

CURRICULUM VITAE

Paul R. Sanberg

CONTACT INFORMATION

University of South Florida
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CURRENT ACADEMIC POSITIONS

1992-Present University of South Florida, Tampa, Florida
Executive Director, Center of Excellence for Aging and Brain Repair (2010-Present)
Distinguished Health Professor
Distinguished University Professor (Neuroscience) (2002-Present)
Joint Appointments: Engineering and Business
2010-Present President, National Academy of Inventors

PAST ACADEMIC POSITIONS

1992- University of South Florida, Tampa, Florida
Senior Vice President for Research, Innovation & Knowledge Enterprise
(2017-2021)
President & CEO, USF Research Foundation, Inc. (2012-2021)
Senior Vice President for Research, Innovation & Economic Development (2013-2017)
Senior Associate Vice President for Research & Innovation (2010-2012)
Special Assistant to the President (2011-2019)
Associate Vice President for Research & Innovation (2008-2010)
Associate Vice President & Associate Dean, USF College of Medicine (2002-2006)

1990-92 Brown University, Providence, Rhode Island
Professor (Research)
Department of Psychiatry and Human Behavior, Division of Biology and Medicine

1986-90 University of Cincinnati, Cincinnati, Ohio
Associate Professor (Tenured), Professor (1989)
Departments of Psychiatry, Neurosurgery, Psychology, Physiology and Biophysics
Director, Division of Neuroscience

1983-86 Ohio University, Athens, Ohio
Assistant Professor, Departments of Psychology and Biomedical Sciences
College of Arts and Sciences and College of Osteopathic Medicine
Director, Behavioral Neuroscience Laboratory

- 1981-83 Johns Hopkins University School of Medicine, Baltimore, Maryland
 Postdoctoral Fellow (with Prof. Joseph T. Coyle, NAM member)
 Departments of Neuroscience and Psychiatry
- 1981 Australian National University
 Postdoctoral Research Assistant (with Prof. Richard F. Mark)
 Department of Behavioral Biology
- 1980 University of California, San Diego, California
 Visiting Scholar (with Prof. Ian Creese)
 Department of Neuroscience
- 1979-81 Australian National University
 Lecturer (part-time), Neuropsychology
 Departments of Psychology and CCE
 Research Scholar
 Department of Behavioral Biology
- 1976-77 University of British Columbia
 Graduate Research Assistant
 Division of Neurological Sciences

ACADEMIC EDUCATION

Bachelor of Science with Honours (Psychology and Biology)

York University, Toronto, Canada, 1976

2018 York University Bryden Alumni Award for Outstanding Achievement

Master of Science (Neurological Sciences)

The University of British Columbia, Vancouver, Canada, 1979, *First-class Honours*

Thesis: *An animal model of Huntington's disease: Behavioral, pharmacological and morphological changes following intrastriatal injections of kainic acid (120 pp.)*

Doctor of Philosophy (Behavioral Biology)

The Australian National University, Canberra, Australia, 1981, *Crawford Medal; 2015 Distinguished Alumni Award*

Thesis: *The basal ganglia: A mammalian and avian perspective (417 pp.)*

Graduate Diploma in Science Education

Curtin University (previously WAIT), Perth, Australia, 1986

Doctor of Science (Neurobiology)

The Australian National University, Canberra, Australia, 1998

Thesis: *Animal models of neurobehavioral disorders: From toxins to transplants and experimental therapeutics (699 pp.)*

Doctor of Medicine (Research)

Saint James School of Medicine, Saint Vincent, SVG, 2008

Thesis: *Cellular repair for the central nervous system (418 pp.)*

PROFESSIONAL EDUCATION

Certificate of Achievement

OxfordX, an online learning initiative of University of Oxford, 2017

Course: From Poverty to Prosperity: Understanding Economic Development

Certified Flight Instructor
Federal Aviation Administration (current)
Gold Seal Instructor
Master Instructor Emeritus

INDUSTRY EMPLOYMENT HISTORY

Saneron CCEL Therapeutics, Inc.
Consultant and Co-Founder, Chair of the Board (2002-Present)
Acting CEO (2002-2006)

Layton Bioscience, Inc. (1998-2001)
Consultant and Member, Board of Directors
Acting CSO and Senior Vice President

CytoTherapeutics, Inc. (now Stem Cells, Inc.) (1990-1992)
Director, Neuroscience and Scientific Affairs

COMPANIES and ORGANIZATIONS FOUNDED

2013 Florida Inventors Hall of Fame
2010 National Academy of Inventors
2005 Natura Therapeutics, Inc.
2002 Saneron CCEL Therapeutics, Inc.
1994 American Society for Neural Therapy & Repair (Co-Founder)
1992 International Behavioral Neuroscience Society (Co-Founder)

