces intracellular neuromelanin levels and attenuates Parkinson-like pathology in neuromelanin-producing parkinsonian rats, 15th International Conference on Alzheimer's and Parkinson's Diseases-AD/PD (virtual), 2021
48. Age-dependent motor and non-motor parkinsonian features in a novel neuromelanin-producing transgenic mouse model of Parkinson's disease and brain aging, 15th International Conference on Alzheimer's and Parkinson's Diseases-AD/PD (virtual), 2021

49. VMAT2 overexpression reduces intracellular neuromelanin levels and attenuates Parkinson-like pathology in neuromelanin-producing parkinsonian rats, The Brain Conference (virtual), 2021
50. Age-dependent motor and non-motor parkinsonian features in a novel neuromelanin-producing transgenic mouse model of Parkinson's disease and brain aging, The Brain Conference (virtual)
51. GCI-induced neurodegeneration and synucleinopathy in non-human primates, 49th Annual Meeting of the Society for Neuroscience, Chicago, USA, 2019
52. Age-dependent neuromelanin accumulation in a novel humanized transgenic mouse model for Parkinson's disease and brain aging, 49th Annual Meeting of the Society for Neuroscience, Chicago, USA, 2019
53. Profiling of lipoproteins and associated lipids in serum samples from Idiopathic REM Sleep Behavior Disorder patients to identify biomarkers for Parkinson's disease, International Congress of Parkinson's Disease and Movement Disorders, Nice, France, 2019
54. Prion-like actions of intraventricular Lewy bodies in the subependymal zone can be prevented by microglia cells, Synuclein Meeting, Porto, Portugal, 2019
55. Age-dependent intracellular neuromelanin accumulation sets the threshold for Parkinson's disease pathology, 5th World Parkinson Congress, Kyoto, Japan, 2019
56. Machine learning reveals different pathological signatures induced by distinct patient-derived alpha-synuclein pathogenic structures in monkeys, 5th World Parkinson Congress, Kyoto, Japan, 2019
57. Carballo-Carbajal I, Laguna A, Romero-Gimenez J, Bove J, Cuadros T, Martinez-Vicente M, Torra A, Parent A, Rodriguez-Galvan B,, Gonzalez-Selpulveda M, Peñuelas N, Ballabio A, Hasegawa T, Bortolozzi A, Gelpi E, Vila M. Role of neuromelanin in Parkinson's disease. XI Neurobiology Symposium of the Catalan Society of Biology, Barcelona, Spain, 2018.
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66. Rabaneda-Lombarte N, Serratosa J, Bové J, Vila M, Saura J, Solà C. Glial activation and its mechanisms of control in the MPTP mouse model of Parkinson's disease. XIII European Meeting on Glial Cells in Health and Disease, Edinburgh, Scotland, U.K., 2017.
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Reviewing Activities

A. Journals:

Ad-hoc reviewer for over 45 scientific journals, including Science, Nature Medicine, Nature Neuroscience, Proceedings of the National Academy of Sciences of the USA (PNAS), Science Translational Medicine, Neuron, Acta Neuropathologica, The Journal of Neuroscience, Annals of Neurology, Brain, Lancet Neurology, Movement Disorders, npj Parkinson's Disease, Nature Communications.

B. Grant agencies:

1. Government-based agencies:

***National*:** Fondo de Investigación Sanitaria-Instituto de Salud Carlos III, Junta de Andalucía, Junta de Castilla y León, Junta de Navarra, Junta de Extremadura, Comunitat Valenciana, Comunidad de Madrid, Ministerio de Educación y Ciencia/Ministerio de Ciencia e Innovación, Agencia Nacional de Evaluación y Prospectiva (ANEP), Banco Andaluz de Cerebros-Biobanco del Sistema Sanitario Público de Andalucía (SSPA, Spain), Gobierno Vasco Ayudas Proyecto de Investigación en Salud, Catalan Institution for Research and Advanced Studies (ICREA), Ikerbasque-Basque Foundation for Science

***International*:** National Institutes of Health (NIH)-"Cell death and injury in neurodegeneration" Study Section (USA), Marie Curie Initial Training Networks (European Commission), Marie Curie Industry Academia Partnerships (European Commission), HEALTH-2007-2.2.1-7: Restorative approaches for therapy of neurodegenerative diseases (European Commission), Innovative Medicines Initiativa (European Commission), CNRS (France), Research Promotion Foundation (Government of the Republic of Cyprus), French National

Research Agency (Agence Nationale de la Recherche, ANR, France), Netherlands Organisation for Scientific Research (NWO), Programa Nacional de Ciencia y Tecnología de la Salud (Colombia), Croatian Science Foundation (CSF), PTC Portugal, Marie Curie Individual Fellowships (European Commission), National Science Centre (Poland), Swiss National Science Foundation (Switzerland), Medical Research Council (U.K.), E-RARE Joint Transnational Call for Proposals, "Development of Innovative Therapeutic Approaches for Rare Diseases" (Austria, Belgium (Flanders), Canada, Quebec, France, Germany, Hungary, Israel, Italy, Latvia, Poland, Portugal, Romania, Spain, Switzerland, The Netherlands and Turkey), Institut National de la Santé et de la Recherche Médicale (INSERM, France), Agence d'évaluation de la recherche et de l'enseignement supérieur (AERES, France), Research Grants Programme-Luxembourg National Research Fund (FNR, Luxembourg), Agencia Nacional de Promoción Científica y Tecnológica (ANPCyT)-Fondo para la Investigación Científica y Tecnológica (FONCyT, Argentina), Einstein Foundation Berlin-BIH Visiting Fellow Programme (Germany), India Alliance (partnership between The Wellcome Trust, UK and the Government of India), Joint Research Projects of the Swiss National Science Foundation (SNSF)-National Scientific and Technical Research Council (CONICET) and the Ministry of Science, Technology and Productive Innovation (MINCyT) in Argentina (Switzerland-Argentina), Austrian Science Fund (FWF), ATIP–Avenir Program, INSERM (France), Deutsche Forschungsgemeinschaft (DFG,German Research Foundation), Czech Science Foundation, SNSF Swiss Postdoctoral Fellowships:

2. Private Foundations/Universities: Michael J. Fox Foundation (USA), Parkinson's Disease Foundation (USA), Federation pour la Recherche sur le Cerveau (FRC, France), Technology Foundation STW (The Netherlands), The Scottish Hospital Endowments Research Trust (UK), United States-Israel Binational Science Foundation (USA-Israel), Neurological Foundation of New Zealand (New Zealand), Italian Telethon Foundation (Italy), Parkinson's Disease Society (UK), Fundación Caja de Burgos (Spain), Fondo de Apoyo a la Investigación Clínica (Spain), Fundació La Caixa (Spain), NHS Grampian Endowment Grants (UK), University of Aberdeen (UK), McGill University (Canada), Columbia University (USA), Universidad Complutense de Madrid (Spain), IdEx Bordeaux International Post-doctoral program (University of Bordeaux, France), Parkinson's UK, Cure Parkinson's (UK).