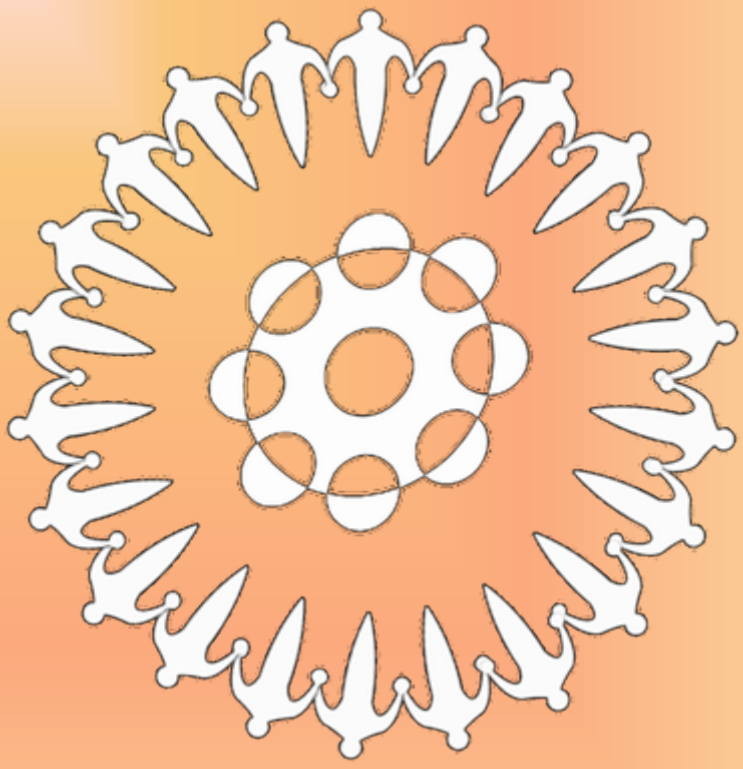
SOKENDAI STUDENT SEMINAR

FALL 2008

Together in harmony...



All for one...One for all!

National University

SOKENDAI

The Graduate University for Advanced Studies

President’s Message

A congratulatory message to the new students

The Graduate University for Advanced Studies, Sokendai in short, is based on and affiliated with the Inter-University Research Institutes. In addition, the University’s mission is to address difficult challenges related to the future of humanity and to fulfill our social responsibilities. You, new students, understand the purpose and philosophy of the University and play an active role in the further development of the University. You are an essential member of Sokendai. I sincerely hope that you actively challenge difficulties and issues that are inconsistent with common sense, as well as achieve excellent results of your research. At the same time, I suggest you to look at social problems to develop your character as a researcher. I wish that, during this invaluable period, all of you will acquire the knowledge, skill, and motivation needed for future success.

Naoyuki Takahata
President

新入生のみなさん、ようこそ総研大へ

総合研究大学院大学（総研大）は、大学共同利用機関によって作られた大学共同利用機関のための大学ですが、それに加えて人類の未来に関わる困難な問題に挑戦して、社会への責務を果たすことを全学の共通目標としています。新入生のみなさんには、こうした大学の趣旨や理想をよく認識し、本学の重要な構成員であるとの自覚のもとに、その一層の発展のために積極的な役割を果たしてくれることを期待します。本学に在学中には、それぞれの研究において優れた成果をあげることはもとより、困難な課題や常識と矛盾する課題に積極的に挑戦すること、また社会的な問題にも目を開き研究者としての人間形成にも努めることが重要です。この掛け替えのない時期に、各人が将来の活躍に必要な知識と力と意欲を身につけることを祈念します。

高畑尚之
学長

The Student Committee Fall 2008

The group that argued, worked and managed the event….
Today it's us…tomorrow it will be you….

