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POSITIONS

- July 2017 – July 2020: Chair, Dept Molecular & Cell Biology, School of Natural Sciences, UC Merced
- July 2015 – Present: Full Professor Step III, MCB, SNS, UC Merced
- July 2010 – July 2015: Associate Professor, MCB, SNS, UCM
- December 2004 - June 2010: Assistant Professor, SNS, UCM
- July 1, 2005 – present: Affiliate Faculty, University of Alaska Fairbanks, School of Fisheries & Ocean Sciences.
- January 2003 – December 2004: Postdoctoral Fellow, Department of Physiology, Tulane University Health Sciences Center
- June 2001 – December 2002: Postdoctoral Fellow, Department of Biology, UC Santa Cruz

EDUCATION

- **Ph.D.** Biology, University of California, Santa Cruz, June 2001
Title: “Endocrinology of Fasting and Renal Function in Pups of the Northern Elephant Seal (*Mirounga angustirostris*)”
Committee: C. Leo Ortiz (chair), Daniel P. Costa, Frank Talamantes, Charles E. Wade
- **M.Sc.** Wildlife & Fisheries Science, Texas A&M University, College Station, December 1994
- **B.A.** Biology, Texas A&M University, College Station, August 1990

REFEREED PUBLICATIONS – Original Articles (* co-first authorships)

1. Cornejo MA, J Nguyen, J Cazares, B Escobedo, A Nishiyama, D Nakano, **RM Ortiz**. 2020. Partial Body Mass Recovery after Caloric Restriction Abolishes Improved Glucose Tolerance in Obese, Insulin Resistant Rats. *Frontiers in Endocrinology* 11:363 doi: 10.3389/fendo.2020.00363
2. Rodriguez R*, B Escobedo*, AY Lee, MA Thorwald, JA Godoy-Lugo, D Nakano, A Nishiyama, DG Parkes, **RM Ortiz**. 2019. Simultaneous angiotensin receptor blockade and glucagon-like peptide-1 receptor activation ameliorate albuminuria in obese insulin-resistant rats. *Clinical and Experimental Pharmacology and Physiology* DOI: 10.1111/1440-1681.13206
3. Dhillon J, Z Li, RM Ortiz. 2019. Almond Snacking for 8 Weeks Increased Alpha-Diversity of the Gastrointestinal Microbiome and Decreased *Bacteroides fragilis* Abundance Compared to an Isocaloric Snack in College Freshmen. *Current Developments in Nutrition*, 3: nzz079 doi.org/10.1093/cdn/nzz079
4. Dhillon J, LK Díaz Rios, K Aldaz, N De La Cruz, E Vu, SA Asghar, Q Kuse, **RM Ortiz**. 2019. We Don't Have a Lot of Healthy Options: Food Environment Perceptions of First-Year, Minority College Students Attending a Food Desert Campus. *Nutrients* 11, 816; doi:10.3390/nu11040816
5. Thorwald MA, JA Godoy-Lugo, GJ Rodriguez, MA Rodriguez, M Jamal, H Kinoshita, D Nakano, A Nishiyama, HJ Forman, **RM Ortiz**. 2019. Nrf2-related gene expression is impaired during a glucose challenge in type II diabetic rat hearts. *Free Radical Biology & Medicine* 130: 306-317.
6. Dhillon J, M Thorwald, NDL Cruz, E Vu, SA Asghar, Q Kuse, LK Díaz Rios, **RM Ortiz**. 2018. Almond snacking for 8 weeks improved glucose tolerance and postprandial insulin sensitivity compared to an isocaloric graham cracker snack in young adults: a randomized controlled trial. *Nutrients* 10, 960; doi:10.3390/nu10080960 (PMCID: PMC6115851).
7. Miranda-Cruz MM, JJ Poom-Llamas, JA Godoy-Lugo, **RM Ortiz**, S Gómez-Jiménez, JA Rosas-Rodríguez, EF Morán-Palacio, JG Soñanez-Organis. 2018. Silencing of HIF-1 in WSSV-infected white shrimp: Effect on viral load and antioxidant enzymes. *Comparative Biochemistry & Physiology C* 213:19-26

8. Rodriguez R*, AY Lee*, KW Mathis, HJ Broome, M Thorwald, B Martinez, D Nakano, A Nishiyama, MJ Ryan, **RM Ortiz**. 2018. Angiotensin receptor and tumor necrosis factor- α activation contributes to glucose intolerance independent of systolic blood pressure in obese rats. *American Journal of Physiology – Renal* 315: F1081-F1090. (PMCID: PMC6230730)
9. Rodriguez R, M Moreno, AY Lee, D Nakano, A Nishiyama, DG Parkes, MS Awayda, **RM Ortiz**. 2018. Simultaneous GLP-1 receptor activation and angiotensin receptor blockade increase natriuresis independent of altered arterial pressure in obese OLETF rats. *Hypertension Research* 41: doi.org/10.1038/s41440-018-0070-0 (PMID: 29985448)
10. Rodriguez R, JN Minas, JP Vazquez-Medina, D Nakano, DG Parkes, A Nishiyama, **RM Ortiz**. 2018. Chronic AT1 blockade improves glucose homeostasis in obese OLETF rats. *Journal of Endocrinology* 237: 271-284. (PMCID: PMC5945211)
11. Martinez B, J Khudyakov, K Rutherford, DE Crocker, N Gemmell, **RM Ortiz**. 2018. Adipose transcriptome analysis provides novel insights into molecular regulation of prolonged fasting in northern elephant seal pups. *Physiological Genomics* 50: 495-503 (PMCID: PMC6087879).
12. Hernández-Palomares MLE, JA Godoy-Lugo, S Gómez-Jiménez, L Gámez-Alejo, **RM Ortiz**, J Muñoz-Valle, A Peregrino-Urriarte, G Yepiz-Plascencia, JA Rosas-Rodríguez, Soñanez-Organis JG. 2018. Regulation of lactate dehydrogenase in response to WSSV infection in the shrimp, *Litopenaeus vannamei*. *Fish and Shellfish Immunology* 74: 401-409
13. Thorwald M, R Rodriguez, AY Lee, B Martinez, J Peti-Peterdi, D Nakano, A Nishiyama, **RM Ortiz**. 2017. Angiotensin receptor blockade improves cardiac mitochondrial activity in response to an acute glucose load in obese insulin resistant rats. *Redox Biology* 14:371-378 (PMCID: PMC4647524).
14. Martinez B, M Scheibner, JG Soñanez-Organis, JT Jaques, DE Crocker, **RM Ortiz**. 2017. Increased sensitivity of thyroid hormone-mediated signaling despite prolonged fasting. *General and Comparative Endocrinology* 252: 36-47 (PMCID: PMC5580341)
15. Olmstead KI*, M La Frano*, J Fahrman*, D Grapov, JA Viscarra, J Newman, O Fiehn, DE Crocker, FV Philipp, **RM Ortiz**. 2017. Insulin induces a shift in lipid and primary carbon metabolites in a model of fasting-induced insulin resistance. *Metabolomics* 13:60 (* co-first authorship) (PMCID: PMC5526460)
16. Lee D, B Martinez, DE Crocker, **RM Ortiz**. 2017. Fasting-induced increase in sirtuin 1 is associated with non-genomic thyroid hormone activation of AMPK in muscle of adult male northern elephant seals. *Physiological Reports* 5(4): e13114 doi: 10.14814/phy2.13114 (PMCID: PMC5328766)
17. Vazquez-Anaya G, B Martinez, JG Soñanez-Organis, D Nakano, A Nishiyama, **RM Ortiz**. 2017. Exogenous thyroxine improves glucose intolerance in insulin resistant rats. *Journal of Endocrinology* 232: 501-511 (PMCID: PMC5419047)
18. Martinez B, JG Soñanez-Organis, JA Godoy-Lugo, LJ Horin, DE Crocker, **RM Ortiz**. 2017. Thyroid hormone-stimulated increases in PGC-1 α and UCP2 promote life history-specific endocrine changes and maintain a lipid-based metabolism. *American Journal of Physiology: Regulatory, Integrative, Comparative Physiology* 312: R189-R196 (PMID: 27903512) (PMCID: PMC5336568)
19. Soñanez-Organis JG, JA Godoy-Lugo, MLE Hernández-Palomares, D Rodríguez-Martínez, JA Rosas-Rodríguez, G Gonzáles-Ochoa, A Virgen-Ortiz, **RM Ortiz**. 2016. HIF-1 α and PPAR γ during physiological cardiac hypertrophy induced by pregnancy: Transcriptional activities and effects on target genes. *Gene* 591: 376-381
20. Martinez B, JG Soñanez-Organis, JA Viscarra, J Jaques, DS MacKenzie, DE Crocker, **RM Ortiz**. 2016. Glucose delays the insulin-induced increase in thyroid hormone-mediated signaling in adipose of prolonged-fasted elephant seal pups. *American Journal of Physiology: Regulatory, Integrative, Comparative Physiology* 310: R502-R512 (PMCID: PMC4867376)
21. Minas J, MA Thorwald, D Conte, JP Vázquez-Medina, A Nishiyama, **RM Ortiz**. 2015. Angiotensin and mineralocorticoid receptor antagonism attenuates cardiac oxidative stress in angiotensin II-infused rats. *Clinical & Experimental Pharmacology and Physiology* 42: 1178–1188 (PMCID: PMC4596772)
22. Khudyakov J, C Champagne, L Preeyanon, **RM Ortiz**, DE Crocker. 2015. Muscle transcriptome response to ACTH administration in a free-ranging marine mammal. *Physiological Genomics* 47: 318-330 (PMCID: PMC4525076)
23. Suzuki M, A Lee, JP Vázquez-Medina, JA Viscarra, DE Crocker, **RM Ortiz**. 2015. Plasma FGF21 concentrations, adipose fibroblast growth factor receptor-1 and β -klotho expression decrease with

