

10 March,2009

1. Title of Seminar

JSPS-DST Asia Academic Seminar : “Genome Regulation: Response to Environmental Stresses”

2. Purpose of Seminar

The precipitous deterioration of the planet’s environment symbolized by global warming has, as biodiversity is rapidly lost, raised sudden fears about the survival of many life forms. Organisms generally possess an outstanding ability to adapt their mode of survival to the changing environment; hence the dire situation facing so many forms of life often escapes our notice until collapse is imminent. At the turn of the century the full genome sequence of many model organisms was mapped, leading to the realization that a species’ response to environmental stresses is a complex phenomenon in which a great variety of genes of the genome are involved. The seminar was designed to examine the topic of “Genome Regulation: Response to Environmental Stresses” from numerous angles. Specifically, it was intended to provide an opportunity to hear presentations on the current state of our knowledge by scientists who are pushing the frontiers of research in their fields, conduct discussions on that basis with the next generation of researchers, identify challenges, and thus plot a course into the future.

3. Period

Friday, December 26 – Tuesday, December 30, 2008 (five days)

4. Venue

Jawaharlal Nehru Centre for Advanced Science Research (JNCASR)
Jakkur, Bangalore-560 064, India

5. Organization

(1) Co-sponsors

In Japan	Japan Society for Promotion of Science
	Hosei University
In India	Department of Science and Technology (DST)
	Jawaharlal Nehru Centre for Advanced Science Research

(2) Organizer

[Organizing Committee] Akira Ishihama (Chairperson, Hosei University, Tokyo, Japan); Ikuro Kawagishi (Hosei University, Tokyo, Japan); Akihiro Ishijima (Tohoku University, Sendai, Japan); Dipankar Chatterji (Indian Institute of Science, Bangalore, India); Tapas Kundu (JN Centre for Advanced Science Research, Bangalore, India); G.V. Shivashankar (National Centre for Biological Sciences, Bangalore, India)

[Advisory Committee] Keitaro Yoshihara (Chairperson, Indo-Jpn Collaborative Research Committee); C.N.R. Rao (Chairperson, Indo-Jpn Collaborative Research Program Committee);

M.R.S. Rao (President, JNCASR, Bangalore, India); Toshio Fukuda (Head, Cell Engineering Res.Group, Nagoya Univ., Japan)

[Funding Organizations] Japan Society for Promotion of Science (JSPS), Tokyo, Japan; Department of Science and Technology (DST), New Dehli, India; Scientific Research in Priority Area System Cell Engineering by Multi-scale Manipulation (MEXT), Nagoya, Japan; Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India; Hosei Univ., Chiyoda-ku, Tokyo, Japan

6. Program: Agenda, topics, related activities (e.g., reception, excursion)

Day1 : December 26, 2008 Registration, Reception

Day2 : December 27, 2008 Opening Session, Session A

Day3 : December 28, 2008 Session B-C

Day4 : December 29, 2008 Short Talk

Day5 : December 30, 2008 Session D

Session A:Genome Regulation

Session B:Nano-Biology and Biophysics

Session C:Response to Environmental Stresses

Session D:Pathogenesis Expression

Session A Genome Regulation
(Organizers: Akira Ishihama and Tapas Kundu)
Akira Ishihama (Hosei Univ., Tokyo, Japan)
Taku Oshima (Nara Inst. Sci. Technol., Nara, Japan)
Dipankar Chatterji (Ind. Inst. Sci., Bangalore, India)
Sue Lin-Chao (Academia Sinica, Taipei, Taiwan)
Hiroji Aiba (Nagoya Univ., Nagoya, Japan)
Tapas Kundu (JNCASR, Bangalore, India)
Parag P. Sadhale (Ind. Inst. Sci., Bangalore, India)
Cheng-Ming Chiang (UT Southwestern Med. Cent., Dalas, USA)

<p>Session B: Nano-Biology and Biophysics (Organizers: Akihiko Ishijima and G.V. Shvashankar)</p>
<p>Akihiko Ishijima (Tohoku University, Sendai, Japan) G.V. Shivashankar (Nat. Cent. Biol. Sci., Bangalore, India) Shige H. Yoshimura (Kyoto Univ., Kyoto, Japan) Fumihito Arai (Tohoku Univ., Sendai, Japan) Yamuna Krishnan (Nat. Cent. Biol. Sci., Bangalore, India) Sudipta Maiti (Tata Inst. Fund. Res., Mumbai, India) Nobuo Shimamoto (Nat. Inst. Genet., Mishima, Japan)</p>

<p>Session C: Response to Environmental Stresses (Organizers: Ikuro Kawagishi and Dipankar Chatterji)</p>
<p>Kaneyoshi Yamamoto (Hosei Univ., Tokyo, Japan) Jung-Hye Roe (Soeul Nat. Univ., Soeul, Korea) Ikuro Kawagishi (Hosei Univ., Tokyo, Japan) Kelly Hughes (Univ. Utah, Salt Lake City, USA) J. Gowrishankar (Cent. DNA Fingerprint. Diagnosis, Hyderabad, India)</p>

