

鹿大「進取の精神」支援基金 2022年度留学生受入推進事業  
研究留学生受入推進プロジェクト 報告書

2023 年 5月 1日

1. 申請者（所属・職名・氏名）	医歯学総合研究科 脳神経外科学・教授・花谷 亮典
2. 受入留学生 （国・大学・学年・氏名）	(1)インドネシア・デイポネゴロ大学・5年・Rafi Ilmansyah
	(2)インドネシア・デイポネゴロ大学・5年・Maulidina Amalia Putri
3. 留学生受入期間	2022年 10月～ 2023年 3月
4. プログラム研究分野	脳神経外科学、リハビリテーション医学、公衆衛生学
<p>5. 本プログラムの目的と概要と成果（申請者／日本語）</p> <p>脳神経外科：新型コロナ感染症蔓延下のために、ある程度の制限下での活動であったが、カンファレンスへの参加、手術見学や検査見学など、十分な研修が可能であった。研究課題として、それぞれが症例研究を担当し、成果発表会（Ground round）での発表と論文作成を行うとともに、脳神経外科関連の研究に関して触れる機会を設けた。さらに、リハビリテーション医学教室では抄読会やカンファレンス、並びに回診に参加する機会を通して、インドネシアでは発展途上にあるリハビリテーション領域についての知識を深めることができた。公衆衛生学教室では、抄読会や研修に参加して、インドネシア人スタッフや研修生との交流を深めながら、公衆衛生学の知識の取得に努めた。</p> <p>研修期間中に、留学生は鹿児島での生活を楽しみながら、神経科学に関する知識と今後の学習意欲を大きく高めることができた。また、本学学生や教員にとっても、彼らとの交流を通して、国際化の意識を高めることができた。成果発表を脳神経外科の研究会で行うことで、地域の国際化にも貢献できた。</p> <p>今後彼らは脳神経領域の診療科へ進み、将来鹿児島大学での学位取得も選択肢としている。今後は、成果発表会に派遣元の大学スタッフもオンラインで参加いただき、こちらのスタッフと直接交流を行なう機会を設ける予定である。</p> <p>こうした留学生や派遣元の大学との親密かつ継続的な交流を通して、鹿児島をアジアの知的交流拠点として活性化しようとする。</p>	
<p>6. 鹿児島大学 での研究活動 と成果 （Student/English or Japanese）</p> <p>Explain your activities and achievement for your research in Kadai.</p> <p>※<sup>きさいりょう</sup>記載量が多いため、<sup>おお</sup>別紙<sup>べっしきんしょう</sup>参照</p>	

## 鹿児島大学での研究活動と成果

## (1) Rafi Ilmansyah

During my period of exchange program in Kagoshima University, I joined three departments, which are Neurosurgery, Rehabilitation, and Preventive medicine department.

In neurosurgery department I joined various activity that involve myself in every life aspect of being a neurosurgeon. I do some “shadowing” – basically following, watching, and observing – my mentor’s daily activity in ward, angiography room, and operation room. Every Monday and Wednesday is the operation schedule, where I usually get to choose to joined some of the surgeries available at that day. I really like to join transsphenoidal surgery, because it’s non-invasiveness and interesting cases met every other day. Other than that, I found many interesting cases of head & spine tumor and endovascular cases in Kagoshima University Hospital. Every Tuesday and Thursday, I usually joined morning pre-operative conferences, while in Tuesday, I also joined rehabilitation ward round. In my point of view, advanced technology in Japan really helped a lot to the outcome of the surgery, not to mention preoperative planning for every surgery was planned in a very detail manner, which minimize intraoperative unexpected findings thus lead to bad surgery outcome. Seeing all available high-technology in neurosurgery operation room was really amazing experience, that even I always dreamed of seeing myself doing surgery with those technologies. I really enjoyed surgery every day, because I learned a lot by discussing, observing, and taking some notes during the operation that helped me understand even more about the case. As a non-Japanese speaker and having zero basic knowledge in Japanese, morning conference always being a big obstacle during my exchange period. Gladly, I have senior residents, senior doctor’s, and fellow young doctor’s those very kind to me for trying to explain some of the cases using English after the conference finish. I often make friends with them and keep communicating until now. I was able to practice my vascular suturing skill anytime in doctor’s office and I got the chance to experience the endovascular surgery simulation in Dr. Higashi’s class. The main outcome during my stay in Kagoshima University is to do more publication in under senior doctor’s guidance. I had the chance to deepen my interest in Pituitary disease with Dr. Shingo Fujio and Dr. Ryutaro Makino as my mentor. I am writing about two topics during the time, first about chordoid meningioma presenting in suprasellar region with preoperative diagnosis difficulty, and second about BRAF-Inhibitor therapy in Craniopharyngioma patients. Dr. Shingo Fujio and Dr. Ryutaro Makino are very great mentors. They are very communicative, which is very important that I can deliver my opinion and view of those topics freely without any hesitations. Dr. Shingo Fujio also has a very wide knowledge about Craniopharyngioma, since he had a chance to do some research collaboration with Dr. Brastianos in Harvard Medical School, whom is a very famous researcher in Craniopharyngioma and BRAF-Inhibitor therapy field. These facts really moved me forward to my high interest in field could be enriched by Dr. Shingo Fujio knowledge and past publication that helped me a lot during my journey writing the publications. I am really looking forward to be able to do some collaboration research under Dr. Shingo Fujio guidance, especially under Craniopharyngioma topics in near future. Beside medical departments, I also joined

