

FUNDING PROGRAM FOR NEXT GENERATION WORLD-LEADING RESEARCHERS

Project Title: Fabricating a healthy, amenable media information environment via the hypersonic effect

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1. Background of research

We found that non-stationary sounds containing high frequency components above the human audible range activate the fundamental part of the brain including the brainstem, thalamus and hypothalamus as well as stimulate the parallel activation of a biological adaptation control system governing human health and a reward-generating nerve system that activates the sensation of beauty and pleasure. We name these phenomena the Hypersonic Effect. Application of the Hypersonic Effect is expected to help to alleviate both the mental and physical diseases affecting modern society as well as to promote the amenities of an information environment. However, suitable equipment and sufficient content for application in such highly promising fields as motor vehicles and mobile usage have yet to emerge.

2. Research objectives

We have pioneered the hypersonic sound system and effective content for mobile facilities, cars and large open spaces in hopes that this technology will improve the activity of the fundamental brain as well as bring about a healthy and amenable media information environment.

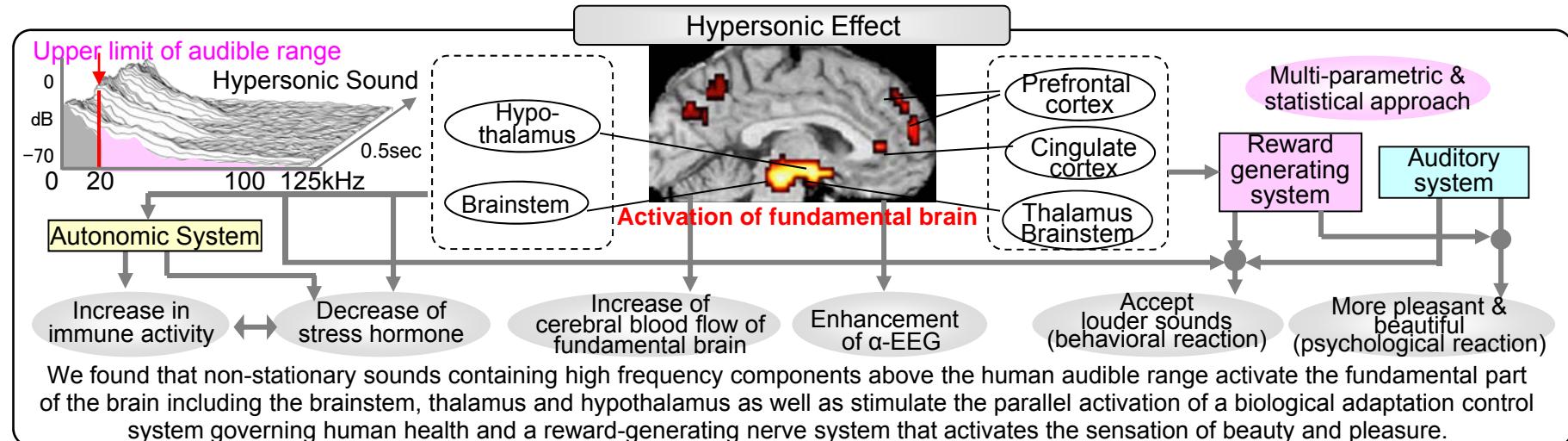
3. Research characteristics (incl. originality and creativity)

Our original actuator technology could lead to production of a miniaturized, highly-efficient reproduction terminal unit. We expect the development of various contents for activating the fundamental brain, making full use of our world's largest databases of ultra-wide-range recorded material. We also envision multifactorially verifying activation of the fundamental brain in various application phases using indexes such as regional cerebral blood flow, encephalogram, and physiological substances in the blood.

4. Anticipated effects and future applications of research

Our research results provide an unprecedented way of using information rather than drugs to help people overcome mental, behavioral and lifestyle disorders that sometimes lead to violent behavior or suicide and that are attributable to malfunctioning of the fundamental brain. An information environment affording a high level of amenities, beauty and low stress can be created thanks to media technology. Applications are expected in the areas of medical treatment, social welfare, education, art, dwellings, transport, automobiles, communications, home appliances, entertainment, and others.

Fabricating a healthy, amenable media information environment via the hypersonic effect



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Research objectives
We have pioneered the hypersonic sound system and effective content for mobile facilities, cars and large open spaces in hopes that this technology will improve the activity of the fundamental brain as well as bring about a healthy and amenable media information environment.

Sound system
Our original actuator technology could lead to production of a miniaturized, highly-efficient reproduction terminal unit.

We also envision multifactorially verifying activation of the fundamental brain in various application phases using indexes such as regional cerebral blood flow, encephalogram and physiological substances in the blood.

Contents
We develop various contents for activating the fundamental brain, making full use of our world's largest database of ultra-wide-range recorded materials.

Our research results provide an unprecedented way of using information rather than drugs to help people overcome mental, behavioral and lifestyle disorders that sometimes lead to violent behavior or suicide and that are attributable to malfunctioning of the fundamental brain.

International standardization, intellectual property

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medical treatment

education

dwellings

transport

communications

entertainment

social welfare

art

automobiles

home appliances

wearable facilities

others

Anticipated effects and future applications of research