

# **CURRICULUM VITAE**

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<b>Name</b>	<b>Pierre J. MAGISTRETTI</b>
<b>Date of birth</b>	September 30, 1952
<b>Citizenship</b>	Swiss and Italian
<b>Marital status</b>	Married to Christine E. Naville Three children: Ambroise (1984), Bérénice (1987) and Henri (1990)
<b>Professional address</b>	<p>Department of Psychiatry University of Lausanne Medical School Lausanne, Switzerland</p> <p>Brain Mind Institute EPFL Lausanne, Switzerland</p> <p>Division Biological and Environmental Sciences and Engineering KAUST Thuwal, KSA</p>

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*On the Clarivate Analytics list of Highly Cited Scientists*  
*h-index : 104*  
*Citations 46'000 (8.2021)*

## **EDUCATION**

1982	<b>Doctor of Philosophy Degree in Biology</b> (Ph.D.), University of California at San Diego, (Advisors: Drs Floyd E. Bloom and Silvio Varon)
1979	<b>Doctorat en Médecine</b> (M.D.), University of Geneva

1977	<b>Diplôme Fédéral de Médecin</b> , University of Geneva <b>Educational Commission for Foreign Medical Graduates Examination</b>
1970	<b>Maturité Fédérale Type A</b> (Classical studies).

**MAIN POSITIONS HELD**

2018	<b>Professor Emeritus</b> , University of Lausanne
2017	<b>Professor Emeritus</b> , EPFL and University of Geneva
2012 -	<b>Distinguished Professor</b> , Division of Biological and Environmental Sciences and Engineering, KAUST, Thuwal
2005 - 2017	<b>Professor</b> , Brain Mind Institute, Swiss Federal Institute of Technology (EPFL)
2004 – 2017	<b>Professor</b> (2004 – 2017) and <b>Founding Director</b> (2004 – 2012), Center for Psychiatric Neuroscience, Department of Psychiatry, University of Lausanne Medical School and Hospitals (UNIL-CHUV)
2008 - 2012	<b>Director</b> , Brain Mind Institute, Federal Institute of Technology (EPFL), Lausanne (Joint appointment with UNIL-CHUV)
2005 - 2008	<b>Co-Director</b> , Brain Mind Institute, Federal Institute of Technology (EPFL), Lausanne (Joint appointment with UNIL-CHUV)
2001 - 2004	<b>Chairman</b> , Department of Physiology, University of Lausanne Medical School (Co-Chairman in 2004)
1988 - 2004	<b>Professor of Physiology</b> , University of Lausanne Medical School

**MAIN FUNCTIONS OCCUPIED**

2014 - 2019	<b>President</b> , International Brain Research Organization (IBRO)
2010 – 2012	<b>Secretary General</b> , International Brain Research Organization (IBRO)
2004 – 2012	<b>Member</b> , Conseil national de la recherche (Scientific Council) Swiss National Science Foundation
2007- 2012	<b>Chairman of the Scientific Advisory Board</b> of Centre d'Imagerie Biomédicale (CIBM), an Imaging Consortium of the Universities, University Hospitals of Lausanne and Geneva and of Ecole Polytechnique Fédérale de Lausanne
2003 - 2020	<b>Member</b> : Board of Trustees, Human Frontier Science Program

2002 – 2006	<b>Chairman of the Board of Directors</b> , CIBM
2002- 2004	<b>Editor</b> , Brain Research Reviews
2002 – 2004	<b>President</b> , Federation of European Neuroscience Societies (FENS)
2002 -	<b>Vice Chairman</b> , European Dana Alliance for the Brain (EDAB)
2001 – 2002	<b>Chairman</b> , Council of Scientists, Human Frontier Science Program
1997 – 1999	<b>President</b> , Swiss Society for Neuroscience
1993 – 2002	<b>Associate Editor</b> , Brain Research Reviews

#### MAIN HONORS AND AWARDS

2021	<b>Elected Foreign Member of Accademia Nazionale dei Lincei</b> , Founded 1630 (Highest Italian Academic Honor)
2015	<b>Co-recipient with Drs David Attwell (UCL) and Marcus Raichle (Washington University) of the 2016 IPSEN Foundation Prize (Topic for 2016 : Neuroenergetics)</b>
2014	<b>Honorary member of the Chinese Association for Physiological Sciences</b>
2011	<b>Elected Member of the American College of NeuroPsychopharmacology (ACNP)</b>
2011	<b>Camillo Golgi Medal Award, Golgi Fondation</b>
2009	<b>Goethe Award for Psychoanalytic Scholarship, Canadian Psychological Association</b>
2007	<b>International Chair Professor, Collège de France, Paris, 2007-2008</b>
2002	<b>Recipient of the Emil Kraepelin Guest Professorship, Max Planck Institute für Psychiatry, Münich</b>
2001	<b>Elected Member of the Swiss Academy of Medical Sciences, ad personam</b>
2001	<b>Elected Member of Academia Europaea</b>
1997	<b>Recipient of the Theodore-Ott Prize of the Swiss Academy of Medical Sciences</b>

**OTHER POSITIONS HELD**

- September 2002 – September 2017      **Professor** (as part of Universities of Geneva and Lausanne collaboration)  
Department of Psychiatry, University of Geneva Medical School
- May 2000 – August 2001      **Interim Chairman**, Department of Cell Biology and Morphology,  
University of Lausanne Medical School
- May 1996 - June 1998      **Chairman**, Department of Neuroscience,  
University of Lausanne
- January 1995 - 2005      **Head**, Neurological Research Laboratory,  
Departments of Neurology and Physiology
- October 1991 - October 1993      **Visiting Adjunct member**, The Scripps Research Foundation,  
Department of Neuropharmacology, La Jolla, California
- January 1987 - November 1988      **Recipient of a Career Development Award** from Fonds National Suisse de la Recherche Scientifique  
(Program START: Swiss Talents for Academic Research and Teaching)  
**Chargé de Recherche**, Department of Pharmacology, University of Geneva
- November 1987 - April 1988      **Visiting Investigator**, Scripps Clinic and Research Foundation,  
La Jolla, California
- August 1986      **Privat-Docent**, Faculty of Medicine, University of Geneva
- October 1982      **Maître-Assistant**, Department of Pharmacology, University of Geneva
- September 1979 - September 1982      **Graduate Student**, A.V. Davis Center for Behavioral Neurobiology,  
The Salk Institute and Department of Biology UCSD, San Diego
- October 1977 - September 1979      **Assistant**, Department of Pharmacology, University of Geneva

**MAIN GRANTS**

- 2010 – 2022      **National Center for Competence in Research** « The synaptic bases of mental diseases ». Director of this multi-investigator center grant.  
<http://www.nccr-synapsy.ch>
- 2010 – 2017      Recipient of research grant from **Fonds National Suisse de la Recherche Scientifique** (31003A-130821) Plasticity of neuron-glia metabolic coupling: Relevance to behavior and neuroprotection
- 2008 – 2010      Continuation of a research grant from **Fonds National Suisse de la Recherche Scientifique** (3100A0-108336)
- 2007 - 2010      Co-Recipient of a research grant from **Fonds National Suisse de la Recherche Scientifique** (3100A0-116220) Metabolic and functional imaging of neural activation

