

1. PERSONAL DATA

- a. Name: Niketa A. Patel, Ph.D.
- b. Current Mailing Address: James A Haley Veterans' Hospital, Research Service, 3802 Spectrum Blvd., Suite 303, Tampa FL 33612
- c. Telephone: (813) 972-2000 X 7283; Fax: (813) 972-7623; Email: Niketa.Patel@va.gov; Niketa@usf.edu
- d. Professional Facilities: Office: Room 303-4 and Laboratories: Suite 300 and 303 at James A. Haley Veterans' Hospital, Research Service, 3802 Spectrum Blvd., Tampa FL 33612

2. EDUCATION

- a. Baccalaureate:
1989 B.S. in Chemistry and Biochemistry, University of Bombay, India
- b. Graduate:
1991 M.S. in Biochemistry, University of Bombay, India
1998 Ph.D. in Biochemistry and Molecular Biology, University of South Florida, Tampa, FL
- c. Postgraduate: 1999 University of South Florida, Tampa, FL

3. POST-DOCTORAL TRAINING

1999-2004 Post-doctoral fellow, Department of Biochemistry and Molecular Biology, University of South Florida, Tampa, FL.

4. APPOINTMENTS

University Appointment: Research Track, University of South Florida

2004-2012	Assistant Professor, Department of Biochemistry and Molecular Biology, University of South Florida, Tampa, FL
2013-2019	Associate Professor, Department of Molecular Medicine, University of South Florida, Tampa, FL
2020-present	Professor, Department of Molecular Medicine, University of South Florida, Tampa, FL

VA Appointment:

2005-2019	Research biologist, James A. Haley Veterans Hospital, Tampa, FL; GS12-14, 8/8 th VA
2020-present	Research Career Scientist, James A. Haley Veterans Hospital, Tampa, FL; GS15/1-GS15/5, 8/8 th VA

5. Personal Statement

I have established a strong program in translational research with direct relevance to human health and diseases. My research integrates human studies (biological samples and epidemiological studies) with pre-clinical elucidation of molecular mechanisms and target validation. I have extensive experience with the characterization and development of human

adipose stem cells derived exosomes as therapeutics in traumatic brain injury and dermal wound healing. My lab is a pioneer in designing and validating an RNA-targeting therapeutic in metabolic and neurodegenerative diseases. I have successfully carved a niche in integrating RNA biology with signaling pathways in biologically relevant systems and understanding how it may be a cause or consequence of a disease. I have integrated the program to study chronic metabolic effects of toxic exposures in US Veterans during their military service.

I currently hold 13 patents, ten of which are parent/priority representing breakthrough patents in the field. Over the years, I have worked across disciplines to innovate and promote technologies developed in academia and the VA hospital to transfer them to the communities- local and nationwide. I have trained Veterans to start research and successfully achieve their career goals in addition to clinical fellows, post-docs, graduate students and undergraduates to become the next generation of scientists and innovators.

With over 100 peer-reviewed manuscripts, book chapters and abstract publications, my cutting-edge research supports VA mission to boost healthcare of Veterans which is evidenced by continuous federal funding, high impact publications and collaborations within VA and in academia. My record demonstrates extensive service to local VA and nationally as well as at the affiliate USF which also includes teaching and mentoring graduate and medical students. I have successfully collaborated with VA clinicians and scientists which have resulted in publications and grants. Over the years, I have held leadership positions with local VA, affiliate university and in other medical research organizations.

6. PROFESSIONAL AFFILIATIONS AND MEMBERSHIP IN SCIENTIFIC SOCIETIES

1998-present	Member, Endocrine Society
2004-present	Sigma-Xi full member, Tampa Bay Chapter
2007-2012	Member, Science Advisory Board
2007-present	Member, American Association for the Advancement of Science
2008-present	Member, Johnnie B. Byrd Alzheimer's Center & Research Institute
2009-present	Founding Member, National Academy of Inventors (NAI), University of South Florida
2012-present	Member, International Inventors Academy of Science, University of South Florida
2014-present	Member, American Society for Biochemistry and Molecular Biology
2020-present	Member, American Association for Advancement of Science
2020	President, USF Chapter of National Academy of Inventors
2020-present	Senior Member, National Academy of Inventors (NAI)
2025-present	Member, Academy of Science, Engineering and Medicine of Florida (ASEMFL)

