

# *SYMPOSIUM*

## *Art of Imperfect Brain*

**Inauguration**  
**Paint and Brush**  
**Talks and Workshop**  
**Skype Meeting with Elizabeth Jameson**  
**Release of *Magical Broom Returns***  
**Science-Art Convergence Display**

*Venue: Ravenshaw University, Cuttack, Odisha, Date: October 28, 2017*

Art and neuroscience are considered two divergent fields as art is imaginative while neuroscience is logical. Increased mutual interest between scientists and artists lead to convergence of two paths leading to a common goal in their quest for knowledge and its expression. With the growing curiosity towards convergence of neuroscience and art, it is proposed to have symposia on the topic to make learning of Neuroscience more engaging.

Pre-Registration Available by Email:  
[neuroyogasym@gmail.com](mailto:neuroyogasym@gmail.com)

To be published in *Integrative Medicine International*  
Background Picture Credit: Elizabeth Jameson

 [www.facebook.com/neuroscience  
research lab](https://www.facebook.com/neuroscience_research_lab)

 Enjoy live video streaming of Symposium



*Inspired by Elizabeth Jameson*

## **Scientific Program- Art of Imperfect Brain**

Art and Neuroscience are considered two divergent fields, as art is imaginative, ingenious, prejudiced and narrative, while neuroscience is characterized as logical, objective and factual. Interest among scientists is increasing towards recognizing artists work as investigators of reality. This inquisitiveness has led to the conclusion that although these divergent streams have different approaches yet artists and scientists are moving towards a converging path leading to a common goal in their quest for knowledge and its expression is replete with sensitivity.

This pursuit has given birth to a new discipline, “Neuroesthetics” which is scientific study of the neural basis for the contemplation and creation of a work of art. Neuroesthetics is use neuroscience as a tool to explicate and recognize the aesthetic experiences at the neurological level. This particular topic has attracted scholars from many disciplines including Neuroscience, Art, History, Art, Psychology, and Philosophy.

With the growing curiosity towards convergence of neuroscience and art, it is proposed to have symposium on the topic to make learning of Neuroscience more engaging.

**Convener: Akshay Anand**

**Inauguration at 1:45PM**

### **Panel Discussion (11-1PM) : Avenues for Integration of Art in Scientific Enterprises**

Chairpersons	S. Sankara Raman (Amar Seva Sangam, Ayikudy), Sudarsan Patnaik (International Sand Artist)
Member	N B Nair (Indian Science Journal, Delhi)
Member	N S Dinesh (Indian Institute of Science, Bangalore)
Member	Shimona Kanwar (Times of India)
Member	Manorama Patri (Ravenshaw University)
Member	Sangram Patnaik (Legal commentator)
Member	B.S.S Rao (NIMHANS)
Member	Yoko Sen (Founder Sensound)
Member	Rakesh Biswas (Kamineni Institute of Medical Sciences, Hyderabad)
Member	Sadasivan Pillai (Frontier life line, Chennai)
Member	M.C Arunan (CUBE Lab, Homi Bhaba Centre for Science Education, TIFR, Mumbai)
Member	Raagav (MDCRC, Coimbatore)
Member	Fatima Al Mansoori (yoga therapist , Bahrain)
Member	Vinod Mehta (Neuro Artist, Chandigarh)
Member	Arun Chidambaram( writer and director, Tamil nadu)
Member	Pradeep K Srivastava(CDRI,Lucknow)
Member	Akshay Anand (Editor, Annals of Neurosciences)