2007 – 2010	Co-Recipient of a research grant from <b>Fonds National Suisse de la Recherche scientifique</b> (3100A0-112101) The hypocretin system and the vulnerability to relapse for cocaine- and ethanol-seeking
2006 – 2009	Co-Recipient of a research grant from <b>Fonds National Suisse de la Recherche scientifique</b> (105311-107728) Neurosciences and psychiatry: images, techniques, clinic
2006 – 2008	Co-Recipient of a research grant from <b>Fonds National Suisse de la Recherche scientifique</b> (205320-112195) Ultra-high resolution tomographic imaging of cells and tissues by digital holographic microscopy: application to synaptic plasticity studies
2005 – 2008	Recipient of a research grant from <b>Fonds National Suisse de la Recherche scientifique</b> (3100A0-108336) Behavioral, cellular and molecular determinants of neurometabolic plasticity
2004 – 2008	Co-Recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (3100A0-105773) Role of the C/EBP transcription factors in cocaine-induced molecular and cellular adaptations in brain reward systems, and in the phosphorylation of the coactivator CBP
2004 - 2007	Recipient of a research grant from <b>Fonds National Suisse de la Recherche scientifique</b> (3100A0-105804) Investigations of the cerebral metabolism using <sup>11</sup> C-d-lactate, <sup>11</sup> C-I-lactate and <sup>11</sup> C-acetate
2004 – 2006	Co-recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (205320-103885) Digital holographic microscopy applied to the measurement of 3D conformation and dielectric properties of biologic cells and tissues
2002 – 2006	Co-recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (3200-068306) Ischemic brain injury: molecular mechanisms for protection and prevention
2002 – 2003	Co-recipient of a research grant from <b>Office fédéral de la formation professionnelle et de la technologie OFFT</b> and EPFL (CTI No. 6101.3 TNS)
2001 - 2004	Co-recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (3100-064031.00) Drug-induced molecular and cellular adaptations in brain reward systems: role of the C/EBP transcription factors
1999 - 2004	Recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (N° 3100-056930.99/2) Astrocyte-neuron metabolic coupling: short-term and long-term regulations
1999 – 2002	Co-recipient of a <b>European Community Grant (RTD actions)</b> Targeting astrocytes to disrupt inflammation-neurodegeneration coupling: application to Alzheimer's disease
1999 – 2002	Co-recipient of a research grant of « <b>Programme commun de recherche en génie biomédical</b> » from UNIL-UNIGE-EPFL-HUG-HCV on New microscopy techniques applied to functional imaging of living cells and tissues: application to clinical diagnosis
1998 - 2000	Co-recipient of a <b>European Community grant (Biotech 94 -98)</b> on Physiological function of PACAP/VIP receptors in the nervous system
1998 - 2000	Continuation of National Research Program grant (NRP 38, Diseases of the nervous system) from <b>Fonds National Suisse de la Recherche Scientifique</b>

1997 - 1999	Continuation, without application, of grant N° 3100-0405565.94, from <b>Fonds National Suisse de la Recherche Scientifique</b>
1996	Recipient of a grant from " <b>Roche Foundation</b> "
1996 - 1998	Co-recipient (principal investigator) of a National Research Program grant NRP 38, Diseases of the nervous system) from <b>Fonds National Suisse de la Recherche Scientifique</b>
1995	Recipient of a grant from " <b>Sandoz Foundation</b> ", for post-doctoral salary
1995 - 1998	Recipient of a grant from <b>Price Foundation</b> , "Brain energy metabolism in anorexia nervosa"
1994 - 1997	Recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (N° 3100-0405565.94)
1994 - 1998	Recipient of a research grant from <b>Laboratoires Lafon, Paris</b>
1992 - 1993	Continuation, without application, of grant N° 31-26427.89, from <b>Fonds National Suisse de la Recherche Scientifique</b>
1991	Recipient of a research grant from <b>GLAXO Institute for Molecular Biology</b>
1989 - 1992	Recipient of a research grant from <b>Fonds National Suisse de la Recherche Scientifique</b> (N° 31-26427.89)
1988	Recipient of a research grant of " <b>Société Académique de Genève</b> " and " <b>Fondation Roche</b> " for a collaboration with the <b>Division of Preclinical Neuroscience and Endocrinology, Scripps Clinic and Research Foundation</b> , La Jolla, California
1989	Recipient of a grant from the " <b>Sandoz Foundation</b> " for the purchase of an HPLC system
1987 - 1988	Recipient of a research grant of <b>Fonds National Suisse de la Recherche Scientifique, START (Swiss Talents for Academic Research and Teaching)</b> (N° 3.347-0.86)
1986	Recipient of a research grant of " <b>Centre de Recherches Médicales Carlos et Elsie De Reuter</b> " (N° 64)
1986 – 1989	Recipient of a research grant of <b>Fonds National Suisse de la Recherche Scientifique</b> (N° 3.357-0.86)
1983 - 1986	Recipient of a research grant of <b>Fonds National Suisse de la Recherche Scientifique</b> (N° 3.423-0.83)

### FELLOWSHIPS

September 1980 - June 1982	Bourse de <b>Jeune Chercheur Avancé</b> du Fonds National Suisse de la Recherche Scientifique
September 1979 – August 1980	Bourse de <b>Jeune Chercheur Débutant</b> du Fonds National Suisse de la Recherche Scientifique

### FIELDS OF RESEARCH

- **Cellular and molecular bases of brain energy metabolism**

- Behavioral, cellular and molecular determinants of neuronal and glial plasticity
- Energy metabolism in neuropsychiatric disorders
- Cellular and molecular bases of functional brain imaging
- Functions of glia
- Neurophotonics
- Regulation of gene expression in the brain
- Neurotransmitters in the brain : Localization, Release, Cellular actions
- Dialogue between neuroscience and psychoanalysis

### MAIN LECTURES (since 2001)

#### 2021

- **29<sup>th</sup> European Congress of Psychiatry – EPA Virtual 2021**, Symposium “Epigenetic and Metabolic Mechanisms of Brain Plasticity for Personalized Interventions in Neuropsychiatric Disorders, (Symposium speaker)
- **KAUST & EPFL Blue Brain Project Online Workshop** “Integrative Modeling of Brain Energy Metabolism”, (Keynote speaker)
- **Glucose Transporter 1 Deficiency Syndrome Meeting** (Keynote speaker)

#### 2020

- **University of Torino (virtual)**, Department of Neuroscience, (Profs Vercelli and Cali)
- **FENS Forum, (virtual)**, « Symposium on Neuron-Glia Metabolic Coupling », (Symposium speaker)
- **33rd ECNP Congress, (virtual)**, Symposium on « Beyond the Neurocentric Paradigm : Targeting Astrocytes and Neuroglial Interactions in CNS Disorders », (Symposium speaker)
- **Neuroscience School of Advanced Studies, (virtual)**, (Dr Pulvirenti)
- **NINDS Symposium on Metabolism based therapies for epilepsy (virtual)** (Invited speaker)
- Several invitations were cancelled because of the COVID pandemic

#### 2019

- **University of Geneva, Public Lecture**
- **Baylor College of Medicine**, Neuroscience Research Institute, (Dr Huda Zoghbi)
- **Karolinksa Institute**, Department of Neuroscience, (Prof Sten Grillner)

- **American University of Beirut**, Neuroscience Program, (Prof Wassin Al Kheir)
- **World Congress of Psychiatry**, Lisbon, (Symposium speaker)
- **International Sports Neuroscience Conference**, Tsukuba University (Keynote speaker)
- **IBRO – MENA International Conference**, Beirut, (Keynote speaker)
- **Division of Pediatric Neurology**, Columbia University (Dr Darryl De Vivo)
- **IBionext**, Paris (Invited Speaker)
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**2018**

