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(502) 852-4074
evelyne.gozal@louisville.edu

EDUCATION

- 1972-1976 B.Sc. in Biology, Hebrew University of Jerusalem, Jerusalem, Israel High School teaching Certificate, Hebrew University of Jerusalem, Jerusalem, Israel
- 1976-1981 Pharm D., Pharmacy School, Hebrew University of Jerusalem, Jerusalem, Israel
- 1991- 1997 Ph.D.in Toxicology, Department of Toxicology and Molecular Pharmacology, University of Southern California, Los Angeles, CA
- 1997-1999 Post-doctoral Fellowship, Tulane University, New Orleans, LA

ACADEMIC APPOINTMENTS

- 1999-2005 Assistant Professor
Department of Pediatrics
University of Louisville
Louisville, KY
- 1999-2005 Assistant Professor (Joint appointment)
Department of Pharmacology & Toxicology
University of Louisville, Louisville, KY
- 2005-present Associate Professor
Department of Pediatrics
University of Louisville
Louisville, KY
- 2005-2014 Associate Professor (Joint appointment)
Department of Pharmacology & Toxicology
University of Louisville
Louisville, KY
- 2005-present Associate Professor (Associate appointment)
Department of Physiology
University of Louisville
Louisville, KY
- 2014-present Associate Professor (Associate appointment)
Department of Pharmacology & Toxicology
University of Louisville
Louisville, KY

OTHER POSITIONS AND EMPLOYMENT

1981-1988 Pharmacist – private practice –Haifa, Israel.
1988-1990 High School teacher, Yaounde, Cameroon

CERTIFICATION AND LICENSURE

1981-present Israel Pharmacy permanent license

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

1999- present Center for Genetics and Molecular Medicine, University of Louisville
1999- present Birth Defect Center, University of Louisville.
2000- present Kentucky Spinal Cord Injury Research Center, University of Louisville
2000- present Society for Neuroscience, National.
2000- present Society for Neuroscience, Louisville Chapter
2004- 2015 Sigma Xi Society
2004- 2012 Sigma Xi Society, Secretary.
2015- present American Heart Association / American Stroke Association

HONORS AND AWARDS (List in chronological order)

COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

2000-2019 Judge for Research Louisville poster competition
2001-2003 Department of Pharmacology & Toxicology Seminar Committee, University of Louisville
2004-2008 Member of Graduate Council, University of Louisville
2005 Department of Pediatrics SIBUP Committee, University of Louisville
2007- 2009 Department of Pharmacology & Toxicology Graduate Program Committee, University of Louisville
2007 Judge for Neuroscience day poster competition – Louisville Chapter Society for Neuroscience
2012 Judge for Neuroscience day poster competition – Louisville Chapter Society for Neuroscience
2014 Judge for the Sigma Xi Bhatnagar Scientific Award
2015 Judge for Neuroscience day poster competition – Louisville Chapter Society for Neuroscience
2015- present: Organizing Work in Progress Seminar Series – Kosair Childrens Hospital Research Institute.

Faculty search committees:

2000-2001 Assistant Professor of Pediatrics (Neurobiology group)
2000-2001 Assistant Professor of Pediatrics (Diabetes group)
2001-2002 Assistant Professor of Neurosurgery
Assistant/Associate Professor of Pharmacology & Toxicology
2002 Pediatric Oncology Chair
2007-2008 Endowed Chair/ Distinguished Scholar in Urban Health Policy

Peer-review for granting agencies:

3/2004	Health Research Board – Dublin – Ireland
5/2006	NIH/NHLBI – Special Emphasis Panel for RFA HL-06-003 “Mechanisms linking short sleep duration and risk of obesity or overweight.
7/2006	American Institute of Biological Sciences proposals review for The United States Army Medical Research and Materiel Command (USAMRMC), Office of the Congressionally Directed Medical Research Programs (CDMRP), Peer Reviewed Medical Research Program (PRMRP). Diabetes Research (Treatment / Devices) Panel.
6/2009	NIH/NHLBI , Heart Lung and Blood Program Review Committee ZHL1 SRC(99). Review panel for PPG grant.
1/2010	NIH/NHLBI , Heart Lung and Blood Program Review Committee ZHL1 SRC(99). Review panel for PPG grant resubmission.
12/2012	NIH/NIGMS, Minority Biomedical Research (MBRS) program, Special Emphasis Panel/Scientific Review Group 2013/01 ZGM1 TWD-7.
1/20/2015	NIH/NHLBI , Heart Lung and Blood Program Review Committee Special Emphasis Panel/Scientific Review Group 2015/05 HLBP 1 for PPG renewal
8/27/2015	NIH/NHLBI , Heart Lung and Blood Program Project Review Panel/Scientific Review Group 2 P01 HL098053-06A1 for PPG renewal.

EDUCATIONAL ACTIVITIESParticipation in graduate courses teaching

Fall 2000 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation, University of Louisville.

Fall 2001 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2002 - Pharmacology 661, Molecular Mechanisms of Drug and Xenobiotic Action (Dept. of Pharmacology and Toxicology Graduate Course): Apoptosis. University of Louisville.

Fall 2002 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2003 - Developmental Neurobiology (Dept. of Anatomy and Neurobiology Graduate Course) - Neuronal Cell Death. University of Louisville.

Fall 2003- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Fall 2004- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2005 - Molecular Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2005- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Fall 2006- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2007- Molecular Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2007- Molecular Endocrinology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Fall 2007- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Fall 2008- Endocrine & Metabolic Pharmacology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Fall 2008- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2009- Molecular Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2009- Endocrine Pharmacology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Fall 2009- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2010- Molecular Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2010- Endocrine Pharmacology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Fall 2010 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2011- Molecular Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2011- Endocrine Pharmacology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Fall 2011 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2012- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2012 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Fall 2012- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Spring 2013- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2013- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Spring 2014 - Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2014- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2014- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Spring 2015- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2015- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2015- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Spring 2016- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course): Transcriptional Regulation. University of Louisville.

Spring 2016- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course) - Apoptosis. University of Louisville.

Fall 2016- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course) – Using drugs to alter or mimic cell signaling. University of Louisville.

Spring 2017- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course);

Spring 2017- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course);

Fall 2017- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course).

Spring 2018- Research Methods in Pharmacology and Toxicology (Dept. of Pharmacology and Toxicology Graduate Course);

Spring 2018- Molecular Mechanisms of Toxicology (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course);

Fall 2018- Endocrine and Metabolic Toxicology (Dept of Pharmacology & Toxicology Graduate Course).

Spring 2019- Graduate Pharmacology II PHTX 642 (Dept. of Pharmacology and Toxicology Graduate Course);

Spring 2019- Molecular Mechanisms of Toxicology PHTX 661-01 (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course);

Spring 2020- Graduate Pharmacology II PHTX 642 (Dept. of Pharmacology and Toxicology Graduate Course);

Spring 2020- Molecular Mechanisms of Toxicology PHTX 661-01 (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course);

Spring 2021- Graduate Pharmacology II PHTX 642 (Dept. of Pharmacology and Toxicology Graduate Course);

Spring 2021- Molecular Mechanisms of Toxicology PHTX 661-01 (Depts of Biochemistry and Dept of Pharmacology & Toxicology Graduate Course);

Advisor for summer students:

Summer 2000 - *Adrienne M. Bedford* Medical School student. Summer Research Student.

Summer 2000 - *William L. Hornback* Department of Biology. Summer Research Student

Summer 2001 - *Rodney J. Avery* - Medical School student. Summer Scholar Program Student.

Summer 2003 - *Christina Wiegand* - Medical School student. Summer Research Scholar Program and MD/PhD Program Student.

Summer 2003 - *Robin A. Gault* - Undergraduate student (BS/Biochemistry) - Summer Research Scholar Program - Cancer Center Training Program.

Summer 2004 - *Cherone Anthony* - Undergraduate student (BS/Biology) - Summer Research Scholar Program - Cancer Center Training Program.

Summer 2004 - *Derek Forster* - Medical School student. Summer Scholar Program Student.

Summer 2014 - *James T. Dixon* - Medical School student. Summer Scholar Program Student. Co-mentoring with Andrew Roberts, Ph.D.

Advisor for High School Students:

2016-2017 - *Shyam Ravishankar* – DuPont Manual High School 9th grade. For a project entitled “Linking Neuroinflammation to Autism Spectrum Disorders”

Graduate Students Committee Member:

2001 - *Alyson (Spille) Ryan* - M.Sc. Student - Department of Anatomical Sciences & Neurobiology. University of Louisville. Advisor: Scott Whittemore.

2001-2006 - *Kara J. Collins* - Ph.D. student. Department of Physiology and Biophysics. University of Louisville . Advisor: Andrew Roberts

2001-2003 - *Chen Hainan* - Ph.D. student. Department of Pharmacology and Toxicology. University of Louisville . Advisor: Paul Epstein.

2001-2004 - *Yue (Cindy) Wang* - M.Sc. student. Department of Pharmacology and Toxicology. University of Louisville . Co-Advisors: Evelyne Gozal and David Gozal.

2002-2004 - *Xiaoyan Li* - Ph.D. student. Department of Pharmacology and Toxicology. University of Louisville . Advisor: Paul Epstein.

2002-2004 - *K. Adam Baker* - PhD student - Department of Anatomical Sciences & Neurobiology. University of Louisville . Advisor: Theo Hagg.

2003-2006 - *Steve Reeves* - MD / Ph.D. student. Department of Pharmacology and Toxicology. University of Louisville. Advisor: David Gozal.

2003-2008 - *Christina Wiegand* - MD / Ph.D. student. University of Louisville . Advisor: Evelyne Gozal.

2004 - *Gilandra D. Russell* - Ph.D. student. Department of Pharmacology and Toxicology. University of Louisville . Advisor: Gavin Arteel.

2004-2007- *Agata Habas* - Department of Pharmacology and Toxicology. University of Louisville. Advisor: Michal Hetman.

2004-2009 - *John T. Philipose* - PhD student. Department of Pharmacology and Toxicology. University of Louisville. Advisor: Michelle Pisano.

2004-2009 - *Ami V. Patel* - PhD student. Department of Anatomical Sciences & Neurobiology. Advisor: Robin Krimm.

2005-2008 - *Katharine Richardson* - PhD student. Department of Pharmacology and Toxicology. University of Louisville. Advisor: Wayne Zundel.

2007- 2008 - *Edward P Womack* – MSc student. Department of Biochemistry and Molecular Biology. University of Louisville. Advisor: Roland Valdes

2007-2008 - *Ewonam A Akabua* : – MSc student. Department of Physiology and Biophysics. University of Louisville. Advisor: Andrew Roberts

2008-2010 - *Sujith Dassanayaka*: – MSc student. Department of Physiology and Biophysics. University of Louisville. Advisor: Andrew Roberts

2009-2011 - *James T. Dixon*: – MSc student. Department of Physiology and Biophysics. University of Louisville. Advisor: Andrew Roberts

2013- 2015 – *Justin L Halgren* – PhD student. Department of Pharmacology and Toxicology. University of Louisville. Advisor: Michal Hetman

2015- present - *Ilya Chernyavskiy*- PhD student. Department of Physiology and Biophysics. University of Louisville. Advisor: Shirish Tyagi

2014- 2016 – *Robert Drinovac* - MSc student. Department of Physiology and Biophysics. University of Louisville. Advisor: Andrew Roberts.

2016- 2018 – *Nayeem Z. Moulana* - MSc student. Department of Physiology and Biophysics. University of Louisville. Advisor: Andrew Roberts.

Graduate Students Advisor:

2001-2004 - *Yue (Cindy) Wang* - M.Sc. student. Department of Pharmacology and Toxicology. University of Louisville. Co-Advisors: Evelyne Gozal and David Gozal. Currently a Physician.

2003-2008 - *Christina Wiegand* - MD / Ph.D. student. University of Louisville. Advisor: Evelyne Gozal. Funding NIH- NINDS - NRSA (F30). Currently a Physician.

2005-2006 - *Robin Gault*- M.Sc. Student. Department of Physiology and Biophysics, University of Louisville. Advisor: Evelyne Gozal. Currently a Physician.

2005-2008 - *Cynthia J. Miller*- Ph.D. Student. Department of Physiology and Biophysics, University of Louisville. Advisor: Evelyne Gozal. Currently Assistant Professor of Physiology, University of Louisville.

Post-Doctoral Advisor:

2000-2003 - Shelley X.L. Zhang M.D. (Jianxi Medical College - China). - University of Louisville. Current position: Assistant Professor, Department of Pediatrics, University of Chicago.

2001-2002 - Celine Vega Ph.D. (University of Sciences - Bordeaux II- France). - University of Louisville. Funding from a Kentucky Spinal Cord Injury Research Center Fellowship. Current position: Assistant Professor of Physiology, Faculte des Sciences Bordeaux, France.

2003-2004 - Reiaz-UI Rehman Ph.D. (Hamdard University - New Dehli - India). University of Louisville. Current position: Assistant Professor, Bioresources, India.