Japanese Language Class by Global Initiative Center on Tuesday to Thursday for 4 months. I learned basic lessons, such as common Japanese expression, vocabularies, and learn some Japanese hiragana dan katakana. This class really boost my confidence to be able communicate little by little with my Japanese friends of mine, and boost my hunger of knowledge to learn even more Japanese language. In future, I am preparing to take some Japanese Language test in Indonesia so I can catch up my Language skills before continuing my study in Japan, if I have the chance to do so.

(2)Maulidina Amalia Putri

During the exchange program, I actively participated in three different departments, namely the Neurosurgery, Rehabilitation, and the Epidemiology and Preventive Medicine Department.

The program offered by the Neurosurgery Department was conducted at two different locations, Kagoshima University Hospital and Kagoshima City Hospital.

At Kagoshima University Hospital, I joined operation programs on Monday and Wednesday, and morning conferences on Tuesday and Thursday. Every Friday, I went to Kagoshima City Hospital to join the morning conference and operation programs. A fascinating experience, as I observed Japanese medical education and neurosurgery departments, as well as rare cases and methods of operation. These included MRI-guided Thalamotomy for Essential Tremor, VNS placement, carotid endarterectomy, STA-MCA anastomosis, DBS, and many more. The operation programs were enjoyable for me since I'd never been to a neurosurgery operation before; I saw all the high-tech equipment and I could understand better since my senior doctors explained in detail about the patient and surgery. At first, I found morning conferences difficult to understand, but thanks to senior doctors and Japanese clinical students who explained them to me, I can understand most of them. In addition, I was glad that I was permitted to practice my vascular suturing skills at the doctor's office whenever I wanted.

As part of my program, the main goal was making a case report, presenting it at the end of the program, and potentially publishing it as well. I wrote a case report about Superficial siderosis due to a spinal dural defect in an Anti-SSA antibody-positive patient. It is a unique and rare case. It was an honor to be mentored by Dr. Hitoshi Yamahata, I deepened my knowledge, especially in neuro spine surgery. The process of writing was a very rewarding learning experience. In addition, I also wrote a narrative review about VNS, because Indonesia has not yet applied it. So, it will contribute to the VNS introduction in Indonesia. We are still working on the writing process to publish in international journals with impact factors.

Toward the end of the program, I presented my case report at the annual Kagoshima neurosurgeon association conference. It was a valuable experience to speak in front of highly respected neurosurgeons as well as introduce the country and university I came from. In the last month of the program, the Neurosurgery department also sent me to take part in a national-scale neurosurgical conference about stroke in Yokohama, Japan. It was my first time attending a large-scale seminar. Over the course of three days, I attended lectures by great speakers from all over Japan, as well as international speakers.

It has been an absolute pleasure learning from respected doctors in the Neurosurgery

Department during my stay in Japan. My sincere gratitude goes out to Prof. Ryosuke Hanaya for giving me the chance to participate in this program.

I also joined the Rehabilitation Department. There I followed weekly conferences and ward-round activities every Tuesday afternoon. During the ward round, I could study some patients who were presented by senior doctors. I also observed physical therapists' work and how doctors examined patients.

In the Epidemiology and Preventive Medicine Department, I participated in the journal reading club that was held online every Thursday night. It was very interesting because members of the journal club took turns presenting an article and discussing it together. Journal topics vary according to the different backgrounds of each member of the journal club so that I can learn many things. I also had the opportunity to present an original article about VNS, the topic of my review.

Over 5 months, I was also enrolled in a Japanese language class offered by the Global Initiative Center. My lessons focused on learning important vocabulary and speaking basic Japanese. This class has been really helpful for me to communicate with senior doctors and friends, and do daily activities in Japanese society.