- **Center for Sports Neuroscience**, Tsukuba University, (Invited speaker)
- **Riken Brain Science Institute** (Prof K. Tanaka)
- **Neuroscience and Mental Health Institute**, University of Alberta, (Invited speaker)
- **Department of Neuroscience**, Stanford University, (Drs Christian Bennet and Robert Malenka)
- **Center for Brain Health**, University of British Columbia, (Drs Tim Murohy and Brain McVicar)
- **Vitual Reality World Forum**, Crans-Montana, (Keynote Speaker)
- **Capital Medical University, Beijing**, (Prof David Xu)
- **5th Annual Meeting of the Mongolian Neuroscience Society**, Ulan Bator, (Keynote Speaker)
- **Honored Public Lecture, The House of Parliament of Mongolia**, (Ulan Bator)
- **7th IIS (International Institute for Integrative Sleep Medicine)**, Tokyo (Keynote Speaker)

**2017**

- **Genomics and Systems Biology VII**, New Your University, Abu Dhabi, (Invited speaker)
- **European School for Molecular Imaging**, « From Molecules to networks », CNRS School Les Houches, (Invited speaker)
- **Diplôme Universitaire d'Ethologie humaine**, (Université de Toulon, Invited speaker (Prof Boris Cyrulnik)
- **Tenth Anniversary of the Ecole de Neuroscience de Paris, University of Paris**, (Keynote speaker)
- **Alliance Française and Swiss Embassy**, Brussels (Invited speaker)
- **Imperial College, Conference on “Mobilising Business, Acting on Future Health”**, London , (Invited speaker)
- **Concordia University, Perform Center**, Montreal, (Invited speaker)
- **Mc Gill University, Killam Lecture**, Montreal (Killam lecture speaker)
- **Montreal Neurological Institute, Mc Gill University, Neurology Grand Rounds**, Montreal (Invited speaker)
- **Society of Neuroscience of Africa (SONA) , Entebbe**, (Plenary lecture)
- **Mediterranean Society for Neuroscience, Malta**, (Plenary lecture)
- **International Symposium on Metabolic and Redox Interactions between Neurons and Astrocytes in Health and Disease, Salamanca**, (Plenary Lecture)
- **XIII European Meeting on Glial Cells in Health and Disease, Edinburgh**, (Symposium speaker)
- **Collège de France, Paris** (Invited speaker, Dr L. Venance)
- **Departmet of Fundamental Neuroscience, University of Lausanne**, (Invited speaker, Prof C. Bagni)
- **XXIII World Congress of Neurology, Kyoto**, (Symposium speaker)
- **30<sup>th</sup> Anniversary of CERVO Research Center, Laval University, Québec** (Keynote speaker)

- **38<sup>th</sup> Congress of the Italian Society of Pharmacology, Rimini, (Keynote Lecture)**

**2016**

- **Department of Physiology**, University of California, San Francisco, Invited Speaker (Prof R. Swanson)
- **European College of Neuropsychopharmacology (ECNP) Workshop**, Nice (Keynote Speaker)
- **Metabolism in development and disease, Company of Biology Workshop**, Wiston House (Invited Speaker)
- **Workshop of the Italian Society of Pharmacology (SIF) on Neurodegeneration**, Catania (Keynote speaker)
- **Brain Bioenergetics, from Behavior to Pathology Symposium**, EPFL, (Invited Speaker)
- **Frontiers in Memory Research, NYU Symposium**, La Pietra, Florence, (Invited Speaker)
- **FENS Forum 2016, Special Lecture "IPSEN Foundation prize"**, Copenhagen
- **Symposium : Glial Control of Brain Physiology and Pathology , 19<sup>th</sup> KSBNS meeting**, Seoul (Invited speaker)
- **Symposium on Molecular Basis of Brain Diseases and Bioenergetics**, Kyungpook National University Medical Center, Daegu (Invited speaker)
- **2<sup>nd</sup> FALAN Congress**, Buenos Aires, (Keynote lecture)
- **Symposium on Neuron-Glia interactions in Health and Disease**, Colonia del Sacramento, Uruguay (Invited speaker)
- **50<sup>th</sup> Anniversary of « Psychomotricité en Suisse romande »**, Geneva (Keynote lecture) Genève, 18-20.11.2016
- **XXV Annual Conference « Pietro Paoletti »**, University of Pavia, (Keynote lecture)
- **Computational Systems Biology Conference**, KAUST, (Invited speaker)

**2015**

- **Biotechnology Centre**, TU Dresden (Prof C.V. Cannistraci)
- **World Federation of Neurology**, Santiago, Chile, Invited Speaker
- **Center for Neural Sciences**, New York University, (Prof C. Alberini)
- **Center for Epigenetics and Metabolism**, University of California at Irvine, (Prof. P. Sassone-Corsi)
- **Gene Expression Laboratory**, The Salk Institute, (Prof J.C. Ispizua Belmonte)
- **Nestlé Institute of Health Sciences – EPFL Science Day**, Lausanne
- **Department of Neuroscience, King's College**, Keynote Speaker, 2015 Neuroscience Symposium
- **Dipartimento di Neuroscienze**, Università di Parma (Prof Giacomo Rizzolatti)
- **Institute of Molecular Medicine, University of Lisbon** (Prof Ana Sebastiao)
- **Department of Neuroscience, Karolinska Institute** (Prof Tomas Hokfelt)
- **Università degli Studi di Brescia**, International seminar on “Neuroscienze, psicoanalisi e perinatalità”, (Prof Loredana Cena)
- **Cold Spring Harbor Asia Conference** “Glia: New Insights about Their Functions and Dysfunctions”, Keynote Speaker

**2014**

- **“Astrocytes in health and neurodegenerative diseases” Biochemical Society and BNA, London**, Invited speaker
- **“Corps et développement psychique”, 7 ème congrès de l’AEPEA, Psyche – Soma, Bruxelles**, Keynote speaker
- **“11th International Conference on Brain Energy Metabolism”**, Helsingør, Invited speaker

- **Symposium in Honor of Torsten Wiesel**, Rockefeller University, Invited speaker
- **Annual Scientific meeting of King Abdullah International Medical research center (KAIMRC), Jeddah**, Invited speaker
- **Capital Medical University**, Beijing, Invited speaker (Prof Xiamin Wang)
- **Tsinghua University**, Beijing, Invited speaker (Prof Bai Lu)
- **Peiking University (PKU)**, Beijing, Invited speaker (Prof Yun Wang)
- **Chinese Academy of Sciences**, Biophysics Institute, Invited speaker (Prof Zhang Lei)
- **Fudan University, Shanghai**, Invited speaker (Zhang Jiayi)
- **Institute of Neuroscience**, Shanghai, Invited speaker (Prof Mu Ming Poo)
- **24<sup>th</sup> meeting of the Chinese Association for Physiological Sciences**, Keynote speaker
- **Annual meeting of the Society for Neuroscience**, Washington, DC, Symposium speaker

2013

- **Gordon research Conference "Glia Biology : Functional Interactions among glia and neurons"** Ventura, Invited speaker
- **"Glia and Neurons: a symbiotic partnership"**, Brain Repair Center Spring School, Cambridge, Invited speaker
- **European federation of Psychoanalysis**, Basel, Invited speaker
- **Gordon Research Conference « Oxidative stress and disease»**, Les Diablerets, Invited speaker
- **Scripps Research Institute, La Jolla**, Invited Speaker (Prof G. Koob)
- **Brain Energy 2013**, Norwegian Academy of Sciences, Oslo, Invited Speaker
- **16<sup>th</sup> Meeting of the European Society of developmental Psychology**, Lausanne, Keynote Speaker
- **The Brain Forum**, Jeddah, Keynote Speaker
- **Institut du Cerveau et de la moëlle (ICM)**, Paris, ICM Conference series, Invited speaker (Prof Y-Agid)
- **Helmholtz Diabetes Center**, Garching, Invited speaker (Prof Matthias Tschöp)
- **IBRO College "Dynamic Imaging in Neuroscience"**, Valdivia, Keynote speaker

