

# ONGOING PARTNERSHIP OF PISTA INSTITUTE

PISTA to be applied in the following study in the coming years.

## Caregiving for Dementia with Brain and Sound Stimulation using PISTA Therapy

### PISTA Modalities Application

- Panic Attack
- PTSD
- Anxiety
- Depression
- Dementia
- Parkinson
- Autism
- Recognitive Decline
- Caregiver's Stress

### Participating Partners of Institutions and Universities

- University of California
- Beijing University
- Shanghai University

### Our research framework and paradigm

- Light eye sound wave
- Brainwave
- Device on using sound wave and vibration
- Eyes research in defining eye brain connections
- Transmitting sound through vibrational physical movements
- Using vibrational and sound transmitting devices to sustain the applicability to generate desired results
- AI technology on testing

## Recently Publish 2021-2022

- [IPA Bulletin, Volume 39 Issue 1, June 2022](#)
- Autism & Your Family
- General Psychology
- Psychology: Active Learning
- [All the World's Your Stage: How your body works and how to enjoy a healthy, productive and abundant life.](#)
- Cerebral folate deficiency in autism spectrum disorder, Techniques in Neurosurgery & Neuroanatomy, in press.
- Neuroprotection of retinal ganglion cells,
- Treatment of cerebral folate deficiency lessens autism spectrum disorder symptoms: case study, in preparation.
- [Normal tension glaucoma: prevalence, etiology and treatment](#)
- [A double-label analysis demonstrating that all enkephalin-immunoreactive amacrine cells in the chicken retina express neurotensin immunoreactivity](#)
- [Molecular cloning and structure of the human \(GABATHG\) GABA transporter gene.](#)
- [Pharmacological characteristics of high-affinity serotonin uptake systems established through gene transfer](#)
- [Localization of neuropeptide-immunoreactive neurons in the human retina](#)
- [The Coexistence of Multiple Neuroactive Substances in the Retina](#)

## To be Published 2023

- To Mind and Mend: How the PISTA Method Heals and Improves Living (**New Edited Version**)
- From Well Looking to Well Being (**New Edited Version**)
- PISTA: An Approach to Assist Persons with Cognitive Decline
- Mind and Mend Program: A Pilot Study Combining Binaural Beats with Self-Actualization Techniques to Develop a Therapy Protocol

## OUR KEY RESEARCHERS AND RESEARCH PARTNERS

- **George Ayoub, Ph.D.**

**Post-Doctoral Fellowship, University of California, San Francisco.**

Dr. George Ayoub is an educator and health scientist with research in three areas: glaucoma, where he identified herbal medicines that help protect vision; cancer, where he has identified foods that stop the growth of cancer cells; and mental health, where he seeks to reduce symptoms of autism and mood disorders related to nutritional deficits. He has taught 10,000 students over the past 25 years in biological, psychological and medical disciplines. He regularly speaks on contemporary issues regarding body, health and nutrition and is the author of 8 books on health and nutrition, including health guides for community clinic patients: Yo Saludable and To Your Health, both published in 2020.

- **Dominic Man-Kit Lam**

**University of Toronto, The University of British Columbia, Harvard Medical**

**School** Chairman and Chief Biomedical Officer of Rejuve Longevity Network

**Institutions:** Baylor College of Medicine, Hong Kong Institute of Biotechnology, World Eye Organization

- **Andre Stang**

**Leibniz Universität Hannover**

Dr. André Stang from Germany is an expert in understanding of the psychological impact of humans on their environment and daily performance. Trained in psychology and environmental science, he focused on the interactions occurring when “bad” chemicals cause imbalances in the human body. This knowledge, combined with his expertise in the integration of interdisciplinary methods, like psychology approaches, has contributed to his impressive track record and proven ability to improve older people’s lives by promoting the best practices procedures in daily life