Abhay Deshpande (KEK)
Farzana Yasmeen (NII)
Laxmi Kumar Parajuli (NIPS)
Marine Chiba (ESB)
Nguyen Kien (NII)
Puneet Jain (KEK)
Sayuri Tsukahara (NIG)
Wajeeha Aziz (NIPS)
Zhou Hangyu (NIFS)
Cui Songkui (NIBB)
Kenzo Hirao (NIPS)
Maria Yotova (NME)
Naoko Kato(ESB)
Okuno, Keisuke (NII)
Rajshri Joshi(NIG)
Shinya Matsuoka (NIG)
Yiming Zhou (NIPS)

Message from Student committee

Welcome to the Graduate University for Advanced Studies (SOKENDAI) !

I am very happy to congratulate you on entering SOKENDAI and becoming a part of its research history. I wish you fruitful research work and enjoyable campus life at your institutes.

After the entrance ceremony, during the 2-day Student Seminar, we will have an opportunity to learn through lectures, group discussions and various activities what exactly it is to have "fruitful research work" and what "enjoyable campus life" means to SOKENDAI students. Designing this year's Student Seminar we, the committee members, have focused on several key words which we find to be leading in our research lives at SOKENDAI. These are *Communication, Dedication and Motivation*. We have tried to unite these words under the topic of "Together in Harmony" and to interweave them into the lecture sessions and the various group activities during the seminar.

Lectures by the Bangladesh Professor in Agriculture Dr. Abdus Samad and SOKENDAI Professor in Information Technologies Dr. Inamura will show us how important for the success of any research project it is to have a good team work and strong motivation. The interactive session, the night activity and "Treasure Hunt" will help us get to know people of various fields of research, speaking in different languages. Through these activities we will learn and develop various communication skills which are necessary for any researcher in any field of science. In the Iteractive Session we will also have a talk by Ms. Parthenia Giannakopoulou, who has come to SOKENDAI from Greece to deepen her research in Paleopathology. She will share with us what it is for her to be a SOKENDAI student and something of her rich experience as a participant in several international projects where she had to communicate with researchers of different cultural backgrounds.

I hope the Student Seminar will become a memorable event for you. My strong wish is that the acquaintances you make here develop into a long-term friendship. I believe the people you meet here will become part of your personal network and will help you have fruitful research work and enjoyable campus life at SOKENDAI.

Abhay Deshpande
Chairman

Day 1 : 9th October

TIME	PROGRAM	PLACE
Entrance Ceremony		
12:30～13:30	Registration	Main Entrance Lobby, SOKENDAI
13:50～14:00	Information for Entrance Ceremony	Lecture Room 2F, SOKENDAI
14:00～14:30	Violin Cello Performance	Lecture Room 2F, SOKENDAI
14:30～15:20	Entrance Ceremony	Lecture Room 2F, SOKENDAI
Student Seminar		
15:30～16:45	Lecture by Dr Samad	Lecture Room 2F, SOKENDAI
16:45～17:00	Break	
17:00～18:30	Interactive Activity	SOKENDAI
18:30～19:00	Check-in	Shonan Village Centre (SVC)
19:00～20:15	Dinner Reception	SVC
20:15 - 20:45	Telescope	SOKENDAI
20:50～22:45	Night Activity	SOKENDAI

第1日（10月9日）

時刻	プログラム	場所
入学式		
12:30～13:30	受付	総研大葉山キャンパス 正面玄関ロビー
13:50～14:00	入学式の案内	総研大葉山キャンパス 2F　講義室
14:00～14:30	チェロ演奏	総研大葉山キャンパス 2F　講義室
14:30～15:20	入学式	総研大葉山キャンパス 2F　講義室
学生セミナー		
15:30～16:45	レクチャー 1:　Dr. Samad	総研大葉山キャンパス 2F　講義室
16:45～17:00	休憩	
17:00～18:30	インタラクティブ・ アクティビティ	総研大葉山キャンパス
18:30～19:00	チェックイン	湘南国際センター
19:00～20:15	夕食	湘南国際センター
20:15 – 20:45	天体観測	総研大葉山キャンパス
20:50～22:45	ナイトアクティビティ	総研大葉山キャンパス

