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Director, Metabolic Nutrition and Exercise Research ([MiNER](#)) Laboratory  
Associate Professor (Tenured), Department of Kinesiology, University of Texas at El Paso  
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[Research Gate Profile](#): h-index 21 (2020) | Research Gate RG Score: 35.38

[Google Scholar Profile](#): h-index 22 (2020)

## **EDUCATION**

2006            PhD – Bioenergetics, East Carolina University, Greenville, NC  
2001            MAED – Exercise Science, University of Nebraska at Kearney, Kearney, NE  
1997            M.Sc. – Physiology, University of Calcutta, Calcutta, India  
1995            B.Sc. – Physiology, University of Calcutta, Berhampore, India

## **PROFESSIONAL EXPERIENCE**

2018 – Present Associate Professor; Department of Kinesiology, UTEP, El Paso, TX  
2012 – Present Director; Metabolic Nutrition and Exercise Research (MiNER) Laboratory,  
The University of Texas at El Paso (UTEP), El Paso, TX  
2019 (Summer) Interim Chair; Department of Kinesiology, The University of Texas at El  
Paso (UTEP), El Paso, TX  
2018 (Summer) Interim Chair; Department of Kinesiology, The University of Texas at El  
Paso (UTEP), El Paso, TX  
2012 – Present Adjunct Assistant Professor; Border Biomedical Research Center, El Paso,  
TX  
2012 – Present Adjunct Assistant Professor; Pennington Biomedical Research Center  
(PBRC), Baton Rouge, LA.  
2012 – 2018 Assistant Professor (Tenure-track); Department of Kinesiology, UTEP, El  
Paso, TX  
2009 – 2012 Instructor; Clinical Research; PBRC, Baton Rouge, LA.  
2007 – 2009 Postdoctoral Researcher; Endocrinology; PBRC; Baton Rouge, LA  
2002 – 2006 Graduate Research/Teaching Assistant; Department of Exercise and Sports  
Sciences; East Carolina University, Greenville, NC;  
1999 – 2001 Graduate Assistant; Department of Health, Physical Ed, Recreation, and  
Leisure Studies; University of Nebraska at Kearney, Kearney, NE  
1997 – 1999 Research Fellow; Indian Institute of Technology, Bombay, India  
1992 – 1997 Project Assistant; University of Calcutta, Calcutta, India

## **HONORS AND AWARDS:**

2019            Mentoring Award – for excellence in student research mentoring, University  
of Texas at El Paso  
2019            Recipient of travel award – American College of Sports Medicine (ACSM)  
annual meeting (NIH BUILDing Scholars) (\$2000)  
2018            College Marshal, College of Health Sciences, University of Texas at El Paso  
2018            Recipient of travel award – American College of Sports Medicine (ACSM)  
annual meeting (NIH BUILDing Scholars) (\$2000)  
2018            5- Year Service Award, University of Texas at El Paso  
2017            Mentoring Award – for excellence in student research mentoring, University  
of Texas at El Paso

- 2017 Recipient of travel award – American Diabetes Association (ADA) annual meeting (NIH BUILDing Scholars) (\$2000)
- 2013 Most Distinguished Faculty Member Award – Center for Excellence in Teaching and Learning, UTEP
- 2008 PAT Simons Travel Grant Recipient; The Obesity Society (TOS)
- 2004 Graduate Students Nutrition Research Fellowship, East Carolina University, NC
- 1999 Reichenbach Scholarship; University of Nebraska at Kearney, NE
- 1995 Topped the honors program (B.Sc. in Physiology), Krishnath College, University of Calcutta, India

**HONORS AND AWARDS RELEVANT TO MENTORED STUDENTS:**

- 2020 Top Ten Senior 2020 Award – University of Texas at El Paso (Student: Isaac Gandara)
- 2020 Best Thesis Award – College of Health Sciences, University of Texas at El Paso (Student: Cesar Meza)
- 2020 Winner of Steven M. Horvath Travel Award – American College of Sports Medicine (Student: Michael Sanchez)
- 2019 Winner of Student Research Development Award – American College of Sports Medicine (Texas Chapter) (Student: Michael Sanchez)
- 2019 Winner of Martin Frank Diversity Travel Awards – Experimental Biology (Student: Cesar Meza)
- 2018 Outstanding Presentation Award at Annual Biomedical Research Conference for Minority Students (ABRCMS) (Student: Zoé Covernali)
- 2018 Winner of 1<sup>st</sup> Position in Graduate Research Presentation at Texas ACSM (Student: Manuel Amador)
- 2017 Winner of 2<sup>nd</sup> Position in Graduate Research Presentation at Texas ACSM (Student: Cesar Meza)
- 2017 Winner of 3<sup>rd</sup> Position in Graduate Research Presentation at Texas ACSM (Student: Manuel Amador)

**PROFESSIONAL ORGANIZATION MEMBERSHIPS**

- American College of Sports Medicine (ACSM)
- American College of Sports Medicine, Texas Chapter (TACSM)
- American Diabetes Association (ADA)
- American Physiological Society (APS)
- American Physiological Society regional chapter formation – Steering Committee member
- El Paso Diabetes Association – Advisory Board Member
- MitoPhysiology
- Sigma Xi
- The Obesity Society (TOS)

## **GRANTS:**

### **Principal Investigator:**

- 2020-2021: Applied and Translational Research Fund, College of Health Sciences; Health and Healthcare Utilization of Hispanic/Latino Subsidized Housing Residents in the Border Region. (Role: Co-PI; PI: Jung). \$7,500
- 2019-2020: Paso del Norte Health Foundation; Qualitative Diabetes Assessment of Patient Education in the County of El Paso TX. (Role: Co-PI; PI: Concha). \$8,900
- 2019-2020: Applied and Translational Research Fund, College of Health Sciences; Neuromuscular Electrical Stimulation (E-Stim) – A Novel Strategy to Improve Insulin Sensitivity. \$7,500
- 2019-2020: Paso del Norte Health Foundation; Diabetes Assessment in the County of El Paso, Texas. \$20,127
- 2016-2017: National Institute of Health (NIH) – Minority Health and Health Disparities Research: In-vitro electrical pulse stimulation as exercise mimetic for human myotubes. \$20,000
- 2014-2015: International Collaborative Research Grant Scheme Victoria University, Melbourne, Australia. \$30,000
- 2012-2013: University Research Institute (URI) program; University of Texas at El Paso; Role of PAT Proteins on Lipid Droplet Mobilization During Exercise Performance \$5,000
- 2007-2008: Pilot and Feasibility Grant from Health & Performance Enhancement and Clinical Obesity Divisions. Pennington Biomedical Research Center. \$25,000

### **Co-Investigator:**

- 2014-2015: Grand Challenges Special Solicitation, University of Texas at El Paso High-Throughput 3D-Visualization of the Mammalian Central and Peripheral Nervous Systems. \$20,000
- 2009-2010: Effect of dietary fat when eaten with fructose versus glucose on insulin resistance and liver fat (PI- George Bray, MD)
- 2008-2009: New Investigator Award; The Obesity Society (PI- Jose Galgani, PhD) Metabolic flexibility to lipid during moderate-intensity exercise in humans (FLEX)
- 2007-2009: USDA special grant (PI- George Bray, MD) Mechanisms of the effect of physical activity on the adaptation to a high fat diet (USDA Exercise)
- 2006-2009: Validation of a paradigm for the evaluation of compounds and drugs that activate mitochondrial biogenesis in skeletal muscle (ACTIV)