- fasting in northern elephant seals. *General & Comparative Endocrinology* 216: 86-89. (PMCID: [PMC4457680](#))
24. Khudyakov JI, L Preeyanon, CD Champagne, **RM Ortiz**, DE Crocker. 2015. Transcriptome analysis of northern elephant seal (*Mirounga angustirostris*) muscle tissue provides a novel molecular resource and physiological insights. *BMC Genomics* 16:64. (PMCID: [PMC4328371](#))
 25. Sharick J, JP Vazquez-Medina, **RM Ortiz**, DE Crocker. 2015. Oxidative stress is a potential cost of breeding in male and female northern elephant seals. *Functional Ecology* 29: 367-376. (PMCID: [PMC4429057](#))
 26. **Ortiz RM**, R Rodriguez, S Depaoli, SE Weffer. 2014. Increased physical activity reduces the odds of developing elevated systolic blood pressure independent of body mass category or ethnicity in rural adolescents. *Journal of Hypertension: Open Access* 3:150 DOI 10.4172/2167-1095.1000150
 27. Martinez B, JG Soñanez-Organis, JP Vázquez-Medina, JA Viscarra, DS MacKenzie, DE Crocker, **RM Ortiz**. 2013. Prolonged food deprivation increases mRNA expression of deiodinase type I & II, and thyroid hormone receptor β -1 in a fasting-adapted mammal. *Journal of Experimental Biology* 216: 4647-4654. (PMCID: [PMC3851149](#))
 28. Vázquez-Medina JP, I Popovich, M Thorwald, JA Viscarra, R Rodriguez, JG Soñanez-Organis, L Lam, J Peti-Peterdi, D Nakano, A Nishiyama, **RM Ortiz**. 2013. Angiotensin receptor-mediated oxidative stress is associated with impaired cardiac redox signaling and mitochondrial function in insulin resistant rats. *American Journal of Physiology: Heart & Circulation* 305: H599-H607 (PMCID: [PMC3891241](#))
 29. Suzuki M, JP Vázquez-Medina, JA Viscarra, JG Soñanez-Organis, DE Crocker, **RM Ortiz**. 2013. Activation of systemic, but not local, renin-angiotensin system is associated with upregulation of TNF- α during prolonged fasting in northern elephant seal pups. *Journal of Experimental Biology* 216: 3215-3221 (PMCID: [PMC4074259](#))
 30. Soñanez-Organis JG, JP Vázquez-Medina, DE Crocker, **RM Ortiz**. 2013. Prolonged fasting activates hypoxia inducible factor-1 α , -2 α and -3 α in a tissue-specific manner in northern elephant seal pups. *Gene* 526: 155-163 (PMCID: [PMC3729614](#))
 31. Vázquez-Medina JP, JG Soñanez-Organis, R Rodriguez, JA Viscarra, A Nishiyama, DE Crocker, **RM Ortiz**. 2013. Prolonged fasting activates Nrf2 in postweaned elephant seals. *Journal of Experimental Biology* 216: 2870-2878 (PMCID: [PMC3713947](#))
 32. Viscarra JA, R Rodriguez, JP Vázquez-Medina, A Lee, MS Tift, SK Tavoni, DE Crocker, **RM Ortiz**. 2013. Insulin and GLP-1 infusions demonstrate the onset of adipose-specific insulin resistance in a large fasting mammal: potential glucogenic role for GLP-1. *Physiological Reports* 1(2): e00023 doi:10.1002/phy2.23 (PMCID: [PMC3755502](#))
 33. Tift MS, EC Ranalli, DS Houser, **RM Ortiz**, DE Crocker. 2013. Development enhances hypometabolism in northern elephant seal pups (*Mirounga angustirostris*). *Functional Ecology* 27: 1155-1165 doi: 10.1111/1365-2435.12111 (PMCID: [PMC3811961](#))
 34. **Ortiz RM**, S Garcia, AD Kim. 2012. Is almond consumption more effective than reduced dietary saturated fat at decreasing plasma total cholesterol & LDL-c levels? A theoretical approach. *Journal of Nutrition & Metabolism* 2012: Article ID 265712, 6 pgs doi:10.1155/2012/265712 (PMCID: [PMC3517848](#))
 35. Montez P, JP Vázquez-Medina, R Rodriguez, MA Thorwald, JA Viscarra, L Lam, J Peti-Peterdi, D Nakano, A Nishiyama, **RM Ortiz**. 2012. Angiotensin receptor blockade recovers hepatic UCP2 expression and aconitase & SDH activities, and ameliorates hepatic oxidative damage in insulin resistant rats. *Endocrinology* 153:5746-5759. (PMCID: [PMC3512060](#))
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 37. Soñanez-Organis JG, JP Vázquez-Medina, T Zenteno-Savín, A Aguilar, DE Crocker, **RM Ortiz**. 2012. Prolonged fasting increases purine recycling in postweaned northern elephant seals. *Journal of Experimental Biology* 215: 1448-1455. (PMCID: [PMC3324699](#))
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- supplementation in a model of metabolic syndrome. *Endocrinology* 153(4):1684–1695 (PMCID: [PMC3320242](#))
39. Limson M, J Krontiris-Litowitz, **RM Ortiz**, TA Pressley, ML Matyas. 2012. The insulation bag: learning thermoregulation through a “hands-in” activity. *Advances in Physiology Education* 36: 65-67 (PMID: [22383416](#))
 40. Crocker DE, **RM Ortiz**, DS Houser, PM Webb, DP Costa. 2012. Hormone and metabolite changes associated with extended breeding fasts in male northern elephant seals (*Mirounga angustirostris*). *Comparative Biochemistry & Physiology A* 161: 388-394 (PMID: [22227222](#)).
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 42. Vázquez-Medina JP, T Zenteno-Savín, MS Tift, HJ Forman, DE Crocker, **RM Ortiz**. 2011. Apnea stimulates the adaptive response to oxidative stress in elephant seal pups. *Journal of Experimental Biology* 214: 4193-4200 (PMCID: [PMC3223118](#))
 43. Vázquez-Medina JP, JG Soñanez-Organis, JM Burns, T Zenteno-Savín, **RM Ortiz**. 2011. Antioxidant capacity develops with maturation in the deep-diving hooded seal. *Journal of Experimental Biology* 214: 2903-2910 (PMCID: [PMC3154117](#))
 44. Rodriguez R, SE Weffer, J Romo, A Aleman, **RM Ortiz**. 2011. Reduced physical activity levels associated with obesity in rural adolescent females. *Childhood Obesity* 7: 194-205
 45. Viscarra J, CD Champagne, DE Crocker, **RM Ortiz**. 2011. 5' AMP-activated protein kinase activity is increased in adipose tissue of northern elephant seal pups during prolonged fasting-induced insulin resistance. *Journal of Endocrinology* 209: 317-325 (PMCID: [PMC3250370](#))
 46. Vázquez-Medina JP, T Zenteno-Savín, HJ Forman, DE Crocker, **RM Ortiz**. 2011. Prolonged fasting increases glutathione biosynthesis in postweaned northern elephant seals. *Journal Experimental Biology* 214: 2194-2199 (PMCID: [PMC3063111](#))
 47. Viscarra J, JP Vázquez-Medina, DE Crocker, **RM Ortiz**. 2011. Glut4 is upregulated despite decreased insulin signaling during prolonged fasting in northern elephant seal pups. *American Journal of Physiology: Reg, Integrative, Comp Physiol* 300: R150-R154 (PMCID: [PMC3023278](#))
 48. Awayda MS, KL Awayda, O Pochynyuk, V Bugaj, JD Stockand, **RM Ortiz**. 2011. Acute cholesterol induced anti-natriuretic effects – Role of epithelial Na⁺ channel activity, protein levels and processing. *The Journal of Biological Chemistry* 286:1683-1695 (PMCID: [PMC3023463](#))
 49. Vázquez-Medina, JP, DE Crocker, HJ Forman, **RM Ortiz**. 2010. Prolonged fasting does not increase oxidative damage or inflammation in postweaned northern elephant seal pups. *Journal of Experimental Biology* 213:2524-2530 (PMCID: [PMC2892425](#))
 50. Rodriguez R, J Mowrer, J Romo, A Aleman, S Weffer, **RM Ortiz**. 2010. Ethnic and gender disparities in adolescent obesity and elevated systolic blood pressure in a rural US population. *Clinical Pediatrics* 49: 876-884 (PMID: [20522603](#))
 51. **Ortiz RM**, H Kobori, D Conte, LG Navar. 2010. Angiotensin II-induced reduction in body mass is Ang II receptor mediated in association with elevated corticosterone. *Growth Hormone & IGF Research* 20:2828-288 (PMCID: [PMC2918720](#))
 52. **Ortiz RM**, B Long, D Casper, CL Ortiz, TM Williams. 2010. Biochemical and hormonal changes during acute food deprivation and re-feeding in bottlenose dolphins (*Tursiops truncatus*). *Marine Mammal Science* 26:409-419
 53. **Ortiz RM**, A Mamalis, LG Navar. 2009. Aldosterone receptor antagonism reduces urinary C-reactive protein excretion in angiotensin II-infused, hypertensive rats. *Journal of the American Society of Hypertension* 3:184-191 (PMCID: [PMC2740916](#))
 54. **Ortiz RM**. 2008. Delineating the contributions of AT1a and AT1b receptor-mediated uptake of Ang II in kidneys and adrenals. *American Journal of Physiology: Renal Physiol* 294: F291-F292 (PMID: [18077595](#))
 55. Graciano ML, A Nishiyama, K Jackson, DM Seth, **RM Ortiz**, MC Prieto-Carrasquero, H Kobori, LG Navar. 2008. Purinergic receptors contribute to early mesangial cell transformation and renal vessel hypertrophy during angiotensin II-induced hypertension. *American Journal of Physiology: Renal Physiol* 294: F161-F169 (PMCID: [PMC2567285](#))
 56. **Ortiz RM**, ML Graciano, JJ Mullins, KD Mitchell. 2007. Aldosterone receptor antagonism alleviates proteinuria, but not malignant hypertension in Cyp1a1-Ren2 transgenic rats. *American Journal of*

