



The Centre for Research in Biotechnology for Agriculture

(CEBAR) has a mission to be at the Forefront in Generating and Disseminating Scientific Ideas and knowledge in Biotechnology Research Relevant to support a Sustainable Agriculture Bio economy, and aims to qualify as a Ministry of Education Centre of Excellence (HiCoE).

In 2018, CEBAR has been awarded as **The Most Excellent University of Malaya Center of Excellent (UMCoE)** in University of Malaya Excellent Awards 2018 for the first time.

CEBAR researchers produced **61 WoS (ISI) publications** with over 60% of these in tier 1 and 2 ranked journals.

CEBAR members secured over **RM4 million in research grants** including from the **Bill and Melinda Gates Foundation** (under the International Institute of Tropical Agriculture (IITA)).

CEBAR also raised income of over **RM1,109.70 through training courses** run by our staff and members.

Currently, CEBAR has **over 75 postgraduate students** under supervision by our **13 Principal Investigators, 14 Associate Members and 1 Adjunct Member** with over half of these at the PhD level. In 2018, CEBAR also hosted **8 national and 2 international interns** in our various labs.

CEBAR staff and students have received a total of **21 International Awards**, were granted with **1 patent** in 2018.

Activities in 2018 included **13 workshop, 4 seminars/mini-symposia** and visits by **international** scientists including from **Ministry of Agriculture, Bangladesh, Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Palode, Thiruvananthapuram, Nara Institute of Science and Technology (NAIST), Japan, University of Queensland, Australia, University East Anglia, Institute of Statistical Science, Academia Sinica, Taiwan and Hungarian National Agriculture Research and Innovation Centre.**

CEBAR continues to manage and operate the University of Malaya Plant Biotech Facility (PBF), which allows researchers to test novel hybrid plants on a large scale in a contained and climate controlled setting. CEBAR **successfully achieved re-certification** of the Plant Biotech Facility to international standards for Biosafety on **29th November 2018** and the certificate is valid until **28th November 2019**.

In terms of International and national networking, 2018 saw CEBAR activities as co-signatory of **MOAs** including with the **Nara Institute of Science and Technology (NAIST), Japan; International Institute of Tropical Agriculture (IITA), under Gates's Foundation; Kyushu Institute of Technology, Japan; Palacky University Olomouc, Czech Republic; Heleogenics Sdn Bhd.; KGC Eco Resort Sdn. Bhd.; Caya Primer Sains Sdn. Bhd.; Sime Darby Technology Centre Sdn. Bhd. and Universiti Malaysia Kelantan (UMK).** CEBAR also conducted activities under several on-going **MOU**.