<p>Session D: Expression of Pathogenesis (Organizers: Akira Ishihama and Dipankar Chatterji)</p>
<p>Shohei Hattori (Univ. Tokyo, Tokyo, Japan) Dipankar Chatterji (Ind. Inst. Sci., Bangalore, India) Toru Shimizu (Kanazawa Univ., Kanazawa, Japan) Suman K. Dhar (Jawaharal Nehru Univ., Dehli, India) M.R.S. Rao (JNCASR, Bangalore, India)</p>

7. Lecturers and Participants

1) Number of Persons

	Lecturers	Participants	Total
Japan side	11	14	25
(Number who participated under program funding)	9	14	23
Indian side	10	29	39
(Number who participated under program funding)	0	0	0
Other persons	4	2	6
(Number who participated under program funding)	4	2	6
Total	25	45	70
(Number who participated under program funding)	13	16	29

2) List

A: Lecturers

No	Name	Position	Affiliation	Country	Remarks
1	Hiroji AIBA	Professor	Nagoya University	Japan	*
2	Fumihito ARAI	Professor	Tohoku University	Japan	
3	Masahira HATTORI	Professor	The University of Tokyo	Japan	*
4	Akira ISHIHAMA	Professor	Hosei University	Japan	*
5	Akihiko ISHIJIMA	Professor	Tohoku University	Japan	*
6	Ikuro KAWAGISHI	Professor	Hosei University	Japan	*
7	Taku OSHIMA	Assistant Professor	Nara Institute of Science and Technology	Japan	*
8	Nobuo SHIMAMOTO	Professor	National Institute of Genetics	Japan	*
9	Toru SHIMIZU	Professor	Kanazawa University	Japan	*
10	Kaneyoshi YAMAMOTO	Lecturer	Hosei University	Japan	*
11	Shige H. YOSHIMURA	Associate Professor	Kyoto University	Japan	
12	Jung-Hye ROE	Professor	Seul National University	Korea	*
13	Sue LIN-CHAO	Professor	Academia Sinica	Taiwan	*
14	Cheng-Ming CHIANG	Professor	University of Texas Southwestern Medical Center	USA	*
15	Kelly T. HUGHES	Professor	University of Utah	USA	*
16	Purnima BHARGAVA	Scientist F	Centre for Cellular and Molecular Biology	India	
17	Dipankar CHATTERJI	Professor	Indian Institute of Science	India	
18	Suman K. DHAR	Associate Professor	Jawaharlal Nehru University	India	
19	J. GOWRISHANKAR	Director	Centre for DNA Fingerprinting and Diagnostics	India	
20	Yamuna KRISHNAN	Professor	Tata Institute of Fundamental Research	India	
21	Tapas KUNDU	Professor	JNCAR	India	
22	Sudipta MALTI	Associate Professor	Tata Institute of Fundamental Research	India	

23	M.R.S. RAO	Director	JNCAR	India	
24	Parag P. SADHALE	Professor	Indian Institute of Science	India	
25	G.V. SHIVASHANKAR	Professor	Tata Institute of Fundamental Research	India	

Place a check [*] in the Remark Column for those who participated using JSPS's seminar funding.

B: Participants

1.From Asian Countries

No	Family Name	Given Name	Position	Affiliation	Country	Remarks
1	Amemiya	Yosuke	Postdoctoral Fellow	National Institute of Genetics	Japan	*
2	Hahn	Ji-Sook	Assistant Professor	Seoul National University	Korea	*
3	Hiremath	Geetha	PhD Course Student	Hosei University	India	*
4	Hisaoka	Miharu	PhD Course Student	University of Tsukuba	Japan	*
5	Ikeda	Yoshiki	PhD Course Student	Nagoya University	Japan	*
6	Ishida	Yuji	PhD Course Student	Hosei University	Japan	*
7	Katayose	Junya	PhD Course Student	Meiji University	Japan	*
8	Komatsu	Tetsuro	PhD Course Student	University of Tsukuba	Japan	*
9	Minagawa	Shu	Assistant Professor	Kyoto Pharmaceutical University	Japan	*
10	Mukaigasa	Katsuki	Postdoctoral Fellow	University of Tsukuba	Japan	*
11	Ogasawara	Hiroshi	Postdoctoral Fellow	Hosei University	Japan	*
12	Ohta	Noriko	PhD Course Student	Nagoya University	Japan	*
13	Ramabadran	Subhashri	Research Scientist	The Institute of Physical and Chemical Research (RIKEN)	Japan	*
14	Sharma	Dharam Singh	Post Doctoral Research Associate	Institute of Molecular Biology, Academia Sinica	Taiwan	*
15	Shimada	Tomohiro	Postdoctoral Fellow	Hosei university	Japan	*
16	Teramoto	Jun	Postdoctoral Fellow	Hosei University	Japan	*

Place a check [*] in the Remark Column for those who participated using JSPS's seminar funding.