2012

- **Scripps Research Institute, la Jolla**, Invited speaker
- **12<sup>th</sup> International Meeting on Advances in Alzheimer's Therapy**, Stockholm, Invited speaker
- **FENS Forum 2012 satellite Symposium "Multidisciplinary approaches to quantify astrocyte neuron signaling"**, Invited speaker
- **20<sup>th</sup> World Congress of International Association for Child and Adolescent Psychiatry (IACAPAP)**, Paris, Plenary Lecture

2011

- **IBRO School, Cape Town**, Invited Faculty
- **1<sup>st</sup> IBRO-Middle East Neuroscience Conference**, Al Ain, UAE
- **10<sup>th</sup> Conference of the Societies of Neuroscience of Africa**, Addis Abeba
- **Brain Research Institute, University of Zurich** (Prof Isabelle Mansuy)
- **Gordon Research Conference « Glial Biology »**, Ventura
- **Swissnex Boston, Cambridge**
- **Mount Sinai School of Medicine, New York** (Prof C. Alberini)

- New York Academy of Medecine
- Istituto Svizzero di Roma
- Gordon Research Conference « Cannabinoid Function in the CNS», Switzerland, Keynote Lecture Université Libre de Bruxelles (Pr Delvenne)
- Glial cells in (patho)physiology, International Society for Neurochemistry, Ljubljana, Slovenia
- Euroglia 2011, 10th European meeting on Glial Cells in Health and Disease, Prague

**2010**

- Public lecture sponsored by « La Caixa », Madrid
- Annual meeting of the Turkish Society for Neuroscience, Istambul, Symposium speaker
- Universita Politecnica delle Marche, Ancona (Prof Conti)
- Institut de Recherches en Ophthalmologie, Sion (Prof Schorderet)
- Istituto Svizzero, Venice (Dr De Riedmatten)
- Annual meeting of the UK Physiological Society, Manchester, Symposium speaker
- 20<sup>th</sup> European Sleep Research Society Congress, Lisbon, Symposium speaker
- 61<sup>st</sup> Meeting of the Italian Physiological Society, Varese, Keynote speaker
- Symposium on Sleep/wake, plasticity and neuroenergetics, Taormina
- 6<sup>th</sup> International Forum for Psychoanalysis, Athens, Symposium speaker
- Zentrum fur Literatur und Forschung, "Freud and the Neurosciences", Berlin
- 29<sup>th</sup> International Congress of Clinical Neurophysiology, Kobe, Symposium speaker
- Human Brain Research Center, Kyoto University, Kyoto (Prof Fukuyama)
- 2<sup>e</sup> Congrès Français de Psychiatrie, Lyon, Keynote speaker
- Distinguished Seminar Series, Dept of Pharmacology and Neuroscience, University of Copenhagen
- 2<sup>nd</sup> Conference on Glia Biology in Medicine, University of Alabama, Birmingham
- 3<sup>e</sup> Journée Cogni-Psy de la Salpêtrière, Paris

**2009**

- Symposium « Synapse-Astrocyte Interactions », Strasbourg (Dr Pfrieger)
- International School for Advanced Studies, Trieste, (Dr Torre)
- Gordon Research Conference on « Glia Biology », Ventura, Panelist
- « Celebrating the 150<sup>th</sup> anniversary of the Origin of species », « Les Treilles »
- PENS Training program « Sleep research and sleep medicine », Bertinoro
- Conférence « Paul Broca », Société des Neurosciences, Bordeaux, Plenary lecture
- Congress « Glia in Health and Disease », Paris
- Institut de Neurobiologie de la Méditerranée, Marseille, (Dr Ben Ari)
- Center for Imaging in Biomedicine, Lausanne, (Prof Gruetter)
- Department of Psychiatry, University of California San Diego, (Dr Judd)
- Université Pierre et Marie Curie (Dr Cauli)

**2008**

- Inaugural lecture, Collège de France, Paris
- Inaugural lecture, EPFL, Lausanne
- Series of 9 lectures on « Glial cells, neuroenergetics and neuropsychiatric disorders », Collège de France, Paris
- « Mind your Brain » Symposium, Lausanne

- **100<sup>th</sup> meeting of the Swiss Neurological Society**, Plenary lecture
- **Symposium « Neurosciences et psychanalyse : une rencontre autour de l'émergence de la singularité », Collège de France, Paris**
- **Club cellules gliales, Paris**
- **Ecole Normale Supérieure, Paris** (Pr. A. Prochiantz)
- **Institute for Research in Biomedicine, Barcelona** (Prof. J. Guinovart)
- **Colloque des neurosciences cliniques, CHUV, (Prof. Levivier)**
- **Symposium on « Neurosciences and Society », FENS**
- **European Science Open Forum, Barcelona**, Plenary lecture
- **Gordon Research Conference on « Membrane transport proteins »», Il Ciocco**
- **Society for Neuroscience, Washington, Symposium speaker**
- **Department of Psychiatry, La Salpêtrière, Paris, (Prof D. Cohen)**

**2007**

- **Ecole Normale Supérieure, Paris** (Prof Frackowiak)
- **12<sup>th</sup> Neural workshop, Verbier**
- **Acettepe University, Ankara** (Prof T. Kalgara)
- **Wallenberg Symposium, Stockholm**
- **International Meeting of ESCAP (European Society for Child and Adolescent Psychiatry), Florence**
- **VIII European Meeting on Glial Function, London**, Plenary lecture
- **Glaxo Smith Kline, Harlow**
- **Association Psicoanalitica de Argentina, Buenos Aires**
- **London Psychoanalytical Society, London**
- **Yale University, Department of Physiology** (Profs J. Hoffmann and R. Shulman)
- **Mount Sinai School of Medicine, Department of Neuroscience** (Prof C. Alberini)
- **Phylocetes Center, New York Psychoanalytical Society, New York** (Dr Nersessian)
- **University of Pennsylvania, Department of Pediatrics** (Prof M. Yudkoff)
- **University of Ancona, Annual Lecture, Department of Neuroscience** (Prof F. Conti)

**2006**

- **University of Arhus, « Brain Storm 2006, a Symposium in honor of Albert Gjedde »**
- **Ellison Foundation Workshop « Biological assessment on mental processes – both conscious and unconscious », New York**
- **Centre Intégratif de Génomique, Lausanne, (Prof Mehdi Tafti)**
- **Max-Plank Institute for Biological Cybernetics, Tübingen, (Prof N. Logothetis)**
- **Symposium « From brain to ethics: what is new under the skull »**
- **Annual Distinguished Lecture, University of Edinburgh (Prof R. Morris)**
- **Cellular and Molecular Neurobiology of Mental Illness, Giessbach**
- **Collège de France, Paris, Chaire de Neuropharmacologie (Prof J. Glowinski)**
- **University of Liège, Center for Neuroscience (Prof J Schoenen)**
- **Gordon Research Conference « Brain energy metabolism and blood flow », Magdalen College, Oxford**
- **37<sup>th</sup> Annual Conference ISPNE, Leiden**
- **Journées Françaises de Radiologie, Paris**
- **Nestlé International Symposium, Lausanne**

**2005**

- Glaxo Smith Kline, London (Dr Lefkos Middelton)
- Service Hospitalier Frédéric Joliot – Commissariat à l'Energie Atomique, Orsay (Dr Gilles Bonvento)
- 18<sup>th</sup> meeting of the British Neuroscience Association – « The Wolstencroft Lecture »
- University of Pennsylvania (Dr J.Detre and Dr B. Chance)
- FASEB Summer Conference on Glucose Transporter Biology
- International Society for Neurochemistry (Innsbruck)
- Presidential lecture, Polish Neuroscience Society, Crakow
- J. of Experimental Biology Symposium on « Phenotypic Plasticity », Cambridge
- Ramón Areces Foundation Symposium « Glial cells as key elements for brain function, protection and regeneration, Madrid
- American College of Neuropsychopharmacology, Hawaii, Plenary lecture