- Physiology: Renal Physiol* 293: F1584-F1591 ([PMID: 17715265](#))
57. **Ortiz RM**, ML Graciano, D Seth, M Awayda, LG Navar. 2007. Aldosterone receptor antagonism exacerbates intrarenal angiotensin II augmentation in Ang II-dependent hypertension. *American Journal of Physiology: Renal Physiol* 293: F139-F147 ([PMID: 17376762](#))
 58. **Ortiz RM**, DE Crocker, DS Houser, PM Webb. 2006. Angiotensin II and aldosterone increase with fasting in breeding adult male northern elephant seals (*Mirounga angustirostris*). *Physiological and Biochemical Zoology* 79 (6): 1106-1112 ([PMID:17041876](#))
 59. **Ortiz RM** and GAJ Worthy. 2006. Body composition and water turnover rates of bottle-fed West Indian manatee (*Trichechus manatus*) calves. *Aquatic Mammals* 32 (1): 41-45
 60. Sherman-Cooney RA, **RM Ortiz**, DP Noren, L Pagarigan, CL Ortiz, F. Talamantes. 2005 Estradiol and testosterone concentrations increase with fasting in weaned pups of the northern elephant seal (*Mirounga angustirostris*). *Physiological and Biochemical Zoology* 78 (1): 55-59 ([PMID: 15702463](#))
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 62. **Ortiz RM**, DP Noren, CL Ortiz, F Talamantes. 2003. GH and ghrelin increase with fasting in a naturally adapted species, the northern elephant seal. *Journal of Endocrinology* 178 (3): 533-539 ([PMID: 12967344](#))
 63. **Ortiz RM**, CE Wade, CL Ortiz, F Talamantes. 2003. Acutely elevated vasopressin increases circulating concentrations of cortisol and aldosterone in fasting northern elephant seal (*Mirounga angustirostris*) pups. *Journal of Experimental Biology* 206 (16): 2795-2820 ([PMID: 12847125](#))
 64. **Ortiz RM**, DS Houser, CE Wade, CL Ortiz. 2003. Hormonal changes associated with the transition between nursing and natural fasting in northern elephant seals (*Mirounga angustirostris*). *General and Comparative Endocrinology* 130: 78-83 ([PMID: 12535628](#))
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 73. **Ortiz RM**, DS MacKenzie, GAJ Worthy. 2000. Thyroid hormone concentrations in captive and free-ranging West Indian manatees (*Trichechus manatus*). *Journal of Experimental Biology* 203(23): 3631-3637 ([PMID: 11060224](#))
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77. Wade CE, LA Baer, WA Belisle, **RM Ortiz**, MF Vasques. 1999. Deposition and renal handling of urinary electrolytes from rats during spaceflight. *Journal of Gravitational Physiology* 6(2): 25-32 (PMID: 11543083)
78. **Ortiz RM**, TJ Wang, CE Wade. 1999. Urea and osmotic excretion in rats exposed to chronic centrifugation. *Aviation, Space, and Environmental Medicine* 70 (11): 1089-1095 (PMID: 10608606)
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- Atkinson S, DE Crocker, **RM Ortiz**. 2017. Endocrine Systems. *In Encyclopedia of Marine Mammals* (B Würsig, JGM Thewissen, K Kovacs, eds), 3rd Edition. Academic Press, San Diego, CA.
- Suzuki M, **RM Ortiz**. 2016. Water Balance. *In Marine Mammal Physiology: Requisites for Ocean Living* (M Castellini and J-A Mellish, eds). CRC Press, Boca Raton, FL.
- Atkinson S, D St. Aubin, **RM Ortiz**. 2008. Endocrine Systems. *In Encyclopedia of Marine Mammals* (Wm F Perrin, B Würsig and JGM Thewissen, eds), 2nd Edition. Academic Press, San Diego, CA.
- Weldon P, **RM Ortiz**, T Sharp. 1992. The chemical ecology of crotaline snakes. *In Biology of the Pitvipers* (JA Campbell and ED Brodie, Jr., eds). Selva Press, Tyler, TX.