## Presentation Timings

Sudarsan Pattnaik	Motivational Art on Sand	International Sand Artist	2:00-2:15 PM
Yoko Sen	The Future of Hospital Sound	Founder Sensound	2:15-2:30PM
Rakesh Biswas	Art of Medicine	Kamineni Institue of Medical Sciences, Hyderabad	2:30-2:45PM
N S Dinesh	Challenges in building Bioengineering Products	Indian Institute of Science, Bengaluru	2:45-3:00PM
S.Sankara Raman	Attitude determines Altitude	Amar Seva Sangam, Ayikudy	3:00-3:15PM
<b>Tea Break</b>			3:15-3:45PM
Sadasivan Pillai	Importance of Quality Assurance in Science and Art discourse	Frontier Life Line, Chennai	3:45-4:00PM
NB Nair	Media's role in Science and Art	Indian Science Journal, Delhi	4:00-4:15 PM
M.C Arunan	Art as a tool of educating Science	CUBE Lab, Homi Bhaba Centre for Science Education, TIFR, Mumbai	4:15-4:30PM
Fatima Almansoori	Yoga as Medicine	Yoga therapist, Bahrain	4:30-4:45PM
Raagav	How DMD kids respond to Music	MDCRC, Coimbatore	4:45-5:00PM
Vinod Mehta	Expressing Neuroscience by Paint And Brush	Neuro Artist, Chandigarh	5:00-5:15 PM
Arun Chidambram	Mass communication through movies	Writer and Filmmaker, Tamil nadu	5:15-5:30 PM
Pradeep k Srivastava	Learning Neuroscience through Scientoons	CDRI, Lucknow	5:30-5:45 PM
Akshay Anand	Humanising Neuroscience in Lab	Editor, Annals of Neurosciences	5:45-6:00PM



## **Working Draft**

### **Introduction (I)**

We invite you to be a part of our participatory action research group whose goal is to reach out and create a positive impact on the lives of as many entities in the shortest time possible with follow up and maintenance of that impact for the longest period possible.

Our brains by their very design are genomically imperfect (aka jeev) and consequently, we constantly keep striving towards perfection (aka param). We invite all jeevs such as us, to a perennial workshop where we can collaboratively learn to utilize available science and art based tools and create/integrate newer ones towards our goal.

### **Methods (M)**

Citizen participants from all walks of life, shall by actionable research and by generating data from their own brains around their experiences (for example a patient or researcher or software professional relating his own history/story/learning journey) and other's lives (for example a medical student or physician or patient relative relating their patient's stories or students relating the learning journeys of their colleagues) and expressing them onto our canvas/story-board/platform where all these stories can be captured and collated and made available for subsequent analysis, education and translation.

The data provided by all the individual brains of our study participants can be captured using human anatomical tools such as sounds generated by our vocal cords (voice, audio) or handwritten or typed text, drawings, paintings and sounds generated by strings or membrane, controlled by humans (aka music) and or muscle movements that can be expressed in resonance with the string and membrane movements (aka dance).

All these individual data collection sessions will be gathered through collective sharing in group sessions/gatherings that will invariably begin with a period of meditation/silence when we expect our brain EEGs to reach an alpha state that is known to be conducive to such a data gathering through creativity. This builds on the concept of a global waiting room put forward by Elizabeth Jameson where patients share their experiences in handwritten notes through a common platform connected to their waiting room.

In the past we have published our experiences where a large group of remotely located patients have shared their hand written notes with us and how these have been further shared after deidentification with a large global network of physicians for supportive feedback to these patients. (Ref 1-3)

Once all the data is digitally collated through text, audio and video, it will be stored in an open online repository in the form of individual online learning portfolios/patient records and participants are encouraged to develop their portfolios within this time frame by regularly entering follow up data of their experiences in their chosen format utilizing afore mentioned tools. Many users may not like to upload their own data themselves we can train some participants to do it for others as an elective that we are currently running as a perennial workshop in some of our centers.

#### Results (R) expected outcomes

Large data sets of lived experiences of individual brains shall be graphically plotted and using tools of sense-making, similarities and unique features identified in the data to generate useful insights that can be fed back to the system in the form of newer solutions to the individual problems identified. This process could be as simple as identifying in the data certain solutions already being utilized by those individual brains utilizing them) and the same solutions may be trialed on those individual brains currently not availing of the same solutions and currently otherwise recording a lower quality of life portfolio.

A grant application will also be written focusing on Public Engagement fund of Wellcome Grant, UK. Please see the link below

<https://wellcome.ac.uk/funding/public-engagement-fund>

A consensus review will also be circulated for publication in Integrative Medicine International.

