

Academic Curriculum Vitae of Prof. Shyam S. Mohapatra, PhD, MBA

Current Positions:

Distinguished USF Health Professor; and Director of Division of Translational Medicine & USF Center for Research and Education in Nanobioengineering, Department of Internal Medicine, USF Morsani College of Medicine

Associate Dean & Prof of Graduate Programs Taneja College of Pharmacy, Tampa, FL.

Research Career Scientist and Principal Investigator,
Research Service, James A Haley VA Hospital, Tampa, FL

Synopsis of Academic Accomplishments:

Shyam (Sam) S. Mohapatra, PhD, MBA has had a distinguished career in academia in research, teaching, and service at USF since 1996. His research in USF has been extramurally funded by the NIH, NSF, Veteran Affairs, DoD, and the Florida Dept of Health. He has published over 241 papers and holds over 40 U.S. and foreign patents. He is recognized for his many inventions in the field of nanoscale biomedical diagnostics and therapeutics in cancers, asthma, viral infections, and traumatic brain injury. In cancers, his inventions and co-inventions have led to several technology platforms and products for innovative anti-cancer drug discovery, drug development, and personalized cancer treatment. His research has spawned inventions that have spun-out companies. He co-founded Transgenex Nanobiotech Inc, a USF spin-out company that focuses on commercializing nanoscale innovations and Agile Diagnostics Inc that focuses on COVID-19 solutions. He is a Charter Fellow of the National Academy of Inventors (NAI); a fellow of the American Academy of Allergy, Asthma & Immunology (AAAAI); American Institute for Medical and Biological Engineers (AIMBE); and American Association of Advancement of Science (AAAS); and is one of the 2014 inaugural inductees of the Florida Inventors Hall of Fame. Since 2014, he has served as Associate Dean of Graduate Programs at the USF Health Taneja College of Pharmacy and established a highly innovative Master of Science program in Pharmaceutical Nanotechnology with additional concentrations in Drug Discovery and Development and Biomedical Engineering. He has been the faculty advisor for the student organization, NANO (New Advances in Nanotechnology Organization). He has created and is the founding president of a non-profit organization, Florida Association for Nanobiotechnology (>500 members), which encompasses all academic and industry institutions in the State of Florida engaged in research and education of nanobiotechnology.

He has a broad background in biology with graduate and post-doctoral training in genetics and molecular biology, early faculty appointments in immunology. Since 1988, he has been involved in research in biology of inflammation starting with allergic-immunologic inflammation of the lung following exposure to allergens (*JBC* 1992, *Jl*, 1992, *Science* 1995, *HGT* 2003) and respiratory syncytial virus (RSV) infection and potential of biologic/gene-based as therapeutic modalities (*JBC* 2002, *Vaccines* 2002, *Nature Med* 2005, *PLoS One* 2013, *JCI* 2014). Since his first publication in 2002 on a nanoscale genome vaccine, he has garnered substantial expertise in nanomedicine. Developing novel nanoscale technologies to advance translational science and transforming inventions from the lab benches to in vivo applications in pre-clinical settings and further to human clinical trials has been and continue to be his passion in research (*NEJM*, 2001, *JACI* 2014, *JACI* 2019). He has always been interested in multi-disciplinary research developing and utilizing cutting-edge technologies in immunology, cell biology, virology, genomics, epigenomics and nanotechnology (biosensing and gene-drug delivery) to advance diagnostic and therapeutic approaches in allergy and asthma, cancers, traumatic brain injury, and viral infection

1. PERSONAL DATA

Name: Shyam (Sam) S Mohapatra
Current Mailing Address: 2812 Coastal Range Way, Lutz, FL 33559, Ph: 813-312 4248
Email: smohapat@gmail.com
USF Health address: 12901 Bruce B Downs Blvd., MDC19, Tampa, FL, 33612
Telephone: 813-974-8568, Email: smohapat@usf.edu

VA address: 13000, Bruce B Downs Blvd, Tampa, FL, 33612
Ph: 813-312 4248, Email: shyam.mohapatra@va.gov

Professional Facilities: MDC19 (Rm 3049) and MDC 30 (Rm 2307),
12901 Bruce B Downs Blvd., MDC19, Tampa, FL, 33612

2. EDUCATION:

Baccalaureate

1976 BS, Orissa University of Agril and Technology, Bhubaneswar, India

Graduate

1978 MS, GB Pant University of Agril & Technology, Pantnagar, India

1984 Ph.D. (Genetics) Australian National University, Canberra

1999 Executive MBA, USF, Tampa, FL

3. POSTDOCTORAL TRAINING

1984-1985 Alexander Von Humboldt Research Fellow, Genetics, University of Bielefeld, Germany

1986-1987 Research Associate, Biology, McGill University, Montreal

1993 Visiting Professor, Allergy & Clinical Immunology, University of Florence, Italy

1993 Visiting Scientist, Immunology, Mayo Clinic, Rochester, Minnesota

2006-2007 USF-Health Leadership Institute (Diploma)

4. APPOINTMENTS

University Appointments

1988-1991 Assistant Professor, Immunology, University of Manitoba, Winnipeg, Canada

1992-1995 Associate Professor (with tenure), Immunology, University of Manitoba, Canada

1996-1999 Associate Professor, Internal Medicine & Medical Microbiology & Immunology, USF

1997-2011 Associate Professor in Pediatrics, Public Health, USF

1999-Pres Professor of Internal Medicine, USF-College of Medicine

2007-2011 Mabel & Ellsworth Simmons Professor of Asthma, Allergy & Immunology

2011 Distinguished Health Professor, USF Health

2014 Distinguished Professor USF Institute of Advanced Discovery & Innovation

VA Appointments

1992-1995 Research Molecular Biologist, Medical Service (Allergy), James A Haley VA Hospital, Tampa, FL

1999-Pres Principal Investigator, VA Merit Review Award

2007-2022 Research Career Scientist

2022-Pres Senior Research Career Scientist, ORD Veteran Affairs, James A Haley VA Hospital, Tampa, FL

Other Administrative Appointments

1999-2011 Director of Basic Research, VA/USF Joy McCann Culverhouse Airway Disease Research Center

2007-2011 Director of Signature Program on Allergy, Immunology and Infectious Diseases,

USF

- 2009-2017 Vice Chair of Research, Department of Internal Medicine, USF
- 2009-pres Director of Nanomedicine Research Center (now renamed: Center for Research and Education in Nanobioengineering), USF
- 2014-pres Associate Dean for Graduate programs, Taneja College of Pharmacy

5. PROFESSIONAL AFFILIATIONS AND MEMBERSHIP IN SCIENTIFIC SOCIETIES

- 1988-95 Member, Canadian Society of Immunology
- 1990-95 Member, Canadian Society of Allergy and Immunology
- 1990-95 Member, European Academy of Allergology and Clinical Immunology
- 1992 Member, Pharmacia Allergy Research Foundation, Uppsala, Sweden
- 1992 Member, American Association of Immunologists
- 1993 Member, American Academy of Allergy and Clinical Immunology
- 1998 Elected as Fellow of the American Academy of Allergy, Asthma and Clinical Immunology
- 1998 Elected as Honorary Member of the Mexican Society of Allergy and Immunology
- 1999 Member, American Thoracic Society
- 2009 Member of USF Academy of Inventors
- 2010 Member of the National Academy of Inventors
- 2011 Member of the American Association for the Advancement of Science (AAAS)
- 2012 Charter Fellow of the National Academy of Inventors (NAI)
- 2014 Elected Fellow of American Institute of Medical and Biological Engineering (AIMBE)
- 2016 Elected Fellow of American Association for the Advancement of Science (AAAS)
- 2017 Organizer American Association of Pharmaceutical Sciences (AAPS) Short Course on "Targeted Virotherapy: Advances and Challenges," AAPS Annual Meeting, San Diego, CA.
- 2017 Organizing Committee Member & Invited Speaker, 17th International Conference and Exhibition on Nanomedicine & Nanotechnology in Health Care, Melbourne, Australia, November 23-24.
- 2018 Organizing Committee Member, USF-FAMU International NanoBio Collaborative Conference, January 19-20
- 2018 Founding President, Florida Association for Nanobiotechnology
- 2019 Chair, NanoFlorida International Conference, November 15-17, 2019
- 2020 Co-Director, Research Hub on "Microbiome, Immunology, Infection Mitigation.;" Pandemic Response Research Network (PRRN) March 2020.
- 2020 Member, PSRB on COVID 19 biorepository (VA Shield), Veteran Affairs, CSRD
- 2020 Selected as Florida Academy of Sciences 2020 Medalist
- 2021 Co-chair of the First International conference on Translational Nanobiotechnology, Feb 2021

6. SERVICE TO VA MEDICAL CENTER & NATIONAL VA

- 2002 VA Hazard and Safety Committee
- 2003 Member of the JAH VA R & D Committee
- 2006 Commodity Standards Committee
- 2012-13 Ad-hoc Member of the IMMA Study Section
- 2013 Advisory Committee Member of the Regenerative Medicine Group
- 2013-15 Renovation and Design Committee
- 2014 Member of the Promotion Committee for JAH VA R & D Investigators
- 2014-18 Appointed to Member of IMMA Scientific Review Board
- 2014-15 Co-chair of the IMMA Study Section
- 2015-17 Chair of the IMMA Study Section
- 2015 Organizer for the 2015 JAH VA Hospital Research Day Symposium
- 2016 Co-organizer for the 2016 JAH VA Hospital Research Day Symposium
- 2016-18 Subcommittee on Research Safety
- 2018- Alternate member Subcommittee on Research Safety

- 2020- ZRD1 SPLO-K (01) 2. BLRD COVID19 Special Emphasis Review Panel
- 2020- Member of the Scientific Review Board of the COVID-19 CSP (CSR) trials
- 2020- Member, PSRB on COVID 19 biorepository (VA Shield), Veteran Affairs.
- 2021 Co-Chair of research subcommittee on JAHVAH Committee on Artificial Intelligence Affairs
- 2021-22 Founding member of the VA-Shield: a National data and Biorepository established by the Veteran Affairs Office of Research and Development