## **MANUSCRIPT REVIEWER**

- American Journal of Physiology – Endocrinology and Metabolism
- Applied Physiology Nutrition and Metabolism
- Biochemie
- Biomedicine and Pharmacotherapy
- Diabetes
- European Journal of Endocrinology
- European Journal of Nutrition
- Experimental Physiology
- Frontiers in Endocrinology
- International Journal of Obesity
- Journal of Applied Physiology
- Journal of Diabetes Mellitus
- Journal of Physiology and Biochemistry
- Journal of Sport and Health Science

- Journal of Strength and Conditioning Research
- Obesity
- PLoS ONE

### **GRANT REVIEWER**

- National Sciences and Engineering Research Council of Canada (NSERC; 2015-2018)

### **EDITOR**

- Associate Editor: Biochimie Journal
- Associate Editor: Frontiers in Endocrinology (Obesity)
- Guest editor for Obesity (Special issue – Peripheral Regulator of Obesity) (2017-2019)
  - Frontiers in Endocrinology
  - Frontiers in Public Health
  - Frontiers in Nutrition

### **PUBLICATIONS:**

1. Amador M, Meza CA, McAinch AJ, King GA, Covington JD, **Bajpeyi S**. Exercise-Induced Improvements in Insulin Sensitivity Are Not Attenuated by a Family History of Type 2 Diabetes. *Front Endocrinol (Lausanne)*. 2020;11:120. PubMed PMID: [32231642](#); PubMed Central PMCID: [PMC7088124](#).
2. McAinch AJ, Hryciw DH, **Bajpeyi S**. Editorial: Peripheral Regulators of Obesity. *Front Endocrinol (Lausanne)*. 2019;10:357. PubMed PMID: [31214125](#); PubMed Central PMCID: [PMC6557997](#).
3. Gnaiger, E., Aasander, Frostner, E., Abdul Karim, N.A., Acuna-Castroviejo, D., Adiele, R.C., **Bajpeyi, S.**, ...Zvejniece, L. Mitochondrial respiratory states and rates. *MitoFit Preprint Archives*. [doi:10.26124/mitofit:190001.v6](https://doi.org/10.26124/mitofit:190001.v6)
4. Fernández-Verdejo R, **Bajpeyi S**, Ravussin E, Galgani JE. Metabolic flexibility to lipid availability during exercise is enhanced in individuals with high insulin sensitivity. *Am J Physiol Endocrinol Metab*. 2018 Oct 1;315(4):E715-E722. PubMed PMID: [29870678](#); PubMed Central PMCID: [PMC6230709](#).
5. Toledo FGS, Johannsen DL, Covington JD, **Bajpeyi S**, Goodpaster B, Conley KE, Ravussin E. Impact of prolonged overfeeding on skeletal muscle mitochondria in healthy individuals. *Diabetologia*. 2018 Feb;61(2):466-475. PubMed PMID: [29150696](#); PubMed Central PMCID: [PMC5770194](#).
6. Covington JD, Johannsen DL, Coen PM, Burk DH, Obanda DN, Ebenezer PJ, Tam CS, Goodpaster BH, Ravussin E, **Bajpeyi S**. Intramyocellular Lipid Droplet Size Rather Than Total Lipid Content is Related to Insulin Sensitivity After 8 Weeks of Overfeeding. *Obesity (Silver Spring)*. 2017 Dec;25(12):2079-2087. PubMed PMID: [29071793](#); PubMed Central PMCID: [PMC5705570](#).
7. **Bajpeyi S**, Covington JD, Taylor EM, Stewart LK, Galgani JE, Henagan TM. Skeletal Muscle PGC1 $\alpha$  -1 Nucleosome Position and -260 nt DNA Methylation Determine Exercise Response and Prevent Ectopic Lipid Accumulation in Men. *Endocrinology*. 2017 Jul 1;158(7):2190-2199. PubMed PMID: [28398573](#); PubMed Central PMCID: [PMC5505213](#).

8. **Bajpeyi S**, Pasarica M, Conley KE, Newcomer BR, Jubrias SA, Gamboa C, Murray K, Sereda O, Sparks LM, Smith SR. Pioglitazone-induced improvements in insulin sensitivity occur without concomitant changes in muscle mitochondrial function. *Metabolism*. 2017 Apr;69:24-32. PubMed PMID: [28285649](#).
9. Covington JD, Tam CS, **Bajpeyi S**, Galgani JE, Noland RC, Smith SR, Redman LM, Ravussin E. Myokine Expression in Muscle and Myotubes in Response to Exercise Stimulation. *Med Sci Sports Exerc*. 2016 Mar;48(3):384-90. PubMed PMID: [26460627](#); PubMed Central PMCID: [PMC5665363](#).
10. Covington JD, **Bajpeyi S**. The sirtuins: Markers of metabolic health. *Mol Nutr Food Res*. 2016 Jan;60(1):79-91. PubMed PMID: [26463981](#).
11. Covington JD, Myland CK, Rustan AC, Ravussin E, Smith SR, **Bajpeyi S**. Effect of serial cell passaging in the retention of fiber type and mitochondrial content in primary human myotubes. *Obesity (Silver Spring)*. 2015 Dec;23(12):2414-20. PubMed PMID: [26538189](#); PubMed Central PMCID: [PMC4701579](#).
12. Covington JD, Noland RC, Hebert RC, Masinter BS, Smith SR, Rustan AC, Ravussin E, **Bajpeyi S**. Perilipin 3 Differentially Regulates Skeletal Muscle Lipid Oxidation in Active, Sedentary, and Type 2 Diabetic Males. *J Clin Endocrinol Metab*. 2015 Oct;100(10):3683-92. PubMed PMID: [26171795](#); PubMed Central PMCID: [PMC4596049](#).
13. Covington JD, **Bajpeyi S**, Moro C, Tchoukalova YD, Ebenezer PJ, Burk DH, Ravussin E, Redman LM. Potential effects of aerobic exercise on the expression of perilipin 3 in the adipose tissue of women with polycystic ovary syndrome: a pilot study. *Eur J Endocrinol*. 2015 Jan;172(1):47-58. PubMed PMID: [25342854](#); PubMed Central PMCID: [PMC4247800](#).
14. Johannsen DL, Tchoukalova Y, Tam CS, Covington JD, Xie W, Schwarz JM, **Bajpeyi S**, Ravussin E. Effect of 8 weeks of overfeeding on ectopic fat deposition and insulin sensitivity: testing the "adipose tissue expandability" hypothesis. *Diabetes Care*. 2014 Oct;37(10):2789-97. PubMed PMID: [25011943](#); PubMed Central PMCID: [PMC4170127](#).
15. Tam CS, Covington JD, **Bajpeyi S**, Tchoukalova Y, Burk D, Johannsen DL, Zingaretti CM, Cinti S, Ravussin E. Weight gain reveals dramatic increases in skeletal muscle extracellular matrix remodeling. *J Clin Endocrinol Metab*. 2014 May;99(5):1749-57. PubMed PMID: [24601694](#); PubMed Central PMCID: [PMC4010691](#).
16. Covington JD, Galgani JE, Moro C, LaGrange JM, Zhang Z, Rustan AC, Ravussin E, **Bajpeyi S**. Skeletal muscle perilipin 3 and coatomer proteins are increased following exercise and are associated with fat oxidation. *PLoS One*. 2014;9(3):e91675. PubMed PMID: [24632837](#); PubMed Central PMCID: [PMC3954790](#).
17. **Bajpeyi S**, Myrland CK, Covington JD, Obanda D, Cefalu WT, Smith SR, Rustan AC, Ravussin E. Lipid in skeletal muscle myotubes is associated to the donors' insulin sensitivity and physical activity phenotypes. *Obesity (Silver Spring)*. 2014 Feb;22(2):426-34. PubMed PMID: [23818429](#); PubMed Central PMCID: [PMC3883809](#).
18. Aas V, Bakke SS, Feng YZ, Kase ET, Jensen J, **Bajpeyi S**, Thoresen GH, Rustan AC. Are cultured human myotubes far from home?. *Cell Tissue Res*. 2013 Dec;354(3):671-82. PubMed PMID: [23749200](#).

