Curriculum Vitae

NAME: Chiquito Joaquim Crasto

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EDUCATION:

Ramanarain Ruia College, Mumbai, India	B.Sc. 1988 (Chemistry)
Indian Institute of Technology, Mumbai, India	M.Sc. 1990 (Chemistry)
Ohio State University, Columbus, OH	M.S. 1995 (Chemistry)
University of New Orleans, New Orleans, LA	Ph.D. 1997 (Chemistry)

RESEARCH APPOINTMENTS:

2015 – Present	Research Associate Professor, Center for Biotechnology and Genomics, Texas Tech University, Lubbock, TX
2007- 2014	Assistant Professor, Department of Genetics, University of Alabama at Birmingham, Birmingham, AL.
2003-2007	Associate Research Scientist, Yale University School of Medicine, New Haven, CT.
2000-2003	Postdoctoral Associate, Yale University School of Medicine, New Haven, CT.
1997-2000	Postdoctoral Associate, Fox Chase Cancer Center, Philadelphia, PA

TEACHING APPOINTMENTS

2019-	**Biocomputing (online)**, Course Developer and Instructor, Center for Biotechnology and Genomics, Texas Tech University, Lubbock, TX
2018-	**Bioinformatics: Methods and Applications (online)**, Course Developer and Instructor, Center for Biotechnology and Genomics, Texas Tech University, Lubbock, TX
2016-	**Advanced Bioinformatics**, Course Developer and Instructor, Center for Biotechnology and Genomics Texas Tech University, Lubbock, TX
2015-	**Bioinformatics: Methods and Application**, Course Developer and Instructor, Center for Biotechnology and Genomics Texas Tech University, Lubbock, TX
2014	**Biology,** Adjunct On-line Lecturer, Department of Biology, King University, Bristol, Tennessee.
2014	**General Chemistry**, Adjunct Lecturer, Department of Chemistry, Georgia Gwinnett College, Lawrenceville, Georgia.
2009-2013	**Bioinformatics.** Course Master, University of Alabama at Birmingham, Graduate Biomedical Sciences Doctoral Program.
2010-2014	**Bioinformatics Web Resources in Proteomics.** Guest Lecturer, Proteomics and

Metabolomics Graduate Course, University of Alabama at Birmingham, Birmingham, AL.

2006-2007 **Protein Biochemistry:** Masters Program in Molecular Biology and Environmental Science, University of New Haven, West Haven, CT.

2005-2006 **General Chemistry.** Undergraduate Program**,** Department of Chemistry, University of New Haven, West Haven, CT

1990-1997 **Physical and General Chemistry**. Graduate Teaching Assistant. University of New Orleans, New Orleans, LA and The Ohio State University, Columbus, OH.

SECONDARY APPOINTMENTS

- Department of Computer Science, Texas Tech University, Since 2015
- Program in Biochemistry and Structural Biology, UAB, 2008 – 2014
- Program in Interdisciplinary Engineering, UAB, 2010 - 2014
- Heflin Center for Genome Sciences, University of Alabama at Birmingham, 2007-2014
- Center for Gene-Nutrition Interactions in Cancer Research, University of Alabama at Birmingham, 2007-2014

HONORS

- Travel Fellowship. BIOSTEC 2020. 13th International Joint Conference on Biomedical Engineering Systems and Technologies. Valletta, Malta (2020)
- Fellow of the President of TTU Leadership Institute. (2018-2019)
- International Research Competition, BiosolveIT, Sankt Augustin, Germany, Runners-up. (2018)
- Travel Fellowship. International conference Data-Basing the Brain. Oslo, Norway. (2001)
- Travel Fellowship. 7th Conference on Small Genomes. Fellowship to Attend, Arlington, Virginia. (1999)
- Plain and Fancy Postdoctoral Fellowship, Fox Chase Cancer Center, 1998-1999.
- National Merit Scholarship, Government of India (1984-1989)

