

Abstract Book



Joint
2nd International Conference on
Bioinformatics and Data Science
(ICBDS - 2021)

and
8th International Conference on Public
Mental Health and Neurosciences
(ICPMN - 2021)

Virtual Event
December 18, 2021

Organized by
Sarvasumana Association,
Bengaluru, India
<https://sarvasumana.in/>



International Journal of Public Mental Health and Neurosciences
ISSN: 2394-4668 (Special Issue)

ORGANIZER	Sarvasumana Association, Bengaluru, India
CO-ORGANIZER	Sanatana Yoga Vignana Kendra, Bengaluru, India

ORGANIZING COMMITTEE

PATRON	Mrs. Padmashree Murthy
Chairman	Dr. R. Somashekhar
Secretary	Dr. Pradeep Naik G and Dr. Lakshmi Shastry
Convener	Dr. Preenon Bagchi and Dr. Kirthi S Jawalkar
Organizing Joint Secretary and Co-Convener	Mr. Rajesh TS and Mr. Shylesh Murthy IA
Members	Mr. Gourango Chandra Mishra Ms. Jemy Ratna Jovita Ms. Milan Khandelwal Ms. Ajeetha Jenifer J Ms. Geethashree S Mr. Raghava T Mr. Rajesh B

Sarvasumanâ Association

Reg. No.: JNRS79-2014-15

Registered Scientific and Industrial Research Organization (SIRO)
By Department of Scientific and Industrial Research (DSIR),
Govt. of India.



#168 A, 1st cross,
1st Block, 3rd Phase,
BSK 3rd stage,
Bangalore-560085

WELCOME



On behalf of Sarvasumana association, as a President it is my pleasure to invite all delegates from across the world to the joint **ONLINE 2nd International Conference on Bioinformatics and Data Science (ICBDS – 2021)** and **8th International Conference on Public Mental Health and Neurosciences (ICPMN – 2021)**. I thank you all for being a part of the fight against covid pandemic.

This conference gives a platform to researchers and learners to share their ideas and inventions with their peers.

During this lockdown period, I request everyone to follow the safety measures like staying at home which being the sole motto for conducting this conference online.

By the unique theme, "The Gen-Next Genomics Revolution" this conference brings Big data to the world of Biotechnology and health sciences.

I hope you will enjoy the conference.

With best wishes.

Padmashree murthy

Padmashree Murthy.

President

Sarvasumana Association



+91-9448685484
<https://sarvasumana.in>

Vasishth Academy of Advanced Studies & Research



Parent institution, SARVASUMANA ASSOCIATION is a registered Scientific and Industrial Research Organization (SIRO), by Department of Scientific and Industrial Research (DISR), Govt. of India.

FROM CHAIRMAN'S DESK



Dear Friends,
Greetings!

It is my pleasure to invite all of the great scientists, academicians, young researchers, and students from all over the world to attend the **joint ONLINE 2nd International Conference on Bioinformatics and Data Science (ICBDS – 2021) and 8th International Conference on Public Mental Health and Neurosciences (ICPMN – 2021)**.

As the association is encouraging inter disciplinary research in the conference, research papers will be presented on Microbiology, Homeopathy, Ayur informatics, Acupuncture and Yoga in this platform. Young researchers are participating in oral presentations as well. Due to Covid-19 pandemic we are unable to conduct the conference physically, but thanks to technology that all of us are coming together to share the knowledge by connecting from home virtually.

During this lockdown period I request everyone to follow the safety measures like washing hands regularly, wearing mask, staying at home, going outside only for essentials. Containment rates are increasing day by day. People are losing connectivity with their loved ones. This situation is affecting us socially, financially, spiritually as well as mentally. Stress and anxiety have been affecting people of all age groups.

I hope this conference would throw some light on the current researches. I wish everyone to stay safe and stay healthy.

Yours sincerely,

Dr. R. Somashekhar,
Director (Research)



Vasishth Academy of Advanced Studies & Research (A unit of Sarvasumana Association®)
Regd. Office: #168 A, 1st cross, 1st Block, 3rd Phase, Banashankari 3rd stage, Bengaluru-560085, India.
Lab: # 30, 9th Cross, 1st Main, Srinidhi Layout, Chunchaghatta, 7th Phase, J.P.Nagar, Bengaluru-560062, India.
Website: <https://sarvasumana.in/Academy.html>; email: vasishthacademy20@gmail.com.