Day 2: 10th October

TIME	PROGRAM	PLACE
7:30～8:30	Breakfast	OAK, SVC
8:30 ~ 9:00	Check Out	SVC
9:00 ～10:15	Lecture by Dr Inamura	Lecture Room 2F, SOKENDAI
10:15～10:30	Break	
10:30～10:45	Photograph	Main Entrance, SOKENDAI
10:45～12:15	Treasure Hunt	Out door
12:15～13:15	Box Lunch	Seminar Room 1F, SOKENDAI
13:30～	*Chartered bus bound for the National Astronomical Observatory from Hayama to Mitaka.*	

第2日（10月10日）

時刻	プログラム	場所
7:30～8:30	朝食	湘南国際センター カフェテリア　オーク
8:30 ～9:00	チェックアウト	湘南国際村センター
9:00 ～10:15	レクチャー 2: 稲邑　哲也准教授	総研大葉山キャンパス 2F　講義室
10:15～10:30	休憩	
10:30～10:45	写真撮影	総研大葉山キャンパス 正面玄関
10:45～12:15	宝探し	屋外
12:15～13:15	昼食（弁当）	総研大葉山キャンパス 1F　セミナー室
13:30～	チャーターバスで国立天文台NAOJ（三鷹）へ	

Japanese Culture Course

Day 2: 10th October		
15:40～17:00	**Opening Address by Prof. Takashi Sakurai (Director, Solar Observatory) Lectures on 'Planetary System' by Associ.Prof.Tamura and 'Deep Space' by Associ.Prof.Kodama**	**Conference room National Astronomical Observatory, Mitaka**
17:00～18:00	**Tour of 4 Dimensional Digital Universe, DOME THEATER**	**Conference room National Astronomical Observatory, Mitaka**
18:00～19:00	**Chartered bus bound for *ASAKUSA VISTA HOTEL***	
19:00～	**Discussion session between Sokendai teachers and participants during Dinner**	**AVIS, ASAKUSA VISTA HOTEL**
Day 3 : 11th October		
7:30～8:30	**Breakfast**	**AVIS, ASAKUSA VISTA HOTEL**
	Check-out ※Except the participants who attend the Japanese Language Classes	
10:00～11:30	**Lecture on Japanese Culture**	**Conference room, ASAKUSA VISTA HOTEL**
11:45～12:00	**Chartered bus bound for Edo-Tokyo Museum**	**Edo-Tokyo Museum**
12:00～13:30	***Lunch (Buy your own food)***	**Edo-Tokyo Museum**
13:30～15:30	**Tour of Edo-Tokyo Museum**	**Edo-Tokyo Museum**
15:30～15:40	**Closing of Japanese Culture Course**	
15:40～	**Chartered bus bound for Tokyo station (via ASAKUSA VISTA HOTEL)→End**	**Tokyo station**

日本文化指導コース

第２日（１０月１０ 日）		
15:40～17:00	挨拶（櫻井隆副台長） 講義１惑星系について （田村元秀准教授）質疑応答 講義２深宇宙について　児玉忠恭准教授）質疑応答	国立天文台　講義室
17:00～18:00	国立天文台施設見学 （4次元デジタル宇宙シアター）	4D2Uドームシアター
18:00～19:00	国立天文台出発 浅草ビスタホテルチェックイン	国立天文台駐車場
19:00～20:00	夕食 意見交換会	浅草ビスタホテル レストラン「アビス」
第3 日（１０月11 日）		
7:30～8:30	朝食	浅草ビスタホテル レストラン「アビス」
	※　ホテルチェックアウト （日本文化指導のみの受講者）	
10:00～11:30	日本文化講義 （浅草ビスタホテル会議室）	
11:45～12:00	ホテル出発→江戸東京博物館へ （貸切バスにて移動）	
12:00～13:30	昼食（各自）	江戸東京博物館
13:30～15:30	江戸東京博物館見学	江戸東京博物館
15:30～15:40	日本文化指導コース閉会	
15:40～	江戸東京博物館出発→ 浅草ビスタホテル（日本語講座受講者）→東京駅※	※日本文化指導のみの受講者は東京駅で解散