7. SERVICE TO UNIVERSITY OF SOUTH FLORIDA

- 2007-10 USF College of Medicine (COM) Executive Committee on Research and Education
- 2007-08 Member of CTSA Planning Group, USF Health
- 2009-pres Member of the USF Conflict of interest Committee
- 2011-14 Member of the Promotion and Tenure Committee at USF-COM
- 2011-15 Member of the Committee for Selection of Distinguished Professors
- 2011-13 Member of USF Committee for Excellence in Research and Innovation Award
- 2015-16 Member of the Panel for USF Research Strategic Planning Committee
- 2016-18 Member of the MCOM Academic Curriculum Committee
- 2017-20 Member of the MCOM Financial Oversight committee
- 2018-19 Chair of the MCOM Financial Oversight Committee

8. SERVICE TO PROFESSIONAL ORGANIZATIONS

NIH Study sections

- 1997 Ad hoc Member of the NIH-NIAID Scientific Review Panel, on AIDS, vaccines and Immunology of Aging, June
- 1997 Study Section on AIDS and Vaccine Development
- 2002-03 Member of NIH-Special Emphasis Panel on Asthma and Allergy Disease Center
- 2002-03 Member of NIH-SEP on Innate Immunity and Bioterrorism Related Grants
- 2003 Member, NIH Study Section (SEP on ancl Asthma and Allergic Diseases Research
- 2004 Chairman of NIH Study Section (SEP on Signaling of the Immune System)
- 2005 Member, NIH Study Section (SEP on NCI's Nanotechnology Platforms for Cancer)
- 2005 Member, NIH Study Section (SEP on NIAID "Leadership in Clinical trials for HIV/AIDs)
- 2007 Member, NIH-SEP on "Asthma and Allergic Diseases Cooperative Research Centers"
- 2007 Member, NIH Study Section (SEP on Leadership for HIV/AIDS Clinical Trials Networks) Member, NIH Study Section (SEP on NCI Nanotechnology Platforms)
- 2007 Member, NIH-SEP on "Respiratory infections and asthma"
- 2007-08 Chair, NIH Study Section– Nanotechnology in Heart, Lung & Blood: NHLBI
- 2008 Excellence in Innovation Award, University of South Florida, November 7, 2008
- 2008 Member, Study section on NCI-F manpower & Training Grants, May 19, 2008
- 2008 Chairman and Member, NIH-SEP on "Innovations in Nanotechnology, NHLBI
- 2009 NIH study section member of the followings
 - ZRG1 RES-C (10) Meeting Date: 3/9/09
 - ZHL1 CSR-N (01) on 8/7/2009
 - NANO Study section: Meeting Date: 6/15/09 – 6/15/09
 - ZRG1 GGG-N (99): Meeting Date: 8/13/09
 - ZRG1 CB-N (58): Meeting Date: 7/20/09 – 7/21/09
 - ZRG1 CB-N (52) & ZRG1 CB-N (58) Meeting Date: 8/13/09
 - NANO Study section: Meeting Date: 9/30/09
 - ZRG1 CVRS-H (10): Meeting Date: 11/19/09 – 11/20/09
- 2009 Member, Study Section for American Institute of Biological Sciences, July 15, 2009
- 2009 Member, Study Section, NIH on Nanotechnology, June 15, 2009
- 2010 Member of RO1 grants for Oro-mucosal vaccines for HIV

- 2011 Member of Gene and Drug Delivery Study Section, October 2011
Member of Allergy, Immunology and Transplantation study Section, March 2011
Member of study section on “Asthma and Allergic Diseases Co-operative Research Centers”, NIH NIAID, 2011
- 2012 Member of NANO study sections, June 7-8,12 SRO: James Li
ZCA1-SRLB-9- M1 Meeting 2012/0503/26/2012 at NCI SRO: KENNETH BIELAT
Asthma Centers of Excellence AITC 06/19/2012 at NIAID SRO: Zhuqing Li
- 2013 ZAI1-ZL-I 09/09/2013 at NIAID Meeting 2014/01 SRO: Zhuqing Li
ZAI1-ZL-I-J1 11/13/2013 at NIAID Meeting 2014/01 SRO: Zhuqing Li
ZRG1-BDCN-A-40 Meeting 2013/08 SRO: Boris Sokolov
ZRG1-BDCN-A-40 Meeting 2013/08 05/09/2013 at CSR SRO: Boris Sokolov
ZRG1-RPHB-K-40 Meeting 2013/0807/12/2013 at CSR SRO: Gabriel Fosu
- 2014 ZAI1-MM-I-M2 of Inner City Asthma Consortium (UM1) Application, NIAID, NIH
04/17/2014 at NIAID Meeting 2014/05 SRO: Maja Maric
- 2015 Member of the NIH Transformational RO1 grants, 2/ 2016.
- 2017 Chair of study section SEP (ZCA1 RTRB-U-J1) for PAR-16-176 (**R21**, NCI Clinical and
Translational Exploratory/Developmental Studies) and PAR 16-416 (**RO3**, Small Grants
Program for Cancer Research) related to Immunology/Immunotherapy
- 2019 NSF ERC 19-503 Pre-Proposal Panel P191388; Meeting Date: 3/11/19 – 3/12/19
- 2020 NIH ZAI1 RG-W (S2) 1. Emergency Awards: Rapid Investigation of Severe Acute
Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease 2019
(COVID-19). Meeting Date: 7/14/20.
- 2020 NIH ZAI1 RG-W (S3) 1. Emergency Awards: Rapid Investigation of Severe Acute
Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease 2019
(COVID-19). Meeting Date: 8/6/20 – 8/7/20.

Membership of Other Committees/Review Panels:

- 1989 Member, International Committee-at-large for Allergen Nomenclature
2009-pres UK Research Council
- 1990-92 Member, International Collaborative Study on HLA Association of Allergies,
- 1990 Member, International Committee on Genetics of Asthma
Study, guidelines for treatment of allergies using
recombinant allergens,
- 1990-93 Member, Interview Committee for the Admission of Students to the Undergraduate
Program, University of South Florida-Faculty of Medicine.
- 1991-96 NSERC, Canada -Operating and Strategic Grants
- 1991-96 NSERC, Canada- Independent Investigator Research Program
- 1992-95 Manitoba Health Research Council, Winnipeg, Canada
- 1993 Member of the Cytokine committee, American Academy of Allergy and Immunology.
- 1993 Member of World Health Organization Expert Panel on Recombinant Allergens and
Epitopes, Geneva, Feb 22-24
- 1993 Medical Research Council of Canada Operating and Scholarship grants
- 1993-95 Member of Operating Grants Panel of the Manitoba Health Research
Council, Winnipeg, Canada,
- 1994 Member of Faculty of Medicine Research Awards Committee, College of Medicine,
- 1994 Member of the International Scientific Board, 5th International Symposium of
Aerobiology, Bangalore, India, University of Manitoba,
- 1995 NATO collaborative grant
- 1995 NSF collaborative grant
- 1995 British Columbia Health Research Council Operating Grants
- 1997 Member of Review Panel for Student Research, University of South Florida-Faculty of
Medicine and VA.
- 1997 Member of Interview Committee for admission of Medicine Students, University of
South Florida-Faculty of Medicine

1998 Member of Scientific Review Panel, American Lung Association, New York,
1998 Member of the Molecular Biology and Genetics Committee, American Academy of Allergy, Asthma, and Immunology,
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1998 Member of the Molecular Biology and Genetics Committee, American Academy of Allergy, Asthma, and Immunology,
1998 Molecular Biology and Genetics Committee, American Academy of Allergy, Asthma, and Immunology
1999 Member of the Cells & Cytokine Committee, American Academy of Allergy, Asthma and Immunology
2001 Member of Scientific Review Panel, American Heart Association, Southern Cons,
2001 National Asthma Campaign, London, England
2002 Asthma Foundation of Netherlands, Amsterdam
2004 AAAAI Workshop Committee Vice Representative, MAAI Interest Section,
2004 Member, Protocol Committee, American Lung Assoc-Asthma Clinical Research Center Network
2004-07 AAAAI Workshop Representative for MAAI Interest Section
2005-pres Singapore National Research Council
2005-10 Member, American Thoracic Society AAI Program Committee
2007 Chairman, American Heart Association Scientific Review Panel
2007 American Lung Association
American Heart Association
2009-pres Singapore National Institute of Health Research
2008-pres Israel Science Research Foundation, Israel
UK Research Foundation
Swish Research Foundation

Reviewer for Manuscripts:

2015-pres Plos One
2007-2013 Genetic Vaccines and Therapy (Editor-in-chief)
2008-pres Molecular and Clinical Allergy (Associate Editor)
2010-pres Mucosal Immunity
2008-pres Gene Therapy (Nature Journals), *Editor*
2007-pres Clinical and Developmental Immunology, (*Associate Editor*)
2003-pres Genetic Vaccines and Therapy, *Editor-in-Chief*
Annual Meeting of AAAI, New Orleans.
2004-pres Clinical and Molecular allergy, *Associate Editor*
1998-pres Journal of Allergy and Clinical Immunology
1997-pres American Medical Association Asthma Web
1997-pres Biodrugs
1996-pres Immunology Today
1996-pres Journal of Clinical Investigations
1993-pres International Journal of Cancer
1993-pres Allergy
1992-pres Journal of Immunology
1991-pres Journal International Archives of Allergy and Immunology
1989-pres Journal of Cellular and Molecular Biochemistry, Vaccine
American J Crit Care Medicine
Gene Therapy
Molecular Therapy
Human Gene Therapy
European Respiratory