RICHARD HILL
M.A., M.Ed., M.B.M.Sc., Dip. Prof. Couns., M.A.C.A.
Psychotherapist, Author, Educator
PO Box 124, Gordon NSW 2072 Australia
Email: richardhill@tpg.com.au
www.richardhill.com.au www.thescienceofpsychotherapy.com

15th December, 2021


It is my great pleasure and honour to be present for this prestigious conference – the combined 2nd International Conference on Bioinformatics and Data Science (ICBDS – 2021) and 8th International Conference on Public Mental Health and Neurosciences (ICPMN – 2021). My thanks and congratulations go to the Sarvasumana Association, Vasishth Genomics Research Lab Pvt Ltd, and Sanatana Yoga for their diligent efforts to organise this conference.

There is so much for us to learn and understand about the subject of genomics and all the possibilities for improving public health, both physical and mental. Each experiment, each investigation, each inquiry and discussion takes us a step closer to what may be a world changing breakthrough. This is not just an imagination, but a real possibility. The contribution of this meeting today is impossible to measure in the moment, but it is without doubt that it will be part of the measuring of progress being made in the world today.

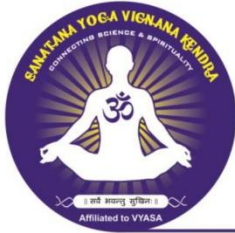
As we seek to discover specific elements within the genome in order to find if there are ways that we can create positive and beneficial interventions, we face the equally challenging dilemma of how the natural complex system of the genetic code and how it is expressed and repressed might be affected by human intervention. I have a colleague in the UAE who has been successful in creating a cloned camel. There are great benefits and also great mysteries of what this might mean. His heart is good and his intentions honorable, so I will be keen to watch his progress and the progress of the replications of Mabrokan.

I encourage students and experienced professional alike at this conference to listen and watch with curiosity and fascination. There is much to be learned and much yet to discover.

My best wishes,

A handwritten signature in black ink, appearing to read 'Richard Hill', with a long horizontal flourish underneath.

Richard Hill



Sanatana Yoga Vignana Kendra

30, 1st Main, 9th Cross, Srinidhi Layout,
Chunchaghatta, 7th Phase J.P.Nagar,
Bengaluru-560 062.

Head Office :

#26/33, 5th A cross, Sarakki Main Road,
1st Phase, J.P.Nagar, Bengaluru-560 078.

mail : info@sanatanayogakendra.org

web : www.sanatanayogakendra.org

Ref.No: SYVK/OL/001/21

Date: 16th Dec 2021

MESSAGE

I am very happy to learn that joint **ONLINE**

2nd International Conference on Bioinformatics and Data Science (ICBDS – 2021) and 8th International Conference on Public Mental Health and Neurosciences (ICPMN – 2021) is being jointly organized by Sarvasumanā Association, and Sanatana Yoga Vignana Kendra in Namma Bengaluru in December 2021.

Every session in the conference provides new insight to manage stress, anxiety and psychological disorders - a novel approach to look at the mental burdens and provided solutions to critically handle these issues. As we look close to remnants of the antiquities, I will expect that wonderful things shall emerge – new ideas, fresh thinking, and a reawakening of the enchantment of life that our academic studies seek to understand. By the unique theme **“The Gen-Next Genomics Revolution”** this conference brings the Big data to the world of Biotechnology, Medicine and yoga.

I am sure that, this interaction will help in fostering strong partnership and linkages with Doctors, Yoga practitioners, Psychologists, Psychiatrists and Neurologists and Neurobiologists. Best wishes for the success of the conference and future endeavors.

Founder, Director


Rajesh.T.S M.Sc,M.Phil,YIC,(Ph.D)



Universiti Sains Malaysia
Bertam, 13200 Kepala Batas
Pulau Pinang, Malaysia
Tel : +604-562 2888 Faks : +604-562 2468
www.amdi.usm.my

14 December 2021

It gives me great pleasure to note that the Sarvasumana Association is hosting the Joint International Conference on Bioinformatics and Data Sciences, and Public Mental Health and Neurosciences on 18 December 2021. I understand that there has been a strong response to the call for papers from both within and beyond the country. This conference allows young researchers, faculty members, and industry professionals to present their research and development work, receive criticism and suggestions on how to enhance the quality of their work. Due to the emergence of new technologies, various topics such as machine learning, big data, data science, metabolomics and etc. have been gaining significant attention in the recent years.