FELLOW

2021 IEEE Fellow
2020 Sigma Xi—The Scientific Research Honor Society (Inaugural Class)
2020 Royal Aeronautical Society
2019 Royal Society of Biology
2019 Biomedical Engineering Society (BMES)
2019 Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA)
2019 Honorary Fellow, International Academy of Nanobiotechnology, Florida Association for Nanobiotechnology
2015 American Institute for Medical and Biological Engineering
2012 National Academy of Inventors
2010 Royal Society of Chemistry
2002 Royal Society for Public Health
2000 Royal Society of Medicine
1998 American Psychological Association, Division 6 and 28
1995 American Society for Neural Therapy and Repair
1995 International Behavioral Neuroscience Society
1994 New York Academy of Sciences
1994 American College of Neuropsychopharmacology
1993 American Association for the Advancement of Science
1988 American Psychological Society

AWARDS & HONORS

- 2021 IEEE Fellow
- 2020 Sigma Xi Fellow (Inaugural Class)
Sigma Xi—The Scientific Research Honor Society
Johns Hopkins University Society of Scholars
RAeS Fellow
Royal Aeronautical Society
- 2019 RSB Fellow
The Royal Society of Biology
BMES Fellow
Biomedical Engineering Society
RSA Fellow
Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA)
AIMBE Fellow Advocate Award
American Institute for Medical and Biological Engineering
Outstanding Faculty Award
University of South Florida
- 2018 Bryden Alumni Award – Outstanding Achievement
York University, Canada
Fulbright Specialist to Australia
 Wilsmore Professor, University of Melbourne
 Honorary Visiting Professor, Wade Institute of Entrepreneurship,
 Ormond College, University of Melbourne
 Australian National University
2018 Community Champion Award
TiE Tampa Bay
- 2016 The 2016 John P. McGovern Science and Society Award
Sigma Xi, The Scientific Research Honor Society
Tampa Bay Business Journal Power 100 (*Inaugural 25*)
IEEE Senior Member
Institute of Electrical and Electronics Engineers
- 2015 Tampa Bay Times 25 Most Influential Business Players in Tampa Bay
Florida Inventors Hall of Fame Inductee
Florida Medalist
Florida Academy of Sciences
Jefferson Ambassador
Thomas Jefferson University
Alumnus of the Year for Research or Academics
Australian National University (ANU), Canberra
Outstanding Faculty Award
University of South Florida
- 2014 AAAS-Lemelson Invention Ambassador
American Association for the Advancement of Science and The Lemelson Foundation
- 2013 USPTO Innovation Expo at the Smithsonian Selection Committee
USPTO and the Smithsonian Institution
- 2012 Distinguished Health Professorship
University of South Florida Health
- 2011 Everfront Award
Pan Pacific Symposium on Stem Cell and Cancer Research, Taichung, Taiwan
- 2008 Grass Foundation Lecturer
Western NC Chapter of the Society for Neuroscience, Wake Forest University School of Medicine

- 2006 Tampa Bay Health Care Hero Award for Research and Innovation
Tampa Bay Business Journal
Kyoto Prize Nomination Committee
The Inamori Foundation, Japan
- 2005 Outstanding Faculty Research Award
University of South Florida
Outstanding Researcher Award
Sigma Xi – Tampa Bay Chapter
- 2004 Outstanding Scientific Research Prize
International Behavioral Neuroscience Society, Annual Meeting
Faculty of 1000 Medicine
Medicine Reports Ltd. (Biomed Central)
ACNP Ad Hoc Committee on Stem Cells
American College of Neuropsychopharmacology
Distinguished University Professorship
University of South Florida
- 2003 President's Award for Faculty Excellence
University of South Florida
- 2002 Semi-Finalist, Coulter Award for Innovation and Entrepreneurship
\$10,000 awarded by Georgia Tech
American Men and Women of Science 21st Edition
- 1999 Grass Foundation Lecturer
- 1998 Enterprise Florida Health Technology Task Force
State of Florida
- 1996 Ove Ferno Prize
International College of Neuropsychopharmacology
- 1995 Plaque of Appreciation
Tourette Association of America
University Medal, University of Santiago de Compostella
Santiago de Compostella, Spain
- 1989 Highest Merit Award
Department of Psychiatry, University of Cincinnati
- 1987 Travel Award
Society for Neuroscience
- 1986 Certificate of Appreciation
Huntington's Disease Foundation of America
- 1985 Research Award
Mead Johnson, Ciba-Geigy Pharmaceuticals
- 1984 Travel Fellowship
American College of Neuropsychopharmacology
- 1982-83 Maurice Klugman Memorial Award
Tourette Association of America Research Fellowship
- 1981 Sir J.G. Crawford Medal for Outstanding Ph.D. Thesis
The Australian National University
- 1979-81 Ph.D. Research Scholarship
The Australian National University

PROFESSIONAL MEMBERSHIPS (including year joined)

- Academy of Science, Engineering & Medicine of Florida (ASEM_{FL}) (2018)
American Association for the Advancement of Science (AAAS) (1993)
American College of Forensic Examiners (2007)
American College of Neuropsychopharmacology (1994)