7. SERVICE TO UNIVERSITY – University of South Florida

2006-2009	Member, Institutional Animal Care and Use Committee (IACUC), USF and VA
2013-present	Member, Institutional Animal Care and Use Committee (IACUC), VA and USF
2008-present	Judge, USF Health Annual Research Day
2009-2019	Judge, USF Young Innovators Competition
2011-present	Judge, USF Undergraduate Research Symposia, Honors College
2011-2017	Member, Research Master's program admissions Committee, Dept of Molecular Medicine, USF
2013-present	Member, Institutional Animal Care and Use Committee (IACUC), USF and VA (lead member)
2013-2019	Member, Obesity Research Focus Group, Dept of Molecular Medicine, USF
2014-2017	Search Committee for Obesity Research Faculty Position, Dept of Molecular Medicine, USF
2016-present	Judge, USF Health Annual Research Day, Post-doctoral Research, USF
2009-present	Founding Member, National Academy of Inventors (NAI), University of South Florida
2012-present	Member, International Inventors Academy of Science, University of South Florida
2016-present	Executive Committee, National Academy of Inventors, USF Chapter
2016-present	Executive Selection Committee for Excellence in Innovation Awards, University of South Florida
2020	President, Executive Committee, National Academy of Inventors, USF Chapter
2020-2022	Biomedical Manufacturing cluster, USF
2020-2022	Pandemic Response Research Network, USF
2025-present	CREATE, USF

8. SERVICE TO LOCAL VA MEDICAL CENTER (James A. Haley VAMC)

2006-2009	Member, Institutional Animal Care and Use Committee (IACUC), USF and JAH VA
2007-present	Director, Molecular Analysis and Core Laboratory Facility, JAH VA Research
2007-2010	Research Integrity Officer, JAH VA
2007-present	Member, Research and Development Committee, JAH VA
2007-present	Member, Subcommittee for Research Safety, JAH VA
2012-2014	Member, Research Building Activation Committee, JAH VA
2012-2014	Vice Chair, Subcommittee for Research Safety, JAH VA
2013-present	Member, Institutional Animal Care and Use Committee (IACUC), USF and VA (lead member)
2013-2019	VA Research Service OT/CT certification
2015-2019	Chair, Subcommittee for Research Safety and Security, JAH VA
2015-present	Director, Molecular Analysis Core Lab, JAHVA Research Service
2019-present	JAH VA Research Building Renovation committee

2021-present	Ad hoc, acting ACOS for Research and Development, JAHVA
2021-2024	Vice-chair, Subcommittee for Research Safety and Security, JAH VA
2021-2024	Research Compliance Collaboration Workgroup, JAHVA
2021-2023	Co-Chair, JAH VA, All Services PI Group
2020-present	Ad hoc, Interview panelist for positions such as ACOS, Clinical Center Director, Technical writer
2022-present	Chair, JAHVA Research Seminar Series
2022-present	Member, JAH VA Annual Research Week Committee
2023-2024	Chair, JAH VA Research Mentoring Program Workgroup
2024-present	Member, JAH VA Research Mentoring Program Workgroup

9. SERVICE TO NATIONAL VA

2008-2009	Member, VA Career Development Review Committee, Washington, D.C.
2011-2014	Member, VA Endocrine (ENDA) Merit Review Committee, Washington, D.C.
2017- present	Ad-hoc Member, VA Endocrine (ENDA) Merit Review and Career Development Award Review Committee, Washington, D.C.
2022-present	Member, VA Bio-fabrication Community
2023-present	Ad-hoc Member, VA Infectious Diseases (IFNB) Merit Review and Career Development Award Review Committee, Washington, D.C.
2024-present	Ad-hoc Member, VA Cellular and Molecular Medicine (CMM) Merit Review and Career Development Award Review Committee, Washington, D.C.
2025-present	Ad-hoc Member, VA Pulmonary Diseases (PULM) Merit Review and Career Development Award Review Committee, Washington, D.C.

10. SERVICE TO PROFESSIONAL ORGANISATIONS

2006-2014	American Heart Association, Southeast Affiliate, Review board
2010-present	Endocrine Annual Meeting Oral and Poster Abstracts review
2016-present	EB Annual Meeting Oral and Poster Abstracts review
2019	Vice-President, Executive Committee, National Academy of Inventors, FL Chapter
2019-present	Ad hoc Member, NIH Cellular Aspects of Diabetes and Obesity (CADO) study section
2019- present	Ad hoc NIH CADO-A (07)S review panel board
2019- present	Panelist, Exploring Careers, ASBMB Conference
2020-present	John Hopkins All Children's Hospital, Scientific Review Subcouncil
2020-present	Obesity Cardiovascular Metabolic Health Interdisciplinary Research Group (IRG), John Hopkins All Children's Hospital
2022-	Ad hoc Member, NIH National Centers for Metabolic Phenotyping in Live Animals of Obesity and Diabetes (MPMOD)
2022-	Ad Hoc Member DoD CDMRP- Several committees