The goals of ICBDS-2021 and ICPMN-2021 are to bring together the multidisciplinary components of biology, computer science, and technology in order to address the complex issues of Big-Data biology utilising computational approaches. This would establish a venue for the exchange of practical experiences in all parts of big data, as well as the search for solutions to the numerous issues that researchers encounter. This conference will give an opportunity for students, instructors, and practical industry experts to exchange ideas on the most recent genomics, metabolomics, data science, and integrative spirituality research.

I would like to take this opportunity to convey my heartfelt gratitude to Mrs Padmashree Murthy, the Patron, and Dr. R Somashekhar, the conference's Chairman as well as the organising secretariat, for successfully hosting ICBDS-2021 and ICPMN-2021. I am confident that the delegates will carry happy recollections of the conference with them. I wish the delegates a fruitful technical exchange and a pleasurable experience.

Thank you.

Best regards,

Associate Professor Dr Vuanghao Lim, IPHM
Advanced Medical and Dental Institute
Universiti Sains Malaysia
Penang, Malaysia

SRI DHARMASTHALA MANJUNATHESHWARA COLLEGE (AUTONOMOUS)

UJIRE - 574 240



DAKSHINA KANNADA, KARNATAKA STATE

(Re-Accredited by NAAC at 'A' Grade with CGPA 3.61 out of 4)

Ph: 08256-236221, 236101(0), Fax: 236220

e-Mail: sdmcollege@rediffmail.com, sdmcollege@sdmcjire.in, Website: www.sdmcjire.in

16-12-2021

I am glad to learn that Sarvasumana Association, Bangalore with Vasishth Genomics Research Lab Pvt Ltd and Sanathana Yoga Vignana Kendra, Bangalore is jointly organizing the 2nd International Conference on Bioinformatics and Data Science (ICBDS-2021) and 8th International Conference on Public Mental Health and Neurosciences (ICPMN – 2021) on the theme The Gen- Next Genomics Revolution on 18th of December 2021.

I have been a part of the programs organized by Sarvasumana Association in the past and the platform provides a great opportunity for learning and networking for students, scholars, academicians, and researchers from different streams. The team spirit towards providing interdisciplinary and trans disciplinary exchange of knowledge is tremendously appreciable. The association has never failed to come up with a well organized participant friendly and informative as well as inquisitive conferences.

Though the conference is going to be held online, I am sure the expanse of knowledge and the quality of dissemination of information will not be compromised.

Wishing you all a very fruitful and rewarding conference.

Regards



Navyashree G.C. M.Sc., Ph.D, NET, SLET
Assistant Professor
Department of PG Studies and Research in Psychology
Sri Dharmasthala Manjunatheshwara College, Ujire, Karnataka

Sl.No	PLENARY TALKS
1	THE CUTTING-EDGE OF METABOLOMICS APPROACHES IN BIOACTIVE NATURAL PRODUCTS
	<i>Dr. Vuanghao Lim</i>
2	THE GENOTYPE, PHENOTYPE, EPIGENOTYPE AND EPIPHENOTYPE
	<i>Dr. Richard Hill</i>
3	YOGA AND INFORMATICS
	<i>Dr. Rajesh TS</i>
4	PSYCHOLOGICAL DISTRESS EXPERIENCED BY THE SURVIVORS OF SEXUAL ABUSE
	<i>Dr. Navyashree G.C & Dr. Manjula M.Y</i>
5	QUALITATIVE ANALYSIS AND CORRELATION OF HYPERTENSION WITH DERMATOGLYPHIC PATTERNS IN HOMO SAPIENS
	<i>Dr. Nethra S</i>
6	STUDIES ON IMMUNO-MODULATORY ACTIVITY OF SELECTED MEDICINAL HERBS (IN-SILICO APPROACH)
	<i>Dr. Preenon Bagchi and Dr. Ajit Kar</i>