GOVERNMENT REPORTS

- Greenwood MRC, **RM Ortiz**, PB Crawford. 2009. Legislative Task Force on Diabetes and Obesity: Report to the California Legislature. 38 pp.

REFEREED PAPERS PENDING REVISION or IN REVIEW

- Dhillon J, JA Viscarra, JW Newman, O Fiehn, DE Crocker, **RM Ortiz**. Exogenous GLP-1 stimulates TCA cycle and suppresses gluconeogenesis and ketogenesis in late-fasted northern elephant seal pups. Pending Revisions, *American Journal of Physiology: Regulatory, Integrative, Comparative Physiol*
- Mendez D, **RM Ortiz**. Mini-Review: Thyroid Hormones and Glucose Metabolism in Cardiomyocytes During Insulin Resistance and T2DM. In Review, *American Journal of Physiology: Endocrinology & Metabolism*
- Suzuki M, C Sato, J Dhillon, H Kamisako, K Ueda, Y Ono, T Matsuoto, **RM Ortiz**. Metabolic changes under food deprivation in common bottlenose dolphins *Tursiops truncatus* and the effectiveness of nutrition fluids on the metabolism. In Review, *The Veterinary Journal*
- Thorwald MA, JA Godoy-Lugo, R Rodriguez, K Stanhope, JL Graham, PJ Havel, HJ Forman, **RM Ortiz**. Cardiac NF- κ B Activation Increases While Nrf2-related Gene Expression and Mitochondrial Activity are Impaired During the Progression of Diabetes in UCD-T2DM Rats. In review, *American Journal of Physiology: Heart & Circulatory Physiology*
- Vázquez-Medina JP, P Juarez, M Suzuki, DE Crocker, **RM Ortiz**. Exogenous ACTH induces differential adrenal responses in fasting northern elephant seal pups. In review, *General & Comparative Endocrinology*

PAPERS DRAFTED FOR PUBLICATION

- Bakke D, MR La Frano, K Pilolla, K Katundu, JA Viscarra, DE Crocker, JW Newman, **RM Ortiz**. Lipid Mediator Response to Fasting and Insulin Infusion in a Large Mammal Model of Fasting-Induced Insulin Resistance. In Prep, *Metabolomics*
- Cornejo MA, A Nishiyama, D Nakano, **RM Ortiz**. Mass Recovery Reverts Lipolysis and Proteolysis, but not Gluconeogenesis, in OLETF Rats After Caloric Restriction. In Prep, *Metabolomics*
- Godoy-Lugo JA, D Lee, M Thorwald, D Hui, D Nakano, A Nishiyama, **RM Ortiz**. Angiotensin receptor blockade reduces liver triacylglycerol accumulation in obese-insulin-resistant OLETF rats. In Prep, *American Journal of Physiology: Endocrinology & Metabolism*
- Minas JN, S Balayan, D Nakano, M Awayda, A Nishiyama, **RM Ortiz**. High fat consumption exacerbates, and angiotensin receptor blockade alleviates impaired glucose tolerance and antinatriuresis in a model of metabolic syndrome. In prep, *American Journal of Physiology: Renal*
- Rodriguez R, AY Lee, JA Godoy-Lugo, B Martinez, D Nakano, DG Parkes, SH Adams, A Nishiyama, JP Vazquez-Medina, **RM Ortiz**. Chronic AT1 blockade decreases hyperglycemia by improving adipocyte function and decreasing hepatic PCK1 and G6PC1 expression in obese rats. In prep, *American Journal of Physiology: Endocrinology & Metabolism*
- Rodriguez-Ortiz CJ, MA Thorwald, R Rodriguez, Z Kieu, N Maitra, C Hawkins, J Valenzuela, M Peng, A Nishiyama, **RM Ortiz**, M Kitazawa. Angiotensin receptor blockade alleviates brain pathology in obese OLETF rats. In Prep, *Journal of Neurophysiology*

PRESENTATIONS

Faculty-Interview Seminar

- "Endocrinology of Fasting in Pups of the Northern Elephant Seal (*Mirounga angustirostris*): A Potential Model for Diabetes?" Division of Neurobiology, Physiology, and Behavior, UC Davis, June 4, 2003. UCD Host: Vice Provost Barbara Horwitz. For position in Natural Sciences at UC Merced. UCM Host: Dean Maria Pallavicini.