2023- Ad hoc Member, NIH Basic Mechanisms of Diabetes and Metabolism
[BMDM] Study Section (ex-CADO)

Editorial Board

2006-2009 Asian Journal of Cell Biology
2013-present Stem Cell Investigation
2018-2022 Journal of Obesity
2022-present Biology
2023-present Scientific Reports, Nature Portfolio

Ad-hoc Reviewer for Scientific journals

Antioxidants
Biochem Biophys Res Comm
Biochimica et Biophysica Acta
Biology
Biology of the Cell
Brain research
Cell
Cellular and Molecular Life Sciences
Cellular Physiology and Biochemistry
Central European Journal of Biology
EB Annual Meeting Oral and Poster Abstracts review
Endocrine Annual Meeting Oral and Poster Abstracts review
Endocrine Connections
Endocrinology
Elsevier Journals (Current Opinion in Cell Biology, Biomaterials, Journal of Genetics and Genomics, Journal of Biological Sciences)
Frontiers in Cell and Developmental Biology
Gene
IJMS
JAHVA- VA Merit Review grants pre-submission
Journal of Biological Chemistry
Journal of Cellular and Molecular Medicine
Journal of Pediatrics
Molecular and Cellular Biology
Noncoding RNA
Nucleic Acids Research
Nutrients
Organogenesis
PeerJ
PLOS Biology

PLOS One
 Scientific Reports
 SOARD
 Stem Cell Investigations
 Therapeutic Advances in Neurological Disorders

11. PROFESSIONAL AWARDS AND HONORS

April 2025	Keynote Speaker, NDS 2025
March 2025	CFTM speaker
June 2024	Air Force Hand Study Symposia Abstract Award
May 2024	Outstanding Publications Award, JAHVA
May 2024	Chair, Neurological Disorders Summit, Barcelona, Spain
Jan 2024	Best Publication of the Year 2023 Award, Biology Journal
Dec 2023	Fellow, National Academy of Inventors
June 2023	Florida High Tech Innovation Award
March 2023	VA BRAVE award
Jan 2020	Senior member of National Academy of Inventors, FL chapter
Oct 2014	Chair, Molecular Medicine Symposia, Athens, Greece
July 2018	Keynote, Splicing conference, Lisbon, Portugal
Sept 2011-present	Outstanding Performance Rating, Office of Veterans Affairs
June 2007	Chair, RNA and Disease Symposia, Endocrine Society Meeting
June 2004	Travel Award, Women in Endocrinology
June 2003	Travel Award, Endocrinology
Oct 1998	Outstanding Student Presentation, 10th Annual IBS Conference
June 1998	Travel Award, Women in Endocrinology

12. FUNDED RESEARCH PROJECTS

Source of Funding	Grant #	Title of Project	Role	Dates
VA Merit	I01RD001366	Chronic health sequelae of dioxin exposure	PI	4/1/2026- 3/31/2030
VA Merit	I01 BX003836	Adipose stem cell niche in obesity- MERP	PI	7/1/2025 – 6/30/2028
VA Merit	I01 BX005591	Cell-free regenerative approach to wound healing	PI	7/1/2022- 9/30/2026
VA RCS	IK6BX005387	Salary support	PI	10/2020-10/2030
VA Merit	I01 BX003836	Adipose stem cell niche in obesity	PI	4/1/2017- 12/31/2025
Florida High Tech Corridor	FL HTC ESI	RNA-targeting therapeutic in	PI	6/1/2023-6/1/2024

		neurodegenerative diseases		
VA BRAVE	I01 BX003836-TTP GPAA-821012361	LncRNA-targeting therapeutic in ADRD	PI	3/1/2023-12/30/2023
VA Merit	I01 BX005708 (PI: Dr. P. Bickford)	Aging and Innate immune system resilience in TBI	Co-I	7/1/2021- 3/31/2026
VA Merit	I01BX000231 (PI: Dr. P. Bickford)	Role of Inflammation and Oxidative Stress in Parkinson's Disease	Co-I	4/2020-4/2024
NIH R01	HL153542 (PI: Dr. J. Breslin)	Obesity, Metabolic Syndrome, and Lymphatic Dysfunction	Co-I	09/22/2022- – 08/31/2024
VA Merit	I01 BX004037 (PI: Dr. S. Song)	Interaction of Granulocyte-Colony Stimulating Factor (G-CSF) with the Endocannabinoid System in the Brain Repair Response to Traumatic Brain Injury	Co-I	6/2018-6/2023
NIH R56	AG064906 (PI: Dr. P. Bickford)	Exosomes from human adipose-derived stem cells modulate age dependent progression of tau myopathy	Co-I	2/2019-7/2022
ASMBS	ASMBS2018	RYGB Improves Insulin Resistance via Sirt-1 and Gas5	PI	10/2018-NCE 2/2022
VA	ShEEP	Confocal microscopy	PI	10/2017-5/2019
FITG	USF Seed grant	Obesity changes adipose stem cell niche	PI	03/2016-03/2017
TVAREF	Tampa VA research Education Foundation Seed Grant	Mechanisms of alternative splicing in sortilin	PI	06/2015-06/2017
VA Merit	PI: Dr. Song	Reinforcing the Repair response to TBI	Co-I	06/13-06/19
VA Merit	I01BX001424	Apoptosis pathways underlying adipogenesis	PI	01/2012-12/2016
VA Merit	I01BX001	Mechanisms of Action of Filgrastim in a Mouse	Co-I	10/09-09/2014