2004-2006 – Cecile Julien Ph.D. (University Joseph Fourier - Grenoble I - France)
Post doctoral fellow, Canada.

2006-2009 - Delphine El-Mehdi Ph.D. (University Paris VI –Faculte des Sciences, France). Current position: Senior Research Scientist PGXLab, Louisville, KY.

2009 – present - Rekha Jagadapillai, Ph.D. National Institute of Mental Health and Neuro Science, Bangalore India. Current position; Research Associate.

2015 – 2016 - Xing-yu Lin, M.D. Jilin University Medicine, China – PhD student at Jilin University.

Invited Lectures and Seminars:

3/2000 *Kinase systems and the Hypoxic Response*. Research Conference. Kidney disease Program. University of Louisville.

10/2000 *Neuronal Susceptibility in Intermittent Hypoxia: Yes, No, Maybe*. Departmental Seminar. Department of Pharmacology and Toxicology, University of Louisville.

1/2001 *Neuronal Survival in Hypoxia: a PDGF Story*. Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Seminar. University of Louisville

1/2001 *Neuronal Susceptibility in Intermittent Hypoxia*. Invited Seminar. Service de Physiologie, INSERM CRI 9701, Hopital Robert Debre, Paris, France.

- 3/2001** *Neuronal Signaling in Hypoxia*. Department of Pediatrics Research Luncheon. University of Louisville,
- 4/2002** *Apoptosis, a.k.a. Programmed Cell Death*. Research Conference, Division of Pulmonary Medicine, Department of Medicine, University of Louisville
- 11/2002** *Hypoxia: Life or Death ?* Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Seminar. University of Louisville,
- 1/2004** *To Bind or Not to Bind ? Akt-heat Shock Proteins Interactions in Hypoxia: A Question of Survival*. Seminaire Grenoblois de Neurosciences. Universite Joseph Fourier, Grenoble France.
- 1/2004** *To Bind or Not to Bind ? Akt-heat Shock Proteins Interactions in Hypoxia: A Question of Survival*. Faculte des Sciences Jussieu, Paris VI, France
- 6/2004** *Heat Shock Proteins / Akt Binding in Hypoxia: A Question of Life and Death ?* Invited lecture, Societe de Circulation et Metabolisme du Cerveau (SCMC)
- 7/2004** *Hypoxia-induced Akt-Heat Shock Proteins interaction in Neuronal Cells: A Survival Response*. Department of Pediatrics Research Luncheon. University of Louisville,
- 1/2006** *An overview of Apoptosis: A potential Player in Spinal Cord Injury*. Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville
- 2/2007** *Heat Shock Proteins in the CNS: Cellular Maintenance and Stress Response*. Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville,
- 12/2007** *Astroglial Cells Regulation of CNS Function, Adaptation, and Metabolism*. Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville.
- 2/2008** *Hsp25, a Multitasking Protein: Multiple Functions in Different Pathologies*. Invited Research seminar, Department of Cell Biology, University of Geneva.
- 11/2008** *Astroglial Cells in injury Role in CNS Function, Adaptation, and Metabolism* Invited research seminar, Department of Physiology and Biophysics, University of Louisville,
- 5/2009** *Heat Shock Protein 25 Response to Astrocyte Injury – Role of Phosphorylation*. Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville,
- 1/2010** *Studying CNS injury in vitro: Slices and scratches –* Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville,
- 1/2011** *Hypoxia-induced cellular mechanisms of brain susceptibility to excitotoxic injury –* Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville,
- 1/2012** *Cellular and pathological consequences of intermittent hypoxia –* Kentucky Spinal Cord Injury Research Center (KSCIRC) Research Forum Friday Seminar Series. University of Louisville,
- 3/ 2017** *Neuroinflammation and Systemic Disease – The Chicken or the Egg?* - Invited research seminar, Department of Physiology and Biophysics, University of Louisville.

GRANTS AND CONTRACTS

Pending

Co-Principal Investigator

Simons Foundation, Simons Foundation Autism Research Initiative – 2021 Genomics of ASD: Pathways to Genetic Therapies. 12/ 2021 – 11/ 2024. Direct costs: \$ 1.200,000, for research project entitled "*Genomic Analyses of Autism Spectrum Disorders: Behaviors and Outcomes*" (Gregory N. Barnes, P.I)

To be resubmitted:

Principal Investigator,

NIH/ R01 07/01/2019 – 06/30/2023 (Andrew Roberts, Ph.D. co-PI)

Direct costs: 1,000,000 \$. for research project entitled: “*Mechanisms of diabetes-induced pulmonary microvascular dysfunction: role of platelet-endothelial interactions and oxidative stress.*”

Scored: 46; percentile: 41

Past Grants:

Principal Investigator,

Collaborative Matching Grant Application University of Louisville School of Medicine : 12/1/15 – 11/30/17

42, 500 \$ + 25, 000 \$ departmental matching funds

For research entitled “*Oxidative stress-induced platelet-endothelial interactions as a cause microvascular dysfunction in the diabetic lung*”

Principal Investigator

Department of Pediatrics Research Bridge Support 07/01/2011 – 06/31/2012

79, 000 \$ as a departmental support to support research aimed at generating preliminary data that will allow grants submissions for funding

7/01/2012 – 06/31/2014 – 127,400 \$ /yr.

Co-Investigator, 5% effort

NIH/ National Institute of Allergy and Infectious Diseases R01AI075212 - 08/08/2008-07/30/2014

Direct costs \$ 1,397,000 for research project entitled: “*Modulation of Neutrophil Apoptosis by Akt-Hsp27 Signalosome*” (Madhavi J. Rane, Ph.D., P.I., Gozal-Co-PI)

Principal Investigator

Department of Pediatrics Pilot Research Grant (PRG) Program 03/2011-02/2012

\$ 20,000 for research project entitled: “*Excitotoxic Response of Organotypic Brain Slices Exposed to Perinatal Intermittent Hypoxia*”

Principal Investigator, NIH/ National Center for Research Resources, COBRE Renewal, 2 P20

RR15576-06, “*Mechanisms of Plasticity and repair after SCI*” **Project 1**, 6/1/05 -5/31/10, Direct cost \$ 902,020, for research entitled *Heat shock proteins in spinal cord neural survival*

Principal Investigator, NIH/ National Center for Research Resources, Project 1, COBRE, P20

RR15576 - 10/1/2000-6/30/2003, (Direct Costs: \$ 895,786) for research project entitled: *Signaling Pathways in Neuronal Susceptibility to Hypoxia.*

Co-Investigator, National Heart Lung and Blood Institute, R01 HL 66358 -10/1/2000-9/30/2004

(Direct Costs: \$700,000) for research project entitled: *Proteomic Analysis of Hippocampal Hypoxic Vulnerability.* (Jon Klein, M.D., Ph.D., P.I.)

Co-Investigator, National Heart Lung and Blood Institute, R01 HL69932-01
4/1/2002-3/31/2006, (Direct costs: \$ 1,000,000) for research project entitled:
Postnatal Brain Susceptibility to Intermittent Hypoxia. (David Gozal, M.D., P.I.)

Co-Investigator, National Institute of Allergy and Infectious Diseases R01, R56
AI059165-01A2 7/1/06-6/30/07, (Direct costs \$ 200,000) for research project entitled:
Role of Hsp27 in regulation of Neutrophil apoptosis (Madhavi J.Rane, Ph.D., P.I.)

Principal Investigator, R01, NIH / NHLBI 7/1/03-6/30/07, No-cost extension to 06-31-08 -R01 HL074296 (Direct costs 1,000,000) for research project entitled: *Hypoxia-induced Akt Signaling Module in Neuronal Cells*

Submitted not funded:

Co-Principal Investigator, National Heart Lung and Blood Institute RFA-HL-16-003 –
“Collaborative Projects to accelerate Research in Organs Fibrosis (R01)- 07/01/2016 – 06/30/2020.
Direct costs: 1,400,000 \$. **Resubmitted in 2016.**
For research project entitled: *“Platelet activation and associated endothelial injury initiate pulmonary and cardiac inflammation, leading to fibrosis in type 1 diabetes.”*

Co-investigator 5% effort - Resubmission

ADA Innovation Award, 07/01/2014 – 6/30/2016

Direct costs \$100,000

For research entitled *“Platelet-endothelial interaction as a cause of diabetes-induced pulmonary microvascular dysfunction”* (Andrew M. Roberts P.I.)

Resubmitted in 2015

Co-Principal investigator

JDRF Innovative Grants/Pilot and Research Tool Grants, 03/01/2014 – 02/28/2015

Direct costs \$ 100,000

For research entitled *“Oxidative stress in the diabetic lung enhances platelet-endothelial interactions and causes microvascular complications.”* (Andrew M. Roberts P.I.)

Principal investigator

Glenn/AFAR Breakthroughs in Gerontology (BIG) Program, 07/01/2014 – 06/30/2016

Direct costs \$ 200,000

For research entitled: *“Role of heat shock proteins in counteracting common pathological mechanisms related to aging and Alzheimer’s disease progression.”*

Co- investigator

Glenn/AFAR Breakthroughs in Gerontology (BIG) Program, 07/01/2014 – 06/30/2016

Direct costs \$ 200,000 For research entitled: *“Oxidative stress and altered nitric oxide signaling enhance platelet-endothelial interactions and cause microvascular complications with aging and Alzheimer’s disease”* (Andrew M. Roberts P.I.)

Co-Principal Investigator, American Heart Association. Collaborative Science Award. Letter of Intent. 07/01/2016 – 06/30/2019. Direct costs: 750,000 \$. For research project entitled: *“Oxidative stress, platelet activation and endothelial injury in Type 1 diabetes-induced pulmonary and cardiac fibrosis.”*

Principal investigator,

NIH/ R21 07/01/2020 – 06/30/2022 (Gregory Barnes, M.D., Ph.D. co-PI)

Direct costs: 275,000 \$. for research project entitled: *“A novel murine ASD model exploring combined environmental and genetic factors”*

Co-Principal investigator,

9/1/2019 to 8/31/2021 Simons Foundation 2019 Pilot Project Award (Gregory Barnes, MD/PhD co-PI)

Total Cost: \$ 300,000. for research project entitled: *“Developmental progression of Neuroinflammation and Platelet-endothelial Cell Dysfunction in a Murine Model of Autism.”*

EDITORIAL WORK

2014 Associate Editor Frontiers in Neuroenergetics, Research Topic Editor for special issue “Glycolysis at 75: Is it Time to Tweak the First Elucidated Metabolic Pathway in History?” Frontiers in Neuroenergetics, 2014.

2019 Associate Editor Frontiers in Neuroscience Co-topic Editor for special issue “Glycolysis Paradigm Shift: Pros and Cons” Frontiers in Neuroenergetics, 2019.

2014 Review Editor in Frontiers in Neuroenergetics, Nutrition and Brain Health.

2021 Review Editor in Frontiers in Cardiovascular Endocrinology

2020 – 2022 Editorial Board Member of “Cells”.

2020 – 2022 Editorial Board Member of Cells of the Nervous System- a section of “Cells”

Reviewer for:

2001 American Journal of Physiology (Cell Physiology).

2001 American Journal of Physiology (Lung Cellular and Molecular Biology)

2002 Neuroscience Letters

2003 Pediatric Research

2003 Journal of Applied Physiology

2004 International Journal of Cancer

2004, 2005, 2013 Neuroscience

(01, 12), 2014

2004, 2008, 2011, 2015 Journal of Pharmacy and Pharmacology

2005, 2007, 2008, 2015, Journal of Neurochemistry

2016 (04, 10)

2006 NeuroReport

2009 Journal of Endocrinology

2010 European Journal of Pharmacology

2010 Clinical Investigative Medicine -

2010(05, 08), 2012, 2015	Toxicology Letters
2013 (01, 03), 2014, 2016	
(01, 02, 03, 05), 2017 (02, 09), 2018	
2011	International Journal of Molecular Sciences
2012, 2014	Molecular Neurobiology
2012	Life Sciences
2012, 2014 (02, 07),2015,	PLoS ONE
2017	PLoS ONE
2012	Molecular Neurobiology
2014, 2017 (06, 09)	Inflammation Research
2014	Chinese Journal of Physiology
2014 (),2018 (07, 10),	Frontiers in Neuroenergetics, Nutrition and Brain
2019 (07),2020 (1) (10), 2021 (5),	
2020 (12)	Frontiers in Neuroscience
2015	Journal of Applied Biomedicine
2015	Neurotoxicity Research
2017	Cell Physiology and Biochemistry
2017, 2021 (2)	Healthcare
2017	Metabolism
2017	Journal of Drug Designs Medicinal Chemistry
2018 (11), 2019 (06)	The Journal of Physiology
2018	International Journal of Cerebral Disease and Stroke
2018 (3), 2019 (6)	Journal of Physiology
2018, 2020 (12)	Scientific Reports
2018	Journal of Neurology & Neuromedicine
2019 (08); 2020 (07)	Current Molecular Pharmacology
2019 (11,12), 2020 (2), 2021 (2)	Cells
2020 (5)	Nutrients
2020 (08)	Biomolecules
2021 (01)	Cells, as Editor
2021 (2)	Journal of Agricultural and Food Chemistry
2021 (5)	Journal of Cellular Immunology
2021(10)	Frontiers in Endocrinology

ABSTRACTS AND PRESENTATIONS

National/ International Meetings

1. Hoyal C, **Gozal E**, Forman HJ. Hydroperoxide mediated modulation of the alveolar macrophage respiratory burst by intracellular calcium is independent of thapsigargin effects. Presented at: 1994 Experimental Biology Meeting, April 24 - 28, 1994, Anaheim, California. Abstracted in: *FASEB J.* 1994; 8:A666.
2. Hoyal C, Robison TW, **Gozal E**, Zhou H, Forman HJ. Modulation of the alveolar macrophage respiratory burst by oxidant exposure does not involve the production of inositol phosphates or the release of calcium from an inositol sensitive pool. Presented at: FASEB Research Conference, Calcium and Cell Function, July 2-7, 1994
3. **Gozal E**, Beckman BS, Brody AR, Forman HJ, Torres M. Protein kinase C (PKC) in rat alveolar macrophage: Role in ADP-stimulated respiratory burst. Presented at: ALA / ATS Meeting, May 12 - 16, 1996, New Orleans, LA. Abstracted in: *Am. J. Resp. Crit. Care Med.* 1996; A441.
4. **Gozal E**, Roussel AL, Gozal L, Gozal YM, Torres JE, Gozal D. Acute hypoxia increases protein kinase C (PKC) activity in the nucleus tractus solitarius (NTS) of the rat.