SL.NO	ABSTRACTS
1	EXECUTION OF BIOINFORMATIC PIPELINE USING GALAXY PLATFORM ON CLOUD
	<i>Swapnaja More, Dr. Ajit More</i>
2	QUALITATIVE ANALYSIS OF CYBERPSYCHOLOGY AND ITS VARIOUS ASPECTS INFLUENCING ON HUMAN MENTAL HEALTH AND BEHAVIOUR
	<i>Rushikesh Sunil Yelikar, Vaibhav Bhagavan Vagare, Thallapalli Manpreeth Reddy and Nethra S</i>
3	CORRELATION AND ANALYSIS OF DIABETES WITH DERMATOGLYPHIC PATTERNS IN HUMANS– A QUALITATIVE STUDY
	<i>Bhumika S, Sandhya R, Debojyothi Saha and Nethra S</i>
4	A QUALITATIVE STUDY OF MUTAGENIC EFFECTS OF UV RADIATION ON FRUIT FLY, DROSOPHILA MELANOGASTER
	<i>Varshitha G S, Sanjana S Kanguri, Akshay Yadav N, Soundarya C M and Nethra S</i>
5	EFFECT OF BRAHMI EXTRACT IN REGULATION OF MTHFR GENE THROUGH RT-PCR
	<i>Dr. Rajesh.T.S and Dr. Somashekhar.R</i>

PLENARY TALKS

THE CUTTING-EDGE OF METABOLOMICS APPROACHES IN BIOACTIVE NATURAL PRODUCTS

Vuanghao Lim, Ph.D.

Advanced Medical and Dental Institute, Universiti Sains Malaysia, Penang, Malaysia

The discovery and characterisation of natural product sources have inspired the development of many new products and medicines. The classical approach to the discovery of natural products typically involves the isolation and identification of a bioactive compound. Although successful, the traditional steps can be time consuming and require extensive training. To overcome this discovery bottleneck, the combination of analytical methods with computational and statistical treatments, known as "omics" technologies, is a valuable ally for natural product chemists. Metabolomics is a process that involves the identification and quantitation of small molecules produced by biological systems, which helps identify novel active agents and accelerate the development of new drugs. Unlike conventional natural product research, metabolomics focuses on the analysis of metabolites in a living system. The association between metabolomics and statistical methods provides a more complete view of the data needed to answer a scientific question. In this instance, Mass Spectrometry and Nuclear Magnetic Resonance are the most used techniques for metabolomics analysis. The use of both methods allows the identification of key constituent groups of plant natural products especially in screening, drug discovery, and quality control. The evolution of data analysis algorithms has enabled scientists to extract valuable information from large sets of data sets. Through metabolomics, analytical tools can identify compounds that have medicinal properties and can be used in tests for the efficacy of herbal medicines. The existence of large mass spectral databases has been instrumental in helping overcome the issue of metabolite identification. Using molecular networking tools such as GNPS, bioinformatics tools have been able to identify novel compounds with chemical structures that are of interest. In addition, computational tools for metabolomics data processing will be discussed. Applications of metabolomics in the areas of drug discovery and quality control will be presented including various limitations and possibilities of bioactive isolation of natural products.

THE GENOTYPE, PHENOTYPE, EPIGENOTYPE AND EPIPHENOTYPE

Richard Hill, MA, MEd, MBMSc

Mindscience Institute, Australia

The observable expression of our genotype, the phenotype, is straightforwardly predictable from the detail of our DNA. The ongoing production of proteins that become the “stuff of life”, is the result of expression of the genetic code in relation to the myriad of experiences, needs and demands that are encountered as we progress through time and life. Genes turn on and off and are expressed and repressed in a multitude of ways. Epigenetics is a curious process that occurs during life where chemical markers are added to or subtracted from the genetic code. These changes also influence gene expression. So, how do these various processes play out in real life? How can we observe and learn more about the complex possibilities of the emerging phenotype? Answers to these questions are found in the unusual cases of identical twins that are separated at birth resulting in exposure to different parents, families, environments and socioeconomic conditions. We will explore cases, including the extraordinary case of two sets of identical twins unknowingly mixed up at birth. They grew up in the belief that they were fraternal twins (non-identical). But then, they were serendipitously reunited at 26 years of age. What were their similarities and differences and why? How can this improve our capacity as therapists and health practitioners?