9. PROFESSIONAL AWARDS AND HONORS

- 1980-83 ANU Post-Graduate International Research Award, tenable in the Australian National University, Canberra for Ph.D. research, 1980-83
- 1984-85 Alexander von Humboldt (AvH) Research Award, AvH Foundation, Bonn, Germany
- 1988 St. Boniface Research Foundation Scholarship, (Declined)
- 1988-91 Research Scholar, Manitoba Health Research Council, Winnipeg
- 1989 Canadian Society of Immunology Travel Award
- 1992 Pharmacia Allergy Research Foundation Award, Paris, for excellence in research on IgE mediated reactions. *[A major International Award in the field of Allergy]*
- 1992 Univ. of Manitoba Merit Award for excellence in research and creative activities
- 1993 Named to the World Health Organization Expert Panel on Recombinant Allergens, Geneva.
- 1993 Medical Research Council (MRC) Visiting Scientist Award.
- 1997 Presidential Honored Research Faculty Recognition, USF.
- 1997 Research and Creative Scholarship Award, USF.
- 1998 American Lung Association of Florida Career Development Award.
- 1998-02 Member of the American Lung Association Research Grant review Committee.
- 1999 Veteran Administration Merit Review Award, 1999-2004.
- 1999 American Heart Association, Florida Affiliate, Research Grant Award, 1999-2001.
- 2000 Named with biography in the distinguished AMERICAN WHO's WHO,
- 2000 Member of American Thoracic Society Advisory Board on Education 2001 Edition.
- 2000 Member, International Who's Who Association, NC.
- 2002-03 Study Section of American Heart Association Scientific Review Panel
- 2003 "Editor-in-chief" of the online Journal: "Genetic Vaccines and Therapy."
- 2004 Outstanding Biotechnology Recognition Award, USF-Health
- 2004 Outstanding Biotechnology Recognition Award, USF-Health
- 2004 Chairman, Scientific Advisory Board of TransGenex Nanobiotech Inc., Tampa.
- 2005 USF Outstanding Faculty Research Achievement Award, Tampa.
- 2005 Outstanding Biotech Achievement Award, USF-Health
- 2005 2004-05 Outstanding Faculty Researcher Award, Sigma Xi Tampa Bay Chapter, Tampa.
- 2006 Chairman, Committee of Signature Program Directors, USF-Health
- 2006 Member, Advisory Board, NIPER-NANO-2006 Conference - Nanotechnology in Advanced Drug Delivery, National Institute Pharmaceutical Education and Research, Chandigarh, India, Feb 17-18, 2006.
- 2006 Co-Chair/Chair for American Heart Association Scientific Review Panel.
- 2006-13 Director (Basic Sciences) USF – Health Signature Program on Allergy, Immunology and Infectious Diseases, Tampa.
- 2007 Finalist, Health Care Hero's Award, Tampa Bay Business Journal on Health Care Innovation and Research.
- 2007 Fellow, USF Health Leadership Institute
- 2007 Member, NIH-SEP on "Respiratory infections and asthma".
- 2007-11 Mabel & Ellsworth Simmons Professor of Allergy and Immunology, USF College of Medicine.
- 2007 Guest Lecturer to NIH-Recombinant DNA Advisory Committee on "Nanotechnology Applications to Gene Therapy".
- 2009 Vice President, USF Academy of Inventors & Member of Board, National Academy of Inventors.
- 2010 Director, USF NanoBio Collaborative Conference, Tampa, FL
- 2011 Member of the Scientific Program Committee, World Allergy Congress, Cancun, Mexico, Dec 2011
- 2011 Advisory Board Member, Nanoflorida 11, FIU, Miami
- 2011 Co-Chairman, US-India Conference on Translational Research on HIV in India, Goa, India, Jan 12-14, 2011.

- 2012 Charter Fellow of National Academy of Inventors
- 2012 Conference Chair and Advisory Board Member of NanoBio-collaborative International, Tampa FL
- 2013 TiE (The Indus Entrepreneurs) Award of Excellence in Entrepreneurship, Safe Harbor, FL November 20, 2013.
- 2013 Conference Chair and Advisory Board Member of NanoBio-collaborative International Conf, Trichi, TN, India
- 2014 Inducted to the "Florida Inventor's Hall of Fame' among the first six inductees.
- 2014 Global Corporate Award in Nanotechnology, by Global Corporate Awards Alliance, Tampa FL April 26, 2014
- 2014-18 Appointed to Member of Veteran Affairs Scientific Review Board
- 2015 Elected as Fellow of American Institute of Medical and Biological Engineers (AIMBE)
- 2016 Elected as a Fellow of the American Association of Advances in Science (AAAS)
- 2017 Organizer, VA Field-Based Meeting on Precision Oncology for Colorectal Cancer, Chicago, May 6, 2017
- 2017 Founder and Director, VA Colorectal Cancer Cell-genomics Consortium (VA4C)
- 2017 Organizer American Association of Pharmaceutical Sciences (AAPS) Short Course on "Targeted Virotherapy: Advances and Challenges," AAPS Annual Meeting, San Diego, CA, November 12-15, 2017
- 2017 Organizing Committee Member & Invited Speaker, 17th International Conference and Exhibition on Nanomedicine & Nanotechnology in Health Care, Melbourne, Australia, November 23-24, 2017
- 2018 Organizing Committee Member, USF-FAMU International NanoBio Collaborative Conference, January 19-20, 2018
- 2018 Founding President, Florida Association for Nanobiotechnology
- 2019 Conference Chair, NanoFlorida International Conference, November 15-17, 2019
- 2020 Florida Academy of Sciences 2020 Gold Medalist
- 2020 Co-Director, Research Hub on "Microbiome, Immunology, Infection Mitigation." Pandemic Response Research Network (PRRN) March 2020.
- 2020 Member, PSRB on COVID 19 biorepository (VA Shield), Veteran Affairs, CSRD
- 2020 Gold Medalist Award, Florida Academy of Sciences 2020
- 2021 Co-chair of the First International conference on Translational Nanobiotechnology, Feb 2021
- 2021 Co-Chair of research subcommittee on JAHVAH Committee on Artificial Intelligence.

10. FUNDED RESEARCH ACTIVITIES

Funding History [Career total: (1988-2021 approx. >\$30 MM)]

Active Support

1. Agency: Department of Veterans Affairs R&D (ID# IK6BX003778); Role: PI; Title: VA Research Career Scientist Award tenable at the JAH VA Hospital; Period of Support: 04/2017 – 03/31/2022
2. Agency: Department of Veterans Affairs R&D (ID: BX003685); Title: "Nanomicellar antiviral strategies for RSV infection" Role: PI; Project period: 07/01/2017 – 06/30/2022
3. Agency: Department of Veterans Affairs R&D (Grant ID: BX003413); Title: "Tumor targeted engineered stem cells for treatment of lung cancer"; Role: Multi-PI; Project period: 10/01/2017 – 09/31/2022
4. Agency: Department of Veterans Affairs R&D (Grant ID: BX004455); Title: "Artificial Intelligence Endoscopy for Colorectal Cancer Prevention"; Role: Co-I; Project period: 01/01/2019 – 12/31/2022. Dept of Vet Affairs, CSRD (COVID19-8900-08); Artificial intelligence-aided chest CT asdiagnostic for COVID 19; Role: PI; July 20-Sept 22.

5. Dept of Vet Affairs, BLRD (IBX005490A) COVID-19: SARS-CoV-2 Neutralizing Agents; Role-Multi-PI; Project Period:4/2021-3/2023.
6. Dept of Vet Affairs, BLRD (1I01BX004584-01A1); Unique non-saccharide Mimetics of Sulfated Glycosaminoglycan Target colon stem cells; Role-Co-I; Project Period: Oct 2020-Sept 2024.
7. FL HiTech (FHT 21-20) Corridor & TransGenex Nnaobiotech Inc; Pre-clinical and New Drug (IND) Enabling Studies of Anti-cancer Leads: PI: Shyam Mohapatra; Project Period:07/01/21 – 06/30/23.
8. FL HiTech (FHT 21-20) Corridor & Agile Diagnostics Inc; Efficacy and Safety of BAAN-01, for COVID-19 in Animal Studies; PI: Subhra Mohapatra; Project Period: 09/01/21 – 08/31/23; Role: Multi-PI.

Past Extramural Support (Selected past awards shown)

9. Florida Hi-Tech Corridor FHT-17-18; (Co-I: Mohapatra) April 2017 – Sept. 2017
10. NCI 1RO1CA152005-01; Preclinical Safety and Efficacy of TN1008 (PI: Mohapatra) Jun. 2010 – Sept. 2014
11. NIH 1P30HL101265-01; An Integrated Nano-cell Technology for detection and therapy of lung cancer(PI: Shyam Mohapatra) Oct. 2009 – Sept. 2013) Nanomedicine Research Center Core Aim: To hire new faculty and develop infrastructure for the Nanomedicine Research Center
12. Dept of Vet Affairs, BLRD, (PI: Shyam Mohapatra) VA Research Career Scientist Award;Jan. 2012 – Dec. 2017;James A. Haley VA Hospital (Salary Support)
13. Dept of Vet Affairs, BLRD, VA Merit Review Award; (PI: Mohapatra); Development of Nanoparticle therapeutics against RSV-induced lung diseases. Oct. 2011 – Sept. 2015
14. HHSN261201300044C-N43CO-2013-00044; Sub contract to USF (Co-I) (PI: Mahasweta Das, TransGenex Nanobiotech Inc) USF Title: Fibrous Scaffold-induced Spheroids mimicking TME; Oct. 2013 – Jun. 2014;
15. NCI-SBIR RFP No. PHS 2014-1, Topic 328; (Subcontract to USF, Role Co-I) PI: Mahasweta Das, TransGenex Nanobiotech Inc; Title: Biopsy-derived tumoroid platform for personalizing cancer treatment; Sept. 2014 – Jun. 2015.
16. NCI-SBIR RFP No. PHS 2014-1, Topic 326; Subcontract to USF (Co-I); Title: Anti-NPRA Inhibitors Targeting Cancer Stem Cells; (PI: Mahasweta Das, TransGenex Nanobiotech Inc); Aug. 2014 – May 2015
17. ONR (Office of Naval Res). N00014-09-11008; Differentiation of stem cells to blood cells using nanomatrix scaffold; (PI: Mohapatra); Jun. 2009 – May 2012.
18. Office of Naval Res. N00014-10-11008; MicroRNA directed generation of blood cells; (PI: Mohapatra) Jun. 2010 – May 2012
19. FI Biomed Res Foundation:09BW-07; Targeted Gene Therapy by SNAP Delivery Method of treatment of Lung Cancer; (PI: Mohapatra); Jan. 2010 – Dec. 2012
20. NIH-1D43TW006793-01A2; Program in Adolescent HIV/AIDS Research Training (PAHRT) (Role-Co-PI, PI: P. Emmanuel); Sept. 2007 – Jun. 2012The overall goal of this proposal is to initiate and sustain a Research Training Program in Adolescent HIV/AIDS involving the University of South Florida (USF) in Tampa, Florida, and Vadodara Medical College (VMC) in Gujarat, Ind
21. Office of Naval Res. N000140810914; Production of Platelets from Hematopoetic Stem Cells using 3-D Smart Scaffolds; (PI: Mohapatra); Sept. 2008 – Aug. 2012
22. NHLBI 1RO1HL105932-01; Inflammasomes in hyperoxic acute lung injury; (Role-Co-I, PI: Kolliputi) Nov. 2011 – Oct. 2016
23. Dept of Vet Affairs, BLRD; VA Research Career Scientist Award; PI-Shyam Mohapatra; James A. Haley VA Hospital (Salary Support); Jan. 2007 – Dec. 2011.
24. NIH-NIAID R13; Conference grant: Translational Research in AIDS/HIV in India; (PI: Mohapatra); Jan. 2011 – Dec. 2011