CEBAR FACTS & FIGURES FOR THE YEAR 2018

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

Item	Detail	Comment
61 ISI publications	Tier 1: 20 (32.79%) Tier 2: 19 (31.14%) (Q1&Q2: 63.93%)	Tier 3: 14 (22.95%) Tier 4: 8 (13.11%)
Research Grants >RM 4.0 million	National grants: RM 332,379.73 Internal grants RM 3,549,800.00 Private Funding: 115,000.00 International grant: RM 147,318.36	5 MOHE grants FRGS: 4 - RM 189,200.00 KTP: 1 - RM 143,179.73 7 RU grants - 3,094,000.00 3 Bantuan Kecil Penyelidikan (BKP) – RM 108,500.00 1 Bantuan Kecil Penyelidikan (BKP SPECIAL) - RM 50,000.00 4 UMRG Programme – RM 209,000.00 13 Postgrad Research Grant (PPP) - RM 88,300.00 Dafflow (M) Sdn Bhd - RM 100,000.00 Mr. Yiang Kwai Sang (Private) - RM 15,000.00 IITA (Bill & Melinda Gates Foundation) - RM 63,717.36 Newton (AKADEMI SCIENCE MALAYSIA (ASM)) – RM 83,601.00
Other income	RM 1,109.70	Training courses: Micropropagation Workshop - RM 292.30 Banana Cloning A to Z Workshop session 1 - RM 343.00 Banana Cloning A to Z Workshop session 2 - RM 474.40
Postgraduate students	MSc 38 PhD 46	Local: 36 International: 2 Local: 37 International: 9
10 Interns	International : 2 National : 8	Universiti Kebangsaan Malaysia (UKM) Universiti Malaysia Sarawak (UNIMAS) Braunschweig - Technische Universität Braunschweig (German) DAAD RISE worldwide internship programme. University of Surrey. United Kingdom Monash University
17 MOU/MOA	11 MOA National : 5 International : 6 6 MOU National : 2 International : 4	MOA: Agreement on research collaboration and academic exchanges between University of Malaya & NARA Institute of Science and Technology (NAIST), JAPAN; Student exchange between University of Malaya and Nara Institute of Science and Technology (NAIST), JAPAN; Dual Doctoral Degree Programme between University of Malaya & NARA Institute of Science and Technology (NAIST), JAPAN; Students and Staff Exchange between Kyushu Institute of Technology and University of Malaya; International Institute of Tropical Agriculture (IITA), Africa; Academic Cooperation between University Malaya and Palacky University Olomouc, Czech Republic; Heleogenics Sdn Bhd, Malaysia; KGC Eco Resort Sdn. Bhd.; Caya Primer Sains Sdn. Bhd.; Sime Darby Technology Centre Sdn. Bhd.; Universiti Malaysia Kelantan (UMK) MOU: Palacky University Olomouc, Czech Republic; University of Dundee, Scotland, United Kingdom; Assam University, India; Academic Cooperation between Kyushu Institute of Technology and University of Malaya; National Institutes of

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

		Biotechnology Malaysia represented by Malaysian Institute of Pharmaceuticals and Nutraceutical; Academic Cooperation between University of Malaya and Global Integrated Associates Sdn Bhd (Quest International University Perak)
32 Awards to CEBAR PI and students	International : 21 National: 8 University: 3	Includes: Keynote, Plenary & Invited Speaker invitations, Membership of scientific committees & Evaluation panels, Invitations as judges / adjudicators and external examiners, Travel Awards, Fellowships, Exchange Programmes, Student Scholarships, Awards at Conferences
Intellectual property	Patent	Granted: 1
CEBAR activities	Workshop: 13 Seminar/symposia: 4	Topics included: Laboratory Biosafety and Biosecurity, Banana Tissue Culture, Plant Biotechnology, Commercialization
Visitors hosted	7 International 1 National	International visitors: Ministry of Agriculture, Bangladesh Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Palode, Thiruvananthapuram Malaysian Biotechnology Information Centre (MABIC) Nara Institute of Science and Technology (NAIST), Japan University of Queensland, Australia University East Anglia Institute of Statistical Science, Academia Sinica, Taiwan Hungarian National Agriculture Research and Innovation Centre
Physical Resources and System	Re-certification of Plant Biotech Facility to international standards for infrastructure and operation to BSL-2	The certification inspection was performed on 29 th November 2018 and the certificate is valid until 28 th November 2019.

Details of awards to CEBAR staff/students in 2018

No.	Name of PI / student	Award	Level
1	Prof. Dr. Jennifer Ann Harikrishna	Review of manuscript for Journal of Experimental Botany (WoS Q1)	International
2	Prof. Dr. Jennifer Ann Harikrishna	Expert reviewer of the work of the Plant RNAi Biology Group at the ICGB New-Delhi	International
3	Prof. Dr. Jennifer Ann Harikrishna	Review manuscript for Journal of Food Biochemistry	International
4	Prof. Dr. Jennifer Ann Harikrishna	Review of research manuscript for WoS Q1 Journal, BMC Genomics	International
5	Prof. Dr. Jennifer Ann Harikrishna	Review manuscript for Plant Biology	International
6	Prof. Dr. Jennifer Ann Harikrishna	Invitation as Resource Person in a workshop under Erudite Scheme	International