19. Champagne CM, Han H, **Bajpeyi S**, Rood J, Johnson WD, Lammi-Keefe CJ, Flatt JP, Bray GA. Day-to-day variation in food intake and energy expenditure in healthy women: the Dietitian II Study. *J Acad Nutr Diet*. 2013 Nov;113(11):1532-8. PubMed PMID: [24021734](#).
20. Conley KE, Amara CE, **Bajpeyi S**, Costford SR, Murray K, Jubrias SA, Arakaki L, Marcinek DJ, Smith SR. Higher mitochondrial respiration and uncoupling with reduced electron transport chain content in vivo in muscle of sedentary versus active subjects. *J Clin Endocrinol Metab*. 2013 Jan;98(1):129-36. PubMed PMID: [23150693](#); PubMed Central PMCID: [PMC3537085](#).
21. **Bajpeyi S**, Reed MA, Molskness S, Newton C, Tanner CJ, McCartney JS, Houmard JA. Effect of short-term exercise training on intramyocellular lipid content. *Appl Physiol Nutr Metab*. 2012 Oct;37(5):822-8. PubMed PMID: [22691059](#); PubMed Central PMCID: [PMC3589127](#).
22. Galgani JE, Johannsen NM, **Bajpeyi S**, Costford SR, Zhang Z, Gupta AK, Ravussin E. Role of skeletal muscle mitochondrial density on exercise-stimulated lipid oxidation. *Obesity (Silver Spring)*. 2012 Jul;20(7):1387-93. PubMed PMID: [21681225](#); PubMed Central PMCID: [PMC4104481](#).
23. Muoio DM, Noland RC, Kovalik JP, Seiler SE, Davies MN, DeBalsi KL, Ilkayeva OR, Stevens RD, Kheterpal I, Zhang J, Covington JD, **Bajpeyi S**, Ravussin E, Kraus W, Koves TR, Mynatt RL. Muscle-specific deletion of carnitine acetyltransferase compromises glucose tolerance and metabolic flexibility. *Cell Metab*. 2012 May 2;15(5):764-77. PubMed PMID: [22560225](#); PubMed Central PMCID: [PMC3348515](#).
24. Johannsen DL, Conley KE, **Bajpeyi S**, Punyanitya M, Gallagher D, Zhang Z, Covington J, Smith SR, Ravussin E. Ectopic lipid accumulation and reduced glucose tolerance in elderly adults are accompanied by altered skeletal muscle mitochondrial activity. *J Clin Endocrinol Metab*. 2012 Jan;97(1):242-50. PubMed PMID: [22049170](#); PubMed Central PMCID: [PMC3251940](#).
25. Sparks LM, Moro C, Ukropcova B, **Bajpeyi S**, Civitarese AE, Hulver MW, Thoresen GH, Rustan AC, Smith SR. Remodeling lipid metabolism and improving insulin responsiveness in human primary myotubes. *PLoS One*. 2011;6(7):e21068. PubMed PMID: [21760887](#); PubMed Central PMCID: [PMC3132732](#).
26. Krishnapuram R, Dhurandhar EJ, Dubuisson O, Kirk-Ballard H, **Bajpeyi S**, Butte N, Sothorn MS, Larsen-Meyer E, Chalew S, Bennett B, Gupta AK, Greenway FL, Johnson W, Brashear M, Reinhart G, Rankinen T, Bouchard C, Cefalu WT, Ye J, Javier R, Zuberi A, Dhurandhar NV. Template to improve glycemic control without reducing adiposity or dietary fat. *Am J Physiol Endocrinol Metab*. 2011 May;300(5):E779-89. PubMed PMID: [21266671](#); PubMed Central PMCID: [PMC3093976](#).
27. Anunciado-Koza RP, Zhang J, Ukropec J, **Bajpeyi S**, Koza RA, Rogers RC, Cefalu WT, Mynatt RL, Kozak LP. Inactivation of the mitochondrial carrier SLC25A25 (ATP-Mg<sup>2+</sup>/Pi transporter) reduces physical endurance and metabolic efficiency in mice. *J Biol Chem*. 2011 Apr 1;286(13):11659-71. PubMed PMID: [21296886](#); PubMed Central PMCID: [PMC3064218](#).
28. **Bajpeyi S**, Pasarica M, Moro C, Conley K, Jubrias S, Sereda O, Burk DH, Zhang Z, Gupta A, Kjemis L, Smith SR. Skeletal muscle mitochondrial capacity and insulin

resistance in type 2 diabetes. *J Clin Endocrinol Metab.* 2011 Apr;96(4):1160-8. PubMed PMID: [21307136](#); PubMed Central PMCID: [PMC3070252](#).

29. Costford SR, **Bajpeyi S**, Pasarica M, Albarado DC, Thomas SC, Xie H, Church TS, Jubrias SA, Conley KE, Smith SR. Skeletal muscle NAMPT is induced by exercise in humans. *Am J Physiol Endocrinol Metab.* 2010 Jan;298(1):E117-26. PubMed PMID: [19887595](#); PubMed Central PMCID: [PMC2806106](#).
30. Moro C, Galgani JE, Luu L, Pasarica M, Mairal A, **Bajpeyi S**, Schmitz G, Langin D, Liebisch G, Smith SR. Influence of gender, obesity, and muscle lipase activity on intramyocellular lipids in sedentary individuals. *J Clin Endocrinol Metab.* 2009 Sep;94(9):3440-7. PubMed PMID: [19531593](#); PubMed Central PMCID: [PMC2741707](#).
31. **Bajpeyi S**, Tanner CJ, Slentz CA, Duscha BD, McCartney JS, Hickner RC, Kraus WE, Houmard JA. Effect of exercise intensity and volume on persistence of insulin sensitivity during training cessation. *J Appl Physiol (1985).* 2009 Apr;106(4):1079-85. PubMed PMID: [19196913](#); PubMed Central PMCID: [PMC2698641](#).
32. Moro C, **Bajpeyi S**, Smith SR. Determinants of intramyocellular triglyceride turnover: implications for insulin sensitivity. *Am J Physiol Endocrinol Metab.* 2008 Feb;294(2):E203-13. PubMed PMID: [18003718](#).