CONSULTANT

- Spektron, LLC, Little Rock Arkansas (2016-2018)
- Kinara Technologies, LLC, Massachusetts. (2006-2009)
- Bioinfopartners, LLC, Massachusetts. (2002-2003)

EDITORIAL BOARDS

Current Bioinformatics, Current Proteomics, ISRN Bioinformatics, ScienceJet, Dataset Papers in Biology, Science Publishing Group

JOURNAL REVIEWER (*ad oc):*

The Open Bioinformatics Journal, iConcept Press, Database, Current Bioinformatics, Current Proteomics, Chemical Senses, BMC Genomics, BMC Bioinformatics, Biological Bulletin, Science, Journal of the American Chemical Society, Recent Patents on Endocrine, Metabolic and Immune Drug Discovery, Acta Crystallographica D, Israel Journal of Chemistry, The Open Proteomics Journal, Science

STUDY SECTION/REVIEW PANELS

- NSF Activation Fall 2010 FY11 Proposal Review Panel, Washington D.C., October 2010
- NSF IGERT (Integrative Graduate Education and Research Traineeship), Washington, D.C., June 2010
- NIH Challenge Grants (2009)
- Biotechnology and Biological Sciences Research Council, U.K. (2007)

GRANT SUPPORT

Past

1. **TTU Exploring novel notions of olfactory receptor-odorant interactions using high performance computing**. Fall 2018 Proposal Assistance Program. (Principal Investigator) (2018-2019) ($4,000)
2. **TTU Multidisciplinary Studies of Olfaction in Dogs**. (Co-Principle Investigator) (2017-2018) ($75,000).
3. **TTU Online Certification in Bioinformatics and Biostatistics**. (Principle Investigator) (2017-2018) ($16,000).
4. **NIH P30HD038985-06A2**. Alan Percy (PI); 9/1/2008 – 6/30/13 (1.44 Calendar) UAB MENTAL RETARDATION RESEARCH CENTER. (Co-Investigator)
5. **NIH 5UL1RR025777-03.** Robert Kimberley (PI); 05/19/08 – 04/30/13; (1.2 Calendar). UAB Center for Clinical and Translational Science (CCTS), Biomedical Informatics Component (BMI). (Co- investigator)
6. **NIH R21DC011068-01**. 06/01/2010 – 05/31/2012 (2.4 Calendar) Exploring a predictive paradigm for olfactory receptor-odorant interactions. TDC= $ 275,000. (Principal Investigator)
7. **NIH R21AT004661-02S1**. Stephen Barnes (PI); 6/01/2008-9/29/11 (1.2 Calendar).Urinary Peptide Excretion and Onset of Puberty. (Co-Investigator)
8. **Faculty Development Grant** (UAB). Computational Biology of Olfactory Receptors. 2008-2009. $10,000. (Principal Investigator)
9. **NIH/NIDCD P01 DC004732-04**. Gordon Shepherd (Program Director—Yale University School of Medicine); 8/01/04-7/31/09. SenseLab: Integration of Multidisciplinary Sensory Data. (Co-investigator)

PRESENTATIONS (TALKS)

- **PIACAN: Pathway Integration and Analysis of Cancer Networks.** BIOSTEC 2020. 13th International Joint Confernece on Biomedical Engineering Systems and Technologies. Valletta, Malta, February 2020.
- **Developing Multidisciplinary Education in Computer Applications**, Department of University Studies, Texas Tech University, October 2019.
- **Bioinformatics Education.** Biology Student Group. South Plains College, South Plains, Texas. April 12, 2017.
- **Bioinformatics Research.** Honors Program. Texas Tech University, Lubbock, TX. March 6, 2017.
- **The Olfactory Receptor Database: Web-based resources for the Genomics,**

Proteomics and Function of Olfactory Receptors. Odor Spaces. International Workshop, Hanover, Germany. September 5, 2013.