American Institute for Medical and Biological Engineering (AIMBE) (2014)
 American Psychological Association (1989)
 American Society for Neural Transplantation and Repair (1995)
 Association for Psychological Science (1989)
 Behavioral Pharmacology Society (1996)
 Behavioral Toxicology Society (1996)
 Biomedical Engineering Society (BMES) (2014)
 Cell Transplant Society (1996)
 Cosmos Club (2020)
 Florida Academy of Sciences (2013)
 Institute of Electrical & Electronics Engineers (IEEE) (2014)
 International Behavioral Neuroscience Society (1993)
 International Brain Research Organization (1994)
 International Society for Developmental Psychobiology (1988)
 National Academy of Inventors (NAI) (2010)
 Neurotoxicity Society (2001)
 New York Academy of Sciences (1994)
 Royal Aeronautical Society (2020)
 Royal Society for the Encouragement of Arts, Manufactures & Commerce (RSA) (2019)
 Royal Society of Biology (2019)
 Royal Society of Chemistry (2010)
 Royal Society of Medicine (2000)
 Royal Society for Public Health (2002)
 Sigma Xi—The Scientific Research Honor Society (2010)
 Society for Neuroscience (1988)
 Society of Biological Psychiatry (1988)

ADVISORY BOARDS, BOARDS OF DIRECTORS, AND OTHER APPOINTMENTS

2019- Board Member, Council on Competitiveness' Technology Leadership & Strategy Initiative
 2019 Selection Committee for the 2019 University Innovation & Entrepreneurship Showcase
 Association of Public and Land-grant Universities and Association of American Universities
 2018- External Advisory Board – NYU Tandon School of Engineering Institute for Invention,
 Innovation, & Entrepreneurship
 New York University
 Inaugural Board of Directors – Academy of Science, Engineering & Medicine of
 Florida (ASEM_{FL})
 University of Central Florida
 2015- Advisory Board – Association of Public & Land-grant Universities (APLU)
 Commission on Innovation, Competitiveness, and Economic Prosperity (CICEP)
 2013- Advisory Board – Florida Inventors Hall of Fame
 Florida Inventors Hall of Fame
 2013 USPTO/Smithsonian Innovation Expo Selection Committee
 US Patent and Trademark Office and the Smithsonian Institution
 2012-19 U.S. National Medal of Technology and Innovation Nomination Evaluation Committee
 U.S. Department of Commerce, medal presented by the President of the United States.
 2011 USF Nanomedicine Research Center Board
 University of South Florida
 International Advisory Board
 Pan Pacific Symposium on Stem Cell Research

Chair, Corporate Recruitment, Walk to Defeat ALS
 ALS Association Florida Chapter
 2010 Board of Directors
 National Academy of Inventors
 USF Research Foundation Board
 University of South Florida
 2009 Scientific Advisory Board (Stem Cells)
 Johnson & Johnson
 Board of Scientific Counselors
 NIA, NIH
 2005 National Advisory Board for Health
 Museum of Science & Industry
 Board of Directors
 Natura Therapeutics, Inc.
 2004 Advisory Board
 Sovereign Equity Fund
 Clinical Advisory Board
 ReNeuron, Inc. England
 2002 Scientific Advisory Board
 MAAS BIOLAB, LLC
 2001 Board of Directors
 CCEL Bio-Therapies, Inc.
 Board of Directors
 Stem Cell Preservation, Inc.
 Board of Directors
 Medical Advisory Systems, Inc.
 2000 Board of Directors
 Saneron CCEL Therapeutics, Inc.
 Scientific Advisory Board
 Cryo-Cell International Inc.
 Board of Directors
 LBS Technologies, Inc.
 1998 Board of Directors
 Layton BioScience, Inc.
 Board of Directors
 BioFlorida, Inc.
 Board of Directors
 USF Research Foundation, Inc.
 1997 Clinical Advisory Board
 Targacept, Inc.
 Executive Director
 American Society for Neural Transplantation
 1995 Scientific Advisor
 Layton BioScience, Inc.
 1994 Scientific Advisor
 Theracell, Inc.
 President-Elect
 American Society for Neural Transplantation
 President-Elect
 Cell Transplant Society
 Governing Council
 International Brain Research Organization

1992 Scientific Advisor
CytoTherapeutics, Inc.
President-Elect
International Behavioral Neuroscience Society
President-Elect
Tampa Bay Chapter, Society for Neuroscience

1991 International Advisory Board
Cell Transplant Society
Scientific Advisory Board
Tourette Association of America

PROFESSIONAL EXPERIENCE

Current Editorial Activities

Editor

American Journal of Neuroprotection and Neuroregeneration, Associate Editor

Cell Transplantation, Founding Editor and Co-Editor-in-Chief

Stem Cells and Development, Associate Editor

Technology and Innovation, Journal of the National Academy of Inventors, Editor-in-Chief

Editorial Boards

Aging & Disease, Editorial Board

Current Aging Science, Editorial Board

Journal of Cellular and Molecular Medicine, Editorial Board

Neurobiology of Aging, Editorial Advisory Board

Regenerative Medicine, Editorial Board

Past Editorial Activities (Selected)