- Presented at: 1997 Experimental Biology Meeting, April 6 -9, 1997, New Orleans, LA.
Abstracted in: *FASEB J.* 1997;11:A637.
5. Gozal D, Holt GA, Torres JE, **Gozal E**. Protein kinase C (PKC) activation enhances cardioventilatory output in the conscious rat.
Presented at: 1997 Experimental Biology Meeting, April 6 -9, 1997, New Orleans, LA.
Abstracted in: *FASEB J.* 1997;11:A350.
 6. Simakajornboon N, Graff GR, Torres JE, Khicha SG, Nayak GS, **Gozal E**, Gozal D. Systemic administration of the protein kinase C (PKC) inhibitor Ro32-0432 attenuates hypoxic ventilatory responses in the rat.
Presented at: 1997 Experimental Biology Meeting, April 6 -9, 1997, New Orleans, LA.
Abstracted in: *FASEB J.* 1997;11:A637.
 7. Gozal D, Holt GA, Torres JE, **Gozal E**. Protein kinase C (PKC) activation enhances cardioventilatory output in the conscious rat.
Presented at: 1997 ALA/ATS International Conference, May 17-21, 1997, San Francisco, California.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1997; 155:A299.
 8. **Gozal E**, Gozal D. Hypoxic ventilatory roll-off is associated with decreases in protein kinase C (PKC) activation within the nucleus tractus solitarius (NTS) of the rat.
Presented at: Cellular Regulation by Protein Phosphorylation: Fourty years of progress. An ASBMB satellite of the International Congress of Biochemistry, August 20-23, 1997, Seattle, Washington.
 9. Dausman JD, **Gozal E**, Simakajornboon N, El-Dahr S, Gozal D. NMDA receptor antagonism attenuates hypoxia-induced tyrosine and SAPK/JNK phosphorylation and AP-1 activation in the nucleus tractus solitarius (NTS) of the conscious rat.
Presented at: 27th Annual Meeting of the Society for Neuroscience, 25-30 October, 1997, New Orleans, LA, Vol. 23, Abstract # 18.1.
 10. Simakajornboon N, **Gozal E**, Graff GR, Gozal D. *In vivo* platelet-activating factor (PAF) receptor inhibition alters protein kinase C (PKC) isoform translocation patterns in the nucleus tractus solitarius (NTS) during hypoxia.
Presented at: Chest 97, Annual American College of Chest Physicians Conference, October 26-30, 1997, New Orleans, LA.
 11. Simakajornboon N, Gozal YM, **Gozal E**, Gozal D. Protein kinase c (PKC) isoform translocation during acute hypoxia is selectively modulated by NMDA glutamate receptors in the nucleus tractus solitarius (NTS) of the conscious rat.
Presented at: 1998 ALA/ATS International Conference, April 24-28, 1998, Chicago, IL.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1998; 157:A342.
 12. Simakajornboon N, **Gozal E**, Gozal D. Platelet-activating factor (PAF) receptors modulate hypoxia-induced AP-1, AP-2, and NF- κ B activation in the nucleus tractus solitarius (NTS) of the conscious rat.
Presented at: 1998 ALA/ATS International Conference, April 24-28, 1998, Chicago, IL.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1998; 157:A249.
 13. **Gozal E**, Simakajornboon N, El-Dahr S, Gozal D. Hypoxia induces selective *in vivo* SAPK/JNK-AP-1 pathway activation in the nucleus tractus solitarius (NTS) of the rat.
Presented at: 1998 ALA/ATS International Conference, April 24-28, 1998, Chicago, IL.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1998; 157:A249.
 14. **Gozal E**, Ortiz L, Lasky J, Tonthat H, Zou X, and Friedman M.
NF- κ B activation in the pathogenesis of bleomycin-induced lung injury.
Presented at: 1998 ALA/ATS International Conference, April 24-28, 1998, Chicago, IL.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1998; 157:A265.
 15. **Gozal E**, Friedman M, Zou X, Reyes MA, Ortiz L. Absence of both p55 and p75 TNF α receptors is required to prevent NF- κ B activation in bleomycin (BLM)-induced lung fibrosis.

- Presented at: 1999 ALA/ATS International Conference, April 23-28, 1999, San Diego, CA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1999; 159:A928.
16. Kafoury RM, **Gozal E**, Squadrito GL, Zou X, Pryor WA, Friedman M. Lipid ozonation products (LOP) activate nuclear factor κ B (NF- κ B) in human bronchial epithelial cells (BEAS-2B).
Presented at: 1999 ALA/ATS International Conference, April 23-28, 1999, San Diego, CA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1999; 159:A463.
17. Lasky JA, **Gozal E**, Brass DM, Lu H, Friedman M, Brody AR. PDGF-selective tyrosine kinase inhibitor significantly blocks asbestos-induced lung fibroblast proliferation.
Presented at: 1999 ALA/ATS International Conference, April 23-28, 1999, San Diego, CA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 1999; 159:A72.
18. Gozal D, Simakajornboon N, **Gozal E**. Developmental patterning of I κ B kinase expression and Nf κ B activation in neocortex and dorsocaudal brainstem of the rat during normoxia and mild environmental hypoxia.
Presented at: 1999 American Pediatric Society / Society for Pediatric Research Annual Meeting, May 1-4, 1999, San Francisco, CA
Abstracted in: *Pediatr. Res.* 1999; 45:A1785.
19. Ortiz LA, **Gozal E**, Zou X, Reyes M, Friedman M. Individual (p55 or p75) TNF receptors activate I κ B α kinase and promote NF- κ B activation in bleomycin (BLM)-induced lung fibrosis.
Presented at: European Respiratory Society Annual Congress, 1999, Madrid, Spain.
20. Gozal D, **Gozal E**. Developmental aspects of signal transduction pathways underlying hypoxic ventilatory responses.
Presented at: 6th World Congress on Sleep Apnea, March 12-15, 2000, Sydney, Australia.
21. Ortiz L, Lasky J, **Gozal E**, Lungarella G, Martorana P, Cavarra E, Pardo M, Friedman M, Selman M. Altered MMP-13/TIMP-1 RNA expression and decreased AP-1, but not NF- κ B, activation characterize TNF receptor knockout mice resistance to silica.
Presented at: 2000 ALA/ATS International Conference, May 5-10, 2000, Toronto, Ontario, Canada.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2000; 161:A 481.
22. **Gozal E**, Ortiz L, Zou X, Reyes M, Burow M, Lasky J, Friedman M. Role of TNF- α and NF- κ B in silica induced apoptosis of Raw 264-7 and IC-21 murine macrophage cell lines.
Presented at: 2000 ALA/ATS International Conference, May 5-10, 2000, Toronto, Ontario, Canada.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2000; 161:A 666.
23. Kafoury RM, **Gozal E**, Squadrito GL, Zou X, Pryor WA, Friedman M. Lipid ozonation products (LOP) activate nuclear factors NF-IL6 and NF- κ B and release interleukin-8 (IL8) in human bronchial epithelial cells (BEAS-2B).
Presented at: 2000 ALA/ATS International Conference, May 5-10, 2000, Toronto, Ontario, Canada.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2000; 161:A 615.
24. **Gozal E**, Klein JB, Pierce WM, Scherzer JA, Cai J, Sachleben LR. Proteomic analysis of CA1 and CA3 regions of hippocampus following 6 hours of intermittent hypoxia.
Presented at: 30th Annual Meeting of the Society Presented at Society for Neuroscience, 4-9 November, 2000, New Orleans, LA. Vol 26, abstract # 655.12.
25. Gozal D, Payne SR, **Gozal E**, Sachleben LR, Guo S-Z, Schurr A. Effect of intermittent hypoxia (IH) on long-term potentiation (LTP) in the CA1 region of hippocampus of young adult rats.
Presented at : 2001 ALA/ATS International Conference, May 18-23, 2001, San Francisco, CA
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2001;A 489.
26. Ortiz L, Champion H, Lasky J, Gambelli F, **Gozal E**, Friedman M, Hyman A, Kadowicz P. Enalapril inhibition of AP-1 and NF- κ B, collagen and TNF mRNA expression, and pulmonary hypertension in bleomycin-treated mice.
Presented at : 2001 ALA/ATS International Conference, May 18-23, 2001, San Francisco, CA

- Abstracted in: *Am. J. Resp. Crit. Care Med.* 2001;A 710.
27. Gozal D, Payne RS, **Gozal E**, Schurr A. Effect of intermittent and sustained hypoxia on long-term potentiation in the CA1 hippocampal region of the rat.
Presented at: 15th Annual Associated Professional Sleep Societies Meeting, June 5-10, 2001, Chicago, IL Abstracted in: *Sleep* 2001; 24:A57.
 28. Schurr A, Payne RS, **Gozal E**, Gozal D. Changes in hippocampal susceptibility to severe hypoxia following long-term exposures to intermittent or sustained hypoxia.
Presented at: 15th Annual Associated Professional Sleep Societies Meeting, June 5-10, 2001, Chicago, IL Abstracted in: *Sleep* 2001; 24:A55.
 29. **Gozal E**, Bedford AM, Bonen A, Sachelben Jr LR, Schurr A, Gozal D. Expression of monocarboxylate transporters in rat heart and brain during chronic intermittent and sustained hypoxia.
Presented at: 15th Annual Associated Professional Sleep Societies Meeting, June 5-10, 2001, Chicago, IL Abstracted in: *Sleep* 2001; 24: A265.
 30. **Gozal E**, Klein JB, Pierce WM, Scherzer JA, Sachleben Jr. LR, Cai J, Gozal D. Intermittent Hypoxia elicits differential responses in the CA1 and CA3 regions of the rat hippocampus: a proteomic analysis.
Presented at: 15th Annual Associated Professional Sleep Societies Meeting, June 5-10, 2001, Chicago, IL Abstracted in: *Sleep* 2001; 24: A264.
 31. Ortiz LA, Lasky JA, **Gozal E**, Brody AR, Pardo A, Selman M, Ruiz V, Friedman M. Tumor necrosis factor receptor deficiency protects mice from silica-induced lung fibrosis by altering lung matrix metalloproteinase-13/tissue inhibitor of metalloproteinase-1 RNA expression and decreasing activating protein-1 activation.
Presented at 43rd Annual Thomas I. Petty Aspen Lung Conference: Mechanisms of Pulmonary Fibrosis, May 31- June 3, 2000, Aspen, CO.
Abstracted in : *Chest* 2001; 120 (1):2S.
 32. Thongboonkerd V, **Gozal E**, Sachleben LR, Arthur JM, Pierce JM, Cai J, Gozal D, Klein JB. Proteomic analysis reveals alterations in the renal kallikrein system during episodic hypoxia-induced hypertension [Abstract].
Presented at ASN/ISN World Congress, October 13-17, 2001, San Francisco, CA.
Abstracted in: *J Am Soc Nephrol* 12: 474A-475A,
 33. Guo S-Z, **Gozal E**, Schurr A, Payne RS, Row BW, Brittain K, Gozal D.
Infarct size induced by temporary middle cerebral artery occlusion (MCAO) is more extensive following chronic intermittent hypoxia (CIH) in the rat.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 436.3.
 34. Sachleben Jr.LR, **Gozal E**, Zhang SX.L, Guo S-Z, Gozal D. Transcription factors NF- κ B and AP-1 are differentially activated in the rat cortex following sustained (SH) and intermittent hypoxia (IH).
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 845.4.
 35. Tseng MT, Schurr A, Payne RS, **Gozal E**, Gozal D. Excitotoxic preconditioning in vitro induced by hypoxia or glutamate and abolished by blockade of lactate transport.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 208.5.
 36. Zhang SX, Sachleben LR, Gozal D, **Gozal E**. Hypoxia, hydrogen peroxide (H₂O₂), NMDA, staurosporine, differ in Akt activation and downstream induction of apoptosis.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 763.15.