- **Advances in the Computational Assessments of Olfactory Receptor- Odorant Interactions**. Department of Genetics, University of Alabama at Birmingham, October 12, 2012**.**
- **Computational Assessments of Olfactory Receptor-Odorant Interactions.** Invited Talk. Department of Chemistry "Cheminar" Series, Berry College. September 27, 2012.
- **Diffusion of Odorants into the Binding Region of the Olfactory Receptor - a Novel Perspective.** Computational Infrastructure Day. University of Alabama at Birmingham. September 13, 2012.
- **Computational Assessments of Olfactory Receptor-Odorant Interactions**. Annual Meeting, American Chemical Senses Society Annual Meeting, 2012, Huntington Beach, CA, April 27, 2011.
- **Preferred Odorant Binding Sites and Olfactory Receptor Function**. Computational Infrastructure Day, University of Alabama at Birmingham, September 15, 2011.
- **Context-dependent Information Retrieval from the Biomedical Literature.** Department of Genetics Seminar Series. Department of Genetics, University of Alabama at Birmingham, Birmingham, Alabama, USA. November 19, 2010.
- **Hydrophobicity Profiles in GPCR transmembrane helical domains**. CCTS-BMI Bioinformatics and Computational Biology Discussion Group. University of Alabama at Birmingham. October 26. 2010.
- **Dynamic Simulations of Olfactory Receptor-Odorant Interactions. C** omputational Infrastructure Day. University of Alabama at Birmingham. S eptember 16, 2010.
- **Drug_Gene_Retriever: An Un-Supervised System for Drug-Gene Information Retrieval.** Department of Genetics (UAB), Retreat. September 2009**.**
- **CF-Retriever: A context based search system for the Cystic Fibrosis Biomedical Literature**. Cystic Fibrosis Workshop, UAB. (July 2009)
- **Identifying Nuclear Transcription Factors Associated with Kreb Cycle Genes**. Nutrition Gene Interactions leaders meeting, Georgetown University, Washington, D.C. February, 2008.
- **Computational Biology of Olfactory Receptors.** Department of Genetics, UAB. October, 2008
- **Computational Biology of Olfactory Receptors.** School of Engineering, UAB. November, 2008
- **ORDB: Devising a nomenclature for Olfactory Receptors**, Cold Spring Harbor Laboratories, New York. Special Meeting for Chemosensory Receptors. 2001.
- **CellPropdB: Automatic population from non-annotated, free text searching.** Satellite Meeting on Web based Designs and Databases, Neuroscience Meeting, New Orleans, Louisiana, USA (2000).

PUBLICATIONS
(First and/or ranking authorship)

1. **PIACAN: Pathway Integration and Analysis of Cancer Networks.** Quintana, A., Vinh, N., Dang, T. and Crasto, C. J.. Proceedings of the 13th International Joint Conference on Biomedical Engineering Systems and Technologies. (2020) 3:246-252.