**2004**

- Winter Conference on Brain Research, Copper Mountain
- University of Milano – Department of Pharmacology (Professor A. Maggi)
- Ecole Normale Supérieure, Paris (Professor Alain Prochiantz).
- Douglas Hospital Research Center, McGill University, Montreal (Professor R. Quirion)
- CINP Meeting, Paris
- Gordon Research Conference « Cerebral metabolism and blood flow », Colby College
- Swiss Academy of Medical Sciences: « Symposium on Neuroethics »

**2003**

- Brain & Mind Institute, Federal Institute of Technology, Lausanne (EPFL), (Prof. Henry Markram)
- International School on Magnetic Resonance and Brain Function: New NMR strategies for brain investigation, Ettore Majorana Foundation, Erice, Italy
- Symposium « From Molecules to Mind », Yale University. New Haven
- Symposium « Monitoring Molecules in Neuroscience », Karolinska Institute, Stockholm
- IBRO Satellite Symposium « Brain communication : Synaptic vs Volume Transmission », Prague
- VI European Meeting on « Glial function in health and disease », Berlin
- Festvortrag (Opening lecture) at the 23rd meeting of « Arbeitsgemeinschaft Neuropharmakologie und Psychopharmakologie (AGNP) », Munich
- High-field MR Imaging and Spectroscopy Workshop, University of Minnesota
- Symposium on « Neuronal communication, neurotransmitters and aging », Ramon Areces Foundation, Madrid

**2002**

- VII International Stockholm/Springfield Symposium on « Advances in Alzheimer's Disease Therapy », Geneva
- Swiss federal Institute of Technology, ETHZ, Behavioral Neurobiology Laboratory (Prof J. Feldon)
- Mc Govern Institute for Brain research, MIT, Cambridge
- Society for Biological Psychiatry Annual Meeting, Philadelphia
- Instituto Ramon y Cajal, Madrid

- Max Planck Institute for Psychiatry, Munich (Prof Holsboer)

**2001**

- World Economic Forum, Davos
- Abteilung fuer Allgemeine Zoologie, FB Biologie, Kaiserslautern University, (Prof J. W. Deitmer)
- Department of Neurology, Dusseldorf University, (Prof J. Freund)
- INSERM U 289, Hôpital Salpêtrière, Paris, (Prof Y. Agid)
- INSERM U 334, Service Hospitalier Frédéric Joliot, Orsay, (Dr S. Dehaene)
- Brain Energy Metabolism meeting, Trondheim
- German Society for Neuroscience, Gottingen
- American Academy of Sleep Medicine meeting, Chicago
- Mc Donnell-Pew Centre for Cognitive Neuroscience, Oxford, (Prof C. Blakemore, Dr Z. Molnar)
- IUPS meeting, Christchurch, New Zealand
- Montreal Neurological Institute, Mc Gill University, Montreal
- University of Manitoba, Grass Lecturer
- Merck Research Laboratories, La Jolla, California

**OTHER HONORS, AWARDS**

- Paul Broca Lecture, Société des Neurosciences, May 2009
- Elected member of the Honorable Company of the Edinburgh Golfers, 2005
- Mc Donnel Visiting Scholar, Washington University School of Medicine, November 2000
- Talairach Lecture, « Functional Mapping of the Human Brain meeting», San Antonio, June 2000

**SOCIETIES**

- Federation of European Neuroscience Societies (FENS) (President 2002 – 2004)
- International Society of Cerebral Blood Flow and Metabolism (Board of Directors, 1999 - 2003)
- Société de Neuroendocrinologie Expérimentale (Member of the Council, 1994 - 1997)
- Société des Neurosciences, France (Member of the Council, 1993 - 2000)
- Société Suisse de Psychiatrie Biologique (Member of the Council, 1992 - 1995)
- Société Suisse de Pharmacologie et de Toxicologie
- European Neuroscience Association
- Society for Neuroscience (USA)
- Société Suisse de Physiologie

**EDITORIAL BOARDS**

- Experimental Biology and Medicine (2009 - 2010)
- Frontiers in Neuroenergetics (2008 - )
- Experimental Neurology (2003 - )
- Glia (2001 - 2014)
- Neurochemistry International (1989 - 1997)
- European Neurology

- Developmental Neuroscience
- Molecular Psychiatry
- NeuroSignal
- Discussions in Neuroscience (Series Editor, 1984 - 995)
- OPAL, Computer-Assisted Teaching Modules (Series Editor)

#### OTHER COMMITTEES – BOARDS

- President-elect, Federation of European Neuroscience Societies (FENS) (2000 - 2002)
- Chairman, PET-Cyclotron Committee, (University Hospitals of Geneva and Lausanne Medical Schools)
- (September 2000 - )
- Vice-chairman, Council of Scientists Human Frontier Science Program (1999 - 2001)
- External Advisory Board, Centre for Magnetic Resonance Research, University of Minnesota (1999 - )
- Advisory Board, Department of Clinical Research, University Hospital of Basel (1998 - 1999)
- Advisory Board, Institut Fédératif de Recherche 47, University of Caen (1998)
- Executive Committee, European Dana Alliance for the Brain (1997 - )
- Advisory Board, Institut Fédératif de Recherche 52, Collège de France, Paris (1996)
- Vice-president, Swiss Society for Neuroscience (1995-1997)
- Swiss Society for Muscular Dystrophy, Member of the Scientific Committee (1995 - )
- Vice-Chairman, Ligue Suisse pour le Cerveau, (1995 - )
- Advisory Board, Institut Fédératif de Recherche en Neurosciences, University of Bordeaux (1995 - )
- Human Frontier Science Program, Member of the Review Committee (1994 - 1996)
- Advisory Board, Price Foundation (1994 - )
- Chairman, Association for the "Decade of the Brain in Switzerland" (1993 - )
- Fondation Bettencour-Schuler, Member of the Scientific Board (2007 - )
- Fondation Puccini, Member of the Board (1993 - )
- Medical Research Council of Canada, Member of the Review Committee, Neurosciences A (1992 - 1995)
- Member of several ad hoc committees of the Medical School of Lausanne University and EPFL
- Chairman, Committee for Basic and Clinical Neuroscience, Pfizer Foundation (1998 - 2010)

#### LIST OF PUBLICATIONS

#### THESES

#### Doctorat en Médecine

Etude de la liaison spécifique du  $^3\text{H}$ -spiroperidol dans la fraction membranaire de la rétine de mammifère: son intérêt pour l'évaluation de l'affinité dopaminergique des substances psychotropes.

Thèse N° 3765, Faculté de Médecine de l'Université de Genève, Juillet 1979

**Doctor of Philosophy Degree in Biology**

Vasoactive Intestinal Polypeptide: a regulator of cellular homeostasis in cerebral cortex.

Ph.D. Thesis, Department of Biology, University of California at San Diego, USA, September 1982

**Thèse d'Habilitation au Titre de Privat-Docent**

Biochemical approaches to the study of peptide actions in the central nervous system. Faculté de Médecine de l'Université de Genève. Août 1986.