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

7	Prof. Dr. Jennifer Ann Harikrishna	Travel Award for Editorial Board Annals of Botany Meeting at UK	International
8	Prof. Dr. Jennifer Ann Harikrishna	Honorary Visiting Fellow in the Department of Genetics and Genome Biology, University of Leicester, UK	International
9	Prof. Dr. Jennifer Ann Harikrishna	Travel award to the II Plant Based Technology Trends Meeting in Brazil	International
10	Prof. Dr. Jennifer Ann Harikrishna	First Prize Winner of the Oral Presentation Competition in the 4th International Plant Breeding Conference 2018 (Student: Ivan Kabiita Arinaitwe)	International
11	Prof. Dr. Noor Hasima Nagoor	Reviewed a manuscript ETM-9307-205294 entitled "The synergic effect of propranolol and vincristine with bevacizumab on hemangioma-model cells" for Experimental and Therapeutic Medicine.	International
12	Prof. Dr. Noor Hasima Nagoor	Reviewed a manuscript OL-16077-204731 entitled "Isolating circulating tumor cells and detection of EGFR mutation in patients with non-small cell lung cancer" for Oncology Letters.	International
13	Prof. Dr. Noor Hasima Nagoor	Reviewed a manuscript SREP-18-05048 entitled "Multipronged activity of combinatorial miR-143 and miR-506 inhibits Lung Cancer cell cycle progression and angiogenesis in vitro" for Scientific Reports.	International
14	Prof. Dr. Noor Hasima Nagoor	Reviewed manuscript 200436 'Knockdown of POLE2 expression suppresses lung adenocarcinoma cell malignant phenotypes in vitro' submitted to Oncology Reports.	International
15	Prof. Dr. Noor Hasima Nagoor	Excellence in Reviewing Award from Spandious Publication.	International
16	Prof. Dr. Noor Hasima Nagoor	Young Investigator Award (Student: Sharan Malagobadan) in International Conference on Biochemistry, Molecular Biology and Biotechnology in 2018. (15-16th Aug 2018)	International
17	Prof. Dr. Noor Hasima Nagoor	Poster Judge for International Conference on Biochemistry, Molecular Biology and Biotechnology in 2018	International
18	Prof. Dr. Noor Hasima Nagoor	Evaluated thesis entitled 'Interleukins 1,2,4 and 13 as Biomarkers in beta-Thalassemic Major Patients with and without Type 1 Diabetes Mellitus' for the Ph.D. Degree in Medicine (Haematology)	International
19	Assoc. Prof. Dr. Subha Bhassu	Silver medal in Geneva Invention	International
20	Assoc. Prof. Dr. Chandran Somasundram	Outstanding Researcher Manager in Food Safety and Food Security	International
21	Dr. Tan Boon Chin	Royal Society-Newton Advanced Fellowship (1st December 2017 - 30th November 2018: 12 months)	International
22	Prof. Dr. Jennifer Ann Harikrishna	External assessor for staff recruitment at UTAR	National
23	Prof. Dr. Jennifer Ann Harikrishna	External Examiner or PhD thesis, UKM	National
24	Prof. Dr. Noor Hasima Nagoor	External examiner (Viva Voce) for MSc. candidate Ng Teng Jia (1001643875) from Faculty of Applied Sciences, UCSI University.	National

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

25	Prof. Dr. Norzulaani Khalid	External examiner Bachelor of Biotechnology (Hons), Faculty of Integrative Sciences & Technology, Qwest International University Perak	National
26	Assoc. Prof. Dr. Subha Bhassu	External examiner for UMS postgraduate student on sequencing of coral genomes with potential commercial applications.	National
27	Assoc. Prof. Dr. Subha Bhassu	Gold Award in International Research Innovation Invention Solution Exposition (IRIISE)	National
28	Assoc. Prof. Dr. Subha Bhassu	Professional Award in International Research Innovation Invention Solution Exposition (IRIISE)	National
29	Assoc. Prof. Dr. Chandran Somasundram	Adjudicator of Tan Sri Datuk Panglima Dr. Abdul Rahman Arshad Challenge Trophy English Language Debate Competition National Level	National
30	Prof. Dr. Jennifer Ann Harikrishna	Best Oral Presentation in Biosymposium 2018 (Student: Mohd Nurfitri B. Abdul Hamid)	University
31	Assoc. Prof. Dr. Subha Bhassu	Panel reviewer for UM Commercialisation	University
32	Prof. Dr. Norzulaani Khalid	Appointment as committee member of Intellectual Property Right of UMCIC	University