#### **INVITED PRESENTATIONS:**

1. October 2020: University of Texas at El Paso, Professional Development Seminar series (BIOL 3192)
2. September 2019: University of Vermont; Exercise – Medicine to improve insulin sensitivity? (*keynote speaker*)
3. September 2017: University of Missouri; Lipid Droplets – Relevance to insulin resistance
4. June 2017: Journey of a scientist; NIH BUILDing Scholars kick-off event
5. April 2017: Texas Tech Health Science Center, El Paso; *Relevance of Intramuscular Lipid to Insulin Resistance*
6. February 2017: American College of Sports Medicine (Texas) chapter, Dallas, TX; *Does Intramyocellular Lipid Really Affect Insulin Sensitivity?*
7. August 2016: Rammohan College, India: *Intramyocellular Lipid, Oxidative Capacity, and skeletal muscle insulin action*
8. Spring 2015 "Exercise, Intramyocellular Lipid and Pat Proteins – *The Potential Role of PLIN3 in fat oxidation*" Health Research Symposium. Seminar
9. Fall 2014: Bajpeyi, Sudip and McAinch Andrew – *Role of endocannabinoids and diet in obesity management.*
10. August 2014; Krishnath College, India: *Exercise training and lipid metabolism*

## **ABSTRACTS OF RESEARCH PRESENTATIONS:**

(†Oral Presentations)

1. Sanchez, M., Mossayebi, A., Sigaroodi, S., Galvan, M., Kisuk, M., Agullo, F., Wagler, A., **Bajpeyi, S.** Effects of Neuromuscular Electrical Stimulation on Insulin Sensitivity and Glycemic Control: A Systematic Review and Meta-Analysis. *American Physiological Society Intersociety Meeting: Integrative Physiology of Exercise, November 9-13, 2020, Virtual.*
2. Sanchez, M., Galvan, M., Tyree, J., Guillen, D., **Bajpeyi, S.** Time Spent in Moderate to Vigorous Physical Activity is Indicative of Better Metabolic Health. *Obesity Week Annual Meeting, Atlanta, GA. November 3-6, 2020*
3. Gándara, I., Sigaroodi, S., Naughton, S., O’Keefe, L., Simcocks, A., Hryciw, D., Mathai, M., McAinch, **Bajpeyi, S.** Effects of fatty acid composition in a high fat diet on skeletal muscle mitochondrial content. *Campus Office of Undergraduate Research Initiatives Spring Symposium, El Paso, TX. El Paso, TX. April 25, 2020*
4. Tyree, J., Guillen, D., Medina, A., Sanchez, M., **Bajpeyi, S.** Effects of Time Spent in Moderate to Vigorous Physical Activity on Lipid Profile. *Campus Office of Undergraduate Research Initiatives Spring Symposium, El Paso, TX. El Paso, TX. April 25, 2020*
5. **Bajpeyi, S.,** Galvan, M., Sanchez, M., Boyle, J., Min, K., Agullo, F., Covington, J. Improvement in glucose metabolism with four weeks of neuromuscular electrical stimulation in sedentary adults. *American Diabetes Association (ADA) 80th Scientific Sessions, Chicago, IL. June 12-16, 2020 (Virtual)*
6. Sanchez, M., Galvan, M., Gandara, I., Nacim, D., Covington, J., Boyle, J., Agullo, F., Min, K., **Bajpeyi, S.** Improvement in Insulin Sensitivity with Four Weeks of Neuromuscular Electrical Stimulation in Overweight/obese Sedentary Adults. *American College of Sports Medicine Annual Meeting, San Francisco, CA, May 26 – 30, 2020 (Virtual)*
7. Min, K., Huang, Y., Bajpeyi, S., and Bennett, A. Loss of MKP-5 protects cardiac function from pressure overload-induced cardiac hypertrophy. *American College of Sports Medicine Annual Meeting, San Francisco, CA, May 26 – 30, 2020 (Submitted)*
8. **(Finalist for graduate research presentation)**  
Sanchez, M., Galvan, M., Nacim, D., Agullo, F., **Bajpeyi, S.** (2020) Improved glucose tolerance and glucose utilization with Neuromuscular Electrical Stimulation. *Texas Chapter of American College of Sports Medicine – Waco, TX. February 20 – 21, 2020; International Journal of Exercise Science: Conference Proceedings: 2(11), 65.*
9. †**Bajpeyi, S.,** Amador, M., Meza, C., McAinch, A. Increased Insulin Sensitivity with Exercise is not affected by a Family History of Type 2 Diabetes. *The Obesity week, Las Vegas, NV. Nov 3-7, 2019*
10. †McAinch, A. **Bajpeyi, S.** A Family History of Type 2 Diabetes does not affect exercise induced improvement in Insulin Sensitivity *Australian and New Zealand Obesity Society, Sydney, Australia. Oct 16-18, 2019*
11. Nacim, D., Galvan, M., Sanchez, M., **Bajpeyi, S.** Can electrical stimulation induced muscle Contraction improve insulin sensitivity? *Campus Office of Undergraduate Research Initiatives Summer Symposium, El Paso, TX. El Paso, TX. August 3, 2019*
12. Jenkins, J., Meza, C., Amador, M., McAinch, A., **Bajpeyi, S.** (2019). Monophasic glucose response curve reflective of glucose intolerance in young Mexican Americans.



- American Diabetes Association 79<sup>th</sup> Scientific Sessions, San Francisco, CA. June 7-11, 2019*
13. Garcia, M., Hernandez, K., Wagler, A., **Bajpeyi, S.** (2019). Effects of exercise modes to improve insulin sensitivity in obese and patients with type 2 diabetes – a meta-analysis. *American Diabetes Association 79<sup>th</sup> Scientific Sessions, San Francisco, CA, June 7-11, 2019*
  14. Garcia, M., Figueroa, C., Covington, J. D. Smith, S. R., **Bajpeyi, S.** (2019). Electrical pulse stimulation induced increase in lipid and mitochondria depends on donor’s physical activity level. *American College of Sports Medicine Annual Meeting, Orlando, Florida, May 29 – June 1, 2019*
  15. Galvan, M., Jenkins, J., **Bajpeyi, S.** Metabolic Profile of a 16 Year Old Female Tennis Player – A Case Study. *American College of Sports Medicine Annual Meeting, Orlando, Florida, May 29 – June 1, 2019*
  16. Jenkins, J., Earnest, C. P., Conley, K., Smith, S. R., **Bajpeyi, S.** A family history of type 2 diabetes does not limit exercise induced improvement in aerobic fitness and mitochondrial function in normoglycemic sedentary men. *American College of Sports Medicine Annual Meeting, Orlando, Florida, May 29 – June 1, 2019*
  17. **Bajpeyi, S.**, Amador, M., Meza, C., Garcia, M., McAinch A. Family history of type 2 diabetes and substrate metabolism following 8 weeks of combined exercise training. *Exercise Metabolism 2019, Sitges, Spain, May 5-7 2019*
  18. **(Winner of Martin Frank Diversity Travel Award)**  
Meza, C., Garcia, M., Serrano, J., Gomez, M., Amador, M., McAinch, A., **Bajpeyi, S.** The role of circulating miRNA-29a in exercise-training induced improvements in insulin sensitivity. *Experimental Biology, Orlando, FL April 6-9, 2019*
  19. Gandara, I. Naughton, S. O’Keefe, L. Simcocks, A. Hryciw, D. Mathai, M. McAinch, A. **Bajpeyi, S.** Effects of fatty acid composition in a high fat diet on skeletal muscle mitochondria content and PLIN3. *Campus Office of Undergraduate Research Initiative Spring Symposium, 2019, El Paso, TX. April 13, 2019*
  20. Rosas, V. Jenkins, J. Varela, A. Covington, J. **Bajpeyi S.** Exercise Leads to Increase in Smaller Lipid Droplet Morphology in Peripheral Region of Muscle Fiber. *Campus Office of Undergraduate Research Initiative Spring Symposium, 2019, El Paso, TX. April 13, 2019*
  21. Garcia, M., Gomez, M., Meza, C., McAinch, A., **Bajpeyi, S.** The Effects of a Family History of Type 2 Diabetes on Circulating miRNA-155 and miRNA-133. *Campus Office of Undergraduate Research Initiative Spring Symposium, 2019, El Paso, TX. April 13, 2019*
  22. Rosas, V. Jenkins, J. Varela, A. Covington, J. **Bajpeyi S.** Exercise Leads to Increase in Smaller Lipid Droplet Morphology in Peripheral Region of Muscle Fiber. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; International Journal of Exercise Science: Conference Proceedings: 2(11), 65.*
  23. Jenkins, J., Earnest, C. P., Conley, K., Smith, S.R., **Bajpeyi, S.**, A Family History of Type 2 Diabetes does not Impact Skeletal Muscle Lipid Content. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; International Journal of Exercise Science: Conference Proceedings: 2(11), 75*
  24. **(Finalist for graduate research presentation)**