Behavioral and Brain Sciences, Editorial Associate

Brain Research Bulletin, Editorial Board

Experimental Neurology, Editorial Board

Frontiers in Neurorestorology, Associate Editor of the Editorial Board

Gene Expression, Editorial Board

Graft Journal, Editorial Board

Journal of Hematotherapy and Stem Cell Research, Editorial Board

Journal of Neural Transplantation and Plasticity, Editorial Board; U.S. Editor

Journal of Neurorestorology, Editorial Board

Life Science, International Editorial Advisory Board

Neuroscience and Biobehavioral Reviews, Editorial Board

Neurosurgery and Spine, Editorial Board

Neurotoxicity Research, Editorial Board

Pharmacology, Biochemistry and Behavior, Editorial Board

Physiology and Behavior, Editorial Board

Psychobiology, Editorial Board

Restorative Neurology and Neuroscience, Editorial Board

Reviews in the Neurosciences, Editorial Board

Stem Cells International, Editorial Board

Translational Neuroscience and Clinics, Associate Editor

World Journal of Stem Cells, Editorial Board

Grant Application Reviewer (Selected)

American Association for the Advancement of Science
American Health Assistance Foundation, Alzheimer's Disease Review Committee
Biomedical Research Council (Singapore)
Biomedical Engineering Institute (University of Minnesota)
Fredericks Ataxia Research Association (FARA)
Harvard University BRSG Committee
Israel Science Foundation
John Simon Guggenheim Memorial Foundation
Louisiana Board of Regents
Medical Research Council (UK)
Medical Research Council (Canada)
Medical Research Council (Singapore)
National Institutes of Health
National Science Foundation
Neurological Foundation
Spinal Cord Research Foundation
Tourette Association of America
U.S. Department of State (Science Center Program)

GRANTS & CONTRACTS

2018-20 National Science Foundation
10/1/18 – 9/30/20
\$179,995.00
"Type II: I-Corps Site at University of South Florida"
(PI: P. Sanberg)

2017-19 U.S. Economic Development Administration
1/2/17 – 12/31/19
\$250,000
"Regional Innovation Strategies Program – Seed Tampa Bay"
(PI: P. Sanberg)

2015-18 U.S. Department of Commerce
4/1/15 – 3/31/18
\$1,068,550
"First WaVE Venture Center Program Expansion"
(PI: P. Sanberg)

2015-18 National Science Foundation
4/1/15 – 3/31/18
\$299,708
"I-Corps Sites: University of South Florida: Catalyzing Research Translation."
(PI: P. Sanberg)

2012-15 U.S. Department of Commerce
09/19/12 - 2/28/15
\$1,000,001
"i6 Challenge Grant Tampa Bay FirstWave Venture Center"
In co-operation with Tampa-Bay Wave, built an innovation accelerator for web-based technologies for 50 startups.
(PI: P. Sanberg)

- 2011-14 TATRIC Department of Defense, Department of the Army - USAMRAA
09/20/11 - 09/19/14
\$1,572,997
"Battlefield – Related Injury Translational Research, Post-Traumatic Disease and Disability – Veterans Reintegration Strategy"
(PI: P. Sanberg)
- 2001-13 Children's Medical Research Foundation
07/01/01 – 06/30/13
\$771,727
"Treating San Filippo with Umbilical Cord Blood Stem Cells"
To study BBB structural and functional impairments in mice modeling Sanfilippo Syndrome type B.
(PI: P. Sanberg)
- 2012 Florida Energy Systems Consortium, Florida Board of Governors
08/01/08-07/31/14
(PI: P. Sanberg)
- 2010-11 National Institutes of Neurological Disorder and Stroke R13
04/01/10 – 03/31/11
(PI: P. Sanberg) "American Society for Neural Therapy and Repair"
Travel award funding for students/post-doctoral fellow to attend 2010 annual ASNTR Conference.
- 2010 AstraZeneca
"TC-5214 Clinical Trials for Depression"
License Agreement with Targacept
(PI: P. Sanberg)
- 2006-11 National Institutes of Health RO1
"Cord blood is neuroprotective in a rat model of stroke"
To examine the ability of specific subsets of cord blood cells to be potentially therapeutic in stroke models.
(Co-PI: P. Sanberg)
- 2007-10 National Institutes of Health RO1
"HUCBC Modulation of Alzheimer"
(PI: Dr. Jun Tan)
- 2002-10 Seven NIH STTR R41 grants have been funded through USF and Saneron CCEL Therapeutics, Inc., based on Dr. Sanberg's stem cell intellectual property
(Various PIs)
- 2002-10 Targacept, Inc.
"Behavioral, Neuropharmacological & Clinical Program Related to Mecamylamine in the Treatment of Neuropsychiatric Disorders"
Ongoing license agreement funding for patented discovery.
- 2006-09 ReNeuron
01/01/07 – 12/31/07
\$289,726
"The Angiogenic and Reparative Properties of a ReNeuron Stem Cell Line in the Treatment of Stroke"
(PI: P. Sanberg)
- 2005-07 National Institutes of Health RO1
"Angiogenesis in the pulmonary microvasculature"
(Co-PI: P. Sanberg)
- 2003-07 Federal HRSA Construction Grant
"Center for Aging and Brain Repair Building"
- 2002-07 National Institutes of Health RO1
"Biology of adult stem cells in aging"
(PI: Dr. Alison Willing)