Details of patents to CEBAR staff/students in 2018

No.	Name of PI	Name of Patent	Certificate No.	Level
1	Prof. Dr. Rofina Yasmin Othman	A Modular Airlift Tubular Photobioreactor(A Bioreactor For Algae Cultivation)	MY-165830-A	National

Details of MOA & MOU activities by CEBAR staff/students in 2018

No.	MOU/MOA	Activity under the MOA/MOU	CEBAR Staff & *students involved	MOA/MOU Active Period
1	Memorandum of Agreement on student exchange between University of Malaya and Nara Institute of Science and Technology (NAIST), JAPAN	1. The 2019 NAIST pre-screening internship for doctorate course, April/October 2020 enrollment Two candidates: i) Hani Sapili ii) Wong Hao Jie	Prof Dr Jennifer Ann Harikrishna Prof Dr. Noor Hasima Nagoor	16 th Mar 2009 – 15 th Mar 2014 (renewed 25 th Feb 2014 – 24 th Feb 2019)
2	Memorandum of Agreement on research collaboration and academic exchanges between University of Malaya & NARA Institute of Science and Technology (NAIST), JAPAN	1. Visit by Professor Hisaji Maki, Professor Masaaki Umeda, Professor Yasumasa Bessho as invited speaker for CEBAR Expert Seminar Series 2/2018 on 17th August 2018	Prof. Dr. Jennifer Ann Harikrishna Prof. Dr. Norzulaani Khalid Prof. Dr. Noor Hasima Nagoor	16 th Mar 2009 – 15 th Mar 2014 (renewed 25 th Feb 2014 – 24 th Feb 2019)
3	Memorandum of Agreement for Dual Doctoral Degree Programme between	Sophia has admitted as Doctoral student in NARA on 1 st October 2017 until 31 st March 2019 (18 months).	Prof. Dr. Noor Hasima Nagoor Student:	16 th May 2017 – 31 st Mar 2020

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

	University of Malaya & NARA Institute of Science and Technology (NAIST), JAPAN	Then she will return to UM to complete the 18 months study in UM until 31 st March 2020	Sophia Sok Ping Meow	
4	Memorandum of Understanding for Academic Cooperation between University Malaya and Palacky University Olomouc	General MOU	Prof Dr Jennifer Ann Harikrishna	2016-2021
5	Memorandum of Student Programme Exchange Agreement between University Malaya and Palacky University Olomouc	Student Exchange Programme	Prof Dr Jennifer Ann Harikrishna	2016-2021
6	Memorandum of Agreement between International Institute of Tropical Agriculture (IITA) and University of Malaya (UM)	Research on-going	1. Prof. Dr. Jennifer Ann Harikrishna 2. Prof.Dr. Rofina Yasmin Othman 3. Dr. Teo Chee How	1 st Oct 2014 – 30 th Sep 2019
7	Memorandum of Understanding for Academic Cooperation between University of Malaya and Assam University, India	Academic cooperation	Prof Dr Jennifer Ann Harikrishna	2017-2022
8	Memorandum of Agreement between Heleogenics Sdn Bhd and the University of Malaya	Experiment finished.	Prof Dr Rofina Yasmin Othman	31 st Dec 2013 – 30 th Dec 2018
9	Memorandum of Understanding between National Institutes of Biotechnology Malaysia represented by Malaysian Institute of Pharmaceuticals and Nutraceuticals and University of Malaya	1. Experiment done 2. Research manuscript entitled "Anti-proliferation, apoptotic induction and anti-migratory effects of hemi-synthetic ACA analogs on MDA-MB-231 breast cancer cells" has accepted for publication in Drug Design, Development and Therapy journal	Prof Dr. Noor Hasima Nagoor	4 th Sept 2014 – 3 rd Sept 2019
10	Memorandum of Understanding for Academic Cooperation between University of Malaya and Global Integrated Associates Sdn Bhd (Quest International University Perak)	Academic cooperation	Prof Dr Jennifer Ann Harikrishna	19th Dec 2016 - 18th Dec 2021
11	Memorandum of Understanding between University of Dundee and University of Malaya	Research attachment in University of Dundee, Dr. Tan Boon Chin (Senior Lecturer CEBAR) from 25th March to 24th June 2018.	1. Prof Dr Jennifer Ann Harikrishna 2. Dr. tan Boon Chin	2018 - 2023
12	Memorandum of	1. Joint research	1. Prof. Dr.	4th Oct 2018 - 3rd Oct

