Patricia M. Di Lorenzo

Curriculum Vitae
Spring, 2016

ADDRESS: Department of Psychology
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EDUCATION AND EXPERIENCE:

2016	Chair, F31/F32 Fellowship review panel, Somatosensory and Chemosensory Systems; National Institute on Deafness and Other Communication Disorders
2010-2015	Member, Somatosensory and Chemosensory Systems Study Section; National Institute on Deafness and Other Communication Disorders
2014, spring	Workshop on Optogenetics, laboratory of Dr. Karl Deisseroth, Stanford University, Paolo Alto, CA
2009 – present	Associate Editor, *Frontiers in Integrative Neuroscience*
2008, spring	Member, NSF Review panel, "Activation"
2002, fall	Sabbatical in the laboratory of Dr. Christiane Linster, Cornell University
2001, summer	Workshop in NEURON, University of Minnesota
2000-2005	Director of graduate program in Behavioral Neuroscience, Department of Psychology, Binghamton University
1998-present	Professor and Director of the Undergraduate Program in Integrative Neuroscience, Binghamton University
1994, spring	Visiting Associate Professor, Department of Psychology - Experimental, laboratory of Dr. W.G. Hall, Duke University
1993, fall	Sabbatical in the laboratory of Dr. Jelle Atema, Boston University Marine Program, Marine Biological Laboratory, Woods Hole, MA
1993, summer	Methods in Computational Neuroscience, short course at the Marine Biological Laboratory, Woods Hole, MA
1991-1998	Associate Professor and Director of the Undergraduate Program in Psychobiology, Department of Psychology, Binghamton University
1985-1991:	Assistant Professor, Department of Psychology, Binghamton University
1983-1985:	Assistant Professor, Department of Psychology, Smith College

1981-1983: Postdoctoral Fellow, Department of Psychology, UCLA; Dr. John Garcia and Dr. Donald Novin, supervisors of research

1974-1981: Graduate student, University of Rochester, Ph.D. in Biopsychology, Dr. Jerome S. Schwartzbaum, dissertation advisor

1973-1974: Graduate student in Physiological Psychology, Carnegie-Mellon University

1969-1973: B.A., magna cum laude, University of Rochester

ACADEMIC AWARDS:

2007 State University of New York Chancellor's Award for Excellence in Scholarship and Creative Activities

1973 Phi Beta Kappa

GRANTS:

Extramural

NIH Grant, "Temporal coding in the gustatory system of the brain", September 1, 2016, to August 31, 2021, $1,457,279 (direct costs).

NIH Grant. "Vagal Influence on Brainstem Plasticity and Neural Coding of Taste", April 1, 2015 to March 31, 2019. $2,090,000 (total direct), Multi-PI.

NIH Grant, "Temporal coding in the gustatory system of the brain", December 1, 2010 to November 30, 2015, $1,250,000 (direct costs).

NIH Bridges to the Baccalaureate Grant, "SUNY Upstate Bridges to Baccalaureate Program, October 1, 2014 to September 30, 2019, $1,080,000 (total direct) co-PI (third renewal).

NIH Grant, ARRA Supplement, "Temporal coding in the gustatory system of the brain", July 17, 2009, to June 30, 2011, $234,000 (direct costs)

NIH Grant, "Temporal coding in the gustatory system of the brain", December 1, 2005, to November 30, 2010, $1,045,000 (direct costs)

NIH Grant, "Taste coding by neural circuitry in the brain stem", September 1, 2003 to August 31, 2007, $450,000 (direct costs).

NSF Research Grant, "Interneuronal dynamics in the neural code for taste in the brain stem", September 1, 2000, to August 31, 2003, $270,000 (direct and indirect).

NSF Research Grant, "Interneuronal dynamics in the neural code for taste in the brain stem", September 1, 1996, to August 31, 2000, $280,161 (direct and indirect).

Whitehall Foundation Grant, "A nonlinear model of the neural code for taste", June 1, 1990 to May 31, 1996, $95,049.

NSF Grant for Exploratory Research, "Perceptual properties of electrical stimulation in the gustatory system", Sept. 1, 1990 to Aug. 31, 1992, $29,166.

NIH Research Grant, "Conditioning of parabrachial pontine units", 1984-1988, $47,801.

New York State Faculty Grant for the Improvement of Undergraduate Instruction, "Update of Physiological Psychology Laboratory Course", 1986-1987, $2,348.

Intramural

SUNY Binghamton BRSG Grant, “Taste responses in the thalamus of the rat”, 1993, $3,230.
SUNY Binghamton Faculty Research Grant, "Stimulation of taste related neural areas as a test of a parallel distributed processing model of gustatory neural coding", 1990, $2,650.
SUNY Binghamton BRSG Grant, "Computational analysis of taste responses in the pons: Intensity/response functions", 1990, $4500.
SUNY Binghamton Faculty Summer Research Grant, "Mathematical model for the gustatory system", 1988, $3,000.
SUNY Binghamton Research Semester Award, Spring, 1988.
BRSG Grant, "Development of a chronic recording technique to study sensory convergence in the brainstem of the rat", Jan. 1, 1988 to Dec. 31,1988, $2300.

RESEARCH CONCENTRATIONS:

Current: Neural circuitry of taste coding in the brain stem of awake and anesthetized rats using electrophysiological and optogenetic techniques. Computational models of the neural code for taste; Investigations of temporal coding with electrical stimulation of the brain stem in awake rats; Centrifugal influence in the gustatory system.

1983-1985: Electrophysiology of conditioned taste aversion; effects of CCK-8 on palatability of tastants; hormonal effects on gustation

1981-1983: Electrophysiology of taste and olfactory convergence in the rat brainstem; electrophysiological responses to ethyl alcohol in the nucleus of the solitary tract in rat; development of central projections of chorda tympani nerve using HRP

1977-1981: Multiunit and single unit recording in nucleus of the solitary tract and parabrachial nucleus of the pons in awake and anesthetized rabbits

1974-1977: Multiunit and single unit recording from hippocampus and reticular formation in awake rabbits in a treadmill; hippocampal theta cell responsivity to sensory stimuli related to movement and non-movement in a treadmill; brainstem multiunit activity in reticular formation related to movement

1971-1974: Hippocampal seizures and short-term memory in rats; reactivity and visual evoked potentials following septal lesions in rats. Effects of anticholinergic drugs on short-term memory in monkeys; aggression and heart rate in rats.