2001-05 NASA
08/01/01 – 09/30/05
\$766,000
“Creation and transplantation of immunoprivileged Sertoli-neuron-aggregated cells (SNAC’s) for the treatment of Parkinson’s Disease”
(Co-PI: P. Sanberg)

2001-05 NASA
“Cell transplantation therapy for diabetes utilizing immunoprivileged Sertoli islet cell aggregates (SICA’s)”
(PI: Dr. Donald Cameron)

2003 Workforce Florida
06/16/03 – 12/31/03
\$500,000
“Graduate Training for Nurses in 3 Specialty Areas and Training for PhD Candidates in Neurosciences”
(PI: P. Sanberg)

1999-03 V.A. Merit Award
“Stem cells as a source of dopaminergic neurons for brain repair”
(PI: Dr. Juan Sanchez-Ramos)

2001-02 State of Florida I-4 Technology Corridor Funds – External Matching Grant Program
“Sertoli cell co-transplants to treat Parkinson’s disease”
(PI: Dr. Alison Willing)

2000-02 Cryo-Cell International, Inc.
04/01/00 – 03/31/02
\$150,000
“Umbilical cord blood stem cells”
(Co-PI: P. Sanberg)

1995-02 Layton BioScience, Inc.
“hNT2 transplants into a stroke animal model”

1998-02 State of Florida I-4 Technology Corridor Funds
“Developing neuroscience products”

1999-01 National Institutes of Health
“Human neuronal cell therapy for Parkinson’s disease”
(1R43 N36502)

1994-01 National Institutes of Health
“Double blind controlled trial of nigral grafting in Parkinson’s disease”
(PI: Dr. Tom Freeman) Multicenter Study

1998-99 American Parkinson’s Disease Association
“Novel cell transplantation strategies for Parkinson’s disease”
(PI: Dr. Alison Willing)

1997-00 Layton BioScience, Inc.
10/13/97 – 10/12/00
\$660,000
“Nicotinic antagonists for neuropsychiatric disorders”
(PI: P. Sanberg)

1996-98 Titan Pharmaceuticals, Inc.
“Sertoli cell research”
(PI: P. Sanberg)

1996-98 Theracell, Inc.
03/01/96 – 03/01/98
\$110,000
“Neural transplants in Parkinson’s model” (Sertoli cell research)
(PI: P. Sanberg)

- 1996-97 **Tourette Association of America**
 “Transdermal nicotine and haldol for the treatment of Tourette’s Syndrome”
 (PI: P. Sanberg)
- 1995-97 **American Heart Association**
 “Fetal neural transplantation in a stroke animal model”
 (PI: P. Sanberg)
- 1994-97 **National Institutes of Health**
 05/06/94 – 04/30/97
 \$25,517
 “Psychopharmacotherapy of nicotine/haloperidol in Tourette’s”
 (RO1 NS32067-02)
 (PI: P. Sanberg)
- 1993-94 **University of South Florida President’s Council**
 “Fetal neural transplantation for Huntington’s disease: Preclinical studies”
 (PI: P. Sanberg)
- 1993-96 **Smokeless Tobacco Research Council**
 “Nicotine in the potentiation of haloperidol in Tourette’s Syndrome”
 (PI: P. Sanberg)
- 1990-92 **Smokeless Tobacco Research Council**
 “Nicotine and neuroleptic treatment in Tourette patients”
- 1990-92 **National Institutes of Mental Health**
 “Pharmacology of fetal striatal tissue transplants”
 (PI: Dr. Norman)
- 1988-92 **National Institutes of Health**
 “Neural transplants, behavior and Huntington’s model”
 (RO1 NS25647)
- 1989-90 **Tourette Association of America**
 “Evaluation of the role of nicotine in potentiating neuroleptic responses in animals and Tourette’s patients”
- 1988-89 **Huntington’s Disease Society of America**
 “Neural, anatomical and behavioral analysis of fetal striatal transplants in a novel animal model of Huntington’s disease”
- 1987-89 **Alzheimer’s Research Center, Ohio Department of Aging**
 “Neural transplantation in animal model of Alzheimer’s disease”
 (PI: Dr. Norman)
- 1987-88 **National Institutes of Health**
 “A quantitative model for the assay of functional and neurochemical recovery following brain tissue transplants in rats” (BRSG SO7RR05408-24)
 (PI: Dr. Norman)
- University Research Council, Cincinnati**
 “Brain tissue transplants, quinolinic acid and Huntington’s disease”
- National Institutes of Health**
 “Brain tissue transplants in a novel quinolinic acid model of Huntington’s disease”
- 1985-87 **Huntington’s Disease Foundation of America**
 “Multivariate analysis of spontaneous locomotion in an animal model of Huntington’s disease: Effects of brain tissue transplants”
- 1985-86 **Hereditary Disease Foundation**
 “Multivariate analysis of spontaneous locomotion in an animal model of Huntington’s disease: Effects of brain tissue transplants”
- 1984-85 **National Institutes of Mental Health**
 “Topography of locomotion in rats with striatal lesions”
 (RO3 MH40127)
- 1983-86 **Ohio University Intramural Research Grants**
 “Brain tissue transplants in Huntington’s disease model”