Invited Seminars – External Domestic (2017-present)

- "Surviving and Thriving in Academia: Research and Strategies Supporting LatinX Students" Doctoralnet webinar, March 16, 2020. Host: Dr. Alana James, CEO & Founder Doctoralnet

- “Health Benefits of Chronic Almond Snacking in Millennials” Seminar at Mercy Medical Center, February 26, 2019. Host: Ms. Lillian Sanchez, Community Health Coordinator, Dignity Health
- “Early Research Opportunities Lay the Foundation for Networking Through A Career in Biomedical Research” NIH NIDDK Network of Minority Health Research Investigators (NMRI) Annual Symposium, Bethesda, MD, April 26, 2019. Host: Dr. Jose Romero
- “Potential Benefits of Almond Snacking on the Reduction of CV Complications in Young Adults” Seminar in the Border Biomedical Research Center, UT EL Paso, November 02, 2018. Host: Dr. Renato Aguilera
- “UC Merced FARMERS: Facilitating Agriculture-Related Mentoring for Emerging Research Scientists” USDA NIFA Program Director’s meeting, Washington, DC, March 20, 2018. Host: Dr. Irma Lawrence
- “On Becoming a Scientist” University of Mississippi Medical Center, Jackson, July 18, 2017. Host: Dr. Michael J. Ryan, PD NIH R25 (presentation for summer scholars)
- “Dynamic Changes in the Physiology of the Fasting Northern Elephant Seal” Georgia State University, April 12, 2017. Host: Dr. Ming-Hui Zou, Director, Center of Molecular & Translational Medicine
- “Career Paths in Biological Sciences” Panel Discussion, Northern California Diversity Forum, UC Merced, April 8, 2017. Host: Northern California Diversity Forum
- “Dynamic Changes in the Physiology of the Fasting Northern Elephant Seal” CSU-Los Angeles, March 17, 2017. Host: Dr. Carlos Gutierrez, MARC Program Director

Invited Seminars – External International (2017-present)

- “Beneficios Potenciales del Consumo de Almendras en la Reducción de Complicaciones Cardio-Metabólicos en Jóvenes” Congreso Mexicano de Cardiología, Queretaro, MX, November 10, 2019.
- “Beneficios Potenciales del Consumo de Almendras en la Reducción de Complicaciones Cardio-Metabólicos en Jóvenes” 7th Simposio Nacional de Biomedicina y Salud, Navojoa, MX, October 26, 2018. Host: Dr. José G. Soñanez-Organis
- “Glucoregulatory Benefits of 8-weeks of Almond Snacking in Millennials” 36th International Symposium on Diabetes & Nutrition, Diabetes & Nutrition Study Group, Opatija, Croatia, June 27, 2018.
- “8 Week Almond Snacking Effects on Glucose Regulation and CV Health in Millennials” Kagawa Medical University, Japan, June 8, 2017. Host: Dr. Akira Nishiyama, Chair, Dept. Pharmacology
- “Dynamic Alterations in Thyroid Hormone Function to Prolonged Fasting in Northern Elephant Seals” School of Natural Resources, Nihon University, Yokohama, Japan, February 20, 2017. Host: Dr. Miwa Suzuki
- “Dynamic Changes in the Physiology of the Fasting Northern Elephant Seal” School of Natural Resources, Nihon University, Yokohama, Japan, February 19, 2017. Host: Dr. Miwa Suzuki

Invited Seminars – Internal UC Merced (2017-present)

- “Beyond the MD” Seminar for the Living Learning Communities, UC Merced November 22, 2019
- “La Fisiología del Ayuno en un Modelo Naturalmente Adaptado” UC Merced Spanish class, December 01, 2017. Host: Prof. Virginia Adan-Lifante

Chaired Conference Symposia/Workshops

- Symposium: “Aging & CVD”, *APS Conference: Physiology of Cardiovascular Disease: Gender Disparities*, University of Mississippi Medical Center, Jackson, October 12-14, 2011
- Featured Topic: “Elucidating Nature’s Solutions to Human Disease”, Comparative Section, American Physiological Society, *Experimental Biology ’11*, Washington, DC, April 11, 2011.
- Symposium: “Transition from Postdoc to Jr. Faculty: Surviving the Initial Years”, Trainee Advisory Committee, American Physiological Society, *Experimental Biology ’06*, San Francisco, CA April 1-5, 2006
- Workshop: “Developing the Foundation of Essential Career Skills”, *Society for the Advancement of Chicanos and Native Americans in Science National Conference*, Albuquerque, NM, October 3-6, 2003 and Austin, TX, October 21-24, 2004.
- Featured Topic: “Comparative Aspects of the Hormonal Responses to Altered Metabolic Demands”,

Comparative Section, American Physiological Society, *Experimental Biology '03*, San Diego, CA, April 11-15, 2003.

Post-Doctoral Fellow Presentations: J. Dhillon

- Dhillon J, O Fiehn, **RM Ortiz**. Almond Snacking For 8 Weeks Differentially Altered the Serum Omics Profiles of Young Adults in Comparison to a Control Snack (Abstract published. Online conference due to COVID-19) American Society of Nutrition June 1-4, 2020.
- Dhillon J, **RM Ortiz**. GLP-1 Induces a Shift in Primary Carbon Metabolites in Late-fasted Northern Elephant Seals. (Abstract published. Conference cancelled due to COVID-19) *Experimental Biology* April 4-7, 2020.
- Dhillon J, **RM Ortiz**. Incorporation of a Morning Snack (Almonds vs. Crackers) Differentially Altered Serum Primary Metabolite Profiles of Breakfast Skipping Young Adults. American Society of Nutrition, Baltimore, MD, June 8-11, 2019.
- Dhillon J, et al, **RM Ortiz**. Profiling the Human Gut Microbiome in an 8-Week Almond Snacking Intervention. American Society of Nutrition, Boston, MA June 9-12, 2018.
- Dhillon J, et al, **RM Ortiz** Profiling the Oxylipin and Endocannabinoid Serum Metabolome in an 8-Week Almond Snacking Intervention. *Experimental Biology*, San Diego, CA, April 21-24, 2018
- Dhillon J, et al, **RM Ortiz**. There Isn't Much Variety: Food Environment Perceptions of Students in a Food Desert Campus. Food & Nutrition Conference, Chicago, IL October 21-24, 2017
- Dhillon J, **RM Ortiz**. Effects of Almond Snacking for 8 Weeks on Glucose Tolerance and Metabolic Hormone Profile in College Freshmen. Ingestive Behavior Research Center Conference, Purdue University, West Lafayette, Indiana October, 2017

Most Recent Graduate Student Presentations (11 of 45)