Japanese Language Classes		
Day 3 : 11th October		
16:00～	ASAKUA VISTA HOTEL	Students who will attend Japanese classes assemble at the *ASAKUSA VISTA HOTEL*
16:20～16:30	Opening for the Japanese classes	Conference room, ASAKUSA VISTA HOTEL
16:30～18:30	Placement Examination	Conference room, ASAKUSA VISTA HOTEL
	Free time for Dinner (Buy your own food)	*Asakusa*
Day 4 : 12th October		
7:30～8:30	Breakfast	AVIS, ASAKUSA VISTA HOTEL
9:00 ～12:00	Japanese class Ⅰ	Conference room, ASAKUSA VISTA HOTEL
12:00～13:30	Lunch	AVIS, ASAKUSA VISTA HOTEL
13:30～16:30	Japanese class Ⅱ	Conference room, ASAKUSA VISTA HOTEL
	Free time for Dinner (Buy your own food)	*Asakusa*
Day 5 : 13th October		
7:30～8:30	Breakfast	AVIS, ASAKUSA VISTA HOTEL
8:30～9:00	Check-out	
9:00 ～12:00	Japanese class Ⅲ	Conference room, ASAKUSA VISTA HOTEL
12:00～13:30	Lunch	AVIS, ASAKUSA VISTA HOTEL
13:30～16:30	Japanese class Ⅳ	Conference room, ASAKUSA VISTA HOTEL
16:30～16:40	Closing for the Japanese classes	
16:40～	*ASAKUSA VISTA HOTEL→TOKYO Station* End	Tokyo station

日本語講座

第3 日（１０月11 日）		
16:00～	ホテル着 （浅草ビスタホテル）	※日本語講座受講者会場 浅草ビスタホテル会議室
16:20～16:30	日本語講座開講式	浅草ビスタホテル会議室
16:30～18:30	クラス分け試験等実施	
18:30～	夕食(各自)	
第4 日（１０月12 日）		
7:30～8:30	朝食	
9:00 ～12:00	日本語授業Ⅰ	浅草ビスタホテル会議室
12:00～13:30	昼食	浅草ビスタホテル レストラン「アビス」
13:30～16:30	日本語授業Ⅱ	浅草ビスタホテル会議室
18:30～	夕食(各自)	
第5 日（１０月13 日）		
7:30～8:30	朝食	
8:30～9:00	チェックアウト	
9:00 ～12:00	日本語授業Ⅲ	浅草ビスタホテル会議室
12:00～13:30	昼食	浅草ビスタホテル レストラン「アビス」
13:30～16:30	日本語授業Ⅳ	浅草ビスタホテル会議室
16:30～16:40	日本語講座閉講式	
16:40～	ホテル発→東京駅　解散	東京駅

Lecture 1 : Post-Green Revolution : Food Production through conventional Plant breeding

Dr. Md. Abdus Samad
Project Director; Plant Genetic Resources Center (PGRC) [2005-2007]

Chief Scientific Officer; Wheat Research Centre, Bangladesh Agricultural Research Institute [2003 - 2007]

Honorary Faculty Member, Institute of Post Graduate Studies in Agriculture (IPSA) [1998 - 2000]

I was born and raised in a country which was never sufficient in food. Still today, Bangladesh, despite being an agricultural country, imports huge amounts of grains, cereals and pulses every year. In the early 1970s wheat was grown in very small areas of Bangladesh. Just after the inception of Bangladesh in 1971 there was a famine for several years. I joined the Accelerator Wheat Research programme as Scientific Officer in 1974. Since then the wheat breeding team in Bangladesh has released 24 varieties of which three became very popular.

