ASHOK REDDY DINASARAPU

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I am a BIOINFORMATICIAN with an academic or industrial career goal in exploring immune, inflammatory and metabolic alterations using *omics* approaches. I am presently investigating the effects of marijuana use in youth living with HIV-1 and anti-retroviral therapy by using their whole blood transcriptomics and plasma lipidomics data.

Keywords: Bioinformatics, Systems Biology, Transcriptomics, Metabolomics, Lipidomics, Java, MySQL, R Programming, HIV-1, Anti-retroviral therapy, Marijuana

Other: Google Citations; ORCID; Reviewer; GitHub; LinkedIn; Signaling Gateway; LIPID MAPS; Twitter: @adinasarapu

GRANTS SUPPORT

Title: Plasma lipid profiling using mass-spectrometry to study the effects of marijuana use in HIV-positive young adults.

Pilot Project Grant Award (NIH-398 format) from the Experimental Pathology Innovation Grants [EPIG, 2014-2015] at University of Florida.

Role: Principal Investigator [Mentor: Dr. Maureen M. Goodenow], Total amount: \$5000.

SELECTED PUBLICATIONS

Dinasarapu AR, ... and Goodenow MM (2015) Recreational marijuana use effectively reduces HIV-1/ART induced immune modulation in young adults (*In preparation*).

Dinasarapu AR and Gupta S (2014) Biological data integration and dissemination on semantic web - a perspective. *Journal of Bioinformatics and Intelligent Control*, 3, 273-277.

Gupta S, **Dinasarapu AR**, Gersten MJ, Maurya MR and Subramaniam S (2014) Omics approaches in macrophage biology. *Book Title: Macrophages: Biology and role in the pathology of diseases*, Mantovani, Alberto, Biswas, Subhra K. (Eds.), Springer (ISBN: 978-1-4939-1310-7).

Gupta S, Kim SM, Wang Y, **Dinasarapu AR** and Subramaniam S (2014) Statistical insights into major human muscular diseases. *Human Molecular Genetics*, 23(14):3772-3778.

Dinasarapu AR, Gupta S, Maurya MR, Fahy E, Min J, Sud M, Gersten MJ, Glass CK and Subramaniam S (2013) A combined omics study on activated macrophages--enhanced role of STATs in apoptosis, immunity and lipid metabolism. *Bioinformatics*, 29 (21): 2735-2743.

Yang K, **Dinasarapu AR**, Reis ES, DeAngelis RA, Ricklin D, Subramaniam S and Lambris JD (2013) CMAP: Complement Map Database. *Bioinformatics*, 29 (14): 1832-1833.

Dontula R, **Dinasarapu A**, Chetty C, Pannuru P, Engelhard H, Ozer H and Lakka S (2013) MicroRNA 203 Modulates Glioma Cell Migration via Robo1/ERK/MMP-9 Signaling. *Genes & Cancer*, 4: 285-296.

Maurya MR, Gupta S, Li X, Fahy E, **Dinasarapu AR**, Sud M, Brown AH, Glass CK, Murphy RC, Raetz CRH, Russell DW, Dennis EA, Subramaniam S (2013) Analysis of inflammatory and lipid metabolic networks across RAW264.7 and thioglycolate-elicited

macrophages. Journal of Lipid Research, 54(9): 2525-2542.

Dinasarapu AR, Saunders B, Ozerlat I, Azam K and Subramaniam S (2011) Signaling gateway molecule pages--a data model perspective. *Bioinformatics*, 27(12), 1736-1738.

Subramaniam S, Fahy E, Gupta S, Sud M, Byrnes RW, Cotter D, **Dinasarapu AR** and Maurya M.R. (2011) Bioinformatics and systems biology of the lipidome. *Chemical Reviews*, 111 (10), 6452-6490.

Ashok Reddy D, Prasad BVLS and Mitra CK (2006) Comparative analysis of core promoter region: information content from mono and dinucleotide substitution matrices. *Computational Biology and Chemistry*, 30, 58-62.

Ashok Reddy D, Prasad BVLS and Mitra CK (2006) Functional classification of transcription factor binding sites: information content as a metric. *Journal of Integrative Bioinformatics*, 3(1), 0020.

Ashok Reddy D and Mitra CK (2006) Comparative analysis of transcription start sites using mutual information. *Genomics, Proteomics & Bioinformatics*, 4(3), 183-195.

RECENT ABSTRACTS/PRESENTATIONS

AR Dinasarapu_(oral presentation 6/06/2015), Appelberg S, Goldberger B, Riva A, Sleasman J, Goodenow M. Marijuana use modulates immune genes in youth living with HIV-1. *UF Pathology Annual Resident Research Day Symposium*, University of Florida Gainesville.

AR Dinasarapu (oral presentation 3/12/2015). Recreational marijuana use effectively reduces HIV-1/ART induced immune modulation in young adults. *SHARC group meeting, University of Florida Gainesville*.

AR Dinasarapu, K-F Chang, X. Zhang, A. Riva, J. W. Sleasman, M. M. Goodenow (2015). Recreational Substance Use Modulates Anti-Viral Response through Cell Surface Receptors in Youth Living With HIV-1 and Antiretroviral Therapy. *2015 SHARC Conference, Gainesville, Florida, January 28-29, 2015*.

A Dinasarapu, K-F. Chang, M. Karki, J. Williams, X. Zhang, Y. Li, J. Sleasman, M. Goodenow (2014). Effects of substance use by HIV-infected young adults on whole blood transcriptional profiling. *University of Florida Celebration of Research March 31 - April 1, 2014*.

AR Dinasarapu, K.-F. Chang, M.Karki, X. Zhang, J. C. Williams; K.S. Appelberg, Y.-Y. Chi, Y. Li, J. W. Sleasman, M.M. Goodenow (2014). Effects of substance use by healthy and HIV- infected young adults by systems biology. *CHAART Scientific meeting, Washington DC, May 14-16, 2014*.

AR Dinasarapu (oral presentation on 5/1/2014). Whole blood transcriptome (bioinformatics) analysis of substance use by healthy and HIV+ human subjects. *2014 bioinformatics seminar series at the University of Florida*.

SOFTWARE, DATABASES & DATA EXCHANGE FORMATS

ChromViz: Java-based standalone data visualization tool

CMAP: Complement Map Database

BioPAX & SBML implementation at UCSD-Signaling Gateway

DATA CURATION (MANUAL)

Human Complement System; Complement C3; Integrin beta-2; Mannose-binding lectin; Complement factor H

POSTDOC TRAINING

PostDoc, University of Florida, USA, 2013 - till [Mentor: Dr. Maureen M. Goodenow, Professor, UFL]
PostDoc, University of California San Diego, USA, 2008-2013 [Mentor: Dr. Shankar Subramaniam, Professor, UCSD]

EDUCATION

Ph.D, Biochemistry, University of Hyderabad, India, 2003-2007 M.Tech, Biotechnology, Anna University, India, 2000-2002 M.Sc, Biochemistry, University of Hyderabad, India, 1998-2000 B.Sc, Chemistry and Biology, Andhra Loyola College, India, 1994-1997

SOCIETY MEMBERSHIP

Sigma Xi, The Scientific Research Society

PROGRAM COMMITTEE MEMBER

NETTAB 2015 & Integrative Bioinformatics 2015 Joint Symposium, Bari, Italy. International Symposium on Integrative Bioinformatics 2014, Newcastle University, UK. International Symposium on Integrative Bioinformatics 2013, IPK-Gatersleben, Germany.

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