**BOOKS**

- Agid Y, Magistretti PJ, **L'homme glial : Une révolution dans les sciences du cerveau**, Odile Jacob, Paris, 2018
- Ansermet F, Magistretti PJ, **Les énigmes du plaisir**. Odile Jacob, Paris, 2010

**Translations in :**

- |         |  |
|---------|--|
| Spanish | <b>Los enigmas del placer.</b> Katz Editores, Buenos Aires, 2011 |
| Italian | <b>Gli enigmi del piacere.</b> Bollati Boringhieri, Torino, 2012 |

- Ansermet F, Magistretti PJ, **A chacun son cerveau : plasticité neuronale et inconscient**. Odile Jacob, Paris, 2004

**Translations in:**

- |          |  |
|----------|--|
| Italian  | <b>A ognuno il suo cervello: plasticità neuronale e inconscio.</b> Bollati Boringhieri, Torino, 2008   |
| Spanish  | <b>A cada cual su cerebro: plasticidad neuronal e inconsciente.</b> Katz Editores, Buenos Aires, 2006  |
| English  | <b>Biology of freedom: Neural Plasticity, Experience, and the Unconscious.</b><br>USA: Other Press, New York, 2007<br>UK: Karnac, London, 2007 |
| Japanese | <b>脳と無意識：ニューロンと可塑性.</b> Seido-sha, Tokyo, 2006   |
| German   | <b>Die Individualität des Gehirns : Neurobiologie und Psychoanalyse.</b> Suhrkamp, Frankfurt am Main, 2005                                     |

**ORIGINAL ARTICLES**

- 260- Buscemi L, Blochet C, **Magistretti PJ** and Hirt L Hydroxycarboxylic acid Receptor 1 and

- Neuroprotection in a Mouse Model of cerebral Ischemia-Reperfusion , **Front Physiol.** 2021; 12: 689239. doi: 10.3389/fphys.2021.689239
- 259- Finsterwald C, Dias S, **Magistretti PJ** and Lengacher S Ganglioside GM1 Targets Astrocytes to Stimulate Cerebral Energy Metabolism **Front Pharmacol.** 2021; 12: 653842. Published online 2021 Apr 28. doi: 10.3389/fphar.2021.653842
- 258 - Carrard A, Cassé F, Carron C, Burlet-Godinot S, Toni N, **Magistretti PJ\*** and Martin JL\* Role of adult hippocampal neurogenesis in the antidepressant actions of lactate **Molecular Psychiatry**, 2021, <https://doi.org/10.1038/s41380-021-01122-0> \*Co-c
- 257 - Coggan JS, Keller D, Markram H, Schürmann F, **Magistretti PJ**. *Excitation states of metabolic networks predict dose-response fingerprinting and ligand pulse phase signalling.* **J Theor Biol.** 2020 Feb 21;487:110123. doi: 10.1016/j.jtbi.2019.110123. Epub 2019 Dec 19
- 256 - Vezzoli E, Calì C, De Roo M, Ponzoni L, Sogne E, Gagnon N, Francolini M, Braida D, Sala M, Muller D, Falqui A, **Magistretti PJ**. *Ultrastructural Evidence for a Role of Astrocytes and Glycogen-Derived Lactate in Learning-Dependent Synaptic Stabilization.* **Cereb Cortex.** 2019 Dec 6. pii: bhz226. doi: 10.1093/cercor/bhz226. [Epub ahead of print]
- 255 - Calì C, Agus M, Kare K, Boges DJ, Lehväläaho H, Hadwiger M, **Magistretti PJ**. *3D cellular reconstruction of cortical glia and parenchymal morphometric analysis from Serial Block-Face Electron Microscopy of juvenile rat.* **Prog Neurobiol.** 2019 Dec;183:101696. doi: 10.1016/j.pneurobio.2019.101696. Epub 2019 Sep 21
- 254 - Dehghani M, Do KQ, **Magistretti P**, Xin L. *Lactate measurement by neurochemical profiling in the dorsolateral prefrontal cortex at 7T: accuracy, precision, and relaxation times.* **Magn Reson Med.** 2019 Nov 14. doi: 10.1002/mrm.28066. [Epub ahead of print]
- 253 - Calì C, Kare K, Agus M, Veloz Castillo MF, Boges D, Hadwiger M, **Magistretti P**. *A Method for 3D Reconstruction and Virtual Reality Analysis of Glial and Neuronal Cells.* **J Vis Exp.** 2019 Sep 28;(151). doi: 10.3791/59444
- 252 - Watson HJ, Yilmaz Z, Thornton LM, Hübel C, Coleman JRI, Gaspar HA, Bryois J, Hinney A, Leppä VM, Mattheisen M, Medland SE, Ripke S, Yao S, Giusti-Rodríguez P; Anorexia Nervosa Genetics Initiative, Hanscombe KB, Purves KL; Eating Disorders Working Group of the Psychiatric Genomics Consortium, Adan RAH, Alfredsson L, Ando T, Andreassen OA, Baker JH, Berrettini WH, Boehm I, Boni C, Perica VB, Buehren K, Burghardt R, Cassina M, Cichon S, Clementi M, Cone RD, Courtet P, Crow S, Crowley JJ, Danner UN, Davis OSP, de Zwaan M, Dedoussis G, Degortes D, DeSocio JE, Dick DM, Dikeos D, Dina C, Dmitrzak-Weglacz M, Docampo E, Duncan LE, Egberts K, Ehrlich S, Escaramís G, Esko T, Estivill X, Farmer A, Favaro A, Fernández-Aranda F, Fichter MM, Fischer K, Föcker M, Foretova L, Forstner AJ, Forzan M, Franklin CS, Gallinger S, Giegling I, Giuranna J, Gonidakis F, Gorwood P, Mayora MG, Guillaume S, Guo Y, Hakonarson H, Hatzikotoulas K, Hauser J, Hebebrand J, Helder SG, Herms S, Herpertz-Dahlmann B, Herzog W, Huckins LM, Hudson JI, Imgart H, Inoko H, Janout V, Jiménez-Murcia S, Julià A, Kalsi G, Kaminská D, Kaprio J, Karhunen L, Karwautz A, Kas MJH, Kennedy JL, Keski-Rahkonen A, Kiezebrink K, Kim YR, Klareskog L, Klump KL, Knudsen GPS, La Via MC, Le Hellard S, Levitan RD, Li D, Lilienfeld L, Lin BD, Lissowska J, Luykx J, **Magistretti PJ**, Maj M, Mannik K, Marsal S, Marshall CR, Mattingdal M, McDevitt S, McGuffin P, Metspalu A, Meulenbelt I, Micali N, Mitchell K, Monteleone AM, Monteleone P, Munn-Chernoff MA, Nacmias B, Navratilova M, Ntalla I, O'Toole JK, Ophoff RA, Padyukov L, Palotie A,