2.from India

Indian Institute of Sciences (IISc)

1. Abantika Ganguly, IISc, India

2. Abhinav Dey, IISc, India
3. Binod Kumar Bharati, IISc, India
4. Prof. Dipankar Chatterji, IISc, India
5. Maya Murdeshwar, IISc, India
6. Prof. Parag P Sadhale, IISc, India

National Centre for Biological Sciences

7. Abhishek Kumar, NCBS, India
8. Feroz Meeran, NCBS, India
9. Prof. G V Shivashankar, NCBS, India
10. Jeevisha Bajaj, NCBS, India
11. Nisha Ramdas, NCBS, India
12. R.Indulaxmi, NCBS, India
13. Shabana Mehtab, NCBS, India
14. Shefali Talwar, NCBS, India
15. Shovamayee Maharana, NCBS, India
16. Soumya Gupta, NCBS, India
17. Venkatesan Iyer, NCBS, India
18. Prof. Yamuna Krishnan, NCBS, India

Tata Institute of Fundamental Research(TIFR)

19. Prof. Sudipta Maiti, TIFR, India

Jawaharlal Nehru Centre for Advanced Scientific Research(JNCASR)

20. Arif M, JNCASR, India
21. Dr. Benaka Prasad, JNCASR, India
22. Bharath G.N., JNCASR, India
23. Bharath S., JNCASR, India
24. Gayatri G, JNCASR, India
25. Javaid Yousuf Bhat, JNCASR, India
26. Jayasha Shandilya, JNCASR, India
27. Dr. Karthigeyan, D, JNCASR, India
28. Keerthi TC, JNCASR, India
29. Laxmi Narayan Mishra, JNCASR, India
30. Prof. M R S Rao, JNCASR, India
31. Dr. Mohan Krishna, JNCASR, India

32. Mune Gowda, N, JNCASR, India
33. Nikhil Gupta, JNCASR, India
34. Ramesh Choudhary, JNCASR, India
35. Dr. Ravindra K C, JNCASR, India
36. Ruthrotha Selvi, B., JNCASR, India
37. Sanjeev Kumar, JNCASR, India
38. Senthilkumar T, JNCASR, India
39. Shrikanth Gadad, JNCASR, India
40. Snehajyoti Chatterjee, JNCASR, India
41. Sourav Roy, JNCASR, India
42. Imtiaz Nisar Lone, JNCASR, India
43. Sujata Kumari, JNCASR, India
44. Surbhi Dhar, JNCASR, India
45. Thanuja G R, JNCASR, India
46. Dr. Thimme Gowda, JNCASR, India
47. Prof. Tapas K Kundu, JNCASR, India
48. T.V.Shiva Shankar, JNCASR, India
49. Vinay Bulusu, JNCASR, India

Jawaharlal Nehru University (JNU)

50. Atul Sharma, JNU, India
51. Dhaneswar Prusty, JNU, India
52. Prof. Suman K Dhar, JNU, India

Centre for Cellular and Molecular Biology(CCMB)

53. Prof. Purnima Bhargava, CCMB, India

Centre for DNA Fingerprinting and Diagnostic(CDFD)

54. Prof. J Gowrishankar, CDFD, India
55. Shivalika Saxena, CDFD, India

Madurai Kamaraj University(MKU)

56. Kalimuthu K, MKU, India
57. K.Karuppasamy, MKU, India
58. V.Ajith Kumar, MKU, India

Central Govt. Health Scheme(CGHS)

59. Dr. Nagashayana Natesh, CGHS, India

8. Please describe the achievements of the seminar.

(1) Academic Outcomes

As already noted, the precipitous deterioration of the planet's environment symbolized by global warming has, as biodiversity is rapidly lost, raised sudden fears about the survival of many life forms. Organisms generally possess an outstanding ability to adapt their mode of survival to the changing environment; hence the dire situation facing so many forms of life often escapes our notice until collapse is imminent. At the turn of the century the full genome sequence of many model organisms was mapped, leading to the realization that a species' response to environmental stresses is a complex phenomenon in which a great variety of genes of the genome are involved. The seminar examined the topic of "Genome Regulation: Response to Environmental Stresses" from numerous angles. Specifically, it provided an opportunity to hear presentations on the current state of our knowledge by scientists who are pushing the frontiers of research in their fields, conduct discussions on that basis with the next generation of researchers, and thus, it is hoped, foster a consensus on new challenges for researchers on the subject.

(2) Fostering International Exchange and Nurturing Young Scientists

This field has, given the seriousness of the threat to the global environment, become the focus of interest among scientists all over the world. The city of Bangalore, India, where the seminar took place, has become known around the world as a major hub of state-of-the-art science and technology, not least IT. Here, in this center of advanced research, outstanding young scientists from across Asia gathered to engage in discussion with their peers and spend several days together under one roof. This experience will not only be a memorable milestone in their scholarly careers, it should also greatly facilitate their efforts to build personal networks with Japanese scientists.