2. **Novel Paradigm for Odorant-Olfactory Receptor Interactions.** Lai, P. C. and **Crasto, C. J**.* MOJ Proteomics and Bioinformatics. (2016); 4(3):1-6. Opinion.
3. **ORDB, HORDE, ODORactor and other on-line knowledge resources of olfactory receptor-odorant interactions.** Marenco, L. N., Wang, R., McDougal, R., Olender, T., Twik, M. Bruford, E., Liu, X., Zhang, J., Lancet, D., Shepherd, G. M. and Crasto, C. J. * Database. (2016); pii, baw132.
4. **Substituted 2-(Dimethylamino)biphenyl-2'-carboxaldehydes as Substrates for Studying n→π* Interactions and as a Promising Framework for Tracing the Bürgi-Dunitz Trajectory**. Breton, G. W. and Crasto, C. J. (2015) *J. Org. Chem.* 80(15):7375-84
5. **Preferential binding of an odor within olfactory receptors as precursor to receptor excitation.** Lai, P. C., Guida, B., Shi, J. and Crasto, C. J. *Chemical Senses*. (2014), 39(2), 107-23.
6. **The olfactory receptor database: web-based resources for the genomics, proteomics and function of olfactory receptors.** Crasto, C. J. (2014). *Proceedings of the 1st International Workshop on Odor Spaces. Flavour.* 3(1). O8. Hanover, Germany.
7. **Beyond modeling: all-atom olfactory receptor model simulations**. Lai, P. C. and Crasto, C. J. *Front Genet*. 2012; 3:61. Epub 2012 May 3.
8. **MRMPath and MRMutation, facilitating discovery of mass transitions for proteotypic peptides in biological pathways using a bioinformatics approach. .** Crasto, C. J., Narne,C., Kawai, M., Wilson, L. and Barnes, S. *Adv Bioinformatics*. (2013). Epub 2013 Jan 29
9. **GenDrux: a biomedical literature search system to identify gene expression-based drug sensitivity in breast cancer.** Crasto, C. J., Luo, D., Forero, A. and Chen, D. *BMC Med Inform Decis Mak*. (2011) May 5;11:28.
10. **Hydrophobicity Profiles in G protein-coupled receptor transmembrane helical domains**. Crasto, C. J. *Journal of Receptor, Ligand and Channel Research*. (2010), 3: 123-133.
11. **Computational Biology of Olfactory Receptors**. Crasto, C. J. *Current Bioinformatics*. 4(1), 1-7, (2009).
12. **An olfactory receptor pseudogene whose function emerged in humans: a case study in the evolution of structure–function in GPCRs.** Lai, P. C., Bahl, G., Gremigni, M., Matarazzo, V., Clot-Faybesse, O., Ronin, C. and Crasto, C. J. *Journal of Structural and Functional Genomics*. 9(1), 29-40, (2008).
13. **NeuroExtract: facilitating neuroscience-oriented retrieval from broadly-focused bioscience databases using text-based query mediation**. Crasto, C. J., Masiar, P. and Miller, P. L. *J Am Med Inform Assoc.* (2007) May-Jun: 14(3):355-60.
14. **SenseLab: new developments in disseminating neuroscience information**. Crasto, C. J., Marenco, L. N., Liu, N., Morse, T. M., Cheung, K-H, Lai, P. C., Bahl, G., Masiar, P., Lam, H. Y., Lim, E., Chen, H., Nadkarni, P. M., Migliore, M., Miller, P. L. and Shepherd, G. M. *Brief Bioinform.* (2007), 8(3):150-62.
15. **Structural activation pathways from dynamic olfactory receptor-odorant interactions.** Lai, P.C., Singer, M. S. and Crasto, C. J. *Chem Senses.* (2005), 30(9):781-92.
16. **Text mining neuroscience journal articles to populate neuroscience databases**. Crasto, C. J., Marenco, L. N., Migliore, M., Mao, B., Nadkarni, P. M., Miller, P.L. and Shepherd, G. M. *Neuroinformatics*. (2003) 1(3):215-37.

17. **Creating Knowledgebases to Text-Mind PUBMED Articles Using Clustering Techniques.** Crasto, C. J., Morse, T. M., Migliore, M., Nadkarni, P., Hines, M., Brash, D. E., Miller, P. L. and Shepherd, G. M. (2003) Proceedings of the AMIA Annual Symposium. p. 821.
18. **Olfactory Receptor Database: a metadata-driven automated population from sources of gene and protein sequences**. Crasto, C. J., Marenco, L. N., Miller, P. L. and Shepherd, G. M. *Nucleic Acids Res*. (2002) Jan 1;30(1):354-60.
19. **Use of electrostatic potentials to study non-bonded, intramolecular, interactions in 1,8- disubstituted naphthalenes with azo-group as the electrophilic substituents.** Crasto, C. J. and Edwin D. Stevens. *Journal of Molecular Structure* (THEOCHEM), (2002), 582, 77-84.
20. **The Olfactory Receptor Family Album**. Crasto, C. J., Michael S. Singer and Gordon M. Shepherd. *Genome Biology*, (2001), 2(10):1-4.
21. **A Pilot Approach to Automated and Efficient Transfer of Neuroscience Data from Journal Articles to Searchable Databases**. Crasto, C. J., Marenco, L. N., Nadkarni, P. M., Miller, P. L. and Shepherd, G. M. *Proceedings of the AMIA Symposium*. (2001). p. 883.
22. **Sequence codes for extended conformation: a neighbor-dependent sequence analysis of loops in proteins.** Crasto, C. J. and Feng, J-A. *Proteins*. (2001) Feb 15;42(3):399-413.
23. **LINKER: a program to generate linker sequences for fusion proteins.** Crasto, C. J. and Feng, J-A. *Protein Eng*. (2000) May;13(5):309-12. PMID: 10835103
24. **Deoxyribose Phosphate Excision by the N-Terminal Domain of the Polymerase ß: The Mechanism Revisited.** Feng, J., Crasto, C. J., and Matsumoto, Y. *Biochemistry*, 37(27), (1998), 9605-9611.
25. **Use of Electrostatic potentials to study non-bonded intramolecular interactions in 1,8 di- substituted naphthalenes with carbonyl groups as electrophilic substituents.** Crasto, C. J. and Edwin D. Stevens. *Journal of Molecular Structure* (THEOCHEM), 454, (1998), 51-55.