COURSES TAUGHT:

Introduction to Computational Neuroscience
Neurophysiology for graduate students
Physiological Psychology for undergraduates and graduate students
Grant Writing and Review for graduate students
Ethics in Research for graduate students
Seminar in the Physiology of Eating
Seminar in the Physiology of Dieting and Eating Disorders
Seminar in the Psychology of Virtual Reality
Physiological Psychology Laboratory

Introduction to Psychology
Seminar in Human Neuropsychology; Developmental Psychobiology

PROFESSIONAL AFFILIATIONS:

Society for Neuroscience
American Physiological Association
Association for Chemoreception Sciences
eLife, ad hoc reviewer
Chemical Senses, ad hoc reviewer
Experimental Biology and Medicine, ad hoc reviewer
Journal of Comparative Physiology A, ad hoc reviewer
Journal of Neurophysiology, ad hoc reviewer
Journal of Neuroscience, ad hoc reviewer
Experimental Neurology, ad hoc reviewer
Brain Research, ad hoc reviewer
Brain Research Bulletin, ad hoc reviewer
Physiology and Behavior, ad hoc reviewer
National Science Foundation, ad hoc reviewer

Director of the Undergraduate Integrative Neuroscience (formerly Psychobiology) Program

organize a Welcome Back picnic for Psychobiology majors
organize special graduation ceremonies for Psychobiology graduates
organize a volunteer peer advisor program
publish a Psychobiology newsletter twice yearly
organize speaker series for the academic year (four speakers per year)
organize Alumni Outreach program
host visiting alumni who give student workshops on careers
publish annual alumni newsletter

Bridges to the Baccalaureate Program, co-PI

helped organize and participated in two visits to Community colleges around New York State
helped organize and participated in a two day visit of Bridges students to Binghamton University campus
participated in summer research program for 15-20 underrepresented minority students from community colleges around New York State

Invited Talks

2016 "Encoding taste and food in the hindbrain through cooperative activity in a variety of cell types" Invited symposium speaker at the International Symposium on Olfaction and Taste, Yokohama, Japan.

2016 "Temporal coding of taste: What is it good for?" Invited symposium speaker at Association for Chemoreception Sciences meeting. Bonita Springs, FL

2015 "Taste and the brain: How we know what we are eating" Cornell University, Ithaca, NY.

2012 "It takes a village: Neural coding of taste in the brainstem" University of Tennessee Health Science Center, Memphis, TN.

2012 “It takes a village: Neural coding of taste in the brainstem” Monell Chemical Senses Center, Philadelphia, PA

2011 “Taste coding through time: a feast for the mind” University of Louisville, Louisville, KY

2011 “Water as an independent taste modality: an old idea with new evidence” Symposium speaker: Why Five? at the annual meeting of the Association for Chemoreception Sciences, St. Pete Beach, FL

2009 “Taste coding through time: a feast for the mind” Downstate Medical College, Brooklyn, NY

2009 “Taste: what every chef should know” Culinary Institute of America, Hyde Park, NY

2009 “Taste coding through time: a feast for the mind” J.B. Pierce Foundation, Yale University, New Haven, CT

2008 “Information processing in the parabrachial nucleus of the pons: Temporal relationships of input and output” Symposium speaker: International Symposium on Olfaction and Taste, San Francisco, CA.

2007 “Taste coding through time: a feast for the mind” Weill Medical College, Cornell University, Dept. of Neurology

2006 “Temporal coding of taste in the brainstem: Information and function” Symposium speaker: Neural Dynamics and Chemosensory Behavior at the meeting of Association for Chemoreception Sciences

2005 “Taste coding through time: a feast for the mind” University of Delaware, Department of Psychology

2002 “Temporal Coding in the Gustatory System” Cornell University, Dept. of Neurobiology and Behavior

2000 “Temporal patterns of spike activity as a code for taste: evidence from electrophysiological and behavioral studies” Invited symposium presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.

1999 "Dynamic coding of taste in the brain stem" Duke University

1998 "Gustatory Information Processing in the Brain Stem" Duke University, Dept. of Neurobiology

1998 “Gustatory Information Processing in the Brain Stem” University of Illinois at Chicago, Department of Psychology

1997 “Gustatory information processing in the brain stem” Monell Chemical Senses Center, Philadelphia, PA

1996 “Effects of adaptation on the response profiles of taste cells in the nucleus of the solitary tract” Henry Ford Health Sciences Center, Detroit, MI

1993 “Information processing in the parabrachial nucleus of the pons” Eleventh International Symposium on Olfaction and Taste, Sapporo, Japan, 1993.

1989 “Gender-related and pregnancy-related differences in the neural processing of taste in the pons” Marine Biological Laboratory, Woods Hole, MA

1988 “Sex differences in the electrophysiological responses to taste in the pons” Cornell University, Ithaca, NY

1986 “Neural coding of gustatory stimuli” Millersville University, Millersville, PA

1986 “Some aspects of the neurophysiological basis of conditioned taste aversion” SUNY at Albany, Albany, NY

Other

Co-editor (with Dr. Jonathan D. Victor) of Spike Timing: Mechanism and Function. CRC Press: Boca Raton, FL, 2013.

Co-organized (with Dr. Thomas R. Scott) a feschrift for Dr. Robert P. Erickson at Duke University, June 3, 1999.

Co-editor (with Dr. Thomas R. Scott) of a special issue of Physiology & Behavior in honor of Robert P. Erickson.

PUBLICATIONS:

Sammons, J.D., Weiss, M.S., Escanilla, O.D., Fooden, A.F., Victo,r J.D. and **Di Lorenzo, P.M**. (2016) Spontaneous changes in taste sensitivity of single units recorded over consecutive days in the brainstem of the awake rat. PLoS One, 11(8):e0160143.

Sammons, J.D., Weiss, M.S., Victor, J.D. and **Di Lorenzo, P.M.** (2016) Taste coding of complex naturalistic taste stimuli and traditional taste stimuli in the parabrachial pons of the awake, freely licking rat. J. Neurophysiol. 116(1):171-182.

Escanilla, O.D., Victor, J.D. and **Di Lorenzo, P.M.** (2015) Odor-taste convergence in the nucleus of the solitary tract of awake freely licking rats. J. Neurosci., 35(16):6284-6297.

Ballsmider, L.A., Vaughn, A.C., David, M., Hajnal, A., **Di Lorenzo, P.M.** and Czaja, K. (2015) Sleeve gastrectomy and Roux-en-Y gastric bypass alter the gut-brain communication. Neural Plasticity 2015:1-9.