Besides conventional plant breeding, genetic engineering is becoming a new technique to incorporate genes for biotic and abiotic stresses. Wheat geneticists and breeders had practically no chance of either reliably identifying donor germplasms or routinely conducting genetic studies and breeding line selection, the basis of all crop genetic improvement. In the view of todays' world food crisis, I will discuss in my lecture the breeding methods we practice, wheat line selection for some abiotic stresses, the need for gene-banks and the need of identifying genes to be introgressed in desired varieties.

Lecture 2 : Behavior Imitation and Embodied Symbol Emergence on Humanoid Robots

Dr. Tetsunari Inamura
Associate Professor, Department of Informatics in the School of Multidisciplinary Sceince, Sokendai

Associate Professor, Principles of Informatics Research Division, National Institute of Informatics

Project Associate Professor, Information and Robot Technology Research Initiative, The University of Tokyo, Japan.

The mirror neuron is a domain in the brain which activates when he/she observes an action of others, and also activates when he/she tries to perform the same action. Since this domain is like a mirror, which projects the corresponding relation between the actions of others and one's own body, it is appropriately named a 'mirror neuron'. Since this domain is near the cerebral language field, a hypothesis of being deeply concerned with brain functions, such as recognition, generation, abstraction, verbalization of motions, has been proposed. We propose a mathematical technique called *mirror neuron model* to integrate above functions on humanoid robots. In this model, human actions are represented as a set of time series sensorimotor patterns such as vision, hearing, tactile sense, and force. The robot abstracts the set of action patterns performed by humans with a graphical model. To realize the factor of symbol: "relations between symbols create novel patterns", a topological space structure is defined using similarity measurement between each action. One of the advantages of the model is that the robot can recognize strange actions and generate novel actions using geometric spatial relationship of the state points, i.e., a proto-symbol. The model enabled humanoid robots to imitate the users' behaviors even if the behavior was strange to the humanoid, by using a combination of known primitive actions.

Interactive Session

Interactive activity is designated for new student to get involved with other student to share your experiences with others. It is really the first chance to introduce who you are, what you have done before entering Sokendai and what will do at Sokendai by each student in the group. During the interactive activity, please introduce yourself to members and think of your life as a research student in Sokendai.

- Introduction by Ms. Giannakopoulou, Parthenia
- Question & Answer
- Group Disccussion
- Presentation

Ms. Giannakopoulou, Parthenia is a fourth-year SOKENDAI student at the School of Advanced Sciences, Department of Evolutionary Studies of Biosystems. Her research is in the field of Paleopathology. She is involved in studying buried human bones from Edo Period. Her main filedwork sites are the National Science Museum and Tokyo Metropolitan Institute of Gerontology.

Treasure Hunt….

- This is an activity to learn Group Skills. Often in research work we have to work as team and we have to learn to under stand opinion of other members and work towards one goal
- The purpose of treasure hunt activity is that all students go through working together to achieve big thing.
- In short, students work in groups to get to the goal as soon as possible by answering several questions, which are set on the way to the goal.
- We hope you all enjoy this activity and realize that success is surely based on “motivation, dedication and communication”!!

インタラクティブ・セッション

インタラクティブアクティビティーは新入生がお互いの今までの経験を共有する事を目的としています．このセッションが，自分が誰なのか，今まで何をしてきたか，総研大でどんな研究をしていきたいかを，当に初めてグループの皆に紹介する場になるかもしれません．このセッションに参加して，グループのメンバーに自己紹介をし，総研大での研究生活に思いを馳せて下さい．

予定：

- ヤナコプル　パルセニアさんによるイントロダクション．
- 質疑応答．
- グループ　ディスカッション
- 発表

ヤナコプル　パルセニアさんは，総研大の先導科学研究科　生命共生進化学専攻の博士課程4年生の学生です。彼女の専門分野は古病理学という分野で、研究テーマは江戸時代の埋没された人の骨を調べ、当時の人々とその生活がどのようであったか調査および研究に携わっています．彼女の主な研究拠点は，国立科学博物館，東京都老年総合研究所です．

宝探し….