37. Singleton H, Mervis RF, Row BW,, Backstetter A, **Gozal E**, Sachleben LR, Brittain KR, Gozal D. Prolonged intermittent hypoxia leads to disruption of spatial memory task acquisition in the absence of obvious structural abnormalities in hippocampal CA1 pyramidal neurons.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 845.6.
38. Li RC, **Gozal E**, Brittain KR, Sachleben LR, Gozal D. Time-dependent modulation of inducible nitric oxide synthase (iNOS) in rat cortex following intermittent hypoxia (IH) but not sustained hypoxia (SH).
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 845.2.
39. **Gozal E**, Pequignot JM, Pequignot J, Row BW, Guo SZ, Sachleben LR, Gozal D. Cortical (CX) and hippocampal (CA1, CA3) changes in tyrosine hydroxylase (TH) expression and catecholamine turnover following 7 days of episodic hypoxia (EH) or sustained hypoxia (SH) in the rat.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 845.3.
40. Klein JB, Pierce WM, Scherzer JA, Sachleben LR, Cai J, Garcia MM, Gozal D, **Gozal E**. Proteomic analysis of CA1 hippocampal protein expression following intermittent hypoxia: 6 hours versus 14 days.
Presented at: 31th Annual Meeting of the Society for Neuroscience, November 10-15, 2001, San Diego, CA. Vol 27, abstract # 845.5.
41. Reeves SR, Wang M, Guo AJ, Lipton AJ, **Gozal E**, Gozal D. Effect of post-natal intermittent hypoxia on respiratory development.
Presented at : 2002 ALA/ATS International Conference, May 17-22, 2002, Atlanta, GA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2002; 165: A 419.45
42. Gozal D, Reeves SR, Lipton AJ, **Gozal E**. Gasping and autoresuscitation in the developing rat: effect of intermittent hypoxia.
Presented at : 2002 ALA/ATS International Conference, May 17-22, 2002, Atlanta, GA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2002;165: A 205
43. Holbrook MD, **Gozal E**, Reeves SR, Wang M, Lipton AJ, Sachleben Jr. LR, Gozal D. Differential effects of sustained and intermittent hypoxia on rostrocaudal brainstem NMDA glutamate receptor subunit expression: implication for acute hypoxic ventilatory response.
Presented at : 2002 ALA/ATS International Conference, May 17-22, 2002, Atlanta, GA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2002; 165:A 668
44. Ovechkin AV, Roberts AM, **Gozal E**, Gozal D. Pulmonary vascular responsiveness changes following intermittent and sustained hypoxia in rats.
Presented at: Experimental Biology Meeting 2002, New Orleans, LA.
Abstracted in: *FASEB J.* 16: A80.
45. Roberts AM, Ovechkin AV, Collins KJ, Li RC, **Gozal E**, Gozal D. Inhibition of inducible nitric oxide synthase attenuates increased pulmonary vascular resistance during lung ischemia-reperfusion injury in rabbits.
Presented at: Experimental Biology Meeting 2002, New Orleans, LA.
Abstracted in: *FASEB J.* 16: A77.
46. Gozal D, Li RC, **Gozal E**, Guo SZ, Sachleben Jr LR. Regional brain inflammation: a putative mechanism underlying the neurobehavioral deficits of obstructive sleep apnea.
Presented at: 16th Annual APSS Meeting, June 8-13, 2002, Seattle, WA.
Abstracted in: *Sleep* 2002; 25, A2
47. **Gozal E**, Rowell PP, Sachleben Jr LR, Guo SZ, Gozal D. Differential NMDA glutamate receptor changes following sustained or intermittent hypoxia in the rat brain.
Presented at: 16th Annual APSS Meeting, June 8-13, 2002, Seattle, WA.

- Abstracted in: Sleep 2002; 25, A333.
48. Soukhova GK, Roberts AM, Lipton AJ, **Gozal E**, Gozal D. Early postnatal exposure to intermittent hypoxia attenuates baroreflex sensitivity in adult rats.
Presented at: 16th Annual APSS Meeting, June 8-13, 2002, Seattle, WA.
Abstracted in: Sleep 2002; 25, A335.
 49. Pillar G, **Gozal E**, Malhotra A, Perlman R, Vega C, Tiosano D, Hochberg Z, Shahar E, Gozal D, Pillar G. Role of hormonal balance, obesity and orexin in severe hypersomnolence developing after pituitary surgery.
Presented at: 16th Annual APSS Meeting, June 8-13, 2002, Seattle, WA.
Abstracted in: Sleep 2002; 25, A153
 50. Guo S.Z., **Gozal E**, Sachleben Jr L.R., Row B.W., Bonen A., Pellerin J.L., C. Vega, Magistretti P.J, Gozal D. Intermittent hypoxia (CIH) during sleep exacerbates stroke volume induced by MCAO in the rat: role of monocarboxylate transporters (MCT).
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 224.5.
 51. Goldbart A., **Gozal E**, Row B.W., Guo S.Z., Sachleben Jr. L.R., Brittan K.R., Kreisman N.R., Gozal D. Intermittent hypoxia is associated with decreases in phosphorylated CREB within the CA1 region of the hippocampus.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 224.6.
 52. **E. Gozal**, M.D. Holbrook, LR. Sachleben Jr., S.X.L. Zhang, C. Vega , D. Gozal. Hypoxia induction of apoptosis in PC-12 cells: NMDA is protective but the anti-oxidant N-acetyl cysteine is not.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 200.10.
 53. LR. Sachleben Jr., S.X.L. Zhang, M.D. Holbrook, C. Vega ,Y.C. Wang, D. Gozal, **E. Gozal**. Sustained and intermittent hypoxia induce apoptosis in PC-12 cells via different mechanisms.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 224.4.
 54. R.C. Li, B.W. Row, **E. Gozal**, L. Kheirandish, K.R. Brittan, S.Z. Guo, L.R. Sachleben Jr., and D. Gozal. COX-2 inhibition attenuates intermittent hypoxia-induced neurobehavioral deficits in the rat.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 224.1.
 55. J.B. Klein, W.M. Pierce, J.A. Scherzer, J. Cai, L.R. Sachleben, D. Gozal **E. Gozal**. Proteomic analysis of CA1 and CA3 regions of hippocampus following brief exposures to continuous hypoxia reveals disparities in antioxidant expression.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 577.7.
 56. C. Vega, LR. Sachleben Jr., D. Gozal, **E. Gozal**. Effect of intermittent hypoxia on energy metabolism in rat primary cortical astrocytes.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28 abstract # 224.3.
 57. S.X.L. Zhang, LR. Sachleben, Jr., D. **Gozal**, **E. Gozal**. Hypoxia induces an autocrine-paracrine anti-apoptotic pathway via PDGF-B/PDGF- β receptor/PI3K/Akt signaling in RN46A neuronal cells.
Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 200.11.
 58. Liu R, Luo C, Goldbart A, **Gozal E**, Sachleben LR, Gozal D. Increased production of reactive oxygen species is associated with intermittent hypoxia-mediated cortical neural cell death.

- Presented at: 32th Annual Meeting of the Society for Neuroscience, November 2-7, 2002, Orlando, FL. Vol 28, abstract # 225.7.
59. Pillar G, Snow A, **Gozal E**, Malhotra A, Perlman R, Vega C, Tiosano D, Hochberg Z, Shahar E, Gozal D. Severe hypersomnolence following pituitary surgery in children: characteristics and potential mechanism.
Presented: 16th Congress of the European Sleep Research Society, 3-7 June, 2002, Reykjavik, Iceland.
Abstracted in: *Journal of Sleep Research* 11(Suppl. 1): A360, p. 179.
60. Gozal D, Vega C, Fan Q, **Gozal E**. Metabolic Adaptations to Sustained Hypoxia in Primary Rat Astrocyte Cultures: Evidence for Time-dependent Regulation of Glucose and Lactate Transport.
Presented at : 2003 ALA/ATS International Conference, May 16-21, 2003, Seattle, WA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2003;A174
61. Goldbart AD, Schurr A, Brittian KR, **Gozal E**, Guo SR, Payne RS, Gozal D. Intermittent Hypoxia During Sleep Elicits Time-dependent Changes in Protein Kinase B/Akt and CREB Phosphorylation in Rat CA1 Region of the Hippocampus : Implications for Long-term Potentiation.
Presented at : 2003 ALA/ATS International Conference, May 16-21, 2003, Seattle, WA.
Abstracted in: *Am. J. Resp. Crit. Care Med.* 2003;A15
62. A. Hui, J.B. Striet, D. Beitner-Johnson, **E. Gozal**, D. Gozal and M. F. Czyzyk-Krzeska. Regulation of catecholaminergic synthesizing enzymes in carotid bodies, superior cervical ganglia and adrenal glands by intermittent and sustained hypoxia.
Presented at: Experimental Biology Meeting 2003, April 11-15, San Diego, CA.
Abstracted in: *FASEB J.*17:A952.
63. M.F. Czyzyk-Krzeska, P.O. Schnell, J.B. Striet, A. Hui, M.G. Wathélet, D. Gozal, **E. Gozal** Role of hypoxia and calcium in regulation of p300/CBP transcription co-activators in carotid body and pheochromocytoma PC12 cells.
Presented at: Experimental Biology Meeting 2003, April 11-15, San Diego, CA.
Abstracted in: *FASEB J.*17:A17.
64. S.Z.Guo, J.B. Klein, Rane M.J., Butt W., Mc Leish K.R., **Gozal E.**, Gozal D. Baclofen increases neutrophil influx following brain ischemia/reperfusion: A role for GABA B receptor dependent neutrophil chemotaxis.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 101.3.
65. M.S. DeMatteis, **E. Gozal**, D. Gozal. Both sleep fragmentation and intermittent hypoxia are associated with altered glucoregulatory mechanisms in the mouse.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 341.3.
66. Z.A. Shah, **E. Gozal**, L.R. Sachleben Jr., S.Z. Guo, S.R. Reeves, D. Gozal. Intermittent and sustained hypoxia differentially regulate PKC isoform translocation in dorsocaudal brainstem of the rat.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 241.4.
67. S.X.L. Zhang, M. Rane, L.R. Sachleben, Jr., R. Wu, Y. Wang, D. Gozal, **E. Gozal**. Hypoxia induction of Heme oxygenase-1 is Akt-dependent and protects PC-12 cells from apoptosis.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 346.7.
68. **E. Gozal**, S.X.L. Zhang, L.R. Sachleben, Jr., R. Wu, D. Gozal, M. Rane. Hypoxia induces binding to Akt signaling module and phosphorylation of heat shock proteins in PC-12 cells.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 346.6