Weiss, M.S., Victor, J.D. and **Di Lorenzo, P.M.** (2014) Taste coding in the parabrachial nucleus of the pons in awake, freely licking rats, and comparison with the nucleus of the solitary tract. J. Neurophysiol., 111(8):1655-70.

Pritchard, T.C. and **Di Lorenzo, P.M.** Ch. 32 Central Taste Anatomy and Physiology of Rodents and Primates. Handbook of Olfaction and Gustation (3rd edition): Modern Perspectives, Wiley, *in press*.

D'Agostino, A.E. and **Di Lorenzo, P.M**. Ch. 45. Information Processing in the Gustatory System. In: Springer Handbook of Bio/ Neuroinformatics (HBNI), N. Kasabov, ed., Springer Verlag, 2014, p. 783-796.

Di Lorenzo, P.M. Spike Timing as a mechanism for taste coding in the brainstem. In: Spike Timing: Mechanism and Function. **P.M. Di Lorenzo** and J.D. Victor, eds., CRC Press: Boca Raton, FL, 2013.

Rosen, A.M. and **Di Lorenzo, P.M.** (2012) Neural coding of taste by simultaneously recorded cells in the nucleus of the solitary tract of the rat. J. Neurophysiol. 108(12): 3301-12.

Roussin, A.T., D'Agostino, A.E., Fooden, A.M., Victor, J.D. and **Di Lorenzo, P.M.** (2012) Taste coding in the nucleus of the solitary tract of the awake, freely licking rat. J. Neurosci., 32(31): 10494-10506.

Weiss, M.S. and **Di Lorenzo, P.M.** (2012) Not so fast: Taste coding time in the rat revisited, Front. Integr. Neurosci., 6: 27.

Di Lorenzo, P.M. and Youngentob, S.L. (2013) Taste and Olfaction. In: Handbook of Psychology, Volume 3. Behavioral Neuroscience, Chapter 10. R.M. Nelson, ed., Wiley, New York: *pp. 272-305*.

Rosen, A.M., Victor, J.D. and **Di Lorenzo, P.M.** (2011) Temporal coding of taste in the parabrachial nucleus of the pons of the rat. J. Neurophysiol., 105(4): 1889-96.

Chen, J.-Y., Victor, J.D. and **Di Lorenzo, P.M.** (2011) Temporal coding of intensity of NaCl and HCl in the nucleus of the solitary tract of the rat. J. Neurophysiol., 105(2): 697-711.

Rosen, A.M., Roussin, A.R. and **Di Lorenzo, P.M.** (2010) Water as an independent taste modality. J. Enteric Neurosci., 4: 175-185.

Rosen, A.M., Sichtig, H., Schaffer, J.D. and **Di Lorenzo, P.M.** (2010) Taste-specific cell assemblies in a biologically informed model of the nucleus of the solitary tract. J. Neurophysiol., 104(1): 4-17.

Di Lorenzo, P.M., Chen, J.Y. and Victor, J.D. (2009) Quality time: Representation of a multidimensional sensory domain through temporal coding. J. Neurosci. 29(29): 9227-9238.

Rosen, A.M. and **Di Lorenzo, P.M. (**2009) Two types of inhibitory influences target different groups of taste-responsive cells in the nucleus of the solitary tract of the rat. Brain Res., 1275: 24-32.

Di Lorenzo, P.M., Leshchinskiy, S., Moroney, D.N and Ozdoba, J.M. (2009) Making time count: Functional evidence for temporal coding of taste sensation. Behav. Neurosci., 123(1): 14-25.

Di Lorenzo, P.M., Platt, D. and Victor, J.D. (2009) Information processing in the parabrachial nucleus of the pons: Temporal relationships of input and output. Ann. N.Y. Acad. Sci., 1170: 365-371.

Roussin, A.T. and **Di Lorenzo PM.** (2008) Oh, how sweet it is: Focus on altered pontine processing in a rat model of obesity by Kovacs and Hajnal. J. Neurophysiol.,100(4): 1697-8.

Di Lorenzo, P.M., Chen, J.Y., Rosen, A.M. and Roussin, A.T. Tastant. Encyclopedia of Neuroscience, Binder, M.D., Hirokawa, H., Windhorst, U., Hirsch, M.C. (Eds.), Springer-Verlag, *in press*.

Chen, J.-Y. and **Di Lorenzo, P.M.** (2008) Responses to binary taste mixtures in the nucleus of the solitary tract: neural coding with firing rate. J. Neurophysiol. 99 (5): 2144-57.

Roussin, A.T., Victor, J.D., Chen, J.-Y.and **Di Lorenzo, P.M.** (2008) Variability in responses and temporal coding of tastants of similar quality in the nucleus of the solitary tract of the rat. J. Neurophysiol., 99 (2): 644-655.

Verhagen, J.V. and Katz, D.B. (2008) More time to taste. Focus on "Variability in responses and temporal coding of tastants of similar quality in the nucleus of the solitary tract of the rat". J. Neurophysiol., 99(2): 413-4.

Di Lorenzo, P.M. and Chen, J.-Y. (2008) Basic tastes as cognitive concepts and taste coding as more than spatial. Commentary on Erickson, R.P. "A study of the science of taste: On the origins and influence of the core ideas." Behav. Brain Sci., 31(1): 78-9.

Di Lorenzo, P.M. and Victor, J.D. (2007) Neural coding mechanisms for flow rate in taste-responsive cells in the nucleus of the solitary tract of the rat. J. Neurophysiol., 97(2): 1857-61.

Hallock, R.M. and **Di Lorenzo, P.M.** (2006) Temporal coding in the gustatory system. Neurosci. Biobehav. Rev., 30(8): 1145-1160.

Hallock, R.M. and **Di Lorenzo, P.M.** (2006) Effects of electrical stimulation of the glossopharyngeal nerve on cells in the nucleus of the solitary tract of the rat. Brain Res., 1113 (1): 163-173.

Di Lorenzo, P.M., Hallock, R.M. and Kennedy, D.P. (2003) Temporal coding of sensation: Mimicking taste quality with electrical stimulation of the brain. Behav. Neurosci., 117(6): 1423-1433.

Di Lorenzo, P.M., Lemon, C.H. and Reich, C.G. (2003) Dynamic coding of taste stimuli in the brain stem: effects of brief pulses of taste stimuli on subsequent taste responses. J. Neurosci., 23: 8893-8902.

Di Lorenzo, P.M. and Victor, J.D. (2003) Taste response variability and temporal coding in the nucleus of the solitary tract of the rat. J. Neurophysiol., 90: 1418-1431.