	(PI: Dr. Sanchez-Ramos)	Model of Alzheimer's Disease		
USF Neuroscience grant	SIPIN	Insulin promotes cognitive effects via PKC δ	PI	02/2011-02/2012
USF Neuroscience collaborative grant	Neuroscience collaborative grant	Interactions of alternatively spliced variants of cdk7 with PKC-iota during glioma cell cycle and proliferation	PI	05/2010-12/2013
NIH RO1	DK 54393-05 (PI: Dr. D. Cooper)	Insulin signaling pathways regulating PKC β splicing	Co-I	01/2008-01/2012
VA Merit	I01BX001 (PI: Cooper)	Regulation of PKC β II splicing	Co-I	04/2008-03/2012
VA MREP	I01BX000114	Anti-Apoptotic Effects of Alternative Splicing in Human NT2 Cells	PI	07/2005-07/2008

13. TRAINING AND MENTORING RELATIONSHIPS

a. Teaching

- 1991-1993 Lecturer
SNDT University, Bombay, India
- 2002-2008 Methods in Molecular Biology (BCH 6135) - RPA
Department of Biochemistry and Molecular Biology, COM, USF
- 2004-2010 Proteomics and Functional Genomics (GMS 7930)
Department of Molecular Medicine, COM, USF
- 2005-2008 Biochemistry, Molecular and Cellular Biology (GMS 6200)
Department of Molecular Medicine, COM, USF
- 2006-2008 Advanced Gene Regulation Technologies (GMS 7930.022)
Department of Molecular Medicine, COM, USF
- 2006-2011 Proteomics and Functional Genomics (BCH 6746)
- Interaction Proteomics I (library-based methods)
-Medical proteomics (Biomarkers)
Department of Molecular Medicine, COM, USF
- 2009-2010 MD Course 1- Molecular Medicine
-Processing and Editing of Genetic Information (BMS 6206)
Department of Molecular Medicine, COM, USF
- 2009-2011 Biomedical Genomics and Genomics (BCH 6411)
-Human Genome Project
-Splicing and Disease
Department of Molecular Medicine, COM, USF
- 2010-2011 MD Course 1- Core Principles & the Musculoskeletal system (BMS 6402)

- 2011-2012 -Processing and Editing of Genetic Information
 -Gene expression; mRNA splicing
 Department of Molecular Medicine, COM, USF
 Basic Medical Genetics (BMS 6012)
- 2012 -Processing and Editing of Genetic Information
 -Gene expression; mRNA splicing
 Department of Molecular Medicine, COM, USF
 MD Course 1- Musculoskeletal system (BMS 6640)
- 2013-2016 -Processing and Editing of Genetic Information
 -Gene expression; mRNA splicing
 Department of Molecular Medicine, COM, USF
 DPT Course1- Medical Biochemistry (BMS 6206)
- 2014 -DNA replication and chromosomes, Transcription
 Department of Molecular Medicine, COM, USF
 Principles of Molecular Medicine
 - RNA Transcription & Post-transcriptional Processing
 - mRNA Splicing & RNA Interference
 Department of Molecular Medicine, COM, USF
- 2013-present MD program Year 1, Cancer Biology (BMS 6816)
- Processing and Editing of Genetic Information
 - Gene expression; mRNA splicing
 - Epigenetics
- 2016-2017 Morsani College of Medicine, USF
 Basic Medical Biochemistry (GMS 6201)
- Lipoproteins
 - Hormone synthesis and Protein hormone Signaling
 - Intracellular signal transduction
- 2017-present Department of Molecular Medicine, MCOM, USF
Course Director: Master's Program: Basic Medical Biochemistry (GMS 6201)
- Amino Acids
 - Fibrous Proteins
 - Globular Proteins
 - Reactive oxygen species and Antioxidant defenses
 - Membranes and Transport
 - Lipoproteins
 - Purine and Pyrimidine Metabolism
 - Peptide and amino acid hormones metabolic pathways
 - Steroid hormones metabolic pathways
 - Signal transduction
- 2020-present Department of Molecular Medicine, MCOM, USF
 MD program Year 2; GI, Endocrine, Renal, Reproductive system (BMS 6639)
- Steroid hormones biosynthesis
 - Steroid hormones receptors