- Galvan, M., Jenkins, J., **Bajpeyi, S.**, The effect of neuromuscular electrical stimulation on metabolic changes in a sedentary population: A pilot study. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; International Journal of Exercise Science: Conference Proceedings: 2(11)*, 80.
25. **(Finalist for undergraduate research presentation)**  
 Gándara, I., Naughton, S., O’Keefe, L., Simcocks, A., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Effects of Fatty Acid Composition in a High Fat Diet on Skeletal Muscle Mitochondrial Content. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; International Journal of Exercise Science: Conference Proceedings: 2(11)*, 76.
26. Garcia, M., Wagler, A., **Bajpeyi, S.** Effects of Exercise Modes to Improve Insulin Sensitivity and Fat Oxidation in Obese and Patients with Type 2 Diabetes – a Meta-Analysis. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; International Journal of Exercise Science: Conference Proceedings: 2(11)*, 62.
27. Gomez, M., **Bajpeyi, S.** (2019). The Effects of a Single Bout of Endurance Exercise on Glucose Transporter-4 (GLUT-4) Content. *Texas Chapter of American College of Sports Medicine – Forth Worth, TX. February 28 – March 1, 2019; 2(11)*, 68.
28. Orozco, N., Jenkins, J., Galvan, M., **Bajpeyi, S.** Neuromuscular electrical stimulation: A pilot study. *BUILDing SCHOLARS Symposium and Consortium Meeting, El Paso, TX. Fall 2018*
29. Orozco, N. Jenkins, J., Galvan, M., **Bajpeyi, S.** (2018). Two weeks of neuromuscular electrical stimulation delays the onset of fatigue during lower body anaerobic exercise. *Annual Biomedical Research Conference for Minority Students, Indianapolis, Indiana, November 14-17, 2018.*
30. **(Winner of outstanding presentation award)**  
 Covernali, Z., Garcia, M., Jenkins, J., Amador, M., **Bajpeyi, S.** (2018). Time spent in lifestyle activities is associated with better insulin sensitivity and physical fitness in a sedentary population. *Annual Biomedical Research Conference for Minority Students, Indianapolis, Indiana, November 14-17, 2018*
31. Gomez, M., Meza, C., Garcia, M., De La Pena, C., **Bajpeyi, S.** The effects of a single bout of endurance exercise on glucose transporter 4 (GLUT4) content and translocation to cell membrane. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2018*
32. Fernandez, D., Meza, C., Gandara, I., Garcia, M., **Bajpeyi, S.** Effects of dietary fatty acid composition on perilipin 3 (PLIN3) and hormone sensitive lipase (HSL) proteins in skeletal muscle. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2018*
33. Orozco, N., Jenkins, J., Galvan, M., **Bajpeyi, S.** Neuromuscular electrical stimulation: A pilot study. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2018*
34. Garcia, M., Meza, C., Amador, M., **Bajpeyi, S.** The Effects of Combined Exercise on Circulating miRNA-29 and miRNA-143 in Individuals with Type 2 Diabetes. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2018*

35. Rodriguez, A., Rosas, V., Meza, C., Varela-Ramirez, A., **Bajpeyi, S.** Skeletal Muscle Glucose Metabolism is Affected by Dietary Fatty Acid Composition. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Spring, 2018*
36. Rosas, V., Maldonado, M., Meza, C., Covington, J., Varela-Ramirez, A., **Bajpeyi, S.** A single bout of exercise improves skeletal muscle lipid droplet morphology. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Spring, 2018*
37. Gándara, I., Meza, C., Varela-Ramirez, A., McAinch, A., **Bajpeyi, S.** Effects of fatty acid composition in a high fat diet on skeletal muscle mitochondrial biogenesis. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Spring, 2018*
38. Garcia, M., Meza, C., Amador, M., **Bajpeyi, S.** The role of caloric expenditure on exercise-induced improvements in insulin sensitivity and maximal aerobic capacity. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Spring, 2018*
39. Meza, C., Amador, M., Garcia, M., Figueroa, C., McAinch, A., **Bajpeyi, S.** Lower Glucose Tolerance in Normoglycemic, Healthy Hispanics with a Family History of Type 2 Diabetes. *American College of Sports Medicine Annual Meeting, Minneapolis, MN, May 29 – June 2, 2018*
40. Amador, M., Meza, C., Garcia, M., Figueroa, C., King, G., McAinch, A., **Bajpeyi, S.**, A Family History of Type 2 Diabetes Does Not Affect Exercise Induced Improvement in Insulin Sensitivity and Metabolic Flexibility. *American College of Sports Medicine Annual Meeting, Minneapolis, MN, May 29 – June 2, 2018*
41. Garcia, M., Amador, M., Meza, C., Figueroa, C., McAinch, A., **Bajpeyi, S.** Lower VO<sub>2</sub>max in individuals with a family history of diabetes is normalized after 8-weeks exercise. *American College of Sports Medicine Annual Meeting, Minneapolis, MN, May 29 – June 2, 2018*
42. **(Winner of 1<sup>st</sup> position in graduate research presentation)**  
Amador, M., Meza, C., Garcia, M., Figueroa, C., King, G., McAinch, A., **Bajpeyi, S.**, Exercise Mediated Improvements in Insulin Sensitivity and Metabolic Flexibility are not Inhibited by a Family History of Type 2 Diabetes. *Texas Chapter of the American College of Sports Medicine Annual Meeting, Austin, TX, March 1 – 2, 2018. International Journal of Exercise Science: Conference Proceedings, 2(10), 60.*
43. **(Finalist for undergraduate research presentation)**  
Garcia, M., Amador, M., Meza, C., Figueroa, C., McAinch, A., **Bajpeyi, S.** A Family History of Type 2 Diabetes does Not Impact Maximal Aerobic Capacity in Normoglycemic, Hispanic Males. *Texas Chapter of the American College of Sports Medicine Annual Meeting, Austin, TX, March 1 – 2, 2018. International Journal of Exercise Science: Conference proceedings, 2(10), 40.*
44. Meza, C., Amador, M., Garcia, M., Figueroa, C., McAinch, A., **Bajpeyi, S.** A Family History of Type 2 Diabetes May Impair Glucose Area Under the Curve in Young, Healthy Hispanics. *Texas Chapter of the American College of Sports Medicine Annual Meeting, Austin, TX, March 1 – 2, 2018. International Journal of Exercise Science: Conference Proceedings, 2(10), 34.*
45. Figueroa, C., Amador, M., Meza, C., Garcia, M., McAinch, A., **Bajpeyi, S.**, Exercise-Induced Improvement in Oxygen Consumption at Ventilatory Threshold is Unaffected by Family History of Diabetes. *Texas Chapter of the American College of Sports*