Katz, D.B. (2003) Making time with taste. Focus on "Taste response variability and temporal coding in the nucleus of the solitary tract of the rat". J. Neurophysiol., 90(3):1375-6.

Lemon, C.H. and **Di Lorenzo, P.M**. (2002) Effects of electrical stimulation of the chorda tympani nerve on taste responses in the nucleus of the solitary tract of the rat. J. Neurophysiol., 88: 2477-2489.

Di Lorenzo, P.M. and Youngentob, S.L. (2002) Olfaction and Taste. In: Handbook of Psychology, R.M. Nelson, ed., Wiley, New York: pp. 269-297.

Di Lorenzo, P.M. and Lemon, C.H. (2001) Methodological considerations for electrophysiological recording and analysis of taste-responsive cells in the brain stem of the rat. In: Methods in Chemosensory Research, Simon, S.A. and Nicolelis, M.A.L., eds., CRC Press, New York, pp. 293-324.

Di Lorenzo, P.M. (2000) The neural code for taste in the brain stem: Response profiles. Physiol. Behav., 69(1-2): 87-96.

Di Lorenzo, P.M., Grandis, K. and Reich, C.G. (2000) Stimulation of sodium channels in taste receptor cells provides noise that enhances taste detection. Neurocomputing, 32-33: 121-126.

Di Lorenzo, P.M. and Lemon, C.H. (2000) The neural code for taste in the nucleus of the solitary tract of the rat: Effects of adaptation. Brain Res., 852: 383-97.

Di Lorenzo, P.M., Lemon, C.H., Kawamoto, M.D. (1997) Changes in response profiles of taste cells in the brain stem parallel those observed in somatosensory thalamic cells following anesthetization of part of their receptive fields. Computational Neuroscience: Trends in Research, 1997 J. M. Bower, Ed., Plenum, New York, pp. 71-73.

Grasso, F. and **Di Lorenzo, P.M**. (1997) GUSSTO: a neural network model of gustation in the rat NTS and PbN. Computational Neuroscience: Trends in research, 1997 J. M. Bower, Ed., Plenum, New York, pp. 321-326.

Di Lorenzo, P.M. and Monroe, S. (1997) Transfer of information about taste from the nucleus of the solitary tract to the parabrachial nucleus of the pons. Brain Res., 763: 167-181.

Erickson, R.P., Schiffman, S.S., Doetsch, G.S., **Di Lorenzo, P.M**. and Woodbury, M.A. (1995) A fuzzy set approach to the organization of the gustatory system. Prim. Sens. Neur, 1(1): 65-80.

Monroe, S. and **Di Lorenzo, P.M.** (1995) Taste responses in neurons in the nucleus of the solitary tract that do and do not project to the parabrachial pons. J. Neurophysiol., 74(1): 249-257.

Di Lorenzo, P.M. and Monroe, S. (1995) Corticofugal influence on taste responses in the nucleus of the solitary tract in the rat. J. Neurophysiol., 74(1): 258-272.

Di Lorenzo, P.M., Monroe, S. and Hecht, G.S. (1994) Information processing in the parabrachial nucleus of the pons. In: Kurihara, K., Suzuki, N. and Ogawa, H. (Eds.) Olfaction and Taste XI, Springer Verlag, New York, pp. 402-404.

Erickson, R.P., **Di Lorenzo, P.M**. and Woodbury, M.A. (1994) Classification of taste responses in brain stem: membership in fuzzy sets. J. Neurophysiol., 71(6): 2139-2150.

Di Lorenzo, P.M. and Hecht, G.S. (1993) Perceptual consequences of electrical stimulation in the gustatory system. Behav. Neurosci., 107: 130-138.

Di Lorenzo, P.M. and Monroe, S. (1992) Corticofugal input to taste-responsive units in the parabrachial pons. Brain Research Bulletin, 29: 925-930.

Di Lorenzo, P.M., Monroe, S. (1990) Taste responses in the parabrachial pons of ovariectomized rats. Brain Res. Bull., 25: 741-748.

Di Lorenzo, P.M. (1990) Corticofugal influence on taste responses in the parabrachial pons of the rat. Brain Research, 530(1): 73-84.

Di Lorenzo, P.M. and Monroe, S. (1989) Taste responses in the parabrachial pons of male, female and pregnant rats. Brain Res. Bull., 23: 219-227.

Di Lorenzo, P.M. (1989) Across unit patterns in the neural response to taste: Vector space analysis. J. Neurophysiol., 62 (4): 823-833.

Di Lorenzo, P.M. (1988) Long-delay learning in rats with parabrachial pontine lesions. Chem. Senses, 13 (2): 219-229.

Di Lorenzo, P.M. (1988) Taste responses in the parabrachial pons of decerebrate rats. J. Neurophysiol., 59 (6): 1871-1887.

Di Lorenzo, P.M. (1987) OFF responses to gustatory stimuli in the parabrachial pons of decerebrate rats. In: Olfaction and Taste IX, edited by S.D. Roper and J. Atema, New York: N.Y. Acad. Sci., pp. 254-257.

Di Lorenzo, P.M., Kiefer, S.W., Rice, A.G. and Garcia, J. (1986) Neural and behavioral responsivity to ethyl alcohol as a tastant. Alcohol, 3: 55-61.

Di Lorenzo, P.M. and Garcia, J. (1985) Olfactory responses in the gustatory area of the parabrachial pons. Brain Res. Bull., 15: 673-676.

Di Lorenzo, P.M. and Schwartzbaum, J.S. (1982) Coding of gustatory information in the pontine parabrachial nuclei of the rabbit: Magnitude of neural response. Brain Res., 251: 229-244.

Di Lorenzo, P.M. and Schwartzbaum, J.S. (1982) Coding of gustatory information in the pontine parabrachial nuclei of the rabbit: Temporal patterns of neural response. Brain Res., 251: 245-257.

Schwartzbaum, J.S. and **Di Lorenzo, P.M**. (1982) Gustatory functions of the nucleus tractus solitarius in the rabbit. Brain Res. Bull., 8 (3): 285-292.

Di Lorenzo, P.M. and Schwartzbaum, J.S. (1980) Coding of taste information in the pontine taste area of the rabbit. In: Olfaction and Taste VII, edited by H. Van der Staure, London: IRL Press Ltd.

Schwartzbaum, J.S., **Di Lorenzo, P.M**., Mellow, W.F. and Kreinick, C.J. (1972) Further evidence for dissociation between visual evoked response following septal lesions in rats. J. Comp. Physiol. Psych., 80: 143-149.