25. NHLBI-1R21088299-02; Association between ANP and NPRA Gene Polymorphisms and Severity of Atopy and Asthma; (PI: Mohapatra:) Jul. 2008 – Dec. 2011
26. NIH-AI075523; Role of Lipid raft in respiratory syncytial virus infection. Role: Co-Investigator (USF-PI)(PI: San Juan Vergara); Jul. 2007 – Jun. 2011.
27. FL Biomed Res Foundation:09KE-05; 4 D-Cell Imaging System; (PI: Mohapatra); Jan. 2010 – Dec. 2010
28. Department of Army Phase-II; Development of multifunctional nanoparticles for targeting ovarian Cancers; Role: Co-investigator (PI of USF component) (PI: Xu, TransGenex Nanobiotech, Inc.) Jan. 2007 – Dec. 2008.
29. FHT 09-02 Florida I-4 Corridor Matching Grant; Development of Anti-HIV Nano-Gene Therapy Vectors; PI: Mohapatra) Apr. 2008 – Mar. 2010
30. Florida I-4 Corridor Matching Grant; Development of nanotechnology diagnostics for ovarian cancer. (PI: Mohapatra); Jan. 2007 – Dec. 2009.
31. Florida Biomedical Research-Bankhead-Coley Cancer Research Program; Nanoparticle-mediated targeting of natriuretic peptide pathway for lung cancer; (PI: Mohapatra); Jan. 2007 – Dec. 2007
32. NIH-Institute of Nursing; NRSA Pre-doctoral Award to Alison Jones under the mentorship of Dr. S. Mohapatra; (PI: Alison Jones-Montpetit) Project period: 2005-2008
33. Department of Army- Phase-I. Development of multifunctional nanoparticles for targeting ovarian Cancers, Role: Co-I (PI of USF Component) (PI: Weidong Xu, PhD) 2004-2006
34. Florida I-4 Corridor Matching Grant; Development of nanoparticles for asthma and respiratory syncytial virus infection; 2005-2007
35. NIH-1P20RR023516-01; University of South Florida CTSA Planning Grant, Role: Co-I, (PI: Ken Zuckerman) Sept. 2006 – Aug. 2007
36. NIH-NHLBI-R41 HL 0769-964-01; Chliposome Nanoparticle Prophylactics for Allergic Asthma (PI: Mohapatra); Sept. 2004 – Apr. 2005
37. NIH-NHLBI R41 HL0782-298-01; Chlipoplex Nanoparticle Prophylactics for RSV Infection (PI: Mohapatra); Sept. 2004 – Apr. 2005
38. Glaxo SmithKline; Mechanism of fluticasone propionate and salmeterol combination therapy in a 3-D human epithelial cell culture model; (PI: Mohapatra) Dec. 2004 – Nov. 2005
39. GlaxoSmithKline: Efficacy and safety of intranasal fluticasone propionate and salmeterol in a rat model of allergen and virus-induced asthma; (PI: Mohapatra); Feb. 2005 – Jan. 2006
40. NIH-Pediatric Clinical Research Center; Role of Natriuretic Peptide-Cascade in the Genesis and Control of Asthma; (PI: Mohapatra); Feb. 2005-Jan. 2006 Development Grant All Children's Hospital
41. NHLBI-RO1 HL71101-01A2; Chitosan IFN- γ -pDNA Nanosphere Therapy and Immunopathology of Allergic Asthma; (PI: Mohapatra); Oct. 2003 – Aug. 2009
42. Dept of Vet Affairs, BLRD VA Merit Review Award: SiRNA-based Prophylactics for Respiratory Syncytial Virus Infection The primary goal of the study is to investigate SiRNA-based prophylactics for RSV infection based on NS1 and NS2 genes; (PI: Mohapatra); Apr. 2005 – Mar. 2009; James A. Haley VA Hospital
43. Florida Biomedical Team Science Program: Florida Biomedical Research Team Science Project (PI: Mohapatra) Jul. 2007 – Dec. 2009

Patent/License related Revenues:

44. Materials and methods for prevention and treatment of RNA viral diseases Construction of the Multilayered Nanofiber Scaffolds. Patent #7,354,908, Issued: April 8, 2008.
45. Mohapatra S, Mohapatra SS, Girard Y and Wang C. United States Patent: 9,624,473. Issue Date: 04/18/2017.
46. 2. A method of personalizing Cancer Treatment. Mohapatra S and Mohapatra SS. United States Patent: 9,618,501. Issue Date: 04/11/2017.
47. A Method of Anti-Cancer Drug Discovery. Mohapatra S, Mohapatra SS and Nair R. Application No. 14/787,648.

48. A Method of Perfused Tumoroid Culture Detecting Drug Efficacy. Mohapatra SS, Guldiken R, Mohapatra S and Nair R. PCT/US2016/018762.
49. USF #21A072 entitled "A DNA Capture-based Gravitational Flow-through Assay for Antigen Detection" Patent Application Number 63/201,469
50. USF #21A105 entitled "Composition and method of treating covid-19 infection" Patent Application Number 63/202,897
51. USF #21A070 entitled "A Broad antiviral anti-inflammatory Nanosystem" Patent Application Number 63/201,397
52. USF#16B149 entitled "A Method of Targeting Onolytic Viruses to Tumors"

11. TRAINING AND MENTORING RELATIONSHIPS

List of specific teaching assignments:

Courses taught (2012-present)

- PHA 6146 Introduction to Nanotechnology
 - PHA 6119 Micro-/Nanoscale Drug Delivery Systems
 - PHA 6225 Invention, Innovation and Entrepreneurship
 - PHA 6277 Ethics in Pharmaceutical Practice and Research
 - PHA 6621 Graduate Program Internship in Pharmaceutical Sciences
 - PHA 6797 Scientific Writing and Communication
 - PHA 6952 Graduate Program Capstone in Pharmacy
 - PHA 6971 Master's Thesis
 - GMS 6101 Cellular and Molecular Immunology
 - GMS 7910 Directed Research
 - GMS 7980 Dissertation doctoral
 - GMS 6183 Clinical Research Methods
 - BMS 6991 International Medicine (SC)
 - BMS 6041 Medicine – Course 5
 - BMS 6042 Medicine – Course 6
 - BMS6043 Medicine-Course 7
 - BMS 6633 Cardio-pulmonary system
 - BMS 6837 Evidence based clinical reasoning-II
 - BMS 6920 Colloquium –I & II
- 2017-pres Faculty Advisor, New Advances in Nanotechnology Organization (NANO), University of South Florida student organization
- 2013-pres Directed the development of curriculum for the Graduate Programs at the College of Pharmacy which involved developing an MS program in Pharmaceutical Nanotechnology and PhD program in Pharmacy
- 2007-08 Teach evidence-based medicine to Med-II students
- 2007-pres Developed the course curriculum and lecturer for "Clinical Research Methods" for VA/USF residents and fellows and house staff. Course contained the following lectures: (1) Literature Searching, (2) Anatomy & Physiology of Clinical Research (3) Project Management, (4) EBM and Teaching Proficiency, (5) Biostatistics (6) Sample Size and Power in Clinical Research, (7) Basic Epidemiology Study Designs, (8) Reading Epidemiology Literature, (9) Grant and Scientific Writing (10) Compliance, (11) Ethics and Research Integrity, (12) Sponsored Project Finances, (13) Journal Reviewing.
- 2007-pres Patient oriented Clinical Research Course: SPOR Program Course
- 2006 Patient oriented Clinical Research Course: – SPOR Program Course on Principles of Clinical Research: (1) The Anatomy and Physiology of Clinical Research, (2) The role of Clinical Research in Evidence-Based Medicine, and (3) Meta-Analysis

Innovations in Teaching:

- 2017-pres Faculty Advisor, New Advances in Nanotechnology Organization (NANO), University of South Florida student organization
- 2013-pres Directed the development of curriculum for the Graduate Programs at the College of Pharmacy which involved developing an MS program in Pharmaceutical Nanotechnology and PhD program in Pharmacy
- 2007-08 Teach evidence-based medicine to Med-II students
- 2007-pres Developed course curriculum and delivered lectures for “Clinical Research Methods” for VA/USF residents and fellows and house staff. Course contained the following lectures: (1) Literature Searching, (2) Anatomy & Physiology of Clinical Research (3) Project Management, (4) EBM and Teaching Proficiency, (5) Biostatistics, (6) Sample Size and Power in Clinical Research, (7) Basic Epidemiology Study Designs, (8) Reading Epidemiology Literature, (9) Grant and Scientific Writing (10) Compliance, (11) Ethics and Research Integrity, (12) Sponsored Project Finances, (13) Journal Reviewing.
- 2007-pres Patient-oriented Clinical Research Course: SPOR Program Course
- 2006 Patient-oriented Clinical Research Course: SPOR Program Course on Principles of Clinical Research: (1) The Anatomy and Physiology of Clinical Research, (2) The Role of Clinical Research in Evidence-Based Medicine, and (3) Meta-Analysis
- 2002, 2005 Developed course curriculum for “Clinical Research Methods.”
- 2001 Co-coordinated lecture series on “Molecular Medicine,” College of Medicine
- 1997-pres Instructed fellows and residents at the Division of Allergy and Immunology and in Internal Medicine in relation to basic immunology, molecular biology and genetics.
- 1997-pres Participated in College of Medicine undergraduate Honors Program
- 1997-pres USF Summer student training program
- 2002-pres Participated in Molecular Cell Biology graduate course
- 2002-pres Participated in Cancer Cell Biology graduate course
- 1997-05 Coordinator of VA Research seminars sponsored by the Division of Allergy and Immunology
- 1996-pres Coordinator of the work-in progress seminars for research
- 1998-99 Coordinator of the “Forum in Molecular Medicine” for the Department of Internal Medicine Grand Rounds, and Molecular Medicine: Bench to Bedside
- 1998-04 Coordinator of the Airway Disease Research Center Seminars