- Medicine Annual Meeting, Austin, TX, March 1 – 2, 2018. International Journal of Exercise Science: Conference Proceedings: 2(10), 57*
46. †Meza, C., Amador, M., De La Peña, C., Figueroa, C., Garcia, M., Maldonado, M., Covington, J., McAinch, A., **Bajpeyi, S.** Lower glucose tolerance in offspring of Hispanic Type 2 Diabetes patients. *Graduate Student Research Expo, El Paso, TX University of Texas at El Paso, El Paso, TX November 10, 2017.*
  47. †Amador, M., Meza, C., De La Peña, C., Figueroa, C., Garcia, M., Maldonado, M., Covington, J., McAinch, A., King, G., **Bajpeyi, S.**, Exercise Induced Improvements in Insulin Sensitivity, Metabolic Flexibility and Aerobic Fitness are Not Influenced by a Family History of Type 2. *Graduate Student Research Expo, El Paso, TX University of Texas at El Paso, El Paso, TX November 10, 2017.*
  48. Amador, M., Meza, C., Mangadu, T., **Bajpeyi, S.**, Eight weeks of Exercise Training Restores Metabolic Defects in Normoglycemic Hispanic Men with a Family History of Type 2 Diabetes. *World Congress on Targeting Metabesity, October 30-31, 2017. London, United Kingdom*
  49. Fernandez, D., Meza, C., De La Pena, C., Montenegro, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., Varela, A., McAinch, A., **Bajpeyi, S.** Effects of high fat diets, differing in fatty acid composition, on insulin sensitivity. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2017.*
  50. **(Winner of 1<sup>st</sup> place in research presentation)**  
Amador, M., Meza, C., De La Peña, C., Figueroa, C., Garcia, M., Maldonado, M., Covington, J., McAinch, A., King, G., **Bajpeyi, S.**, Insulin Sensitivity and Metabolic Flexibility Improvements Following Eight Weeks of Combined Exercise Training in Normoglycemic, Sedentary, Young Mexican-American Men. *El Paso Community College, University of Texas at El Paso, New Mexico State University Graduate Research Symposium. El Paso Community College, El Paso TX. July 31st, 2017.*
  51. **(Winner of 1<sup>st</sup> place in research presentation)**  
Meza, C., Montenegro, C., De La Peña, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., Varela, A., McAinch, A., and **Bajpeyi, S.** (2017) A high fat diet, rich in monounsaturated fatty acids, protects against impairments in GLUT4 translocation. *El Paso Community College, University of Texas at El Paso, New Mexico State University Graduate Research Symposium. El Paso Community College, El Paso TX. July 31st, 2017.*
  52. Amador, M., Meza, C., Montenegro, C., Herrera, M., McAinch, A., King, G.A., **Bajpeyi, S.** (2017). Exercise induced improvement in insulin sensitivity and metabolic flexibility in normoglycemic, sedentary, young, Mexican American men. *77<sup>th</sup> Scientific Sessions, American Diabetes Association, San Diego, CA; June 9-13, 2017*
  53. Meza, C., Montenegro, C., De La Pena, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., Varela, A., McAinch, A., **Bajpeyi, S.** High fat diet rich in polyunsaturated fatty acids downregulates GLUT 4, but not skeletal muscle glycogen. *American College of Sports Medicine Annual Meeting, Denver, CO. May 30-June 3, 2017.*
  54. Garcia, M., Meza, C., Montenegro, C., De La Pena, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., Varela, A., McAinch, A., **Bajpeyi, S.** Replacing saturated with monounsaturated fatty acids, in a high fat diet, protects against impaired skeletal muscle glucose transport. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2017*

55. De La Pena, C., Meza, C., Montenegro, C., Maldonado, M., Varela, A., Covington, J., **Bajpeyi, S.**, The effects of a high fat diet and physical activity on mitochondria, PLIN3, and PLIN5 protein contents in humans. *Campus Office of Undergraduate Research Initiative Spring Symposium, El Paso, TX. Summer, 2017*
56. Meza, C., Montenegro, C., De La Peña, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., Varela, A., McAinch, A., and **Bajpeyi, S.** (2017). A high-fat diet rich in polyunsaturated fatty acids downregulates glut4, but not skeletal muscle glycogen. *American College of Sports Medicine Annual Meeting, May 30 – June 3, 2017, Denver, CO*
57. **(Finalist for undergraduate research presentation)**  
Montenegro, C., De La Peña, C., Meza, C., Naughton, S., Simcocks, A., O’Keefe, L., Hryciw, D., Mathai, M., McAinch, A. **Bajpeyi, S.** High fat diet rich in saturated fatty acids, but not monounsaturated fatty acids, impairs glycogen preservation after adiponectin treatment. *Texas Chapter of American College of Sports Medicine – Waco, TX. February 16-17, 2017; International Journal of Exercise Science: Conference Proceedings, 2(9),18.*
58. **(Winner of 2<sup>nd</sup> position in graduate research presentation)**  
Meza, C., Montenegro, C., De La Peña, C., O’Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** High fat diet induced obesity impairs skeletal muscle glycogen and lipid preservation after adiponectin incubation. *Texas Chapter of American College of Sports Medicine – Waco, TX. February 16-17, 2017. International Journal of Exercise Science: Conference Proceedings, 2(9), 28.*
59. **(Finalist for undergraduate research presentation)**  
De La Peña, C., Meza, C., Montenegro, C., Simcocks, A., Naughton, S., O’Keefe, L., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Lower skeletal muscle mitochondrial content after a high fat diet rich in polyunsaturated fatty acids compared to a high fat diet rich in monounsaturated fatty acids. *Texas Chapter of American College of Sports Medicine – Waco, TX. February 16-17, 2017. International Journal of Exercise Science: Conference Proceedings, 2(9), 27.*
60. **(Winner of 3<sup>rd</sup> position in graduate research presentation)**  
Amador, M., Meza, C., Montenegro, C., Covington, J., McAinch, A., King, G., **Bajpeyi, S.** Eight weeks of combined exercise training induced improvements in insulin sensitivity is associated with improvement in aerobic capacity, but not with improvement in strength. *Texas Chapter of American College of Sports Medicine – Waco, TX. February 16-17, 2017. International Journal of Exercise Science: Conference Proceedings: 2(9), 48.*
61. Mangadu, T., **Bajpeyi, S.**, Orezza, M. C. E., Leos, J. (2017). Implications for Diabetes Prevention at the Community Level from a U.S.-MX Border Intervention: The “Eat Well! El Paso” Restaurant Initiative. *Today’s Research Tomorrow’s Therapies. Miami, FL. January 22-25, 2017*
62. Naughton, S., Meza, C., Simcocks, A., Montenegro, C., O’Keefe, L., De La Pena, C., Mathai, M., Hryciw, D., **Bajpeyi S.**, McAinch, A. Adiponectin is capable of sparing glycogen content with a monounsaturated fatty acid rich high fat diet. *Metabolic Diseases; Breakthrough Discoveries in Diabetes & Obesity - Melbourne, Australia. December 1-2, 2016.*