69. L.R. Sachleben, Jr., M. Rane, S.X.L. Zhang, R. Wu, D. **Gozal, E.** Gozal. Akt/PKA cross-talk modulates hypoxia-induced survival response in PC-12 cells.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 346.8.
70. J.B. Klein, W.M. Pierce, J.A. Scherzer, J. Cai, L.R. Sachleben, D. **Gozal E.** Gozal Proteomic analysis of CA1 and CA3 regions of hippocampus following brief exposures to continuous hypoxia reveals differential expression of HIF-1-dependent genes.
Presented at: 33th Annual Meeting of the Society for Neuroscience, November 8-12, 2003, New Orleans, LA. Vol 29, abstract # 346.10.
71. Wu, R., Butt, W., Powell, D.W., McLeish, K.R., **Gozal, E.**, Klein, J.B., and Rane M.J. Silencing Hsp27 Expression Inhibits Akt and 14-3-3 _ Interaction in HEK-293 Cells.
Presented at: ASN/ISN World Congress, November 12-17, 2003, San Diego, CA.
Abstracted in: J Am Soc Nephrol 14: 91A-, F-PO126.
72. Rane M. J., Wu, R., Khundmiri S. J., Klein, J.B., and **Gozal, E.** Akt mediated PKA phosphorylation in HK-11 cells requires Akt/Hsp27 interaction.
Presented at: ASN/ISN World Congress, November 12-17, 2003, San Diego, CA.
Abstracted in: J Am Soc Nephrol 14: 92A-, F-PO129.
73. Rane, M., Butt, W., Guo S. Z., **Gozal E.**, Thongboonkerd, V., McLeish, K. R., Gozal D. Klein J. B. Baclofen Increases Neutrophil Influx Following Ischemia/reperfusion: a Role for Gaba_B Receptor Dependent Neutrophil Chemotaxis in Organ Damage.
Presented at: ASN/ISN World Congress, November 12-17, 2003, San Diego, CA.
Abstracted in: J Am Soc Nephrol 14: 553A-, SU-PO070.
74. Dematteis M, **Gozal E**, Gozal D. A novel procedure for sleep deprivation and sleep fragmentation in rodents.
Presented at: 18th Annual APSS Meeting, June 5-109, 2004, Philadelphia, PA.
Abstracted in: Sleep 2004.
75. Rane M, Wu R, Kausar H, Sachleben, Jr LR, Klein J, **Gozal E.** Akt autophosphorylation inhibits hypoxia induced Akt Ser473 phosphorylation and regulates HK-11 cell survival.
Presented at: ASN/ISN World Congress, October 2004
Abstracted in: J Am Soc Nephrol 15: 452A-, SA-PO683.
76. Kausar H, **Gozal E**, Wu R, Montoya-Durango D, Klein JB, and Rane MJ. Hsp27 acts as a scaffolding protein for upstream activators of Akt.
Presented at: ASN/ISN World Congress, October 2004
Abstracted in: J Am Soc Nephrol 15: 97A-, F-PO146.
77. Wu, R, **Gozal, E**, Sachleben, Jr LR, Barati, M, Klein, JB, and Rane, MJ. Akt phosphorylation of Nuclear Factor-Erythroid 2 (NF-E2) regulates NF-E2 DNA binding activity in neutrophils (PMNs). Presented at: ASN/ISN World Congress, October 2004
Abstracted in: J Am Soc Nephrol 15: 499A-, SA-PO913.
78. Dematteis M, **Gozal E**, Gozal D. Platelet-Activating Factor receptor deficient mice are protected from intermittent hypoxia-induced glucose homeostasis impairments.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 663.9
79. Sachleben Jr L.R, Rane, M.J., Wu R, Gozal D, **Gozal E.** PKA/Akt crosstalk in hypoxic PC-12 cells modulates PI3K/Akt cell survival pathway.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 259.2
80. **Gozal E**, Sachleben Jr LR, Wiegand C, Wu R, Rane, MJ. HSP90 inhibition induces PC-12 cell death and Akt downregulation without altering hypoxia induced Akt phosphorylation.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 259.3

81. Rane, MJ, Lominadze G , Sachleben Jr LR, Wu R, **Gozal E** Hypoxia induces akt-mediated HSP 70 phosphorylation in PC-12 cells.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 259.1
82. Li RC, Wang Y, Zhang SX, **Gozal E**, Gozal D. Neuroglobin Protects PC12 Cells from Oxidative Stress.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 529.3
83. Wang Y, Li RC, **Gozal E**, Wang Y, Sachleben Jr LR, Gozal D. Protein Kinase A Regulates Hypoxia-Induced Transcriptional Pathways in the PC-12 Cell line.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 1018.11
84. J.Klein, M.Barati, **E.Gozal**, D.Gozal, J.Scherzer, J.Trent, R.Wu, M.Rane: Association of valosin - containing protein p97 and Akt during hypoxia in the rat hippocampus.
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 663.7
85. S.Z.Guo, Z.J.Cheng, S.R.Reeves, **E.Gozal** D.Gozal Nerve growth factor in nucleus of solitary tract mediates functional recovery of hypoxic ventilatory response and promotes vagal afferent axonal sprouting following excitotoxic lesions in the rat. Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 145.5
86. D.Gozal, S.Z.Guo, **E.Gozal**, R.C.Li, L.R.Sachleben Jr, S.R.Reeves. Time - dependent changes in growth factor expression following domoic acid lesions in the nucleus of the solitary tract of the rat
Presented at: 34th Annual Meeting of the Society for Neuroscience, October 23-28, 2004, San Diego, CA. Vol. 30, Abstract # 145.6
87. C. Véga, L.R. Sachleben, D. Gozal, **E. Gozal**. Biphasic metabolic adaptation to hypoxia in rat astrocytes
Presented at: XXIInd International Symposium on Cerebral Blood Flow, Metabolism, and Function & VIIth International Conference on Quantification of Brain Function with PET. June 7-11, 2005, Vrije Universiteit Amsterdam, The Netherlands.
88. K. Sedoris, **E. Gozal**, A.V. Ovechkin, A.M. Roberts. Pulmonary ischemic preconditioning stimulates protein-protein interaction between eNOS and Hsp90 in lung tissue and improves nitric oxide bioavailability during reperfusion in rabbits.
Presented at: Experimental Biology Meeting 2005, March 31-April 5, San Diego, CA. Abstracted in: *FASEB J*. Part II, 19(5), A1217, 2005.
89. M.J. Rane, H. Kausar-Amanullah, M.T. Barati, M. Merchant, R. Wui, **E. Gozal**. Disruption of Akt/Hsp27 interaction induces JNK Kinase activity and neutrophil apoptosis.
Presented at: ASN 38th World Congress, November 10-13, 2005, Philadelphia, PA.
90. M.J. Rane, M.T. Barati, D. Gozal, R. Wu. L.R. Sachleben, **E. Gozal**, J.B. Klein. Phosphorylation of VCP regulates its association with ubiquitinated proteins: identification of Akt phosphorylation sites.
Presented at: ASN 38th World Congress, November 10-13, 2005, Philadelphia, PA.
91. C.A. Julien, M.J. Rane, L.R. Sachleben, Jr, R. Wu, **E. Gozal**. PKA modulates heat shock protein (HSP)-mediated PC-12 stress response to hypoxia.
Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 130.12
92. C.B. Wiegand, M.J. Rane, L.R. Sachleben, Jr, R. Wu, **E. Gozal**. Effect of HSP90 inhibition by geldanamycin on PC-12 cells survival and hypoxic response.
Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 549.9

93. M. DeMatteis, C. Julien, **E. Gozal**, P. Levy. Intermittent hypoxia induces sequential cardiovascular alterations leading to hypertension and delayed vascular remodeling in mice. Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 407.5
94. L.R. Sachleben, C.A. Julien, M.J. Rane, R. Wu, C.B. Wiegand, **E. Gozal**. Akt/PKA signaling crosstalk regulates PC-12 hypoxic stress response. Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 361.7
95. **Gozal E.**, Benton R.L., Enzmann G.U., Sachleben Jr L.R., Rane, M.J., Whittemore S.R. Expression of Hsp 25 in traumatic spinal cord injury (SCI): A differential stress response in oligodendrocytes and astrocytes. Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 220.19
96. Rane M.J., Barati M.T., Gozal D., Wu R., Sachleben, Jr. L.R., TrentJ.O., **Gozal E.**, Klein J.B. Akt-mediated VCP phosphorylation regulates its association with ubiquitinated proteins. Presented at: 35th Annual Meeting of the Society for Neuroscience, November 12-16, 2005, Washington, DC. Vol. 31, Abstract # 361.6
97. Wiegand C. B, Rane, M.J. Sachleben, Jr. L.R., Wu R., **Gozal E.** Hsp90 inhibition by Geldanamycin upregulates expression heat shock proteins in PC-12 cells. Presented at: Cell Signaling World , Signal Transduction Pathways as Therapeutic Targets. Luxembourg, January 25-28, 2006.
98. Julien C.A., Miller C. J., Schurr A., Dematteis M., Gozal E. PKA modulates hypoxic tolerance and metabolic adaptation in PC12 cells. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 680.15.
99. Miller C.J., Julien C.A, Sachleben, Jr. L.R., Dematteis M., **Gozal E.** PKA regulation of hypoxia-induced ROS production and PC-12 cell death. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 314.11
100. Wiegand C.B., Rane, M.J., **Gozal E.** Role of geldanamycin in Akt/ERK-mediated PC12 cells survival. Presented at: 36th Annual Meeting of the Society for Neuroscience, October 14-18, 2006, Atlanta, GA. Vol. 32, Abstract # 89.2.
101. Roberts A.M., Rodriguez W.E., Akabua E.A., Tyagi N., Tyagi S.C., **Gozal E.** and Lominadze D. Fibrinogen/fibrin deposition and microvascular leakage caused by pulmonary ischemia-reperfusion in the intact rabbit lung. Presented at: Experimental Biology Meeting 2007, April 28-May 2, Washington, DC . Abstracted in: *FASEB J.* 21, 2007 Abstract # 979.8.
102. **Gozal E** , Miller CJ , Sachleben LR , Dematteis M, Rane MJ. Intermittent and sustained hypoxia differentially regulate cell death signaling pathways: Role of PKA. Presented at: 21st Annual Associated Professional Sleep Societies Meeting (APSS) Meeting, June 9-14, 2007, Minneapolis, MN. Abstracted in: *Sleep* 2007; 30, A.
103. Véga C, Sachleben Jr LR, Gozal D, **Gozal E.** Sustained intermittent hypoxia alters energy balance in rat primary culture of astrocytes. Presented at: 8ème Colloque de la Société des Neurosciences, Montpellier, France, May 22-25, 2007.
104. Machaalani R, Arlotto M, Waters KA, **Gozal E**, Berger F and Dematteis M. A novel method for collection and storage of tissue for SELDI-TOF-MS proteomic analysis. Presented at: International Brain Research Organization, IBRO World Congress of Neuroscience, Melbourne, Australia, July 12-17, 2007.

105. El Mehdi D, Weeter LA, Benton RL, Whittemore SR, **Gozal E.** HSP25 expression and phosphorylation induces cellular tolerance and promotes astrocyte process extension after rat SCI.
Presented at: Louisville Neuroscience Day, Society for Neuroscience Louisville Chapter, April 12, 2007.
106. Véga C, Sachleben Jr. LR, Gozal D. and **Gozal E.** Differential Adaptation To Acute And Long Term Intermittent Hypoxia in Rat Astrocytes.
Presented at: 36th Annual Meeting of the Society for Neuroscience, November 3-7 2007 San Diego. Vol. 32, Abstract # 148.15
107. C.B. Wiegand, C.J. Miller, L.R. Sachleben Jr., M.J. Rane, **E. Gozal.** Disruption of Hsp90 protein complex by geldanamycin in PC-12 cells: role of oxidative stress.
Presented at: 36th Annual Meeting of the Society for Neuroscience, November 3-7 2007, San Diego. Vol. 32, Abstract # 766.4
108. Miller CJ, Rane MJ, Sachleben, Jr L.R., Dematteis M, **Gozal E.** PKA regulates ROS production and cellular energy metabolism in hypoxic PC-12 cells
Presented at: 36th Annual Meeting of the Society for Neuroscience, November 3-7 2007 San Diego. Vol. 32, Abstract # 88.2
109. El Mehdi D, Weeter LA, Benton RL, Whittemore SR, **Gozal E.** HSP25 expression and phosphorylation induces cellular tolerance and promotes astrocyte process extension after rat SCI.
Presented at: 36th Annual Meeting of the Society for Neuroscience, November 3-7 2007 San Diego. Vol. 32, Abstract # 769.9
110. Machaalani R, Arlotto M, Waters KA, **Gozal E,** Berger F and Dematteis M. A novel method for collection and storage of tissue for SELDI-TOF-MS proteomic analysis.
Presented at: the Human Proteome Organization (HUPO) conference - Proteomics: from technology Development to Biomarkers Applications. October 6 – 10, 2007, Seoul, Korea. Selected for the AOHUPO/KSMS Young Scientist Award.
111. Wiegand C., Miller, C.J., Sachleben, LR. Jr., Rane M.J., and **Gozal E.** Disruption of Hsp90 Protein Complex by Geldanamycin in PC-12 Cells: Role of Oxidative Stress.
Presented at: Medical Scientist Training Program Annual MD/PhD Student Conference, July 27-29, 2007, Keystone, Colorado, USA.
112. Machaalani R, **Gozal E,** Berger F, Waters KA, Dematteis M. SELDI_TOF MS analysis of the effects of post-mortem interval on rat brain proteomic.
Presented at: Joint AOHUPO (Asian Oceania Human Proteome Organization) and PRICPS (Pacific Rim International Conference on Protein Science), June 22-26, 2008. Cairns, Australia.
113. El Mehdi D, Howard R, Benton RL, Merchant ML, Rane MJ, Whittemore SR, **Gozal E.** HSP25 expression and phosphorylation regulates astrocyte process extension after injury to promote recovery.
Presented at: 37th Annual Meeting of the Society for Neuroscience, November 15-19 2008 Washington DC. J. Neuroscience Vol. 33, Abstract # 837
114. C.B. Wiegand, C.J. Miller, L.R. Sachleben, Jr., M.J. Rane, **E. Gozal.** Geldanamycin induces cytotoxic oxidative stress and disrupts Hsp90 binding, targeting proteins to non-proteasomal degradation in PC-12 cells.
Presented at: 37th Annual Meeting of the Society for Neuroscience, November 15-19 2008 Washington DC. J. Neuroscience Vol. 33, Abstract # 354
115. Roberts A, Akabua EA, Lominadze D , **Gozal E.** Inducible Nitric oxide synthase inhibition attenuates lung injury and decreases NADPH oxidase expression and activation during ischemia-reperfusion in the ventilated rabbit lung.
Presented at: Experimental Biology Meeting 2008, April 5 - 9, San Diego, CA . Abstracted in: *FASEB J.*, 23, 2009. Abstract # 620.2