- Pantel J, Papezova H, Pinto D, Rabionet R, Raevuori A, Ramoz N, Reichborn-Kjennerud T, Ricca V, Ripatti S, Ritschel F, Roberts M, Rotondo A, Rujescu D, Rybakowski F, Santonastaso P, Scherag A, Scherer SW, Schmidt U, Schork NJ, Schosser A, Seitz J, Slachtova L, Slagboom PE, Slof-Op 't Landt MCT, Slopien A, Sorbi S, Świątkowska B, Szatkiewicz JP, Tachmazidou I, Tenconi E, Tortorella A, Tozzi F, Treasure J, Tsitsika A, Tyszkiewicz-Nwafor M, Tziouvas K, van Elburg AA, van Furth EF, Wagner G, Walton E, Widen E, Zegger E, Zerwas S, Zipfel S, Bergen AW, Boden JM, Brandt H, Crawford S, Halmi KA, Horwood LJ, Johnson C, Kaplan AS, Kaye WH, Mitchell JE, Olsen CM, Pearson JF, Pedersen NL, Strober M, Werge T, Whiteman DC, Woodside DB, Stuber GD, Gordon S, Grove J, Henders AK, Juréus A, Kirk KM, Larsen JT, Parker R, Petersen L, Jordan J, Kennedy M, Montgomery GW, Wade TD, Birgegård A, Lichtenstein P, Norring C, Landén M, Martin NG, Mortensen PB, Sullivan PF, Breen G, Bulik CM. *Genome-wide association study identifies eight risk loci and implicates metabo-psychiatric origins for anorexia nervosa.* **Nat Genet.** 2019 Aug;51(8):1207-1214. doi: 10.1038/s41588-019-0439-2. Epub 2019 Jul 15
- 251 - Yao S, Kuja-Halkola R, Martin J, Lu Y, Lichtenstein P, Norring C, Birgegård A, Yilmaz Z, Hübel C, Watson H, Baker J, Almqvist C; Eating Disorders Working Group of the Psychiatric Genomics Consortium, Thornton LM, Magnusson PK, Bulik CM, Larsson H. *Associations between attention-deficit/hyperactivity disorder and various eating disorders: A Swedish nationwide population study using multiple genetically informative approaches.* **Biol Psychiatry.** 2019 Oct 15;86(8):577-586. doi: 10.1016/j.biopsych.2019.04.036. Epub 2019 May 15
- 250 - Tauffenberger A, Fiumelli H, Almustafa S, Magistretti PJ. *Lactate and pyruvate promote oxidative stress resistance through hormetic ROS signaling.* **Cell Death Dis.** 2019 Sep 10;10(9):653. doi: 10.1038/s41419-019-1877-6
- 249 - Suzuki K, Yamamoto M, Hernandez-Benitez R, Li Z, Wei C, Soligalla RD, Aizawa E, Hatanaka F, Kurita M, Reddy P, Ocampo A, Hishida T, Sakurai M, Nemeth AN, Nuñez Delicado E, Campistol JM, Magistretti P, Guillen P, Rodriguez Esteban C, Gong J, Yuan Y, Gu Y, Liu GH, López-Otín C, Wu J, Zhang K, Izpisua Belmonte JC. *Precise in vivo genome editing via single homology arm donor mediated intron-targeting gene integration for genetic disease correction.* **Cell Res.** 2019 Oct;29(10):804-819. doi: 10.1038/s41422-019-0213-0. Epub 2019 Aug 23
- 248 - Magistretti PJ, Geisler FH, Schneider JS, Li PA, Fiumelli H, Sipione S. *Gangliosides: Treatment Avenues in Neurodegenerative Disease.* **Front Neurol.** 2019 Aug 6;10:859. doi: 10.3389/fneur.2019.00859. eCollection 2019
- 247 - Calì C, Tauffenberger A, Magistretti P. *The Strategic Location of Glycogen and Lactate: From Body Energy Reserve to Brain Plasticity.* **Front Cell Neurosci.** 2019 Mar 6;13:82. doi: 10.3389/fncel.2019.00082. eCollection 2019
- 246 - Duffy ME, Rogers ML, Joiner TE, Bergen AW, Berrettini W, Bulik CM, Brandt H, Crawford S, Crow S, Fichter M, Halmi K, Kaplan AS, Klump KL, Lilienfeld L, Magistretti PJ, Mitchell J, Schork NJ, Strober M, Thornton LM, Treasure J, Woodside B, Kaye WH, Keel PK. *An investigation of indirect effects of personality features on anorexia nervosa severity through interoceptive dysfunction in individuals with lifetime anorexia nervosa diagnoses.* **Int J Eat Disord.** 2019 Feb;52(2):200-205. doi: 10.1002/eat.23008. Epub 2019 Jan 12
- 245 - Duffy ME, Rogers ML, Joiner TE, Bergen AW, Berrettini W, Bulik CM, Brandt H, Crawford S, Crow S, Fichter M, Halmi K, Kaplan AS, Klump KL, Lilienfeld L, Magistretti PJ, Mitchell J, Schork NJ, Strober M, Thornton LM, Treasure J, Woodside B, Kaye WH, Keel PK. *An investigation of indirect effects of personality features on anorexia nervosa severity through interoceptive dysfunction in individuals with lifetime*

- anorexia nervosa diagnoses.* **Int J Eat Disord.** 2019 Feb;52(2):200-205. doi: 10.1002/eat.23008. Epub 2019 Jan 12.
- 244 - Didier MEP, Tarun OB, Jourdain P, **Magistretti P**, Roke S. *Membrane water for probing neuronal membrane potentials and ionic fluxes at the single cell level.* **Nat Commun.** 2018 Dec 11;9(1):5287. doi: 10.1038/s41467-018-07713-w
- 243 - Dyar KA, Lutter D, Artati A, Ceglia NJ, Liu Y, Armenta D, Jastroch M, Schneider S, de Mateo S, Cervantes M, Abbondante S, Tognini P, Orozco-Solis R, Kinouchi K, Wang C, Swerdloff R, Nadeef S, Masri S, Magistretti P, Orlando V, Borrelli E, Uhlenhaut NH, Baldi P, Adamski J, Tschöp MH, Eckel-Mahan K, Sassone-Corsi P.  
Atlas of Circadian Metabolism Reveals System-wide Coordination and Communication between Clocks.  
**Cell.** 2018 Sep 6;174(6):1571-1585.e11. doi: 10.1016/j.cell.2018.08.042.
- 242 - Kurita M, Araoka T, Hishida T, O'Keefe DD, Takahashi Y, Sakamoto A, Sakurai M, Suzuki K, Wu J, Yamamoto M, Hernandez-Benitez R, Ocampo A, Reddy P, Shokhirev MN, **Magistretti P**, Núñez Delicado E, Eto H, Harii K, Izpisua Belmonte JC. *In vivo reprogramming of wound-resident cells generates skin epithelial tissue.* **Nature.** 2018 Sep;561(7722):243-247. doi: 10.1038/s41586-018-0477-4
- 241 - Margineanu MB, Mahmood H, Fiumelli H, **Magistretti PJ.** *L-Lactate Regulates the Expression of Synaptic Plasticity and Neuroprotection Genes in Cortical Neurons: A Transcriptome Analysis.* **Front Mol Neurosci.** 2018 Oct 10;11:375. doi: 10.3389/fnmol.2018.00375. eCollection 2018.  
PMID: 30364173
- 240 - Coggan JS, Calì C, Keller D, Agus M, Boges D, Abdellah M, Kare K, Lehväslaiho H, Eilemann S, Jolivet RB, Hadwiger M, Markram H, Schürmann F, **Magistretti PJ.** *A Process for Digitizing and Simulating Biologically Realistic Oligocellular Networks Demonstrated for the Neuro-Glio-Vascular Ensemble.* **Front Neurosci.** 2018 Sep 25;12:664. doi: 10.3389/fnins.2018.00664. eCollection 2018.  
PMID: 30319342
- 239 - Tran The J, **Magistretti P**, Ansermet F. *The Epistemological Foundations of Freud's Energetics Model.* **Front Psychol.** 2018 Oct 11;9:1861. doi: 10.3389/fpsyg.2018.01861. eCollection 2018. Review
- 238 - Jourdain P, Rothenfusser K, Ben-Adiba C, Allaman I, Marquet P, **Magistretti PJ.** *Dual action of L-Lactate on the activity of NR2B-containing NMDA receptors: from potentiation to neuroprotection.* **Sci Rep.** 2018 Sep 7;8(1):13472
- 237 - Coggan JS, Keller D, Calì C, Lehväslaiho H, Markram H, Schürmann F, **Magistretti PJ.** *Norepinephrine stimulates glycogenolysis in astrocytes to fuel neurons with lactate.* **PLoS Comput Biol.** 2018 Aug 30;14(8):e1006392. doi: 10.1371/journal.pcbi.1006392. eCollection 2018
- 236 - Carteron L, Solari D, Patet C, Quintard H, Miroz JP, Bloch J, Daniel RT, Hirt L, Eckert P, **Magistretti PJ**, Oddo M. *Hypertonic Lactate to Improve Cerebral Perfusion and Glucose Availability After Acute Brain Injury.* **Crit Care Med.** 2018 Jun 19. doi: 10.1097/CCM.0000000000003274. [Epub ahead of print]  
PMID: 29923931
- 235 - Peachey NS, Yu M, Han JYS, Lengacher S, **Magistretti PJ**, Pellerin L, Philp NJ. *Impact of MCT1 Haploinsufficiency on the Mouse Retina.* **Adv Exp Med Biol.** 2018;1074:375-380. doi: 10.1007/978-3-319-75402-4\_46