- 研究の世界においては、共通のゴールに向かって、しばしばチームで働き、他のメンバーの意見に耳を傾けなければいけません。
- 宝探しゲームの目的は、学生のみなさんが大きなことを成し遂げるために、力を合わせることを経験してもらうことにあります。
- 簡単に言えば、学生のみなさんがグループに分かれ、質問に答えながらゴールへと、どれだけ早く到達できるかを競います。
- みなさんがこのゲームを楽しみ、また成功とは“motivation, dedication and communication”の上に成り立つのだということを知ってもらえればと思います。

After Dinner Activity

1. Balloon Bop Game (30min): [Get to know Names]
Stand in a circle, toss a balloon in the air and call someone's name and body part. That person must catch the balloon with certain body part before it touches the ground. If the person succeeds he/she then tosses the balloon up and calls the next name and body part.

2. Chopstick-gun w/ origami target : [Get to know Japanese/World Culture.]

How creative can you be with a sheet of paper?
Do you know how to use Chopstick, other than using it when you eat?

NO IDEA??
Then, please JOIN us!
You will learn some Japanese Culture while you will learn the culture of your NEW friends!!

Sky Hunt….

- Lets see the sky through Telescope
- Hunt the treasures in the sky….
- Only possible if sky is clear and stars are seen !
- This activity is educational activity. We plan to introduce sky observation and show the wonders of sky through Telescope. At Mitaka we will be seeing sky show in theatre. Sky hunt will help us learn the difference in actual sky and simulated sky !!

アフターディナー・アクティビティ

1.　風船ゲーム (30 分)　（入学生の名前を覚えよう）
グループで輪になり、グループの誰かの名前と体の部分を声に出しながら風船をパスします。指名された人は、指示された体の部分で風船を受け取ります。うまく受け取れたら、次の人の名前と体の部分を声に出してパスしていきます。うまくつないでいけるでしょうか！？

2.わりばし鉄砲と折り紙　（日本の文化、世界の文化を知ろう）
わりばし鉄砲と折り紙。日本で育った人なら多くの人が遊んだ経験があると思います。もし知っていたらぜひ留学生の人たちにも教えてあげてください。

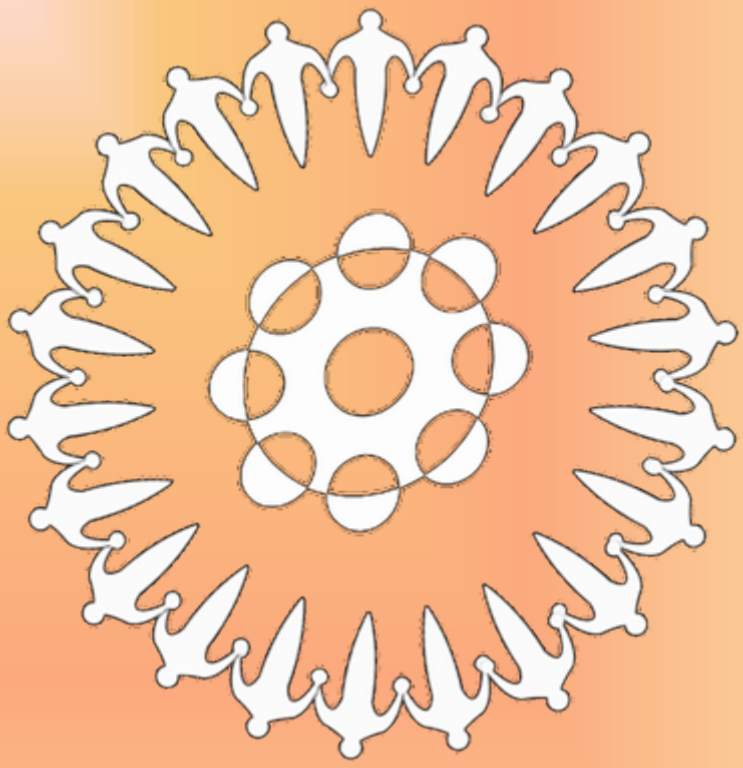
天体観測….

