FY2021 Annual Report for International Joint Research International Joint Digital Archiving Center for Japanese Art and Culture (ARC-iJAC), Art Research Center, Ritsumeikan University

[International Joint Research to Utilize the Center's Facilities and Equipment]

Date 2022/05/10:

1. Title of the research project		
The Application of Deep Learning Method for Detecting the Symptoms of Mental Health Disorder from Artworks Datasets of ARC-iJAC Collection, Ritsumeikan University of Japan		
2. Research leader		
Name		Organization and title
Wanda Listiani		Institut Seni Budaya Indonesia Bandung/Dr.
3. Co-researcher (Total: 2 persons)		
Name	Organization and title	
Anrilia Ema M.N	Universitas 7 Agustus 1945, Surabaya/Ph.D	
Ida Ayu Laksmita Sari	Universitas Udayana, Bali/Dr.	

4. Overview of the research project (about 150 words). Note: If you have changed your project since the time of application submission, please write clearly where you made changes.

The research aims to detect the mental health disorder of the artists (creators) from their artworks. Deep learning is programmed (data training, data test, and data validation) to classify artworks from artists suffering from mental health disorders. The significance of this joint research is that mental health can change behaviour, belief and attitude. Therefore, artists' detection of symptoms of mental disorders can help patients or non-patients early on. Furthermore, mental health is a priority and important matter for Japan, Indonesia, and other countries to face the global pandemic and improve the well-being of the world community.

5. Overview of the research results. Note: We may use this section for the Center's PR.

During the Covid-19 pandemic from 2020 to 2021, we conducted research with a collection of libraries and internet data. In general, this research produced a digital archive in the form of a dataset of categories of artists and artworks produced during their mental illness.

- 6. Research activities Note: We may use this section for the Center's PR.
- (2) Articles
- a. "Taksonomi Intervensi Seni Kreatif untuk Kesehatan Mental" : 31 Desember 2021 : Sunan Ambu Press; Jurnal Panggung Terakreditasi Nasional Sinta 2; Nomor 4.Volume 31 : Anrilia Ema M.N and Wanda Listiani, p.454-466 : peer-reviewed

Link: https://jurnal.isbi.ac.id/index.php/panggung/article/view/1787

- b. "Feeling Blue and Seeing Moon on The Tsukioka Yoshitoshi Artworks"; draft for Journal Art Research at https://www.arc.ritsumei.ac.jp/e/news/pc/013521.html
- c. "Depression, Psychosis and Schizophrenia: The Creativity and Mental Health on Artworks"; draft