116. Johnson PR, Cummings TD, Manning TR, Wu R, Sachleben LR, **Gozal E**, MJ Rane. Nuclear factor erythroid derived-2 (NF-E2)-mediated regulation of NF-kB activation in neutrophils: A potential mechanism of NF-E2-mediated apoptosis.
Presented at: Experimental Biology Meeting 2008, April 5 - 9, San Diego, CA . Abstracted in: *FASEB J.*, 23, 2009. Abstract # 526.6.
117. El Mehdi D, Howard R, Rane MJ, Whittemore SR, **Gozal E**. Role of Hsp 25 in the regulation of astrocyte response to spinal cord injury.
Presented at: Euroglia 2009, September 8-12, Paris, France. Abstracted in *Glia*, vol. 57 No. S13, Supplement 10, Abstract # P-338, October 2009.
118. Jagadapillai R, Mellen N, Sachleben, Jr. LR., **Gozal E**. Chronic Intermittent Hypoxia increases Brain Susceptibility to Excitotoxic Injury.
Presented at: 39th Annual Meeting of the Society for Neuroscience, November 13-17, 2010, San Diego, CA. *J. Neuroscience* Vol. 35, Abstract # 256.1
119. Roberts AM, Lominadze D, Dassanayaka S, Sachleben Jr. LR, Juniel C, **Gozal E**. Pulmonary Microvascular Constriction and Oxidative Stress in the Intact-ventilated Mouse Lung during Acute Inhibition of Nitric Oxide Synthase
Presented at: Experimental Biology Meeting 2011, April 9 - 13, Washington, DC . Abstracted in: *FASEB J.*, 2011. Abstract #
120. Dixon JT, **Gozal E**, Sachleben Jr. LR, Lominadze D, Juniel CL, Roberts AM. NFkB signaling and inducible nitric oxide synthase activity during pulmonary ischemia-reperfusion increase colocalization of fibrinogen/fibrin and platelets at sites of vascular leakage in rabbit lung.
Presented at: Experimental Biology Meeting 2012, April 21 – 25, San Diego, CA, Abstracted in: *FASEB J.*, 2012. Abstract #
121. Jagadapillai R, Mellen N, Sachleben, Jr. LR., **Gozal E**. Ceftriaxone enhances glutamate transporters expression and improves cell viability in rat hippocampal slices exposed to intermittent hypoxia.
Presented at: 41st Annual Meeting of the Society for Neuroscience, October 13-17, 2012, New Orleans, LA. Abstracted in: *J. Neuroscience* Vol. 37, Abstract # 332.22.
122. Jagadapillai R, Roberts AM, Vaishnav R, Friedland RP, Sachleben, Jr. LR, **Gozal E**. Progressive astroglial activation and decreased heat shock proteins expression in aging APP transgenic mice.
Presented at: 42nd Annual Meeting of the Society for Neuroscience, October 9-13, 2013, San Diego, CA. Abstracted in: *J. Neuroscience* Vol. 38, Abstract # 135.09
123. Roberts AM, Jagadapillai R, Vaishnav RA, Friedland RP, Sachleben, Jr. LR, **Gozal E**. Oxidative stress-induced changes in nitric oxide availability contribute to increased pulmonary microvascular tone in a mouse model of Alzheimer's disease.
Presented at: Experimental Biology Meeting 2014, April 26 – 30, San Diego, CA, Physiology - Kaley Lecture Complementary Talks Posters- Abstracted in: *FASEB J* April 2014 28:1082.2.
124. Jagadapillai R, Roberts AM, Vaishnav R, Friedland RP, Sachleben, Jr. LR, **Gozal E**. Progressive astroglial activation and decreased heat shock proteins expression in aging APP transgenic mice.
Presented at: 43rd Annual Meeting of the Society for Neuroscience, November 15-19, 2014, Washington, DC. Abstracted in: *J. Neuroscience* Vol. 39, Abstract # 406.23.
125. Roberts AM, Jagadapillai R, Dixon JT, Tan Y, Cai ,L. and **Gozal E**. Platelet-endothelial association with fibrinogen/fibrin, coupled with oxidative stress, protein nitrosylation and fibrosis may underlie pulmonary endothelial cell dysfunction in a mouse model of Type 1 diabetes.

- Presented at: Experimental Biology Meeting 2015, April 26 – 30, Boston, MA, Abstracted in: FASEB J., 2015. Abstract #
126. Jagadapillai R, Mellen N, Sachleben, Jr. LR., **Gozal E**. Increased susceptibility to excitotoxic injury in rat hippocampal slices exposed to intermittent hypoxia.
Presented at: International Stroke Conference 2016, February 17 – 19, Los Angeles, CA, Abstracted in: Stroke, 2016.
 127. Drinovac R, Jagadapillai R, **Gozal E**, Lin X, Vaishnav R, Friedland RP, Roberts AM. Loss of bioavailable NO with enhanced iNOS expression and oxidative stress increase pulmonary arteriolar tone in aged mice.
Presented at: Experimental Biology Meeting 2016, April 2 – 6, San Diego, CA, Abstracted in: FASEB J., 2016. Vol. 30(1) Abstract # 728.5
 128. Roberts AM, Jagadapillai R, Vaishnav R, Friedland RP, Drinovac R, Lin X, **Gozal E**. Altered nitric oxide signaling and oxidative stress increase pulmonary arteriolar tone and cause lung fibrosis in a mouse model of Alzheimer's disease.
Presented at: Experimental Biology Meeting 2016, April 2 – 6, San Diego, CA, Abstracted in: FASEB J., 2016. Vol. 30 (1) Abstract # 960.3
 129. Friedland RP, Rane M, **Gozal E**, Jin S, Jagadapillai R, Roberts AM, Liu R, Adame A, Masliah E, Stribinskis V The influence of bacterial amyloid on Alpha synuclein (AS) misfolding in the rat.
Presented at: American Academy of Neurology Annual Meeting, Vancouver BC, April 15-21, 2016, Abstracted in: Neurology April 5, 2016, 86:16 Supplement 1.003; 1526-632x.
 130. Barnes G, **Gozal E**, Jagadapillai R. The Association of ASD-like Behavior, Inflammatory Signaling, and Oxidative Stress Cascades in Semaphorin 3F KO Mice.
Presented at: International Meeting for Autism Research (IMFAR), San Francisco, CA, May 10 – 13, 2017. Abstract # 106.035.
 131. Jagadapillai R, Li Z, **Gozal E**, Barnes G. Deletion of semaphorin 3F in interneurons is associated with decreased GABAergic neurons, autism-like behavior, and increased inflammation and oxidative stress
Presented at: 46th Annual Meeting of the Society for Neuroscience, November 11-15, 2017, Washington, DC. Abstracted in: J. Neuroscience Vol. 42, Abstract # 651.07.
 132. Jagadapillai R, Li Z, **Gozal E**, Barnes G. Interneuron-specific Knockout of Semaphorin 3F Results in Increased Inflammation, Oxidative Stress and Autism-like Behavior.
Presented at: INSAR 2018 Annual Meeting, Rotterdam, The Netherlands, May 9-12, 2018.
 133. Roberts AM, Jagadapillai R, Moulana N, Cai L, **Gozal E**. Increased Subpleural Pulmonary Arteriolar Tone Associated with Inhibition of Nitric Oxide Synthase in a Mouse Model of Type-1 Diabetes.
Presented at: Experimental Biology Meeting 2018, April 21 – 25, San Diego, CA, Abstracted in: FASEB J., 2018. Vol. 32 (X) Abstract # LB276.
 134. Elnakieb Y, Dekhil O, Shalabi A, Ayinde B, Mahmoud A, Switala A, Elmaghraby A, Keynton R, Ghazal M, **Gozal E**, El-Baz A, Barnes G. An early-detection diagnostic framework for autism spectrum disorder using DTI and sMRI.
Presented at: 47th Annual Meeting of the Society for Neuroscience, November 3-7, 2018, San Diego, CA. Abstracted in: J. Neuroscience Vol. 43, Abstract # 121.28.
 135. Moulana NZ, Jagadapillai R, **Gozal E**, Cai L, Roberts AM. Subpleural Microvascular Dysfunction in the Intact Mouse Lung in Conjunction with Increased Blood Glucose Levels, Oxidative Stress and Altered Nitric Oxide Signaling in a Model of Type-1 Diabetes.

Presented at: Experimental Biology Meeting 2018, April 6 – 9, Orlando, FL, Abstracted in: FASEB J., 2019.Vol. 33 (1) supplement Abstract # 685.12.

136. Jagadapillai, R, Li, Z., Gozal, E., Barnes, G. Interneuron-specific knockout of Semaphorin 3F induces neuroinflammation and endothelial injury with disruption of the blood brain barrier. Presented at: International Society for Autism Research (INSAR) 2020, Virtual event, June 3 2020. Abstract # 408.004.
137. Barnes, G, Jagadapillai, R, Li, Z., **Gozal, E.** Semaphorin 3F Deletion in GABAergic Neurons of a Genetic Model of autism and Epilepsy induces Neuroinflammation and Endothelial Injury with Disruption of the Blood Brain Barrier. Selected for the Investigator Workshop/Basic Science Poster session.
Presented at: American Epilepsy Society 2020, Virtual Event, December 4 – 8, 2020, Seattle, WA, Abstract ID: 913865
138. Jagadapillai, R, Li, Z., **Gozal, E.**, Barnes, G. Neuroinflammation and platelet-endothelial injury with disruption of the blood brain barrier in a genetic model of autism with GABAergic neuron-specific deletion of Semaphorin 3F.
Presented at: Society for Neuroscience Global Connectome, virtual event, January 11-13, 2021. Abstracted in: J. Neuroscience Vol. 45, Abstract # 021.02
139. Qiu, X, Ohja, K, Jagadapillai, R, **Gozal, E.**, Shipu Zou, S, Barnes, G. Putative Relationships between Autism Risk Genes, Vascular Signaling, and Behavior in Autism Spectrum Disorder: A Pilot Study.
Presented at: International Society for Autism Research (INSAR) 2021, May 5-8, Boston, MA,
140. Zeng, W., Chu, T., Gao, J., **Gozal, E.**, Jagadapillai, R., Barnes, G.N., Cai, J. Genetic susceptibility and high fat diet-induced obesity underlie changes in neurobehavior, white matter microstructure, and hippocampal metabolites in C57Bl/6 mice.
Presented at: Society for Neuroscience 2021, virtual event, November 8-11, 2021 and in person, November 13-16, Chicago, ILL. Abstracted in J. Neurosci, vol46, Abstract #
141. **Gozal, E.**, Jagadapillai, R., Chu, T., Cai, J., Barnes, G.N. Increased oxidative injury and blood brain barrier disruption in the brain of two murine models of autism spectrum disorder.
Presented at: Society for Neuroscience 2021, virtual event, November 8-11, 2021 and in person, November 13-16, Chicago, ILL. Abstracted in J. Neurosci, vol46, Abstract # 043.03

Local/Regional Meetings

1. **Gozal E**, Holt GA, Gozal D. Protein kinase C (PKC) activation in the NTS mediates ventilatory responses to hypoxia in the conscious rat.
Presented at: 9th Annual Neuroscience Retreat, 1 February 1997, New Orleans, LA.
Recipient of a Travel Award from the Greater New Orleans Society for Neuroscience.
2. **Gozal E**, Roussel AL, Gozal L, Torres JE, Gozal D. Hypoxia induces protein kinase C (PKC) activation in the nucleus tractus solitarius (NTS) of the rat.
Presented at: 1997 Southern Society Pediatric Research Meeting, 2 -5 February 1997, New Orleans, LA.
Abstracted in: *J. Invest. Med.* 1997; 45:40A.
3. **Gozal E**, Ortiz L, Zou X, Reyes M, Burow M, Lasky J, Friedman M. Role of TNF- α and NF- κ B in silica induced apoptosis of RAW 264-7 and IC-21 murine macrophage cell lines.

Presented at: Ohio Valley Society of Toxicology Meeting, November 11-12, 1999, Louisville, KY.

4. Dixon, J.T., **Gozal, E.**, Sachleben, Jr, LR, Lominadze, D, Juniel, CL, and Roberts, A.M. NF κ B signaling and inducible nitric oxide synthase activity during pulmonary ischemia-reperfusion increase co-localization of fibrinogen/fibrin and platelets at sites of vascular leakage in rabbit lung.
Poster Presentation at 1st inaugural meeting of Kentucky Chapter of the American Physiological Society, March 25, 2013, Lexington, KY.

PUBLICATIONS

PEER-REVIEWED

(Note: If you are not listed as first author on publications for which your mentored student is listed, note that role with an asterisk.)