- Cornejo MA, J Emery, M Smith, A Nishiyama, D Nakano, **RM Ortiz**. Body mass recovery after visceral lipectomy improves glucose tolerance without adipose recovery in obese, insulin resistant rats. *Experimental Biology 2020*, San Diego, CA April 07-10, 2020 (online)
- Godoy-Lugo JA, D Lee, M Thorwald, D Hui, D Nakano, A Nishiyama, **RM Ortiz**. Lipid profile and liver lipids of OLETF rats during ARB treatment and after its removal. *Experimental Biology 2020* San Diego, CA April 07-10, 2020 (online)
- Cornejo MA, A Nishiyama, D Nakano, **RM Ortiz**. Metabolomics Analysis of Plasma Following an Acute Caloric Restriction and Partial Mass Recovery in OLETF rats. *Inaugural meeting of the California Society of Physiologists*, Pasadena, CA November 06, 2019
- Godoy-Lugo JA, D Lee, M Thorwald, P Juarez, P Malhi, D Nakano, A Nishiyama, **RM Ortiz**. Changes in perilipin gene expression during acute lipid gavage in the liver of obese OLETF rats. *Inaugural meeting of the California Society of Physiologists*, Pasadena, CA November 06, 2019
- Mendez DA, MA Cornejo, A Nishiyama, D Nakano, **RM Ortiz**. Effects of Acute Caloric Restriction on Muscle Insulin Receptor Phosphorylation in Obese Insulin Resistant Otsuka Long Evans Tokushima Fatty (OLETF) Rats. *Inaugural meeting of the California Society of Physiologists*, Pasadena, CA November 06, 2019
- Cornejo MA, A Nishiyama, D Nakano, **RM Ortiz**. Systolic Blood Pressure is Maintained Despite Varying Degrees of Acute Caloric Restriction and Sodium-Glucose Cotransporter-2 Inhibition in Obese, Insulin Resistant Rats. *Council of High Blood Pressure 2019*, New Orleans, LA, September 07, 2019
- Cornejo MA, J Nguyen, J Cazares, B Escobedo, A Nishiyama, D Nakano, **RM Ortiz**. Acute Caloric Restriction Improves Adipokine Profile with Concomitant Increase in Glucose Reabsorption and Decreased Gluconeogenesis in Obese, Insulin-Resistant Rats. *Experimental Biology 2019*, Orlando, FL, April 08-11, 2019
- Godoy-Lugo JA, D Lee, M Thorwald, P Juarez, P Malhi, D Nakano, A Nishiyama, **RM Ortiz**. Changes in liver perilipin gene expression during an oral lipid load in obese OLETF rats. *Experimental Biology 2019*, Orlando, FL, April 08-11, 2019
- Cornejo MA, ID Montes, SA Asghar, B Escobedo, A Nishiyama, **RM Ortiz**. Caloric Restriction combined with SGLT2 Inhibitor Improves Glucose Tolerance Independent of Reduced SBP or

Triglycerides in Obese, Insulin Resistant Rats. *Experimental Biology 2018*, San Diego, CA, April 21-24, 2018

- Godoy-Lugo JA, D Lee, M Thorwald, D Hui, D Nakano, A Nishiyama, RM Ortiz. ARB treatment ameliorates liver triacylglycerol accumulation during insulin-resistant conditions in the liver of OLETF rats. *Experimental Biology 2018*, San Diego, CA, April 21-24, 2018
- Cornejo MA, J Nguyen, J Cazares, B Escobedo, A Nishiyama, **RM Ortiz**. Glucose tolerance and triglyceridemia improves during acute caloric restriction without changes in SBP in obese, insulin resistant rats. *Experimental Biology '17*, Chicago, IL April 22-26, 2017.

Most Recent Undergraduate & Postbac* (from 43)

- Emery JM, MA Cornejo, D Nakano, A Nishiyama, **RM Ortiz**. Acute Caloric Restriction Does Not Improve Hepatic Glucose Metabolism or Insulin Resistance Index in Insulin Resistant OLETF Rats. *Experimental Biology 2020*, San Diego, CA, April 5, 2020 (online).
- Emery JM, MA Cornejo, D Nakano, A Nishiyama, **RM Ortiz**. Caloric Restriction Increases Hepatic Glucose in Obese, Insulin Resistant OLETF Rats. *Inaugural meeting of the California Society of Physiologists*, Pasadena, CA November 06, 2019
- Smith ME*, R Rodriguez, MA Thorwald, **RM Ortiz**. The Effects of a GLP1r Agonist on Renal Ischemia-Reperfusion Injury. *Inaugural meeting of the California Society of Physiologists*, Pasadena, CA November 06, 2019
- Ortiz-Flores S, F Ortiz, E Rodriguez Cruz, E Diaz Machado, B Kaur, K Hlubik, **RM Ortiz**, LK Diaz Rios. Food security needs assessed by college student key-informants. Youth Roundtable: Youth leading the way to healthier communities. *American Public Health Association Annual Meeting*, Philadelphia, PA, November, 2019
- Tletlepanzi SA, D Conte, R Rodriguez, MS Awayda, **RM Ortiz**. Angiotensin II-induced Hypertension in Sprague-Dawley Rats is Attenuated by the Antagonism of Angiotensin and Aldosterone Receptors. *Aldosterone & ENaC in Health and Disease: The Kidney and Beyond Conference*, Estes Park, CO, October 2-6, 2019
- Ortiz-Flores S, F Ortiz, E Rodriguez Cruz, E Diaz Machado, B Kaur, K Hlubik, **RM Ortiz**, LK Diaz Rios. Food access information and nutrition education needs assessed by college student key-informants. *Society for Nutrition Education and Behavior Annual Meeting*, Orlando, FL, July 2019.

FELLOWSHIPS

- January – December 2019. New Leadership Academy Fellow, University of Michigan
- January 2011. Japanese Society for the Promotion of Science Fellow, Kagawa Medical University
- April 2009. USDA-HSI E (Kika) de la Garza Fellow, Washington DC
- March 2004 – January 2005. NIH National Research Service Award with Dr. L. Gabriel Navar, Department of Physiology, Tulane University Health Sciences Center.
- April 2002 (Began January, 2003). Ford Foundation Postdoctoral Fellow with Dr. L. Gabriel Navar, Department of Physiology, Tulane University Health Sciences Center.
- July 2001 – December 2003. University of California's Office of the President Postdoctoral Fellow with Dr. Frank Talamantes, Department of Biology, UC Santa Cruz
- September 2000. University of California's Office of the President Dissertation Year Fellowship. Department of Biology, University of California, Santa Cruz
- June, 1997 - 2001. NASA's Graduate Student Researcher Program Predoctoral Fellowship. Department of Biology, University of California, Santa Cruz
- July - August 1996: Minority International Research Training (M.I.R.T.) Fellowship with Dr. C. L. Ortiz, Department of Biology, UC Santa Cruz. Field research in the Gulf of California.

RESEARCH EXPERIENCE

- June - September 1998: NASA-UCSC Education Associate. NASA Ames Research Center
- September 1995 - September 1997: Scientist Associate. Lockheed-Martin Engineering and Science Services, NASA Ames Research Center
- June - August, 1995: Research Assistant I. Bionetics Corp., NASA Ames Research Center
- April - May, 1995: Research Assistant with Dr. F. Michael Byers, Texas A&M University

TEACHING and MENTORING EXPERIENCE

- Developed and implemented Endocrinology & Lab (BIO 163)
- Developed and implemented Human Physiology & Lab (BIO 161)
- Developed and implemented Special Topics in Endocrinology (QSB 298)
- Developed and implemented Nutrition (BIO 60)
- Contribute lectures & team teach Responsible Conduct in Research (QSB 294)
- Contributed lectures in Current Topics in Quantitative & Systems Biology (BIS 290) and CORE 1
- July, 2005: Physiologist-in-Residence for Summer Science Teachers Forum. Sponsored by American Physiology Society. Airlie, VA
- Spring, 2004: Physiology for Biomedical Engineering (BME 304): Renal Physiology section. Tulane University, New Orleans, LA.
- Spring, 2004: Human Physiology (GPSO 60401): Facilitator for Problem Based-Learning sessions. Tulane University Health Sciences Center, New Orleans, LA.
- Spring, 2002: Developed and taught course, “Bioethics in Science” for MARC/MBRS students, University of California, Santa Cruz