- 1983 The Pratt Family
 “Analysis of spontaneous and drug-induced locomotion in an animal model of Huntington’s disease”
- 1981-82 Postdoctoral Training Grant
 National Institutes of Health
 Omnitech Electronics, Inc.
 “Development of automated measurement analysis of locomotor behavior”
 (\$70,000/equipment)
 Ohio Department of Mental Health
 “Equipment start-up grant”
 (\$100,000/equipment)

PUBLICATIONS

>699 Publications

Citations: 38,091; h-index: 101 (Google Scholar Citation Indices, 12/16/2021)

Scientific Articles, Reviews, Position Papers, and Book Chapters 699 (pp. 13-54)

Books - 14 (p. 54)

Multimedia Presentations and Edited Proceedings - 13 (p. 54-55)

Issued U.S. Patents - 55, and Foreign Patents - 113 (pp. 55-58)

Regional, National and International Invited Presentations (pp. 58-60)

>588 Research Abstracts/Presentations at scientific meetings (Available on request)

Scientific Articles, Reviews, Position Papers, and Book Chapters (694)

- Larsen RW, Bradley-Klug K, Bloom M, Goldstein H, **Sanberg P**: USF pandemic response research network (USF-PRRN): a highly integrative basic and responsive research approach to Covid-19. *Technology and Innovation, Vol. 22, pp. 165-171, 2021.*
<http://dx.doi.org/10.21300/22.2.2021.5>
- Carlos J. Jiménez Haertel, Marcia McNutt, Mihrimah Ozkan, Edda S.P. Aradóttir, Kalliat T. Valsaraj, **Paul R. Sanberg**, Shuchi Talati, Jennifer Wilcox: The promise of scalable direct air capture. *Chem.* 2021 7(11):2831-2834 ISSN 2451-9294, doi.org/10.1016/j.chempr.2021.10.005.
- Sanberg P**, Morrison DC, Bjugstad K: ASNTR’s Venture into a Hybrid Conference: Lessons Learned During the COVID-19 Pandemic. *Cell Transplant.* 2021;30:9636897211053872. [doi:10.1177/09636897211053872](https://doi.org/10.1177/09636897211053872)
- Sanberg P**, Morrison DC, Kovacs RA, Bjugstad K. A Retrospective Look at Recent COVID-19 Articles Published in Cell Transplantation: Research Leading to Further Understanding. *Cell Transplant.* 2021 Jan-Dec; 30:9636897211049814. [doi: 10.1177/09636897211049814](https://doi.org/10.1177/09636897211049814). PMID: 34689578; PMCID: PMC8549463.
- Sanberg, Paul & Rao, G. & Comizzoli, Pierre & Coons, Jessica. (2021). Seeding the Future: Access to Capital for Funding Innovation. *Technology & Innovation.* 22. 1-2. [10.21300/21.4.2021.1](https://doi.org/10.21300/21.4.2021.1).
- Park YJ, Farooq J, Cho J, Sadanandan N, Cozene B, Gonzales-Portillo B, Saft M, Borlongan MC, Borlongan MC, Shytle RD, Willing AE, Garbuzova-Davis S, **Sanberg PR**, Borlongan CV: Fighting the War Against COVID-19 via Cell-Based Regenerative Medicine: Lessons Learned from 1918 Spanish Flu and Other Previous Pandemics. *Stem Cell Rev Rep.* 2021 Feb;17(1):9-32. [doi: 10.1007/s12015-020-10026-5](https://doi.org/10.1007/s12015-020-10026-5). PMID: 32789802 Free PMC article.
- Garbuzova-Davis S, Boccio KJ, Ehrhart J, **Sanberg PR**, Appel SH, Borlongan CV: Detection of endothelial cell-associated human DNA reveals transplanted human bone marrow stem cell engraftment into CNS capillaries of ALS mice. *Brain Res Bull.* 2021 Feb 2; S 0361-9230(21)00033-2. [doi: 10.1016/j.brainresbull.2021.01.020](https://doi.org/10.1016/j.brainresbull.2021.01.020). Epub ahead of print. PMID: 33545308.