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

	Understanding for Academic Cooperation between Kyushu Institute of Technology and University of Malaya	<ol style="list-style-type: none"> 2. Exchange of academic material and publication 3. Exchange of faculty members for research, discussion & lectures 4. Exchange of undergraduates and graduate students for study and research 	Jennifer Ann harikrishna	2023
13	Memorandum of Agreement for Students and Staff Exchange between Kyushu Institute of Technology and University of Malaya	Student and staff exchange	1. Prof. Dr. Jennifer Ann harikrishna	4th Oct 2018 - 3rd Oct 2023
14	Memorandum of Agreement between Sime Darby Technology Centre Sdn. Bhd. and University of Malaya	<ol style="list-style-type: none"> 1. Collections of drought treated oil palm seedlings completed deliverables. 2. Small RNA sequencing completed deliverables. 3. Bioinformatics analysis completed deliverables. 4. Validation of miRNA expression through qPCR completed deliverables. 5. Shared publications 	<ol style="list-style-type: none"> 1. Dr. Katharina Mebus 2. Dr. Teo Chee How 3. Dr. Tan Boon Chin 	14th May 2018 - 13th May 2020
15	Memorandum of Agreement between Caya Primer Sains Sdn. Bhd. and University of Malaya	To carry out the Development, Testing and Validation of Molecular Diagnostics for Shrimp Disease	Assoc. Prof. Dr. Subha Bhassu	8th Nov 2018 - 7th May 2019
16	Memorandum of Agreement between KGC Eco Resort Sdn. Bhd. and University of Malaya	To carry out the Strengthening of Freshwater Prawn Industry through Technology Transfer and Commercial Production for Poverty Elevation. This project is focusing in improving the survivability of the giant freshwater prawn and increase the income yield from each cycle of harvesting.	Assoc. Prof. Dr. Subha Bhassu	8th Nov 2018 - 7th May 2019
17	Memorandum of Agreement between Universiti Malaysia Kelantan and Universiti Malaya	Research collaboration for the project entitled "Improvement of banana for smallholder farmers in the Great Lake region of Africa"	1. Prof. Dr. Rofina Yasmin Othman	1st May 2018 - 30th April 2020

Details of CEBAR activities in 2018: Workshops

No.	Title	Date/venue	Output
1	CEBAR PI workshop	2nd March 2018/CEBAR Meeting	Knowledge Transfer