YOGA AND INFORMATICS

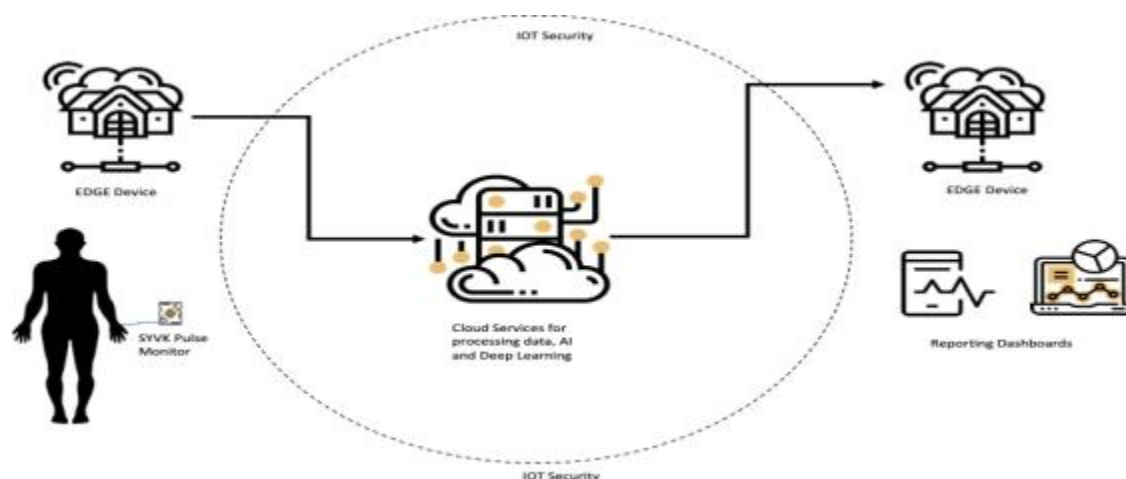
Raejsh. T.S, Ph.D

Sanatana Yoga Vignana Kendra, Bangalore.

The word ‘Yoga’ is derived from the Sanskrit root ‘Yuj’, meaning ‘to join’ or ‘to yoke’ or ‘to unite’. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature.

The practice of Yoga is believed to have started with the very dawn of civilization. The science of yoga has its origin thousands of years ago, long before the first religions or belief systems were born. In the yogic lore, Shiva is seen as the first yogi or Adiyogi, and the first Guru or Adi Guru

Yogic Practices for Health and Wellness:The widely practiced Yoga Sadhanas (Practices) are: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana (Meditation), Samadhi /Samyama, Bandhas & Mudras, Shat-karmas, Yukta-ahara, Yukta karma, Mantra japa, etc.Yama's are restraints and Niyama's are observances. These are considered to be pre-requisites for the Yoga Sadhanas (Practices). Asanas, capable of bringing about stability of body and mind ‘kuryat-tad-asanam-sthairyam...’, consists in adopting various body (psycho-physical) patterns, giving ability to maintain a body position (a stable awareness of one’s structural existence) for a considerable length and period of time as well.



The present work done is in line with the above vision and starts with design of a device called the “SYVK Pulse Monitor” which collects metrics from various marma points on human body and transfers the data to a centralized cloud system through EDGE device using the IOT technology.

PSYCHOLOGICAL DISTRESS EXPERINCED BY THE SURVIVIVORS OF SEXUAL ABUSE

Navyashree G.C & Manjula M.Y***

*Assistant Professor, Department of PG Studies and Research in Psychology,
Sri Dharmasthala Manjunatheshwara College, Ujire- 574 240.

Email id- navyashreegc@yahoo.co.in

** Emeritus Professor, Department of Psychology, Christ University, Bangalore

Amongst the many social problems that exist worldwide, child sexual abuse is one which is heinous, disturbing, and violates the rights of the child for safe living and is an important public health concern. It is an abuse of power over a child and a violation of a child's right to life and normal development through healthy and trusting relationships. The incident of sexual abuse leaves a scar on the mind of the children and adolescents that unconsciously or unknowingly it gets reflected in the form of physical or emotional ailment over the period of time or immediately. Childhood abuse tends to have the most complications with long-term effects out of all forms of trauma because it occurs during the most sensitive and critical stages of psychological development. Young people in abusive situations must redirect their energy from emotional development to survival. When they are forced to focus on avoiding the violent or sexual advances of an adult caretaker, they do not make the same developmental progress as children who receive unconditional love, support and guidance. The present study aims at understanding the psychological distress experienced by the adolescent survivors of sexual abuse. The sample for the study consisted of 104 adolescent girls aged 15 to 18 years with the experience of contact sexual abuse at least once. Psychological distress experienced by the survivors of sexual abuse scale developed by the researcher in 2015 was used to collect the data. The results revealed that the survivors of sexual abuse experience psychological distress like nightmares, negative flashbacks, feelings of impurity, attitude of revenge etc. The obtained data is represented using graphs and percentages.