Morsani College of Medicine, USF

2006- present	Informal, ad-hoc training scientists and investigators in JAHVA and USF on RNA splicing assays, cloning heterogenous splicing minigenes
2016-present	Informal, ad-hoc training scientists and clinicians in JAHVA and USF on isolation and characterization of adipose-derived stem cells and its secreted exosomes

b. Mentoring with (c) successful current positions**Postdoctoral**

Name	Trainee Status	Dates	VA or non-VA	Clinician or Non-clinician	Current Position
Nilanjan Ghosh	Post-doc	2006-2007	Non-VA	Clinician	John Hopkins Medicine
Kun Jiang	Post-doc	2008-2010	Non-VA	Clinician	Moffit Cancer Hospital
Pengfei Li	Post-doc	2010-2012	Non-VA	Non-clinician	Research Associate; Byrd Alzheimers' Institute
Abhishek Mathur	MD	2014-2017	VA	Clinician	Surgery Fellow; TGH
Gitanjali Vidyarthi	MD	2013-2017	VA	Clinician	Gastroenterologist, JAH VA
Charles J. Gutierrez	Ph.D.	2014-2018	VA	Non-clinician	Neurorespiratory Care Specialist JAH VA
Ghattas El Bassit	MD	2015-2017	Non-VA	Clinician	Physician, United Health
Robert Sparks	Post-doc	2020-2021	Veteran*	Non-clinician	Post-doc, Harvard Medical School. VA CDA2 and NIH R99 applicant with Dr. Patel as co-mentor
Meredith Krause-Hauch	Post-doc	2023-present	VA	Non-clinician	Post-doc Patel lab (current CDA2 applicant)
Aurore Nkiliza	Post-doc	2024-present	VA	Non-clinician	Awarded NIH NIA R03: 1R03AG087463 (Dr. Patel co-mentor)
Genesis D'aloisio	Post-doc	2025-present	Non-VA	Non-clinician	Post doc, USF (Dr. Patel co-mentor on BrightFocus Fellowship)

Graduate

Name	Trainee Status	Dates	VA or non-VA	Clinician or Non-clinician	Current Position
Eden Kleiman	Ph.D. Candidate	2006-2010	Non-VA	Non-clinician	Post-doc; Univ of Miami
Hercules Apostolatos	Ph.D. Candidate	2009-2010	Non-VA	Non-clinician	Spectrum Biolabs; Business Entrepreneur
Shraddha Desai	Ph.D. Candidate	2010-2011	Non-VA	Non-clinician	Post-doc Duke University; Senior Director of Clinical Science, Kezar LifeSciences
Prajit Pillai	Ph.D. Candidate	2010-2011	Non-VA	Non-clinician	Clinical Project Manager, INC Research
Amanda Morris	M.S.	2013-2015	Non-VA	Non-clinician	Medical college
Ghattas El Bassit	MD	2015-2017	Non-VA	Clinician	United Health
Jacob Sherwood	Ph.D. Candidate	2016-2019	Non-VA	Non-clinician	Graduate education, USF
Sajan Parag	M.S.	2016-2018	Non-VA	Clinician track	NOVA dental college; DD
Daniel Capote	MS in Biomedical sciences, USF	2015-2018	Non-VA	Non-clinician	MS in Biomedical sciences, USF
Gearta Kraja	MS in Biomedical sciences, USF	2021-2023	Non-VA	Non-clinician	Medical College
Tradd Dobbins	B.S., MS	2017-2019	Veteran*	Clinician track	ENT Resident, Walter Reed VAMC
Udoka Okaro	Ph.D. Candidate	2016-2019	Non-VA	Non-clinician	Post-doc, CDC
Suhaas Singireddy	MS in Biomedical sciences, USF	2022-2024	Non-VA	Non-clinician	USF Medical College
Rafael Hernandez	MS in Biotechnology, USF	2022-2023	Non-VA	Non-clinician	Medical College
Brenna Osborne	MS in Biomedical sciences, USF	2022-2025	Non-VA	Non-clinician	Technician