Graduate Students:

- 2018-pres Heta Jadhav, MS Student, Major Professor
- 2018-pres Alejandro Gonzalez, MS Student, Major Professor
- 2018-pres Xiomar Bustos Perez, MS Student, Major Professor
- 2017-2018 Zein Barakat, MS Student, Major Professor; Development of Glucometer-Assisted Immunoassay for the Detection of Creatinine
- 2017-2018 Anthony Singer, MS Student, Major Professor; A New Approach to the Development of an RSV Anti-viral Targeted Nanocarrier for Dual Inhibition of Viral Infection and Replication
- 2017-pres Andrew McGill, PhD Student, Research, Nanomicellar therapies for RSV-induced lung diseases
- 2017-pres Roukiah Khalil, PhD Student, Co-mentor
- 2014-pres Mark Howell, PhD Student, Co-mentor; Research: Treatment-induced Drug Resistance in Lung Cancer; Awards: USF Signature Research Fellowship; USF Health Vice President’s Award for Outstanding Graduate Student Oral Presentation, Feb 2017; Travel Award at the 9th Annual Graduate Student Research Symposium, USF, March 2017
- 2013-2018 Ryan Green, PhD Student, co-mentor; Research: Cancer Stem Cells and NPRA Signaling in Lung Cancers; Award: American Heart Predoctoral Fellowship 2015-2017
- 2012-2017 Viviana Sampayo, PhD Student, Research: Osteopontin Plays a Pivotal Role in Increasing Severity of Respiratory Syncytial Virus Infection; Award Fulbright Scholarship

- 2011-2016, Outstanding MCOM Doctoral Student Poster Presentation (2017) Current Position – Fulbright Postdoctoral Fellow, University of Del Norte, Barranquilla, Colombia
- 2010-2016 Michael Cheung, PhD Student, Co-Supervisor, 50 hours per year; Research: Respiratory Syncytial Virus-Infected Mesenchymal Stem Cells Regulate Immunity via Interferon-Beta and Indoleamine-2,3-Dioxygenase Current Position - Postdoc Cleveland Clinic
- 2008-2013 Terriane Wong, PhD candidate, 2010, SIPAIIID concentration, University of South Florida; Thesis Title: Innate Immune Responses to Respiratory syncytial Virus: Age-associated Changes (current position: CDC, Atlanta)
- 2007-pres Yvonne Davis, BS PhD (2013)
- 2005-2008 Xiaoqin Wang, MS PhD (2009)
- 2005-2008 Shawna Shirley, BSc PhD (2008)
- 2005-2008 Alison Jones-Montpetit, RN PhD (2008)
- 2001-2005 Homero San-Juan, MD PhD (2004)
- 1992 Lei Zhang, MD, present position: Senior Scientist, Health Canada, Ottawa
- 1994 Egil Olsen, PhD, present position: Research Manager Dynabeads & Assoc Prof, Univ. of Oslo & Univ. of Manitoba
- 1996 Gangur Venugopal, MVSc, PDF, Univ. of Manitoba
- 1992 Youhai Chen, MD (with Dr. A. Sehon), present position: Asst. Prof, Univ. of Pittsburg
- 1993 Subhra Mohapatra, MSc (with Dr. A. Sehon), present position: Professor, USF College of Medicine
- 1992 Ming Yang, MD, MSc, Student, Univ. Manitoba
- 1996 Cao Yanna MSc, present position: Res. Associate, Univ. Manitoba
- 1992 Hui Wang, MSc, Thesis entitled "In vivo and in vitro study of murine cytokine gene expression via RNA and protein analysis," University of Manitoba

Member of Dissertation Committee:

- 2017-pres Andrew McGill, PhD Student, Research, Nanomicellar therapies for RSV-induced lung diseases
- 2012-2017 Viviana Sampayo, PhD Student, Research: Osteopontin Plays a Pivotal Role in Increasing Severity of Respiratory Syncytial Virus Infection; Award Fulbright Scholarship 2011-2016, Outstanding MCOM Doctoral Student Poster Presentation (2017) Current Position – Fulbright Postdoctoral Fellow, University of Del Norte, Barranquilla, Colombia
- 2010-2016 Michael Cheung, PhD Student, Co-Supervisor, 50 hours per year; Research: Respiratory Syncytial Virus-Infected Mesenchymal Stem Cells Regulate Immunity via Interferon-Beta and Indoleamine-2,3-Dioxygenase Current Position - Postdoc Cleveland Clinic
- 2008-2013 Terriane Wong, PhD candidate, 2010, SIPAIIID concentration, University of South Florida; Thesis Title: Innate Immune Responses to Respiratory syncytial Virus: Age-associated Change (current position: CDC, Atlanta)
- 2010 Yvonne Davis, PhD candidate, 2009, SIPAIIID concentration, University of South Florida
- 2008 Alison Jones, College of Nursing, University of South Florida; current position: faculty, UAB
- 2008 Shawna Shirley, Department of Molecular Medicine, University of South Florida
- 2007 Natalie Frey, Department of Physics, University of South Florida
- 2007 Raquel Carvallo, Department of Chemical Engineering, University of South Florida
- 1995 Umu Anzala, Ph.D. Candidate, Department of Medical Microbiology
- 1992-95 Brendan McClarty, summer student

Thesis Examination:

- 2014 Examiner (External) PhD Thesis, "Targeting cancer cell death using aptamer-tagged nano-formulated surviving antagonists" by Kislav Roy, Deakin University, Vic, Australia
- 2012 Examiner (External) PhD Thesis, "Orally administered anti-cancer nanocarriers loaded with therapeutic proteins," by Mahidhara V.N.L. Ganesh, Deakin University, Vic, Australia

- 2011 Examiner (External) PhD Thesis, "Gene-gene interaction studies on asthma with special reference to Th1/Th2 paradigm," by Amrendra Kumar, University of Pune, India
- 2009 Examiner, PhD Thesis, Characterization of curcumin responses on human dendritic cells," by Shawna Shirley, College of Medicine, University of South Florida, Tampa
- 2008 Examiner, PhD Thesis, "Modulation of Monocyte-Derived Dendritic Cell Maturation and Function by Cigarette Smoke Condensate in a Bronchial Epithelial Cell Co-Culture Model," by Alison Jones Montpetit, College of Nursing, University of South Florida, Tampa
- 2008 Examiner, PhD thesis, "Surface and interface magnetism in nanostructures and thin films," by Natalie A. Frey, University of South Florida, Tampa
- 2008 Examiner, PhD thesis, "Supercritical fluid aided microencapsulation of dry powders," by Raquel Carvallo, University of South Florida, Tampa
- 2004 Examiner, PhD thesis, "Role of PKC-alpha in Respiratory Syncytial Virus Infection of human epithelial cells", University of South Florida, Tampa
- 1994 External Examiner, PhD thesis, "Characterization of Tropomyosin as the Major Allergen of Shrimp," by Shanti, K.N., Indian Institute of Science, Bangalore, India
- 1994 External Examiner, PhD thesis, "Molecular Characterization of Dust Mite Allergens" by Dilworth, M., University of Western Australia
- 1993 Examiner, PhD thesis, "Developmental and Molecular Characterization of Allergen Cognates in Barley," by Astwood, J., University of Manitoba
- 1993 Examiner, PhD thesis, "Downregulation of Antigen Specific Antibody Responses by CDR3 Peptides of Antigen Receptors of CD8 Positive Suppressor T-cells," by Mohapatra, SS, University of Manitoba
- 1992 Examiner, MSc thesis, "In Vivo and In-vitro Study of Murine Cytokine Gene Expression via RNA and Protein Analysis," by Wang, H., University of Manitoba
- 1992 Examiner, PhD thesis, "Characterization of Ovalbumin-Specific Suppressor T-cells and Their Suppressor Factors Induced by Tolerogenic conjugates of Ovalbumin and Monomethoxy Polyethylene Glycol," by Chen, Y., University of Manitoba

Research Supervision

Clinical Fellows

- 2006-2008 B Shin, MD: Viral Infections and siRNA nanoparticles
- 2005-2007 Steven Cole, MD: General laboratory Research Training
- 2005-2007 Thomas Chacko, MD: General laboratory Research Training
- 2004-2006 Alexander Vu, MD: General laboratory Research Training
- 2004-2006 Denise Kearney, MD: Role of ateoroids in RSV infection
- 2003-2005 Patrick DeMarco, MD: General laboratory Research Training
- 2003-2005 John Ramey, MD: General laboratory Research Training
- 2002-2004 Sean McKnight, MD: General laboratory Research Training
- 2001-2003 Jose Arias, MD: General laboratory Research Training
- 2000-2002 Nina Ramirez, MD: Respiratory infection
- 2000-2003 Richard Crockett, MD: Role of antibiotics in asthma
- 1999-2002 Daniel Reichmuth, MD: Genetic basis of asthma
- 1999-2001 Giana N-Kasti, MD: Effect of dexamethazone on epithelial cells
- 1997-2001 Kevin Rosenbach, MD: Mechanism of aspirin-induced asthma
- 1997-2000 Demetrios Theodoropoulos, MD: Detection of respiratory syncytial virus in sputum

Mentors/Co-mentors of Research Faculty and Postdoctoral Fellows

- 2020-pres Mark Howell, PhD- Postdoctoral Fellow
- 2019-Pres Ryan Green, PhD- Postdoctoral Fellow
- 2019-pres Eleni Markoutsas, PhD- Postdoctoral Fellow