Here is a demo simulation exhibit with online link and QR code

<http://avi33tbtt.github.io>

Video guided tour here

<https://youtu.be/yrJ0DfmRg8E>





#### Analysis (A):

Outcomes from using the afore mentioned tools of data collection, representation and shared learning Intervention to improve quality of lives in individual imperfect brains will be compared using standard quantitative and qualitative approaches.

#### Discussion and Conclusions (D)

We present a feasible collectively driven strategy to augment positive optimization strategies in our imperfect brains striving toward perfection with better quality of life outcomes and we hope to run this strategy soon in a sample of action research participants.

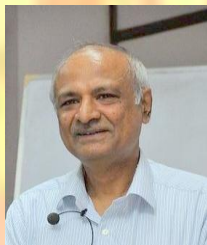
#### Reference links:

[http://www.udhc.co.in/INPUT/input\\_directory.jsp](http://www.udhc.co.in/INPUT/input_directory.jsp)

<http://www.bjll.org/index.php/ejpch/article/view/766>

<http://bjll.org/index.php/ejpch/article/view/1271>

## **SPEAKERS**



***N S Dinesh is Professor in Department of Electronic Systems Engineering in Indian Institute of Science, Bangaluru. His expertise involves mechatronics, Telematics and Biomedical Engineering.***



***Yoko Sen is a Japanese American sound alchemist and Founder of Sen sound. She is working on sound experience research to explore how sound affects people's environment, experience and emotions, using human-centered design.***



***S. Sankra Raman is Secretary of Amar Seva Sangram working for disabled communities in rural areas of Tamil Nadu.***



***N B Nair is an eminent Digital Media Journalist and Editor of Indian Science Journal.***



***He is Deputy Managing Director at frontier life line hospital in Chennai. He is Ph.D. in Toxicology. He is an expert of Quality Assurance, GLP certified CRO and a pharmaceutical industries.***



***M C Arunan is currently visiting Professor at Homi Bhabha Centre for Science Education, TJFR, Mumbai. His areas of interests are Biological Plasticities: Biological basis of Learning and memory; Teaching-Learning in Neurosciences and Collaborative Undergraduate Biology Research through College-Research Center Networking.***





***Shimona Kanwar is Assistant Editor in Times of India. She covers science, health, and prefers an interdisciplinary approach. She loves simplifying science stories, sheering them of jargon to ensure enjoyable reading.***



***Rakesh Biswas graduated from Post Graduate Institute of Medical Education and Research, Chandigarh and is currently Professor, Kamineni Institue of Medical Sciences, Hyderabad. His interest in neuroscience is related to his special interest in creating a 'user driven health care' community of patients and health professional users for better health care***



***Shankaranarayana Rao did PhD and M.Phil in Neurophysiology at NJMHANS, Bangalore. His areas of research include cellular and molecular mechanisms of learning and memory, amelioration of stress and depression-induced cognitive deficits, activation of resident stem cells in the adult brain.***



***Vinod Mehta is an eminent painter of Tricity Chandigarh.***



***Arun Chidambaram is the writer, Actor and Director of 7 international Award winning Indian film "Kanavu Variyam(Dream Factory).He is the 1st Indian Director to win 2 prestigious REMJ Awards***





***Sangram Pattnaik is an eminent Legal commentator***



***Sudarsan Pattnaik is a noted international sand artist.***



***Fatima Al Mangoori is a renowned internationally accredited yoga therapist and life style coach from Bahrain.***



***Pradeep K Srivastva, a scientist in drug research and father of Scientoons. He is involved in developing technology for the production of various drugs and pharmaceuticals and he has got more than 33 years of experience.***



***Manorama Patri, Ravenshaw University, Cuttack is Organizing Secretary for JAN-2017. Her research is aimed at understanding the molecular and cellular mechanisms underlying learning and memory.***

**PhD applications are invited for atleast 4 vacancies immediately available under Dr. Akshay Anand , contact him directly at 9815968102 or by emailing him at [akshay2anand@gmail.com](mailto:akshay2anand@gmail.com).**