ABSTRACTS AND PAPERS PRESENTED:

Denman-Brice, A.J, and Di Lorenzo, PM. Field potentials in solitary nucleus reflect state dependent taste processing. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Bonita Springs, FL, April, 2016

Escanilla OD, Weiss MS, Sammons JD, Hajnal A and Di Lorenzo PM. Responses in the nucleus of the solitary tract of freely licking rats with Roux-en-Y gastric bypass surgery. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Bonita Springs, FL, April, 2016.

Sammons, JD, Bass, CE, Victor, JD and Di Lorenzo, PM. Effects of the gustatory cortex on temporal coding in the nucleus of the solitary tract of the rat. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Bonita Springs, FL, April, 2016.

Weiss, MS, Hajnal A, Czaja K, Di Lorenzo PM. Gustatory information processing in the nucleus of the solitary tract in the awake, freely licking, diet-induced obese rat. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Bonita Springs, FL, April, 2016.

Sammons, J.D., Bass, C.E., Victor, J.D. and Di Lorenzo, P.M. Optogenetic manipulation of lateral hypothalamic input to the nucleus of the solitary tract modulates licking behavior in the awake rat. Presented at the annual meeting of the Society for Neuroscience, Chicago, IL, 2015.

Sammons, J.D., Kittrell, H, Graber, W., Czaja, K, PhD, Hajnal, H., Di Lorenzo, P.M. Changes in taste and odor preference following bariatric surgery in humans. Presented at the annual meeting of the Society for Neuroscience, Chicago, IL, 2015.

Escanilla, O.D. and Di Lorenzo, P.M. Transfer of chemosensory information between the NTS and PbN in the awake-behaving rats. Presented at the annual meeting of the Society for Neuroscience, Chicago, IL, 2015.

Weiss, M.S., Sammons, J.D., Victor, J.D. and Di Lorenzo, P.M. A lick-related circuit in the parabrachial nucleus of the pons in the awake, freely licking rat. Presented at the annual meeting of the Society for Neuroscience, Chicago, IL, 2015.

Sammons, J.D., Bass, C.E., Victor, J.D. and Di Lorenzo, P.M. Effects of the gustatory cortex on temporal coding in the nucleus of the solitary tract of the rat. Paper

presented at the annual meeting of the Association of Chemoreception Sciences, Bonita Springs, FL, 2015.

Weiss, M.S., Victor, J.D. and Di Lorenzo, P.M. Temporal coding of foods in the parabrachial nucleus of the awake, freely licking rat. Presented at the annual meeting of the Society for Neuroscience, Washington, D.C., 2014.

Denman-Brice, A., Czaja, K. and Di Lorenzo, P.M. Effects of selective gastric vagotomy on sucrose consumption in obese and lean rats. Presented at the annual meeting of the Society for Neuroscience, Washington, D.C., 2014.

Vaughn, A.C., Fletcher, C., Ballsmider, L.A., Di Lorenzo, P.M. and Czaja, K. Diet-induced obesity alters the gut-brain communication and results in microglia activation in the hindbrain feeding centers. Presented at the annual meeting of the Society for Neuroscience, Washington, D.C., 2014.

Escanilla, O.D. and Di Lorenzo, P.M. Retronasal odorants modulate responses of taste cells in the nucleus of the solitary tract of the awake, behaving rat. Presented at the annual meeting of the Society for Neuroscience, Washington, D.C., 2014.

Escanilla, O.D. and Di Lorenzo, P.M. Responses to retronasal odorants in taste-responsive cells in the nucleus of the solitary tract of the awake rat. Paper presented at the annual meeting of the Association of Chemoreception Sciences, Bonita Springs, FL, 2014.

Denman-Brice, A., Czaja, K and Di Lorenzo, P.M. Diet-induced Obesity Alters Vagally Mediated Satiety Signals. Paper presented at the annual meeting of the Association of Chemoreception Sciences, Bonita Springs, FL, 2014.

Escanilla, O.D., Fooden, A.M., Victor, J.D. and Di Lorenzo, P.M. Olfactory stimuli can enhance or attenuate information conveyed about taste quality in the nucleus of the solitary tract in awake, freely licking rats. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2013.

Czaja, K., Di Lorenzo, P.M., Ballsmider, L., and Callahan, C. Vertical gastric sleeve surgery does not reduce body fat accumulation or body weight gain in lean Sprague Dawley male rats. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2013.

Weiss, M.S., Fooden, A.F., Victor, J.D., Di Lorenzo, P.M. Taste responses change over consecutive days in single cells in the rat brainstem recorded in the awake animal. Paper presented at the annual meeting of the Association of Chemoreception Sciences, Huntington Beach, CA, 2013.

Escanilla, O.D. and Di Lorenzo, P.M. Taste and odor convergence in the nucleus of the solitary tract of awake, behaving rats. Paper presented at the annual meeting of the Association of Chemoreception Sciences, Huntington Beach, CA, 2013.

Denman-Brice, A. and Di Lorenzo, P. M. Sensory Afferents from the Stomach of the Rat Converge onto Taste-responsive Neurons in the Rat Brainstem. Paper presented at the annual meeting of the Association of Chemoreception Sciences, Huntington Beach, CA, 2013.

Weiss, M., Victor, J. D. and Di Lorenzo, P. M. Contributions of temporal coding to taste information in the parabrachial nucleus and comparisons to the nucleus of the solitary tract in the awake, freely licking rat. Presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, 2012.

Denman-Brice, A. and Di Lorenzo, P. M. Sensory afferents from the stomach of the rat converge onto taste-responsive neurons in the rat brainstem. Presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, 2012.

Escanilla, O. and Di Lorenzo, P. M. Olfactory responsive taste cells in the Nucleus of the Solitary Tract in awake, behaving rats. Presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, 2012.

Weiss, M., Victor, J. D. and Di Lorenzo, P. M. Temporal coding of taste in the parabrachial nucleus of the awake, freely licking rat. Paper Presented at the annual meeting of the Society for Neuroscience, Washington, DC, 2011.

Roussin, A.T., Victor, J.D. and Di Lorenzo, P.M. Anti-lick cells in the nucleus of the solitary tract of the freely licking rat. Paper presented at the annual meeting of the Association of Chemoreception Sciences, St. Pete Beach, FL, spring, 2011.

D'Agostino, A.E. and Di Lorenzo, P.M. Neural coding of taste mixtures in the nucleus of the solitary tract of the awake rat. Paper Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2010.

Rosen, A.M. and Di Lorenzo, P.M. Neural circuitry of the gustatory nucleus of the solitary tract. Paper Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2010.