Key words: Child sexual abuse, survivors, psychological distress

QUALITATIVE ANALYSIS AND CORRELATION OF HYPERTENSION WITH DERMATOGLYPHIC PATTERNS IN *HOMO SAPIENS*

Nethra S, Shreelakshmi sanjay, Tayyaba Ahmad, Chandana M,
Akshata S*

Padmashree Institute of Management and Sciences, Department of Biotechnology,
Kommaghatta, Kengeri, Bangalore-560060

*Corresponding Author E-mail-abhayanethra5@gmail.com

Dermatoglyphics is a branch of science which reveals about the environmental and genetic factors of an individual and is helpful in detecting various diseases making impact on individual's health and normal lifestyle. Dermatoglyphics is considered as an art of depicting out individuals personality with the help of an angle measurement commonly known as atd angle. In dermatoglyphics there are unique patterns of prints such as fingerprints, palm prints, tongue prints and sole prints. Studies are practiced on the basis of the ridges and the unique patterns of the fingerprints. Hypertension, a major medical discussion in the disease world, which is known in every next member of family, this is not the disease having roots, only in genetics but has spread its roots in environmental factor as well. So hypertension can be studied in relevance to dermatoglyphics, on the basis of fingerprints and the ridges on the palms, individually. These patterns are used in criminal investigations also. Joint national committee considered the patients of hypertension, who have systolic blood pressure more than 140 mmhg and diastolic blood pressure more than 89 mmhg.

Keywords: Dermatoglyphics, hypertension, ridges, atd angle

STUDIES ON IMMUNO-MODULATORY ACTIVITY OF SELECTED MEDICINAL HERBS (IN-SILICO APPROACH)

Preenon Bagchi and Ajit Kar

Vasishth Academy of Advanced Studies and Research,
Sarvasumana Association, Bengaluru, India

Immuno-modulator is generally defined as a substance, biological or synthetic, which can stimulate, suppress or modulate any of the components of the human immune system including both innate and adaptive arms of the immune responses, specific immunity has evolved as highly sophisticated defence mechanism of higher organisms. The consequences of deficiencies of the immune system include recurrent infections, autoimmunity and susceptibility to malignancy. In human beings, the immune response is composed of two major mechanisms: the cell mediated immune system, which includes phagocytes, macrophages, T lymphocytes, granulocytes and the other, the humoral immune system which includes antibodies that are produced by β lymphocytes. Mature β lymphocytes can be found in the bone marrow, lymphoid tissue, spleen and to a lesser extent the blood stream. Major functions of β lymphocytes are to produce antibody and interact with T cells. The development of an initial (primary) immune response evolve over 8 to 14 days. Part of this response includes the generation of “memory” β and T cells, which provide a long term system for rapid immune response upon subsequent exposures to antigen (secondary response). This allows development of immune T cells and antibody within 1 to 3 days of antigen exposure for rapid control or destruction (modulation) of the immune stimulus.

The term bioinformatics is new routinely applied to experiments in genomics that rely on sophisticated computations. Genomics is the technology behind the study of the full complement of genetic information in an organism’s genome – out of bioinformatics- have also grown some new disciplines: functional genomics, structural genomics and evolutionary genomics. It is to be noted that multiple genetic and environmental factors contribute to the development of autoimmune diseases. Auto-immune diseases generally result from the failure of immune tolerance, the process by which the immune system recognizes and accepts self-tissue. However, association of specific gene polymorphisms are noted with autoimmune diseases. In Ayurveda to maintain immune homeostasis under different conditions of impaired immune responses several medicinal plants are used. In the present study specific phytochemicals are selected from the following promising plants eg. *Azadirachta indica*, *Ocimum sanctum*, *Tinospora cordifolia*, *Asparagus racemosus*, *Andrographis paniculata*, *Aegle marmelos*, *Aloe vera*, *Commiphora mukul*, *Vitex negundo*, *Allium sativum*, *Carica papaya*, *Moringa oleifera*, *Cinnamomum tamala*, *Curcuma longa*, *Berberis aristata*, *Syzygium aromaticum*, *Solanum xanthocarpum*, *Emblica officinalis*, *Pluchea lanceolata*, *Plumbago zeylanica*, *Ficus benghalensis*,

Withania somnifera, *Centella asiatica*, *Hemidesmus indicus*, *Rubia cordifolia*, *Phyllanthus niruri*, *Glycyrrhiza glabra*, *Piper longum*, *Swertia chirayata*, *Glycosmis pentaphylla*, *Achyranthes aspera*, *Tragia involucrata*.