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

Room			
2	CEBAR brainstorm follow up	15th March 2018/ CEBAR Meeting Room	Knowledge Transfer
3	Banana workshop A to Z	22nd March 2018/PBIU	Knowledge Transfer
4	Micropropagation workshop	28th March 2018/PBIU	Knowledge Transfer
5	Make Terrarium for your office workshop	23rd April 2018/ PBIU	Knowledge Transfer
6	CEBAR workshop “Penetapan Bidang Tujahan Penyelidikan (Nichea Area) UM”	24th April 2018/ CEBAR Meeting Room	
7	Create your own orchid variety workshop	26th June 2018/ PBIU	Knowledge Transfer
8	Create Designer Bougainvillea workshop	23rd July 2018/ PBIU	Knowledge Transfer
9	Chili pepper fertigation technique workshop	27th August 2018/ PBIU	Knowledge Transfer
10	Make your Cactus Flower Workshop	24th September 2018/ PBIU	Knowledge Transfer
11	Kokedama workshop	22nd October 2018/ PBIU	Knowledge Transfer
12	Non Coventional Banana Micropagation Techniques workshop	15th November 2018/PBIU	Knowledge Transfer
13	Make your Fig plant fruity	17th December 2018/ PBIU	Knowledge Transfer

Details of CEBAR activities in 2018: Seminar/symposia

No.	Title	Date/venue	Output
1	Scientific Seminar Presentation by ISB/CEBAR PI	29 th January 2018/ Bilik iCUBE, Blok iSAINS	Knowledge Transfer
2	CEBAR Expert Seminar Series 2/2018 ; Professor Hisaji Maki, Professor Masaaki Umeda, Professor Yasumasa Bessho from Nara Institute of Science and Technology (NAIST), Japan & Prof Bernard Carroll from University of Queensland, Australia	17 August 2018/ Jupiter Meeting Room	Knowledge Transfer

*Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018*

3	CEBAR Expert Seminar Series 3/2018 ; Dr. Tiong Khong Loon From Institute of Statistical Science, Academia Sinica, Taiwan	5th October 2018/ Mars Meeting Room	Knowledge Transfer
4	CEBAR Expert Seminar Series 4/2018 TERRA AQUA GROUP/ CEBAR PI	16th November 2018/ Auditorium JPPHB, UM	Knowledge Transfer

Details of CEBAR activities in 2018: Other activities/Research activities

No.	Title	Date/venue	Output
1	CEBAR Budget Plan 2018	4th January 2018/CEBAR Meeting Room	Knowledge Transfer
2	HICOE Meeting	5th January 2018/CEBAR Meeting Room	Knowledge Transfer
3	Evaluation meeting for APC/SPC, PPC, Exit Policy, Counseling and Motivation	10th January 2018/ Prof Hasima Lab	Knowledge Transfer
4	Discussion of the CEBAR Master Programme	30th January 2018/CEBAR Meeting Room	Knowledge transfer
5	Interview CEBAR Finance Admin	6th February 2018/ CEBAR Meeting Room	N/A
6	CEBAR RU 2017 proposal presentations	9th February 2018/ CEBAR Meeting Room	Knowledge transfer
7	UMCoE Achievement Meeting	13th February 2018/ CEBAR Meeting Room	Knowledge transfer
8	Syarahan. Demonstrasi dan 'hands-on' Kultur tisul Tumbuhan.	23th Feb 2018/ Bilik Anggerik IPS & PBIU	Knowledge transfer
9	Discussion for KPI 2018 with CEBAR CNY Pot Luck	26th February 2018/ CEBAR Meeting Room	Knowledge transfer
10	Lunch meeting: CEBAR succession planning	14th March 2018/ Italian Restaurant	Knowledge transfer
11	Penjanaan ekonomi melalui pertanian Bandar (Penjualan hasil tanaman dari AADK)	29th March 2018/ Dataran Perpustakaan Utama UM	Generate Income
12	Interview for CEBAR Finance Admin	10th April 2018/CEBAR Meeting Room	N/A