2018-pres Rinku Dutta, PhD – Postdoctoral Fellow

2017-2019 Waise Quarni, PhD – Postdoctoral Fellow; St. Jude Childrens Hospital

2016-2018 Xiaolan Tang, PhD – Postdoctoral Fellow; Moffitt Cancer Center

2016-2017 Eva Samal, PhD, Research Associate; Next Position: Faculty, USF Heart Institute

2016-2017 Swati Checker, PhD, Post-doctoral Fellow; Next Position: Faculty in Mumbai, India

2014-2015 Tuhin Das, PhD – Postdoctoral Fellow; Next position: Faculty, Memorial Sloan Kettering

2010-2014 Chunyan Wang, PhD – Postdoctoral Fellow; Next position: Res Associate, Department of Surgery, USF

2010-2013 Jaya Mallela, MBBS PhD – Postdoctoral Fellow, Next position: Res Associate, Cleveland Clinic

2011-2012 Sid Kamath, BS, Associate in Research

2011-2014 Subbiah Alwarappan, PhD, Postdoctoral Fellow

2010-2012 Nancy Goicochea, PhD, Postdoctoral Fellow

2009-pres Mahasweta Das, PhD, Postdoctoral Fellow

2009-2013 Julio Garay, PhD, Postdoctoral Fellow

2008-2015 Sandhya Boyapalle, PhD, Postdoctoral Research Associate

2008-2009 Hongyu Zheng, PhD – Postdoctoral Fellow, Current position: Res Assoc., Univ of Alabama

2007-2010 Xiaoquin Wang, PhD – Postdoctoral Fellow, Current position: Associate Prof. Xian University, China

2007-2008 Basu Nagarelli, PhD, Postdoctoral Fellow, Optimization of thin film for bilingual drug delivery and development of multifunctional nanoparticles for nonspecific binding

2007-pres Jia-wang Wang, PhD, Research Associate, microRNA and regulation of asthma

2006-pres Arun Kumar, PhD, Research Instructor, Nanotechnol. & diagnostic applications

2006-2009 Weidong (Wilson) Xu, PhD, Assistant Professor, HIV infection and ovarian cancer

2005-pres Weidong Zhang, MD, Research Instructor, siRNA inhibition of virus infection

2005-2009 Mark Glaum, MD, PhD, Assistant Professor, Role of ANP signaling in mast cells

2005-2009 Weidong Zhang, Research Instructor

2005-2006 Biswabhusan Sahoo, PhD, Postdoctoral Fellow, Chemical synthesis of polymeric nanoparticles

2004-2009 PK Jena, PhD, Research Instructor, Regulation of ANP gene expression

2004-2006 Dong-won Lee, PhD, Postdoctoral Fellow, Chitosan nanoparticles and gene transfer

2003-2005 Weidong Zhang, MD, Postdoctoral Fellow, siRNA inhibition of Dengue virus infection and respiratory syncytial virus infection

2002-2004 Raji Singam, PhD, Respiratory Syncytial Virus Infection

2001-pres Gary Hellermann, Research Biological Scientist

2000-2002 Geoff Patton, PhD, Development of animal model of RSV infection

1999-2001 Gary Hellermann, PhD, Postdoctoral Fellow, Role of IL-9 receptor in asthma

1996-2003 Mukesh Kumar, PhD, Postdoctoral Fellow, Development of DNA vaccines

1997-2003 Aruna K. Behera, PhD, Postdoctoral Fellow, Molecular changes in epithelial cells following infection with respiratory syncytial virus

1997-2000 Hiroto Matsuse, MD, PhD, Postdoctoral Fellow, Adjuvant role of IL12 as a vaccine adjuvant

1994-96 Ming Yang, MD, Research Associate

1992 Arvinda Kasyap, PhD, Postdoctoral Fellow

1990-92 Ma Luo, PhD, Postdoctoral Fellow

1989-91 Andre Silvanovich, MSc, Research Associate (with Dr. R.D. Hill)

1989-91 Egil Olsen, Postdoctoral Fellow

Visiting Faculty

2007-pres Sang-Joon Park, MD, Postdoctoral Fellow, The effect of combined fluticasone and salmeterol on RSV infection in rats

- 2007-pres Ruckmani Kandasamy, PhD, Postdoctoral Fellow, Development of lecithin and lipid based nanoparticles to explore the in-vitro release using isatin as a model drug
- 2002-2004 Xiang Hu, MD, Identification of genes associated with differential predisposition to IgE immune responsiveness
- 1997-99 Jianan Hu, MD, IL-12 as an adjuvant in allergen vaccines and allergen immunotherapy
- 2019-Pres Dr. Mustafa Culha, Visiting Professor from Turkey (also now in Research faculty Department of Ophthalmology)

Technologists and Biological Scientists

- 2011-2015 Raminder K. Bedi, MS, Research Assistant
- 2009-2014 Kunyuli Wang, BS, Research Assistant
- 2010-2012 Jordan Heft, BS, Graduate Research Assistant
- 2010-2012 Marcia Cubillo, BS, Research Assistant
- 2010-2015 Saniya Rangooni, MS, Research Assistant
- 2005-2006 Dongqing Chen, BS, Technologist
- 2003-2015 Gary Hellermann, PhD, Biological Scientist
- 2002-2009 Xiaoyuan Kong, MD, MS Senior Biological Scientist
- 2003-2005 Sumita Behera, MS, Technologist
- 1999-2001 Jianan Zhang, MD, MS, Biological Scientist, Human blood groups
- 1998-1999 Nicole Kuderer, MD, Characterization signaling pathways in epithelial cells following their exposure to allergens
- 1997-1998 Alice Zong, BS, Identification of genes associated with differential predisposition to IgE immune responsiveness

Post-Graduate Clinical Fellows

- Demetri Theodoropoulos, MD, Clinical Research Fellow, Detection of respiratory syncytia virus in sputum
- Giana N-Kasti, MD, Clinical Research Fellow, Effect of dexamethazone on epithelial cells
- Kevin Rosenbach, MD, Clinical Research Fellow, Mechanism of aspirin-induced asthma
- Mukesh Kumar, PhD, Postdoctoral Fellow, Development DNA Vaccines
- Aruna K Behera, PhD, Postdoctoral Fellow, Molecular changes in epithelial cells following infection with respiratory syncytial virus
- Xiang Hu, MD, Identification of genes associated with differential predisposition to IgE immune responsiveness
- Hiroto Matsuse, MD, PhD, Postdoctoral Fellow, Adjuvant role of IL12 as a vaccine adjuvant
- Gary Hellerman, PhD, Postdoctoral Fellow, Role of IL-9 receptor in asthma
- Geoff Patton, PhD, Instructor, Development of animal model of RSV infection
- Dan Reichmuth, MD, Clinical Research Fellow, Genetic basis of asthma
- Weidong Zhang, MD, Postdoctoral Fellow, siRNA inhibition of Dengue virus infection and respiratory syncytial virus infection

Faculty

- Eleni Markoutsas, PhD, Research Instructor/ Assistant Professor, Internal Medicine/Pharmacy
- Daniel Denmark, PhD, Research Instructor, Internal Medicine/Pharmacy (now Medical writer, Medtronics)
- PK Jena, PhD, Research Instructor, Regulation of ANP gene expression
- Dong-won Lee, PhD, Postdoctoral Fellow, Chitosan nanoparticles and gene transfer
- Arun Kumar, PhD, Research Associate, Nanotechnology and diagnostic applications
- Biswabhusan Sahoo, PhD, Postdoctoral Fellow, Chemical synthesis of polymeric nanoparticles
- Sang-Joon Park, MD, Postdoctoral Fellow, The effect of combined fluticasone and salmeterol on RSV infection in rats
- Ruckmani Kandasamy, PhD, Postdoctoral Fellow, Development of lecithin and lipid based nanoparticles to explore the in-vitro release using isatin as a model drug

Basu Nagarelli, PhD, Postdoctoral Fellow, Optimization of thin film for bilingual drug delivery and development of multifunctional nanoparticles for nonspecific binding

Undergraduate Students

2007 Omar Syed
2003 Brian Schroer (medical student)
1997 Janice Wetherspoon
1997 Gregory Brun
1994 Allon Davis, BSc (Med) (with Dr. Becker)
1990 Peter R. Clark, BSc (Med)

12. EXTRAMURAL ACTIVITIES

Chair/Moderator, Scientific sessions:

2018 Session Chair, NanoFlorida Conference, FIT, Melbourne, FL, October 5-7, 2018
2018 Session Chair, European Biotechnology Conference, Athens, Greece, April 26-28, 2018
2017 Speaker, USF-FAMU International NanoBio Collaborative Conference, Tampa, FL, January 19-20, 2018
2017 Organizing Committee Member & Invited Speaker, 17th International Conference and Exhibition on Nanomedicine & Nanotechnology in Health Care, Melbourne, Australia, November 23-24, 2018
2017 Invited Speaker, American Association of Pharmaceutical Sciences (AAPS) Short Course on "Targeted Virotherapy: Advances and Challenges," AAPS Annual Meeting, San Diego, CA, November 12-15, 2017
2017 Co-organizer and Speaker, VA Cellgenomics Collaborative on Colorectal Cancer (VA4C), Chicago, IL, May 6-7, 2017
2016 Chair of NAI Nanobio Engineering Conference, Tampa, FL 2016
2014 Keynote: "Translating advances in nanotechnology for biomedical applications: What's in the horizon." 4th Annual EMN (Energy, Materials and Nanotechnology) Conference, Orlando FL, Nov 2014.
2014 Panelist and Speaker, "People Drives Innovation ... Innovation Drive the World", Future of Florida Forum... Moving Florida Forward, Orlando, FL, September 2014.
2014 Chair/Moderator, Global Business Forum Session on Indo-US Collaboration on Life sciences and safe and affordable Health Care, Tampa, FL April 24-2, 2014
2013 Conference Chair, Moderator and NanoBio Collaborative International Conference, Trichi, India, August 2013
2012 Conference Chair, Moderator and NanoBio Collaborative International Conference, Tampa, FL, Nov 2012
2011 Chair of Symposium ALA-ACRC studies on older asthmatics, World Allergy Congress, Cancun, Mexico, Dec 2011.
2011 Chair, Symposium in Cytokines, World Allergy Congress, Cancun, Mexico, Dec 2011.
2011 Co-Chair, Translational Research in HIV in India, Goa (India), January 2011
2010 Chairman of Southern Medical Association Asthma Assembly on "*Healthcare Deficiencies in the South- Asthma*", November 4-6, Orlando.
2010 Director, Fourth Annual SIPAIID symposium on Genomics, Immunity and Infections. Tampa, FL
2010 Session Chairman and Plenary Lecture "Preventing HIV Transmission: Progress and Perspectives" Mumbai, India, Jan 2010.
2009 Plenary lecture "Short interference RNA (SiRNA): Potential therapy for allergy and asthma" World Allergy Organization Symposium, Buenos Argentina (Invited), December
2009 Plenary lecture "Nanomedicine: Applications in diagnosis and therapy", World Allergy Organization Symposium, Buenos Argentina (Invited) December