Other peer-reviewed papers

1. **Third transmembrane domain of the adrenocorticotropic receptor is critical for ligand selectivity and potency**. Yang, Y., Mishra, V., Crasto, C. J., Chen, M., Dimmitt, R. and Harmon, C. M. *J Biol Chem*. (2015), 290(12):7685-92.
2. **Frequent genetic differences between matched primary and metastatic breast cancer provide an approach to identification of biomarkers for disease progression.** Popławski, A. B., Jankowski, M., Erickson, S. W., Díaz de Ståhl, T., Partridge, E. C., Crasto, C. J., Guo, J., Gibson, J., Menzel, U., Bruder, C. E., Kaczmarczyk, A., Benetkiewicz, M., Andersson, R., Sandgren, J., Zegarska, B., Bała, D., Srutek, E., Allison, D. B., Piotrowski, A., Zegarski, W. and Dumanski, J.P. *Eur J Hum Genet*. (2010), May;18(5):560-8.
3. **Novel binding motif of ACTH analogues at the melanocortin receptors**. Yang, Y., Hruby, V. J., Chen, M., Crasto, C. J., Cai, M. and Harmon, C. M. *Biochemistry*. (2009), 48(41):9775-84.
4. **Somatic mosaicism for copy number variation in differentiated human tissues**. Piotrowski, A, Bruder, C. E., Andersson, R, Diaz de Ståhl, T., Menzel, U., Sandgren, J.,

Poplawski, A., von Tell, D., Crasto, C. J., Bogdan, A., Bartoszewski, R., Bebok, Z., Krzyzanowski, M., Jankowski, Z., Partridge, E. C., Komorowski, J. and Dumanski, J. P. *Human Mutations*. (2008), 29(9):1118-24.