Ashley Lui	Ph.D. Candidate (Dr. Patel- Major Professor)	2017-2022	Non-VA	Non-clinician	Post-doc, Moffitt Cancer Center
Aya G. Elmarsafawi	Ph.D. Candidate (Dr. Patel- Committee member)	2018-2024	Non-VA	Non-clinician	Ph.D. Candidate, USF
Chetna Thawani	MD student (Dr. Patel- Major Professor)	2018-2022	Non-VA	Clinician track	Medical student, USF
Nana Adjoa Ben-Crentsil	Ph.D. Candidate (Dr. Patel- Committee member)	2019-2022	Non-VA	Non-clinician	Post-doc CDC
Niat Gebru	Ph.D. Candidate (Dr. Patel- Committee member)	2021-2024	Non-VA	Non-clinician	Ph.D. Candidate, USF
Jianxiang Xue	Ph.D. Candidate (Dr. Patel- Committee member)	2021-2022	Non-VA	Non-clinician	Ph.D. Candidate, USF
Anna Kharitonova	Ph.D. Candidate (Dr. Patel- co-Major Professor)	2021-present	Non-VA	Non-clinician	Ph.D. Candidate, USF
William Lawless	Ph.D. Candidate (Dr. Patel- Committee member)	2021-2024	Veteran*	Non-clinician	Post-doc, USF (VA CDA2 application in preparation with Dr. Patel as co-mentor)
Brianna Jones	Ph.D. Candidate	Start 2023-	Non-VA	Non-clinician	Ph.D. Candidate, USF
Adwale James	Ph.D. Candidate (Dr. Patel Committee Chair)	2024-present	Non-VA	Non-clinician	Ph.D. Candidate, USF
Emily Otmanowski	MD-Ph.D. Candidate (Dr. Patel Committee member)	2024-present	Non-VA	Non-clinician	MD-Ph.D. Candidate, USF
Sakshi-Buchke	Ph.D. Candidate	Start 2025-	Non-VA	Non-clinician	Ph.D. Candidate, USF

Undergraduate Student Research Mentor

Name	Date	
Quinton Yeldell	2004-2006	Undergraduate, McNair Scholar, USF
Andre Apostolatos	2009-2011	Undergraduate, USF
Jaqueline Romero	2010-2012	Undergraduate, USF Honors College
Mishka Peart	2010-2011	Undergraduate, USF Honors College
Amanda Reno	2011-2012	St. Leo University, CREST national program
Chelsey Ellingson	2011-2012	St. Leo University, CREST national program
Vasty Souffrant	2011-2012	St. Leo University, CREST national program
Cassy Anselme	2011-2012	St. Leo University, CREST national program
Megan Nemeth	2011-2012	St. Leo University, CREST national program
Neihmei Nelcidor	2011-2012	St. Leo University, CREST national program
Vyshak Shibu	2015-2017	Undergraduate, pre-med, USF
Rina Bhalani	2012-2013	NOVA, pre-med
Joshua Womrath	2013-2015	Undergraduate, USF
Robert Sparks	2013-2015	MS in Biomedical sciences, USF
David Olshan	2014-2016	Endocrine Society Research Fellowship Program
Brian Skidmore	2014-2016	Endocrine Society Research Fellowship Program
Joanne Majerczyk	2015-2017	MS, St. Leo University
Claudia Hanak	2016-2017	Undergraduate, USF
Rea Rupani	2017-2020	Undergraduate, USF Honors College
Shivani Saini	2018-2021	Undergraduate, UF Honors College
Houston Edmonson (*Veteran)	2022-2023	USF (currently Pharmacy College, USF)
Alexandria Bustabad	2022-2024	Honors College, USF
Ryan Shaw	2023-2025	Honors College, USF

14. COLLABORATIONS

Name	VA or non-VA	Clinician or Non-clinician	Affiliation
Dr. Stephen Mastorides	VA	Clinician	JAHVA
Dr. Paul Albear	VA	Clinician	JAHVA