- 2009 Plenary lecture “Anti-viral therapy. What is new” World Allergy Organization (invited) December
- 2008 Plenary on ‘Designer Antibodies’ in World Allergy Organization Symposium at the American Academy of Allergy, Asthma and Immunology, Philadelphia, March
- 2008 Plenary lecture on “siRNA in allergic disease” in AAAAI Course on Molecular Biology, What’s hot: Novel applications to allergic disease. American Academy of Allergy, Asthma and Immunology, Philadelphia, March
- 2008 Moderator, “Molecular Links: RSV and asthma” American Academy of Allergy, Asthma and Immunology, Philadelphia, March
- 2008 Plenary lecture on “Mesenchymal stem cells and asthma “in Pulmonary stem cells: Role in Pathogenesis and protection.” American Academy of Allergy, Asthma and Immunology, Philadelphia, March
- 2007 Discussion Leader in Advanced Seminar, “Nanotechnology, Drug Delivery and Asthma”. American Academy of Allergy, Asthma and Immunology, San Diego, California, February 23-27
- 2007 Discussion Leader in Advanced Seminar, “What is the Optimal Treatment for Virus Induced Wheezing and Asthma” February 23-27
- 2007 Discussion Leader in Advanced Seminar, “The Beginning of Asthma: Role Natriuretic Peptides” February 23-27
- 2007 Chairman, Signature Conference “Advances in Immune Regulation” Embassy Suites Hotel, University of South Florida, Tampa, FL, May 2007.
- 2006 Chairman, Advanced Conference on “Advances in Nanotechnology: Biomedical Applications”, University of South Florida, Tampa, FL, December 2006.
- 2006 Co-Moderator, Advanced Seminar on “Nanotechnology and applications to Allergy and Asthma” American Academy of Allergy, Asthma and Immunology, Miami, Florida (March).
- 2006 Co-organizer, NIPER-NANO-2006 Conference - Nanotechnology in Advanced Drug Delivery, National Institute Pharmaceutical Education and Research, Chandigarh, India. (Feb 17-18, 2006)

Professional Communications:

Plenary lecturer in important national/ international symposia:

- 2018 Speaker, Harvard University, on Nanotechnology and Integrative Medicine. June 21-23, 2018
- 2018 Speaker, “New Frontiers of Nanobiotechnology, Progress and Challenges,” European Biotechnology Congress, Athens, Greece, April 26-28, 2018
- 2018 Speaker, “New Frontiers of Pharmaceutical Nanotechnology: Progress and Challenges,” Whitaker Center STEMinar, Florida Gulf Coast University, Fort Myers, FL, April 18, 2018
- 2018 Speaker, USF-FAMU International NanoBio Collaborative Conference, Tampa, FL, January 19-20, 2018
- 2017 Invited Speaker, 17th International Conference and Exhibition on Nanomedicine & Nanotechnology in Health Care, Melbourne, Australia, November 23-24, 2017
- 2017 Invited Speaker, American Association of Pharmaceutical Sciences (AAPS) Short Course on “Targeted Virotherapy: Advances and Challenges,” AAPS Annual Meeting, San Diego, CA, November 12-15, 2017
- 2017 10th Annual Nanoscience Technology Symposium, Florida International University (FIU), Miami, FL, September 23-24, 2017
- 2017 Invited speaker: VA Cellgenomics Collaborative on Colorectal Cancer (VA4C), Chicago, IL, May 6-7, 2017
- 2014 Speaker at the ‘Future of Florida Conference’, Nov 2014

- 2013 Novel Biosensing Applications of Graphene, In: "Novel Solution Process for Nano-/Biomaterials" at ICMAT 2013 in Singapore.
- 2013 Stem cells and micro RNAs: novel nanomedical approaches to Reparative Medicine", Nanobio Collaborative International Conference 2013, Trichy, India, June 27-29, (2013)
- 2012 Advanced Seminar, "Inflammasome in allergic diseases" in Am Acad Allergy Immunology and asthma, Orlando, March 2012.
- 2010 Plenary Lecture "Preventing HIV Transmission: Progress and Perspectives" Mumbai, India, Jan 2010.
- 2009 Plenary lecture "Short interference RNA (SiRNA): Potential therapy for allergy and asthma" World Allergy Organization Symposium, Buenos Argentina (Invited), December
- 2009 Plenary lecture "Nanomedicine: Applications in diagnosis and therapy", World Allergy Organization Symposium, Buenos Argentina (Invited) December
- 2009 Plenary lecture "Anti-viral therapy. What is new" World Allergy Organization (invited) December
- 2008 Webinar, International Asthma Congress, Monte Carlo, November 5-8, 2008.
- 2008 Paul-Ehrlich Symposium-II, Nurnberg, Germany, October 3-5, 2008.
- 2008 World Cancer Congress, Shanghai, China, June 2008
- 2008 Panel discussion, The Future Medical Forum, Tampa, 2008
- 2008 Co-Organizer Indo-US Workshop on Adolescent HIV/AIDS, Vadodara, India
- 2008 Plenary on 'Designer Antibodies' in World Allergy Organization Symposium at the American Academy of Allergy, Asthma and Immunology, Philadelphia, March (Invited)
- 2008 Plenary lecture on "siRNA in allergic disease" in AAAAI Course on Molecular Biology, What's hot: Novel applications to allergic disease. American Academy of Allergy, Asthma and Immunology, Philadelphia, March (Invited)
- 2008 Moderator, "Molecular Links: RSV and asthma" American Academy of Allergy, Asthma and Immunology, Philadelphia, March (Invited)
- 2008 Plenary lecture on "Mesenchymal stem cells and asthma "in Pulmonary stem cells: Role in Pathogenesis and protection." American Academy of Allergy, Asthma and Immunology, Philadelphia, March (Invited)
- 2007 Lecture, "A critical role for atrial natriuretic peptide receptor signaling in allergic disease", World Allergy Congress, Bangkok, Thailand (Invited speaker)
- 2007 Lecture, "Atrial natriuretic peptide receptor (NPRA) signaling in human dendritic cells controls Treg development, World Allergy Congress, Bangkok, Thailand (Invited speaker)
- 2007 Symposium on "What is the Optimal Treatment for Virus Induced Wheezing and Asthma", *Topic: Molecular Approaches to Antiviral Therapy: What's in the Horizon.* American Academy of Allergy, Asthma and Immunology, San Diego, California, (February 23-27).
- 2007 Invited lecture, Workshop "Nanotechnology and Asthma", American Academy of Allergy, Asthma and Immunology, San Diego, California, (February 23-27).
- 2007 Invited Lecture, Workshop on "The Beginning of Asthma: Role of Natriuretic Pathway", *Topic: ANP Pathway: Modulation of Innate and Adaptive Immunity*", American Academy of Allergy, Asthma and Immunology, San Diego, California, (February 23-27).
- 2006 Invited Lecture on "Nanotechnology Applications to Allergy and Asthma", University of Manitoba, St. John's, Antigua (November 19-22)
- 2006 Plenary Lecture on RSV Infection and Asthma, XIV Latin American Congress of Allergy, Asthma and Immunology, Buenos Aires, Argentina, (August 16-19).
- 2006 Plenary Lecturer, Florida Association of Allergy, Asthma and Immunology. Florida (June)
- 2006 Plenary Lecturer, Symposium on Nanoparticles and Gene Therapy, Congress on Particles, Orlando, Florida (May).
- 2006 Plenary Lecturer: Pittsburg Annual International Lung Symposium, Pennsylvania (Apr 2-4).
- 2006 Invited Lecture, workshop on "Nanotechnology Applications to Allergy and Asthma", American Academy of Allergy, Asthma and Immunology, Miami, Florida, (March 3-7).

- 2006 Invited Lecture, workshop on “Regulation of Allergic Inflammation by Hormonal Peptides”, American Academy of Allergy, Asthma and Immunology, Miami, Florida (March 3-7).
- 2006 Discussion Leader and Lecture, advanced seminar on “Nanotechnology and Asthma”, American Academy of Allergy, Asthma and Immunology, Miami, Florida (March 3-7).
- 2006 Invited Lecture, workshop on “Regulation of Allergic Inflammation by Hormonal Peptides”, American Academy of Allergy, Asthma and Immunology, Miami, Florida (March 3-7).
- 2006 Plenary Lecturer, NIPER-NANO-2006 Conference “Nanotechnology in Advanced Drug Delivery, National Institute Pharmaceutical Education and Research”, Chandigarh, India, (Feb 17-18).