Roussin A.T., Victor J.D. and Di Lorenzo P.M. Taste responses in the nucleus of the solitary tract of the actively licking rat. Paper presented at the meeting of the European Chemoreception Organization, Avignon, France, 2010.

Roussin A.T., Victor J.D. and Di Lorenzo P.M. Lick-evoked taste responses in the nucleus of the solitary tract of awake rats. Paper presented at the annual meeting of the Association of Chemoreception Sciences, St. Pete Beach, FL, spring, 2010.

Rosen, A.M. and Di Lorenzo, P.M. Responses to different temporal patterns of electrical stimulation of the chorda tympani and glossopharyngeal nerves in the nucleus of the solitary tract. Paper presented at the annual meeting of the Association of Chemoreception Sciences, St. Pete Beach, FL, spring, 2010.

Roussin A.T., Victor J.D. and Di Lorenzo P.M. Single-cell gustatory responses in the nucleus of the solitary tract of the awake rat during active consumption. Paper presented at the annual meeting of the Society for Neuroscience. Chicago, IL, 2009.

Rosen, A.M. and Di Lorenzo, P.M. Responses to different temporal patterns of electrical stimulation of the chorda tympani and glossopharyngeal nerves in the nucleus of the solitary tract. Paper presented at the annual meeting of the Society for Neuroscience. Chicago, IL, 2009.

Sichtig, H., Schaffer, J.D., Laramee, C., Rosen, A.M. and Di Lorenzo, P.M. Evolution in spiking neural networks. Paper presented at the 74th Cold Spring Harbor Symposium on Quantitative Biology . Evolution: the Molecular Landscape, May 27 - June 1, 2009.

Rosen, A.M., Sichtig, H. Schaffer, J.D. and Di Lorenzo, P.M. A network model of the nucleus of the solitary tract. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2009.

Platt, D., Di Lorenzo, P.M., and Victor, J.D. Temporal coding of taste quality in the parabrachial nucleus of the pons in the rat. Paper presented at the annual meeting of the Society for Neuroscience. Washington, D.C., 2008.

Rosen, A.M. and Di Lorenzo. P.M. Electrical stimulation of the chorda tympani nerve reveals two types of inhibitory influences on taste-responsive cells in the nucleus of the solitary tract of the rat. Paper presented at the annual meeting of the Society for Neuroscience. Washington, D.C., 2008.

Roussin, A.T., Park, J.Y. and Di Lorenzo. P.M. The neural code for ethanol in the nucleus of the solitary tract of the rat during intoxication. Paper presented at the annual meeting of the Society for Neuroscience. Washington, D.C., 2008.

Chen, J.-Y., Di Lorenzo, P.M., and Victor, J.D., Temporal characteristics of responses to salty and sour tastants with changes in intensity in the nucleus of the solitary tract. Paper presented at the International Symposium on Olfaction and Taste, July 21-26, San Francisco, CA, 2008.

Platt, D., Di Lorenzo, P.M., and Victor, J.D. Temporal coding of taste in the parabrachial nucleus of the pons in the rat. Paper presented at the International Symposium on Olfaction and Taste, July 21-26, San Francisco, CA, 2008.

Rosen, A.M. and Di Lorenzo, P.M. Effects of paired-pulse electrical stimulation of the chorda tympani nerve on taste-responsive cells in the nucleus of the solitary tract of the rat. Paper presented at the International Symposium on Olfaction and Taste, July 21-26, San Francisco, CA, 2008.

Herrera, C.M. Jr., Luce, C.T., Song, J. and Di Lorenzo, P.M. Computing a generative model for neural codes. *BMC Neuroscience*, 9(Suppl 1):P124, 2008.

Chen, J.-Y., Victor, J. D., and Di Lorenzo, P.M. Perceptual maps of the taste space using temporal coding in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2007.

Chen, J.-Y., Victor, J.D., and Di Lorenzo, P. M. Temporal coding of intensity of salty and sour tastants in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2007.

Di Lorenzo, P.M., Moroney, D.N., Leshchinskiy S. and Ozdoba, J.M. Behavioral evidence for temporal coding of quinine in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2007.

Roussin, A.T., Victor, J.D. and Di Lorenzo, P.M. Temporal coding of taste quality in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2007.

Rosen, A.M. and Di Lorenzo, P.M. Effects of paired-pulse electrical stimulation of the chorda tympani nerve on taste-responsive cells in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, CA, 2007.

Roussin, A. T., Di Lorenzo, P. M., Rosen, A. M. and Schweitzer, L. Juxtacellular labeling as a technique for studying structure-function relationships in the nucleus of the solitary tract. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2007.

Chen, J.-Y. and Di Lorenzo, P.M. Responses to taste mixtures in the nucleus of the solitary tract of the rat. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2007.

Rosen, A.M., Di Lorenzo, P.M. and Schweitzer, L. Morphological characteristics of taste-responsive cells in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, Atlanta, GA, 2006.

Chen, J.-Y., Di Lorenzo, P. M., and Victor, J. D. Temporal coding of taste mixtures in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, Atlanta, GA, 2006.

Roussin, A.T., Victor, J.D. and Di Lorenzo, P.M. Temporal coding of similar tastants in the nucleus of the solitary tract of the rat. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2006.

Chen, J.-Y. and Di Lorenzo, P.M. Computational Models of temporal firing properties of single neurons in the nucleus of the solitary tract. Paper presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2006.

Chen, J.-Y. and Di Lorenzo, P. M. Multi-compartment modeling of the gustatory system in rat. Presented at the annual meeting of the Society for Neuroscience, Washington, DC. 2005.

Di Lorenzo, P.M. Hallock, R.M. and Roussin, A.T. Behavioral evidence for temporal coding of rejection in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, Washington, DC. 2005.

Roussin, A.T., Victor, J.D. and Di Lorenzo, P.M. Temporal coding in responses to taste stimuli of similar quality in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, Washington, DC. 2005.

Roussin, A.T. and Di Lorenzo, P.M. Responses in the nucleus of the solitary tract to taste stimuli of similar quality can vary independently across repeated trials. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2005.

Hallock, R.M. and Di Lorenzo, P.M. Response properties of cells in the rat nucleus of the solitary tract following glossopharyngeal nerve stimulation: evidence of modulatory activity and the convergence of input from the hypoglossal nerve. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2005.

Di Lorenzo, P.M., Victor, J.D. Rugai, N. and Hallock, R.M. Neural coding mechanisms for flow rate and taste quality in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, San Diego, California, 2004.