Dr. Steven Rakita	VA	Clinician	JAHVA
Dr. Santana-Hernandez	VA	Clinician	JAHVA
Dr. Gitanjali Vidyarthi	VA	Clinician	JAHVA
Dr. Boris Kiriazov	VA	Clinician	JAHVA
Dr. Terry Wright	VA	Clinician	JAHVA
Dr. Risa Richardson	VA	Clinician	JAHVA
Dr. Joquain Gomez-Daspert	VA	Clinician	JAHVA
Dr. Carlos Muro-Cachos	VA	Clinician	JAHVA
Dr. Laura Bajor	VA	Clinician	JAHVA
Dr. Michel Murr	VA	Clinician	JAHVA/currently Advent Health
Dr. Lisa Gould	VA	Clinician	JAHVA/currently Warwick, RI
Dr. Kun Jiang	Non-VA	Clinician	Moffit Cancer Hospital
Dr. Denise Cooper	VA	Non-Clinician	JAHVA/USF
Dr. Paula Bickford	VA	Non-Clinician	JAHVA/USF
Dr. Charles Chalfant	VA	Non-Clinician	JAHVA/USF
Dr. Mack Wu	VA	Non-Clinician	JAHVA/USF
Dr. Jianfeng Cai	Non-VA	Non-Clinician	USF
Dr. Wayne Guida	Non-VA	Non-Clinician	USF
Dr. Jerome Breslin	Non-VA	Non-Clinician	USF
Dr. Cesar Borlongan	Non-VA	Non-Clinician	USF
Dr. Kirpal Bisht	Non-VA	Non-Clinician	USF
Dr. Alan Mullen	Non-VA	Clinician	Massachusetts General Hospital
Dr. Sanford Sampson	Non-VA	Non-Clinician	Bar-Ilan University, Israel
Dr. Ashutosh Dharap	Non-VA	Non-Clinician	USF
Dr. Hariom Yadav	Non-VA	Non-Clinician	USF
Dr. Shalini Jain	Non-VA	Non-Clinician	USF

15. EXTRAMURAL ACTIVITIES

Invited Speaker (International)

1. Keynote Speaker, NDS Conference, Frankfurt, Germany, April 2025
2. Session Chair and Speaker, Neurological Disorders Summit, Barcelona, Spain 2024
3. Plenary Speaker, Nutri-talk, September 2020 – Virtual meeting due to COVID
4. Keynote Speaker; Splicing Conference, Lisbon, Portugal July 2018
5. Obesity Summit, London UK April 2016
6. 16th International Symposium on Molecular Medicine, Athens, Greece, October 2014
7. Gene Expression Conference, Montreal, Canada, November 2011
8. Gifu University, Japan, March 2010
9. International Congress of Endocrinology, Kyoto, Japan, March 2010
10. Ehrlich II, RNA World Conference, Germany, October 2008

Invited Speaker (National)

11. Research Trends, JAHVH, January 2026
12. Central Florida Triangle Metabolism Meeting, March 2025
13. Military Exposures and Polytrauma, JAHVA, Feb 2025
14. Minorities in Medicine, USF, September 2024
15. Air Force Hand Symposia, Washington D.C., August 2024
16. Neuroscience Institute, USF Health, April 2024
17. NextRNA, March 2024
18. ENDO 2023, Chicago, June 2023
19. JAH Veterans Hospital, Research Lecture Series, May 2023
20. JAH Veterans Hospital, Research Week Event, May 2023
21. University of California, Irvine, Grand Rounds, March 2023
22. Kentucky College of Osteopathic Medicine, November 2022
23. JAH VA, Research Trends, March 2022
24. Microbiomes, USF, November 2021
25. SPARC, September 2021
26. Keynote Speaker, Research Day, West Palm VA, May 2021
27. John Hopkins All Children's Hospital, April 2021
28. Speaker, Byrd Alzheimer's Institution 2020 -Virtual
29. Speaker, ENDO Annual Conference, New Orleans, March 2019
30. Speaker, Experimental Biology (EB/ASBMB) Annual Conference, Orlando, April 2019
31. CMMB, USF, Tampa, FL, October 2017
32. TBI therapeutics, ASNTR. Clearwater, 2017
33. Sanford Burnham Institute, Orlando, FL, April 2016
34. Experimental Biology (EB/ASBMB) Annual Conference, Boston, March 2015
35. Obesity Conference, Orlando, September 2014
36. Endocrine Society and ICE, Annual Conference, Chicago, June 2014
37. Research Retreat, University of South Florida, May 2014
38. Brooks Debartolo, May 2013
39. Current Topics in Pathology & Cell Biology, USF, February 2013
40. Chemistry Colloquim, USF, October 2012
41. Florida Clinical Ligand Assay Society, Tampa, June 2012
42. St. Leo University, Florida, October 2011
43. Research Retreat, University of South Florida, September 2011
44. Research Retreat, University of South Florida, November 2010
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b. Book Chapters

1. **Patel, N.A.** Nomenclature of Vitamin A and related metabolites. *Food and Nutritional Components in Focus, Vitamin A and Carotenoids*; Editor Victor Reedy; DOI: 10.1039/ISBN; Publisher: Royal Society of Chemistry. March, 2012.
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c. Patents