63. Meza, C., Montenegro, C., De La Pena, C., O'Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** (2016). A high fat diet rich in monounsaturated fat preserves skeletal muscle glycogen content following adiponectin incubation. *Graduate Student Research Expo, El Paso, Tx University of Texas at El Paso, El Paso, TX November 11, 2016.*
64. Amador, M, Covington, J.D., McAinch, A, King, G.A. **Bajpeyi, S.** Impact of family history of type 2 diabetes on exercise induced improvement in insulin sensitivity and metabolic flexibility in normoglycemic sedentary men. *Graduate Student Research Expo, El Paso, Tx University of Texas at El Paso, El Paso, TX November 11, 2016.*
65. Amador, M., Meza, C., Perales, J., Dorgo, S., **Bajpeyi, S.** Six Weeks of Sprint Training Improves Sprint Time and Aerobic Fitness Independent of Training Performed on a Track or Treadmill. *APS Intersociety Meeting: The Integrative Biology of Exercise VII, Phoenix, AZ, November 2-4, 2016.*
66. Montenegro, C., De La Pena, C., Meza, C., Naughton, S., Simcocks, A., O'Keefe, L., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Adiponectin is more effective in sparing glycogen content with high fat diet in dietary monounsaturated fat compared to diets high in saturated and polyunsaturated fat. *American Physiological Society: The Integrative Biology of Exercise Chapter VII– Phoenix, AZ. November 2-4, 2016.*
67. Meza, C., Montenegro, C., De La Pena, C., O'Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Adiponectin incubation decreases skeletal muscle glycogen content after reverting to a chow diet following diet induced obesity. *American Physiological Society: The Integrative Biology of Exercise Chapter VII – Phoenix, AZ. November 2-4, 2016.*
68. De La Pena, C., Meza, C., Montenegro, C., Simcocks, A., Naughton, S., O'Keefe, L., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Skeletal muscle glycogen content is unaffected by dietary fatty acid composition. *American Physiological Society: The Integrative Biology of Exercise Chapter VII. Phoenix, AZ. November 2-4, 2016.*
69. Herrera, M. N., Amador, M., Meza, C., Uranga, S., Montenegro, C., De La Pena, C., Mata, A. D., **Bajpeyi, S.** The effects of family history of type 2 diabetes and 8-weeks of combined training on insulin sensitivity and metabolic flexibility in a Hispanic population. *BUILDing SCHOLARS Fall Symposium, University of Texas at El Paso; El Paso; TX September 2016.*
70. Meza, C., Montenegro, C., De La Pena, C., O'Keefe, L., Naughton, S., Simcocks, A., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Adiponectin incubation reduces glycogen content with a chow diet following diet-induced obesity, however increases glycogen in diets high in monounsaturated fat. *Campus Office of Undergraduate Research Initiative Symposium, El Paso, TX. Aug 6, 2016.*
71. Perales, J., Amador, M., **Bajpeyi, S.**, Dorgo, S., Effects of Treadmill and Overground Sprint Training Modes On Sprint Speed, Body Composition and Aerobic Power. *National Strength and Conditioning Association 2016 National Conference, New Orleans, LA. July 6-9, 2016*
72. Perales, J., Dorgo, S., **Bajpeyi, S.** Comparison of the effectiveness of treadmill vs. overground spring training on overground and treadmill maximum running speed. *National Strength and Conditioning Association 2016 National Conference, New Orleans, LA., July 6-9, 2016.*
73. Covington, J.D., Johannsen, D.L., Herbert, C., Zhang, Z., Conley, K.E., Tam, C.S., Smith, S.R., Ravussin, E., **Bajpeyi, S.** Eight weeks of overfeeding decrease

- mitochondrial content, function, SIRT6 and mitochondrial SIRT3 protein content in humans. *American Diabetes Association 76<sup>th</sup> scientific sessions, New Orleans, LA June 10-14, 2016*
74. Conde, D., Gamboa, C., Covington, J., King, G. A., **Bajpeyi, S.** Effects of 11.5 or 30 volts of pulse stimulation on mitochondrial density *in vitro*. *American College of Sports Medicine – Boston, MA. May 31- June 4, 2016*
  75. Amador, M., Perales, J. A., Montalvo, S., **Bajpeyi, S.**, Dorgo, S. The Effects of Two Different Sprint Training Modalities on Sprint Speed, Aerobic Fitness and Body Composition. *Texas Chapter of the American College of Sports Medicine Annual Meeting, College Station, Texas; March 2-4, 2016*
  76. Konrardy, A. K., Amador, M., Sanchez-Barrios, P., Covington, J. D., Moore, J., McAinch, A., King, G., & **Bajpeyi, S.** Does a first degree family history of T2DM negatively impact insulin sensitivity in Normoglycemic Hispanic males? *Graduate Student Research Expo, El Paso, Tx University of Texas at El Paso, El Paso, TX November 11, 2015.*
  77. Sanchez-Barrios, P., Konrardy, A. K., Amador, M., Covington, J. D., Moore, J., McAinch, A., King, G., & **Bajpeyi, S.** Does a family history of type 2 diabetes affect exercise induced improvement in insulin sensitivity in a Hispanic male population? *Graduate Student Research Expo, El Paso, Tx University of Texas at El Paso, El Paso, TX November 11, 2015.*
  78. Amador, M., Covington, J.D., Maier-Moore, J., McAinch, A., King, G., **Bajpeyi, S.**, Does a Family History of Type 2 Diabetes Affect Exercise Induced Improvement in Myokine concentration in a Hispanic male Population? *Graduate Student Research Expo, El Paso, Tx University of Texas at El Paso, El Paso, TX, Nov. 11, 2015*
  79. †Covington, J.D., Coen, P.M., Burk, D.H., Obanda, D. N., Ebenezer, P.J., Tam, C.S., Johannsen, D. L., Goodpaster, B.H., Ravussin, E., **Bajpeyi, S.** Intramyocellular Lipid Droplet Size Rather Than Total Lipid Content Is Related to Insulin Sensitivity After 8-Weeks of Overfeeding. *American Diabetes Association 75<sup>th</sup> scientific sessions, Boston, MA, June 5-9, 2015*
  80. Conde, D., Gamboa, C., Covington, J., Rustan, A., King, G. A., Varela, A., **Bajpeyi, S.** Electrical Pulse Stimulation induced changes on lipid, mitochondrial, GLUT4 and AMPK content in human myotubes. *American College of Sports Medicine – San Diego, CA. May 26-30, 2015*
  81. Gamboa, C., Conde, D., Covington, J., Rustan, A.C., King, G.A., Varela, A., **Bajpeyi, S.** Electrical pulse stimulation increases mitochondrial content in lean, but not in type 2 diabetic myotubes. *American College of Sports Medicine – San Diego, CA May 26-30, 2015*
  82. Valverde, L.F., Marquez, E. L., O’Keefe, L., Naughton, S., Simcoks, A., Jenkin, K., Hryciw, D., Mathai, M., McAinch, A., **Bajpeyi, S.** Human skeletal muscle oxidative capacity is improved by cannabinoid receptor 2 antagonist (CB2). *American College of Sports Medicine 62<sup>nd</sup> Annual Meeting – San Diego, CA. May26 – 30, 2015.*
  83. Conde, D., Gamboa, C., Covington, J., Rustan, A., King, G. A., Varela, A., **Bajpeyi, S.** 24 hrs of Electrical Pulse Stimulation upregulates GLUT4 and AMPK protein content in human myotubes. *American College of Sports Medicine – Texas chapter. Austin, TX Feb 26-27, 2015*
  84. Conde, D., Gamboa, C., Covington, J., Rustan, A., King, G. A., Varela, A., **Bajpeyi, S.** Effects of electrical pulse stimulation on lipid and mitochondrial content in human