8. **Sanberg, P.R.** & Stewart, J. The time to eliminate racial barriers in American innovation is now. *Technology & Innovation*, 21, 1-3. December, 2020. <https://doi.org/10.21300/21.4.2020.11>
9. Fan, J., Saft, M., Sadanandan, N., Gonzales-Portillo, B., Park, Y.J., **Sanberg, P.R.**, Borlongan, C.V. & Luo, Y. LncRNAs stand as potent biomarkers and therapeutic targets for stroke. *Frontiers in Aging Neuroscience*, 12, October 19, 2020. EPUB: <https://doi.org/10.3389/fnagi.2020.594571>
10. **Sanberg, P.R.** & Burg, K.J.L. An idea that has come of age—Organized innovation: A blueprint for renewing America's prosperity. *Technology & Innovation*, 21(3), 243-246. August, 2020. <https://doi.org/10.21300/21.3.2020.243>
11. Garbuzova-Davis, S., Willing, A.E., Ehrhart, J., Wang, L., **Sanberg, P.R.** & Borlongan, C.V. Cell-free extracellular vesicles derived from human bone marrow endothelial progenitor cells as potential therapeutics for microvascular endothelium restoration in ALS. *Neuromolecular Medicine*, 2020, Dec;22(4):503-516; Epub August 20, 2020. <https://doi.org/10.1007/s12017-020-08607-1>
12. Borlongan, M.C., Borlongan, M.C. & **Sanberg, P.R.** Editorial: The disillusioned comfort with COVID-19 and the potential of convalescent plasma and cell therapy. *Cell Transplantation*, 29, 1-6. January 2020. <https://doi.org/10.1177/0963689720940719>
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49. **Sanberg, P.R.**, Cameron, D.F., Borlongan, C.V. & Heller, R.: "Sertoli cells as transplantation facilitator for Cell Transplantation." United States Patent Office, Patent: 5,830,460. Issued 11/3/1998.
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51. Dionne, K., Emerich, D.F., Hoffman, D. & **Sanberg, P.R.**, et al: "Methods for coextruding immunoisulatory implantable vehicles with a biocompatible jacket and biocompatibles matrix core." United States Patent Office, Patent: 5,800,829. Issued 09/01/1998.
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53. Dionne, K., Emerich, D.F., Hoffman, D. & **Sanberg, P.R.**, et al: "Implantable bio compatible immunoisulatory vehicle for delivery of selected therapeutic products." United States Patent Office, Patent: 5,798,113. Issued 08/25/1998.
54. **Sanberg, P.R.**, Cameron, D.F. & Borlongan, C.V.: "Sertoli cells as neurorecovery inducing cells for neurodegenerative disorders." United States Patent Office, Patent: 5,702,700. Issued 12/30/1997.
55. Aebischer, P., Goddard, M., Moldauer, J.G., Mulhauser, P. J., Rathbun, M. A., **Sanberg, P.R.**, Vasconcellos, A. V. & Warner, N. F.: "Implantable therapy systems and methods." United States Patent Office, Patent: 5,487,739. Issued 01/30/1996.

RECENT REGIONAL, NATIONAL AND INTERNATIONAL INVITED PRESENTATIONS

1. **Sanberg, P.R.** (2019, November 16). *Dignitaries Welcome*. Invited Speaker. NanoFlorida International Conference: Advances in Translational Nanobiotechnology. Tampa, FL.
2. **Sanberg, P.R.** (2019, June 28). *The Innovation Ecosystem*. Invited panelist. *The Times Higher Education* Young Universities Summit 2019: Embracing Risk, Creating Opportunities. Surrey, UK.
3. **Sanberg, P.R.** (2019, May 31). Invited Panelist: White House Academic Roundtable on Innovation in Quantum Innovation Science. Washington, DC.
4. **Sanberg, P.R.** (2019, April 11). President's Address: State of the Academy. National Academy of Inventors 8th Annual Meeting. Houston, TX.
5. **Sanberg, P.R.** (2019, March 2). Featured Inventor: Florida Technologies Exhibit Opening, Cade Museum. "Explore, Discover & Invent." Gainesville, FL.
6. **Sanberg, P.R.** (2019, Feb. 11). Invited Panelist: AIMBE: Navigating the Nexus of Regulatory Science, Policy and Entrepreneurship: A Workshop on Biofabrication and Biomanufacturing. Session 2: Opportunities and Challenges of Integrating Key Commercialization Requirements with BFAB/BMAN Academic Research. U.S. Patent & Trademark Office, Alexandria, Virginia.
7. **Sanberg, P.R.** (2019, Jan. 24). *Florida's Legacy of Invention: How a proud history of innovation is shaping the future of Florida*. Invited panelist. 2019 Synapse Summit, Tampa, FL.
8. **Sanberg, P.R.** (2018, Oct. 23). *How Does a Country Get More Inventors and Entrepreneurs?* Invited panelist, Center for Strategic and International Studies Conference: How Can Mexico Become More Innovative? Mexico City.