- **An Qiuling**

**Associate Professor, Department of Sociology, East China Normal University**

Born in Shandong in 1975, Ph.D. in Developmental and Educational Psychology, now an associate professor at the Department of Sociology, East China Normal University

# SOCIAL WORKS AND PSYCHOLOGY RESEARCH

## 1. An Qiuling

**Associate Professor, Department of Sociology, East China Normal University**

**Category:** Social work, social psychology, personality development and adolescent psychology, etc.

- An intervention study in urban low-income families: promoting family functioning to children
- The effectiveness of modified, group-based CBT for dementia-worry among Chinese elders
- Brian fitness intervention on knowledge and worries about Alzheimer's: A randomized controlled trial
- Is Social Work Really Being Recognized? Problems with Social Work Employment Opportunities in Mainland China

# DIAGNOSIS, TREATMENT AND RESEARCH ABOUT ALZHEIMER'S DISEASE: EYE-BRAIN CONNECTION

## 1. Li-Huei Tsai

**Massachusetts Institute of Technology**

**Category:** Neuroscience, Alzheimer's disease

- The road to restoring neural circuits for the treatment of Alzheimer's disease
- Targeting the correct HDAC (s) to treat cognitive disorders
- Multi-sensory gamma stimulation ameliorates Alzheimer's-associated pathology and improves cognition
- Single-cell transcriptomic analysis of Alzheimer's disease
- An epigenetic blockade of cognitive functions in the neurodegenerating brain
- Gamma frequency entrainment attenuates amyloid load and modifies microglia
- Trekking across the brain: the journey of neuronal migration
- Conserved epigenomic signals in mice and humans reveal immune basis of Alzheimer's disease
- Identification and rescue of  $\alpha$ -synuclein toxicity in Parkinson patient-derived neurons

## 2. George Ayoub, Ph.D.

**Ph.D. (Neuroscience), Baylor College of Medicine, Houston, Texas.**

**Category:** Psychology, Nutrition and Health: Eye and Brain **Published**

**Works (Research):**

- Cerebral folate deficiency in autism spectrum disorder, Techniques in Neurosurgery & Neuroanatomy, in press.
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**Published Works (Books):**

- Autism & Your Family
- General Psychology
- Psychology: Active Learning
- All the World's Your Stage: How your body works and how to enjoy a healthy, productive and abundant life.

### 3. Dominic Man-Kit Lam

**University of Toronto, The University of British Columbia, Harvard Medical School**

**Category:** Nutrition and Health: Eye and Brain

- A double-label analysis demonstrating that all enkephalin-immunoreactive amacrine cells in the chicken retina express neurotensin immunoreactivity
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- The Coexistence of Multiple Neuroactive Substances in the Retina

### 4. Zee Chung-Ying Benny

**Chinese University of Hong Kong**

**Category:** Science, Nutrition and Health: Biostatistics, Cancer, Medicine, Clinical trials

**Published Works:**

- Interpreting the significance of changes in health-related quality-of-life scores
- Treatment results for nasopharyngeal carcinoma in the modern era: the Hong Kong experience
- Prospective randomized study of intensity-modulated radiotherapy on salivary gland function in early-stage nasopharyngeal carcinoma patients
- Stroke risk assessment for the community by automatic retinal image analysis using fundus photograph

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- Identification and rescue of  $\alpha$ -synuclein toxicity in Parkinson patient-derived neurons

## 6. Emily Porter

**The University of Texas at Austin**

**Category:** Alzheimer's disease

- Gamma band neural stimulation in humans and the promise of a new modality to prevent and treat Alzheimer's disease
- Gamma band light stimulation in human case studies: groundwork for potential Alzheimer's disease treatment

## 7. Josef Flammer

**Professor emeritus für Ophthalmologie, Universität Basel**

**Glaukom Category:** Eye Health

- Measuring and Treating Retinal Venous Pressure: Efforts and Benefits
- The impact of ocular blood flow in glaucoma
- The primary vascular dysregulation syndrome: implications for eye diseases
- A sick eye in a sick body? Systemic findings in patients with primary open-angle glaucoma
- Influence of age on the visual fields of normal subjects