- myotubes. *Keystone Symposia on Mitochondria, Metabolism and Heart Failure, Santa Fe, NM, January 27 – February 1, 2015.*
85. Conde, D., Gamboa, C., Covington, J., Rustan, A., Varela, A., King, G. A., **Bajpeyi, S.** Electrical Pulse Stimulation induced improvement in lipid, mitochondrial and AMPK content is dependent on cell harvesting time in human myotubes. *The University of Texas at El Paso Graduate Student Research Expo, El Paso, TX, November 14, 2014.*
  86. Conde, D., Gamboa, C., Covington, J., Rustan, A., Varela, A., King, G. A., **Bajpeyi, S.** Electrical pulse stimulation induced improvement in lipid, mitochondrial and AMPK content is dependent on cell harvest time in human myotubes. *11th Annual Faces of Diabetes Conference, El Paso, TX, October 24, 2014.*
  87. Gamboa, C., Conde, D., Covington, J., Rustan, A., King, G. A., Varela, A., **Bajpeyi, S.** Electrical pulse stimulation increases in mitochondrial content is not evident in myotubes from donors with type 2 diabetes. *11th Annual Faces of Diabetes Conference, El Paso, TX, October 24, 2014.*
  88. Marquez, E. L., Valverde, L. F., O’Keefe, L., Naughton, S., Simcocks, A., Jenkin, K., Hryciw, D., Mathai, M. Conde, D., McAinch, A., **Bajpeyi, S.** Cannabinoid receptor (CB2) antagonist improves skeletal muscle oxidative capacity. *11th Annual Faces of Diabetes Conference, El Paso, TX, October 24, 2014.*
  89. **Bajpeyi, S.**, Conley, K.E., Newcomer, B., Jubrias, S.A., Gamboa, C., Murray, K., Sparks, L.M., Smith, S.R. Twelve weeks of pioglitazone treatment improves insulin sensitivity, lipid utilization and metabolic flexibility – but not maximal ATP synthesis capacity. *American Diabetes Association 74<sup>th</sup> scientific sessions San Francisco, CA, June 13-17, 2014*
  90. Conde, D., Covington, J.D., Gamboa, C., King, G.A., Rustan, A.C., **Bajpeyi, S.** Electrical pulse stimulation induced increase in mitochondrial content is dependent on duration of stimulation. *American College of Sports Medicine – Orlando, FL. May 27-31, 2014*
  91. Marquez, E., Rodriguez R., Valverde L. F., Beltran S., Walker E., Varela A., Gosselink K., **Bajpeyi S.** Effects of Stress on Skeletal Muscle Glycogen and Mitochondrial Content. *COURI Symposium Abstracts, Summer 2014.*
  92. Rodriguez, R.R., Valverde, L.F., Beltran, S.M., Walker, E.M, Varela, A., Khan, A.M., Gosselink, K.L., **Bajpeyi, S.** Chronic stress decrease mitochondrial content in rat skeletal muscle. *The 4<sup>th</sup> annual Campus Office of Undergraduate Research Initiatives symposium, El Paso, TX. April 26, 2014*
  93. Henagan, T.G., Covington, J.D., Stewart, L.K., Galgani, J.E., Ravussin, E., **Bajpeyi, S.** Exercise repositions the -1 nucleosome within the PGC1 $\alpha$  promoter in association with alterations in gene expression in skeletal muscle. *Experimental Biology – San Diego, CA. April 26-30, 2014*
  94. Conde, D., Covington, J.D., Gamboa, C., King, G.A., Rustan, A.C., **Bajpeyi, S.** Increase in mitochondrial content after electrical pulse stimulation is dependent on duration of stimulation. *Conference Proceedings: Vol. 2 : Iss. 6 , Article 44. American College of Sports Medicine – Texas chapter. Forth Worth, TX Feb 27-28, 2014*
  95. **Bajpeyi, S.**, Covington, J.D., Coen, P.M., Anguiano, S., Rodriguez, R., Burk, D.H., Tam, C.S., Johannsen, D.L., Goodpaster, B.H., Ravussin, E. Decrease in smaller lipid droplet density is protective against overfeeding-induced increase in fat cell size and weight gain. *The Obesity week, Atlanta, GA. Nov 11-16, 2013*



96. **Bajpeyi, S.**, Covington, J.D., Coen, P.M., Rodriguez, R., Anguiano, S., Burk, D.H., Tam, C.S., Johannsen, D.L., Goodpaster, B.H., Ravussin, E. Smaller lipid droplet density is protective against overfeeding-induced increase in weight gain. *10<sup>th</sup> Annual Diabetes Conference, 2013, El Paso, TX.*
97. **Bajpeyi, S.**, Conley, K.E., Newcomer, B., Jubrias, S.A., Gamboa, C., Murray, K., Sparks, L.M., Smith, S.R. Improvement in insulin sensitivity and lipid utilization after Pioglitazone treatment is independent of maximal ATP synthesis capacity. *10<sup>th</sup> Annual Diabetes Conference, 2013, El Paso, TX.*
98. Conley, K., **Bajpeyi, S.**, Sparks, L.M., Smith, S.R. Pioglitazone Improves Indices of Skeletal Muscle Insulin Sensitivity without Change in Energy Balance or Mitochondrial Metabolism in Patients with Type 2 Diabetes. *American Diabetes Association 73<sup>rd</sup> scientific sessions, Chicago, IL, June 21-25, 2013 (Audio Poster)*
99. **Bajpeyi, S.**, Covington, J.D., Coen, P.M., Johannsen, D.L., Tam, C.S., Burk, D.H., Goodpaster, B.H., Ravussin, E. Overfeeding-induced lipid accumulation is associated with insulin sensitivity. *American Diabetes Association 73<sup>rd</sup> scientific sessions, Chicago, IL, June 21-25, 2013 (Audio Poster)*
100. **(Winner of travel award from Seahorse Biosciences)**  
Covington, J.D., Hjelle, L., Rogers, P.M., Galgani, J.E., Rustan, A.C., Ravussin, E., **Bajpeyi, S.** Skeletal muscle myotubes from type 2 diabetics show reduced mitochondrial respiration but similar mitochondrial content as myotubes from non-diabetics. *American Diabetes Association 73<sup>rd</sup> scientific sessions, Chicago, IL, June 21-25, 2013. (Travel award recipient from Seahorse Biosciences)*
101. Covington, J.D., **Bajpeyi, S.**, Tchukalova, Y.D., Moro, C., Ebenezer, P.J., Burk, D.H., Ravussin, E., Redman, L.M. Perilipin 3 expression and adipose tissue lipolysis is increased after 16 weeks of exercise training in women with polycystic ovary syndrome. *Endocrine Society, 2013*
102. Covington, J.D., Galgani, J.E., Rustan, A.C., Zhang, Z., Moro, C., Smith, S. R., Ravussin, E., **Bajpeyi, S.** Muscle perilipin 3 is reduced using *in vitro* and *in vivo* exercise models and negatively associated with exercise lipid oxidation. *Experimental Biology Meeting 2013*
103. Covington, J.D., Johannsen, D.L., Zhang, Z., Tam, C.S., **Bajpeyi, S.**, Ravussin, E. Impact of SIRT3 and p65 Subunit of NFkB (RelA) on Muscle Mitochondrial Function After an 8-Week High-Fat 40% Overfeeding. *The Obesity Society 30<sup>th</sup> Annual Scientific meeting, San Antonio, TX. Sept 20 – 24, 2012*
104. **Bajpeyi, S.**, Covington, J.D., Tam, C.S., Ravussin, E. Eight Weeks of Overfeeding Increases PLIN2 and PLIN3 Gene Expression. *The Obesity Society 30<sup>th</sup> Annual Scientific meeting, San Antonio, TX. Sept 20 – 24, 2012*
105. Tam, C.S., Covington, J.D., Tchoukalova, Y., Burk, D., Stadler, K., **Bajpeyi, S.** Johannsen, D.L., Ravussin, E. Robust Increases in Extracellular Matrix Remodeling in Adipose Tissue and Skeletal Muscle after 8-weeks Overfeeding in Healthy Subjects. *The Obesity Society 30<sup>th</sup> Annual Scientific meeting, San Antonio, TX. Sept 20 – 24, 2012*
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