5. **Phenotypically Concordant and Discordant Monozygotic Twins Display Different DNA Copy- Number-Variation Profiles.** Bruder, C. E. G., Piotrowski, A., Gijsbers, A. C. J., Andersson, R., Erickson, S., Diaz de Stumlahl, T., Menzel, U., Sandgren, J., von Tell, D., Poplawski, A., Crowley, M., Crasto, C. J., Partridge, E. C., Tiwari, H., Allison, D. B., Komorowski, J., van Ommen, G-J. N., Boomsma, D. I., Pedersen, N. L., den Dunnen, J. T., Wirdefeldt, K. and Dumanski, J. P. *American Journal of Human Genetics*. (2008), 82(3): 763-71.
6. **Integrated olfactory receptor and microarray gene expression databases**. Liu, N., Crasto, C. J. and Ma, M. *BMC Bioinformatics*, (2007), 8, 231.
7. **A framework for exploring functional variability in olfactory receptor genes**. Man, O., Willhite, D. C., Crasto, C. J., Shepherd, G. M. and Gilad, Y. *PLoS ONE*, (2007), 2(8):e682
8. **Semantic Web Meets e-Neuroscience: an RDF use case.** Hugo, Y. K. L., Marenco, L. N., Clark, T., Gao, Y., Kinoshita, J., Shepherd, G. M., Miller, P., Wu, E., Wong, G., Liu, N., Crasto, C. J., Morse, T., Stephens, S. and Cheung, K- H. *Proceedings of International Workshop on Semantic e-Science*, ASWC. (2006). 158-170.
9. **AlzPharm: integration of neurodegeneration data using RDF.** Lam, H. Y., Marenco, L., Clark, T., Gao, Y., Kinoshita, J., Shepherd, G., Miller, P., Wu, E., Wong, G. T., Liu, N., Crasto, C. J., Morse, T., Stephens, S. and Cheung, K-H. *BMC Bioinformatics*. (2007) May 9;8 Suppl 3:S4.
10. **Achieving evolvable Web-database bioscience applications using the EAV/CR framework: recent advances.** Marenco L, Tosches N, **Crasto, C. J.**, Shepherd G, Miller PL, Nadkarni PM. *J Am Med Inform Assoc.* (2003) Sep-Oct; 10(5):444-53.
11. **Olfactory genes and flavor perception: implications for the evolution of human cuisines.** Shepherd, G. M., Crasto, C. J. and Singer, M. S. (2003). Flavour Research at the Dawn of the Twenty-first Century. *Proceedings of the 10th Weurman Flavour Research Symposium*, Lavoisier, Cachan, France. Pp. 263-268.

Book Chapters

1. **WAPDAP-Software that Automates Proteomics Data Analysis Pipeline.** Ahmed. A., Zabet-Moghaddam, M. and Crasto, C. J. *Avid Science*. Telangana, India (2017).
2. **Bioinformatics Education for Biological Researchers—on-line modalities.** Crasto, C. J.*. In: *Informatics Education in Healthcare: Lessons Learned*. Ed. Eta Berner. Springer-Verlag: London, U.K. (2013)
3. **Databases in SenseLab for genomics, proteomics and function of olfactory receptors.** Marenco, L. N., Bahl, G., Hyland, L., Shi, J., Wang, R., Lai, P. C., Miller, P. L., Shepherd, G. M. and Crasto, C. J. (213). *Olfactory Receptors*. In: Methods in Molecular Biology. Ed. Crasto, C. J. (Series Editor: John M. Walker), Springer, New York. (2013)
4. **Developments in integrating, storing and disseminating the knowledge of olfactory receptors**. Marenco, L. N., Bahl, G., Shi, J., Hyland, L., Miller, P. L., Shepherd, G. M. and Crasto, C. J. *Olfactory Receptors*. In: Methods in Molecular Biology. Ed. Crasto, C. J.

(Series Editor: John M. Walker), Springer, New York. (2013)

5. **Molecular modelling of odorant / Olfactory Receptor complexes.** Charlier, L., Topin, J., Lai, P. C., Crasto, C. J., Golebiowski, J. *Olfactory Receptors*. In: Methods in Molecular Biology. Ed. Crasto, C. J. (Series Editor: John M. Walker), Springer, New York. (2013)
6. **Managing knowledge in Neuroscience**. Crasto, C. J.* and Gordon M. Shepherd. (2007). *Neuroinformatics*. **Crasto, C. J. (ed)**. In: Methods in Molecular Biology. (Series Editor: John M. Walker). Humana Press. Totowa, NJ. Pp. 3-21.
7. **SenseLab: A Decade of Experience with Multilevel, Multidisciplinary Neuroscience Databases.** Marenco, L. N., **Crasto, C. J.**, Liu, N., Migliore, M., Liu, J., Morse, T. M., Hines, M. L., Nadkarni, P. M., Miller, P. L. and Shepherd, G. M. In: *Databasing the Brain: From Data to Knowledge* (Neuroinformatics). Eds: Stephen Koslow and Shankar Subramaniam. Wiley, John and Sons. (2005)
8. **Databases for the Functional Analyses of Olfactory Receptors.** Crasto, C. J., Liu, N. and Shepherd, G. M. In: *Neuroscience Database*: A Practical Guide. Ed: Rolf Kotter. Kluwer Academic Publishers, Düsseldorf, pp: 37-50. (2003)