9. **Sanberg, P.R.** (2018, June 7). *Translational Research – Bridging the Gap from Campus to Community*. Invited remarks and panel moderation at the Times Higher Education Young Universities Summit, Tampa, FL.
10. **Sanberg, P.R.** (2018, April 19). *University Perspectives*. Invited panelist at the *Unleashing American Innovation Symposium*, U.S. Commerce Department's National Institute of Standards and Technology (NIST) in cooperation with the White House Office of Science and Technology Policy, Washington, DC.
11. **Sanberg, P.R.** (2018, April 5). *State of the Academy*. Keynote Address, The National Academy of Inventors Annual Meeting, Washington, DC.
12. **Sanberg, P.R.** (2018, March 15). *Fostering Collaboration between Research Institutions and the Business Community*. Presentation as an invited Fulbright Specialist, at Ormond College and Wade Institute of Entrepreneurship, University of Melbourne, Melbourne, Australia.
13. **Sanberg, P.R.** (2018, March 14). *Creating a Culture of Innovation and Invention*. Presentation as an invited Fulbright Specialist, at VESKI (Victorian Endowment for Science, Knowledge & Innovation) and University of Melbourne Wade Institute of Entrepreneurship, Melbourne, Australia.
14. **Sanberg, P.R.** (2018, March 8). *Big Picture Lecture: Making a Difference through Innovation and Entrepreneurship*. Presentation as an invited Fulbright Specialist, at the University of Melbourne, Melbourne, Australia.
15. **Sanberg, P.R.** (2018, March 7). *Innovation and the Translation of Research to Industry*. Presentation as an invited Fulbright Specialist, at the Australian National University, Canberra, Australia.
16. **Sanberg, P.R.** (2018, March 5). *Inspiring Innovation*. Presentation as an invited Fulbright Specialist, at the VESKI (Victorian Endowment for Science, Knowledge & Innovation) Conversation, Melbourne, Australia.
17. **Sanberg, P.R.** (2017, August 10). *Welcome Address*. Invited panelist on "Threats Facing Florida's Tourism Driven Economy" at the Official Hearing of the U.S. Senate Committee on Commerce, Science, and Transportation, St. Petersburg, FL.
18. **Sanberg, P.R.** (2017, June 27). *Ceremony Remarks*. Invited guest speaker at the induction of Institut Pasteur as a Member of the National Academy of Inventors, Paris, France.
19. **Sanberg, P.R.** (2017, April 15). *Therapeutic Benefits of Cord Blood Plasma/Serum in Neurodegeneration*. Invited speaker at the 10th Pan Pacific Symposium on Stem Cells and Cancer Research, Hualien City, Taiwan.
20. **Sanberg, P.R.** (2017, April 6). *State of the Academy*. Keynote Address, The National Academy of Inventors Annual Meeting, Boston, MA.
21. **Sanberg, P.R.** (2017, March 13). *Does Innovation Boost Global Perspectives?* Invited panelist at the American Council on Education Annual Meeting, Washington, DC.
22. **Sanberg, P.R.** (2016, November 12). *The John P. McGovern Science and Society Lecture*. Keynote speaker at the Annual Meeting & International Research Conference, Sigma Xi: The Scientific Research Honor Society, Atlanta, Georgia.
23. **Sanberg, P.R.** (2016, October 13). *State of Innovation: Why Florida's STEM Success Starts with Elevating a Culture of Discovery*. Invited presentation at the Tampa Bay STEM Education Summit, Tampa, FL.
24. **Sanberg, P.R.** (2016, May 14). *Recent Cord Blood Research and Patents for Neurological Disorders*. Invited speaker at the 9th Pan Pacific Symposium on Stem Cells and Cancer Research, Taichung, Taiwan.
25. **Sanberg, P.R.** (2016, April 14). *State of the Academy*. Keynote address at the National Academy of Inventors Annual Meeting, Washington, DC.
26. **Sanberg, P.R.** (2016, March 18). *Explore, Discover, and Move Forward*. Keynote address at the Florida Academy of Sciences Annual Meeting, St. Petersburg, FL.
27. **Sanberg, P.R.** (2015, November 19). *Valuing Faculty Inventors: Recognizing the Importance of Tech Transfer in Tenure & Promotion*. Keynote address at the Academy of Eminent Scholars Meeting, Georgia Research Alliance, Atlanta, GA.

28. **Sanberg, P.R.** (2015, September 17). *Cell Transplantation, Cord Blood and Stroke*. Invited presentation at Duke University, Durham, NC.
29. **Sanberg, P.R.** (2015, July 22). *All Things Research*. Invited panelist at the All Things Research 2015 symposium hosted by the Association of American Universities and the Science Coalition, National Press Club, Washington, DC.
30. Burg, K., Cooper, R.A., **Sanberg, P.R.** & Veedu, V. (2015, June 15). *Viewpoint on Invention Ecosystem: Celebrate Invention*. Invited panelist at the AAAS-Lemelson Invention Ambassadors conference, American Association for the Advancement of Science, Washington, DC.
31. **Sanberg, P.R.** (2015, June 9). *Creating and Nurturing New Talent and Ideas*. Conversation Lead for Breakout Session, Council on Competitiveness/National Science Foundation Meeting, Georgia Tech, Atlanta, GA.
32. **Sanberg, P.R.** (2015, May 15). *Cord Blood Therapies for Degenerative Neurologic Diseases*. Invited speaker at the International Society for Cellular Therapy annual conference, Las Vegas, NV.
33. **Sanberg, P.R.** (2015, April 11). *Scientist or Inventor? Entrepreneurship in Regenerative Medicine*. Invited speaker at the 8th Pan Pacific Symposium on Stem Cells and Cancer Research, Taichung, Taiwan.
34. **Sanberg, P.R.** (2011, October 7). *Perspectives for treatment of neurodegenerative diseases with stem cells*. Invited presenter at the Commemorative Event of 100,000 Post-graduation Titles of the University of São Paulo, Ribeirão Preto, São Paulo, Brazil.