Research Seminars and Invited Guest Lectures:

- 2018 STEMinar, Florida Golf Coast University, Fort Myers, FL
- 2018 Yeditepe University, Dept of Genetics & Bioengineering, Istanbul, Turkey
- 2017 Florida Agricultural and Mechanical University, Tallahassee, FL
- 2017 University of Queensland, Brisbane, Australia
- 2016 All India Institute of Medical Sciences, Bhubaneswar, India
- 2015 Surat Medical College, Surat, Gujarat, India
- 2015 Albany College of Pharmacy and Health Sciences, Albany, NY
- 2014 Rush University Medical Center, Chicago, IL
- 2012 University of North Dakota, Grand Forks, ND
- 2011 University of Texas Health Science Center at Tyler, TX
- 2011 Penn State Univ Hershey Medical College, Hershey, PA
- 2009 Univ of Texas, San Antonio, TX
- 2008 Univ of Colorado & National Jewish Hospital, Denver, CO
- 2008 University of Carabobo, Valencia, Venezuela
- 2008 Peking Medical Union College Division of Allergy and Immunology, Beijing, China
- 2008 Xi’an Jiaotong University College of Medicine, Xian, China
- 2008 Pennington Biomedical Research Foundation, April 2008
- 2007 Johns Hopkins University, Baltimore, July 2007
- 2007 University of Pennsylvania, Pennsylvania, June 2007
- 2006 Nanobiotech World Congress, Boston, MA
- 2006 University of West Virginia, Morgantown, WV
- 2006 Rush University Medical Center, Chicago, IL

13. BIBLIOGRAPHY (total of 244 publications, 43 patents issued, and 39 patents pending)

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2. Markoutsas E, Mayilsamy K, Gulick D, **Mohapatra SS** and Mohapatra S. Extracellular vesicles derived from inflammation-educated stem cells reverse brain inflammation- Implication of miRNAs. *Molecular Therapy Mol Ther*. 2021 Aug 8:S1525-0016(21)00402-0. doi: 10.1016/j.ymthe.2021.08.008
3. Dutta R, Khalil R, Mayilsamy K, Green R, Howell R, Bharadwaj S, **Mohapatra SS** and Mohapatra S. Combination Therapy of Mithramycin A and immune checkpoint inhibitor for the treatment of colorectal cancer in an orthotopic murine model. *Front in Immunol*. 12: Article 706133 (2021), doi: 10.3389/fimmu.2021.706133.
4. Howell R, Green R, McGill A, Khalil R, Dutta R, Mohapatra S and **Mohapatra SS**. SARS-CoV-2 Induced Gut Microbiome Dysbiosis: Implications for Colorectal Cancer. *Cancers*. 13(11), 2676 (2021) <https://doi.org/10.3390/cancers13112676>

5. McGill A, Khalil R, Dutta R, Green R, Howell R, Mohapatra S and **Mohapatra SS**. SARS-CoV-2 Immuno-pathogenesis and potential for diverse vaccines and therapies: Opportunities and Challenges. *Infect Dis Rep* 2021, 13, 102–125. <https://doi.org/10.3390/idr13010013>
6. Khiev D, Mohamed ZA, Vichare R, Paulson R, Bhatia S, Mohapatra S, Lobo GP, Valapala M, Keur N, Passaglia CL, **Mohapatra SS** and Biswal M. Emerging nano-formulations and nanomedicines applications for ocular drug delivery. *Nanomaterials* 2021, 11(1): 173 doi: [10.3390/nano11010173](https://doi.org/10.3390/nano11010173)
7. Markoutsas E, McGill A, Jadav H, Mohapatra S and **Mohapatra SS**. A Multifunctional Nanoparticle as a Prophylactic and Therapeutic approach targeting Respiratory Syncytial Virus. *Nanomedicine* (2020) 32:102325. doi: [10.1016/j.nano.2020.102325](https://doi.org/10.1016/j.nano.2020.102325).
8. Das M, **Mohapatra SS** and Mohapatra S. The role of Autoimmunity after traumatic brain injury. Biomarkers for Traumatic Brain Injury; Page 55-76. (2020) DOI: <https://doi.org/10.1016/B978-0-12-816346-7.00005-1>
9. Denmark D, Mohapatra S and **Mohapatra SS**. Point-of-Care Diagnostics: Molecularly Imprinted Polymers and Nanomaterials for Enhanced Biosensor Selectivity and Transduction. *Eur Biotech*. 2020. DOI: [10.2478/ebtj-2020-0023](https://doi.org/10.2478/ebtj-2020-0023)
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45. Disclosure No/Date: 21A072 4/30/21; Title: A DNA capture-based gravitational flow-through assay for antigen detection; Status: Licensed.
46. Disclosure No/Date: 21A081 5/14/21; Title: Composition and method of treating covid-19 infection; Status: Licensed.
47. Disclosure No/Date: 21A105 6/29/21; Title: Composition and method of treating covid-19 infection; Status: Licensed.
48. Disclosure No/Date: 21A075 5/07/21; Title: Method of treating kidney disorders by glomeruli-targeted nanotherapeutics; Status: Available.
49. Disclosure No/Date: 20B185 10/28/20; Title: A method of treating traumatic brain injury; Status: Under Review.
50. Disclosure No/Date: 20B183 10/28/20; Title: A Method of treating human coronavirus infection; Status: CS-Available.
51. Disclosure No/Date: 20B176 9/30/20; Title: A method of treating coronavirus infection; Status: Under Review.
52. Disclosure No/Date: 20A112 5/28/20; Title: Antiviral Impermeable Polyimide-Polyurea Films and Nanomembranes for Coating PPE and Packaging: COVID-19; Status: CS-Available.
53. Disclosure No/Date: 20A110 5/28/20; Title: Real-Time Monitoring of COVID-19 Progress Using Magnetic Sensing and Machine Learning; Status: CS-Available.
54. Disclosure No/Date: 20A060 4/8/20; Title: Compositions and Methods Prevention and Treatment of Respiratory Viral Infections; Status: Available.
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 61. Disclosure No/Date: 19B147 10/2/19; Title: A Method of Treating Cancer with combination Immunotherapy involving Mithramycin; Status: Available.
 62. Disclosure No/Date: 19B141 9/18/19; Title: A novel microparticle for controlled release of Telmisartan and Actinomycin-D combination for lung cancer therapy; Status: CS-Available.
 63. Disclosure No/Date: 19A083 5/16/19; Title: Nanomedicine-shCCL20 for Traumatic Brain Injury; Status: Available.
 64. Disclosure No/Date: 19A074 5/1/19; Title: A Method of Deep Learning for Colorectal Polyp Screening; Status: Available.
 65. Disclosure No/Date: 19A068 4/24/19; Title: Methods for Cancer Stem Cell (CSC) Expansion; Status: Agreement.
 66. Disclosure No/Date: 19A052 3/25/19; Title: Incorporated into 17A023 Lung Cancer Cells Survive EGFR TKI Exposure Through Upregulation of Cholesterol Synthesis; Status: Agreement in Negotiation.
 67. Disclosure No/Date: 19A049 3/19/19; Title: Additional Studies Conducted in Relation to Scaffold Technology; Status: Agreement in Negotiation.
 68. Disclosure No/Date: 19A026 2/22/19; Title: Combined Pioglitazone and Human Mesenchymal Stem Cell Therapy Improves TBI Induced Neuropathological and Behavioral Outcomes in Rats; Status: Agreement in Negotiation.
 69. Disclosure No/Date: 19A025 2/22/19; Title: A Microfluidic-coupled In Vitro Model of the Blood-Brain Barrier; Status: Available.
 70. Disclosure No/Date: 19A022 2/22/19; Title: 4D-Perfused Tumoroid-on-a-chip Platform for Personalized Cancer Treatment Applications; Status: Letter of Commitment.
 71. Disclosure No/Date: 19A021 2/22/19; Title: Stem-cell Targeted Therapy for Respiratory Syncytial Virus Mediated Treatment of Lung Cancer; Status: Incorporated into other Technology.
 72. Disclosure No/Date: 18B188 12/21/18; Title: A Method of Using a Cancer Stem Cell Inhibitor to Increase Sensitivity of Cancer Immunotherapy Treatments; Status: Agreement in Negotiation.
 73. Disclosure No/Date: 18B149 8/2/18; Title: A Method of Delivering Genes and Drugs to the Posterior Eye; Status: Available.
 74. Disclosure No/Date: 18A109 5/21/18; Title: Development and Characterization of a Nanoparticle System to Combat RSV-infection; Status: Available.
 75. Disclosure No/Date: 18A010 1/24/18; Title: Combination of Actinomycin-D and Telmisartan as a treatment for lung cancer stem cells; Status: Exclusive License.
 76. Disclosure No/Date: 18A007 1/18/18; Title: Methods of Detecting Creatinine in Serum or Urine; Status: Incorporated into other Technology.
 77. Disclosure No/Date: 17A078 5/23/17; Title: Combination Therapy for Traumatic Brain Injury; Status: Available.
 78. Disclosure No/Date: 17A049 3/28/17; Title: Device for Rapid and Sensitive Detection of Analytes; Status: Available.
 79. Disclosure No/Date: 17A023 2/22/17; Title: (Co Owned w/ Transgenex) Combination Treatment for Drug Resistant Lung Cancers; Status: Letter of Commitment.
 80. Disclosure No/Date: 16B149 9/19/16; Title: A Method of Targeting Oncolytic Viruses to Tumors; Status: Licensed.
 81. Disclosure No/Date: 16A103 6/10/16; Title: The Composition and Method of Inhibiting Cancer Stem Cell Expansion; Status: Available.
 82. Disclosure No/Date: 16A035 2/17/16; Title: Screening of Clinically Approved Anticancer Drugs for Use in Treatment of Colorectal Adenocarcinoma; Status: Letter of Commitment.

News and Media Reports (a few selected of many)

- 06/22/2020 USF Distinguished Health Professor Shyam Mohapatra awarded Florida Academy of Science 2020 medal
- 03/27/2017 USF Spinout Transgenex Nanobiotech Inc. Awarded a SBIR Phase II Contract from National Cancer Institute
- 01/20/ 2016 Shyam Mohapatra, Ph.D., MBA To be Inducted into Medical and Biological Engineering Elite
- 07/08/2014 Shyam Mohapatra elected one of six inaugural inductees to Florida Inventors Hall of Fame
- 04/26/2014 USF faculty and TransGenex co-founder receives Global Corporate Award in Nanotechnology
- 09/21/2013 The Indus Entrepreneurs of Tampa honor TransGenex co-founders
- 09/17/2013 TransGenex Receives \$299,000 SBIR Phase I Contract from National Cancer Institute
- 04/26/2008 The Indo-US Chamber of Commerce honors TransGenex founder with the International Business Person of the Year
- 06/20/2007 TransGenex founders receive Team Science Award from Florida Biomedical Research Foundation
- 11/10/2006 Technology awards fete Tampa Bay area innovation