BOOKS

1. **Olfactory Receptors.** Crasto, C. J. (ed.) (2013). Methods in Molecular Biology (Series Editor: John M. Walker), Springer, New York.
2. **Neuroinformatics.** Crasto, C. J. (ed). (2007). Methods in Molecular Biology (Series Editor: John M. Walker). Vol. 401. Humana Press. Totowa, NJ.

CONFERENCE ABSTRACTS

- **Elucidating Olfactory Receptor – Odorant Interactions: Leveraging Drug-Design Ideations.** Poster. Crasto, C.J., Lokubandara, A., Mandla, V. and Buzatu, D. *Biophysical Society Annual Meeting*. Baltimore, Maryland, USA. (2019).
- **Advances in SenseLab's interoperable neuroinformatics databases: Functional MicroconnectomeDB and ModelDB.** Poster. Morse, T. M., Mareonco, L. N., McDougal, R. A., Wang, R., Hines, M., Carnevale, N. T., Cavaretta, F., Migliore, M., Crasto. C.J., Miller, P. L. and Shepherd, G. M. *American Chemical Senses Association Annual Meeting*, Bonita Springs, Florida, USA. (2016).
- **Senselab databases integrate neuronal data and modeling.** Talk. Carnevale, N. T., Cheung, K-H., Crasto, C. J., Hines, M. H., Marenco, L. N., McDougal, R. A., Migliore, M., Miller, P. L., Morse, T. M., Neymotin, S. A., Shepherd, G. M, Wang, R. and Yu, Y. *Neuroinformatics* Stockholm, Sweden. (2013).
- **Diffusion based molecular dynamics of odorant binding in olfactory receptors**. Lai, P. C. and Crasto, C. J. *International Symposium on Olfaction and Taste.* Stockholm, Sweden, June, (2012).
- **Diffusion-based molecular dynamics of odorant binding inolfactory receptors.** Lai, P. C. and Crasto, C. J. *American Chemical Senses Association Annual Meeting*, Huntington Beach, CA, April, (2012).
- **MRMPath: A web-based tool that identifies peptide transitions for LC-MRM-MS analysis and its application to biological pathways**. Crasto, C. J., Narne, C., Kawai, M., Wilson, L. and Barnes, S. *American Society of Mass Spectroscopists 58th Annual Meeting*. Salt Lake City, UT, USA. May (2010).