Conclusion: Understanding gene regulations in homeostasis may provide new insights into pathogenesis and treatment of auto-immune disorders. This study aimed to combine gene expression (GE) microarray, next generation sequencing (NGS), and bioinformatics to explore genetic regulations associated with auto-immune disorders. Immune response is a host's immediate reaction to encounter an invasive foreign entity. Specific phytochemicals could interact with specific host's immune cells (in innate or adaptive arms) body's defence mechanism and maintaining immune homeostasis under different conditions of impaired immune responses.

Further in improving body's immune system their important role of fresh seasonal fruits and vegetables to ensure intake of adequate micronutrients like zinc, iron etc, vitamin C and vitamin D, natural antioxidants are noted. Also, high mental stress levels will have negative impact on the overall immune system.

ICBDS & ICPMN-2021

PRESENTATION ABSTRACTS

ICBDS & ICMAN 2021

EXECUTION OF BIOINFORMATIC PIPELINE USING GALAXY PLATFORM ON CLOUD

¹Swapnaja More, ²Ajit More, Ph.D

¹Research Student, *Departement of Computer Science, Y.M. College,
Pune. Maharashtra, India*
[1swapnaja86@gmail.com](mailto:swapnaja86@gmail.com)

²Head of Department, *Departement of Computer Applications and system Studies,
IMED, Bharati Vidyapeeth, Pune, Maharashtra, India*
[2 ajit.more@bharativedyapeeth.edu](mailto:ajit.more@bharativedyapeeth.edu)

The emergence of NGS (next-generation sequencing) correlated with the possibility of a tsunami of genome data which would flood storage systems and crush computing clusters in different genome informatics ecosystems. The coming storm of data forces scientists to find easy and genuine storage and computational methods. According to sequencing instruments' growth, configuring and using specialized software to interpret the data necessitates computer hardware, professional technical support, and bioinformaticians. The researcher's requirements of computing resources fluctuate widely over time. Buying and maintaining a fixed amount of computing resources are very costly for institutional clusters. Hence, the structured and cost-beneficial option is provided by the cloud for this situation. Since the cloud architecture is elastic and scalable, we can assign resources precisely when needed and dynamically scale them up or down as our needs change over time. Outside providers maintain these compute clouds. At usegalaxy.org, the accessible public server is provided, known as Use galaxy, which anyone can use as primary. To control the galaxy, such as installing tools, managing users, creating groups, etc., through the User interface user must become an administrator. Admin privileges available to only registered users. Local galaxy can be installed on our local instance of the galaxy from scratch and become an admin. CloudMan (usecloudman.org) allows researchers to handily deploy, customize, and share their entire cloud analysis environment, including data, tools, and configurations. This platform improves accessibility of cloud resources, tools, and contributes toward reproducibility and transparency of research solutions.

QUALITATIVE ANALYSIS OF CYBERPSYCHOLOGY AND ITS VARIOUS ASPECTS INFLUENCING ON HUMAN MENTAL HEALTH AND BEHAVIOUR

Rushikesh Sunil Yelikar, Vaibhav Bhagavan Vagare, Thallapalli Manpreeth Reddy and Nethra S

Padmashree Institute of Management and Sciences, Department of Biotechnology,
Kommaghatta, Kengeri, Bangalore-560060

*Corresponding Author E-mail-abhayanethra5@gmail.com

Cyberpsychology is one of the upcoming fields of study which includes different aspects like cyber-bullying, cyber crime, gaming addictions, social media influence, usage of scam apps, which impact on the mental health and behaviour of humans. Cyberpsychology tries to understand how people engage with developing technology such as digital gadgets, the internet, virtual reality, and artificial intelligence. The present study is an apt and scopeful, to the present day generation of people. Since two years world is facing pandemic situation and it switched into the digital mode, which also had a very great impact on the psychological status of People. Cyber psychology is not a common term that people generally use while talking about changes in human behavior due to the excessive usage of the internet and social media. It is like a big umbrella, which covers different aspects as covered in the study, which literally has taken the lives of people. The present study interprets that both genders of people were affected psychologically under different aspects of cyberpsychology. Males were more influenced due to cyber games and scam apps and females were more affected due to social media influence, cyber bullying, cyber crimes. Basically, age-wise, 19-25 groups of aged people were more affected according this study. The present qualitative study has made an attempt towards understanding the psychological status of humans which affect the mental health and behavior due do the usage of cyber-technology.