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

13	CEBAR Master of Biosecurity for Agriculture	18th April 2018/CEBAR Meeting Room	Knowledge transfer
14	CEBAR Plant Biosafety Training Programme meeting	18th April 2018/CEBAR Meeting Room	Knowledge transfer
15	Teleconference and Presentation of Jasdeep Singh, Title: Biosafety for RNAI-Based Plant Biotechnology	27th April 2018/Video Conference Room, IPPP	Knowledge transfer
16	Demo Dino-lite microscope	17th May 2018/CEBAR Lab	Knowledge transfer
17	Training on the Colorimeter Konica Minolta CR-20	26th June 2018/ CEBAR Meeting Room	Knowledge transfer
18	CEBAR Raya Potluck	5th July 2018/CEBAR Common room	N/A
19	MABIC Asian Short Course	13th August 2018/Jupiter Meeting room	Knowledge transfer
20	Talk by Professor Philip M Gilmartin	28th September 2018/CEBAR Meeting Room	Knowledge transfer
21	Participated in University of Malaya Research Carnival (UMRC) 2018 (Poster presentation & research pitch challenge)	15 - 17 November 2018/ Dewan Tunku Canselor	Knowledge transfer
22	CEBAR RU Research Grant Funds	12th December 2018/ CEBAR Meeting Room	Knowledge transfer
23	Year End Potluck and CEBAR Staff Meeting	13th December 2018/CEBAR Meeting Room, Common Room	N/A
24	Interview CEBAR Project Manager	19th - 20th December 2018/ CEBAR Meeting Room	N/A

Details of visitors to CEBAR in 2018

No.	Visitor(s)	Institute/Organization	Date of Visit	Activity
1	Delegates from the Ministry of Agriculture, Bangladesh	Ministry of Agriculture, Bangladesh	2nd March 2018	Visit PBF & Visit CEBAR

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

2	Dr. R K Rhada	Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Palode, Thiruvananthapuram	13th March 2018	Visit PBF & Visit CEBAR
3	Visitor from Asian Short Course (National/International)	Malaysian Biotechnology Information Centre (MABIC)	13th August 2018	Visit PBF
4	Professor Hisaji Maki, Professor Masaaki Umeda, Professor Yasumasa Bessho	Nara Institute of Science and Technology (NAIST), Japan	17th August 2018	Visit PBF & Visit CEBAR
5	Professor Dr. Bernard Carroll	University of Queensland, Australia	17th August 2018	Visit PBF & Visit CEBAR
6	Professor Dr. Philip M Gilmartin	University East Anglia	28th September 2018	Visit PBF & Visit CEBAR
7	Dr. Tiong Khong Loon	Institute of Statistical Science, Academia Sinica, Taiwan	5th October 2018	Visit CEBAR
8	Dr. Csaba Gyuricza	Hungarian National Agriculture Research and Innovation Centre	23rd November 2018	Visit CEBAR & PBF

Details of interns hosted by CEBAR in 2018

No.	Name	Institute/ Country	Duration of attachment
1	Siti Najiha Binti Nasahruddin	Universiti Kebangsaan Malaysia (UKM)	11th June – 17th August 2018
2	Cheong Kae Luen	Universiti Kebangsaan Malaysia (UKM)	11th June – 17th August 2018
3	Jan Terbrack	Braunschweig - Technische Universität Braunschweig (German) DAAD RISE worldwide internship programme.	6th August - 10th Sept 2018
4	Teynraj A/L Angumuthu	Universiti Malaysia Sarawak (UNIMAS)	18th June - 24th August 2018
5	Nada Sofiya Binti Mohd Asni	Universiti Malaysia Sarawak (UNIMAS)	18th June - 24th August 2018
6	Nur Husna Syamimi Binti Nor	Universiti Malaysia Sarawak (UNIMAS)	18th June - 24th August 2018
7	Nur Amirah Diyana	Universiti Malaysia Sarawak (UNIMAS)	18th June - 24th August 2018

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

8	Poonthalir Veeran	Universiti Malaysia Sarawak (UNIMAS)	18th June - 24th August 2018
9	Lum Wing Sam	University of Surrey, United Kingdom	9th June - 10th August 2018
10	Lee Chuang Zheng	Monash University	19th November 2018 - 11th January 2019

Details of CEBAR PI's Professional Memberships (ongoing in 2018)