Hallock, R.M. and Di Lorenzo, P.M. Paired pulse depression and facilitation observed in taste cells in the rat nucleus of the solitary tract following glossopharyngeal nerve stimulation. Presented at the annual meeting of the Society for Neuroscience, San Diego, California, 2004.

Hallock, R.M. and Di Lorenzo, P.M. Paired pulse facilitation and depression observed in taste cells in the rat nucleus of the solitary tract following glossopharyngeal nerve stimulation. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2004.

Rugai, N., Hallock, R.M. and Di Lorenzo, P.M. The effect of flow rate on the temporal structure of a taste response recorded from the nucleus of the solitary tract in the rat. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 2004.

Hallock, R.M. and Di Lorenzo, P.M. Evoked responses to electrical stimulation of the glossopharyngeal nerve in the nucleus of the solitary tract in the rat. Presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, 2003.

Rugai, N., Hallock, R.M. and Di Lorenzo, P.M. The effect of flow rate on the temporal structure of taste responses in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, 2003.

Di Lorenzo, P.M. and Hallock, R.M. A simple model of a taste-responsive cell in the brainstem predicts the effects of adaptation. Paper presented at the Annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2003.

Hallock, R.M. and Di Lorenzo, P.M. Evoked responses to electrical stimulation of the glossopharyngeal nerve in the nucleus of the solitary tract in the rat. Paper presented at the Annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2003.

Hallock, R.M. and Di Lorenzo, P.M. Temporal coding in gustation predicts rejection. Presented at the annual meeting of the Society for Neuroscience, Orlando, FL, 2002.

Di Lorenzo, P.M. and Victor, J.D. Variability of taste response magnitude in the nucleus of the solitary tract with stimulus repetition. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2002.

Hallock, R. and Di Lorenzo, P.M. Generalization of a conditioned aversion to lick-contingent electrical stimulation of the nucleus of the solitary tract to a natural

tastant. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2002.

Reich C.G. and Di Lorenzo P.M. Effects of glossopharyngeal anesthesia on taste responses in the nucleus of the solitary tract of the rat. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, spring, 2002.

Hallock, R.M., Kennedy, D.P. and Di Lorenzo, P.M. Temporal pattern of lick-contingent electrical stimulation in the nucleus of the solitary tract predicts behavioral rejection. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, April 25-29, 2001.

Reich, C.G. and Di Lorenzo, P.M. Effects of glossopharyngeal anesthesia on taste responses in the NTS of the rat. Presented at the annual meeting of the Association for Chemoreception Sciences, Sarasota, FL, April 25-29, 2001.

Di Lorenzo, P.M. Temporal patterns of spike activity as a code for taste: evidence from electrophysiological and behavioral studies. Invited symposium presented at the annual meeting of the Society for Neuroscience, New Orleans, LA, November, 2000.

Lemon, C.H. and Di Lorenzo, P.M. Electrophysiological responses recorded from the nucleus of the solitary tract to paired pulse electrical stimulation of the chorda tympani. Society for Neuroscience Meeting, New Orleans, LA, 2000.

Di Lorenzo, P.M. and Reich, C.G. Effects of brief pulses of taste stimuli on subsequent taste responses in the chorda tympani of the rat. Paper presented at the 22nd annual meeting of the Association for Chemoreception Sciences, spring, 2000.

Lemon, C.H. and Di Lorenzo, P.M. Tetanic electrical stimulation of the chorda tympani alters single unit response profiles in the nucleus of the solitary tract of the rat. Paper presented at the 22nd annual meeting of the Association for Chemoreception Sciences, spring, 2000.

Di Lorenzo, P.M., Grandis, K. and Reich, C.G. Stimulation of sodium channels in taste receptor cells provides noise that enhances taste detection. Paper presented at the Computational Neuroscience Meeting, Pittsburgh, PA, July 18-23, 1999. (peer reviewed)

Di Lorenzo, P.M., Lemon, C.H. and Reich, C.G. Effects of brief pulses of tastants on neuronal sensibilities in the nucleus of the solitary tract. Paper presented at the 21st annual meeting of the Association of Chemosensory Sciences, spring, 1999.

Di Lorenzo, P.M. and Lemon, C.H. Inhibitory influence on electrophysiological responses to taste in the brain stem. Paper presented at the Computational Neuroscience Meeting, Santa Barbara, CA, July 25-30, 1998. (peer reviewed)

Lemon, C.H., Reich, C. and Di Lorenzo, P.M. Suppression of taste responses in the nucleus of the solitary tract of the rat by brief pulses of tastants. Paper presented at the 20th Annual Meeting of the Association of Chemoreception Sciences, Sarasota, Florida, 1998.

Lemon, C.H., Di Lorenzo, P.M. and Kawamoto, M.D. Adaptation produces similar changes in response profiles in the nucleus of the solitary tract and the parabrachial nucleus of the pons in the rat. Soc. Neurosci. Abstr. 23(1): 1036, 1997.

Lemon, C.H. and Di Lorenzo, P.M. Autocorrelational analyses of spike trains in the parabrachial nucleus of the pons following gustatory adaptation. Paper presented at the Twelfth International Symposium on Olfaction and Taste, San Diego, CA, 1997.

Kawamoto, M.D., Lemon, C.H. and Di Lorenzo, P.M. Autocorrelational analysis of firing patterns in taste responsive units in the nucleus of the solitary tract of the rat. Paper presented at the Twelfth International Symposium on Olfaction and Taste, San Diego, CA, 1997.

Di Lorenzo, P.M., Hecht, G.S.. and Travers, S.P. Temporal coding of sensory stimuli: mimicking gustatory stimuli with electrical stimulation of the brain. Paper presented at Dynamical Neuroscience Satellite Symposium, Society for Neuroscience Meeting, Washington, D.C., November 15-16, 1996.

Di Lorenzo, P.M., Lemon, C., Kawamoto, M.D. Changes in response profiles of taste cells in the brain stem parallel those observed in somatosensory thalamic cells following anesthetization of part of their receptive fields. Paper presented at the Computational Neuroscience Meeting, Cambridge, MA, July 14-17, 1996. (peer reviewed)

Grasso, F. and Di Lorenzo, P.M. GUSSTO: a neural network model of gustation in the rat NTS and PbN. Paper presented at the Computational Neuroscience Meeting, Cambridge, MA, July 14-17, 1996. (peer reviewed)

Kawamoto M.D., Lemon C. and Di Lorenzo, P.M. Functional connectivity in the nucleus of the solitary tract. Paper presented at the 18th Annual Meeting of the Association for Chemoreception Sciences, Sarasota , Florida, 1996.