<http://www.ncbi.nlm.nih.gov/sites/myncbi/evelyn.gozal.1/bibliography/47848154/public/?sort=date&direction=ascending>.

1. Shi, M., **Gozal, E.**, Choy, H.A., Forman, H.J.: Extracellular glutathione and γ -glutamyl transpeptidase prevent H₂O₂-induced injury by 2,3-dimethoxy-1,4-naphthoquinone. *Free Rad. Biol Med.* 1993; 15:57-67.
2. Murphy, J.K., Livingston, F.R., **Gozal, E.**, Torres, M., Forman, H.J.: Stimulation of the rat alveolar respiratory burst by extracellular adenosine nucleotides. *Am. J. Resp. Cell Mol. Biol.* 1993; 9:505-510.
3. Kugelman, A., Choi, H.A., Shi, M., **Gozal, E.**, Forman, H.J.: γ -Glutamyl transpeptidase is increased by oxidative stress in clonal (L-2) rat alveolar type II epithelial cells. *Am. J. Resp. Cell Mol. Biol.* 1995; 11:586-592.
4. Hoyal, C.R., **Gozal, E.**, Zhou, H., Foldenauer, K., Forman, H.J.: Modulation of the rat alveolar macrophage respiratory burst by hydroperoxides is calcium-dependent. *Arch. Biochem. Biophys.* 1996; 326:166-171.
5. Gozal, D., **Gozal, E.**, Gozal, Y.M., Torres, J.E. Nitric oxide synthase isoforms and peripheral chemoreceptor stimulation in conscious rats. *NeuroReport* 1996; 7:1145-1148.
6. Gozal, D., **Gozal, E.**, Torres, J.E., Gozal, Y.M., Nuckton, T.J. and Hornby, P.J.: Nitric oxide modulates ventilatory responses to hypoxia in the developing rat. *Am J. Resp. Crit. Care Med.* 1997; 155:1755-1762.
7. Gozal, D., Torres, J.E., **Gozal, E.**, Nuckton, T.J, Gozal, Y.M., Hornby, P.J.: Nitric oxide modulates anoxia-induced gasping in the developing rat. *Biol Neonate* 1998; 73: 264-74, 1998.
8. Gozal, D. and **Gozal, E.**: Hypoxic ventilatory roll-off is associated with decreases in protein kinase C activation within the nucleus tractus solitarius of the rat. *Brain Res.*1997; 774:246-249.
9. Gozal, D., Graff, G.R., Torres, J.E., Khicha, S.G., Nayak, G.S., Simakajornboon, N., **Gozal, E.*** Cardiorespiratory responses to systemic administration of a protein kinase C inhibitor in the conscious rat. *J. Appl. Physiol.* 1998; 84:641-648.
10. **Gozal, E.**, Roussel, A.L., Holt, G.A., Gozal, L., Gozal, Y.M., Torres, J.E. and Gozal, D.: Protein kinase C mediates critical components of the ventilatory response to hypoxia in the nucleus tractus solitarius. *J. Appl. Physiol.* 1998; 84:1982-1990.
11. **Gozal, E.**, Simakajornboon, N., Gozal, D.: NF κ B induction during hypoxia in the dorsocaudal brainstem of the rat: Effect of MK-801 and L-NAME. *J. Appl. Physiol.* 85:372-376, 1998.

12. Gozal, D., **Gozal, E.** and Graff, G.R.: Evidence for a central role of protein kinase C in modulation of the hypoxic ventilatory response in the rat. *Adv. Exp. Med. Biol.* 1998; 10:45-49.
13. Gozal, D., Graff, G.R., **Gozal, E.** and Torres, J.E.: Modulation of the hypoxic ventilatory response by Ca²⁺-dependent and Ca²⁺-independent protein kinase C in the dorsocaudal brainstem of conscious rats. *Respir. Physiol.* 1998; 1121:283-290.
14. Gozal, D., and **Gozal, E.**: Episodic hypoxia enhances the late hypoxic ventilatory response in the developing rat: Putative role of neuronal NO synthase. *Am. J. Physiol. (Regulatory Integrative and Comparative Physiology)* 1999; 276:R17-R22.
15. Forman, H.J., Zhou, H., **Gozal, E.** and Torres, M.: Modulation of the alveolar macrophage superoxide production by protein phosphorylation. *Environmental Health Perspectives* 1998; 106:1185-1190 (Suppl. 5).
16. **Gozal, E.**, Simakajornboon, N., Dausman, J.D., Xue, Y.-D., Corti, M., El-Dahr, S. and Gozal, D.: Hypoxia induces selective SAPK/JNK-2-AP-1 pathway activation in the nucleus tractus solitarius of the conscious rat. *J. Neurochem.* 1999; 73:665-674.
17. Gozal, D., Simakajornboon, N., Czaplá, M.A. Xue, Y.D., **Gozal E.**, Vlasic, V., Lasky, J.A. and Liu, J.Y.: Brainstem activation of Platelet-derived growth factor β receptor modulates components of the late phase of the hypoxic ventilatory response. *J. Neurochem.* 2000; 74:310-319.
18. Gozal, D., **Gozal, E.** and Simakajornboon, N.: Signaling pathways of the acute hypoxic ventilatory response in the nucleus tractus solitarius. *Respir. Physiol.* 121:209-221, 2000.
19. Simakajornboon, N., **Gozal, E.**, Gozal, Y.M. and Gozal, D.: Hypoxia induces activation of a NMDA glutamate receptor - protein kinase C pathway in the dorsocaudal brainstem of the conscious rat. *Neurosci. Lett.* 2000; 278:17-20.
20. Alea, O.A., Czaplá, M.A., Lasky, J.A., Simakajornboon, N., **Gozal, E.** and Gozal, D.: PDGF β receptor expression in the dorsocaudal brainstem is temporally associated with ventilatory acclimatization to hypoxia in the rat. *Am. J. Physiol. (Regulatory Integrative and Comparative Physiology)* 2000; 279:R1625-R1633.
21. Vlasic, V., Simakajornboon, N., **Gozal, E.** and Gozal, D.: PDGF β receptor expression in the dorsocaudal brainstem parallels hypoxic ventilatory depression in the developing rat. *Pediatr. Res.* 2001; 50:236-241.
22. Simakajornboon, N., **Gozal, E.**, and Gozal, D.: Developmental patterns of NF κ B activation during acute hypoxia in caudal brainstem of the rat. *Dev. Brain Res.* 2001; 127:175-183.
23. Schurr, A., Payne, R.S., Tseng, M.T., **Gozal, E.** and Gozal, D.: Excitotoxic preconditioning elicited by both glutamate and hypoxia and abolished by lactate transport inhibition in rat hippocampal slices. *Neurosci. Lett.* 2001; 307:151-154.
- Cavarra, E., Brody, A.R, Friedman, M., Pardo, A., and Selman, M.: Tumor necrosis factor receptor deficiency alters matrix metalloproteinase 13/tissue inhibitor of metalloproteinase 1 expression in murine silicosis. *Am. J. Resp. Crit. Care Med.* 2001; 163:244-252.
25. Simakajornboon, N., Zerlip, N.J., **Gozal, E.**, Anonetapipat, J.W. and Gozal, D.: In vivo PDGF β receptor activation in the dorsocaudal brainstem of the rat prevents hypoxia-induced apoptosis via activation of Akt and BAD. *Brain Res.* 2001; 895:111-118
26. **Gozal, E.**, and Gozal, D.: Respiratory plasticity following intermittent hypoxia: developmental interactions. *J. Appl. Physiol.* 2001; 90:1995-1999.
27. **Gozal, E.**, Forman, H.J. and Torres M.: ADP stimulates the respiratory burst without activation of ERK and AKT in rat alveolar macrophages. *Free Radical Biology and Medicine* 2001; 31:679-687.
28. **Gozal, E.**, Row, B.W., Schurr, A. and Gozal, D.: Developmental Differences in Cortical and Hippocampal Vulnerability to Intermittent Hypoxia in the Rat. *Neurosci. Lett.* 2001; 305:197-201.

29. Gozal, D., **Gozal, E.**, Reeves, S.R. and Lipton, A.J.: Gasping and autoresuscitation in the developing rat: effect of antecedent intermittent hypoxia. *J. Appl. Physiol.* 2002; 92: 1141-1144.
30. Ortiz, L.A., Champion, H.C., Lasky, J.A., Gambelli, F., **Gozal, E.**, Hoyle, G.W., Beasley, M.B., Hyman, A.L., Friedman, M. and Kadowicz, P.J.: Enalapril protects mice from pulmonary hypertension by inhibiting TNF-mediated activation of NF- κ B and AP-1. *Am. J. Physiol. (Lung Cellular and Molecular Physiology)* 2002; 282: L1209-L1221.
31. **Gozal, E.**, Ortiz, L.A., Zou, X., Burow, M.E., Lasky, J.A. and Friedman, M.: Silica-induced apoptosis in murine macrophage: involvement of TNF α and NF- κ B activation. *Am. J. Resp. Cell Mol. Biol.* 2002; 27:91-98.
32. **Gozal, E.**, Gozal, D., Pierce, W.M., Thongboonkerd, V., Scherzer, J.A., Sachleben Jr., L.R., Guo, S.Z., Cai and J., Klein, J.B. : Proteomic analysis of CA1 and CA3 regions of rat hippocampus and differential susceptibility to intermittent hypoxia. *J Neurochem.* 2002; 83: 1-14.
33. Thongboonkerd, V., **Gozal, E.**, Sachleben Jr., L.R., Arthur, J.M., Pierce, W.M., Cai, J., Chao, J., Bader, M., Pesquero, J.B., Gozal, D. and Klein, J.B.: Proteomic analysis reveals alterations in the renal kallikrein pathway during hypoxia-induced hypertension. *J. Biol. Chem.* 2002; 277:34708-34716.
34. Snow, A., **Gozal, E.**, Malhotra, A., Tiosano, D., Perlman, R., Vega, C., Shahar, E., Gozal, D., Hochberg, Z. and Pillar, G.: Severe hypersomnolence after pituitary/hypothalamic surgery in children: Clinical characteristics and potential mechanisms. *Pediatrics*, 2002; 110: e74.
35. Reeves, S.R., **Gozal, E.**, Guo, S.Z., Sachleben, L.R., Brittian, K.R., Lipton, A.J. and Gozal, D. Effect of long-term intermittent and sustained hypoxia on hypoxic ventilatory and metabolic responses in the adult rat. *J Appl. Physiol.* 2003; 95: 1767-1774.
36. Klein, J.B., Gozal, D., Pierce, W.M., Thongboonkerd, V., Scherzer, J.A., Sachleben, L.R., Guo, S.Z., Cai, J. and **Gozal, E.**: Proteomic identification of a novel protein regulated in CA1 and CA3 hippocampal regions during intermittent hypoxia. *Respir. Physiol. Neurobiol.* 2003; 136:91-103.
37. Row, B.W., Goldbart, A., **Gozal, E.** and Gozal, D.: Spatial pre-training attenuates hippocampal impairments in rats exposed to intermittent hypoxia. *Neurosci. Lett.* 2003; 339: 67-71.
38. Li, R.C., Row, B.W., **Gozal, E.**, Kheirandish, L., Brittian, K.R., Guo, S.Z., Sachleben Jr., L.R. and Gozal, D.: Cyclooxygenase 2 and intermittent hypoxia-induced spatial deficits in the rat. *Am. J. Respir. Crit. Care Med.* 2003; 168:469-475.
39. Zhang, S.X.L., Gozal, D., Sachleben Jr., L.R., Rane, M., Klein, J.B. and **Gozal, E.**: Hypoxia induces an autocrine-paracrine survival pathway via PDGF-B/PDGF-beta receptor/PI3K/Akt signaling in RN46A neuronal cells. *FASEB J.* 2003; 17:1709-1711.
40. Goldbart, A., Row, B.W., Kheirandish, L., Schurr, A., **Gozal, E.**, Guo, S.Z., Payne, R.S., Cheng, Z., Brittian, K.R. and Gozal, D.: Intermittent hypoxic exposure during light phase induces changes in cAMP response element binding protein activity in the rat CA1 hippocampal region: Water maze performance correlates. *Neuroscience* 2003; 122 : 585-590.
41. Gozal, D., Row, B.W., **Gozal, E.**, Kheirandish, L., Neville, J.J., Brittian, K.R., Sachleben Jr., L.R. and Guo, S.Z.: Temporal aspects of spatial task performance during intermittent hypoxia in the rat: Evidence for Neurogenesis. *Eur. J. Neurosci.* 2003; 18:2335-2342.
42. Hui, A.S., Striet, J. B., Gudelsky, G., Soukhova, G.K., **Gozal, E.**, Beitner-Johnson, D., Guo, S.Z., Sachleben Jr., L.R., Haycock, J.W., Gozal, D. and Czyzyk-Krzeska, M.F.: Regulation of catecholamine by sustained and intermittent hypoxia in neuroendocrine cells and sympathetic neurons. *Hypertension* 2003; 42: 1130-1136.
43. Li, R.C., Row, B.W., Kheirandish, L., Brittian, K.R., **Gozal, E.**, Guo, S.Z., Sachleben Jr., L.R. and Gozal, D.: Nitric oxide synthase and intermittent hypoxia-induced spatial learning deficits in the rat. *Neurobiol. Dis.* 2004; 17:44-53.