- **NeuroDev-Retriever- a Gene Drug information retrieval system for neurodevelopment disorders.** Crasto, C. J. *Neurodevelopment/Simpson-Ramsey symposium.* University of Alabama at Birmingham, Birmingham, Alabama, USA. April (2010).
- **Hidden Markov Models and Sequence-Structure Correlates to Identify Active Sites in Olfactory Receptors.** Poster. Crasto, C. J. *International Society of Olfaction and Taste/American Chemical Senses Association Annual Meeting*. San Francisco, CA, USA. July (2008)
- **A Functional OR with Novel Sequence-Structural Features.** Poster**.** Lai, P. C., Bahl, G., Matarazzo,V., Clot-Faybesse, O., Ronin, C., and Crasto, C. J.. Poster. *European Chemosensory Receptor Organization (ECRO)*. Granada, Spain (2006)
- **A new structural subclass of olfactory receptors.** Poster. Lai, P. C., Bahl, G., Ronin, C., Matarazzo,V., Clot-Faybesse, O. and Crasto, C. J. *American Chemical Senses Association Annual Meeting*, Sarasota, Florida, USA (2006)
- **An Integrated Olfactory Receptor Microarray Gene Expression Database**. Poster. Liu, N., Yang, J., Crasto, C. J., Firestein, S., Ma, M. *American Chemical Senses Association Annual Meeting*, Sarasota, Florida, USA (2006).
- **AlzPharm: a light-weight rdf warehouse for integrating neurodegenerative data**. Talk. Cheung, K H., Lam, Y. K., Marenco, L., Clark, T., Gao, Y., Kinoshita, J., Shepherd, G. M., Miller, P., Wu, W., Wong, G., Crasto, C., Morse, T. and Stephens, T. *International Semantic Web Conference*, Athens, Georgia, USA. (2006)
- **Databases for the cellular bases of normal brain function and neurological disorders.** Poster. Crasto, C. J., Zhang, Q., Lui, N., Marenco, L. N., Wang, T, Morse, T. M., Miller, P. L. and Gordon Shepherd. *Society for Neuroscience Annual Meeting*, Washington D.C., USA. (2005)
- **Consensus Structure-Function Determinants for Olfactory Receptors- Odor Ligand Interactions.** Poster. Crasto, C. J., Lai, P. C. and Shepherd, G. M. *American Chemical Senses Association Annual Meeting*, Sarasota, Florida, USA (2005)
- **Designing Dynamic and Evolvable Knowledgebases to be used in Text Mining Solutions .** Poster**.** Crasto, C. J., Marenco, L. N., Nadkarni, P. M., Miller, P. L. and Shepherd, G. M. *Human Brain Project Annual Meeting*, Bethesda, MD, USA (2004).
- **Mechanism for Olfactory Receptor-Odorant Interactions** Poster. Lai, P. C., Singer, M. S., Shepherd, G. M. and Crasto, C. J. *American Chemical Senses Association Annual Meeting*, Sarasota, Florida, USA (2004)
- **Olfactory genes and Flavor Perceptions: Implications for the Evolution of Human Cuisines.** Talk. Gordon Shepherd, Chiquito Crasto and Singer, M. S. *10th Weurman Flavor Research Symposium.* Beaune, France. (2002)
- **Olfactory reception and Processing: Recent progress toward the neural.** Talk. Shepherd, G. M. and Crasto, C. J. *Abstracts of the Papers of the American Chemical Society*. 224: U86. (2002)
- **Natural Language Processing to Populate Neuroscience Databases using Focused Searches in PUBMED.** Electronic Demonstration. Crasto, C. J., Luis Marenco, Michele Migliore, Buqing Mao, Prakash Nadkarni, Perry Miller and Gordon Shepherd. Human Brain Project Meeting, Washington D. C., (2002).
- **Toward a nomenclature for Human and Mouse Olfactory Receptors.** Poster Presentation. Crasto, C. J., Bahl, G. and Shepherd, G. M. *American Chemical Senses Association Annual Meeting*, Sarasota, FL, USA (2002).

- **A Pilot Approach to Automated and Efficient Transfer of Neuroscience Data from Journal Articles to Searchable Databases.** Poster Presentation. Crasto, C. J., Marenco, L. N., Nadkarni, P. M., Miller, P. and Shepherd, G. M. *AMIA Annual Meeting*. Washington D.C., USA (2001).
- **Automatic Population of the Olfactory Receptor Data Base from sources of gene sequences**. E- Demonstration. Crasto, C. J., Marenco, L. N., Nadkarni, P. M., Miller, P. and Shepherd, G. M. *Neuroinformatics Annual Meeting*. NIH, Bethesda, MD, USA (2001).
- **Text mining solutions for automatic population of CellPropDB and NeuronDB. E-Demonstration**. Crasto, C. J., Marenco, L. N., Nadkarni, P. M., Miller, P. and Shepherd, G. M. *Neuroinformatics Annual Meeting*. NIH, Bethesda, MD, USA (2001).
- **Dynamic Model of Mouse I7 Olfactory Receptor.** Poster and Demonstration. Singer, M. S., Crasto, C. J. and Shepherd, G. M. *Human Brain Project Meeting*. Bethesda, MD, USA. June (2000).
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