Lemon, C., Kawamoto, M.D. and Di Lorenzo, P.M. Intranuclear processing of gustatory information in the parabrachial nucleus of the pons. Paper presented at the 18th Annual Meeting of the Association for Chemoreception Sciences, Sarasota , Florida, 1996.

Kawamoto, M.D., Lemon, C and Di Lorenzo, P.M. Effects of adaptation of best and non-best stimuli on evoked taste response in the nucleus of the solitary tract. Paper presented at the 17th Annual Meeting of the Association for Chemoreception Sciences, Sarasota , Florida, 1995.

Di Lorenzo, P.M., Arnold, H.M. and Hall, W.G. Olfactory experience decreases subsequent ingestive behavior in preweanling rat pups. Paper presented at the annual meeting of the International Society for Developmental Psychobiology, 1994.

Di Lorenzo, P.M. and Grasso, F.W. Representation of stimulus quality and intensity in a network model of brainstem gustatory neural coding. Soc. Neurosci. Abstr. 20(2): 979, 1994.

Erickson, R.P., Di Lorenzo, P.M., Doetsch, G.S. and Woodbury, M.A. Fuzzy set analysis of organization of taste responses in NTS of rat. Soc. Neurosci. Abstr. 20(2): 979, 1994.

Grasso, F.W. and Di Lorenzo, P.M. Information processing in the gustatory nuclei of the brain stem: Gustatory Unit Stimulus Selective Topographical Organizer (GUSSTO), a network model. Paper presented at the 16th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1994.

Di Lorenzo, P.M. and Monroe, S. Information processing in the gustatory nuclei of the brain stem: Electrophysiological data. Paper presented at the 16th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1994.

Di Lorenzo, P.M., Monroe, S. and Hecht, G.S. Information processing in the parabrachial nucleus of the pons. Paper presented at the Eleventh International Symposium on Olfaction and Taste, Sapporo, Japan, 1993.

Di Lorenzo, P.M. and Hecht, G.S. Generalization of a Conditioned Aversion to Lick-paired Electrical Stimulation of the Nucleus of the Solitary Tract in the Rat. Paper presented at the 15th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1993.

Monroe, S. and Di Lorenzo, P.M. Spatiotemporal coding of taste quality in the nucleus of the solitary tract of the rat. Paper presented at the 15th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1993.

Monroe, S. and Di Lorenzo, P.M. Cyclic spontaneous activity in taste-responsive units in the nucleus of the solitary tract in the rat. Society for Neuroscience Abstracts, 1992.

Di Lorenzo, P.M. and Hecht, G.S. Conditioned Aversion to Lick-paired Electrical Stimulation of the Nucleus of the Solitary Tract in the Rat. Paper presented at the 14th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1992.

Monroe, S. and Di Lorenzo, P.M. Cyclic Spontaneous Activity in Taste-responsive Units in the Parabrachial Pons of the Rat. Paper presented at the 14th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1992.

Monroe, S. and Di Lorenzo, P.M. Corticofugal influence on taste responses in the nucleus of the solitary tract of the rat. Society for Neuroscience Abstracts, 1991.

Di Lorenzo, P.M., Monroe, S., and Hecht, G. Taste responses to perithreshold stimuli in the parabrachial pons of the rat. Society for Neuroscience Abstracts, 1991.

Monroe, S. and Di Lorenzo, P.M. Taste responses in units in the nucleus of the solitary tract that do and do not relay information to the parabrachial pons. Paper presented at the 13th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1991.

Monroe, S. and Di Lorenzo, P.M. Behavioral effects of descending input from the gustatory neocortex to the parabrachial pons in the rat. Paper presented at the 12th

Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1990.

Di Lorenzo, P.M. and Monroe, S. Effects of electrical stimulation of the gustatory neocortex on taste-responsive units in the parabrachial pons. Paper presented at the 11th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1989.

Di Lorenzo, P.M. and Monroe, S. Taste responses in the parabrachial pons of ovariectomized rats. Society for Neuroscience Abstracts, 1988.

Di Lorenzo, P.M. and Monroe, S. Taste responses in the parabrachial pons of male, female and pregnant rats. Paper presented at the 10th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1988.

Di Lorenzo, P.M. Taste responses in the parabrachial pons of rats with reversible lesions of the gustatory neocortex. Society for Neuroscience Abstracts, 1987.

Di Lorenzo, P.M. OFF responses to gustatory stimuli in the parabrachial pons of decerebrate rats. Paper presented at the IX International Symposium on Olfaction and Taste, Snowmass, Colorado, 1986.

Di Lorenzo, P.M. Responses to NaCl of parabrachial pontine units that were conditioned with intravenous LiCl. Paper presented at the 7th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1985.

Di Lorenzo, P.M. and Ralphe, D.L. CCK-8 decreases preferences for sweet tastes in rats. Paper presented at the 6th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1984.

Di Lorenzo, P.M. and Garcia, J. Responses to olfactory stimuli in the gustatory area of the parabrachial pons of the rat. Paper presented at the 6th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1984.

Di Lorenzo, P.M. and Garcia, J. Taste responses of parabrachial units to NaCl and saccharin in rats that were pretrained to avoid saccharin. Society for Neuroscience Abstracts, 1983.

Di Lorenzo, P.M. and Garcia, J. Taste responses of parabrachial units conditioned with intravenous LiCl. Paper presented at the 5th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1983

Di Lorenzo, P.M., Kiefer, S.W., Rice, A.G. and Garcia, J. Taste coding of ethyl alcohol: Electrophysiological and behavioral data. Paper presented at the 4th Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1982.

Di Lorenzo, P.M. and Schwartzbaum, J.S. Time course as a discriminator of taste quality in parabrachial units of the rabbit. Paper presented at the 3rd Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1981.

Di Lorenzo, P.M. and Schwartzbaum, J.S. Coding of taste information in the pontine taste area of the rabbit. Paper presented at the 7th International Symposium on Olfaction and Taste, Noordwijkeshout, Holland, 1980.

Di Lorenzo, P.M. and Schwartzbaum, J.S. Localization of taste responsivity in nucleus tractus solitarius of the rabbit. Paper presented at the 1st Annual Meeting of the Association for Chemoreception Sciences, Sarasota, Florida, 1979.

Di Lorenzo, P.M. and Schwartzbaum, J.S. Responses of theta cells in rabbit hippocampus to sensory stimuli presented during movement and non-movement in a treadmill. Society for Neuroscience Abstracts, 1976.