1. **US Patent No. 6,852,529 B1** Glucose-regulated mRNA instability element (Feb 8, 2005).
2. **US Patent No. 8,008,071 B2**: Compositions and Methods for Detecting Intracellular Glucose and Analogs Thereof (August 30, 2011)
3. **US Patent No. 9,458,086 B1** Compositions and Methods for Adipocyte Modulation (October 4, 2016)
4. **US Patent No. 9,822,359** Method of Treating Neurological Disorders Using Long Non-Coding RNAs (November 21, 2017)
5. **US Patent No. 10,196,612 B1** Characterization and Manipulation of Adipose Stem Cell Depots to a Metabolically Healthy State (February 5, 2019)
6. **US Patent No. 10,724,097** Methods and compositions for diagnosis and management of diabetes and metabolic syndrome (July 28, 2020)
7. **US Patent No. 10,849,896** Sortilin-Binding Small Molecules for Increasing Glucose Uptake (December 1, 2020)
8. **US Patent No. 10,857,187** Exosomes from human adipose-derived stem cells for treatment of traumatic brain injury (December 8, 2020)

9. **US Patent No. 11,129,808** PKCdelta (PKC δ) inhibitor formulations and uses thereof (September 28, 2021)
10. **US Patent No. 11,214,835** Methods and compositions for diagnosis and management of neurodegenerative diseases (Jan 4, 2022)
11. **US Patent No. 11,278,521** GAS5 binding compounds, formulations and uses thereof (March 22, 2022)
12. **US Patent No. 11,844,779B2** PKCdelta (PKC δ) inhibitor formulations and uses thereof with utilities (December 19, 2023)
13. **US Patent No. 12,016,884B2** Adipose derived stem cell exosomes and uses thereof (June 25, 2024)

d. Provisional Patents (VA and USF asserted rights)

1. **Provisional Application number: 16/023,366:** Clk1 and/or 4 inhibitors for the development of brite or beige fat cells from human and mouse adipose derived stem cells.
2. **Provisional Application number: 20B139:** Extremely high affinity natural product specific for Site 2 of sortilin
3. **Provisional Application number: 18/301,093:** Human Adipose-Derived Stem Cell Exosomes And Their Packaging For Use At Room Temperature.
4. **Provisional Application number: 63/458872:** Small molecule targeting lncRNA in neurodegenerative diseases and tauopathies.
5. **Provisional Application number: 63/449619:** Human adipose stem-cell derived exosomes and methods of treating Parkinson's disease.
6. **Provisional Application number: 63/852415:** Direct blood droplet test for GAS5 (July 2025)

VA Invention Disclosures

7. VA ID # 06-094: PKC δ -specific polyclonal antibody
8. VA ID # 08-033: Human PKC δ VIII-specific polyclonal antibody
9. VA ID #2024-210: GCSF therapy in traumatic brain injury
10. VA ID#2024-137: Diagnosis of mild traumatic brain injury using blood

e. Selected peer-reviewed Abstracts

1. Krause-Hauch M., Patel, R.S., Osborne, B., Albear, P. and **Patel, N.A.** Adipose depot differences in regenerative properties of exosomes derived from human adipose stem cells. ENDO, June 2024
2. Patel, R.S., Krause-Hauch M., Kenney, K., Miles, S., Richardson, R., and **Patel, N.A.** VLDLR-AS1 levels in serum correlate with chronic mild TBI. VA Research Day, 2024
3. Osborne, B., Patel, R.S., Bustabad, A. and **Patel, N.A.** Investigating the metabolic effects of PKC δ inhibitor NP627 in diet-induced obese mice. USF Research Day, Tampa FL. 2024

4. Patel, R.S., Kharitonova, A., **Patel, N.A.** Small molecule targeting lncRNA GAS5 regulates metabolic pathways in human adipose tissue. Central Florida Translational Metabolism, St. Petersburg, 2024
5. **Patel, N.A.** Targeting early genetic risk factor during aging to promote brain metabolism (**Speaker**) Neurological Disorders Summit, 2024
6. **Patel, N.A.** LncRNA cargo contained in human adipose stem cells derived exosomes promote repair and regeneration in wounds. Innovations in Wound Healing Conference, Dec 2023
7. Lui, A., and **Patel N.A** Regulation of a novel sortilin splice variant expression in human diabetic adipocytes by GLP-1. (**Speaker**) ENDO 2023.
8. Lui, A., and **Patel N.A** A novel sortilin splice variant associates with glucose transporter-4 to regulate glucose homeostasis in human diabetic adipocytes. Keystone Symposia 2023.
9. Kharitonova A., Metcalf, R., Sparks, R., Lawless, W., Daniel, K., Brooks, W., **Patel, N.A.**, Guida, W. Development of a highly potent modulator of STING as a new lupus therapeutic. Kazan 2023
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11. Patel, R.S., Liu, C., Edmondson, H., Albear, P. and **Patel N.A** Advances in regenerative medicine in treatment of chronic wounds. (Oral) VA Research Day 2022.
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