44. **Gozal, E.**, Sachleben Jr., L.R., Rane, M.J., Vega, C., Gozal, D.: Mild Sustained and Intermittent Hypoxia Induce Apoptosis in PC-12 Cells via Different Mechanisms. *Am. J. Physiol. Cell Physiol.* 2005; 288:C535-C542.
45. **Gozal, E.**, Shah, Z.A., Pequignot, J.M., Pequignot, J., Sachleben Jr., L.R., Czyzyk-Krzeska, M.F., Li, R.C., Guo, S.Z., Gozal, D.: Tyrosine Hydroxylase Expression and Activity in the Rat Brain: Differential Regulation Following Long-term Intermittent or Sustained Hypoxia. *J. Appl. Physiol.* 2005; 99: 642 – 649.
46. Rane, M.J., Gozal, D., Butt, W., **Gozal, E.**, Pierce, W.M., Guo, S.Z., Wu, R., Goldbart, A.D., Thongboonkerd, V., McLeish, K.R., Klein, J.B.: GABA_B Receptors stimulate neutrophil chemotaxis during ischemia-Reperfusion. *J. Immunol.* 2005; 174: 7242-7249.
47. Ovechkin, A.V., Lominadze, D., Sedoris, K.J., **Gozal, E.**, Robinson, T.W., Roberts, A.M.: Inhibition of inducible nitric oxide synthase attenuates platelet adhesion in subpleural arterioles caused by lung ischemia reperfusion in rabbits. *J Appl. Physiol.* 2005; 99: 2423-2432.
48. Benton, R.L., Woock, J.P., **Gozal, E.**, Hetman, M., Whittemore, S.R.: Intraspinal application of endothelin results in focal ischemic injury of spinal gray matter and restricts the differentiation of engrafted neural stem cells. *Neurochem. Res.* 2005; 30: 809-823.
49. Klein, J.B., Barati, M.T., Gozal, D., Pierce, W.M., Wu, R., Sachleben, L.R., Trent, J.O., **Gozal, E.**, Rane, M.J.: Akt-mediated valosin-containing protein 97 Phosphorylation regulates its association with ubiquitinated proteins. *J. Biol. Chem.* 2005; 280: 31870-31881.
50. Vega, C., Sachleben Jr., L.R., Gozal, D., **Gozal E***. Differential metabolic adaptation to acute and long term hypoxia in rat primary cortical astrocytes. *J. Neurochem.* 2006; 97:872-883.
51. Machaalani, R., Arlotto, M., Waters, K.A., **Gozal, E.**, Berger, F., Dematteis, M. A.: novel method of tissue collection and storage: Validation using SELDI –TOF MS analysis. *Clin. Chem.* 2007; 53 (7): 1387-1389.
52. Dematteis, M., Julien, C., Guillermet, C., Sturm, N., Lantuejoul, S., Mallaret, M., Levy, P., **Gozal, E***.: Intermittent hypoxia induces Early functional and structural cardiovascular remodeling in mice. *Am. J. Resp. Crit. Care Med.* 2008; 177: 227-235, 2008.PMID: 17962641.
53. Sedoris, K.C., Ovechkin, A.V., **Gozal, E.** and Roberts, A.M.: Differential effects of nitric oxide synthesis on pulmonary vascular function during lung ischemia-reperfusion injury. *Arch. Physiol. Biochem.* 2009; 115(1):34-46.. PMID: 19267281.
54. Clark, C.B., Rane, M.J., El-Mehdi, D., *Miller, C.J., Sachleben Jr., L.R., **Gozal, E***.: Role of oxidative stress in Geldanamycin-induced cytotoxicity and disruption of Hsp90 signaling complex *Free Radicals Biol Med.* 2009; 47: 1440-1449. PMID:19703551.
55. Machaalani, R., **Gozal, E.**, Berger, F., Waters, K.A., Dematteis, M.: The effect of post- mortem intervals on regional brain protein profiles in rats using SELDI-TOF MS analysis. *Neurochem. Int.* 2010; 57 (6): 655-661. PMID:20708053.
56. Sedoris, K.C., **Gozal, E.**, Ovechkin, A.V., Theile, A.R., Roberts, A.M.: Interplay of Endothelial and Inducible Nitric Oxide Synthases Modulate the Vascular Response to Ischemia-Reperfusion in the Rabbit Lung. *Acta Physiologica.* 2012; 204 (3): 331-343. PMID: 21827639.
57. Schurr, A. and **Gozal, E.** Aerobic production and utilization of lactate satisfy increased energy demands upon neuronal activation in hippocampal slices and provide neuroprotection against oxidative stress. Special issue: "The link between brain energy homeostasis and neuronal activity", *Front. Pharmacol.* doi: 10.3389/fphar.2011.00096, 2012. *Front Pharmacol.* 2011;2:96. Epub 2012. PMID: 22275901.
58. Dixon, J.T., **Gozal, E.** and Roberts, A.M. Platelet-mediated vascular dysfunction during Acute Lung Injury. *Arch. Physiol. Biochem.* 2012; 118(2):72-82. PMID: 22439828
59. Jagadapillai, R., Mellen, N.M., Sachleben Jr., L.R., **Gozal, E***. Ceftriaxone Preserves Glutamate Transporters and Prevents Intermittent Hypoxia- induced Vulnerability to Brain Excitotoxic Injury. *PLOS ONE* 2014; 9(7):1-11 <http://dx.plos.org/10.1371/journal.pone.0100230>

PMID:25014412

60. Schurr, A. and **Gozal, E** - Research Topic Editors for special issue “Glycolysis at 75: Is it Time to Tweak the First Elucidated Metabolic Pathway in History?” *Frontiers in Neuroenergetics*, 2014.
61. Johnson, P.R., Shah, P.P., Barati, M.T., **Gozal, E.**, Rane, M.J. Molecular chaperones: Ubiquitous Proteins with Great Diversity of Function in Health and Disease. *Current Topics in Biochemical Research* 2015; Vol. 16, 53 – 65.
62. Schurr, A. and **Gozal, E.** Glycolysis at 75: Is it Time to Tweak the First Elucidated Metabolic Pathway in History? *Front. Neurosci.*;9:170. 2015; doi: 10.3389/fnins.2015.00170. eCollection PMID: 26029042.
63. Roberts, A.M., Jagadapillai, R., Vaishnav, R.A., Friedland, R.P., Drinovac, R., Xingyu Lin, X., **Gozal, E***. Increased Pulmonary Arteriolar Tone Associated with Lung Oxidative Stress and Nitric Oxide in a Mouse Model of Alzheimer’s Disease. *Physiological Reports*. 2016; 4(17): e12953. PMID: 27604401.
64. Chen, S.G., Stribinskis, V., Rane, M.J., Demuth, D., **Gozal, E.**, Roberts, A.M., Jagadapillai, R., Liu, R., Choe, K., Shivakumar, B., Son, F., Jin, S., Kerber, R., Adame, A., Masliah, E., Friedland, R.P. Exposure to the Functional Bacterial Amyloid Protein Curli Enhances Alpha-Synuclein Aggregation in Aged Fischer 344 Rats and *Caenorhabditis elegans*. *Scientific Reports. Sci Rep.* 2016; 6:34477. doi: 10.1038/srep34477. PMID:27708338.
65. Jagadapillai, R., Rane, M.J., Lin, X., Roberts, A.M., Hoyle, G.M., Cai, L., **Gozal, E***. Diabetic Pulmonary Fibrosis: A role for platelets and pulmonary vascular injury. *Int. J. Mol. Sci.* 2016; 17, 1853; doi:10.3390/ijms17111853. PMID: 27834824.
67. Ohja, K., **Gozal, E.**, Cai, L., Cai, J., Fahnestock, M., Freedman, J., Switala, A., El-Baz, A., Barnes, G. Neuroimmunologic and Neurotrophic interactions in autism spectrum disorders: relationship to neuroinflammation. *Neuromolecular Med.* 2018; 20(2):161-173. doi: 10.1007/s12017-018-8488-8. PMID:29691724.
68. **Gozal, E***, Miller, C.J., Dematteis, M., Sachleben, Jr. L.R., Schurr, A., Rane, M.J. PKA activity exacerbates hypoxia-induced ROS formation and hypoxic injury in PC-12 cells. *Toxicology Letters* 2017; 5(279):107-114. doi: 10.1016/j.toxlet.2017.07.895. PMID: 279:107-114.
69. Zheng, Z., Ma, T., Lian, X., Gao, J., Wang, W., Weng, W., Lu, X., Sun, W., Cheng, Y., Fu, Y., Rane, M., **Gozal, E.***, Cai L*. Clopidogrel reduces fibronectin accumulation and improves diabetes-induced renal fibrosis. * Co-senior authors. *International Journal of Biological Sciences* 2019; 15(1): 239-252. PMID 30662363.
70. Li, Z., Jagadapillai, R., **Gozal, E**, Barnes, G. Deletion of Semaphorin 3F in Interneurons is Associated with Decreased GABAergic Neurons, Autism-Like Behavior, and Increased Oxidative Stress Cascades. *Mol. Neurobiol.* 2019; 56(8):5520-5538.
<https://doi.org/10.1007/s12035-018-1450-9> PMID 30635860
71. Cai, J., Jagadapillai, R., Barnes, G., **Gozal, E***. Book Chapter: “Experimental Models of Autism Spectrum Disorder” In: “Textbook of Clinical and Basic Neuroscience in Autism Spectrum Disorders” Greg Barnes MD/PhD, Ayman El-Baz PhD, Jasjit Suri PhD Editors. Submitted.

72. Lin, X., Jagadapillai, R., Cai J, Cai L., Shao, G., **Gozal, E***. Metallothionein induction attenuates the progression of lung injury in mice exposed to long-term intermittent hypoxia. *Inflamm Res.* 2020; 69(1):15-26. doi: 10.1007/s00011-019-01287-z. PMID 31707449.
74. Mazzocco, J.C., Jagadapillai, R., **Gozal, E.**, Kong, M., Xu, Q., Barnes, G.N., Freedman, J.H. Disruption of essential metal homeostasis in the brain by cadmium and high fat diet. *Toxicology Reports* 2020; 7:1164-1169. <https://doi.org/10.1016/j.toxrep.2020.08.005> 2020. PMID 32983904.
75. Huang, S., Wang, J., Men, H., Tan, Y., Lin, Q., **Gozal, E.**, Zheng, Y., Cai, L. Cardiac methallothionein overexpression rescues diabetic cardiomyopathy in Akt2-knockout mice. *J. Cell. Mol. Med.* 2021; 25(14): 6828-6840. PMID: 34053181 <https://doi.org/10.1111/jcmm.16687>
76. Roberts, A.M., Moulana, N.Z., Jagadapillai, R., Cai, L., **Gozal, E***. Intravital Assessment of Pre-capillary Pulmonary Arterioles of Type-1 Diabetic Mice Shows Oxidative Damage and Increased Tone in Response to L-NAME. *J. Appl Physiol.* 2021; September 30. doi:10.1152/jappphysiol.00395.2021. Online ahead of print. PMID:34590907.
77. **Gozal, E.***, Jagadapillai, R., Cai, J., Potential Crosstalk between Sonic Hedgehog-Wingless-related Integration Site Signaling and Neurovascular Molecules: Implications for Blood Brain Barrier Integrity in Autism Spectrum Disorder. *J. Neurochem.* 2021; 159 (1): 15-28. doi: 10.1111/jnc.15460. PMID: 34169527.
78. Jagadapillai, R., Qiu, X., Ohja, K., Li, Z., El-Baz, A., Zhu, S., **Gozal, E.***, Barnes, G*. Potential Cross Talk Between Autism Risk Genes and Neurovascular Molecules: A Pilot Study on Impact of Blood Brain Barrier Integrity. * Co-senior authors *Neurobiology of Disease.* 2021; In revisions.

In Preparation:

1. Jagadapillai, R., Mellen, N.M., Sachleben Jr., L.R. **Gozal, E.** Intermittent hypoxia impairs glutamate homeostasis and increases susceptibility to excitotoxic injury in rat organotypic slices.
2. Sedoris, KC, **Gozal E**, Ovechkin AV, Roberts AM. Pulmonary ischemic preconditioning alters lung nitric oxide synthase and attenuates pulmonary vascular resistance during pulmonary reperfusion injury. In submission to *Acta Physiologica*.
3. Johnson, P.R., Wua, R., Jin, S., Michelle Barati, M., **Gozal, E.***, Rane, M.J.*. Nuclear Factor Erythroid Derived 2 (NF-E2) is a pro-apoptotic protein regulated by Akt-dependent phosphorylation in human neutrophils. * Co-senior authors