No.	Organization	Academic Staff	Professional Membership	Duration	Level
1	PiscoMed Publishing	Assoc. Prof. Dr. Subha Bhassu	Editor in Chief	26/01/2017-25/01/2019	International
2	International Society Of Horticultural Science	Assoc. Prof. Dr. Chandran A/L Somasundram	Member	01/01/2015-19/01/2018	International
3	Institute Of Food Technologies	Assoc. Prof. Dr. Chandran A/L Somasundram	Member	01/02/2017-31/01/2018	International
4	Asian Federation of Biotechnology	Dr. Jamilah Syafawati Yaacob	Member	Life Member	International
5	European Biotechnology Network	Dr. Jamilah Syafawati Yaacob	Member	Life Member	International
6	The Society for Experimental Biology	Dr. Tan Boon Chin	Member	05/02/2018-07/01/2019	International
7	Asia Pacific Journal of Molecular Biology and Biotechnology, Malaysian Society For Molecular Biology and Biotechnology (MSMBB)	Dr. Tan Boon Chin	Editorial Board	01/12/2017-30/11/2019	International
8	Malaysian Society For Molecular Biology and Biotechnology (MSMBB)	Dr. Tan Boon Chin	Council Member	19/05/2017-18/05/2019	International
9	Malaysian Society For Molecular Biology and Biotechnology (MSMBB)	Dr. Tan Boon Chin	Member	28/02/2017-28/02/2018	International
10	Asia Oceania Agricultural Proteomics Organization	Dr. Tan Boon Chin	Council Member	Jan 2018-Dec 2019	International
11	Asia Pacific Biosafety Association	Dr. Tan Boon Chin	Member	Life Member	International
12	International Plant Proteomic Organization	Dr. Tan Boon Chin	Member	Life Member	International
13	Open Access Journal of Microbiology & Biotechnology	Dr. Teo Chee How	Editorial Board	Life Member	International
14	Asian Chromosome Colloquium	Dr. Teo Chee How	Committee Member	Life Member	International
15	The Scientific Malaysian Advisory Board Members	Prof. Dr. Rofina Yasmin Othman	Advisory Board Members	Life Member	National
16	Fellow, Academy of Sciences Malaysia	Prof. Dr. Rofina Yasmin Othman	Fellow		National
17	Board of Directors of Malaysian	Prof. Dr. Rofina Yasmin	Board of		National

Centre for Research in Biotechnology for Agriculture (CEBAR)
Highlights of Activities & Achievements in 2018

	Global Innovation and Creativity Centre (MaGIC)	Othman	Directors		
18	Malaysian Society Of Molecular Biology And Biotechnology (MSMBB)	Prof. Dr. Noor Hasima Nagoor	Committee Member	Life Member	National
19	Genetics Society of Malaysia	Prof. Dr. Noor Hasima Nagoor	Member	Life Member	National
20	English-Speaking Union Of Malaysia	Assoc. Prof. Dr. Chandran A/L Somasundram	Member	Life Member	National
21	Malaysian Genetics Society	Prof. Dr. Jennifer Ann Harikrishna	Member	Life Member	National
22	Malaysian Society Of Molecular Biology And Biotechnology (MSMBB)	Prof. Dr. Jennifer Ann Harikrishna	Member	Life Member	National
23	Malaysian Society Of Molecular Biology And Biotechnology (MSMBB)	Prof. Dr. Norzulaani Binti Khalid	Member	Life Member	National
24	Malaysian Genetics Society	Prof. Dr. Rofina Yasmin Othman	Member	Life Member	National
25	Malaysian Genetics Society	Assoc. Prof. Dr. Subha Bhassu	Member	Life Member	National
26	Malaysian Society Of Molecular Biology And Biotechnology (MSMBB)	Assoc. Prof. Dr. Subha Bhassu	Member	Life Member	National
27	Malaysian Society Of Plant Physiology	Dr. Tan Boon Chin	Member	Life Member	National
28	Malaysian Agricultural Proteomics Society	Dr. Tan Boon Chin	Honorary Secretary	05/09/2016-05/09/2018	National
29	Persatuan Genetik Malaysia	Dr. Norhafizah Binti Mohd Arshad	Member	23/02/2018-22/02/2019	National