Post-doctoral Fellows

- August 2016 – July 2020: Dr. J Dhillon (NIH K99/R00 Fellow)
- March 2012 – March 2013: Dr. M Suzuki (JSPS Fellow)
- October 2010 – December 2012: Dr. JG Soñanez-Organis (UCMexus/CONACYT Fellow),

Graduate Student Committees - Current

- PhD candidates: M Cornejo (chair, UCM), P Saldierna-Guzman (member, UCM), J Alvarenga (member, UCM)
- PhD students: JA Godoy-Lugo (chair, UCM), J Wilson (chair, UCM), B Sanchez (co-mentor, UCM)
- MS students: JM Emery (chair, UCM), D Mendez (chair, UCM)

Graduate Student Committees - Completed

- UCM PhD students: R Rodriguez (chair, Su '18), M Thorwald (chair, Su '18), B Martinez (chair, Spr '16), JP Vazquez-Medina (chair, Spr '13), J Viscarra (chair, Spr '13), Y Zhu (member, Spr '16)
- Non-UCM PhD students: M Keogh (member, Univ AK, Fairbanks: Spr '11)
- MS students: G Vazquez-Anaya (chair, UCM; Spr '16); A Lee (chair, UCM; Spr '16), N Mayer (member, UCM; Fall '15), D Conte (chair, UCM; Fall '12), B Litz (member, Univ AK, Fairbanks: Spr '09), J Minas (chair, UCM: Su '14), J Mowrer (member, Fresno State: Spr '14), H Orrell (member, UCM: Su '11), C Paolo (member, UCM: Fall '10), J Sharick (member, CSU Sonoma: Spr '14), L Vazquez (member, UCM: Spr '09)

Mentored Undergraduate Students: (performed extramural research outside UCM)

- UC Merced, 2005 – present (females): **J Aguil, K Aldaz, A Arteaga**, K Asato, S Balayan, **F Barragan, M Barron**, AM Burachek, A Camello, **S Castro** (Unison, MX), **D Conte, C Cummings**, N de la Cruz, **JM Emery**, J Ghio, J Grewal, **L Horin** (Pitzer College), **D Lee, L Lee, A Lopez**, K Luna, **P Malhi, B Martinez**, D Mendez, **J Minas**, I Montes, **P Montez, M Moreno, J Mowrer, J Nguyen**, S Ortiz-Flores, I Popovich, R Ram, **A Ramirez-Gonzales**, D Rodriguez, L Rodrigues, M Rodriguez, J Romo, **M Smith, J Sood, S Tletlephantzi, S Torres** (UNM), E Vu, M Williams, W Williams
- UC Merced, 2005 – present (males): J Aboulhosn, **T Agyapong**, D Araiza, **S Asghar, J Cazares**, K Dang, M de la Vega, **B Escobedo**, JA Garcia, J Garcia, R Garcia, **JA Godoy-Lugo** (Unison, MX), **M Haro-Crespo, P Juarez**, A Lakhani, **A Lee, A Mamalis**, V Morales, A Nucum, A Ortiz, **R Rodriguez, S Duval Ruilova**, E Sandoval, **M Thorwald, K Veliz**, M Viray, **J Viscarra**, A Wiener
- BA-STAR (UCM), 2007-2008: A Gonzalez, I Lona, J Matias, A Mojica
- Tulane University HSC, 2003-2004: A Bailey
- UCSC 1997 – 2003: A Bigelow, O Fregoso, A Galarza, G Gurun, S Lacayo, B Litz, L Pagarigan, A

Ramirez, J Ramirez, R Sherman

Conference Student Mentor:

- Experimental Biology '09 New Orleans, LA; EB '08 San Diego, CA; EB '06, San Francisco, CA; EB '05, San Diego, CA; EB '04 Washington, DC; EB '03, San Diego, CA; APS Conference, *The Power of Comparative Physiology: Evolution, Integration and Application*, 2002 San Diego, CA

PROFESSIONAL EXPERIENCE

- July 2017: co-Founder and interim President, California Society of Physiologists
- July 2012 – Deepwater Horizon Natural Resource Damage Assessment (NRDA) panel review for National Oceanographic and Atmospheric Administration
- 2006-2009: Inaugural member California's State Legislature Task Force on Diabetes & Obesity
- August 2002 – Independent consultation for University of Miami's Center for Independent Experts to review the National Marine Fisheries Service's International Dolphin Conservation Program Act Science Report
- February 2002 – Independent consultation for University of Miami's Center for Independent Experts to review the National Marine Fisheries Service's Chase Encirclement Stress Studies on dolphins

CURRENT RESEARCH SUPPORT

- Center for Medicinal Cannabis Research #727953 \$300K
Effects of CBD on blood pressure and substrate metabolism during metabolic syndrome
Role: PI 10/01/20 – 09/30/22
- UC Mexus #A20-0066 \$25K
Role of Perilipin Family in the Cardiac Lipid Metabolism During Physiological Hypertrophy Induced by Pregnancy
Role: UC PI 07/01/19 – 06/30/21

CURRENT PROGRAM SUPPORT

- USDA HSI Educational Grant 2017-03691 \$1M
UC Merced FARMERS
Role: Program Director 09/01/17 – 08/31/21

PENDING PROGRAM SUPPORT

- NIH NIGMS U-RISE 1T34GM136472-01A1 \$4.1M
U-RISE at UC Merced
Role: Program Director 04/01/21 - 03/31/26

RECENTLY COMPLETED SUPPORT (last 3 yrs)

- CONACYT: 220496 \$107K
Participación del factor inducido por hypoxia 1 (HIF-1) en el metabolismo energético anaerobio y repuesta celular y humoral ante la infección con el virus de la mancha blanca en camarón blanco (*Litopenaeus vannamei*)
Role: Collaborating Investigator 09/01/14 – 08/31/17
- UC Mexus \$1500
Advancing Collaborative Opportunities between Universidad de Sonora & UC Merced
Role: co-PI 10/01/16 – 09/30/17
- AztraZeneca \$192K
The Contributions of GLP-1 and Angiotensin Receptor Activation on Renal Na⁺ Handling & Renal Oxidative Stress in a Novel Model of Metabolic Syndrome
Role: PI 11/01/12 – 02/01/17 (NCE)
- UC Mexus \$25K
Pregnancy-induced Shift in Cardiac Metabolism by Activation of HIF-1 and PPAR- γ
Role: co-PI 09/01/14 – 03/31/16
- NIH NHLBI: 1R01HL091767-01A1 \$1.78 mil

- Oxidative stress and inflammation during prolonged fasting and sleep apnea in seals
 Role: PI 2/01/09 - 1/31/14 (NCE)
- NIH West Coast Metabolomics Center: DK097154-01 \$33.8K
 Metabolomic and Lipidomic Profiles in Response to Exogenous Insulin and GLP-1 Infusions during Prolonged Fasting
 Role: PI 10/16/13 - 6/16/14
 - NIH NHLBI: 1K02HL103787-01 \$415K
 Independent scientist development award in oxidative stress & apnea
 Role: PI 8/01/10 - 5/31/14
 - NIH NHLBI: 3R01HL091767-02S1 \$174K
 Graduate student research supplement to mechanisms of oxidative stress and inflammation during prolonged fasting and sleep apnea in a naturally adapted mammal, the northern elephant seal
 Role: PI 7/01/10 - 6/30/13
 - USDA HSI Educational Grant 2011-38422-30813 \$289K
 Undergraduate Training & Mentoring in the Agricultural Sciences
 Role: Program Director 09/01/11 – 08/31/13 (NCE)
 - NSF 11-514 Ethics Education in Science and Engineering (EESE) \$400K
 Building Student Skills in Publication Ethics: Understanding and Implementing Professional Standards of Practice
 Role: Advisory Board member 9/15/12-8/31/15