- 234 - Steiner N, Rossetti C, Sakurai T, Yanagisawa M, de Lecea L, **Magistretti PJ**, Halfon O, Boutrel B. *Hypocretin/orexin deficiency decreases cocaine abuse liability.* **Neuropharmacology.** 2018 May 1;133:395-403. doi: 10.1016/j.neuropharm.2018.02.010. Epub 2018 Feb PMID: 29454841
- 233 - Kilic K, Karatas H, Donmez-Demir B, Eren-Kocak E, Gursoy-Ozdemir Y, Can A, Petit JM, **Magistretti PJ**, Dalkara T. *Inadequate Brain Glycogen or Sleep Increases Spreading Depression Susceptibility.* **Ann Neurol.** 2017 Dec 15. doi: 10.1002/ana.25122. [Epub ahead of print]
- 232 - Rossetti C, Sciarra D, Petit JM, Eap CB, Halfon O, **Magistretti PJ**, Boutrel B, Cardinaux JR. *Gender-specific alteration of energy balance and circadian locomotor activity in the Crtc1 knockout mouse model of depression.* **Transl Psychiatry.** 2017 Dec 8;7(12):1269. doi: 10.1038/s41398-017-0023-4
- 231 - Huckins LM, Hatzikotoulas K, Southam L, Thornton LM, Steinberg J, Aguilera-McKay F, Treasure J, Schmidt U, Gunasinghe C, Romero A, Curtis C, Rhodes D, Moens J, Kalsi G, Dempster D, Leung R, Keohane A, Burghardt R, Ehrlich S, Hebebrand J, Hinney A, Ludolph A, Walton E, Deloukas P, Hofman A, Palotie A, Palta P, van Rooij FJA, Stirrups K, Adan R, Boni C, Cone R, Dedoussis G, van Furth E, Gonidakis F, Gorwood P, Hudson J, Kaprio J, Kas M, Keski-Rahonen A, Kiezebrink K, Knudsen GP, Slof-Op 't Landt MCT, Maj M, Monteleone AM, Monteleone P, Raevuori AH, Reichborn-Kjennerud T, Tozzi F, Tsitsika A, van Elburg A; Eating Disorder Working Group of the Psychiatric Genomics Consortium, Collier DA, Sullivan PF, Breen G, Bulik CM, Zeggini E. *Investigation of common, low-frequency and rare genome-wide variation in anorexia nervosa.* **Mol Psychiatry.** 2017 Jul 25. doi: 10.1038/mp.2017.88. [Epub ahead of print]
- 230 - Mohammed H, Al-Awami AK, Beyer J, Cali C, **Magistretti P**, Pfister H, Hadwiger M. *Abstractocyte: A Visual Tool for Exploring Nanoscale Astroglial Cells.* **IEEE Trans Vis Comput Graph.** 2018 Jan;24(1):853-861. doi: 10.1109/TVCG.2017.2744278. Epub 2017 Aug 29
- 229 - Jadhav KS, **Magistretti PJ**, Halfon O, Augsburger M, Boutrel B. *A preclinical model for identifying rats at risk of alcohol use disorder.* **Sci Rep.** 2017 Aug 25;7(1):9454. doi: 10.1038/s41598-017-09801-1
- 228 - Escobar C, Ansermet F, **Magistretti PJ**. *A Historical Review of Diachrony and Semantic Dimensions of Trace in Neurosciences and Lacanian Psychoanalysis.* **Front Psychol.** 2017 Jun 23;8:734. doi: 10.3389/fpsyg.2017.00734. eCollection 2017
- 227 - Li D, Chang X, Connolly JJ, Tian L, Liu Y, Bhoj EJ, Robinson N, Abrams D, Li YR, Bradfield JP, Kim CE, Li J, Wang F, Snyder J, Lemma M, Hou C, Wei Z, Guo Y, Qiu H, Mentch FD, Thomas KA, Chiavacci RM, Cone R, Li B, Sleiman PA; Eating Disorders Working Group of the Psychiatric Genomics Consortium; Price Foundation Collaborative Group, Hakonarson H. *A genome-wide association study of anorexia nervosa suggests a risk locus implicated in dysregulated leptin signaling.* **Sci Rep.** 2017 Jun 19;7(1):3847. doi: 10.1038/s41598-017-01674-8. Erratum in: **Sci Rep.** 2017 Aug 21;7(1):8379
- 226 - Duncan L, Yilmaz Z, Gaspar H, Walters R, Goldstein J, Anttila V, Bulik-Sullivan B, Ripke S; Eating Disorders Working Group of the Psychiatric Genomics Consortium, Thornton L, Hinney A, Daly M, Sullivan PF, Zeggini E, Breen G, Bulik CM. *Significant Locus and Metabolic Genetic Correlations Revealed in Genome-Wide Association Study of Anorexia Nervosa.* **Am J Psychiatry.** 2017 Sep 1;174(9):850-858. doi: 10.1176/appi.ajp.2017.16121402. Epub 2017 May 12
- 225 - Chatel B, Bendahan D, Hourdé C, Pellerin L, Lengacher S, **Magistretti PJ**, Le Fur Y, Vilmen C, Bernard M, Messonnier LA. *Role of MCT1 and CAII in skeletal muscle pH homeostasis, energetics, and*

*function: in vivo insights from MCT1 haploinsufficient mice.* **FASEB J.** 2017 Mar 2. pii: fj.201601259R. doi: 10.1096/fj.201601259R. [Epub ahead of print]

- 224 - Carrard A, Elsayed M, Margineanu M, Boury-Jamot B, Fragnière L, Meylan EM, Petit JM, Fiumelli H, **Magistretti PJ\***, Martin JL\*. *Peripheral administration of lactate produces antidepressant-like effects.* **Mol Psychiatry.** 2016 Dec 6. doi: 10.1038/mp.2016.237. \*Co-last authors
- 223 - Suzuki K, Tsunekawa Y, Hernandez-Benitez R, Wu J, Zhu J, Kim EJ, Hatanaka F, Yamamoto M, Araoka T, Li Z, Kurita M, Hishida T, Li M, Aizawa E, Guo S, Chen S, Goebel A, Soligalla RD, Qu J, Jiang T, Fu X, Jafari M, Esteban CR, Berggren WT, Lajara J, Nuñez-Delicado E, Guillen P, Campistol JM, Matsuzaki F, Liu GH, **Magistretti P**, Zhang K, Callaway EM, Zhang K, Belmonte JC. *In vivo genome editing via CRISPR/Cas9 mediated homology-independent targeted integration.* **Nature.** 2016 Dec 1;540(7631):144-149. doi: 10.1038/nature20565
- 222 - Preissmann D, Charbonnier C, Chagué S, Antonietti JP, Llobera J, Ansermet F, **Magistretti PJ**. *A Motion Capture Study to Measure the Feeling of Synchrony in Romantic Couples and in Professional Musicians.* **Front Psychol.** 2016 Oct 27;7:1673
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