## 8. Thibaut Devogelaere

Het Oogziekenhuis Rotterdam

Category: Eye Health

- The Effects of Vitamin Supplementation Containing L-Methyl folate (Ocufofin® forte) on Retinal Venous Pressure and Homocysteine Plasma Levels in Patients with Glaucoma
- Pattern ERG evaluation of disease activity and treatment effect in eyes with an occludable angle
- Thin-flap LASIK with a High-frequency, Low-energy, Small Spot Femtosecond Laser – Effectiveness and Safety
- Exposure keratopathy following silicone frontalis suspension in adult neuro- and myogenic ptosis

## 8. A David Smith

Professor of Pharmacology, University of Oxford, Director MRC Anatomical Neuropharmacology Unit

Category: Dementia

- Can we improve ocular blood flow and protect the eye?
- Genome-wide association study identifies variants at CLU and PICALM associated with Alzheimer's disease
- Common variants at ABCA7, MS4A6A/MS4A4E, EPHA1, CD33 and CD2AP are associated with Alzheimer's disease
- Folate, vitamin B12, and serum total homocysteine levels in confirmed Alzheimer disease
- The neuropsychology of schizophrenia
- Cerebrovascular disease and threshold for dementia in the early stages of Alzheimer's disease
- Cognitive and clinical outcomes of homocysteine-lowering B-vitamin treatment in mild cognitive impairment: a randomized controlled trial
- Preventing Alzheimer's disease-related gray matter atrophy by B-vitamin treatment
- Rare coding variants in the phospholipase D3 gene confer risk for Alzheimer's disease
- Genetic evidence implicates the immune system and cholesterol metabolism in the aetiology of Alzheimer's disease
- Cell cycle markers in the hippocampus in Alzheimer's disease



# ON BRAIN STIMULATION: Sound Stimulation

## 1. Leila Chaieb

**University of Bonn**

**Category:** Brain stimulation

- Increasing human brain excitability by transcranial high-frequency random noise stimulation
- Comparatively weak after-effects of transcranial alternating current stimulation (tACS) on cortical excitability in humans
- Auditory beat stimulation and its effects on cognition and mood states
- Evaluating aftereffects of short-duration transcranial random noise stimulation on cortical excitability
- Transcranial electrical stimulation modifies the neuronal response to psychosocial stress exposure
- Brain-derived neurotrophic factor: its impact upon neuroplasticity and neuroplasticity inducing transcranial brain stimulation protocols
- The impact of monaural beat stimulation on anxiety and cognition
- Binaural beat stimulation

## 2. Alair Pedro Ribeiro

**Federal University of Rio de Janeiro**

**Category:** Brain stimulation

- Stimulation by Light and Sound: Therapeutics Effects in Humans. Systematic Review
- Modulatory Effect of Association of Brain Stimulation by Light and Binaural Beats in Specific Brain Waves
- Brain stimulation used as biofeedback in neuronal activation of the temporal lobe area in autistic children

# ON TOXICOLOGY

## 1. Andre Stang

**Category:** Science: Toxicology

- Mind and Mend Program: A Pilot Study Combining Binaural Beats with Self-Actualization Techniques to Develop a Therapy Protocol
- [Automated analysis of DNA damage in the high-throughput version of the comet assay](#)
- [Planktonic bacteria and fungi are selectively eliminated by exposure to marine macroalgae in close proximity](#)
- [The ability of the high-throughput comet assay to measure the sensitivity of five cell lines toward methyl methane sulfonate, hydrogen peroxide, and pentachlorophenol](#)

# ON AI TECHNOLOGY TO BRAIN HEALTH

## 1. Zee Chung-Ying Benny

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# ON NUTRITIONAL SUPPLEMENTS ON PREVENTATIVE NEUROLOGICAL DISORDER

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