AWARDS, HONORS and SUPPORT (last 5 yrs)

- April 2015: selected as Fellow of The American Physiological Society (FAPS)
- April 2014: elected to Council of The American Physiological Society
- April 2013: UCM Academic Senate Award for Distinction in Research (AY '12-'13)
- September 2012: selected as Fellow of the American Heart Association (FAHA)
- June 2011. UCM HSRI mini-grant (\$2500)
- May-June 2011. Japanese Society for the Promotion of Science Fellowship
- November 2010. UCM HSRI mini-grant (\$6000)
- August 2010. NIH NHLBI Career Development Award (K02)
- April 2010. New Investigator Award, Comparative Section, American Physiological Society
- April 2009. Early Career Professional Service Award, American Physiological Society
- Invited to attend Treenut, Peanut & Seeds Scientific Nutritional Symposium (March 1-2, 2007. UC Davis)
- Invited to attend POM Wonderful Scientific Symposium (Feb. 7, 2007. UCLA)
- December 2006. Millennium Sports Club gift award for childhood obesity study. (\$5K)
- October 2006. Great Valley Center, Modesto CA, student fellowship award (J Mowrer, R Rodriguez) (\$20K)
- June 2006. UCM Graduate Research Committee mini-grant. (\$1830)
- April 2006. National Kidney Foundation of Northern California Young Investigators Forum Award.

ACADEMIC & PROFESSIONAL SERVICE

Editorial Review Boards

- 03/10 – present: Frontiers in Aquatic Physiology, Frontiers in Endocrinology
- 06/11 – present: American Journal of Physiology: Regulatory, Integrative & Comparative
- 07/14 – present: American Journal of Physiology: Endocrinology & Metabolism
- 12/15 – 2018: APSselect Selection Board

UC Merced & System Committees

- July 2013 – June 2015: Chair, UC Merced Committee for Faculty Welfare, Diversity and Academic Freedom
- July 2012 – June 2015: UC System-wide Committee for Affirmative Action & Diversity
- 2009-2017: Advisory Board member, UC Mexus

- July 2014 – July 2015: President, UC Merced Chapter Sigma Xi
- July 2013 – June 2014: Vice-President, UC Merced Chapter Sigma Xi
- July 2013-present: Faculty Sponsor, UC Merced Chapter of SACNAS
- October 2011 - 2015: Faculty Advisory cmt for UCM Program In Medical Education (PRIME)
- September 2011 - 2014: Public Health Advisory Committee
- January – December 2012: UCM Space Committee - School of Natural Sciences Representative
- October 2011 – January 2013: Chancellor’s Task Force on Community Engaged Scholarship
- August 2009 – June 2012: Program Director for Undergraduate Research Training Program for the Center of Excellence in Health Disparities & Executive Committee member of UCM Center of Excellence in Health Disparities
- November 2011 – March 2012: UCM Provost & EVC search committee member
- July 2009 – June 2010: Athletics Advisory Committee
- July 2007 – June 2009: Chair, QSB Education Policy Committee (previously Curriculum Cmt) & Representative to Life Sciences CC
- 2005-2010: UCM Faculty Search committees
- March 2007 – June 2010: Inaugural member, UCM Institutional Animal Care & Use Cmt

External Committees & Activities

- August 2019 – present: Ford Foundation Regional Liaison
- July 2017-2020: co-Founder & Interim President, The California Society of Physiologists
- 2014-2017: member, Council of The American Physiological Society
- January 2014: Invited to participate in the development of an APS Leadership Institute
- 2013 – 2015: AHA Trainee Advisory Committee
- 2012 – 2016: AHA Western States Affiliate Research Committee
- 2011 - present: Almond Board of California, Nutrition Research Committee
- 2005 - 2017: APS Advisory Board for the Professional Skills Training for Minority Students in Biomedicine
- September 2011 – April 2012: APS Strategic Planning Task Force
- 2007-2011: APS Porter Development Committee
- 2003-2006: APS Trainee Advisory Committee
- 2003-2006: APS Comparative Section Steering Committee
- Oct 29-31, 2005: APS Strategic Plan meeting (Woodlands Resort, Houston, TX)

Grant/Fellowship Reviewer

- 2018: Agence Nationale de la Recherche (French National Government)
- 2020: member, AHA Cardiorenal 3 Study Section
- 2013-2017: chair, AHA Cardiorenal 3 Study Section
- 2013- 2018: member, NIH Atherosclerosis & Inflammation CV System Study Section
- 2014: Member, AHA Collaborative Research Grants Peer Review Group (inaugural review of new program)
- 2012-2013: Member, AHA Cardiorenal3 Study Section
- 2011-2012: AHA Student Undergraduate Research Fellowship
- 2012: Member, AHA Innovative Research Grants Peer Review Group
- 2017-present: Ford Foundation fellows programs
- 2009-present: University of California’s Office of the President Postdoctoral Fellowship
- 2010-2017: Member, NAS/NRC Research Associates Fellowship
- 2008-2011: American Physiological Society’s Porter Development Predoctoral Fellowship
- 2009, 2020: NSF IOS grant review

Journal Reviewer

Advances in Physiol Educ	Advances Nutrition	AJP: Endo & Metab; Heart;	Aquatic Mammals	Archives Biochem & Biophysics	California J Health Promo
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		Renal; RIC			
Canadian J of Zoology	Cellular Physiol & Biochemistry	Circulation	Clinical Exp Pharmacol Physiol	Clinical Pediatrics	Comp Biochem Physiol A
Comprehensive Phys	European J of Inflammation	Endocrine	Fish Physiology & Biochemistry	Free Radical Biol Medicine	Frontiers in Aquatic Physiol: Endocrinology
General & Comp Endocrinology	Hypertension	Hormone & Metabolic Res	Integrative & Comp. Biology	International J Medical Science	J Am College Nutrition
J Am Heart Assoc	J Clinical Invest	J Comparative Physiology B	J. Experimental Biology	J Endocrinology	J Health Psychol
J. of the RAAS	Kidney & Blood Pressure Res.	Marine Mammal Science	Metabolomics	Metabol & CV Disease	Nephron
Nutrition	Peptides	Physiology (APS)	Physiol & Biochem Zool	PLoS One	Res. Veterinary Science
Scientific Reports	Zoo Biology				

Conference Abstract Reviewer

- American Heart Association - Council for High Blood Pressure, American Physiological Society, Society for the Advancement of Chicanos and Native Americans in Science, Society of Experimental Biology and Medicine, Society of Marine Mammalogy

PROFESSIONAL MEMBERSHIPS

- American Physiological Society (APS)
- American Heart Association (AHA)
- California Society of Physiologists (Life Member)
- Endocrine Society
- Society for Experimental Biology and Medicine (SEBM)
- Society for the Advancement of Chicanos & Native Americans in Science (SACNAS) (Life Member)

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