望遠鏡で夜空を観察してみましょう。もしかしたら何か面白いものが発見できるかも･･･。学生セミナーの後に行われる日本文化セミナーでも、国立天文台（三鷹）においてシアター内での天体観測が体験できますが、シアターと、実際の夜空との違いを楽しむのも良いでしょう。
ただし、悪天候の場合は中止とします。

Participants

School	Department	NAME	NAME IN ENGLISH
Cultural and Social Studies	Cyber Society and Culture	大倉孝昭	Takaaki OKURA
		村田教子	Noriko MURATA
		山本由紀子	Yukiko YAMAMOTO
Physical Sciences	Structural Molecular Science	伊佐美恭平	Kyohei ISAMI
	Fusion Science	董　春風	CHUNFENG DONG
		ﾄﾞﾝｼｭﾝ ﾁｬﾝ	DONGXUN ZHANG
		ｼﾞｮﾃｨｰ ｼｬﾝｶｰ ﾐｼｭﾗ	JYOTI SHANKAR MISHRA
	Space and Astronautical Science	小川美奈	Mina OGAWA
High Energy Accelerator Science	Accelerator Science	周徳民	DEMIN ZHOU
		ﾌﾟﾆﾄ ﾃｨﾔｷﾞ	PUNEET VEER TYAGI
	Materials Structure Science	ﾃｸﾞ ﾕﾘｱｽ ｽﾙﾔ ﾊﾟﾝﾁｬ ﾌﾟﾃﾗ	TEGUH YULIUS SURYA PANCA PUTRA
Multi disciplinary Sciences	Statistical Science	荒川俊也	Toshiya ARAKAWA
		福井晶喜	Akiyoshi FUKUI
	Informatics	佐賀一繁	Kazushige SAGA
		橋本祐介	Yusuke HASHIMOTO
		前田泰成	Yasushige MAEDA
		ﾒﾈﾝﾃﾞｽ ﾓｰﾗ ﾗｳﾙ ｴﾙﾈｽﾄ	MENENDEZ MORA RAUL ERNESTO
		ﾛﾏﾝ ﾃｨﾎﾞ ﾌｫﾝﾃｭﾆｭ	Romain Thibault FONTUGNE

Life Science	Genetics	ｼﾞｮｾﾌ ｼﾞﾅﾑ ﾃｨﾓｼ ｴｲﾄﾞﾘｱﾝ ｱﾅｸ	JOSEPH JINAM TIMOTHY ADRIAN ANAK
	Basic Biology	浅野卓也	Takuya ASANO
	Physiological Sciences	奥慎一郎	Shin'ichiro OKU
		牧田快	Kai MAKITA
Multi disciplinary Sciences	Statistical Science	庄子聡	Satoshi SHOJI
	Informatics	神谷結花	Yuka KAMIYA
		ﾗﾝｹｲｼﾜﾗ ﾑﾅｼﾝﾊ	LANKESHWARA MUNASINGHE
		ﾀﾝ ﾄﾞｯｸ ｺﾞ	THANH DUC NGO
Life Science	Genetics	ﾃﾞｰﾊﾟｸ ｱｲﾗﾆ	DEEPAK AILANI
	Genetics	ﾌﾟﾗﾃﾞｨｰﾌﾟ ﾗﾙ	PRADEEP LAL
	Physiological Sciences	中畑義久	Yoshihisa NAKAHATA
		ﾄﾞｩｲ ﾜﾌｭｰ ｲﾝﾄﾞﾘｱﾃｨ	DWI WAHYU INDRIATI
		ﾃｨﾓﾃｨｱｽ ﾌﾞﾃﾞｨｻﾝﾄｿ	TIMOTHEUS BUDISANTOSO



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