Keywords: Cyberpsychology, Cyber-bullying, cyber crime, Cyber-technology, Human mental health and behavior, scam apps, gaming addictions

CORRELATION AND ANALYSIS OF DIABETES WITH DERMATOGLYPHIC PATTERNS IN HUMANS– A QUALITATIVE STUDY

Bhumika S, Sandhya R, Debojyothi Saha and Nethra S

Padmashree Institute of Management and Sciences, Department of Biotechnology,
Kommaghatta, Kengeri, Bangalore-560060

*Corresponding Author E-mail-abhayanethra5@gmail.com

Dermatoglyphics (derma, "skin", and glyph, "carving") is the scientific study of fingerprints, lines, mounts and shapes of hands, as distinct from the superficially similar pseudoscience of palmistry. In the present study, correlation and analysis of diabetes with dermatoglyphic patterns was studied. The study involved people, aged between 40 - 75 years. Both males and females were included in the study, people belonged to south india. The type 1 and type 2 diabetic patients were included in the dermatoglyphics study. The types of dermatoglyphic patterns were observed with the 'atd' angle of each person. The dermatoglyphic features of the present study may be used as a suggestive diagnostic tool to make a provisional diagnosis and to identify the persons who are at risk, but it requires more extensive studies in a large number of the patients.

Keywords

Dermatoglyphics, atd angle, type1 & 2 diabetes, diagnostic tool

**A QUALITATIVE STUDY OF MUTAGENIC EFFECTS OF UV RADIATION
ON FRUIT FLY,
*DROSOPHILA MELANOGASTER***

***Varshitha G S, Sanjana S Kanguri, Akshay Yadav N, Soundarya C M
and Nethra S***

Padmashree Institute of Management and Sciences, Department of Biotechnology,
Kommaghatta, Kengeri, Bangalore-560060

*Corresponding Author E-mail-abhayanethra5@gmail.com

The colour of flies makes it more appealing and appreciating, colour patterns are among the most obvious and striking features of animal diversity. Body coloration affects how animals interact with the environment. In insects, the rapid evolution of black and brown melanin patterns suggests that these are adaptive traits. Exposure to uv radiation is always a risk and causes many health issues as evident from the research done by scientists. In the present study of mutagenic effect of uv radiation, the fruit fly, "*drosophila melanogaster*" was used as a model organism for the experimentation. The first stage of life cycle of *drosophila melanogaster* that is the egg was exposed to uv light at different intervals in comparison with control and the observations were made. The mutation occurred in the uv exposed eggs which developed into adults resulting in "ebony", body colour, the mutant fly. The flies carried a mutation in their ebony gene in the third chromosome. Normally ebony gene is responsible for building up the trans-coloured pigment in the normal fruit fly. If the ebony gene is defective, the black pigment accumulate all over the body and makes the body black.

Key words: *Drosophila melanogaster*, uv radiation , ebony , chromosomes.

EFFECT OF BRAHMI EXTRACT IN REGULATION OF MTHFR GENE THROUGH RT-PCR

Rajesh.T.S^{1,2*} and Somashekhar.R³

¹Research Scholar, School of Sciences, Career Point University, Kota, Rajasthan India,
Email: trajeshsr@gmail.com

²Sanatana Yoga Vignana Kendra (affiliated to VYASA), Bengaluru, Karnataka.

³ Career Point University, Kota, Rajasthan India

MTHFR is a key enzyme in folate metabolism. MTHFR is associated with number of neuropsychiatric disorders including psychiatric disorders like schizophrenia, bipolar disorder and unipolar depressive disorder etc. In the current research human neuroblastoma cell line SH-SY5Y were treated with Bhrami extract to check the effect on MTHFR gene. The results indicated Bhrami extract in the concertation of 3.25mg and 6.5mg showed least ΔC_t value of 2.56 and 2.265 respectively in the real time PCR which indicated the up regulation of the MTHFR gene in human neuroblastoma cell line SH-SY5Y.

Keywords: folate metabolism, MTHFR, neuroblastoma

ICBDS & ICA